Uto-Aztecan: A Comparative Vocabulary

By

Brian D. Stubbs

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ABBREVIATIONS (for sources, also at pp. 3, 8-10; languages, p. 3; and branches, p. 3)

acc accusative adjective adj adv adverb **AMR** Alexis Manaster Ramer anim animate AYq Arizona Yaqui Aztecan branch of Uto-Aztecan Azt bec become **BH.Cup** Bright & Hill's Cupan cognate sets **B.Tep** Bascom's Tepiman cognate sets \mathbf{C} any or unknown consonant Ca Cahuilla Cah Cahitan caus causative cf. compare Chemehuevi Ch CL.Azt Campbell&Langacker's Proto-Aztecan Vowels Cm Comanche CN Classical Nahuatl **CNum** Central Numic Cp Cupeño Cora Cr CrCCorachol branch of Uto-Aztecan $\mathbf{C}\mathbf{U}$ Colorado Ute d dual Eu Eudeve/Dohema fob father's older brother fos father's older sister Fowler83 Fowler's cognate sets fyb father's younger brother fys father's younger sister Gabrielino Gb HH.Cup Kenneth and Jane Hill's Cupan adjustments to BH.Cup HN Huastec Nahuatl,

Hp Hopi

IJAL International Journal of American Linguistics

imp imperfectinanim inanimate

I.Num Iannucci's Numic cognate sets

e.o. each other **KCH** Kenneth C. Hill

KH/M06 Kenneth C. Hill's revision of Miller 1988

KH.NUA Kenneth C. Hill's NUA comparative data in his Serrano dictionary

KT Kiowa-Tanoan
Kw Kawaiisu
lit literally
LP Lower Pima
Ls Luiseño

L.Son Lionnet's Sonoran cognate sets

M67 Wick Miller's 1967 Uto-Aztecan Cognate Sets

M88 Miller's 1988 unpublished computerized database of Uto-Aztecan cognate sets

Mn Mono

mob mother's older brother **mos** mom's older sister **ms** mother's sister

Munro.Cup Munro's Cupan cognate sets

My Mayo

myb mother's younger brother **mys** mom's younger sister

MZ Mixe-Zoquean

N any or unknown nasal consonant

n noun

NB Nota Bene, Latin for 'note well'

nom nominative
 NP Northern Paiute
 NT Northern Tepehuan
 NU Northern Ute or Uintah Ute
 NUA Northern Uto-Aztecan

Num NumicNv Nevomeobj(s) object(s)OpOpata

p.c. personal communication

perf perfect

phon Uto-Aztecan Phonology section of the book

Pl Pipil
pl plural
Po Pochutec
poss'd possessed
postp postposition
ptc participle

PUA Proto Uto-AztecanPYc Pima de YecoraPYp Pima de Yepachic

rec reciprocalredupl reduplicationrefl reflexiveRJC R. Joe Campbell

Sapir Sapir's Uto-Aztecan cognates from his 1913, 1915 work

sgsingularShShoshoniSNumSouthern Numics.o.someoneSonSonoranSPSouthern Paiute

Sr Serrano

stative st

ST Southern Tepehuan

s.th. something

SUA Southern Uto-Aztecan

subject subj Tetelcingo T Tak Takic

Tb Tübatülabal Tbr Tubar Tep Tepiman

TO Tohono O'odham, formerly called Papago

Tr Tarahumara

TSh Tümpisha Shoshoni, formerly called Panamint

Uto-Aztecan UA UP Upper Pima

 \mathbf{V} any vowel or unknown vowel

vi verb, intransitive vt verb, transitive Wc Huichol

WMU White Mesa Ute WNum Western Numic Guarijio Wr

WSh

Western Shoshone

Yq Yaqui $\mathbf{Z}^{'}$ Zacapoaxtla

PART ONE: INTRODUCTION

This comparative vocabulary of Uto-Aztecan (UA) languages is a work in progress, not a finished product. The size of UA and the regular emergence of new materials guarantee that any comprehensive comparative effort is but a new horizon for viewing the next, but hardly final. Yet many a linguist's life work finds its final resting place in files or landfill due to (1) lack of time to finish it, despite the potential value to future researchers; (2) uncertainty about certain details, perhaps 3%, though the other 97% would have benefited those interested; and/or (3) not relishing the prospect that condemnations of the 3% may seem louder than commendations of the 97%. So let the latest from three decades of doing UA be made available lest it be lost to landfill should I exit without warning. Publishing, despite its pretense of completion, is as often only the latest draft of endless endeavor. The original hope of finishing such an undertaking before one's own undertaking gradually gives way to time's reminder that no one gets everything right the first time, or even the last time in mortal exertions the magnitude of a language family, and our assumptions about when the last time might be are regularly erroneous, as we hardly get glimpses of our hourglasses. The tragic unpredictable passing of our mentor Wick Miller in May 1994 is an example.

Wick Miller was an example in several ways: he was open, cordial, and encouraging. He was not overly critical, perhaps a tad animated at times, but generally friendly as a team-player in our cooperative progress in UA. As founder of the Friends of Uto-Aztecan organization, he was a friend to Uto-Aztecanists and devoted most of his life to UA. Miller's 1988 computerized database of potential cognate sets exemplifies his openness. He knew it was a compilation of rough-draft brainstorming in need of sorting, revision, etcetera, but he shared it openly—opening himself to an egoless vulnerability for the sake of progress, being more interested in our progress in knowledge than in his being right all the time. In that spirit is this work offered. Errors, loose ends, and uncertainties are certain, but some UA matters may remain unresolved even if one could spend three lifetimes on them, for many more than that have already been devoted to UA and to the reconstruction of Proto-Uto-Aztecan (PUA).

This is somewhat a bilingual comparative work: though mostly in English, we do not translate the Spanish, as half the UA languages are in Latin America; and familiarity with both is nearly a necessity for doing comparative work in UA. In the reconstructions I do not deal with vowel length, only vowel quality and consonants. Figuring out PUA vowel length may fill another lifetime, but not mine. Reduced consonant clusters with compensatory vowel lengthening underlie some long vowels in UA (CVCCV > CVVCV; see phonology 2.15.9), raising doubts about vowel length until the medial clusters are clarified. That and changing stress patterns—stress causing vowels to lengthen, or lack of stress causing vowels to shorten or dissappear, in the various branches and languages through the layers of time—make the puzzle of PUA vowel-length quite unappealing to me, if not presently impractical. This work also continues Miller's (1967, 1988) tradition of including sets found in only one branch. Rejecters (page 4) of Northern-Uto-Aztecan (NUA) and others of Southern Uto-Aztecan (SUA) make two-branch sets possibly from PUA, and one-branch sets are worth listing, since a reflex from another branch often appears later, though they can hardly be considered from PUA until such support surfaces. A few loans are listed if entering UA early enough to be found in multiple branches. As Miller (1988, 1) notes, "loans are of as much historical interest as inherited forms."

Edward Sapir (1913, 1915) was the first to apply the comparative method sufficient to establish Uto-Aztecan as a viable language family, after Buschmann, Brinton, Kroeber, and others helped lay the foundations for Uto-Aztecan studies, by identifying the three previously accepted branches—Shoshonean (NUA), Sonoran, and Aztecan. A five-letter surname that looms as large as Sapir's in UA contribution needs no further abbreviation, so sets from Sapir's founding work (1913, 1915) are cited as Sapir. A half century later, Voegelin, Voegelin, and Hale (1962) produced 171 cognate sets that further established the sound correspondences and phonology of UA. Not long afterwards, Wick Miller (1967) published Uto-Aztecan Cognate Sets, containing 514 cognate sets. That was the last published work attempting to deal with all the known cognate sets of UA. Miller continued working in UA and his last update (1988) of some 1185 potential cognate sets is herein abbreviated M88. Kenneth Hill (2006) has done much good work in sorting and revising M88, combining some sets, redistributing others, adding new reflexes to existing sets, and adding cognate sets of his own discovery, totaling more than 1200 sets. Hill's revision of M88 is herein abbreviated KH/M06. Besides the usual cognate collections, Kenneth Hill's Serrano Dictionary (in progress) contains many comparative notes on other Takic languages, Tübatülabal, Hopi, and sometimes Numic languages, i.e., most of NUA, so for sets with a Serrano reflex, it is another valuable comparative resource for NUA, here cited as KH.NUA. Ronald Langacker (1976b, 1977a) and Jason Haugen (2008) have authored excellent books dealing with UA grammar. Alexis Manaster Ramer (AMR) has also been a prolific contributor to UA studies by means of more articles than are easily retrievable. His and the works of Dakin, Campbell, Canger, Casad, Estrada Fernandez,

Fowler, Haugen, Heath, Jane Hill, Langacker, Lionnet, Munro, Shaul, Seiler, Steele, the Voegelins, Zamarron, and many others—works both published and unpublished, like Kaufman's 1981 draft manuscript *Comparative Uto-Aztecan Phonology*—all constitute a corpus somewhat daunting for mere mortals to master.

As is the nature of research, this work also builds on the good work of many others; thus, I am greatly indebted to the excellent output of scores of scholars before me. This work is finally made available after previous mentions (Stubbs 2000a, 2003) in spite of one lifetime being a few short of what is needed to do it. Though this corpus may double the number of previously known sets, the new sets are mostly smaller sets, as the larger ones, easier to find, have long been identified in previous works. Nevertheless, this work adds some 1400 new sets, new reflexes to previous sets, expands the number of branches for many sets, includes a phonology section addressing several features of UA comparative phonology, provides discussion on salient questions in some sets, but mainly marshals an enlarged database and some new perspectives for furthering UA research.

I intentionally avoid the use of "cognate sets" in the title, though the great majority are cognate sets. Most uncertainties arise relative to potential ties between sets and to some less-than-certain reflexes proposed for some sets (with perceptions of probability provided: probable (60-99%), possible (20-60%), less likely (less than 20%), etc.). Yet all decent possibilities should be listed; otherwise, the value of the database to future researchers is diminished. The main reasons for leaving "cognate sets" out of the title are (1) that a score or more are early loans into UA and so are not cognate sets from PUA; and (2) another couple of hundred sets do not yet have the multi-branch representation needed to be properly counted as being from PUA. However, many times I and others, starting with single-branch sets, have found cognates in other branches that turn many single-branch sets into multi-branch sets. So single-branch sets are well worth including in a comparative database designed to facilitate comparative research.

Before diving into the minutia of comparative Uto-Aztecan (from which one may never return, if set on solving all), consider a bigger picture. As a relatively recent science, comparative linguistics first provided a flurry of impressive results in Indo-European. The more accurate recording of more Native American languages enabled similar bursts of impressive progress in Native Americana by the likes of Boas, Sapir, Kroeber, and Bloomfield. Their graduate students produced another generation or two of prominent comparativists, like Haas, the Voegelins, then Bright, Callaghan, Chafe, Goddard, Hale, Hymes, Langdon, Miller; but fewer prominent comparativists emerged from that tier. The decrease in comparative work may stem from two causes: (1) after the more obvious basics became established and caution resumed reign to rein in the macro-phyla momentum, progress necessarily slowed through the remaining fine-tuning of the less obvious, which required deeper digging and other investments filling larger percentages of a lifetime; (2) and it followed the Chomsky-led tidal wave of grammatical theories that swept the linguistic landscape and perhaps washed away a host of potential comparativists into the seeing of grammatical theory as the new wave to ride. I did theory too, before getting hooked on historical, for after a language family's more apparent tenets are established, further solutions can seem so deeply buried in data (data possibly unavailable) that comparative progress can turn into comparative composting; that is, progress often becomes mired in stewing over seeming unsolvables. So please take no offense! We love our theoretician friends who contribute to equally valid branches of linguistics, but those willing to add diachronic to their endeavors are more than welcome.

Returning to UA, this comparative effort is assembled in hopes of helping Uto-Aztecanists postpone composting. My generation of comparative Uto-Aztecanists—Kenneth and Jan Hill, Alexis Manaster-Ramer, Lyle Campbell, Pamela Munro, Terrence Kaufman, and myself—are aging and/or ceased work on UA; fortunately, however, a growing number of Mexican linguists are now passing U.S. output. Nevertheless, whatever meager gains are attained we loosely call "progress" for the sake of encouragement in a field where all but a handful have turned from comparative research to realms offering more hope of closure than reconstructing a large language family can possibly provide.

In short, the 2700 sets of this study are intended to facilitate comparative research in UA and serve as a new plateau or expanded database. Adding to and refining this body of data will be an ongoing process by the author and any willing to join the cooperative effort.

Table 1: The Preceding Cognate Collections in Chronological Order and Their Abbreviations

Sapir	Sapir's "Southern Paiute and Nahuatl: a Study in Uto-Aztecan" (1913, 1915)
VVH	Voegelin, Voegelin, and Hale's Typological and Comparative Grammar of UA (1962)
B.Tep	Burton Bascom's Proto-Tepiman (1965)
M67	Wick Miller's Uto-Aztecan Cognate Sets (1967)
BH.Cup	William Bright and Jane Hill's "The Linguistic History of the Cupeño" <i>IJAL</i> 33 (1967)
HH.Cup	Jane Hill and Kenneth Hill's "Stress in the Cupan Languages" IJAL 34 (1968)
I.Num	David Iannucci's Numic Historical Phonology (1972)
CL.Azt	Campbell and Langacker's "Proto-Aztecan Vowels," IJAL 44 (1978)
Fowler83	Catherine Fowler's "Lexical Clues to UA Prehistory" IJAL 49 (1983) and her fieldnotes
L.Son	Andrés Lionnet's Relaciones Internas de la Rama Sonorense (1985)
M88	Wick Miller's 1988 Computerized Database of Uto-Aztecan Cognate Sets (1988)
Munro.Cup	Pamelo Munro's "Stress and Vowel Length in Cupan Absolute Nouns" IJAL 56 (1990)
KH.NUA	Kenneth Hill's Serrano Dictionary, with comparative notes relevant to NUA (2001)
KH/M06	Kenneth Hill's Miller's Uto-Aztecan Cognate Sets: revised and expanded by KCH (2006)

Table 2: The Uto-Aztecan Languages and Their Abbreviations

Mn	Mono	Нр	Норі	Eu	Eudeve
NP	Northern Paiute	Tb	Tübatülabal	Op	Opata
		Ls	Luiseño	Tbr	Tubar
TSh	Tümpisha Shoshoni	Ca	Cahuilla	Yq	Yaqui
Sh	Shoshoni	Cp	Cupeño	AŶq	Arizona Yaqui
WSh	Western Shoshoni	Sr	Serrano	My	Mayo
Cm	Comanche	Gb	Gabrielino	Wr	Guarijio
		Ktn	Kitanemuk	Tr	Tarahumara
Kw	Kawaiisu	TO	Tohono O'odham	WTr	Western Tr
Ch	Chemehuevi	UP	Upper Pima/Pima Alto	Cr	Cora
SP	Southern Paiute	Nv	Nevome	Wc	Huichol
WMU	White Mesa Ute	LP	Lower Pima/Pima Bajo	CN	Classical Nahuatl
CU	Colorado Ute	PYp	Pima de Yepáchic	Pl	Pipil
		PYc	Pima de Yécora	HN	Huastec Nahuatl
		NT	Northern Tepehuan		
		ST	Southern Tepehuan		

Table 3: The Branches of the Uto-Aztecan Language Family and Their Abbreviations

Mn NP	Western Numic (Num/WNum) Western Numic	Hp single-language branch Tb single-language branch Ls Takic, Cupan (Cup within Tak)	Op Op	oatan (Op) oatan (Op) ngle-lang branch
TSh	Control Numic (Num/CNum)			
1311	Central Numic (Num/CNum)	Ca Takic, Cupan (Cup within Tak)	rq C	ahitan (Cah)
Sh	Central Numic	Cp Takic, Cupan (Cup within Tak)	AYq Ca	ahitan (Cah)
Cm	Central Numic	Sr Takic (Tak)	My Ca	ahitan (Cah)
		Gb Takic (Tak)	Wr Ta	rahumaran(Trn)
Kw	Southern Numic (Num/SNum)	Ktn Takic (Tak)	Tr	(Trn)
Ch	Southern Numic	TO Tepiman (Tep)	WTr	(Trn)
SP	Southern Numic	Nv, UP Tepiman (Tep)	Cr	Corachol (CrC)
WM	Southern Numic	PYc Tepiman (Tep)	Wc	Corachol (CrC)
CU	Southern Numic	PYp Tepiman (Tep)	CN	Aztecan (Azt)
		LP Tepiman (Tep)	Pl	Aztecan (Azt)
		NT Tepiman (Tep)	HN	Aztecan (Azt)
		ST Tepiman (Tep)		

1.1 The Branches of Uto-Aztecan

Miller (1984) and Cortina-Borja and Valiñas (1989) tallied the number of lexical agreements between UA languages using Swadesh's 100-word list, with 12 substitutions. Cortina-Borja and Valiñas added six languages to Miller's and analyzed the data differently. Table 4 presents most of those data:

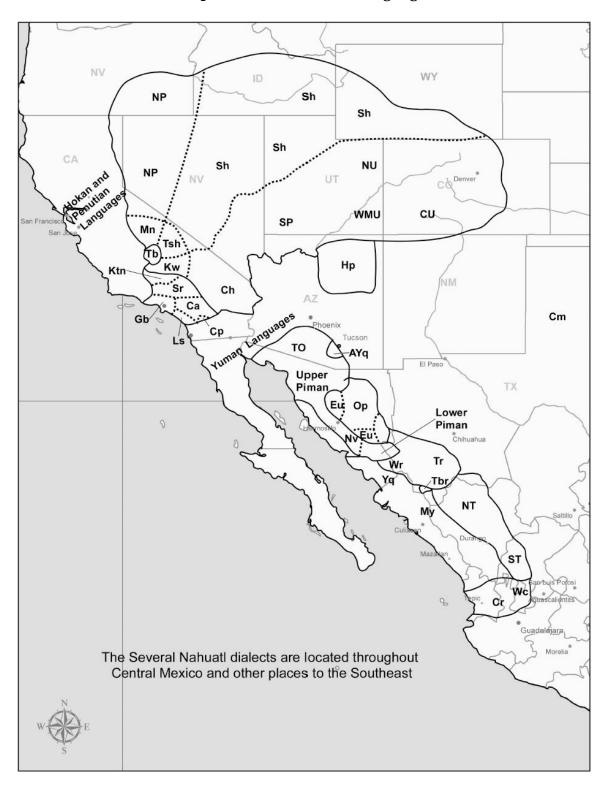
Table 4: Lexical Correlations between Uto-Aztecan Languages

```
NP 77 NP
TSh59 58 TSh
Sh 58 58 87 Sh
Cm 57 58 79 88 Cm
Kw 52 56 54 55 49 Kw
Ch 50 55 61 58 54 75 Ch
SP 53 58 62 62 59 79 86 SP
CU 52 57 59 61 59 76 78 87 CU
Tb 39 42 37 38 35 39 42 39 40 Tb
Gb 26 26 26 26 23 24 27 26 27 40 Gb
Sr 26 24 24 24 21 26 28 27 27 35 45 Sr
Ca 29 27 27 27 24 27 31 31 29 38 42 50 Ca
Cp 28 27 24 24 23 26 30 31 28 37 34 38 65 Cp
Ls 26 27 25 24 22 24 27 27 26 34 38 35 50 48 Ls
Hp 33 32 27 23 22 31 33 31 32 38 29 29 31 31 26 Hp
TO 23 26 25 25 23 26 28 28 30 35 25 27 31 28 25 32 TO
LP 24 26 24 24 23 24 26 26 27 35 24 27 30 27 24 35 85 LP
NT 25 28 26 26 23 27 28 30 29 37 26 30 32 29 26 33 79 79 NT
ST 22 24 23 23 21 24 24 26 27 33 26 28 31 28 25 30 73 75 82 ST
Wr 26 29 23 23 24 24 24 25 28 36 29 34 34 29 28 32 44 47 47 48 Wr
Tr 23 27 21 21 21 22 22 23 26 32 28 34 33 26 28 28 41 42 42 43 83 Tr
Op 26 29 21 20 20 20 26 24 23 33 26 31 33 29 24 33 40 44 40 39 55 54 Op
Eu 28 27 23 23 22 26 24 26 27 35 26 30 34 29 25 35 45 47 45 43 59 52 73 Eu
My 27 28 25 26 24 27 25 27 28 35 29 33 36 26 28 34 43 45 49 49 58 51 53 61 My
Yq 29 30 26 26 24 29 26 29 30 35 28 32 35 26 28 36 45 47 49 49 58 51 55 62 93 Yq
Tbr 28 27 27 28 27 28 27 30 31 33 24 28 29 26 23 30 40 41 46 43 48 44 42 51 51 53 Tbr
Wc 25 24 23 23 21 23 23 24 25 32 24 28 34 26 27 28 41 43 42 41 51 48 48 49 48 51 41 Wc
Cr 25 22 22 23 21 22 21 22 23 30 19 21 24 23 22 26 34 34 35 35 42 38 35 42 45 46 39 58 Cr
CN 18 18 16 16 14 16 15 16 16 24 20 22 23 19 19 24 29 29 30 29 32 33 39 40 38 39 36 39 37 CN
Te 19 18 16 16 14 17 15 16 17 25 20 22 24 20 19 24 30 30 30 29 32 34 38 40 38 39 35 37 35 85 Te
Za 17 17 15 15 13 16 16 17 18 26 21 20 24 20 19 24 31 31 32 31 29 33 35 39 37 38 35 35 33 80 85 Za
    16 15 14 14 12 16 15 16 17 24 21 19 23 20 18 24 30 30 29 29 33 34 38 40 39 39 37 37 35 79 81 77
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Many students of UA see a primary split between Northern Uto-Aztecan (NUA) and Southern Uto-Aztecan (SUA)(Heath 1977:27; Heath 1978:222; Langacker 1977:5; Langacker 1978:197, 269; Fowler 1983:234, Cortina-Borja and Valiñas 1989), yet a few reject NUA and Manaster Ramer (p.c.) rejects SUA. Jane Hill (2001a and b, 2010) also cites evidence for NUA vs. a lack of such for SUA. NUA does exhibit phonological innovations *-L-> n, *-c->-y- (Manaster Ramer 1992b) and some morphological innovations (Heath 1977:1978), while SUA may exhibit a slightly closer lexical unity. (See discussion in Miller 1983, Goddard 1996, Cortina-Borja and Valiñas 1989.) But until comprehensive morphological studies clarify matters, objecting to the objectors of either half of UA may be premature. Accordingly, NUA has traditionally consisted of Numic, Takic, and two single-language branches: Tübatülabal and Hopi. Major SUA branches include Tepiman, Taracahitan, Corachol, and Aztecan.

Numic (Num) has three subbranches. From southern California, Western Numic (WNum) spread northward along the California-Nevada border into Oregon and Idaho. Central Numic (CNum) spread northeastward through central Nevada, northwestern Utah, into Idaho, Wyoming, and onto the plains. Southern Numic (SNum) spread eastward into southern Nevada, northern Arizona, most of Utah, and the mountainous west half of Colorado. Western Numic includes Mono (Mn) and Northern Paiute (NP). To Central Numic belong Tumpisha Shoshoni (TSh), Shoshoni (Sh), and Comanche (Cm). Southern Numic includes Kawaiisu (Kw), Chemehuevi (Ch), Southern Paiute (SP), Northern or Uintah Ute (NU), White Mesa Ute (WMU), and Colorado Ute (CU).

Map of the Uto-Aztecan Languages



The term Colorado Ute here replaces Southern Ute, since northern vs. southern is not a language division, but relocation options for the many dialects: e.g., the Uncompangre Utes from southern Colorado went north to the Uintah-Ouray reserve, though their dialect and ties are closer to southern Colorado Ute; and White Mesa Ute (Stubbs 2011, 6-10), often labeled Southern Ute, retains features in NU and California SNum, but lost in Ignacio's Colorado Ute; and none of the three so-called Northern Ute dialects (two from Colorado) is recorded. So the northern-southern distinction is recent-geographic, not linguistic, and of at least five dialects, only Ignacio's is left in Colorado, thus, the term Colorado Ute.

The tabulations above show high correlations within each branch of Num (76-88), but less between the Num languages of different branches (49-62). Lamb (1958) and others have explained the Num languages' spread from the NUA homeland in southern California out into the Great Basin. The data show the inner-most language of each branch to be more closely related to the outer-most language of the same branch than to the closer neighboring Num languages of different branches. This pattern shows more diversity in Southern California between languages of differing branches only a few miles away vs. closer ties to tongues of the same branch 1,000 miles away. For example, TSh in Southern California is linguistically much closer to Sh (87) in Wyoming and Cm (79) on the plains, all three of Central Numic (CNum), than TSh is to nearby Mn (59), of Western Numic (WNum) and also in Southern California, or to nearby Kw (54), of Southern Numic (SNum) and also in Southern California. This greater diversity in the geographically limited Numic (and NUA) homeland speaks convincingly for a three-way Numic split in Southern California before spreading north, northeast, and eastward into the Great Basin.

Takic (Tak) has traditionally included the UA languages of Southern California, less Tübatülabal (Tb) and Numic languages. Within Tak is a tighter Cupan (Cup) group—Luiseño (Ls), Cahuilla (Ca), and Cupeño (Cp)—though the numbers above show Sr as close to Ca as Ls is to Ca. Serrano (Sr), Gabrielino (Gb), Kitanemuk (Ktn) and other now extinct languages together with Cupan constitute the Tak branch. Tak shows a much greater diversity than Numic. The numbers between the Tak pairs range from 35 to 50 (except for Ca-Cp 65) vs. Numic's numbers (49-88). Matters relating to that diversity have periodically caused the validity or unity of the Tak branch to be questioned. Californian (Alexis Manaster Ramer 1992a; Kenneth Hill 1998) has been a contemplated union of Tb with Tak. Numbers as low as 34 between Gb and Cp, and 35 between Sr and Ls approximate several other 34's between Tak and non-Takic languages (Wr, Tr, Eu, Tb, Wc). Those inter-Tak numbers are no larger than the 35 through 40 that Tb shares with four Tak languages (Gb, Sr, Ca, Cp). Thus, the union of Tb and Tak into a Californian branch of NUA is reasonable enough in view of the above data, and questioning the traditional Tak unity merits consideration. Nevertheless, the author sees support for Tb's separation from Tak (see discussion under Tb), though hardly overwhelming. Kenneth Hill (2010, 1) also notes Tb's lack of initial η and allowing η only after vowels to be like the Numic languages and unlike the Tak languages' initial η, and sees Tb's lenited absolutive suffix's (*-t > -l) similarity to the Cupan languages as likely coincidental.

Tübatulabal's (Tb) numbers with Num range from 35 to 42, with Tak they range from 34 to 40, and the Tb-Hp number is 38. The differences are so slight and the ranges so overlapping that Tb appears to be about equidistant lexically to other branches of NUA; thus, Tb seems to hold an especially central place in NUA. Yet viewing matters from the other directions, we see that Num is closer to Tb (35-42) than Num is to Tak (21-31) or to Hp (22-33), and that Hp is closer to Tb (38) than Hp to Tak (26-31) or Hp to Num (22-33). Furthermore, Cortina-Borja and Valiñas (1989, 235) see Tb to be slightly more closely associated with Hp and Num than with Tak. Thus, it may be useful to retain Tb as a NUA branch for now. Nevertheless, Tb and Hp both hold especially central positions, not only in NUA, but in UA generally: the Tb and Hp numbers with SUA branches are higher than other NUA languages with SUA languages, though Ca and Sr are not far off.

Hopi (Hp), presently spoken in northern Arizona, holds a unique position in UA—unique as a single-language branch of NUA and as the only known UA tribe to participate in the Ancient Pueblo (Anasazi) tradition, along with three other language families (Kiowa-Tanoan, Keresan, and Zuni). Some measures put Hp closer to Tak (Cortina-Borja and Valiñas 1989, 228), while the numbers above show the closest Hp correlate to be Tb (38). Interestingly, however, Hp's next highest numbers are shared with Yq (36), Eu (35), LP (35), and My (34), all of SUA, after which several low 30's (30-33) are shared with some Tak and Numic languages, but also with some other Tepiman and Taracahitan languages. This fairly equal distancing with so many SUA and NUA languages further confirms Hp's unique place in UA.

Southern Uto-Aztecan (SUA) consists of Tepiman (Tep), Opatan (Op), Tubar(Tbr), Tarahumaran(Trn), Corachol (CrC), and Aztecan (Azt), mostly from Arizona to Mexico City. In contrast to earlier leanings toward a UA homeland in NUA areas, hints of greater diversity in SUA areas surface regularly, bringing Manaster Ramer, Jane Hill, and myself to deem SUA areas as more likely prospects for the UA homeland. One such hint is the close proximity of all UA reflexes for PUA *kw in the heart of SUA. Within miles of each other are Tep and Eu b, Cahitan bw, Tbr kw, and Tr w/b/ko (Stubbs 1995), while all of NUA reflects a nearly unanimous kw.

Tepiman (Tep) is so unique phonologically (*kw > b, *c > s, *s > h, *y > d, *w > g) among UA languages that it may merit distinction from Taracahitan strictly on phonological grounds and grammar, regardless of word counts. Yet even word counts show a tight Tep entity with numbers from 73-85 between Tep languages, while 34-49 are the numbers between other Sonoran languages and the Tep languages, about the same as between NUA branches. That fact and the unique Tep phonology both recommend a separate Tep branch, here represented by Tohono O'odham (TO) in Arizona and Nevome (Nv) in Mexico, both of Upper Pima, while Lower Pima/Pima Bajo (LP) includes Pima de Yepachec (PYp) and Pima de Yécora (PYc). The Tepehuan languages include Northern Tepehuan (NT) and Southeastern Tepehuan (ST) in western Mexico.

In the middle of SUA are several small branches. Eudeve (Eu) and Opata (Op) or Tewima/Tegwima (Shaul, p.c.) are a closely related pair called **Opatan** (Opn). **Cahitan** (Cah) consists of Yaqui (Yq), Arizona Yaqui (AYq), and Mayo (My). The Tr dialects with the Wr dialects form another closely related subbranch called **Tarahumaran** (Trn). These central SUA subbranches diverge in their reflexes of PUA *kw, but each subbranch is consistent within itself: PUA *kw > Tbr kw, Cah bw, > Op *b, > Trn *w. I used to combine Opn, Cah, Trn, and Tubar into a branch called TaraCahitan (TrC), and that term of central SUA branches is occasionally useful and used in the discussions.

Tubar (Tbr) is a unique language in UA and is its own single-language branch. Two factors make its proper classification challenging: one, the lexical data are limited; two, the limited data, obtained shortly before extinction, show numerous loans and influences upon this small language surrounded by other larger UA languages. It is apparent that Tbr is in part a product of phonological influences from Tep and lexical loans from Cahitan and Trn, yet it is a kw-language, isolated geographically from the only other kw-languages of SUA: i.e., the Corachol and Aztecan branches. Phonological influences from neighboring Tep languages upon Tbr include some *s > h, some *w > g, and initial *p > w (Stubbs 2000b). These various unique dimensions have encouraged Uto-Aztecanists to make Tbr its own branch.

Corachol (CrC) is a viable grouping, not only because Cora (Cr) and Huichol (Wc) show a closer lexical relationship to each other (58) than to any other UA languages, but phonologically they form a pair and align better with Aztecan in many ways than with the old Sonoran grouping. They share an innovation with Aztecan of * $p > h/\phi$ and a retention of *kw, neither of which is prevalent in Tep or TrC.

The **Aztecan** (Azt) branch consists of the many dialects related to Classical Nahuatl. Cortina-Borja and Valiñas (1989) include nine in their classification study. Suarez' (1986) admirable comparative study of Nahua dialects merits more use. Of interest is that Azt yields numbers of 30-40 with other SUA languages, but only teens to 20 with NUA languages, except Tb, Hp, and Ca, with which the Aztecan numbers are 23-26.

1.2 Primary Sources for the Lexical Data (in addition to the cognate collections): Mono (Mn): Bethel, Rosalie, Paul V. Kroskrity, Christopher Loether, and Gregory A. Reinhardt. Mn A Dictionary of Western Mono. 2nd ed. 1993. **Northern Paiute (NP):** Bednark, James. Project director. Paiute-English, English-Paiute Dictionary. NP A publication of the Yerington Paiute Tribe, 1987. Liljeblad, Sven, Catherine S. Fowler, Glenda Powell, and Harold Able. The Northern Paiute-NP(B) Bannock Language: A Dictionary. Salt Lake City: University of Utah Press, 2011. Tümpisa Shoshone / Panamint (TSh): Dayley, Jon P. Tümpisa (Panamint) Shoshone Dictionary. Berkeley: U of C Press, 1989. TSh **Shoshone (Sh):** Miller, Wick R. Newe Natekwinappeh: Shoshone Stories and Dictionary. Sh University of Utah Anthropological Papers, number 94. Jesse D. Jennings, ed. Salt Lake City: University of Utah Press, 1972. Crapo, Richley H. Big Smokey Valley Shoshoni. Desert Research Insitute Sh(C) Publications in the Social Sciences, number 10. Don D. Fowler, ed. 1976. Gould, Drusilla, and Christopher Loether. An Introduction to the Shoshoni Language. Sh(GL) Salt Lake City: University of Utah Press, 2002. Crum, Beverly, and Jon Dayley. 1993. Western Shoshoni Grammar. Boise State University: WSh Occasional Papers and Monographs in Cultural Anthropology and Linguistics, no. 1. Comanche (Cm): Robinson, Lila Wistrand, and James Armagost. Comanche Dictionary and Grammar. Summer Cm Institute of Linguistics and U of Texas at Arlington, Publications in linguistics, 92. 1990. Kawaiisu (Kw): Zigmund, Maurice L., Curtis G. Booth, and Pamela Munro. Kawaiisu: A Grammar and Kw Dictionary with Texts. Berkeley: University of California Press, 1991. Chemehuevi (Ch): Press, Margaret L. A Grammar and Lexicon. Berkeley: University of California Press, 1979. Ch Laird, Carobeth. *The Chemehuevis*. Banning: Malki Museum Press, 1976. Ch(L) **Southern Paiute (SP):** Sapir, Edward. 1931. Southern Paiute Dictionary. Proceedings of the American SP Academy of Arts and Sciences 65:537-730. White Mesa Ute (WMU): Stubbs, Brian, Mary Jane Yazzie, Aldean Ketchum, Loretta Posey. 2011. **WMU** White Mesa Ute: A Dictionary and Lessons. Preliminary edition. Colorado Ute (CU): Givon, Talmy, ed., and Southern Ute Tribe. 1979. Ute Dictionary. Ignacio, CO: Ute Press. CU Jean O. Charney. 1996. Ute Dictionary. Ignacio, Colorado: Southern Ute Indian Tribe. Hopi (Hp):

Seaman, P. David. 1985. Hopi Dictionary. NAU Anthropological Paper, no. 2. Flagstaff: NAU. Hp(S)

Hp

Hp(V)

Hill, Kenneth C., and the Hopi Dictionary Project. 1998. *Hopi Dictionary*:

the Problem of Selection. IJAL Memoir 14.

Hopìikwa Laváytutuveni. Tucson: The University of Arizona Press. Voegelin, C. F., and F. M. Voegelin. 1957. Hopi Domains: A Lexical Approach to

Tübatulabal (Tb): Voegelin, Charles F. 1958, "A Working Dictionary of Tübatulabal," <i>IJAL</i> 24:221-28.	Tb
Munro, Pamela, and William E. Mace. 1995. <i>A New Tübatulabal Dictionary</i> . (revised preliminary version) UCLA.	Tb(M)
Hill, Kenneth C. 2010. Tübatulabal Dictionary. Draft manuscript.	Tb(H)
Serrano (Sr): Hill, Kenneth C. Serrano Dictionary. In preparation, 2001 edition.	Sr
Kitanemuk (Ktn) Anderton, Alice Jeanne. 1988. The Language of the Kitanemuks of California. Ph.D. dissertation, UCLA.	Ktn
Cahuilla (Ca): Seiler, Hansjakob, and Kojiro Hioki. 1979. Cahuilla Dictionary. Banning, California: Malki Museum Press.	Ca
Cupeño (Cp): Hill, Jane H., and Rosinda Nolasquez. 1973. <i>Mulu'wetam: the First People:</i> Cupeño Oral History and Language. Banning: Malki Museum Press. Hill, Jane H. 2005. A Grammar of Cupeño. UCPL 136. Berkeley and Los Angeles: University of California Press.	Ср
Luiseño (Ls): Bright, William. 1968. <i>A Luiseño Dictionary</i> . UCPL 51. Berkeley: University of California Press.	Ls
Elliott, Eric B. 1999. <i>Dictionary of Rincon Luiseño</i> . Ph.D. Dissertation. San Diego: University of California at San Diego.	Ls(E)
Tohono O'odham (TO): Saxton, Dean, Lucille Saxton, and Susie Enos. Dictionary: O'othham Milgaan, English Papago/Pima, 2nd ed. 1983. R.L. Cherry, ed. Tucson: University of Arizon Press Saxton, Dean and Lucille. Dictionary: O'odham Milgaan, English Papago/Pima. 1969. Tucson: The University of Arizona Press. Mathiot, Madeleine. A Dictionary of Papago Usage. 1976. Tucson: University of Arizona Press.	
Upper Pima (UP) and Nevome (Nv):	
Bascom, Burton W. <i>Proto Tepiman</i> . Ann Arbor: University Microfilms, Inc., 1965. Munro, Pamela, et al. Akimel O'odham. In Preparation. Pennington, Campbell W. ed. <i>Vocabulario en la Lengua Nevome: The Pima Bajo of Central Sonora, Mexico</i> . vol. 2. Salt Lake City: University of Utah Press, 1979.	UP UP(M) Nv
Pima Bajo (PB) or Lower Pima (LP):	
Bascom, Burton W. <i>Proto Tepiman</i> . 1965. PhD Dissertation: University of Washington. Printed at Ann Arbor: University Microfilms, Inc.	LP(B)
Escalante, Roberto, and Zarina Estrada Fernandez. 1993. <i>Textos y Gramática del Pima Bajo</i> . Hermosillo, Mexico: Departamento de Letras y Lingüistica, Universidad de Sonora.	LP(EF)
Shaul, David Leedam. "A Sketch of the Structure of Oob No'ok (Mountain Pima)" in <i>Anthropological Linguistics</i> . vol. 36, number 3, Fall 1994. Barragan, Luis M. fieldnotes on the Pima Bajo dialect of Yécora, Sonora, Mexico.	PYp PYc
Northern Tepehuan (NT): Bascom, Burton. Northern Tepehuan Dictionary. In preparation. Bascom, Burton. Proto Tepiman. Ann Arbor: UMI, 1965.	NT

Willett, Thomas. <i>Southeastern Tepehuan Dictionary</i> . 2005. Preliminary edition. Bascom, Burton. <i>Proto Tepiman</i> . 1965. Ann Arbor: UMI.	ST
Eudeve (Eu): Anonymous. 1981. Arte y Vocabulario de la Lengua Dohema, Heve, o Eudeva. Ed.Campbell W. Pennington. Mexico City: Mexico, Instituto de Investigaciones Filológicas, Universidad Nacional Autónoma de Mexico. Lionnet, Andrés. 1986. Un Idioma Extinto de Sonora: El Eudeve. Mexico City: Universidad Nacional Autónoma de México.	Eu
Tubar (Tbr) : Lionnet, Andrés. 1978. <i>El Idioma Tubar y Los Tubares</i> . Universidad Iberoamericana.	Tbr
Yaqui (Yq): Estrada Fernandez, Zarina, et al. 2004. <i>Diccionario Yaqui-Español y Textos</i> . Johnson, Jean B. <i>El Idioma Yaqui</i> . 1962.	Yq Yq(J)
Arizona Yaqui (AYq): Molina, Felipe S., and David Leedom Shaul. 1993. A Concise Yoeme and English Dictionary. Tucson: Tucson Unified School District.	AYq
Mayo (My): Collard, Howard, and Elisabeth Scott Collard. 1984. <i>Vocabulario Mayo</i> . Serie de vocabularios indígenas, no. 6. Mexico, D.F.: Instituto Lingüistico de Verano.	My
Guarijio (Wr): Miller, Wick R. Guarijio: Gramática, Textos, y Vocabulario. 1996. Medina Murillo, Ana Aurora. 2012. Diccionario Léxico-Morfológico del Guarijío.	Wr Wr(M)
Tarahumara (Tr): Brambila, David. <i>Diccionario Raramuri-Castellano</i> . 1976. La Obra Nacional de la Buena Prensa. Hilton, K. Simón. <i>Diccionario Tarahumara de Samachique</i> . 2nd ed. Serie de vocabularios indígenas, no. 101. Tuscon: Instituto Lingüistico de Verano, 1993. Lionnet, Andrés. 1972. <i>Los Elementos de la lengua Tarahumar</i> . México: UNAM.	Tr Tr(H) Tr(L)
Cora (Cr): McMahon, Ambrosio, and Maria Aiton de McMahon. <i>Cora y Español</i> . 1959. Serie de Vocabularios Indigenas, no. 2. Mexico City: Instituto Lingüistic de Verano.	Cr
Huichol (Wc): Grimes, José E., Pedro de la Cruz Avila, José Carrillo Vicente, Filiberto Díaz, Román Díaz, Antonio de la Rosa, and Toribio Rentería. El Huichol: Apuntes Sobre el Léxico. 1981. New York: Cornell University.	Wc
Classical Nahuatl (CN) and other Aztecan Dialects Campbell, R. Joe. <i>Draft Lexicon of Molina and Florentine Codex Vocabulary</i> , 2006. Cl. Karttunen, Frances. 1983. <i>An Analytical Dictionary of Nahuatl</i> . Austin: University of Texas Press Simeon, Remi. <i>Diccionario de la Lengua Nahuatl or Mexicana</i> . Mexico City: Siglo Veintiuno, 1977. First published in French in Paris: la imprimerie nationale, 1885. Campbell, Lyle. 1985. <i>The Pipil Language of El Salvador</i> . New York: Mouton Publishers. Campbell, Lyle, and Ronald W. Langacker. 1978. Proto-Aztecan Vowels. <i>IJAL</i> 44. Hernandez Beatriz, Marcelino. 2016. Vocabulario Nahuatl-Español de la Huasteca Hidalguense Wolgemuth Walters, Joseph Carl et al. 2002. Diccionario Nahuatl de los municipios de Mecayapan y tatahuicapan de Juarez, Veracruz. Mexico, D.F.: Instituto Lingüístico de V	Pl CL.Azt HN N(JV)

Southern Tepehuan (ST):

PART TWO: UTO-AZTECAN COMPARATIVE PHONOLOGY

Table 5: Vowel and Consonant Symbols

Vowels:	front	central	back
high	i	ï/ü	u
_	I		U
mid	e	ə	О
	3		
low	æ	a	

Consona	nts:	<u>bilabial</u>	<u>dental</u>	<u>alveolar</u>	<u>palata</u> l	<u>retroflex</u>	<u>velar</u>	<u>uvular</u>	glottal
stops	voiceless	p		t		ţ	k	q	,
	voiced	b		d,D			g		
fricatives	voiceless	f	θ	S	š(sh)	ş	X		h
	voiced	V	đ	Z	ž(zh)		ġ		
affricates	voiceless			c(ts)	č(ch)				
	voiced			dz	j				
nasals		m		n	ñ		ŋ		
liquids				1, r	1 ^y		-		
glides		W			y				

i = high central vowel occuring in many UA languages; i^r and ö^r are Ken Hill's representation of pharyngealized or retroflexed vowels in Sr.

The Sound Correspondences within Uto-Aztecan

An oversimplified portrayal of the basic consonant correspondences (Sapir 1913-15, VVH 1962, Miller 1967, Steele 1979, Manaster Ramer 1992b, Ken Hill, p.c., Stubbs 2003):

Table 6: Uto-Aztecan Consonant Correspondences in Initial Position, -C- for Medial Position

PUA *	<u>p</u>	<u>*t</u>	<u>*k</u>	*kw	<u>*m</u>	<u>*n</u>	<u>*c</u>	<u>*s</u>	<u>*w</u>	<u>*y</u>	* * >	<u>kh</u>
Num	p, -v-	t,-r-/-d-	k,-ġ-/-x-/-h-	kw m,	ŋw, w	n	с,-у-	S	W	y	,	h
Hp	p, -v-	t	k,q	kw	m	n	c,-y-	S	w,l	y	,	h
Tb	p	t,-l-	h,k	W	m	n	c,-y-	š	W	y	,	h
Sr	p, -v-	t	k,q	kw	m	n	c,-y-	ş,h	W	y	,	h
Ca,Cp	p, -v-	t,-l-	k,q, -x-	kw,w	m	n	c,-y-	S	W	y	,	h
Ls	p, -v-	t,-l-	k,q, -x-	kw	m	n	c,-y-	s,š	W	y	,	h
Tep	w,v	t,c	k	b	m	n,ñ	s, š	h,ø	g	d,j	ø,'	ø,',h
Eu, Op	p	t	k	b	m	n	c, č	S	W	d	ø,'	h
Tr,Wr	p	t, r (Tr)	k	w,-'w-	m	n	c, č	S	W	y	ø,',h	h
Yq,My	b,p	t	k	bw	m	n	c, č	S	W	y	,	h
Tbr	w,-p-	t	k	kw	m	n	c, č	s,h	mw, ñ	y,ñ	ø,h	h
Cr	h	t	k,č	kw,čw	m,mw	n	c, č	S	W	y	,	,
Wc	h	t	k	kw	m	n	c, č	s,z	W	y	Ø	Ø
CN	ø, p	t	k	kw	m	n	c, č	s,š	W	y	ø,',h	Ø

ö (< PUA *o) a mid-front rounded vowel in Hopi, White Mesa Ute, and CU, much like English vocalic r.

^{-&}quot; = final geminating feature on following consonants in Numic, caused by an underlying consonant.

N = general nasal, final nasalizing feature in Num or unknown nasal consonant (m, n, or η).

The spirantizing feature in Numic will not be marked since it signifies a zero feature or no underlying consonant.

L = PUA liquid, whether r or l or both is yet unclear.

D = d/D of TO alternates with liquids in certain environments and corresponds to liquids in other UA languages, in contrast to TO d which usually corresponds to PUA *y.

While some Proto-Uto-Aztecan (PUA) consonants justifiably attract debate, such as PUA *r and/or *l, and *ŋ and/or *n, the mostly secure PUA consonants include *p, *t, *k, *kw, *', *h, *s, *c, *m, *n, *L, *w, and *y. The PUA vowels are *a, *i, *o, *u, and *ï. Exceptions for *kw before round vowels (*kwo, *kwu) are discussed below (2.2 and 2.12; Stubbs 1995). Some PUA *t palatalized to c/č in time for the Tepiman sound change *c > s, and are thus easily mistaken for PUA *c (2.3.3; Stubbs 2000a).

Table 7: Uto-Aztecan Vowel Correspondences and the Medial Liquid(s), represented by *-L- for now (Sapir 1913-14, VVH 1962, Miller 1967, Bright and Hill 1967, Langacker 1970, Munro 1990, Ken Hill, p.c., Stubbs 2003):

PUA	*i	*a	*u	*o	*ï	*-L-
Num	i	a	u	o/ö	ï	-n-
Hp	i	a	O	ö	ï	-n-,-l-,-r- (Shaul 1985)
Tb	i	a	u	O	ï	-n-
Sr	i	a	u	ö	ï	-n-,-r-
Ca	i	a	u	i	e	-n,-l-
Cp	i	a	u	i	ə (written e)	-n-,-l-
Ls	i	a	u	e(i)	o(u)	-n-,-l-
Gb	i,e	a	u,o	e,o	0	-n-
Tep	i	a	u	O	ï	-l-, -D-, -r-
Tr,Wr	i	a	u,o	O	e,i	-l-,-r-
TrC	i	a	u	O	e	-l-,-r-
CrC	i	a	ï	u	e	-l-,-r-
CN	i	a	i	O	e	-1-

2.1 Summary of Consonant Correspondences among the Uto-Aztecan Languages

The basic UA consonant correspondences portrayed in Table 6 might be summarized as follows: **PUA *p** initially remains p in most languages, but in Tep *p > w/v, in CrC *p > h, and in Azt *p > \emptyset , initially. Medially, *-p- > -v- in most of NUA, but *-p- > -b- in Tb and some Num languages.

PUA *t initially remains t in most languages, but *t > r in Tr, and *t > c preceding high vowels in TO. Medially, *-t->-r-/-d- in most Num languages, *-t->-l- in Tb and Tak, and sometimes *-t->-c-/-č- adjacent to high vowels in Tep, and sometimes early enough to catch the *c > s Tep sound change (see 2.3.3). Also some *-t->-c-/-č- happened early in NUA languages, in environments and cases not yet entirely clear.

PUA *k initially remains k in most languages, but sometimes *k > h in Tb, but not always, creating a dichotomy in Tb not yet clarified. Before low vowels, uvularization of *k > q/_a, o happens in Hp, and much of Tak and Num. Medially, the same initial phenomena happen in addition to *-k- > -x- in Tak, and *-k- > -x-/-g-/- \dot{g} - in Num. **PUA** *kw initially remains kw in NUA, except for *kw > w in Tb, and a few other instances. *kw also remains kw in CrC and Azt of SUA. However, *kw > bw in Cahitan, *kw > w in Tr and Wr, and *kw > b in Tep, Eu, and Op. UA *kwo/*kwu appear to be exceptional cases, as mentioned above, and addressed below at 2.12. The *-kw-medial reflexes are mostly similar to the initial reflexes. Initial PUA *kw is exemplified below in the reflexes for *kwasïC 'cook/boil, ripen':

Mn	kusedetagi/kupï'a	Hp	kwasi	Eu	basá/basé/basí
NP	kwasïpï	Tb	wïš-(ït)/'ïwïš	Tbr	kwasi
TSh	kwasï"	Sr	kwah yi	AYq bwa	sa (vt), bwase (vi), bwasi (stative)
Sh	kwasï"	Ca	-kwás-	My	bwasse, bwassi
Cm	kwasïpï	Ls	kwáşi-š	Wr	wahsí 'asar'; iwa-ná 'be ripe'
Kw	kwasi/kosi	Cp	kwáşe	Tr	wasá-/wasí-; o'e-
Ch	kwasï	TO	baha/bahi/bai/baikam	Cr	kwasí
SP	qwašï-ppï	Nv	bahida	Wc	kwášee/kwáašíi;
WMU	qw <i>ah</i> sű-y	PYp	bahi	CN	(i)kwasi, wiksi,
CU	kusï-ka-tï	NT	báhi/baáhyi		yoksi/iuksi
		ST	baaya; baikam		

PUA *s is also exemplified in *kwasiC 'cook, ripen' above. Both initially and medially, PUA *s mostly remains s in most languages, but *s > h/ø in Tep and *s > h in Sr and Ktn of Tak, and sometimes in Tbr. However, a retroflex \S in Sr \S and Ktn \S does not go to h like most of the PUA *s > h in Sr and Ktn. Retroflex \S appears in other Tak languages as well, though not entirely consistently among themselves, so an explanation or another proto-sibilant vet needs some attention.

PUA *c > s in Tep, but remains c elsewhere initially. Medially, PUA *-c-> -y- in NUA (see at 2.3.2).

PUA *w remains w in most of UA, but *w > g in Tep, *w > 1 in Hp before low vowels, *w > mw, \tilde{n} in Tbr, and medial *-w- > ϕ on occasion in many languages.

PUA *y remains y in most of UA, but *y > d/đ in Tep, Eu, and Op, and often *y > \tilde{n} in Tbr.

PUA *h and **PUA** *' are predictably fragile, as they are in many world languages, yet they remain h and 'in most UA languages most of the time, but are subject to frequent elision ($> \emptyset$), and in NT and ST, are subject to consistent elision (*h > \emptyset ; *' > \emptyset). A few PUA *h do remain h in TO.

PUA nasals (m, n and/or n) are at least partially intertwined with a potential liquid or two, and the whole array awaits a brilliant disentanglement. The author's present perspective is at 2.7. Vowel correspondences and behavior are treated at 2.15.

Some larger phonological patterns in UA are that approximant glides become stops in Tep: *w > g, *y > d. Tep also shows a general weakening or lenition of a series of consonants: *t > c sometimes, and *c > s, *s > h, *h > '/ø. Tbr nasalizes the glides: $*w > mw/\tilde{n}$, $*y > \tilde{n}$.

The following discussions contain less about the obvious (sound correspondences), and more about some lesser known pecularities of UA phonological phenomena in UA. These illustrative sets are numbered with a \mathbf{P} (for phonology), to not confuse them with the comparative sets, from which they are greatly abbreviated. For the fuller treatment, see each in its alphabetized comparative listing.

2.2 Phonemic Frequencies in Uto-Aztecan

The phonological frequencies of initial syllables in Miller 1988 (M88) were calculated. The exact numbers of initial syllables among UA cognate sets are subject to adjustment, yet those in M88 are reasonably proportionate and available for quick inspection, until this work's sets settle sufficiently for counting. The first column is the number of sets beginning with glottal stop-vowel or initial vowel. (Enough UA languages require glottal stop before otherwise initial vowels that Miller (M88), Ken Hill (KH/M06), and others deem the same for PUA.) The other columns are sets beginning with the specified CV combination. Totals of the lines (vowel totals) are to the right; and totals of the columns (consonant totals) are below. The total number of sets in M88 is 1185, the total both of the rows and of the columns.

Table 8: Initial Syllable Frequencies

,	c	h	k	kw	m	n	p	S	t	W	У	totals
a 39	18	17	43	15	43	38	64	29	48	27	28	409
i 11	23	7	10	16	6	2	28	18	1	18		140
ï 19	15	9	17	6	11	15	17	22	54	12	19	216
o 27	20	8	38		11	12	26	15	26	14	10	207
u <u>9</u>	<u>20</u>	<u>21</u>	<u>37</u>		<u>23</u>	<u>5</u>	<u>23</u>	<u>21</u>	<u>24</u>	<u>2</u>	<u>28</u>	<u>213</u>
105	96	62	145	37	94	72	158	105	153	73	85	1185

Some observations of interest and relevance to the phonological discussions include:

- (1) The vowel a is about twice as frequent as other vowels.
- (2) The syllables kwo, kwu, and yi are absent. Yet there are 38 ko and 37 ku syllables, respectively, vs. 10 ki and 17 ki. The ko/ku are nearly as many as the 43 ka, which vowel, across the board, is normally twice what others are. The increase in ko/ku syllables is probably related to the absence of kwo/kwu syllables, though the same cannot be said for an increase in *i* in absence of yi.
- (3) Among all tV syllables, only one ti syllable (M88-ti1 'man') existed until Ken Hill redistributed it (to KH/M06-ci24, tu10, ti9), so now no ti syllables exist (in KH/M06) vs. 48 ta, 54 ti, 26 to, and 24 tu. In contrast, the number of ci syllables (23) is larger than other cV syllables (18, 15, 20, 20) in spite of the fact that i is the least frequent vowel: i.e., 140 i vs. 409 for a and vs. 200-plus for the other three vowels. All this suggests that many apparent *ci may be from an earlier **ti.

2.3 Cluster Clutter in Uto-Aztecan

Previous tradition has it that UA stems are generally CVCV (C = consonant; V = vowel). While many undoubtedly are, evidence is emerging to suggest that many Proto-Uto-Aztecan (PUA) stems contained consonant clusters not previously recognized, in forms such as CVCCV, CVCCVC, etcetera, though many could be from archaic compounds, too. Sapir (1913, 415) concluded that most UA clusters result from vowel syncope or syllable reduction: CVCVCV > CVCCV. Later, Kaufman (1981) and Manaster Ramer and Blight (1993b) and Manaster Ramer (1997) noted evidence for reconstructing clusters for several etyma, such as *kapsi 'thigh' vs. *kasi (Miller 1967). Sometimes the cluster itself survives in only one language or none, though evidence for the cluster is found in others. We see frequent evidence in UA that vowel syncopation (the deletion of an internal vowel) is a common phenomenon in UA and creates additional clusters (as Sapir noted), and that even those later clusters sometimes reduce quite quickly (CVCVCV > CVCCV), suggesting that many UA languages do not maintain consonant clusters well, though Ken Hill (p.c.) notes that Sr, Hp, and some others do maintain clusters fairly well. The author (1995, 2000b, 2003) has long suggested that part of the problem, if not the major part of the problem, with the medial consonant correspondences is underlying or previous consonant clusters which have reduced in a variety of ways, thus creating the variety. Miller (1983) recognized that "initial syllables can be reconstructed in considerable detail, but there are still many problems for non-initial syllables." For example, one can observe in Miller (1967, 5) that the initial consonant correspondences are fairly clear and consistent, while the medial consonant correspondences are horribly varied and inconsistent. Yet the possibility that many of those medial consonants are from reduced consonant clusters may eventually explain some of the variety and difficulty, if not most of it. If we are dealing with 13 PUA consonants (which number is also debatable), then (13x13=) 169 possible clustering combinations exist, each of which would yield a greater variety of results than a single consonant would, depending on the consonants clustered, phonological environments, when they became a cluster, what phonological rules were productive before vs. after their becoming a cluster, etc. Though not all such combinations are likely to have existed, of course, many to most could have. Perhaps a dozen of those clusters reduced to the velar nasal (n) in some languages. Perhaps another dozen combinations reduced to a glottal stop (') in some languages, etc. Each cluster would likely reduce more ways than a single consonant would among the 30 UA languages. In other words, the whole matter of medial consonant clusters is very complex, which is why little progress has been made in unraveling them.

2.3.1 Final Features as Evidence of Earlier Consonant Clusters

Final features suggest the presence or absence of internal consonant clusters. Final features have been discussed by several (Sapir 1914, 451-2; Sapir 1930, 62-65; Irving Miller 1982; Wick Miller 1983; Manaster Ramer 1992b, 2004) and involve the presence or absence of underlying final consonants, whose presence causes consonant cluster behavior at morpheme boundaries. These final features are found in much of NUA, most notably and clearly in Num, but also in Tak and Tb. Sapir (1930) found that Num stems had one of three final features: gemination (-") causes a doubling of the next consonant (> -CC-); nasalization (-N) adds a nasal dimension to precede the next consonant (> -NC-); or spirantization appears to be a lack of a final underlying consonant, such that the next morpheme's initial consonant appears as it typically does between vowels (*-k- > -x-/-ġ-, *-t- > -r-/-d-, *-p- > -v-). Miller, Elzinga, and McLaughlin (2005) provide some TSh examples with the post-position -pa'a 'on' after spirantization (*naka-pa'a > naġa-va'a 'bighorn sheep-on'), gemination (*tua"-pa'a > tuappa'a 'son-on'), and nasalization (*pïyïN-pa'a > pïyïmba'a 'duck-on'). The variety of absolutive suffixes (*-ta > -t(a), -l(a), etcetera) mostly in NUA, also leaves hints of the existence and type of final consonant (Sapir 1914, 451; Manaster Ramer 1992b; 2004). For example, in Tak and Tb, an absolutive suffix -l is thought to mean the lack of a final consonant, that is, the stem ended with a vowel (*V-ta > V-la > V-l), whereas an absolutive suffix of -t suggests that the noun stem had an underlying final consonant no longer obvious (*VC-ta > V-t).

2.3.2 Intervocalic *-t- vs. *-tt-/*-Ct- Clusters, and Many NUA -c- < *-tt-/*-Ct-

Intervocalic *-t- usually goes to -r- or -d- in Num and to -l- in Cupan and Tb (Sapir 1914, 451; Manaster-Ramer 1992b). So when we see intervocalic -t- in those languages, it is usually due to an underlying geminated *-tt- or to a cluster approximating *-Ct- that behaves much like *-tt-. For Sapir (1914, 452) also noticed that Num geminated -tt- corresponds to Tak and Tb -t-. Later, Alexis Manaster Ramer (1992a) demonstrated PUA medial *-c- -y- in NUA, and accordingly suggests the various NUA medial -c- are from other sources than PUA *-c-, unless *-cc- is geminated or clustered. Thus, the source of NUA -c- is often a palatalized *-tt- or *-Ct-, especially before high vowels. (See discussion at 'bat'.) In fact, Sapir (1914, 445) noted that many UA *c* may be from syncopated *ti. I would add that many, if not more, are also from non-syncopated *ti / *-tti or *tī / *-ttī. In the data below, note the frequency of *t-/*-tt-/*-Ct- > c/-c-, often adjacent to high vowels, but not always.

- **P1.** *attip-na 'good': CU 'atti 'good'; SP 'attïN 'good'; Cp á'či'a 'good'; Ca áča'e 'good, fine, well, very'. Related to these are Hp -'civa 'accord with', Hp a'civa 'behave as expected, do what one can with one's personal resources and limitations'; Hp àacipna/a'cipna 'do as expected'. Note that Hp a'cipna and Cp á'či'a are quite identical in five segments (a'ci . . . a) except for a consonant cluster in Hp that aligns with a glottal stop in Cp, and both align with SNum (CU, SP) *'atti, suggesting *-tti- > -ci-. The next four were also treated in Stubbs 2000a.
- P2. *paCti'a 'bat' > *paci, *pali, etc. NP pidahana'a 'bat' actually shows -t-. See discussion at 'bat'.
- P3. *paCti 'daughter' (at 'woman') > paci in SP and CU, but patti in the rest of Numic.
- **P4.** *patta/*patti 'flat' > *paci. See at 'flat'.

2.3.3 More Examples of Proto-Uto-Aztecan *t/*tt > c and before *c > s in Tepiman

We not only see *t or *-tt->-c-, but sometimes that change was early enough to undergo the Tepiman sound change of *c > s, such that some PUA *t /-Ct-> c > Tep s:

P5. *matta > *maca/*maci 'tick': NP madabi (< *matapi); Kw muu'maa-ci; CU mata-ci (< *matta-ci); Ch mata-vi (< *matta-pi); Cp máči-ly; Ca máči-l; Ls 'amáča; Sr maca-c; Hp màaca; TO maamş; Wr macá; Tr mačá; Wc mate. Takic, Hp, and TrC show -c- (in both NUA and SUA), but Num and Wc show -t-/-tt- (again in both NUA and SUA), yet TO has ş (< c < *-tt-).

P6a. *takoLa/*takuLa 'round, (en)circle': Eu takóris 'circle'; AYq tekolai 'round'; My tékolai 'redondo'; Sr ta'kï'q 'be round, circular'. From the first vowel *a* (Eu, Sr), note some raised vowels (AYq, My). If raised a little more, then:

P6b. *tikoLa > *cikoLa (> Tep *sikoLa/i) '(a)round': TO sikoD 'round, circumscribed'; TO sikol 'circular, round'; NT šikóra; NT šikóraka; ST šikar. Ken Hill adds Cahita číkola 'alrededor' which is exactly the link theorized. **P7a.** *tikiya 'deer' is found in most Numic languages and Tb, yet compare

P7b. *ciki 'white-tailed deer' in Tep *siki < *ciki < *tiki: TO siiki 'white-tailed deer'; PYp siiki 'white-tailed deer'. **P8.** *paNtuC > *paicu' 'badger': ST vaisïly 'tejón'; Cr haihcï(-te) 'tejón(es)'; and Wc háisï 'tejón' all match *paicV (*p > ST v; *p > CrC h). CN peeso'-tli 'badger' also parallels ST vaisïly and Wc háisï, all pointing to s.th. near *paicu, though CN s should be c and CN has p while Cr and Wc have h, so CN may be from an early loan. Most forms suggest an originally round final vowel, but puzzles remain. Wr pincúri 'tejón' and Tr batúwi 'tejón' must be included and may be key to the cluster. Wr pincúri shows *-nc-, a nasal-alveolar cluster, and the dipthong *ai > i instead of > e, like CN. ST s agrees nicely with the c of CrC and Wr. In light of many PUA *t > c adjacent to high vowels and in light of Tr's t and in light of Cr, Wr, Tr showing PUA *u after the t/c, something like *paNtu may explain all forms, especially since other examples of UA vowels before alveolars tending toward i (2.15.2) would explain *paicu (< *pantu). In addition, Wr's nasal in the cluster may explain such a cluster > -c- in most languages, for this may have been a different kind of cluster than in 'bat' (below) which resulted in Cr -c- vs. Cr -hc- for 'badger'. This is a fourth example of *t > c > Tep s.

P2. At *(so'o)-paCti'a 'bat' note the -pisa of PYp ho'opisa (Tepiman) and pida- of NP pidahana'a 'bat' among the dozen-plus reflexes. Because of NUA -c-, the reconstruction must include *-Ct-/*-t- and NP actually has -t- among many Num -c-, yet in a Tep language (PYp) we find -s-, the usual reflex of *c, but ultimately from *t or *-Ct-. *(so'o)-paCti'a > *pita- (NP pitahana'a 'bat')

> *pali (Ca)
> *paci'a > *paca'a (Tb, Kw, Ch, SP, CU)
> *paci'i > háci'i (Cr)
> *paci > *so'-peci (Tr, Wr, Eu) > *soci (Yq, My)
> *paci > *so'o-pica > Tepiman ho'o-pisa (PYp)

- **P9.** *natipa (> *nacipa > *nacpa > Tep *naspa) 'fold': ST naspa' 'doblar, torcerse'; Eu nátpa 'doblar'; Nv nasa 'plegar una cosa'. Here, we actually have Eu -t- aligning with Tep -s-, suggesting palatalization before c > s in Tep. **P10.** *tuti > *cuci > Tep *susi(-ka) > Tep susaka 'sandals': TO šuušk; LP šuušak; NT súúsaka; ST suusak. In light of Tep's frequent aniticipatory V assimilation (*V-a > a-a, at the end of 2.15.3), an original *tuti would have high vowels following both consonants (*tuti > *cuci > Tep *susi), then suffixed -ka would encourage *susi-ka > susaka. As we often see Tep s < c < *t (i.e., Tep *susa < *susi < *tuti) and since Hp o < *u, then Hp tooci (< *tuti) 'shoe, moccasin' agrees with Tep entirely.
- **P11.** *tapputi / *tüpputi 'flea': TO čiīpš; PYp teepas; NT tapīīši; ST tapīīš; Eu tepú'u / tepú; Yq téput, tepučim (pl); My tépput; Wr tehpucí; Tr ŕipučí; Tbr tipú-t; Wc teepiï; Cr tepï-, tepï-ci (pl.). We see a 3^{rd} consonant -t- in Yq, My, and Tbr, and even if the -t- was originally part of a suffix, it understandably palatalized in Tr, Wr, and the Yq pl, and that palatalization (c) is as likely the source of Tep s, that is, the 3^{rd} consonant in several Tep forms. The first vowel may well be a; for NT and ST both show a, not i, and if i (a high V) were original, then results similar to *t > c > s as in 'deer' and 'sandals' for the first consonant would have resulted, but that did not happen, and perhaps because an original initial *ta syllable, which only later became ti, prevented it.
- **P12.** *'ati / *ata / *aCti 'laugh': Wr a'ci 'estar riendose'; Tr ačí 'reirse'; My aače 'reírse'; AYq aače; Cr ra-'á'ace 'he is laughing at him'; TO a'as; LP 'a'aši; PYp a'asi; NT ááši-/ásyi; ST 'aas/ašia. Miller includes Ca 'ála' 'mock, echo s.o., vt' which is probably cognate. Because Ca 'ála' has l, which is the Cupan reflex for intervocalic *-t-, it again may suggest a medial *-t- or cluster *-Ct- originally, which again did the cycle *t > c > s in Tepiman *asi. Ca 'ála' is a transitive verb, perhaps preserving the final vowel -a, of the alternation -a 'transitive, active' vs. -i intransitive, stative'.
- P13. *tïyuna 'keep': Mn tïyuna 'store, v'; NP notïīna 'keep s.th.'; Ca téyan 'preserve, carry on (custom, rite)'; and NT šiid'yúñd'yi 'retacar, guardar, llenar mucho'. With *t- > *c > Tep *s preceding high vowels, Mn and NT agree. P14. *koCti / *koCta 'bark, shell, money' (at shell): Cp qíči-ly 'money, silver'; Ca qíč-ily 'money' (pl: qišlyam); Ls qéš-la 'seashell'; Ls qéš-la-ka-š 'skull'; Gb (a)-xóóxoc '(su) cáscara'; Sr -qöč 'hide, bark'; Sr qöčaaviam 'money'; Cr kúcape'e (Cr u < *o) 'cáscara'; Cr kuhca'ana 'type of tree with useful bark'; Cr ra-ká-kuhca'an 'he is skinning it'. Ken Hill adds Ktn koco 'shell (of turtle), peel, skin'. The following three languages may be a different set or simply shifted semantically to 'shrimp (shell)': *koCti 'shrimp': L.Son90 *koci 'camarón'; Wr kohcí 'camarón, canqui'; Tbr koci-kal 'camarón'; and My kóči kapá'ora = baa kóočim 'camarón'. Add Nv koska 'concha de nácar [mother of pearl shell, nacre]'; this Tep form fits the Cup/Tak sound correspondences. When both SUA and NUA have medial *-c-, it is probably from medial *-t- or a cluster, thus making NP kota 'crayfish' (Nichols) and other NUA forms from *-t-, not *-c-. So Nv -s- < *-Ct-, again Tep s < c < *-t- or *-Ct-. P15. *pï(C)ta/i 'all': TO wïisï / wees; LP vïis; NT vïisi; ST vïis; PYp veesi; Cp petá'ama 'all, every'. In light of Cp -t- vs. Tep -s-, this may be another case of *-Ct-/*-t- > *-c- in time for *c > Tep s, though *pïcV-ta > *pïtta is possible.

P16a. *kwitta/i / *kuhita 'smoke': Mn ku"-kuhi" 'smoke'; Mn kuhida 'smoke out, vt'; Mn kuhita'i 'be smokey, vi'; NP kwitta; TSh kukkwi 'smoke, v'; TSh kukkwippï 'smoke, n'; Sh (kuk)kwiippïh 'smoke'; Kw kwihi 'be smoky'; SP kwii"; CU kwii-vï; Hp kwiici(nw); My bwicia 'está humeando'; My bwiici 'hizo humo'. Add Yq bwicia 'smoke, n'; Eu bici 'smoke, n'; Cr kïici 'smoke, dust'; Wc kïci 'smoke'. The Corachol forms are cognate since CrC *kici < *kwici < *kwici. Manaster-Ramer (1992b) astutely proposes that *kwici 'smoke' (<**kwit-) may involve an original t, on the Hopi evidence: Hp kwiit-an-ta 'purify with (juniper) smoke, fumigate'; Hp kwiit- 'smoke, n' (combining form of Hp kwiicinw 'smoke, n') in contrast to *kwici for most other UA languages. Supporting that is also the NP evidence: NP kwitta 'smoke' and NP kwidaba 'smolder' and the Mn forms. So Mn, NP, and Hp align with Manaster Ramer's suggestion that we have medial *-t-/*-Ct- instead of *-c-, and in the following Tep forms we find -s-.

P16b. *kut-kwitti > *ku-kwici > Tep ku-bisi 'smoke, dust': TO kuub(s); UP kuubsi; LP kuubiš; Nv kupsa 'humear'; PYp kuubisi 'smoke, n'; PYp kuuba smoke, vt'; NT kuubúši; ST kuubïš. The first element is likely *kut 'fire'. Some Num forms also align with *kut-kwiC.

P17. *pita/*piti > *pica/pici/picu 'wasp, bee': several NUA languages show medial -c- as well as SUA languages: Eu pica/pisat 'avispa'; Wr pi'cá 'vuitachi (como abeja, rojo, pica, que secreta goma usada como incienso)'; Tr pičé 'avispa sp'; My bíica; AYq viiča (*p > v in AYq); Pl eca-t; Gb píčokwar 'mosca'; Sr piičiču'a|ţ /piiččua'|ţ 'fly, n'; Ktn picucu'a-č. However, NUA -c- is normally from *-t- or *-Ct- or *-Cc-; so the several Tep forms showing s (after redupl) are likely the result of *-t-/*-Ct- > -c- > -s- in Tep: TO wiipš; PYp vipisi 'wasp, hummingbird'; LP(EF) wípis 'avispa, bitache'; NT pipííši 'wasp, hummingbird'; ST viipis 'wasp'; ST vipiiš 'hummingbird'.

Fourteen examples above (2, 5-17) show PUA *t/*tt > c > Tep s.

2.3.4 Consonant Clusters Reducing to One Consonant: *-CC->-C-

Returning to consonant clusters generally, an example follows to illustrate that sometimes a language may show both elements of a cluster, while other languages show evidence of a former cluster but without both consonants, while other languages show the cluster so far removed from memory that it behaves as a single consonant:

P18. *nakana 'grow'; *nakan-tu(pï) 'become grown/old (man)': Num forms show only *nakan: Mn naa 'grow'; Sh nahna" 'grow, grow up'; Kw nahna 'grow'; SP nanna 'grow'; CU nana-pï 'grown, mature' (< CU naná-y 'grow'); Cr tí'inahana 'grow'. Tak has *nakan-tu(pï): Cp naxánču've-l 'old man'; Ca náxaluvel 'old man'; Ca náxaluvuk 'bec. old (of man)'; Ls naxááčuu 'bec. an old man'; Ls naxááči-š 'old person'. Note that Cp naxánču've-l 'old man' and Ca náxaluvel 'old man' are identical except for the medial consonant(s) -nč- and -l-; whenever c and l align, it is likely a cluster involving *-t-. Cp shows the cluster; Ls shows evidence of a cluster but lost the nasal, while Ca -l-behaves without any sign of the cluster. P2 *paCti'a 'bat' above is another example: Ca -l- again lost all trace of the cluster while others show -c-, a strong sign of a clustered *-Ct-, especially in NUA. A third example of Ca -l-and Tb -l- while all of Num shows *-tt- is at *pïttiya 'heavy'. Thus, determining underlying clusters in PUA yet requires care with frequently tentative results. A similar but more problematic example follows.

P19. *nos-tu 'old woman': Cp níču 'grow old (of women)'; Cp níšl^yuve-l 'old woman'; Ca níšl^yuvel 'old woman'; Ca níšl^yuvuk 'bec. old (of women)'; Ls néču 'bec. an old woman'; Ls néš-la/néš-ma-l 'old woman'; Sr niihtavï^rc 'old woman'; Sr niihtavï^rcu' 'grow old (of a woman), become an old woman'. Ken Hill notes Sr's first vowel is likely due to Ca influence. Ken Hill also adds Ktn nohtat, pl: nonohtam. In the above reflexes, I surmise that -c- < -st-preceding high vowels, while Sr and Ktn show *-st- > -ht-/_a, where -t- is maintained preceding non-high vowels. The present cluster -šl- may suggest that a vowel previously intervened: *nositu- > nVšlu.

Consider other examples of apparent clusters reducing to a single consonant in some languages. **P20. *is-taka** 'lie, v': CN istlaka-ti 'lie, v'; CN istlaka 's.th. false'; HN 'istlaka-wia 'lie to s.o.'; Wc 'ítá 'lie, v'. Note *-st->-t- in Wc.

P21. *tukuN-pa 'sky, up': Sr tukuhp|t 'sky'; Gb tokúpar; Cp túkva'aš; Ls túúpaš 'sky'; Hp tokpela 'sky'; Tb tuguumbaal; Mn túgupaa 'above' (< *tukuppaa); Sh tukumpana; Ch tugúmpa; and most other Num languages reflect *tukum-pa. Note Ls túúpa-š with loss of -ku- syllable, but *p remained a stop (vs. -v-) due to a -kp- cluster: *tukupa > *tukpa > *tukpa > *tuupa. SUA *tïkpa-(wa) also syncopated the second vowel (like Cp, Ls, Hp) to yield SUA *tïkpa-(wa) > Tep *tïvagi, even showing the same -wa syllable apparent in Hp tokpela (Hp l < *w), though Tep lost all sign of the previous cluster.

P22. *kapsi 'thigh': 7 of 8 branches show reflexes resembling *kasi (M67), then Manaster-Ramer (1993) noted the cluster in Tb hapši-l 'thigh, upper leg' and evidences of clusters in Hp qàasi/qahsi 'thigh, hind quarter' and other reflexes, while others retained no sign of a cluster.

P23. *tasikaLi 'tortilla': CN tlaškal-li 'tortilla, baked bread'; CN tlaškaloaa 'make tortillas'; Pl taškal; Tbr tasekalí-t /tasikalí-t 'tortilla'; Yq tahka'i. Tbr has the fullest form with all vowels, while Yq, whether a loan from Azt or not, shows the loss of the vowel and then the loss of s/š in the cluster.

In fact, note that in many reduced clusters, the first consonant is often more altered (or lost) than the second, though gemination or other hints of a previous cluster may be apparent in or adjacent to the remaining consonant, much like Latin in- 'not' of incomplete, illegal, and irresponsible.

2.3.5 Medial -p- (vs. -v-) from a Previous or Underlying Consonant Cluster

Many UA languages yield intervocalic -v- < *-p-, as the first set P24 suggests. So when those same languages show -p-, it likely results from gemination or a cluster, perhaps even in Tep, as P25 suggests.

P24. *nopi 'hand, arm': TO nowi 'hand, arm', pl: noonhoi; PYp novi, pl nonovi; Nv novi, pl: nonovi; NT novi; ST nov. TO pl shows h but no v.

- **P25.** *sïppi 'cold' vs. *sïpï 'cool, wind': *-pp- in TO heepi 'cold' vs. TO hewel 'air, wind'; TO hew-kk 'to become chilled (person)'; hew-kon 'to blow on, vt'; TO heweD 'to blow (wind)'; TO hewajiđ 'cool, chill, relieve (pain), vt'; and PYp heepi 'cold' vs. PYp heve 'cool'; PYp hevel 'wind'; PYp heve-lim 'to blow'; and NT ïïpíd^yi 'cold, adj'; NT ïïpiar^yi 'be cold, vi' vs. NT ïvïli/ïvïili 'wind'; and ST hïïpidy 'cold' vs. ST hïvïily 'wind'. Could the difference ('cold' vs. 'cool'?) be a matter of intensity (gemination) vs. a lack of it?
- **P26.** *tïLopini 'rope' (B.Tep243 *tïrovini 'rope': PB tïrviñ; NT tïró-; ST tïrviñ), note PYp forms exhibiting both intervocalic -p- and -v-: PYp teevin 'thin rope'; PYp terevin/telvini 'rope, fence wire'; PYp tepinid 'roll, twist, wring, vt'. The last term is likely a verb intensified: *-p- > -pp-.
- **P27.** *wïL-pa'a 'tall, long, great-height/length': Hp wïïpa 'tall, long'; Cp weváşa 'long'; Cp weváşiš 'tall'. Miller (M67-229) astutely sees Hp wïïpa 'tall, long' as a compound of *wïL-pa'a 'big-height/length'. Intervocalic -p- in Hp instead of -v- supports Miller's observation, though the -v- in Cp likely means it was sooner perceived as clusterless or non-geminated in Tak.
- P28. *naNkapï 'leaf': Kw naga-vï; Ch nanká-va; SP maavï-naŋqa-vï 'leaf' (vs. SP naŋqava 'ear');
- CU nïká-'a-vi (vs. CU nïká-vi 'ear'); Tb naŋhabïï-l; Hp nàapi/nahpi. Whether Hp is a loan from Num or not, it lost intervocalic -ŋk- and Hp nàapi/nahpi shows -p- instead of -v-, probably due to a previous cluster.
- **P29.** *mukpiC 'nose': While Num *muvi lost all signs of a medial cluster, Sr and Ktn *mukpi agree with Hp mòope(q) 'in front' in showing evidence of the cluster.
- **P30.** *sïCpowa / *sïk-powa 'numb': CN sepoowa 'be numb (of body part, from cold or lack of circulation)'; Eu zopóre 'encogerse'. The first element of the CN term is suggested to be CN sek-tli 'snow, ice'. Eu normally has intervocalic -v- for *-p-, so Eu -p- (vs. -v-) suggests a cluster in Eu as well.

Other examples are at *piso-ta 'vomit, v' > SNum pitta, *pusa-ta 'wake' > Wc hīī-tīa, and elsewhere. The gemination for intensification in 'cold' and 'rope' above is seen elsewhere as well, e.g., in

P31. NP kodabi (< *kotapi) 'break, v' and NP kotabi (< *kottapi) 'break clean off, v'—both in the same language.

2.4 Proto-Uto-Aztecan *p in the Corachol and Aztecan Branches

Usually Proto-Uto-Aztecan *p > \emptyset in Aztecan and *p > h/ \emptyset in Corachol in initial position. So from whence are the many initial p's in Azt and CrC? Loans are a presumable source. However, medially there are also both many -p- and lacks of -p-. In fact, medial *-p- evaporates often enough that one could wonder if it must be geminated or in a cluster to have remained, as in P30 *sïk-powa 'numb' above. First are some well known examples of loss of initial *p (P32, P33), but then follow several examples of loss of *-p- intervocalically (P34-P41):

- P32. *pa 'water': CN aa-tl 'water'; Wc haa; Cr hah.
- P33. *pusi 'eye': CN iiš-tli 'face'.
- P34. *saypoL 'fly, n' in several other SUA languages, but CN saayool-in 'fly'.
- **P35.** *supa 'adobe': Tr supá-na-ri and Wc šïnaríiya 'adobe'. Tr supá-ca-ri and NT úúpasai 'el adobe' have -ca- as 2^{nd} morpheme, and both show *supa es expected for the first morpheme. However, *supa > sï a > sï in Wc.
- P36. *pipa 'tobacco': While most branches show reflexes of *pipa 'tobacco', Sapir astutely associates
- Wc yáa 'tobaco' and Cr ya-na 'tabak rauchen' with *pipa, in that h (< *p) is feeble in the CrC languages, such that *pipa > *hiha > *ia > *ya for both Cr and Wc is reasonable. Thus, medial *-p- was lost as well as the initial *p.
- **P37a.** *tapusa > tïposa > tïposi 'gopher': TO jewho/čïwho; LP tïvi; PYp tïvua; NT tïvóóhi; ST tïvua; Eu tïvósi; Op tewosi; Yq tébos; Wr te'pósi; Tr repósi. Yet notice the lack of *-p- in the CrC and Azt branches:
- **P37b.** *tapusa > tausa (> tusa) > tosa 'gopher': CN tosan 'gopher'; Cr tauhsa 'tuza'. Note Cr tauhsa shows the expected result of loss of -p- from *tapusa.
- **P38.** *napu 'spotted': Cm naboo-, naboorï 'marked, striped, spotted'; SP navoo'vi (< *napuu'pi Miller lists) 'spotted'; Wc -naïye of Wc cíí-naïye 'pinto' belongs, since *p > h or zero and CrC ï < *u: thus, napu > naï, or loss of *-p-.

- **P39.** *hupi 'woman, wife': several UA languages show *hupi; with loss of h- are Wr upí 'wife'; Tr upí 'wife'. In Cr ïita'a 'woman' and Wc 'ïya 'woman, wife' is the usual PUA *u > CrC ï and loss of intervocalic *-p-: *hupi > (h)ïi-.
- **P40.** *wiwi-pukV 'tremble': TO gigiwuk; Nv gigibuku; PYp gigvia 'tremble, shake, shiver, vi'; NT gigivukui; ST gi'ivuk; Sapir ties Tep and CN wiwio-ka 'shake from cold'. CN wiwiyoka / wiwiyokowa 'tremble, shake, shiver' corresponds to *wiwi-pukV, since Tep *gigivukui roughly corresponds to UA *wiwipuku, and with CN losing *-p- intervocalically, then Tep *gigivuku and CN *wiwi-ok(ow)a correspond well, CN -y-likely being excrescent following i.
- **P41.** *taput(i) 'cottontail rabbit': As in *tapusa 'gopher' above, sixteen languages match the four segments *tapu 'cottontail rabbit', while CN tooč-tli shows both loss of intervocalic *-p- and a change of first vowel to second: *taput(i) > *tapoc(i) > *taoci > CN tooc-. CrC kept the first vowel, but also lost intervocalic *-p- in a process something like *tapoci > *tapci > CrC *taciu 'rabbit' for Wc táciu; Cr táciu'u. Notice at both *tapusa 'gopher' and *taputi 'rabbit' that CrC kept the first vowel (a), while CN assimilated the first vowel toward the second (a-u > o-o) though both lost intervocalic *-p-.

The above eight examples (P34-P41) of loss of intervocalic *-p- in CrC/Azt are but a sample to begin studying such. Sometimes when CN does have medial -p-, other UA languages suggest an underlying gemination *-pp-:

P42. *tippV 'short': PYp tepelika 'flat, short, level'; Nv tipirhika 'corta'; Ca tépi 'be short (clothes)' (*-p- > -v- in Ca, so *-pp- > -p-); CN tepitoon 's.th. small'; CN tepicin 's.th. small'. PYp in SUA and Ca in NUA both normally have intervocalic -v- < *-p-, so intervocalic -p- is from *-pp- for both of them, and perhaps for CN's having -p- at all.

2.5 Aztecan Initial *p Forms May Be Loans from Other UA Languages

Some evidence suggests the **Aztecan initial *p** forms may have come from other UA languages. **P43.** CN aa-tiya 'melt, be smelted' has the expected CN form for 'water': aa- < *paa; but note CN paati 'dissolve, melt, vi' and CN paatla 'dissolve, melt s.th., vt' both with initial *p, and Hp paata 'melt, vt'; Hp paati 'melt, vi'. Hp has loans from CN, but CN's initial p would suggest borrowing the other direction or from other more northern UA languages into Aztecan.

- **P8.** *paNtu' > *paicu' 'badger': Wr pincúri; Tr batúwi; ST vaisïly; Cr haihcə(-te); and Wc háicï all match *paicV (*p > ST v; *p > CrC h). CN peeso'-tli 'badger' parallels ST vaisïly and CrC hai(C)cï, and CN may be a loan from Tep before *p > Tep v, or from another discontinued UA form, since CN s should be c and CN has p while Cr and Wc do not.
- **P44.** *kwïLuC 'swallow': Hp kwelo 'taste, v'; Tb weleeh 'swallow'; Eu béru'u 'swallow'. Hp and Eu match perfectly through four segments, Tb assimilating one vowel. However, CN(RJC) palo/paloa 'taste, eat' does not have the expected sound correspondences as the other three have, but does resemble the Eu form somewhat or may be a loan from a similar TrC form not presently available, and that would explain CN initial p, which is not supposed to be.
- **P45.** *pïwa 'start, begin, first': TO weepeg 'first, adv'; TO weepegat 'become the first one, v'; LP viïpïg; NT ïïpïga; ST viïpi'; HN peewa' 'to begin'. Add PYp veepegi 'first'; CN peewa 'begin'; Pl peewa 'begin, commence'. This stem appears only in Tep and Azt (with initial p), which means Azt may have borrowed it from Tep.
- **P46.** *pïci 'flat, prone': Tr peči 'cama, tendido para dormir [bed, stretched out for sleeping]'; CN(RJC) pečtik 'flat, flat-based, wide'; CN(RJC) pečiuhki 'flat'; CN(RJC) pečia 'underlie s.th.'
- **P47.** *pata/*patta 'flat': at 'flat' are some CN forms with initial p and others without p: CN patla-čoaa 'flatten, press, crush, vt, bec. flat, collapse, vi' vs. CN alaktik / alastik / alaawak 's.th. slippery, crumbly'; CN alaawa 'slip, slide s.th., vt'. Note CN forms both with and without *p.

For CN paaka and NUA *pa-ka, see 'wash'; and other examples are retrievable. The Aztecs say they came from the north or northwest, but exactly where or how far north is unknown, but may be discernible from language.

2.6 Reduplication Created Clusters That Later Separated

In the sets below, some sets show the base form (non-reduplicated), while many show the reduplicated form. Interestingly, in both sets, NUA has the base form, while SUA has the reduplications. Another consistency in both sets is that the second consonant is a liquid (*-L-), and it appears that the reduplication first created a cluster, which caused the liquid to change to glottal stop, which was later separated from the other consonant by an echo vowel: *-VLC->-V'C->-V'VC-.

P48. *wïL, reduplicated *wïLwïLu > *wï'wïLu > *wï'iwïLu 'big' or Tep gï'igïru: among the several UA forms, the reduplicated form is usually the plural form of *wïL.

P49. *koLi, reduplicated *koLkoLi > *ko'koLi > *ko'okoLi) 'hurt, be sick, chili pepper': See at pain, the many SUA forms showing *ko'okoLi, while Cupan shows the non-reduplicated form with its vowel change *koLi > *qoLi > qiLi: Cp qilyíqa-t 'hot, spicy, strong'; Cp qilyíqtu'ni 'hurt, sting, vt'; Ca qélya 'feel sore, v'; Ca qélyak 'peppery, pungent, creating a burning sensation'. In SUA: TO s-ko'ok 'be painful'; TO ko'okol 'chile pepper'; TO ko'okoD 'hurt, give pain to, vt'; NT kóóko 'be sick'; NT kóókoli 'chile'; ST -ka'ook 'be sick'; ST ko'okoly 'chile'; Eu kókoe- 'doler'; Wr ko'koré- 'dolerse'; Wr ko'kóri 'chile'; My kó'okori 'chile'; My kó'okore 'enfermo'.

2.7 Nasals

Uto-Aztecanists have long held to the correspondences of NUA η: SUA n and NUA n: SUA L (L = either liquid, 1 or r). David Shaul (1985) and Jane Hill (2007b) summarize the history of the matter well, stating that Miller (in Miller and Silver 1997, 285) viewed the matter as PUA * η > SUA n and PUA * η > SUA *L (l/r). Others, such as VVH (1962), Campbell and Langacker (1978), Manaster Ramer (1993), and Dakin (2001) argued for the opposite direction of change: *L > NUA n, and *n > NUA n. Sapir (1915, 475), on the other hand, considered *n > SUA n more probable, but also considered PUA *L and *n to have merged in NUA, or *L > NUA n (Sapir 1915, 477), and that *n remained n in both NUA and SUA, though disappearing in SP when not geminated (Sapir 1915, 473-4). Sapir's view comes nearest the author's. I surmise that PUA had at least three such consonants—*L. *n. and *η—and that η is often the reduced result of a consonant cluster, at least one of which was a nasal. Because many η are from cluster reductions (though not all), it seems less reasonable that *n became η and then η blossomed into an array of consonant clusters, but rather that *-NC-/-CN- > * η > SUA n. For example, *kumCa 'husband' (below) > *kuηa (NUA) > *kuna (SUA) seems more likely than *kuna > *kuηa > *kumwa. The parallel corollary of such a change would be PUA *n > SUA L, and is sometimes the case, vet again I agree with Sapir. that in other cases PUA *L > NUA n. The *n-*L complex remains unsolved in part, though something like a merger of *n and *L merging to n in NUA, which Sapir (1915, 477) also suggested, and *L and some *n merging to SUA L may hold some potential, though groups of exceptions litter the aspired neatness and await insightful explanation.

A number of sets reflect the patterns NUA n : SUA L and NUA \mathfrak{g} : SUA n, yet other sets provide complications to those oversimplifications. For some sets show NUA n corresponding to SUA n and others NUA L to SUA L, though it is often suggested that these derive from *-t- or such. Thus, more is likely involved than only the correspondences: \mathfrak{g} :n and n:L. But even the complications offer some consistencies. The n:n and L:L sets appear further below, but first consider some sets that shed light on the matter by revealing consonant clusters as the likely source of some \mathfrak{g} , which means those particular \mathfrak{g} are not from PUA *n. For example, several sets suggest that consonant clusters, like *-'m- (glottal stop plus m) and others, underlie many medial - \mathfrak{g} -.

2.7.1 Medial *-'m- and Other Consonant Clusters with Nasals Underlie Some Medial -ŋ-

P50. *si'moci 'hummingbird': Wr se'móci 'chuparrosa, colibrí'; Tr semučí / simučí 'chuparrosa, colibrí'; NP soŋoi'i 'hummingbird'. NP aligns with *si'muci in that NP's 2^{nd} and 3^{rd} vowels agree with Tr and Wr, and if the 1^{st} assimilated to the 2^{nd} (*i-o-i > NP o-o-i), and PUA *-c->-y- (or i or '; see 2.11), then *si'moci> *so'moyi/*so'mo'i> *soŋoi'i has NP being a decent match with Tr/Wr, and glottal stop plus m (-'m-) aligning with -ŋ-. Three sets show the -'m- cluster in SUA, and -ŋ- in NUA (P50, P51, P52).

P51. *cu'mV > *cuŋV 'suck, sip, kiss': Kw čohmi 'suck, v'; Cp čúŋe 'kiss,vt'; Cp čúmum 'suck obj, as venom'; Cp čúme 'suck, vt'; Ca čúŋ suck, vt'; Ls čúŋi 'suck (breast)'; Ls čúŋi 'kiss'; Sr čuuŋ 'suck, vt'; Wr cu'mi 'suck or slurp food'; Tr cu'mi 'kiss, sip'; My čuune; AYq čuune; Hp coocona 'kiss, suck'. Note -čiina in CN (paal)čičiina 'soak up, suck in, smoke, vt' and CN ilčiina 'suck up, consume'; HN čičiina / čičiini'. Add Nv tup'suma 'suck, vt' and NT višúúsumai 'suck'. These forms suggest *cu'ma. Six languages show medial -m- or -Cm- aligning with the frequent NUA ŋ and SUA n. As to why different languages show -m- in this set, including some SUA languages,

remains to be determined, though possible explanations include (1) a later loss of an intervening vowel in some languages or (2) different phonological rules coming into play at different times in the various languages.

P52. *o'mana 'sad, suffering': CN a'mana 'be upset, disturbed'; Tr o'moná / o'móna- 'be afflicted, saddened'; Tr o'móna-ri 'sadness, affliction'; in Sr the -uŋani- portion of Sr ahauŋanik 'sad, miserable'; Sr hahauŋan 'be poor, pathetic, miserable'; Sr hauŋanič 'poor one, orphan' (u often pronounced o); and Ktn haoŋa 'poor'. Words as long as the Sr forms are certainly compounds, so -uŋani- is as likely an element of those compounds as any. Here the cluster -'m-appears in SUA (CN and Tr) and as η in Sr and Ktn, as with cu'mi in Tr/Wr and η in NUA; in addition, the Tr and CN forms agree perfectly in the consonants -'m-n-, but disagree in the vowels: a-a-a vs. o-o-a. However, the vowels of Sr and Ktn are between the two, agreeing fairly well with both, perhaps:

PUA *o'mana > CN a'mana

> Tr o'mona

> Sr -unani- / Ktn -ona

P53. *yu'mi > yuŋi 'warm': NP yuwi; NP yui; Sh yuai 'warm'; Cm yu'a 'warm (of weather)'; SP yuuttui 'be warm'; SP yu'mi 'warm (of water)', yu'ata (of weather); Hp yoni 'be warm'. Even if SP yu'mi and Hp yoni have an extra morpheme than the others, Hp (-η-) and SP (-'m-) still suggest a medial cluster. The fact that 9 sets (P50-P58) show m in some languages and η in others suggests instances of medial -m-, when clustered (-Cm-/-mC-), reducing to -η-. Some -'m- clusters could be from something like *-km- or other things that reduce to -η-, like P54. **P54.** *sïk-mukki 'numb' < 'ice/cold-dead': Hp sǘmokiw|ta 'be numb, vi'; NP ta/ma-sïsïŋi 'foot/hand goes to sleep'; Cm sïsï'nitï 'numb, feel numb, asleep'; WMU sï'uú 'be numb'. The first morpheme could well be a cognate of CN sek-tli 'ice/cold'. Though Hp lost the velar stop, it preserved the vowel pattern best. In NP, Cm, and WMU are cluster reductions, showing residual features of both consonants, in which the velar + nasal cluster -km- went the following directions: *-km- > η (NP); -'n- (Cm); and 'u (WM; underlined V = nasal V), for all show signs of a velar (velar nasal or glottal stop) and a nasal; a nasalized vowel shows the nasalization in WMU. Or perhaps *sïkmukki > *sïN(u)ki > sïCCi or sïŋŋi as in NP, for after vowel loss, the whole second syllable is gone. (See vowel behavior below.)

After four examples of -'m- aligning with - η - , consider three well known examples of NUA η aligning with SUA η , but with several seldom-hightlighted m's among the NUA reflexes as well.

HUSBAND; MARIDO

Mn	kúwa	Нр	kooŋya	Eu	kúnwa
NP	guma	Τb	kuuŋa	Tbr	son-e-ká-m 'wife-haver'
Tsh	kuhma(cci)	Sr	wöčahav	AYq	kuuna
Sh	kuhma/kuha	Ca	wél'isew-ily	My	kuuna
Cm	kumahpï'	Ls	kúúŋ; tó'ma-vu	Wr	kuná
Kw	kuhma	Cp	kúŋ	Tr	kuná(ra)/guná(ra)
Ch	kumá	TO	kun	Cr	kïïn (2 nd V stressed)
SP	kumma	LP	kun	Wc	kïna
WM	piwá	NT	kúna	CN	siwawa, okič-tli
CU	piwá	ST	kun		

P55. *kuNa / *kumCa / *kuCma 'husband': this set is one of few whose reflexes appear in 25 or more UA languages. Note Hp, Tb, and Tak η aligns with SUA n, while 9 Num languages show -m(m)- / -Cm-. WMU and CU have piwá 'husband', but kumma 'male' also, in a slight semantic shift on SNum's east end:

SP kumma 'male, husband'

SP piŋwá 'wife, spouse'

CU kumáa-vi 'male animal, stud, macho'

CU piwá 'spouse, husband, wife'

The fact that nearly all UA languages show a form agreeing with *kuNa, but only vary in the type of nasal, three different nasals, no less—bilabial in Num; velar in Hp, Tb, Tak; alveolar in SUA—suggests that we are dealing with a single proto-form whose medial consonant is likely a reduced cluster, probably involving *m* and something else. Reflexes of 'lung' provide a similar enigma.

LUNG(S); PULMÓN(ES)

Mn	sóno	Нр	halayna; mïma	Eu	abokadaga-di
NP	soŋo/sono	Tb	mošooha-t	Tbr	wopaN-s; sorá komwa-lí-t
Tsh	somo/soŋwo/soŋo	Sr		Yq	saré'ečia
Sh	sonko/sonno	Ktn	šoŋa-č	AYq	hemaha'ačim
Cm	soomo	Ca	yávayva	My	sáre'ečiam
Kw	soo-vï	Ls	şavá-şva-š	Wr	so'locá
Ch	soo-vi	Cp	qíqilye	Tr	sonorá
SP	soo-vi	TO	hahaw	Cr	šáïñi-mee; ta'atime
CU	sö'ö-vï	PYp	hakadaga; pl: havdaga	Wc	šaaka
		ST	havkal	CN(RJ	C) mimiyawayo-tl

P56. *somCo / *suNCa 'lungs': Mn; NP; TSh; Sh; Cm; Kw; Ch; SP; CU; Tb; Sr; Ktn; Gb sár; Tbr; Cr; and HN sooneewa' 'to swell up (of vipers)'; Tr sonorá; and Wr so'locá. Tr has the expected SUA n for NUA \mathfrak{n} , but Wr has a liquid clustered with a glottal stop. NUA -m- (Tsh, Cm) and - \mathfrak{n} - as well as SUA -n- and -'L- suggest an underlying cluster with a nasal, and recommend * \mathfrak{n} > n and * \mathfrak{n} > L, as Tbr and Wr did both, but Tr only underwent the first step. Reflexes of 'salt' have a similar array of medial nasals.

SALT; SAL

Mn	omábi; omaa- 'to salt'	Нр	öŋa;	Eu	onát/ónta
NP	oŋabi	Tb	uŋaal	Tbr	oná-t
Tsh	onwapi(cci)/omapi-	Sr	čŏka't	Υq	'óna; AYq čo'oko 'salty'
Sh	oŋa-/onka-/ona-pin	Ca	'íŋ-il	My	oona
Cm	ona-/onaabi/ona'aitï	Ls	'éŋ-la	Wr	woná
		Cp	yewál; v. íŋeyu	Tr	oná/koná/noná
Kw	'owa-vi	Gb	'oŋó-r		yakáwi- 'salt/season s.th.'
Ch	aso-na; asómpï	TO	on	Cr	unáh
SP	oa	PYp	ona; ta'akil 'salty'	Wc	'únaa; 'ucíivi 'salty'
WMU	'öá-vi	NT	ónai		kwíe.túušáari 'earth with salt'
CU	'öá-vi	ST	'on	CN	ista-tl; CN poyek 'salted'

P57. *omCa/*oNCa > *oŋa (then > SUA *ona) 'salt': Reflexes exist in all branches except Azt, and the medial consonants (n, η, m, ø) again show a pattern similar to 'lung' and 'husband' with Mn and TSh showing m. **P58.** *sïm 'laugh': Cp šeme; Ca sém; Od hïhïm; ST h(ï)mpa, h(ï)mia; Nv 'ï'imï 'smile'; Ca sém-yaw 'smile'; Ca séni 'smile' may involve the same stem as Ca sém-yaw, but with a differing suffix, then η becoming a cluster reduction.

Above are nine sets having medial clusters of m plus something else corresponding to some NUA η and SUA n. Below are other cluster combinations corresponding to NUA η and SUA n.

P59. *taŋa 'bag, sack, contain(er)': Sr taŋat 'sack'; Gb taŋár 'sack'; Hp taŋa 'contained things'; Hp patŋa 'squash' (with pa- prefixed). Stubbs (2003:4) adds Tbr tanaté 'zurrón, mochila de cuero en que se acarrea a la espalda el ineral'; the -ta'ni of Mn kusatá'ni 'sack' (kusa 'sack'); CN taana'-tli 'basket with a handle'; and Yq 'ía-tana 'this shore/side' (a shore as that which contains/encloses water). *taŋa compounded with *pa- 'water' produces *pa-taŋa 'squash, pumpkin, gourd, i.e., liquid-container' (Stubbs 2003:4 and KH/M03-pa66 'squash'): Ch paráŋar(a) 'pumpkin'; SP paráŋwaraN 'pumpkin'; and Hp patŋa 'squash, pumpkin'. Note that the only NUA language not showing ŋ (Mn) does show a cluster of glottal stop plus n (-'n-), which suggests a cluster of some kind.

P60. *coLowa / *coLwa 'be hungry': Wr coloá-ni 'be hungry'; (Wr co'-cóla-ni 'be hungry, pl'); Hp cöŋö-w(ï)- 'hunger'; Hp cöŋ-moki 'die of starvation'. Wr coloá- and Hp cöŋö- match fairly well, since Hp ö < *o, and if -owa- > -oa- in Wr, then syncope causing a cluster of *-lw- > -ŋ- in Hp is natural, for w is a labio-velar and SUA *L often becomes NUA nasals, so the nasal and velar dimensions' becoming the velar nasal is reasonable, as does -nk- > -ŋ- in NUA sometimes. Note Tr čiriwísa 'tener hambre', which has the same three consonants (c, L, w). In light of alveolar and palatal consonants often causing V > i in Tr, as also in Tr bikiyá 'three' < *pakay, Tr does show the 3 consonants hypothesized.

- **P61.** *ca'Lo 'chin, jaw': Tr ča'ró 'chin'; Wr caló 'chin, jaw'; CN teen-čal-li 'chin'; CN kama-čal-li 'jaw'; Yq čao 'barba'; My čaro hímsim 'bigote'; My čaro wá'asa'ari 'quijada'; Hp cànw-ti 'open the mouth'. (For a semantic tie between mouth and mouth-verbs, see HN at P68a below.) The medial *-'Lo- of SUA likely corresponds to Hp -ηw- much like we saw in *coLowa 'hungry' above. These sets (*coLowa, *ca'Lo, and *yïLCa below) with Hp η aligning with SUA L plus round vowel suggest two things: (1) they suggest *L > NUA nasal, since *η > L is hardly likely in the other direction; (2) and they show Hp η aligning with likely clusters of a nasalizing element (*L > N in NUA) plus w or round vowel. Below is yet a third example of Hp η aligning with a possible cluster involving a liquid plus w.
- **P62.** *wïL 'grow': Ca wél 'to grow, rise up high'; Cp wéle 'to grow'; Ls wola/i 'grow (of plants or anim subj)'; and Hp wïŋwa 'grow, grow up', if it contains another morpheme not yet identified. The set *caLwa below has its problems, but may be a fourth example of such *-Lw->-η-.
- **P63.** *caLwa / *caCNa 'rib, side': Tb ca'apï-l; Ca čáwa-'al, Ca -cáw'a 'ribs (poss'ed); Ls čááŋax 'this side'; Gb -čáx/čáš 'back'; Sr -ča' 'ribs' (poss'ed); Hp cïŋï 'rib'; Cr i-ca'apwa-ri 'ribs'. I agree with Miller (M88-ca2) and Hill (KH/M06-ca2), who have these all related, despite our lacks of explanations for the difficulties. The variety of medial consonants (w, ', m, ŋ, k) recommends a previous cluster or additional morphemes. CN šillan-tli 'side' may tie in too, since syncope collapsing a liquid and nasal to a -LN- cluster is fairly typical of what produces the variety of medial consonants we see in some of the other reflexes. CN has -l- and Cr's glottal stop < *-L-; in addition, -w- and -η- each appear at least twice also.
- **P64.** *kuyuNkV / *kuyuCNV 'turkey': Hp koyoŋo; Cm kuyu'nii; CU kwiyú-tï. Hp and Cm agree perfectly through the first four segments; thereafter Hp has a velar nasal and Cm clusters a glottal stop plus nasal. A velar-plus-nasal cluster would explain both, but whether the nasal is before or after an obstruent is unclear. CU shortened the u, then anticipated y/i (*kuyu > kwiyu) due to stress on the second ú, but agrees well with both Cm and Hp, in that CU shows -tï vs. -rï, which also suggests an underlying third consonant or cluster, as is also apparent in Hp and Cm.
- **P65.** *yïLa / *yïCla / *yïLya 'moth': Hp yïïyïŋya 'moth'; Wr sunú yelá 'moth'; Yq yuéria 'moth'. Setting aside Wr sunú 'corn', Wr yelá 'moth' and Yq yuéria 'moth' show four segments in common—yeLa—though a reconstruction to include the other Yq segments, such as *y(u)ïL(i)a 'moth', looks horrible. Hp yïïyïŋya 'moth' for the fifth time has Hp η corresponding to a UA liquid, and the vowels are identical: *ï-a. So the terms are likely related and an underlying cluster seems probable in light of *colowa 'hungry', *ca'Lo 'chin, mouth', and others above also showing Hp η aligning with SUA liquids clustered with other consonants. Yq -ia and the palatalization of Hp -ηya are noteworthy, and may be meaningful.
- **P66.** *saŋa 'yellowjacket, stinging one': Cp šéše'nimi 'yellowjacket'; Sr haaŋa-ţ 'bee'; Ktn haŋa-č 'yellowjacket'; Ls şaŋá-ṣŋa-š 'thorny, a thorn'; Ls şááṣaŋ-la 'yellowjacket'. Note the glottal stop plus ŋ in Cp, perhaps suggesting an underlying cluster.
- **P67.** *nïmi 'walk around, live': from among many more, here are cited only a few forms: NP nïmmi 'walk'; Sh nïmi 'live'; Cm nïmi 'move about, walk, sg'; Cp nénewe 'walk'; Ca ném 'walk around'; Ca némi 'chase, follow tradition'; Gb noŋí 'andar'; Sr nïm/nïmï- 'walk, walk around, walk along'; Sr nïhnïm 'be walking (around)'; Sr nïmini 'chase'; Ca nénmi 'chase'; Cp nénmi 'chase'; Ls nónmi / nóonumi 'follow'; CN nemi 'live'; CN ne'nemi 'wander about'. Note -η- in Gb noŋí, whose velar nasal is likely the result of a cluster created by a reduplication similar to Cp nénmi or Cp nénewe, then syncope (*nïnïmi > *nïnmi / *nïnwi > nïŋi > Gb noŋi), as reduplications of *nïmi are frequent, since walking around is real repetitive.
- **P68a.** *kaCma 'cheek(s), mouth': Tsh kamma 'taste'; Sr qäŋ, pl: qaŋam 'beard, facial hair' (cognate? Miller queries—probably); TO kaam 'cheek'; PYp kama 'cheek'; PYp kamar 'face'; LP kama / kaam; NT kááma 'cheek'; ST kaam 'cheek'; CN kam(a)-tl 'mouth'; HN kamak-tli 'mouth'; HN kama-wia' 'speak to'; Pl kamačal 'jaw'; Pl kamak 'cheek'. Likewise, NP gamu 'chin' and Yq kámta 'swallow, put in mouth' may tie these to *kaCma 'taste' as suggested by VVH.
- **P68b.** *kaŋa /kana 'beard, facial hair': if Sr qāŋ 'beard' is includable, then Mn qana 'beard' and Tb kaŋaa-l 'facial hair' are also. Sapir ties Tb gaŋa 'beard' (kaŋaa-l 'facial hair' in Voegelin and Munro) and Ktn qaŋa and CN kan-tli 'cheek'. Add CU kaná-qo-pï 'chin'. Note *kamma 'taste' in Mn, TSh, Sh, Kw, Ch and Sr qämä'k 'drunk'. As for the medial -C-, geminated -mm- or -n(n)- in Num, -ŋ- in Tak and Tb, and -m- in SUA suggest a cluster involving at least one nasal.

P69. *naŋaN-ya'i/ *naNCaN-ya'i 'angry': Kw naha-ye'e 'be angry'; Kw naha(m)-bištï 'one who is short-tempered'; Kw na-naha-yaa-bï 'one who is mean'; Ch naŋá-ya'i 'angry'; SP naŋaN-y'ai 'be/get angry < anger-die'; WMU naái'ye-y / naái'i / naai'e 'be angry'; CU naáy-'ay 'be angry'. Kw nana-ha'a 'quarrel, argue- (ha'a 'bark') allows the possibility that syncope of *nana-ha'a is the source of the cluster. Two languages (Kw and SP) also show nasalization in a 3rd C as well. Medial *-ŋ- or 'entirely disappears in SNum in terms for 'lung' and 'salt'; so this velar nasal (ŋ) in Ch and SP must result from a different or later cluster, though it did disappear in WMU and CU (the languages furthest east). And -ŋ-, -ø-, and -h- constitute enough variety to suggest a medial cluster.

P70. *yawi / *ya'wi / *yaŋwi 'carry': Mn ya 'put on, wear'; NP yahita; Sh yaa" 'get, carry, pick up'; Cm yaa 'take'; Kw yaa 'carry sg. obj'; Kw yaa-ki 'bring'; Kw yawi 'hold'; SP yaa 'carry one obj'; SP yaŋwi 'carry'; CU yáa'way 'carry, take by hand'; Cp yawiči 'carry'; Cp yáwe 'bring, carry'; Ca yáw 'to catch, touch, have, hold, take care of'; Ls yááw 'have, hold, take'; Sr yaa' 'take, carry'; Sr yaa|i 'take, seize, catch'; Gb yáw 'tener'; Gb yá'a 'carry it!'; Hp yaaw- 'carry in/by hand'. The semantic identity of Tb yiïw 'hold, keep it' makes it probable, in spite of a vowel change. Add Od đagi 'action with hands'; Od đagi-mun 'massage, knead, v'; Od đagio'iđ 'take care of, support' and note the similar semantic ranges of Od đagi and Ca yáw 'catch, touch, have, hold, take care of', not to mention the segmental identity to *yawi. However, CU and SP show medial consonant clusters -ŋw-, -'w-; thus, a likely medial cluster, most apparent in CU and SP, reduced to -w- or-'- or -ŋw- or final gemination in NUA and to -w- (> g) in Tep. Pairs such as Kw yaa- vs. Kw yawi; and SP yaa vs. SP yaŋwi make one wonder whether there were two morphemes or the first shortened from the latter. I lean toward the latter.

P71. *niC / *nik(pa) 'chief': Cp nét/nət 'chief of lineage, captain'; Ca nét 'chief of clan, moderator of a fiesta'; Ls nóó-ta 'ceremonial leader, chief'; Gb not/nóta 'capitán' (V borrowed from Ls?). Add Ktn nïqpa / nïhpa(č) 'chief' and Ktn canïqpač puyu 'God: chief of us all' and Ktn ca-ŋïhpa-y 'our chief, God'. Remember that Ktn often shows latter segments lost in other forms (cf. antelope, rock) and then note that absolutive -t(a) (vs. -l) of other Tak forms does suggest a final consonant, and Ktn shows that to be *-k-, if not *-kpa. Also note the initial η in the last Ktn form when resulting from a cluster: *cam-nïqpa > canïhpa-. [Gb V]

Above are 22 sets (P50-P71) exemplifying probable consonant clusters that reduced to the velar nasal (ŋ) in some NUA languages and to other things in other languages.

2.7.2 NUA n: SUA n

Besides the η : n and n: L correspondences of tradition, other sets show NUA n corresponding to SUA n, some of which are clusters involving -n-.

P72. *mo'na / *mo'ona / *munna / *muCna 'son-in-law, male in-law': Sh monappï; Kw mono; SP monna; Hp mö'önaŋw 'male in-law'; Eu mónwa; Wr mo'né; Tr mo'né-ra; My mó'one; Yq mó'one; Tbr moa-saká-r; Wc muune; Cr mú'u 'affīnal relative'; mu'un 'yerno'; CN moon-tli 'son-in-law'; Pl muunti; Ca míŋkiw'a 'son-in-law' (Ca i < *o). Sapir lists Cr muna-ra.. Here several NUA languages and several SUA languages, show NUA n / nn corresponding to SUA n. The only $\mathfrak q$ (Ca) is explainable by its adjacence to k. Note that in both 'son-in-law' and 'lung', Tbr loses intervocalic -n-.

P73. *ton(n)o 'hill': Od toon-k 'hill'; Nv tonika 'hill'; SP tonnoqqi / tunnuqqi 'a hill rises'. Another NUA n and SUA n correspondence.

P74. *ti'niyaC 'trap': Kw ti'niya 'trap, v'; Kw ti'niya-pi 'trap, n'; ST tii'nja' 'set trap'; an extraordinary match for 7 or 8 segments, since ST -j- corresponds to Kw and PUA * -y-. Furthermore, we find another n:n correspondence (*ni > *ñi) and they both show a final C (ST ' and Kw -pi vs. -vi).

P75. *mana 'put (flat/lying down), vt'; *mani 'be put, be, lie, fall, vi/stative': all 20 forms at 'lie' show both NUA n and SUA n.

P76. *kana 'thin, flat': Sh kanah 'thin (of animal or person)'; CN kanaaw(a) 'make s.th. thin and flat'; CN kanaawa-k 'something flat and thin'.

P77. *yun 'kind, gentle': Sh yuun 'gentle, tame'; NT adúúñi 'kind, friend'. Minus NT's extra initial V, the two match well, since NT d < *y.

P78. *mï'nï 'lost': Kw mïï'ni 'lost'; Tr méne/méni 'lose, vt'.

The above seven sets (P72-P78) and others show NUA n : SUA n.

2.7.3 Nasal Anticipation, Especially in Tübatülabal

P79. *ku(C/N)ta(N)(pa) 'bee': Cp kutáŋva-l 'bumblebee'; Ls kúúkunta-la 'bumblebee'; My kuta kúmera 'bee that lives in wood'; Nv kuarhagi mumuva 'abejas grandes que hacen panales'; WMU kučávi 'bee'. Ls anticipates the nasalization a syllable earlier than is apparent in Cp, while the SUA languages (My, Nv) do their typical lack of clustered nasalization. WMU -č- (vs. -r-) and Cp -t- (vs. -l-) signify a cluster.

P80. *(na-)patï(N)kï(N) 'fight, v': Mn pidïkï 'fight'; Mn nanna-pidïkï 'fight one another'; TSh napitïŋkïn / napitiŋkïn 'fight'; Sh napitinka" 'to fight'; Cm nabitïkïrï 'war, battle'; Tb paandïgït 'fight'. WNum and CNum *napitïNkï and Tb *paNtïkï show Tb anticipating the nasalization a syllable before Numic's nasal feature, and even Num *pitïNkï may be anticipating nasalization from *pVtïkïN.

P81. *pina 'bring, gather, acquire': Tb pin ~ 'imbin 'bring it'; Sr pinai 'bring, bring back'; Wc piini 'be the property of'; Nv vino'o 'for river to carry s.th.'; Tr bi'ni/be'ná 'recoger uno a uno, pepenar'. Note nasalization anticipation in Tb above and below:

Without nasal anticipation

Tb kiig ~ 'ikik 'to sack, store, load' Tb kita ~ 'ikita 'it is locked'

Tb kuuŋut ~ 'uuguuŋu 'she married'

Tb kamiiž ~ 'akamiič 'to catch it'

Tb paabï ~ 'aabaabï 'be tired' Tb pacaa'in ~ 'apacaa'in 'he caches'

Tb tomocka ~ 'otomocka 'to stumble'

Tb tuluumiin ~ 'utuluumiin 'to roll his blanket' Tb taŋ ~ 'andaŋ 'it is raining'

Tb tulu'uma ~ 'utulu'uma 'it rolls'

With nasal anticipation

Tb kam'-(ut) ~ 'angam' 'it fits' Tb kin-(at) ~ 'ingin 'he brings it'

Tb kumaawa'(ït) ~ 'ungumaawa' 'it is shady'

Tb paam ~ 'ambam 'make into a ball'

Tb pin ~ 'imbin 'bring it'
Tb paan ~ 'amban 'to close it'
Tb tana ~ 'andana 'to get down'

The Tb telic (perfective) form generally reduplicates the first vowel. If the second consonant is a nasal, sometimes that nasalization is anticipated with the prefixed vowel. However, nasalization does not always occur. The cognate languages show that there is not inherently any nasalization in front of the verb stem, so it must come from anticipating the nasalization two consonants away. This same principle may sometimes explain Tb's nasalization in other places.

In conclusion, NUA η sometimes derives from clusters, involving -m- or -'m- or -Lw- or other cluster combinations. Then - η - > -n- in SUA, unless the vowel loss and resulting cluster occurred later in some SUA languages (as in *cu'mi 'suck'; *o'mana 'sad'; and *sï'moci 'hummingbird'), in which cases SUA occasionally shows the cluster more clearly. However, much remains to be unraveled.

2.8 Glottal Stop Anticipation and Other Consonant Shifts

Besides nasals being anticipated, glottal stops frequently jump to the preceding syllable, and liquids only occasionally (see Ca at *makuta 'bag, blanket' at 'bag'). This glottal stop hop or anticipation occurs often in TrC, especially in Tr and Wr, and Sapir (1930, 59) noticed the glottal stop's mobility in SP. I have also noticed it in WMU.

P82. Note the glottal stop hop at 'carry' in Tr ca'pi 'coger' vs. Tr na'cabi 'coger pl obj's.

P83. *ci'ma / *(L)a'cima 'beautiful': Cp á'čimal 'pretty, nice'; PYp la'sima 'beautiful'; Tr či'má in Tr či'má(k)ame 'precioso, primoroso, bello'; Tr či'má-re-ma 'ser bello, primoroso, precioso'. With additional prefixes in Cp and PYp, the glottal stop hops, as all agree in five segments otherwise—(')ci(')ma—and PYp s < *c.

P84. While other forms point to *paLo'osi 'jackrabbit' at 'rabbit' (such as My paaros, pl. paró'osim), Wr pa'loísi and Tr ba'loísi anticipated or transposed the glottal stop a syllable forward.

P85. In contrast to forms suggesting *cuLaka'i 'bird, woodpecker' is Wr cu'rukí 'bird' with the glottal stop moved

P85. In contrast to forms suggesting *cuLaka'i 'bird, woodpecker' is Wr cu'ruki 'bird' with the glottal stop moved two syllables forward.

P86. At 'bag' in a complex assortment of forms from *makuLa to *mako'o, we find My mo'oko 'basket' and Wr mo'ke-warí 'basket' matching other forms, such as NP mago'o, but with the frequent Tara-Cahitan glottal stop hop (*CVCV'V > CV'(V)CV).

While speaking of glottal stop behavior, another common occurrence yet to be elucidated is glottal stop > w; potential incidences include Tb pacaawa 'bat' when most NUA languages show *paca'a, and not in the vicinity of any round vowels, between two a's; *yawa / yï'a 'beautiful'; and others.

2.9 The Elusive Liquids of Uto-Aztecan

PUA likely had a liquid, but whether the liquid(s) was(were) r or l or both remains unclear. While most UA languages have one liquid or none (Numic), some have both l and r, and occasionally in similar environments, such as My ele'e siiki 'da comezón' and My ere'e-suúkim 'ant', but whether both were originally liquids or one from something else remains a valid question, and the lack of a demonstrable sorting in the few languages that have two have thus far made the liquids elusive or difficult to identify securely. So for now let *L represent a general PUA liquid in reconstructions, which rarely feature initial liquids for PUA. Several languages exhibit liquid-initial words, though sometimes evidence suggests an initial syllable was lost, but not always, so a handful of liquid-initial reconstructions do emerge. A number of sets support the traditional correspondence of medial NUA -n-: SUA -L-, though Shaul (1985) notes the exception that Hp may reflect -l-, -r-, or -n-. Sometimes other NUA branches also reflect liquids, but first a few examples of NUA -n-: SUA -L-.

P87. *suna 'heart': SUA: Wr sulá; Tr surá; bisurá; My suula; Nv hura-di; NT úra; ST hur; TO huDa 'side, particularly side of midriff'. NUA: Sr huun 'heart, inside, center'; Cp şúun; Ca sún-il; Ls şún-la; Gb súnar; Hp soona 'kernel, edible part of seed'; comb: sona- / -son- 'inside'; Tb suuna-l 'heart, inside'.

P88. *kani / *kaLi 'house': SUA: Wr karí; Tr garí; My káari; CN kal-li; Tbr kalí-n 'pueblo'.

NUA: NP kani (archaic form); TSh kahni; Sh kahni; Cm kahni; Kw kahni; WMU kaní; CU káni;
Tb hanii-l; Ca qáankiš 'desert willow (possibly as housing material plant)'; Hp qeni 'place, room, space'.

P89. *aLi 'little': SUA: TO al 'little'; TO ali 'baby, child'; LP lii; NT áli; ST 'alyii; My iliči/ili'iči; Tbr ali- 'small'; AYq ili/iliči 'small, little, few'. NUA: Sr añii'č|i 'small one, little one, baby, child'; Ca íñišily 'small one'; but also Ls 'ááli-may 'woman's brother's child'.

P90. *sanaC / *saLaC 'pitch, pine gum': SUA: CN saaloaa 'to glue, make s.th. stick to s.th. else'; CN saaliwi 'stick to s.th.'; Pl saaluaa 'to stick, glue'; sasaalik 'sticky'. NUA: Mn sanápi; NP sanapi; TSh sanappin; Sh sana"-pin; Sh sanakko"; Cm sana 'sticky'; Cm sanahkena 'sap'; Kw sana-pi; Ch sana-pi; SP sanna"-(ppi); CU saná-pi; Tb šaanot; Ls şáánu-t; Ca sáán-at 'gum'; Cp saana-t 'pitch, gum'; Sr haanat 'tar'; Ktn hana-t 'tar'; Hp saana 'pitch, gum of tree'. Of interest may be Washo šála' 'pitch' though it neighbors NUA languages far to the north, so if borrowed, why does it have SUA phonology?

P91. *mïLa / *mïLi 'go, run, flow': SUA: TO mïD, mï, miïl 'arrive (wind, water, runner)'; LP mïli; LP oimïrï; NT mïli; NT aimïrai 'walk around'; NT mïráádami 'runner'; ST mïlyi; Wr ma/mi; Tr mé; Cr me/me'i; Eu merá 'run, v'; PYp mera/meli 'run'. NUA: Hp mïïna 'flow, run (of liquid)'; Ls món-/muná 'travel, come, walk, go'; Cp menmáx 'will come'; Ca ménvax 'come'; NP minai 'ooze out'.

P92. *taLa 'foot'; SUA: TO tad; LP tar; PYp tar; NT tára; Eu tarát 'pie, rastro'; Wr talá 'planta del pie'; Tr rará 'planta del pie, pie, pata, huella'; CN tlaloaa 'run, flee'. NUA: Mn ta" 'foot'; NP ta" 'foot'; Sh ta"- 'with the feet'; Kw ta- 'with the foot'; SP ta"- 'with the foot'; Hp tana 'hoof, foot'.

P93. *maLa 'child, offspring': SUA: Od maD(ï) 'female's offspring, nephew or niece by a younger sister, fruit of a plant'; PYp mar 'child'; PYp mar-t 'bear a child, vi'; PYp mar-tim 'give birth, vi'; NT már(a) 'daughter, son'; ST mar; Op mara; Eu márwa; Yq maára; My maála; Wr mala-/malawa 'daughter';

Tr mará. NUA: Sr maih-c 'young one, child'; Hp maana 'daughter, adolescent girl, woman never married'. P94. *wïLï 'stand, v': SUA: Eu wéhra 'parar'; Wr werí; Tr wiri-mea 'vi'; Tr wera-ma 'vt'; My wéyyek 'está parado' (My wéyye 'va caminando'); AYq weyek 'be standing, sg'; Tbr weré/welo 'estar, estar en pie'. NUA: Mn wïnï; NP wïnï; TSh wïnï; Sh wïnï; Cm wïnï; Kw wïnï 'stand, stop, sg'; SP wïnï; CU wïní 'be standing'; CU wïnï-wi 'get up, stand up'; Tb 'ïwïnït-'ïï'ïiwïn 'stand up'; Tb wïnït 'be located, exist'; Hp wïnï 'be standing, sg'; Ca wéwen 'stand up, be standing, stop, stand still'; Ca wén 'put in place/order'; Cp wé' 'there it is'; Ls wón 'be at a place'; Gb wó 'there is/are'; Sr wïn/wïnïi 'be in a place, lie (mass/pl)'; Sr čönu'-wïn 'be standing' or resultative of čönu'-k 'stand up, stop, sg.'

2.9.1 Evidence for *L > n in NUA

There is some evidence for *L > n in NUA (e.g., P60, 61, 62, 65 above, and TSh at P101 'buzzard' below). Perhaps with help from clustering with -t-, Yq and AYq in SUA seem to show *-Lt->-nt-, in contrast to Tr and Eu, in the following:

P95. *soLa 'rot, go to waste, throw away': Tr sorá-ta 'podrirse'; Eu nasór-tu'u 'echarse a perder'; Eu nasór-ta'a 'echar a perder'; Eu nanásora 'componer'; AYq nasonte 'descomponerse'; Yq nasonta 'descomponer, vt'; Yq nasonte/nasontu 'descomponerse, vi'.

2.9.2 Evidence for *n > L in SUA

Other evidence may suggest an occasional *n > L in SUA. In P56 above (lung), from among nearly every language displaying reflexes resembling NUA *sona or SUA *sona, we see Wr so'locá, with glottal stop and liquid. Or is another morpheme involved? Less likely so in the next example:

FIVE; CINCO

	,				
Mn	manigí-i/tu	Нр	civot	Eu	márki; Op mariki
NP	manigi'yu	Tb	maahaijiya	Tbr	mamuní-r
TSh	manïki/manaki	Sr	mahäţ	Yq	mámni
Sh	ma-naikkih-	Ca	axnamekwánaŋ	My	mamni
			né-ma-kwanan (my-han	d-half)	
Cm	mo'o-be' (hand-measure)	Ls	maháár	Wr	marikí
Kw	manïgi(yu)	Cp	siiku'um (Sp)	Tr	marí
Ch	manïg	TO	hïtasp	Cr	ansïbi / ansï´
SP	manniki	Nv	utaspo	Wc	
CU	ma-nïgi-ini	NT	taáma	CN	maakwiil-li
WMU	J manïgíyIni	ST	hiš-čamaam		čiko/čikwa (in compounds)

P96. *manniki 'five': Mn; NP; TSh; Sh; Kw; SP; CU; Yq; My; Wr; Tr; Eu; Op. Let us add WM Ute manïgíyIni. Tbr, Yq, My *mam(V)ni > *mamni (perhaps a reduplication *mamani misvoweled in Tbr) may underlie the forms and the NUA gemination be from *-mn- > -nn-. If so, three SUA languages (Tbr, Yq, My) show n like NUA *manniki, while four SUA languages (Eu, Op, Wr, Tr) show a liquid aligning with Numic's -n(n)-, as if *maniki > *mariki in Tarahumaran/Opatan. This and other sets suggest that in some cases PUA *n was denasalized to a liquid in SUA instead of PUA liquids becaming nasals in NUA.

2.9.3 NUA L Corresponding to SUA L

On the other hand, several sets show liquids or *L for both NUA and SUA. One might argue that these liquids in both NUA and SUA may derive from intervocalic *-t- or such, becoming liquids in all relevant languages. While this may be possible for some, the probability of that being the case for all seems unlikely. Original liquids seem a more likely explanation, though sure proof is elusive, and admittedly something is happening not yet understood, to have these contrasting with n:L above.

P44. *kwïLu 'swallow': Hp kwelo(-k) 'sample by tasting'; Eu béru'u 'swallow'; Tb weleeh 'swallow'. Hp and Eu correspond perfectly through 4 segments, since Hp o < *u and Eu b < *kw. And Tb's w (< *kw) agrees through 3, the last V assimilating to the first, yet all NUA and SUA forms show a liquid.

P49. *koLi, reduplicated *koLkoLi > *ko'okoLi) 'hurt, be sick, chili pepper': at pain, many SUA forms show *ko'okoLi, while Cup shows non-reduplicated *koLi with its vowel change *koLi > *qoLi > qiLi: Cp qilyíqa-t 's.th. hot, spicy, strong'; Cp qilyíqatu'nine 'hurt, sting, v'; Ca qélya 'feel sore, v'; Ca qélyak 'peppery, pungent, creating a burning sensation'. Again, all SUA and NUA forms show liquids.

P97. *(wa)Laka 'snail': CN wilaka 'caracol de monte'; Tr warákoara 'caracol'; Ls muvílaqa 'snail' (Ls múúvi-l 'nose'); Wr alágaloci 'snail'; Wr nalágeloci 'snail'; Tr narákuri 'snail'. These are another example of a NUA liquid (Ls) corresponding to SUA liquids, though some languages engaged prefixes that eliminated initial w(V)-.

P98. *(wi)LaNa 'pull, drag': CN wilaana 'drag'; Hp lana(-k) 'be pulled taut, stretched in a line'.

P99. *paLo / *papaLo 'butterfly': CN paapaaloo-tl; the -val- in Cp málval; Hp poovoli/poli-; the *-pola- in Ls 'avélaka 'butterfly' (Ls e < *o); and the pa'u in Cr ácipa'u-se fits *palo because Cr u < *o, and *-L-> -'- in Cr. Thus, perhaps *(pa)palo (Cr, Cp, Azt) > *(po)polo > *(po)poli (Hp). At butterfly are two SUA and five NUA terms all showing -L-, though some of the vowelings are strange.

P89. *aLi 'small': aligning with several SUA forms showing *aLi 'small, child', are Ca íñišily 'small one' and Ls 'ááli-may 'woman's brother's child'; Ls 'alú'-ma-l 'small, thin, a baby'. In spite of Ca -ñ-, we see NUA Ls -l-with SUA -l-. So *-L-> n in NUA?

P100. *mumus-(paLawa) 'honey, lit. bee-juice': AYq mumum; My mumu bá'awa; Wr momohá; Hp momospala. Note Hp's liquid in NUA and My's evidence (glottal stop) for the former liquid in SUA.

P101. *wiLhukuN 'buzzard, turkey vulture':

PUA	*wiLhukuN 'buzzard, turkey buzzard, zopilote'
Mn	wiho
NP	wi'ho/wiho
Tsh	wihnumpi(cci) / wihumpiccih / wiyombic
Sh	wikkumpiccïh
Kw	wiku-mahaa-zi
SP	wikkuN
CU	wəkúci-ge-tï
Нр	wisoko
Tb	wišokombiš-t 'song of the turkey buzzard'
Sr	wirukt
Yq	wiiru
My	wiiru
Tr	wirú
Tbr	wilú
Wc	wiriki
Cr	viskï
CN	wiiloo-tl, pl: wiiloo-me' 'dove'

Miller (1967) reconstructs *witu perhaps to let intervocalic *-t- provide the liquid of both NUA and SUA. However, does intervocalic *-t- > -s- in Hp, Tb, and Cr occur elsewhere? Not that I know of. But *-L- > -s- does happen in UA, but for it to happen in three languages in this set (Hp, Tb, Cr), it may be clustered with a voiceless spirant to devoice *-L- > -s-; thus, -h- in the reconstruction. In light of other medial liquids in both NUA and SUA, this may simply be another PUA liquid. In this wonderful example of rampant syllable reduction, notice that Wc (SUA) and Sr (NUA) show all three syllables of *wiLhukuN, while the rest are reductions. The first syllable *wi-is apparent in 17 of the 18 reflexes; only CU's non-descript short unaccented V departs from i. Nine show the second syllable *-Lu- in both NUA and SUA; three others show devoicing of *L > s in both NUA and SUA from an earlier cluster with a voiceless spirant. Nine languages show a third syllable *-ku; and Tb and Num show some nasalization after that. Except for the CrC branch, most of SUA lost the third syllable, leaving *wiLu in most of SUA. In Num, syncope eliminated the 2nd syllable and clustered *lk which led to the absorption of l or doubling of k in most instances (*wiLhuku > *wilku > *wikku), though all three syllables appear in some languages of both NUA and SUA. The n in one TSh form (wihnumpi) again suggests the presence of PUA *L, not t. Note also liquids in both NUA (Sr) and SUA.

P102. *taLumaC 'blanket, garment, covering': Tb taluuma-t 'breech clout'; CN tilma'-tli 'cloak, blanket, indigenous man's garment fastened on one shoulder'; Eu terúwa/teruva 'tilma, frazada'; TO čïDhum 'blanket'; ST tidya 'wrap with a blanket'. TO čïDhum has h, which may be a partial devoicing of a V due to any number of causes, rather than from the usual source of *s; nevertheless, TO has *tVLum in common with Tb, and all but u with CN. Tb, TO, Eu are intriguing, in that they agree in five of six segments *taluma, outside of a liquid raising a vowel in TO and Eu (*a > ï or i/_r, l, common in UA), an extra h in TO, and perhaps *m > w in Eu. Note how easily CN tilma'-can derive from *taluma, since CN i < *u: *taluma > tul(u)ma > tilma. ST tidya is close to TO čïD-, and both CN and Tb suggest a fourth or final consonant. The above nine sets exemplify NUA *L corresponding to SUA *L.

2.9.4 Medial *-L->-'- in Cahitan (Yaqui, Arizona Yaqui, and Mayo)

We also see L > ', especially in the two Yaqui dialects, but in other languages as well.

P103. *piLok 'lightning': My bérok-te; Yq béok-te; Yq bé'obé'ok-te, among several other forms showing *piLok 'lightning'.

P104. *paLawa 'stew, juice, soup': Eu varáwa; Yq bá'awa; My bá'awa, etc.

P105. *paLa-mukki '(be) thirst(y), liquid-die': Wr palamú-; Yq ba'aimuuke; My ba'imuuke, etc.

P61. Above at *ca'Lo 'chin' > Yq čao 'barba' is another example of Yq losing a liquid apparent in other languages.

P106. *pisaLï 'gourd': Eu visár 'calabaza'; Yq bísa'e 'bule, guaje'; AYq visa'e 'gourd'. Note -r- > -' - in Cah.

P107. *hatawa 'yawn, v': Eu hátawa (prêt: hátauhri) 'bostezar'; My ten háha'awa 'está bostezando';

Yq háawe 'bostezar'; Cr ha'ateewa 'bosteza'; Kw 'atawa 'yawn'; Mn na'ïdawï 'yawn, vi'; TSh hïtawa 'yawn, vi'. Glottal stop in Cah (Yq, My) aligns with *t in other languages; i.e., *t > 1/r > '/ø in Cah.

Other examples of PUA *-L- > Cah -'- are sprinkled throughout the sets, as well as loans from Spanish. For example, Spanish caballo > My kabba'i and Spanish cuchillo 'knife' > Yq kúči'i both show the recent productiveness of *L > ' and of final vowels becoming -i regardless the original vowel.

2.9.5 Intervocalic *-L->-'- in Cora

P108. *taLu 'egg': Tbr ne-telu-r 'huevo'; Cr ta'u 'blanquillo, huevo'.

P91. *mïLa/*mïLi 'run, flow, go, want': aligning with the many *mïLa/*mïLi forms in the comparative vocabulary is Tbr mu- 'desear, futuro'and Cr(JM) me 'go, sg subj'; Cr(ST) me'i 'go, sg subj' and Cr mï'ï 'desiderative morpheme' (Casad 1984, 162), as 'want' and 'run' are often paired semantically in UA.

P109. *mo'o-kaLi 'hat, head-house': Tbr mo-kalí-t (Lionnet has mo-ka-lí-t); Wr mo'kóri; Tr mokoyo- / mokoho- / mokoo- 'put on hat'; Tr mokoyóra / mokohóra / mokoora 'hat, head-wear' (Tr mo'ó head');

Tr moki 'encimar'; Cr muúku'u-ci 'hat'. Note Cr's glottal stop at the place of the liquid.

P110. *taLowi 'edible root sp': Tr ŕerowi 'potato'; Wr teloé 'potato'; Tbr teró-t; Ca tályki 'Indian potato'; Cr tá'upu'u 'potato'. Because *L > -'- in Cr and *o > u in Cr, then *taLo > Cr ta'u fits perfectly.

P111. *pa-suL 'sweat': TO wahuD/wahul- 'sweat, vi'; TO wahulðag 'sweat, n.; sweaty, adj'; Nv vahurhu 'sweat, v'; Nv sivahurhudaga 'sweat, n'; PYp vahar 'sweat, v'; PYp vahagdar 'sweat, n'; NT vaahúraryi 'sweat, vi'; ST voor 'sweaty' (pl ST vapor). Also likely are the latter two syllables of Cr táisi'e 'sweat, vi'; Wc kwaašiiya 'sweat, n', for Cr -si'e < *suLV, and Wc assimilated the V a bit more toward y.

P112. *kwaL 'soft': Eu barínari 'blando, lo que fue ablandado por otro'; My bwalko 'blando'; first two syllables of Cr kwa'ačíra'a 'está suave, blando, tierno, débil'. Note *-L-> Cr -'-.

P113. *kaLi(sV) 'squash sp': Tr arisi/garisi/karisi 'calabacilla, calabaza de coyote'; Wc káisa 'sonaja'; Nv sarkarhkaari 'calabaza'; Tbr halípá-t 'jueja, jícara'. As the close sister-language to Cr in Corachol, Wc káisa also shows the loss of the intervocalic liquid, which is retained in the other languages.

Besides the seven above, other examples of PUA *-L-> Cr -'- grace the pages of this work.

2.9.6 Medial *-L- > -v-

'vaciarse' (Eu d < *v).

On occasion a pattern emerges of UA liquid > y. Because liquids are often pronounced proximate to the alveolar ridge, like y is, then liquid > y is common among world languages. For example, some Mayan languages have y corresponding to Mayan *r (Lyle Campbell 1977, 97-100), and Bickerton (1981) lists three English creoles in which English *for* became *fo*, *fi*, and *foe*, two of three showing high-front vowels approximating the r. **P114.** *yu'ri / *yu'Li '(be) empty': Ls yuya/i 'bec. empty, vi, empty, vt'; Wr yu'ripú- 'empty, throw out liquid, vt' (Wr yu'ri 'fall by itself'); Tr fu'ri- 'derramarse, verterse'; Tr fu'ri-wa- 'derramar, verter, vt'; Eu dúri-da'a-

P115. *tu'La/i 'be cold, freeze': Wr tu'la-; Tr ŕurá-; Cp túyuye 'freeze, vi'; Cp túyuyi-š 'cold, freezing, adj'; Ls tóóyi 'freeze, vi'; Ls tóóyi-t 'frost, ice'.

The examples above show the same patterns in the same languages: TrC *...u'La/i vs. Tak *...uya/i.

P116. *kaLu 'slide': Eu karú-da'a 'resbalar'; Ca xáyuš / xáyuqi 'slide down, v'; Wc harúanari 'liso'. Note Ca -y-corresponding to SUA -r-. A third example of Tak -y- and SUA -r-.

P117. *kwiya / *kwiLa 'earth': TO bid 'adobe, mud, clay, plaster'; Wr we'e; Tr wee/we-/wi'ye; Cr čwéh; Cr čuáata'a 'on the ground'; Wc kwí(y)e; My bwiya 'tierra, suelo, piso'. The preceding more align with *kwiya, but showing a liquid instead of y are the pl of Yq bwía, pl: bwiam/bwiram and Tbr kwirá-t 'tierra, mundo'. Note the liquids instead of y in both Tbr and the Yq pl also align with the NUA n in several Takic and Numic forms that KH/M06-kwi2 adds to Miller's list: Sr pääkwiñit 'mud' (water-dirt) and Gb kwenár 'mud', and NUA n typically comes from PUA *L, not *y.

P118. *ï'La 'think about, remember, believe, decide, care': in contrast to TO ïliđ, Nv ïra, Eu erá, Wr e'lá, and other forms of both SUA and NUA *ï'na, note My éiya / éyya.

P119. *wiLu 'play a reed flute': Ca wiiru; Ls wiiru; Sr wiirui'n 'play a reed flute'; Sr wiirui'ni-t 'reed flute'; WMU viyu'/eviiyu'ni 'flute' even shares the glottal stop with Sr and is very similar to the Sr form, except -y- instead of -r-. Kw woyo 'flute' (archaic) belongs; and WMU ia'nəp 'flute' is similar to Kw woya'a-nï(m)bï 'musical instrument, flute' (archaic); and TSh wooino 'flute' and NP kocokkwoino are probably related to the Kw form and at least to each other. In any case, note the -y- in Kw and WMU aligning with the liquids of the other languages. Note w > kw in NP.

P120. *kwa'Lo' / *kwa'ro' (> kwara/kwaya/kwa'na) 'frog': SP paqqwan'a 'frog, toad'; CU páqxa-kwá'na 'frog' vs. CU páqxá-ci-ci 'horned toad'; Gb kwá'ro', pl: kwakwá'ro'am 'sapo'; Hp paakwa 'toad'; Eu kohár 'sapo'; CN kweyatl 'frog'. Fowler also lists Ls pakwari-t 'tadpole'; Gb qwarava 'frog'. The words for frog are a difficult collection; in order to facilitate a solution, additional possibilities should be considered: My boórók, pl: booró'okim 'sapo' (< *kwoLo); Tr barí; Tb woohnaa-l 'frog'; TO bábað 'frog'; PYp babadu 'frog'; NT babáádai 'frog, toad'; NT kuaáli 'frog'; Wc kwaašaa 'species of frog'. A general voweling of *a-o/u as in Gb kwá'ro', PYp babadu seems best, for in them and My are signs of o in the second vowel, as well as in the possible metatheses of Eu and Tb. In Gb, My, Eu, Tr are signs of a liquid in the second consonant or cluster, while we have *kwayV in CN and Tep. Besides a -'r- cluster in Gb, the -'n- in Num also aligns with a liquid. All together these forms show *l/r > n in Num and *r > y in Azt. Tep d can reflect either *y or *L, and we see a final glottal stop in Gb and My.

P49. *koLi (*koLkoLi > *ko'okoLi) 'hurt, be sick, chili pepper': While many SUA forms show the reduplication *ko'okoLi, Ca and Cp show *koLi > *qoLi > qiLi; yet CN has CN kokoya 'be sick'.

P121. *haLi 'endure, tire of': Wr naharí-na 'suffer, endure' (probably *na- prefix); Ca háyin 'be tired'; Cp háye 'finish, tire of'. Note this fourth instance of TrC r corresponding to Tak y.

Besides P114-P121, note also Tr in P109, My wéyye at P94 *wïLï 'stand, v', the Tbr liquid vs. other y in P122b, and P49—a dozen instances of *-L-> y.

The beginning of sets for studying the **devoicing of liquids** (*L/r > s) when adjacent to or preceding a voiceless consonant may include the Pl and CN forms at *koLoka 'necklace' at 'neck'; CN at *toLoka 'throat, voice'; and Cr, Tb, and Hp forms at *wiLhuku 'buzzard'.

2.10 Some *-k- > NUA -h-, > SUA -k-, and > ø in Hp, Tb, Eu, Op

TWO: DOS Mn wahá-i/tu Hp lööyöm Eu wodí(m) (gen. woke; acc. wok) NP waha('yu) Tb woo/wooh; wooyo 'both' Op gode woo'ami 'twice' Tbr nyohór TSh wöh Yq wói waha Sr waha/waa-ttin wíh Sh Ca My wooyi Cm wéh Wr waha Ls woká Kw waha wíh Tr okwá Cp Ch wahá Od gook Cr wá'apua SP húuta 'pair, double' Nv gok Wc waa WM 'útïmana 'second (place)' wáyIni NT goóka CU wáy-ini STgok CN oome

P122a. *wakay 'two': Mn; NP; TSh; Sh wahattïwih; WSh wahattin; Cm; Kw wahayu; Ch; SP; WM; CU; Sr waah-/wah- 'twice'; Gb wahá 'other, companion'; Ktn wah-/weh- 'twice'; Cr wá'apua.

P122b. *wokay / *wokoy: Sr wöh; Ls wéh; Ca wíh; Cp wíh; Gb wehé'; Hp; Tb; Eu wodí(m)/wok; Tbr nyohór; Yq wói; My wooyi; Wr woká; Tr okwá. Note liquids in Yq and My wo'olim 'twins' and Tbr in contrast to -y- in Hp, Eu, Op, and Num. While *wakay and *wokay are likely variants of an original unity, UAnists often separate them according to first vowel, which is fine for the sake of tidiness. Both Num and Cr show initial *wa, while the rest of UA rounded the vowel adjacent to w: *wakay > wokay.

THREE; TRES

Mn	pahí-i/tu	Hp	paayom	Eu	veidúm
NP	pahi'yu	Tb	paai	Op	vaide
TSh	pahi/pai	Sr	paahi'	Tbr	vayí-r
Sh	paih-	Ca	páh / páx	My	bahi
Cm	pahihtï	Ls	pááhay	Yq	báhi
Kw	pehe/peheyu	Cp	páh	Tr	bikiyá
Ch	pahí	Od	waik	Wr	paiká
SP	pai	Nv	vaiko	Cr	waihka
WM	páyIni	NT	váíka	Wc	háika; hairíeka 'third'
CU	pay-ni	ST	vaik	CN	eei

P123. *pakay 'three': a form of *pakay is in every language above, plus WSh pahaittin; Ktn pahi'; Gb páhe'; and note Kw peheyu. Note the k syllable in Wr, Tr, CrC, and Tep, in three branches. Note also Ca páh / páx, with an alternate form suggesting *-k- > -x-/-h-. In nearly the same languages as in *wakay 'two' above, here also *k > k in Tr, Wr, Tep; *k > h in most of Num, Tak; *k > ø in Hp, Tb, SP, CU, Eu, Op. The -k- is clear in Tr, Wr, CrC, and Tep.

P28. *naNkapï 'leaf': Kw naga-vï; Ch nanká-va; SP maavï-naŋqa-vï 'leaf' (vs. SP naŋqava 'ear'); CU nïká-'a-vi (vs. CU nïká-vi 'ear'); Tb naŋhabïï-l; Hp nàapi/nahpi 'leaf'. The last three sets show Hp losing intervocalic -k-/-ŋk-, but Hp nàapi/nahpi shows -p- instead of -v-, as evidence of a previous cluster.

P124. *tīku 'drunk': Wr tekú 'be drunk'; Tr fiku 'become drunk, sick, faint'; Tr téguri/tékuri 'ebrios, borrachos, pl'. **P125.** *tīhu 'angry': Mn tïhuyee 'be angry'; Sh tuhu" 'angry'; TSh tuupïkkan 'be angry'. In light of other examples of a correspondence between Tr/Wr k and h in Num and other languages (agave, two, three, deer), a relationship between Num *tīhu 'angry' and TrC *tīku 'drunk' is plausible.

P7a. *tīkīya 'deer': Mn tīhīta 'deer'; Mn tīhīya 'old buck'; NP tīhīdda; TSh tīhīya(n); Sh tīhīyan; Cm tīhīya 'horse'; Kw tīhīya; Ch tīhíya; SP tīġia 'deer'; SP tī- 'deer, game'; CU tīíyī. Though the first vowel is problematic, Tb tohii-l 'deer' is likely related, since the other three of the first four segments agree. From Sapir on, some have mixed these with *tīnnV 'antelope' (< *tīmīna), which is another example of syllable reduction causing a cluster: *tīmīna (Ktn) > tīmna > *tīnna.) For 'deer' the SP form shows *-k-, while the other Num forms show -h- or nothing. So again, *k > h in most of Num.

P7b. *ciki 'white-tailed deer': Od siiki 'white-tailed deer'; PYp siiki 'white-tailed deer'. In light of the frequency of *ti > ci, this Tep stem (*ciki > Tep *siki) likely ties to NUA *tikiya 'deer'. The Tep k with Num h (< *k) is consistent with the above terms (two, three, drunk/angry) as well.

Other puzzles present themselves, such as the following:

P126. *wikiC / *wiCki(C) 'knife': Mn wihi; NP wihi; TSh wihin; Sh wiin 'knife'; Sh wihi 'metal'; Kw wihi-či; SP wii"-/ wihi" / wii; CU wií-či. Note that Ls wóki-la-š 'knife' (Ls wóki (<*wikki) 'cut, let bleed') is not far from Num *wihi, since both changes—k > h and i > i—occur in Num. In fact, one SP variant shows the same vowels: i-i. A certain cluster *-Ck- may more likely remain strong -k- in Ls, but go to -h- in Num.

Similar though less clear things happen in *tukkuC / *tuhu 'bobcat/lion' at 'lion'.

2.11 Medial *-s-/-c- > Numic -'-

Sapir (1914, 470) noted some clear cases where PUA medial *-s- or *-c- > -'- (glottal stop) in Num: *pusi 'eye' > Num pu'i; *wïci 'fall' > Num wï'i. The matter awaits further investigation.

2.12 The Labial Labyrinth in Uto-Aztecan

The labiovelar spectrum in UA is fraught with intrigue. The syllabic frequencies (p. 11) show a complete lack of *kwo and *kwu among UA initial syllables paralleled by a marked abundance of about twice as many ko and ku syllables as k with other vowels: 38 ko and 37 ku syllables vs. 10 ki and 17 kï, and nearly as many as the 43 ka, though across the board, *a*-syllables are normally twice what others are. Lack of *kwo/kwu syllables alongside about double the usual vocalic ratio for *ko/ku syllables may suggest many *kwo/kwu became ko/ku.

A count of TO's initial syllables provides an even greater discrepancy. Considering that TO b corresponds to PUA *kw, notice that a rough count from Saxton's (1983) dictionary yields the following:

	a	Ĩ	1	0	u
b (< *kw)	ba(40)	bï(5)	bi(28)	bo(0)	bu(0)
k	ka(48)	kï(20)	ki(13)	ko(70)	ku(88)

Again in TO, a complete lack of bo/bu syllables contrasts with about triple the expected number of ko/ku syllables, as if in Tep languages *kwo/kwu > ko/ku. Note the TO variants of a plant (Mathiot 1976, 362):

P127. bihul / hikul 'a plant'. These alternate forms switch first and second consonants, except that PUA *kw is b before i, but *kw is kw before u. In PUA terms, *kwisuL > TO bihul, and *sikwuL > TO hikul.

If we take each language's initial correspondences for *kw and place them before o and u, and then consider the likely results, we would have *bwo/bwu > bo/bu in Cah (Yq, My), *wo/wu > o/u in Tr/Wr, *kwo/kwu > ko/ku in the kw-languages and apparently in Tep as well, and *kwu > kwi in CN. Interestingly, some semantically plausible groups of words show that very array of correspondences.

P128. *kwuhV 'scrape off, degrain (corn)': Yq buh-te 'espigar [take grain from ear]'; My búh-tuk 'se espigó'; My búh-te 'está espigando'; Tr ohó 'desgranar [remove grain from ears]'; CN kwi'kwi 'chip off (wood or stone), clean up a surface, take s.th. away, get ready, be prepared'. As Miller points out that Tr sometimes shows o as well as u for PUA *u, these four languages show PUA *kwuh 'scraping off s.th.': *kwu > Cah bwu > bu; > Tr oh; > CN kwih/kwi'.

P129. *kwuya (> *kwoya) 'growl, scold': Eu búde/nevúde/nepúde 'growl, bark'; My buuye 'snarl, growl, bark, scold'; Hp qö'öqöya 'scold, vt'; Hp(S) qöyqöya 'he's scolding'; Tr oyo 'become angry';

TO koDog 'rumble, gurgle'; and perhaps CN kwikwinaka 'make a low sound in the throat; for a dog, to growl; for a person, to hum' since CN i \leq *u. But TO koDog with D is usually \leq PUA *L rather than *y.

P130. *sakwo > *sikwo/sikwi 'witch, bewitch': My sisibo 'hechizar'; My sibori 'hechizado'. Cp sekwíte 'curse, whip' (Cp i < *o) suggests a semantic tie such that the set under *sakwi 'whip, v' (at whip) may be related: M88-sa27; KH.NUA: Cp sekwíte 'curse, whip'; Cp sekwítxe-l 'whip, n'; Sr şakwit(kin) 'whip, swat, vt sg obj' (borrowed from Cup?); Gb sakwít 'castigar'; Ls şíqwi 'to punish, whip' (vowel is wrong, Miller notes), but Miller speaks of the first vowel, often putting too much emphasis on the unstable, unaccented vowels; Tr siku- 'hechizar'; Tbr sigu-l 'hechicero'. Ls -qw-, rather than -kw-, suggests a non-high second vowel, i.e., a second vowel of *o instead of *i originally (Langacker 1970), which agrees with SUA TrC (Tr, My). As for the first V, it appears that *a went to the schwa options—i and i—suggesting it may have been unstressed previously, with Sr and Gb maintaining the original a. And note My -bo- (< *bwo) with Tak *-kwo-. Tr ku < *kwu may be the medial reflex vs. the initial.

We also often see what we might call **kw-reduction—*kwVC > kuC/koC**—where the vowel between *kw and the next C becomes short enough that the rounding of *kw overrides it, and the result is k + round V + C: e.g., Tr kusá at *kwasa 'eagle'; Ca kuş at *kwïsi 'grasp, take'; Tr oke/weke at *kwïkï 'weep'; and others. Perhaps kw-reduction is more likely between two bilabials, as below:

P131. *kwawa/i 'invite, call': Cp kwawe 'call, invite'; Tr o'wi 'invite'; Wr oi 'invite to work'; Eu bowá 'invite'; perhaps the baa- of TO baamuđ 'plead, invite' (lack of TO g < w is frequent enough). These forms show kwreduction in some (TrC), which brought the kwo-phenomenon into play in Eu, Tr, Wr, while Cp may come nearest the original *kwawV.

P132. *cakwa / *cakwo / *cakwi 'catch, grasp, close, lock': Ls čáqwi 'seize, catch'; Cp čáqwe 'catch, grab, cling to'; TO šaakum 'catch, grasp'; NT saakómi 'handful'; ST saakum 'handful'; CN cakwa 'close, enclose, lock up'; CN cakwi 'close, get closed, vi'; Pl cakwa (pret cak) 'close, shut, cover'; Mn cakwiti'i 'close, lock, bolt'. Here kwreduction in Tep between two labials (*kw and m) triggers Tep ku < *kwu, instead of bu < *kwu.

Infrequently mentioned is the fact that Tr often lends itself to Tepiman-like phonology in the labial realm or has variants with Tep correspondences in addition to the usual Tr correspondences. The widely publicized sound correspondence for *kw in Tr is w initially and for *w is also Tr w. While those two are most frequent, Tr has dozens of variant pairs, in which one variant indeed shows the touted w < *kw or w < *w or w < *p, but one variant resembles Tepiman phonology: w > w/b or w > w/g/k or v > w/b:

```
*kw > b
Tr wasi-/basi-bura 'loincloth' (< *kwasi 'tail, penis')</p>
Tr wasu/basu 'cook in water' (< *kwasV 'boil')</p>
Tr we-móri/be-móri 'dust' (< *kwiya- 'earth')</p>
Tr wa'wé/ba'wé 'eagle' (< *kwa'awV > TO ba'ag; Eu páwe)

*kw > gu/go
Tr witá/guté 'feces' (< *kwita 'feces')
Tr ciwá/cigó 'rob' (< *ïcikwa 'steal')

*w > g/k
Tr oná/koná 'salt' (< *oŋa/*omCa; Wr woná)
Tr oona/koona 'corncob (Wr wo'ná)
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Tr wiso/biso 'infect(ion)' (Wr pehsóni; PUA *pisVk 'rot, infection')

Other Tr forms show similar and considerable phonological variety: Tr uusabi / kuusabi / guusabi 'Prunus Capuli'; Tr utuburi / tutuguri / rutuburi 'type of dance' (note b-g alternation medially)

P133. Most intriguing is the pair—Tr bineri 'alone, only, sg' and Tr a'wineri 'alone, only, pl'—as if *p > kw when geminated medially, since -'w- is a reflex of medial *-kw- in Tr. Tr may do similarly in *kap(p)a 'egg' below. **P134.** *kap(p)a 'egg': Eu akabo-ra; Yq kaba; My kabba; Tr ka'wa, among others.

P135. Another example of medial *-p- > -kw- exists in Num: *yïpana 'autumn': Mn yïba, yïbano 'be autumn'; NP yïbano; TSh yïpani; Sh yïpani; Kw yïvana; Ch(L) yïvana; SP yïvanna" / yïvwanna; CU yuvwa-na(-tti) / yugwa-na(-tti).

Note that when the labiovelar glide -w- develops in SP -vw-, then the labiovelar -kw- is the next step in the next language east (CU). Similarly, I have heard native speakers of Yaqui pronounce intervocalic -w- with some velar contact: -gw- (< *-w-), and Shaul and Yetman (2007) suspect Op gw was an intermediate step from *w > gw > g. At *hupa (> *howa 'back'), the Tbr variants (ova/owa/ogo) show another instance of velarizations of labials preceding round vowels. Larry Hagberg (p.c.) informed me that in My also PUA *wo is usually pronounced wo, but occasionally go, but not gwo; but with other vowels, *wa, for example, is never pronounced gwa only wa. So round vowels can trigger velarization in labials. In contrast, Monzón and Seneff (1984) note *kw > w, bw, b in various Nahuatl dialects.

Manaster Ramer's (1993a) suggestion of *-tw->-kw- finds support in the My reflex of *ïcikwa/*ït(i)kwa 'steal'. Among the TrC reflexes (Eu écba'a-n, Tbr icikwa, Yq 'étbwa) is My ekbwa, which essentially does the change that Manaster Ramer proposed, changing non-velar t/c to a velar -k- adjacent to the labio-velar *kw/bw.

2.13 Proto-Uto-Aztecan *w

p > w/b

Tr wici-/bici- 'believe' (< *piti)

PUA *w remains w in most UA languages. The notable exceptions are the Tepiman branch and Hopi: PUA *w > Tep g (Sapir 1914; VVH; Miller 1967), and PUA *w > Hp l/a, e, ö (VVH; Miller 1967), and sometimes PUA *w > Tbr -ny- or -mw- (Stubbs 2000b). Some Hp -wa- syllables provide inconvenient exceptions to this rule and will be explained later.

We also occasionally see the velar nasal ŋ associated with *w, not unlike the velar stop g in Tep. Munro (1973) noted Ls ŋ appearing in place of *w for several UA sets. See at *kowa 'snake'; *siwa 'girl, woman'; *tïwa 'name'; *tïpiw/*tïpiŋ 'ask'; *yawi / *yaŋwi 'grab/carry'. R. Joe Campbell (1976) similarly notes underlying /ŋw/ in Hueyapan Nahuatl, also in *kowa 'snake' (koŋwa). In fact, Kaufman (1981) actually reconstructs a nasal clustered with the -w-: *konwa 'snake'. Other forms (TO ko'oi/ko'owi 'rattlesnake', Nv ko'o, PYp ko'o at P142 below) also have me suspecting a cluster: *koCwa or *koNwa. The glottal stops in Tep could be signs of a cluster

that later separated: koCwa > ko'wV > ko'o(wV), as in 'big' and 'sick' (2.6). The Ktn reflex below shows another instance of koCwa > ko'wV > ko'o(wV), as in 'big' and 'sick' (2.6).

P136. *yawamin 'believe': Sr yawamin 'to believe'; Gb yawayno 'believe it'; Ktn yaŋam 'believe'. In addition, the Hp combining forms often have $\eta < w$, such as $-\eta n\ddot{\imath} < w\ddot{\imath}n\ddot{\imath}$ 'stand'.

Most PUA *w are realized as Tep g. Some exceptions have *w remaining w in Tep. Whether due to early loans, meshing movements, or undiscovered sound laws, collecting such instances creates a useful database:

P137. *winima 'dance, v': Hp winima 'dance, vi sg'; Ch winimi 'dance, v'; TO wiinim 'dancer in a harvest ceremony'.

P138. *mawiya 'mountain lion': Tr mawiyá; Wr mawiá 'bobcat'; Cr mwáhye/mwáhaye 'onza'; TO mawið, pl. maipið 'lion, puma, cougar'; LP maviji; PYp mavidi; NT mavíídyi; ST maviidy; Eu maviot/mavirot. In Tep this could appear to be from medial *-p-, but we hardly see *-p- so consistently -w- as the apparent *mawiya in TrC and CrC.

P139. *sukaC(-wi) 'deer': Tak *suka-t; Tbr suhá-t/ suká-t; Tr sohawí; TO huawi. Of course, the -wi in SUA is likely a suffix, perhaps subject to different rules; nevertheless, TO, like Tr, shows -wi, not -gi.

P140. *tïwïL 'grow, green': Cp tewe 'to grow (of plants)'; TO čïwïl-him 'to grow'.

P141. At *kowa / *koNwa / *koCwa 'snake' the Tep forms show no g < *w as usual, but only glottal stops and -w-: TO ko'oi/ko'owi 'rattlesnake'; Nv ko'o; PYp ko'o; NT kói/kóyi; ST ko'.

Sometimes intervocalic *-w- > -v- can make proto-forms seem to be from PUA *-p- instead of *-w-.

P142. *mawiya 'mountain lion': *mawiya > mavid in some Tep languages and in Eu.

P234. *na-wakay 'four': most languages show -w- in reflexes of *na-wakay, but *-w- > -v- in Eu návoi.

P143. *yuwiN > *yuviN 'ponderosa pine' (in Num) and > *yuy 'conifer sp' (in Tak). The two are likely related, both deriving from s.th. like *yuwiN, for *w would be quite hidden in the environments of Tak, and w > v happens often enough in Num: Kw yïvi-bï 'ponderosa or yellow pine'; Ch yuvimpï 'pine sp'; CU yïvï-pï 'pine tree'.

P144. *woko(N) 'pine' > Eu vokót/gokót.

P145. *pi'wi 'clean, vt' > Eu pigwide/pivide.

P146. *wokin 'drag': Tb wiigiin~'iiwiigin 'drag it'; Hp lölökinta 'drag, pull behind'; if *w > v, then Sr vööhkin 'pull, drag'. These seem related, even if Tb's first vowel does not agree. The fact that four of the five segments agree in Tb and Hp with identical semantics is compelling: *wVkin.

P147. *awa 'tell': TO aag(a); TO aagiđ; UP 'aagi; LP 'aagi; NT áága; ST 'a'aga; Eu áwa; My hiáwa 'decir'; Tbr amwá/omwá; Tb aawiinat~aawiin 'tell to'; Hp aa'awna, aawin-/awin- 'tell, inform, relate, announce'; but Sr aav 'tell a true story' seems to show *-w- > -v- in Sr again.

P148. *kamo'-ta 'sweet potato': Cr kámwah; CN kamo'-tli; Pl kamuh 'sweet manioc'. ST kamav 'camote' perhaps with '> w > v.

P119. *wiLu 'play a reed flute': Ca wiiru; Ls wiiru; Sr wiirui'n 'play a reed flute'; Sr wiirui'ni-t 'reed flute'; WMU viyu'/eviiyu'ni 'flute' is very similar to Sr except w > v. Other examples are at *tuwiya 'dance'.

Other examples are Tbr yavá-n 'river' at 'canyon' *yaway; Eu sevíce 'tener miedo, v' at 'fear' *sawi; Ca yávayva 'lung, liver' at 'lung' *yaway(a)wa; Eu kuvés-rawa 'summer' at 'summer' *kuwesa.

2.14 Consonant Harmony

Instances of consonant harmony in UA seem to be consistently regressive or anticipatory: that is, a preceding consonant harmonizes with the following or anticipated consonant:

P149. *tanapiko 'heel': among others are My témpe'erim and Yq pémpe'im, Yq's first consonant harmonizing with the second.

P150. *tipa > *pipa 'throw, v': thereat Yq and all of TrC show *pipa while other branches show *tipa.

P151. *yoLi 'live, alive, bear, be born': most reflexes align with *yoLi, and so does Cr ruúrikame 'alma, vida' (Cr u < *o) except that the first consonant harmonized to the second.

P152. *huCkuN- 'dust': while seven other languages show *hukkuNpV, CU kukupï (< *kukkuppï) shows consonant harmony.

P153. *pacay 'shine': TO wađađ-k 'be shiny, bald'; PYp vasad 'shine, vi'. Consonant harmony in TO.

P154. *pakwa 'pus': Tr bawana/wawana 'erupcion purulenta, sarna'; Ls 'apáákwaya 'rotten wood, punk'. Medial *-kw- > Tr -w-, so outside of a preceding vowel that Tr lost or Ls gained, both match *pakwa. However, note the consonant harmony in one of the two Tr variants: wawana.

P155. *tuLipa / *tVLV 'shake': whether the final *-pa in CrC is a suffix or not, notice that Cr harmonized the second consonant to the third: Wc titïriva 'estar temblando'; Cr rubibéh 'tiembla'; Eu turiré nomíkdaa 'shake, stir'; Hp tïrïrï 'be shivering, trembling, shaking'.

2.15 Vowel Behavior (or Misbehavior) in Uto-Aztecan

Early on, Sapir (1913, 402) noticed that "most UA languages seem to assimilate vowels of successive syllables to each other to some extent, though in varying manner." He also noted the frequency of vowel syncope and that the existence of many consonant clusters was due to it (Sapir 1913, 415). In fact, Sapir (1913, 417) goes so far as to say, "In Nahuatl (as presumably in UA generally) there were no consonant clusters to begin with. All present clusters have been brought about by the disappearance of short vowels." I vary from that view only slightly: even if many present clusters were brought about by vowel syncope, there were also original clusters, even if many are largely now lost, but sometimes residual evidence of old clusters are perceptible in the reduction of the old cluster to a single consonant, whether the components of the cluster are retrievable or not.

The UA vowel correspondences are fairly straightforward and obvious by inspection of table 7. Hopi shifted them one direction (*u > o; *o > ö), while the Corachol languages shifted them the other (*u > \ddot{i} ; *o > u). CN continued the CrC shift one step further: *u > \ddot{i} > i. The Tak languages offer less obvious scenarios, treated by Langacker (1970), who also explains PUA *k > Cup q/_o, which q remained even after *o became high front vowels in Cupan: Tak *ko > *qo > qe (Ls) / > qi (Cp, Ca). Examples are at *kuta 'neck'; *koLoka 'beads'; and elsewhere.

2.15.1 Vowels > i/i/e in Unstressed Syllables

Vowel centralization is common in language change. Sapir (1913, 416) noticed that many vowels appear to change to *i* in shortened/aspirated syllables and that a 'dulling' to a is common in SP in unaccented syllables (Sapir 1930, 8). This is similar to the schwa-phenomenon in English, wherein short unaccented vowels of longer words become a. The UA schwa-equivalents are i and i/e.

P156. *(pa)-hawa 'fog, steam': Yq báhe(wa) 'fog'; AYq haawa 'vapor, steam, n'; AYq vahewa 'mist, fog'; AYq vaiweče 'fog, mist'; My baihwo 'neblina, brisa'; My háawa 'vapor'; Eu baúua (baúwa) 'rocío, neblina'; Eu beiwat 'neblina'; Ca háway 'be foggy, vi'; Ca háway-š 'mist, fog'. The diachronic fragility of h results in a dipthong and the loss or near loss of the middle syllable after the prefix *pa-. Also of interest is the fact that all forms without the prefix *pa- show *hawa (Ca, My, and one AYq form) because the first syllable was likely stressed, while all forms with prefix *pa- show a higher vowel after pa-, i.e., pa-(h)ïwa/(h)iwa with second syllable reductions, because pa- was stressed and thus not the first syllable of *hawa. Furthermore, those high vowels are the UA schwas, and, like the English schwa, sometimes result from lack of stress in unaccented syllables, not from PUA *ï or *i.

P157. *hatawa 'yawn, v': Mn na'ïdawï 'yawn, vi'; NP ïdamuwïnï 'yawning, vi'; TSh hïtawa 'yawn, vi'; Cm ïhtamakï'atï 'yawn, vi'; Kw 'atawa 'yawn'; Eu hátawa (prêt: hátauhri) 'bostezar'; My ten háha'awa 'está bostezando'; Yq háawe 'bostezar'; Cr ha'ateewa 'bosteza'. Note a glottal stop in Cah corresponding to *t in the other UA languages: *t > l/r > ' in Cah. Interestingly, in TrC where the first vowel is stressed, the *a is retained while second and third vowels sometimes change, but in Num where the second vowel is more often stressed, the first vowel goes to ï, the UA schwa, in all Num forms except Kw.

P158. For *ata(N)kaC 'grasshopper', note that the second vowel is consistently a in TSh aattaŋki(cci); Sh aattankih; Cm aatakii'; Kw 'aataka-piži; SP aataŋka", aataŋka-ppici except for some CU variants: CU 'áa-rīká-ci, 'áa-raká-ci, 'aa-taká-ci. In the one CU variant, the unaccented a > ī between two accented syllables. Anticipatory assimilation may explain the Sh dipthong ai, which dipthong often goes to e, but in CU the third vowel is also a, so only unaccented schwa-like behavior can explain *a > ī in one of the CU variants.

P159. *ayakwi 'pus' (at rot): Cp áyexwi-š / áyaxwi-š 'pus'; Ls 'iyáxwi-š 'pus'. Ls and one Cp form both show an unaccented a > i/i, while accented á remains in all cases.

P160. *yaCV 'laugh': Mn yawi; TSh yahi/yahe; Sh yahnai"; Cm yahneetï 'laugh, v sg' vs. Cm na'yïnetï 'laugh, v pl'. The two Cm forms are quite identical except that when the prefix *na- is added, the first vowel a becomes the second, and in the unaccented position becomes ï.

P161. *pakuwa 'mushroom, fungus': Mn paagú' 'type of pink mushroom'; PYp vikoga 'mushroom(s); Wr wehkoári 'fungus'; Tr wikubékuri 'large white edible mushroom'; Tr wekogí 'mushroom'; Tr wehorí 'type of edible mushroom'; Tr čohowékuwi 'large white edible mushroom'. The phonological variety in Tr is typical (-weku-, wiku-, béku, weko, weho-) and some forms suggest Tep influence. The Mn, PYp, and one Tr form (-beku-) suggest initial *p, whose reflexes in Tep (v/w) are the loan source of some Tr/Wr forms. The first vowel is probably a on the strength of the Mn form, which a easily assimilates or centralizes to ï/e/i when a greater stress is later in the word.

P162. At *taka 'fruit' are 11 languages with reflexes of *taka, but Kw tikipiya 'fruit' shows *a > i/_i.

P163. *yuhu 'fat, grease': among several Num *yuhu forms with stress usually on the second syllable, we find Kw yïhuu/yuhuu-vï and CU yïú-vi 'fat, oil, grease, lard' which changed *u > ï when unstressed.

P164. *pašweL 'young man': Ca pašwél-iš 'young man'; Cp pišwéliš 'young man'.

P165. *toci 'head': among other SNum *tocí- forms, all accented on the second syllable, is CU tïcí-vi.

P166. *pana 'yucca whipplei': Ls panáá-l; Cp pəná-l; Ca pána-l. Note Cp ə < *a in the unstressed syllable.

Additional examples of schwa-like behavior (V > i/i), usually in unaccented syllables, can be found at *malkocowa 'hug'; *paca 'long, thin, stretch'; *patto- 'swell'; and above (in P131) *sakwo > *sikwo/sikwi 'bewitch, whip'; and others.

2.15.2 Uto-Aztecan Vowel Assimilations Anticipating Following Consonants

Uto-Aztecan vowels also assimilate toward the point of articulation of the following consonant, anticipating its place of articulation, though again, more often in unaccented syllables, that is, V > o/u before labials and V > i before alveolar consonants.

Rounding of Vowels before Labials

P167. *sa'maC 'spread': Kw sa'ma 'spread out (e.g., a blanket)'; Kw sa'ma-pï 'blanket, mat'; SP sa'ma / sam'a 'spread out (a blanket)'; SP sa'mappï 'spread out, ptc, cover on which s.th. is laid'; Ch som'á 'spread a blanket'. Note Ch's assimilation of *a > o/ m.

Vowel > i before Alveolar Consonants, Especially in Unstressed Syllables

Note how often reconstructable non-high-front vowels become high-front when preceding an alveolar or when anticipating the point of articulation of what might be considered a "high front" consonant.

P8. *paNtu' > *paicu' 'badger'.

P168. *packo'or 'prickly pear sp.': PYp pasko'or 'type of prickly pear'; Tr péčuri 'nopal species'.

P60. In P60 above (*coLowa 'hungry"), Tr ciriwisa exemplifies the raising influence of three of four consonants being alveolar, with perhaps help from assimilation toward the third accented -í-.

P123. At *pakay 'three', Tr bikiyá shows the anticipatory influence of -y-.

P111. From *pa-suLV/suLa 'sweat' we have the last two syllables of Wc kwaašiiya 'sweat, n' assimilating the V toward y, while Cr táisï'e 'sweat, vi' or Cr -sï'e (< *suLV) agrees well with all the other *pa-suLV/suLa forms, mostly of Tep.

NB, as suggested by Ken Hill, Spanish *frazada* is the source of Hp pösaala, and is the likely source of other UA words for blanket: Ca sáala'a, Tbr pirisál, Yq piisam. Comparing Tbr and Yq, note Yq's quick loss of r since European arrival. Also note the tendency of alveolars to raise and front preceding vowels (a > i/_ before r/l/s/t) in Tbr, Yq.

NB, the vowel in Hp kapiira from Spanish cabra. To separate the Spanish consonant cluster, i emerged, perhaps partially due to its schwa properties, though having become a long vowel hardly has it schwa-like any more, so perhaps more likely is the influence or anticipation of r.

2.15.3 Vowel Assimilations to Other Vowels, Anticipating the Following Vowel or Preserving the Preceding Vowel

Relevant to Sapir's (1913, 402) generalization that "most UA languages seem to assimilate vowels of successive syllables to each other ... in varying manner" are *u-a > o-a (P169-P180), *i-a > e-a (P181-P185, P49), vowel leveling *a-i or i-a > e-e (P186-P197), Tübatülabal's preservative vowel assimilation (P198-P204), and Nahuatl's anticipatory vowel assimilations (P205-P209 plus five others) and Tepiman's (P210-P214) anticipatory vowel assimilations, each treated below:

2.15.3.1 The Partial Anticipatory Assimilation *u-a > o-a

P169. *kuC-taC-pï 'ashes': TSh kuccappïh; Kw kuca-pï; SP kučča" 'ashes, light gray'; CU kuca-pï; Ls koškuyat 'soot' (vowel is wrong, Miller notes); Hp qöcvi (vowel is wrong, Miller notes). Both vowels that Miller notes as wrong (Ls and Hp) are likely due to *u-a > o-a, because three other forms show *u-a, and *u-a > o-a is natural and explains Ls o; otherwise, Ls o < *ï, which would not work here.

P170. *hupa 'pull out': Kw hovo 'pull out (hair, grass, seeds), v'; Ch hová 'pull out, v'; Nv 'upana 'arrancar'. The semantics are identical, as are the correspondences nearly, since Nv ' < *h. The only difference is *u-a > o-a in NUA, then Kw further assimilated the second vowel to the first.

P171. *yuLa 'hang': Ca yúlaa 'to hang'; Ls yóóra 'to swing, hang in the air'. Ls and Ca are similar except for the explainable vowel assimilation in Ls. That assimilation was later than the one in P175 below, wherein the change was before the Ls vowel shift of o > Ls e: that is, *suka > *soka > Ls *sexa. For note that all of SUA and even Sr in Tak show *suka while Ls has *seka.

P172. *LukV 'stoop': Ca lúku 'bend the body forward'; Ls lóóqa 'stoop'. The fact that Ls has final -a allows *u-a > o-a to explain Ls o, as in P169 and P171 above and P173 below.

P173. *suka 'to heat, be hot (weather)': Ls šéexa 'to simmer, of water when it is about to boil'; Ls šéx-la 'to warm water'; Eu sukáe-n 'caliente'; Op sukkara; My súkka 'está caliente'; AYq suka/sukkai 'warm'; Tr sukáre 'calentarse'; Wc šīkáa 'caliente'; Cr šīká 'sun'; Cr wa-šīka 'be hot (weather)'; Nv 'ukadida 'calentar, vt'; Nv 'ukagī 'calentarse a la lumbre'; NT uukádyi; ST huukad; TO huukaji. Ls e < *o suggests *u-a > o-a as an intermediate step: *suka > *soka > Ls *sexa.

P174. *yuŋa 'cactus fruit': Hp yöŋö 'prickly pear cactus'; Wc yïna; TO juni 'dried saguaro cactus fruit'. Both Wc and TO agree with *u, and *u-a > o-a likely preceded o > Hp ö, as in P169 and P175 also.

P175. *uŋa > *oŋa '(feel/be) lazy': Hp ööna 'not feeling like doing'; Hp naa'öna 'lazy'; Sr 'ööŋa' 'lazy'; Cp íŋi-š, pl. í'iŋčam 'lazy'; Cp íŋiču 'be unmoving'; Cr wá-'ïna-ase 'he feels lazy, dragged out'. Note Hp n vs. Tak ŋ as in 'suck'. Also note Cr ï < *u, and *u > NUA *o is easily feasible before a following a.

P176. *'uma 'be cloudy': Hp oomaw 'cloud'; Tr na'oma 'become cloudy, erased'; Tbr homé-k 'be cloudy'. A reconstruction of the first vowel as *u instead of *o is preferred, as we would expect Hp ö < *o, and Tr sometimes shows o where u is expected anyway, and even if that were not the case, a vowel assimilation or lowering *uma > *oma, a common phenomenon in UA, also explains the Tr and Tbr forms.

P72. *muCna 'brother-in-law' above may be another example of *u-a > o-a, as one language (SP) shows u, and plausibly all the others lowered to o, yielding *moCna? Sometimes the minority is original.

P177. *muwa 'father': Kw muwa; Ch móa; SP moa; WMU muuwá-; CU múa; *u-a > o-a in Ch and SP.

P178. *pu'na 'pull out, uproot': TO wooni 'pick, harvest, uproot'; LP bona 'arrancar hierbas'; Eu pópna (< *pona) 'pull roots/hair'; Wr po'na 'arrancar (de hierbas, matas, fruta)'; Tr bo'ná/bo'ní 'arrancar, sacar a fuerzas'; My pónna 'arrancar'; Wc huuná 'arrancar una cosa inmóvil'; CN kopiina 'pull s.th. out, for s.th. to pull itself loose, remove from a mold, copy'; Pl kupiina 'pull out, tear out, tear off'; NT voopónai 'arrancar'; NT voóñii 'arrancar'; ST takvuna 'uproot, pull out'; ST voopñia 'pull out (weeds, hair)'; AYq popóna 'pull up, uproot'. Most fit *po'na except the Aztecan forms and ST, which suggest *-pu'na, and in light of the frequency of *u-a > o-a, PUA *u may be the better choice.

We have already noted the Cupan languages show a vowel assimilation from *kuta > *qoLa (Proto-Cupan) 'neck'. So *yuna 'cactus fruit'; *una 'lazy'; *uma 'cloud'; *hupa 'pull out'; *suka 'heat'; and *kuta 'neck' or all seven show NUA lowering the round vowel in assimilating (*u-a > o-a) while SUA languages do not as much.

Subbranches have their frequencies, too. WNum does so in WNum *toka (NP, Mn) at *tuka 'black, night, fire goes out'; and in P179 (*tuCcaC) below:

P179. *tuCcaC / *tuCCaC 'dirt(y)': Mn tocábi 'dirty one'; NP tocaggïti 'dirty clothes, v'; TSh tuccaappï dirt, dirty'; Ch tucá-vi 'dirt'.

P180. *muLa 'ear of grain': *muLa > Cah mo'a > mo(w)a): Yq móa 'espiga'; My mówwa 'espigar', while the rest of SUA is consistent with *muLa: TO muDa 'tassel'; Nv murhadaga 'espiga'; Eu murát 'espiga'; Wr mulá 'espiga'; Tr murá 'espiga'; Cr mwée-yu 'spike/espiga'; NT muurádadï 'la espiga'.

2.15.3.2 The Partial Aniticipatory Assimilation *i-a > ï/e-a

Similar to *u-a > o-a, so is *i-a > e-a (or > i-a) as common in UA.

P181. *kisa 'chicken hawk': Tak and Hp show *kisa (Cp kísi-ly; Ca kísily 'chicken hawk'; Ls páákiš-la 'chicken hawk'; Gb pakísar 'chicken hawk'; Sr paakiha-ţ 'chicken hawk'; Hp kiisa 'chicken hawk'). But SNum assimilated the first vowel to the second or *i-a > ï-a (Kw kïsa-vi 'chicken hawk'; Ch(L) kïsavu 'hawk species').

P182. *witta > witta 'wrap' at 'blanket' shows SNum *witta, but *witta in CNum and WNum.

P183. At *sika / *siki 'cut (hair), mow', Tr has two stems: Tr sikí and a secondary stem Tr seká. Other forms (at 'cut') with second vowel a also show the change (> "i-a"); yet other forms level the vowels (> "i-i").

P184. *huppa 'skunk': among many *huppa forms is CN epa-tl 'skunk' which likely acquired its vowel thus—
**uppa > *ipa > CN epa—the last step being i-a > e-a.

P185. *wina > *wina 'limp, be lame': Cm wihnai mi'arï 'walk lamely, limp'; Ls wóna 'limp, be lame'. Note the identity of three of four segments (*wVna), with *i-a > \ddot{i} -a, and \ddot{i} > Ls o.

P49. *koLi (*koLkoLi > *ko'okoLi) 'hurt, be sick, chili pepper': While many SUA forms show the reduplication *ko'okoLi, Ca and Cp show *koLi > *qoLi > qiLi. Then after acquiring final -a, Ca lowers *i-a > e-a: cf. Cp qilyíqa-t 's.th. hot, spicy, strong'; Cp qilyíqatu'nine 'hurt, sting, v'; Ca qélya 'feel sore, v'; Ca qélyak 'peppery, pungent, creating a burning sensation'.

2.15.3.3 Vowel Leveling

Hopi e is the only Hp vowel of its six that does not align clearly with PUA's five vowels. However, vowel leveling of i-a and a-i combinations is often the source of Hp e. Ken Hill (p.c.) also mentions reductions of ai dipthongs as a source of e, another form of vowel leveling.

P186. *cikwa 'rain, v': TO siibani 'drizzle, sprinkle' and Hp cekwekwe-ta 'be raining big drops as at the outset of heavy shower' (cekwe- 'soak') suggest *cikwa with vowel leveling in Hp.

P187. *kwiLa / *kwita 'badger / tejón': Ca wílyaly 'badger'; Tbr kwelé-t/keré 'tejón'.

P188. *kwiya 'earth, land': most vowels reflect *kwiya, but Tr, Wr, and Cr leveled the vowels *i-a > e'e.

P189. *kaLi 'kidney': SP qaniN-, qanimpi 'kidney' and the k^yele- portion of Hp k^yelevosna 'kidney'.

P190. *piska 'rot, pus, infection' and Hp peek^ye 'pus, pus-filled infection'. (*piska is more fully elaborated below under phonological reductions.)

P191. *civa 'bitter': CN čičiya 'bitter, sour' and Tb ceeyee'ït / 'eceeyeeu 'be bitter' show *i-a > e-e.

P88. *kaLi 'house': In SUA: Wr karí; CN kal-li; Tbr kalí-n 'pueblo'. In NUA: NP kani; TSh kahni; Sh kahni; Cm kahni; Kw kahni; WMU kaní; CU káni; Tb hanii-l; and Hp qeni 'place, room, space'. Note how many of the vowel leveling exampes involve Hp.

P192. *pisa 'pound': NT viaáhai 'remoler'; Hp pïsïsï-ta 'be a continuous drumming or pounding sound'. With vowel leveling, these agree.

P75. *mana/mani 'stumble, roll (over), fall over/off/down': Cp máne 'roll, fall off, stumble'; Ca mána/i 'fall down (rolling), roll, stumble over'; Cp manáninjiyqal 'he fell over'; Ls máána/i 'stumble and fall, roll down (a hill) vi, vt'; Sr manamk 'fall down'. Note Hp mïnï(k) 'stumble and fall, fall down'; Hp mïnï-k-na 'knock over' quite identical semantically though Hp leveled the vowels: *mani > mïnï.

P193. *Laya 'lie with legs/feet spread/pointing outward': The specific semantic identity of Hp lèesi-kiw-ta 'lie with feet pointed outward' and of Ls láya 'lie with legs spread apart' makes this match quite probable, when we consider that Hp e is usually from vowel leveling, such as a-i / i-a > e-e, or as we have here: aia/aya > ee, as in Ls laya and Hp lèesi.

P69. *naŋaN-ya'i/ *naNCaN-ya'i 'angry': Kw naha-ye'e 'be angry'; Ch naŋá-ya'i 'angry'. Vowels leveled in Kw. **P194.** *ta'ika 'tomorrow': Ch ta'ika 'tomorrow'; Kw te'eka-su 'tomorrow'. Kw again levels the vowels.

- **P195.** *mama'u 'woman': While other languages show *mama'u, Kw levels the vowels to Kw momo'o 'woman'; Ch mamá'u 'woman'; Ch(L) mamau'u 'woman'; SP mamma'u-ci 'woman, young woman'; WMU mamá-či 'woman'; CU mamá-ci 'woman'.
- **P196. *pami** 'girl': My beeme 'girl'; Yq béeme; AYq veeme; Tr bamirá. Tr probably shows the more original vowels with vowel leveling occurring in Cah: *a-i > e-e.
- **P197.** *siwa(N) 'sand': While Num shows *siwaN, the TrC terms level the vowels of 'sand' similarly: *siwa > se'e. (See at 'sand'.)

2.15.3.4 Tübatülabal's Frequent Preservative Assimilation of Second Vowel to the First

- **P198.** *huna 'out(side)': NP hunaggwa 'outside'; Sh hunankwa 'outside'; Cm hunakï 'outside'; Tb 'oonooban 'the outside'. Probably *u-a > o-a > o-o.
- **P44.** *kwiLu 'swallow': Hp kwelo(-k) 'sample by tasting'; Eu béru'u 'swallow'; Tb weleeh 'swallow'.
- Hp and Eu correspond perfectly through 4 segments, since Hp o < *u and Eu b < *kw. With Tb w (< *kw), Tb agrees as well, considering that the second vowel assimilated to the first.
- **P199.** *mo'oLV 'bear': Kw mo'orii-ži 'brown or black bear' and Tb mo'olohy 'brown bear'.
- **P200.** *tuwaC / *tu'aC 'to bear, son, child': among many forms approximating *tuwa'/tu'a, we have
- Tb tu'mul 'baby, offspring' which even assimilated the vowel of the suffix *-maL 'small, young'.
- **P201.** *pit-kanas 'loincloth, rear-cover': Hp pitkina 'kilt, breechclout' and Tb pigiiniš-t 'shirt'; the latter portion likely relates to *kina 'cover' and the *kanas of Cr (see at clothing) with preservative vowel assimilation in Tb.
- **P202.** *comi /*comya 'hair': CN comi-, Hp -cmi, Tb comoo-, with preservative vowel assimilation in Tb.
- **P191.** *civa 'bitter': Tb ceeyee'ït~'eceeyeeu 'be bitter'; CN čičiya 'bitter, sour'; likely *i-a > e-a > e-e.
- P203. *hu-ma'sa '(arrow-)feather': Hp homasa 'wing feather'; Tb 'umuša-t 'arrow feathers'.
- **P204.** *wakoL > *wikoL 'round': Tep gakoD; NP wïkono'o 'ring, circle'; Mn wigo'onogi 'crooked'; but Tb(M) wiiginat ~ iwiigin 'stir, v'.
- **P212.** *muLawi 'dance, v': Tb muuluwat 'dance, v'; TO mualig '(of a person) to spin or dance'.

2.15.3.5 Nahuatl's Anticipatory Assimilation of First Vowel to Second Vowel

- **P197.** *siwaN 'sand': Most of Numic suggests *siwa(N), while most of SUA lost -w- and some leveled vowels, such as My see'e. However, some SUA forms kept the original vowels: Nv hia, TO -hia,
- Tbr siha-t, and Wc šie.káari almost. However, CN šaal-li again anticipated the second vowel (iwa > aa), though š is evidence for the original first vowel (AMR 1996d).
- **P205.** *wiwa 'amaranth, pigweed': Hp wiiwa 'amaranth (pig weed)'; CN waaw-tli 'amaranth'. Another example of CN's propensity for assimilating 1^{st} V to 2^{nd} : *wiwa > *wawa > waw.
- **P206.** *cako 'small': Hp cay, pausal acc: càako 'small, little'; CN coko 's.th. very small'. Comparing Hp's pausal accusative form, CN's first vowel anticipated or assimilated to the second.
- **P207.** *(ta)tacowa 'push': CN totočoaa 'to push, shove someone or something to the front'; Tr na'tačo 'push each other'; Cr raa-tátahči 'lo empuja'; perhaps Yq táhta 'bump'. Note CN's assimilation of the earlier vowels to the latter.
- P208. *to'asa 'throw': Wc túaša 'tirar'; Cr tiú'utu'asah 'tira (piedra)'; CN tlaasa 'throw s.o. down'.
- **P41.** *taputi 'cottontail rabbit': Sixteen languages match perfectly the four segments *tapu, which consistency is rare in UA. For CN tooč-tli, we have both loss of intervocalic *-p- and a change of first vowel to second: *taputi > *tapoč(i) > *taoč- > CN tooč-. CrC kept the first vowel, but also lost intervocalic *-p-: *tapoci > *tapci > CrC *taciu 'rabbit' in Wc táciu; Cr táciu'u.
- **P209.** *su'i / *suwi 'hare': while all of Tak, Hp, and Tb show *suwi/*su'i 'jackrabbit', CN si'-tli may show anticipation in *su'i > si'i, then loss of final vowel, though *u > CN i also, but no palatalizing $s > \check{s}$.
- **P21.** SUA *tikpa-wa (< *tukum-pa-wa) 'up, above, sky, on': Tr ŕe'pá; Tr ŕe'paní 'sky, up';
- Eu téva(n)/tewa; Tep *tïvagi (< *tïpawi) aligns with *tïkpa-wa (cf. Hp tokpela, Hp l < *w); CN tlakpa-k 'above, on top'. Note that while all others (and others not repeated here) show \ddot{i} -a, CN has a-a. See at 'sky' for details on other forms.
- **P52.** *o'mana 'sad, suffering': CN a'mana 'sad, troubled'; Tr o'moná-/o'móna- 'be afflicted, saddened'; Tr o'móna-ri 'sadness, affliction'. Tr and CN agree in the cosonants -'m-n-, but disagree in vowels: a-a-a vs. o-o-a. Note CN again has earlier vowels anticipating following vowels *o-V-a > CN a-a-a.

P37. *tapusa > tïposa > tïposi 'gopher': TO jewho/čïwho; PYp tïvua; NT tïvóóhi; ST tïvua; Eu tïvósi; Yq tébos; Wr te'pósi; Tr repósi. For CrC and Azt, *tapusa > tausa > tusa > tosa: CN tosan 'gopher'; Cr tauhsa 'tuza'. At both *tapusa 'gopher' and *taputi 'rabbit', CrC kept the first vowel (a), but CN assimilated the first vowel toward the second (a-u > o-o).

2.15.3.6 Anticipatory Vowel Assimilation in Tepiman: *u-a > ua-a, and *i-a > ia-a

Nevome's vowel (P210) anticipates the vowel on the other side of the consonant in the other languages.

P210. *ku(N)ta(N)(pa) 'bee': Cp kutáŋva-l 'bumblebee'; Ls kúúkunta-la 'bumblebee'; My kuta kúmera 'bee that lives in wood'; Ny kuarhagi mumuva 'abejas grandes que hacen panales'; WMU kučávi 'bee'.

P211. *suma 'hungry': Eu hisúmrava 'hambre, n'; Eu hisúme 'haber hambre'; Eu hisúm-ce 'tener hambre'; ST uama 'die of hunger'. From *suma > Tep (h)uma > ST uama, ST anticipates the following vowel, as happens often in Tep.

P212. *muLawi 'dance, v': TO mualig '(of a person) to spin or dance'; Tb muuluwat 'dance, v';

Tb muuluwii-l 'dance, n'. This pair shows three consonants in agreement. It is plausible that the Tb vowels assimilated between the initial syllable's u and the third C w, or second assimilating to first as in P198-P204, then with the frequent Tep vowel anticipation, TO's vowels reflect the original, though shifted a syllable forward: *muLawi > mualig.

P213. *masiwa 'centipede': Eu másiwa; Yq masíwe; My masia; TO maihogi; PYp maihig; Nv maiokka (< *mahioga < *masiwa). Wr ma'yáka, Tr maagá/ma'agá, and Tr mahará may derive from Tep loans: *masiwa > Tep *mahiga > mahaga (Tr) and > ma'yaka (Wr). Vocalically TO behaves much like in *muLawi above, anticipating the second vowel, but with rounding toward -w-, a form of anticipation: *masiwa > *maisowV > maihogi.

P214. *si'a > Tep hi'a 'urinate, v': TO hi'a; Nv i'a/'i'a; PYp hia'a. PYp aniticipates the following vowel.

P192. *pisa 'pound': NT viaáhai 'remoler'; Hp pïsïsï-ta 'be a continuous drumming or pounding sound'. Note NT anticipatory assimilation and Hp's vowel leveling.

P11. *tuti-ka > *cuci-ka > *susi-ka > susa-ka at 'shoe' also shows Tep anticipatory vowel assimilation.

2.15.4 Vowel Transposition or Vowel-Line Shift

Another phenomenon frequent in TaraCahitan and sometimes in Tep is what might be called vowel-line shift, transposition, or leapfrog; that is, a sequence of vowels shifts in position relative to the consonants, similar to TO in P212 above: *muLawi > TO mualig.

P149. At 'heel' Tr ranikura and Eu tenuka have matching consonants (*t-n-k) and the two forms have a similar string of vowels (i/e-u-a), but the vowels have shifted one slot relative to the consonants.

P215. At 'rainbow' are many phonological reductions/puzzles, but clear is another vowel-line shift in these four forms: though the feeble -h- dropped out in Tr/Wr, the vowel pattern persisted, thus leap-frogging the remaining consonants: NT kiihónali 'rainbow'; TO gihonalï; Wr kenolá; Tr ginorá. Note:

'rainbow' *kihonali (TO, NT) 'heel' Tr fanikura *kinola (Wr, Tr) Eu tenuka

P97. From *(wa)Laka 'snail' above (CN wilaka 'caracol de monte'; Tr warákoara 'caracol'; Ls muvílaqa 'snail'; Wr alágaloci 'snail'; Wr nalágeloci 'snail'; Tr narákuri 'snail') is another example of vowel transposition: Wr a-a-a(l)o-i

Tr a-a-u(r)i

2.15.5 Often *u > ï in Numic

P216. *tu'a- 'good': CU tīī'ay 'be good/well'; CU tīī'a-tī 'good'; WMU tīī'a-; Yq tú'i 'bueno, está bueno'; My tu'uri 'be good/well'.

P217. *suku 'snake, lizard': TSh pa-suku 'water snake'; Mn pasúgu 'water snake'; Tb pišuugat 'red racer snake'; Yq/AYq sikkuča'a 'coral snake'; Ch sïgïpici 'lizard'; CU sïgï-naġóy-či 'lizard'; Kw čigïpi-ži 'lizard' (initial *s > c?).

P218. *cukka/*cukki 'crowded, mixed': CN ciciika 'stuff s.th. tight'; SP cïkki 'be mixed with'; CU cïku'mi 'narrow, constricted'; Cm cïhki-/cïkk- 'crowded'. Since *u > i in CN and *u > ï in Num is frequent enough, Num

and CN agree through *cuk, and the final vowels (-a vs. -i) are the active/transitive in CN and stative in Num (except CU).

P219. *hu'uC 'thorn': Kw hu'u-pi-vï 'boxthorn, desert thorn'; Sh hï'i- 'stickers'.

P220. *puni 'turn, look, see': Mn puni/poni; NP puni; TSh puni" 'see, look at, study'; Sh puni"/pui" 'see'; Cm puni-tï; Ch puunii 'see, look'; SP pïnni 'see'; CU pïni-kya 'see, vt'; CU pïni-'ni 'look at';

Hp poniniykï 'start moving, wake up'. Hp poni-ni-ykï is cognate with Num *puni 'see/look', as would the more basic stem Hp poni- 'turn, bend' be also, as in Hp poni-l-a 'turn, make turn, steer' as well as the Tak forms *puni 'turn'. 'He turned to look' and 'he turned' and 'he looked' can all apply to the same instantaneous event. Note that the eastern end of the SNum line (SP, CU) changed *u > \bar{i}.

P221. *hupi 'bumblebee': Mn hïbíwu 'bumblebee'; NP huupi nodda 'bumblebee'; Sh hïpi-muih 'bumblebee'.

P39. *hupi (*huppi?) 'woman, wife': While other UA languages at 'woman' show forms consistent with *hupi, the Num languages show *hipi/*hippi (< *hup(p)i): Mn hiipi'; TSh hippicci(cci); Sh hipi; Cm hibi, though occasional gemination remains to be clarified.

P222. *muCta 'cholla cactus': Cp múta-l; Ca múta-l; Ls múúta-l; Sr muutu|ţ; Sh(C) mïca 'cactus'. While Tak shows u, the Num form has ï, as well as -c- < *-Ct- or *-tt-.

P223. *yuna/i 'pour, put': Mn tïyuna 'pour into'; Cm payunitï 'pour water on, water, vt'; Ch yuná 'put pl obj's'; CU yunáy 'scatter, put pl obj's'; Kw yïna/yuna 'pour'. Note a Kw form showing yïna < *yuna.

Many other examples of *u > "i" in Num are in the comparative vocabulary.

2.15.6 Some NUA i align with SUA i

P7a. NUA *tikiya 'deer'

P7b. SUA *ciki 'white-tailed deer'

P224a. NUA *piciN 'duck': Mn piyi; NP pihi; TSh piyin; TSh piyicci; Sh piyin; Cm piiyi.

P224b. SUA *pici 'duck': Pl pišiiši 'duck sp'; Eu bavíci/babici 'duck'.

P225. *sipi 'berry tree': Hp siivi 'sumac'; Hp sivipsi 'sumac berry'; Tbr sipí 'capulin'. [i-i > i-i]

P14. *tiyuna 'keep': Mn tiyuna 'store, v'; NT šiid^yúñd^yi 'retacar, guardar, llenar mucho'.

P137. *winima 'dance, v': Hp winima 'dance, vi sg'; Ch winimi 'dance, v'; TO wiinim 'dancer in a harvest ceremony'.

2.15.7 Pima de Yepáchic (PYp) Vowel Metatheses

PYp occasionally metathesizes its first two vowels from a pattern of PUA *a-i > i-a, or *a-u > u-a:

P2. At *paCti'a 'bat' several languages illustrate *paCti'a > *paci/*paca, but PYp -pisa < *pica.

P226. *yaLipá 'poison': Mn (y)enipá' 'poison, n'; Mn enipa'a 'poison, v'; Wr yeloá 'poison, n'; Wr yeloé-na 'poison, vt'; PYp dirav 'poison for fish'. PYp fits well, because Tep d < *y and v < *p, and it shows the same metathesis as in 'bat': i-a < *a-i. TrC (Wr) often shows intervocalic -p- > -w- late in a word.

P41. From *taputi 'cottontail rabbit' note the vowel metathesis in PYp tuuva 'cottontail'.

2.15.8 Vowels' Effects on Consonants

Besides the palatalizing effect of high vowels (*t > c) discussed above, low vowels (PUA *a and *o) often caused *k > q. *k > q/_a is common in Num, Tak, and Hp, but Tak changed *ko > *qo, then kept q even after the subsequent Cupan vowel changes of *o > i (Ca, Cp) and > e (Ls), which then yield Ls qe and Ca/Cp qi < *ko (Langacker 1970). Examples are at *kuta 'neck'; *koLi 'hurt, be sick, chili pepper'; *ko'ci 'sister, older'; *koyni 'plow' at 'plant, v'; and others.

2.15.9 Compensatory Vowel Lengthening with Consonant Cluster Reduction

Other examples exist, but the following instroduce the phenomenon of compensatory vowel lengthening in conjunction with consonant cluster reductions: CVCCV > CVVCV. Examples in Tb include Tb(V) paanint 'ant' vs. Tb(M) pa'nint 'ant'; and Tb(M) polo'mat ~ 'opoloom 'bend, vi'.

Ls also provides examples. At 'touch' are Cp ŋášxa 'be rough'; Cp ŋašxaŋášxa'a-š 'rough, adj'; and Ls ŋááxa/i 'scratch, scrape, vi, scratch, brush against, vt'. These show a cluster in Cp being reduced in Ls with compensatory lengthening of the vowel. In contrast to most Tak terms for 'sky', which show no long vowels in Ca túkva-š, Cp túkva'a-š, or Sr tukuhpţ, we see the long vowel in Ls túúpa-š, which again appears to be due to the reduced cluster. The Ls *p remaining a stop (vs. -v-) is evidence of the previous -kp- cluster (*tukupa > *tukpa > *tuupa); nevertheless, a long vowel appears in Ls which is not found in any of the other forms.

Hopi's long vowel with falling tone in some dialects (àa), aspiration in others (ah), usually signifies a previous consonant cluster reduced to one consonant with compensatory vowel lengthening, for -àa- at least and for -ah- if -h- is considered a voiceless vowel continuation of the preceding vowel.

P28. *naNkapV 'leaf': Kw naga-vi; Ch nanká-va; SP maavi-nanqa-vi 'leaf'; SP nanqava 'ear'; Tb nanhabii-l; Hp nàapi / nahpi 'leaf'. Note that Hp lost -k- / -nk- and that Hp nàapi / nahpi shows -p- (not -v-) usually due to a previous cluster, and with the reduced cluster, Hp has a long vowel.

P27. *wïL-pa'a 'tall, long, great-height/length': Hp wïïpa 'tall, long' is a compound of *wïL-pa'a 'big-height/length'. Hp -p- (vs. -v-) means a cluster, yet the first morpheme does not inherently have a long vowel. So the long vowel in the compound is due to a cluster's reduction with compensatory lengthening.

P73. TO toon-k 'hill'; SP tonnoqqi / tunnuqqi 'a hill rises'. The long vowel in TO appears to be long due to the cluster reduced in TO, but still apparent in SP.

P72. *mo'na / *mo'ona > monna / moona 'son-in-law': Sh monappï; Kw mono; SP monna; Hp mö'önaŋw 'male in-law'; Eu mónwa; Wr mo'né; Tr mo'né-ra; My mó'one; Yq mó'one; Tbr moa-saká-r; Wc muune; Cr mú'u 'affinal relative'; mu'un 'yerno'; CN moon-tli 'son-in-law'; Pl muunti; Ca míŋkiw'a. The long vowels in CN, Pl, and Wc are obviously not original, as a dozen other UA forms show short vowels with an intervocalic glottal stop or a cluster (-'n-/-nn-), so the long vowels in the three are secondary and appear to be due to reduced consonant clusters.

With *yu'ma 'tired, worn out' we see clusters in Tb yu'mat~'uuyu'm 'worn out' and Ch yum'á 'tired, suffer, drunk, dead, pl', but without the cluster, we see a longer vowel in Yq yúume 'cansarse' and My yuúme 'se está cansando'. These examples suffice to introduce the fact that consonant cluster reduction with compensatory vowel lengthening is a feature of UA comparative phonology.

2.16 Phonologic and Syllabic Reductions

Reduction resulting from loss of syllables and phonological detail is universal in language change, yet its severity in UA can be spectacular. Words or compounds of more than two-syllables seldom retain all the syllables in many UA languages. While the first syllable is occasionally lost, the first syllable is by far the most stable. Most reductions occur in the second or later syllables, phonological deterioration being most remarkable at the ends of long words. However, which languages reduce which parts (middle or end) and what circumstances trigger reduction in the various languages and branches await clarification. For now, let's simply note some examples so that we can begin thinking about it, watching for it, and collecting instances for a more comprehensive study of this phenomenon.

P190a. *pisVka '(become) rotten, infected': besides many of the forms below, Miller (M88) astutely lists TO wi'ikam 'remnant, survivor'; Tr bi'ká 'podrirse'. (Note TO's probable separation of a cluster with an echo vowel—wi'ka > wi'ika—as in 2.6 or P48, P49). This set is more clear when considering terms for 'pus/infection' in addition to 'rot'. Three consonants appear to be involved, though the second vowel is least clear. Possible reconstructions include *pisika / pisaka / pisaka > *piska. Note the cluster -sk- in Sr and Tb, but s in most of Takic and in Central Numic, but k in SNum and in TrC, and -h- in WNum.

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PUA *piska / *pisika 'pus, infection, rot(ten), spoil(ed)'
Mn pihi 'rot'; pihika 'be infected'
NP pihi 'rot'
TSh pisi" 'rot'; pisippï 'pus'
Sh pisi-ppï 'rotten'
```

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Cm
        pisi(ppi) 'pus, infection'
Kw
        piki
                'rot';
                        piki-pï 'pus'
        piki
Ch
                'rot'
CU
        piki
                 'rot'
Hp
        peekye 'pus, pus-filled infection; vi: get infected, rot, decay'
Tb
        piškiš-(ït) 'have pus'
Sr
        pişqa'
                'rot'
                 'spoil, rot'
Ca
        písa
Cp
        pisá'e
                  'rot, go sour'
Ls
        pisa'(a) 'rot'
Eu
        viikát 'pus, sore'
Yq
        bikáa 'rotten'
AYq
        viika 'infected'
                 'pus'; bikára 'rotten'
        biká
My
Wr
        piga-ní 'rotten';
                                 pigapá-ni 'rot'
Tr
        biká 'pus, rotten'; biká-mea 'rot'
Cr
        pe'ečíra'a 'está hueco, podrido'
```

Cearly *pi is the first syllable. Beyond that, several languages show *s and several show *k; however, some show both s and k (Sr, Tb, perhaps Mn), and others show hints of both. For example, the glottal stop in some Takic languages (Cp, Ls) aligns with k. In addition, the word-final gemination in the Central Numic languages (TSh, Sh, Cm) suggests an underlying third consonant, and k is a good guess, judging by the other forms (pisi-ppï < *pisik-pï). Hopi's palatalization of the k (k^y) is a natural for a possible underlying -sk- cluster, with a near palatal plus velar reducing to a palatalized velar ($sk > k^y$). What's more, Hp vowel leveling of i-a or a-i > e-e is apparent elsewhere (P186, P189, P193). So all 20 languages show initial *pi, 10 show s, 13 show k, two show both (Sr, Tb), and seven display phonological hints of both (Hp, TSh, Sh, Cm, Mn, Cp, Ls). Thus, it is another example of the eventual loss of a syllable in most of the languages, though the languages are split as to which syllable is lost—second or third, but seldom first. A reconstruction like *pisoka could also include Wr and Tr *piso, though Wr, Tr *pika 'rot' also exist.

P190b. *piso 'pus, infection'; Tr bisó/wisó 'supurar, infectar un grano o herida'; Wr pehsoní 'pus'.

P190c. *pika 'sore': Mn piha'ayee 'become itchy, become rash-like'; Kw pakagi'i-dï 'sore, pain, ache, be sore'; SP pakka 'sore, pain'; SP pikka 'sore, hard'; CU pikyá-vi 'poke-mark, sore'. Note Eu biikát 'llaga, materia' and others above, likely from reduction: *piska > pikka. Note Num k > WNum h.

P227. *hi-mu-suwi 'face/mouth-hair': In addition to *mu-suwi forms (e.g., TSh musuwi 'mustache'; cf. TSh suwi 'pubic hair'), a hi- prefix precedes some TrC forms followed by reductions in most SUA languages: Tbr hi-musí-r; Eu hínsi (gen. himúste); Yq himsim; My hímsim. Thus, *hi-mu-suwi > hi-musi > himsi/hinsi, a reduction of four syllables to two.

P228. *tïpi-simuCta 'moth': Cm tïpi simuhta' 'moth (i.e., rock-nose)'; SP tïvĭššïra-ci / tiv™ïšira-c 'moth'. SP appears to be a reduction of a compound like the Cm form, with some vowel assimilation; of syllables, -mu- is missing: *tïpisimuta > *tïpisita (SP).

P229. *asipu(toNki) 'butterfly': TSh aasiputunkwi; Sh a'ipputoonkih; Kw 'aasibï-zi; SP aïšï. While Numic *asipu has much in common with Cr ácipa'u 'butterfly', the aci- portion is likely from Cr aci'i 'bat'; another UA term for bat became butterfly in Eu (see *so'o-pati'a 'bat').

P101. *wiLhukuN 'buzzard' (above) is another wonderful example of reductions in many languages. Only four languages show all three syllables; the other fourteen languages reduced three syllables to two in one way or another.

P230. At 'cricket', that the forms of so many languages are reductions is obvious, so a comfortable reconstruction is not

P149. At *tanapiko 'heel' an array of noteworthy reductions is apparent in most reflexes.

P231. It appears that CNum and WNum *posi'a 'louse' was reduced in SNum *po'a 'louse', losing the middle syllable: *posi'a > *po'a.

- **P215.** At *kosamaLo 'rainbow' notable reductions afflict nearly every reflex.
- *kosamaLo 'rainbow' remained relatively intact in Azt, but reduced remarkably in the rest of SUA:
- *kosamaLo > *kihonaLi (NT, TO) > *kihoL (rest of Tep) > *kuLu (in Cah *kurues)
 - > *kinoLa (Tr, Wr)
- (See at rainbow for full treatment.)
- **P232.** *(wïC)-tono'oki 'scrape, pull out': TSh -tono'oki(n) 'scrape, vi'; TSh (wït)tono'oki(n) 'scrape, vt'; Ch wïn'ógi 'shave (body), rake, v'; Sh(C) wï-noih 'scrape, v'; Sh(C) -noih 'yank, pull out, vt'; Sh(M) -noih 'pull out'. Ch lost 4 segments and Sh(C) lost more than half, losing 6 of the 11 segments apparent in TSh, both reducing 5 syllables to 3.
- **P233.** *toŋo-mukki 'heat-die = thirst': TO tonom(kam); Nv tonomu(giga) v(n); LP tono; NT tonómo; ST tanoom / čanoom / tonmo. Due to high mortality rates for 3rd and 4th syllables, compounds whose last morpheme is *mukki 'die' often lose -ki, showing only -mu or -m. Another example follows.
- **P234.** *kwawa 'angry': Hp kwala(k-) 'boil, become enraged, get angry, vi'; TO baga 'be angry'; *kwa > Tep ba and *w > Tep g and > Hp l. NT baamúku 'be angry' has Tep baa- compounded with *-mukku/i 'die', but only -m of the *-mukku/i survives in other Tep languages: PYp baam 'get angry'; ST baam.
- **P235.** *ha'a-sun-tu'i 'want, wish': Ch ha'ï-suntu'i 'like, v'; SP 'aššïntu'i 'like, want, v'; CU 'ásti'i 'want, v'; sötö-of CU sötö-'na-y 'wish' (<* söCtö-Cna-y). From s.th. like the Ch form come many mighty reductions.
- **P236.** *na-wakay 'four (two two's): Tr nawosa/nagó; Wr naó; Eu návoi (w > v); Tbr narikí-r; Yq náiki; My naíki; Wc náuka; CN naawi; Hp naalöyöm. Tr/Wr *na(w)o < *nawakay (Tr -sa is another morpheme) has massive reductions late in the word. Wc and CN are more clear reductions of *na-wakay, but still stubstnatial. Cah (Yq/My) curiously look like reductions from s.th. like Tbr nariki > na'iki > naiki. But where did r come from? In any case, note reductions: *na-wakay > *naiki (loss of -C-, assimilation of vowels toward -y), > *nawi (Azt), > *nawka (Wc), > *na-woyo (Hp), > nawo / naw (Tb, Wr, Tr, Eu).
- **P237.** *suwatokoma'sï(N)wi 'nine': Kw suukumïsu; SP šuwárokomma'sïŋwi-yu; CU suwárogómasuwí-ini; WMU suwadoġomsu. Note the reductions in Kw and WMU, from seven syllables to four in Kw.
- **P2**. *so'opaCti'a 'bat' reduced to *so'peci in some SUA languages, but reduced further to *soci-k in Cah (Yq, My), from five syllables to two.
- **P238.** *yawamin 'believe': Sr yawamin 'to believe'; Gb yawáyno 'believe it'; Ktn yaŋam 'believe'; but Tb yahn~'aayanh 'believe him, vt' shows considerable reduction, two syllables reduced to an -hn- cluster, yet typical of UA is its reduction of four syllables to two.
- **P239.** *tosa-kammu 'cottontail rabbit (lit: white jackrabbit)': Cp tísixa-t; Ls tóóṣaxi-t/tóóṣiqa-t/ tóóṣixi-t; Sr tiïhaqt; Gb tosóxot 'conejo'. Only Mn tosaqamï 'mountain rabbit' reveals the compound *tosa 'white' and *kammu 'jackrabbit' and keeps all four syllables. The vowels are horrible, but the reductions typical.
- **P240.** *siCtoko 'braid': TSh sittoko'e 'braid'; Kw šidogo'o 'braid'; Sh(C) tasittokoi" 'braid'; Sh(C) tasinku-naih 'braid'. CU sugway 'braid one's own hair' and Sh tasinku- both reduced the -Cto- syllable to extinction.
- **P21.** *tukuN-pa 'sky, up, above': Tb tuguumbaa-l; Mn túgupaa 'above' (< *tukuppaa); Sh tukumpana; Ch tugúmpa; and most other Num languages reflect *tukum-pa. Cp túkva'aš; Ls túúpaš 'sky'; and Hp tokpela 'sky' lost a vowel, thus a syllable. Ls túúpa-š lost the -ku- syllable, but has *p remaining a stop (vs. -v-) due to a -kp-cluster: *tukupa > *tukpa > *tuupa. SUA *tïkpa-(wa) also syncopated the second vowel (like Cp, Ls, and Hp) to yield SUA *tïkpa-(wa) > Tep *tïvagi, even showing the same -wa syllable apparent in Hp tokpela (Hp l < *w), though Tep lost all evidence of a cluster.
- **P241.** *wakati 'younger sister': NP wannka'a 'younger brother' (nasal anticipation); Tr wayé / wa'í 'younger sister (of a man)'; My waáyi; Yq wai; Cr ne-'iwaa-ra'a 'my relativey/younger sister'. M67-493 inlcudes Wc 'iwá 'cousin'. Add Ca wáxal^y 'younger sister' and Cp wáxal^yi 'younger sister' (Tak *wakati). In both Ca and Cp, the final l^yi is not an absolutive suffix. A proto-type more like the Cupan forms may explain NP's velar nasal and Cupan's liquids, though TrC's glottal stop from a cluster indeed eliminates most detail. Intervocalic *-t->-r- is common in TrC, but the much lacks supporting explanatory examples:
- *wakati > wakalyi (Ca, Cp)
 - > *wakri > *wa'yi/wayi (My, AYq, Tr)
 - > *walka > *wanka... (NP)

2.17 The Active vs. Stative -A/-I Verb Alternation

A morphological feature worth noting before turning readers loose on the comparative sets is a final vowel alternation on verbs in most UA languages: *-a 'transitive, active' vs. *-i 'intransitive, passive, stative'. Others have mentioned it in a language, branch or few branches (Sapir 1930, 73, 143; Whorf 1935; Langacker 1977, 132; Dakin 1982), but it is in all eight branches and more prevalent than most Uto-Aztecanists are aware, so for perusal it is copied here from the grammatical morphemes at the end of the comparative vocabulary. This feature may, in the future, clarify some matters, such as *u-a > o-i in some verbs. In the comparative vocabulary, the reconstructions of some verbs end with -a/i, mainly because the forms are split as to final -a or -i ending, not necessarily because that verb is identified as having this feature, though it may well have had historically. In Tep, this feature is often employed as an old perfective or past tense, not unlike English -ed which serves as both past tense and passive/stative.

P242. *-a/-i 'vowel alternation on the end of verbs such that *-a 'transitive, active' and *-i 'intransitive, passive, stative': Sapir 1930, 73, 143; Whorf 1935; Langacker 1977, 132; Dakin 1982: Cr -i 'stative suffix' (Casad 1984, 159); Wc cana 'romper'; Wc sani 'roto';

Yq -i 'stative suffix' (Estrada Fernández et al 2004, 399);

Wr has transitive verbs ending in -a with corresponding intransitive verbs ending in -i (Miller 1996, 130):

Wr co'a 'put out fire'; Wr co'i 'be no fire';

Wr wela 'put upright/standing'; Wr weri 'be upright/standing';

Wr mo'a 'put pl obj's inside'; Wr mo'i 'enter, pl subj's';

Wr sa'wa 'cure s.o., alleviate s.th.'; Wr sa'wi 'be alleviated, go away';

Tr also has such pairs of verbs' (Hilton 1993, 139):

Tr mana 'put, place, set'; Tr mani 'be (in/at a place), exist';

Tr bi'wá 'clean it': Tr bi'wí 'be(come) clean':

Tr čiwá 'stick, vt'; Tr čiwí 'be stuck, vi';

CN also has such pairs of verbs (Sullivan 1988, 171):

CN tla-tema 'fill, place s.th.'; CN temi 'be full, be lying down';

CN tla-kotona 'break s.th.'; CN kotoni 'be broken';

CN tla-mana 'put s.th. on the floor'; CN mani 'be stretched out, extended';

CN tla-toma 'undo s.th.'; CN tomi 'be undone'; and so does Tbr:

Tbr towa 'leave s.th. behind, vt': Tbr towi/tovi 'stay, remain, vi.'

Nv vurha 'atar, vt'; Nv vurhi 'atado';

Nv tuha 'moler, vt'; Nv tuhi 'cosa molida';

Nv virioka 'desatar'; Nv virioki 'cosa desatada';

TSh sawa 'boil, vt' and TSh sawi 'melt, vi'; and others;

SP muntunaa 'cover oneself' (active); SP muntun'i 'be covered' (stative) (Sapir 1930, 73, 143);

SP yauggwa 'push in'; SP yauggwi 'go in, set (of sun)';

SP yunna 'put down (pl objs)'; SP yunnia 'fall, drop down, pl';

SP ton'na 'strike, hit, vt'; SP ton'ni 'shake, vi'; SP ova 'pull out hair, vt'; SP ovi 'come out (of hair), vi'

SP pačá'a 'fasten s.th., vt'; SP pačá'i 'hang, be fastened, vi'

SP tuġwa 'put fire out, vt'; SP tuġwa / tuġwi 'fire goes out, vi'

SP yunna 'put down (pl objs), vt'; SP yunnia 'several fall, drop, vi'

SP münišša 'turn over, vt'; SP münišši" 'turn over, vi'

WMU spæ'naa-ti'(i) 'flatten, vt'; WMU spæ'ni 'flat, stative/adj'

WMU - 'núga-y 'put in, stick in'; WMU núġi 'wear, be in, be put in'

WMU tuġwá-y 'put fire out, vt'; WMU tuġwí- 'fire went out by itself, is gone out (stative/past)'

Hp -iwa 'passive suffix' eliminates final -a of transitive verbs, so it could feasibly also be -a > -i with added -wa:

Hp aama 'buried' vs. aamiwa 'was buried'; Hp paata 'melt, vt'; Hp paati 'melt, vi';

maqa 'give' vs. makiwa 'was given' (Ken Hill 1998b, 881);

Tb -(i)w 'passive'; like Hp, the examples show -i of -iw changes verb final -a > -i (Voegelin 1935, 99);

ST taapna' 'partir, rajar, vt'; ST taapñia' 'partirse, rajarse, vi.'

Ls has this feature, but somehow reversed it to -a being intransitive/passive and -i being active/transitive.

Some languages have the final -i vowel as the perfective (having been done) rather than stative (is done):

Cm -i 'completive suffix on verbs' (Charney 1993, 142-3);

Ca -'i 'realised' (Seiler 1977, 138-40);

TO -i 'perfective is marked by a final vowel change to -i' (Langacker 1977, 131);

Op -i 'perfective changes final -a to -i' (Shaul 2003, 25);

Eu -i 'the final stem vowel changes to final -i for the Eu preterite (past tense) in many, if not most Eu verbs, vs. Eu -a-n 'present indicative verb ending':

Eu hipra-n 'watch over, care for' vs. preterite: hipri 'watched over, cared for';

Eu maka-n 'give' vs. preterite: maki 'gave';

Eu taha-n 'burn' vs. preterite: tahi 'burned';

However, some Eu verbs show an -a transitive and -e intransitive distinction (e being halfway from a to i in position), as well as the -i preterite for both:

Eu wehra 'stand s.th. up, vt' (pret: wehri); Eu wehre 'stand up, grow, vi' (pret: wehri);

Eu pitása 'smash, flatten, vt' (pret: pitási); Eu pitáse 'be/get flattened' (pret: pitási).

An -a-/-o- alternation in the first stem vowel may exist for some verbs.

P243. *kappi / *koppi 'break'

P244. *nama / *noma 'cover' at close.

P245. *Lami / *Lo(')mi 'fold': Ca lámi-n 'fold, wrinkle'; Wr lo'mí-na-ni / lo'mí-ca-ni / lo'mi-ná-ni / lo'mi-cá-ni 'bend s.th. almost double, s.th. supple like a sapling, vt'. We can hardly put this at circle where *nom 'bend' already has Ca ními 'bend, vi'.

Unanswered Questions

A phonology section would not be complete without a list of puzzles to ponder relative to Uto-Aztecan comparative phonology that await clarification: (1) Given that PUA initial *t > r in Tr, from whence are Tr's initial t? (2) While loss of initial syllables may explain some initial liquids in UA, does that explain all initial liquids in Uto-Aztecan? (3) What are the sources (plural) of NUA velar nasal \mathfrak{g} ? While some nicely correspond to SUA n, a half dozen or more align with velar stops (k/g), and others align with consonant clusters involving a nasal, and what else might be their source(s)? (4) While all four branches of NUA have velar nasals medially, why do only Hp and Tak have them initially? (5) What is a comprehensive explanation for the nasal-liquid group of consonants? (6) What is the source of the retroflex s in Tak? (7) A seeming split in Ktn and Sr where many s > t, but s > t makes one wonder: what is the origin of each? (8) Do we have another PUA phoneme or is another explanation available? (9) Several questions relative to medial consonants and consonant clusters remain unanswered, if even identified.

PART THREE: THE COMPARATIVE VOCABULARY

PRELIMINARY COMMENTS

Both English and Spanish headings highlight each semantic section, but they are in the alphabetical order of English. Each number is considered a cognate set. Sets are given separate letters under the same number when two or more groups of words are plausibly related, but different enough to be uncertain, or when marked semantic or phonological differences ought to be highlighted, even if the set's cohesiveness is certain. Following the number is a tentative reconstruction or two, as this is a work in progress. After all, reconstructing all known UA sets has not been attempted for nearly a half century, since Miller 1967, which contained 20% of this collection. Then are listed the cognate collections and sometimes other articles that have previously cited the set. Sets with no such previous citations (about half) are original to this work, as far as the author knows. Then are listed the reflexes of the various languages. If a word's definition is essentially the same as the first or preceding definition, it may not be repeated. Absolutive suffixes may be separated from nouns whether the source did so or not. Most of these are common knowledge to Uto-Aztecanists, though a few suffix boundaries can be debated. After the reflexes, some discussion may accompany less obvious inclusions and complexities—sometimes to clarify, sometimes to verify that not all is clear to the author either. A phonology bracket may note phonological phenomena in the set. The final bracket lists the branches represented by the reflexes. When all letters under the same number seem likely to be related, then the branch bracket follows all letters. Sometimes enough doubt looms over the union of the letters (as to whether they are from the same proto-form or not) that separate branch brackets follow each letter. At the end of each semantic section are notes (NB) referencing other sets, potential sets, loans, or other information relevant to that semantic section. If a comparison seems less than probable, but worth contemplating, it is not given a number, but is listed among the NB (nota bene [note well]) below the semantic group, for consideration.

Miller 1988 lists only reflexes, but not reconstructions. Kenneth C. Hill's revision of Miller 1988 (KH/M06) offers some reconstructions, and cites Alexis Manaster Ramer (AMR) for reconstructions from AMR, as the two have been in frequent contact through years of periodic collaborative discussion on UA, two eminent Uto-Aztecanists, to be sure.

Many UA languages require a glottal stop to begin words that would otherwise begin with a vowel. That feature exists in enough UA languages that many Uto-Aztecanists reconstruct initial glottal stop (*'V) for otherwise vowel-initial forms. I do not necessarily disagree with that, but am ambivalently still thinking about it. So many other matters seem more pressing, that for that matter I simply leave it to each reader to supply such glottal stops for vowel-initial reconstructions if prefered. In SP, Sapir has some vowel initial entries and others with glottal stop ('V), and if he is right, as he usually (but not always) is, then a pervasive application of either would be wrong, each item being a separate consideration.

Pragmatically, reconstructions mostly deal with the first two syllables, sometimes three. Beyond that, compounding and concatenations of morphemes are less sortable. Much value for comparative UA can be gained when more of that level of comparative sorting is accomplished, first at the branch levels, which has been started for some branches, whether in sources or in the heads of branch specialists, but not a lot on paper yet. Thus, much remains to be done in those areas.

Also worth noting is a philosophical difference in recording between some Central Numicists and Southern Numicists. Many Central Numicists (perhaps following Miller) record what they believe to be underlying forms while Western and Southern Numicists record sounds, from which one can usually determine underlying forms, but perhaps not always. As a Southern Numicist, I prefer recording sounds. For example, -ŋ- may or may not always be from *-nk- as Central Numicists seem to assume, but may be from other clusters, and -r- may or may not always be from intervocalic *-t-; it could possibly be from a liquid or an older *-Ct- cluster or who knows what else. To put such assumptions into a dictionary can introduce analytic errors. Nevertheless, I have tried to accurately relay the dictionaries' data, in the hope that the associated reconstructions and discussion can clarify such potential complications.

As a working database for UA comparativists, I also include possibilities for consideration with cautionary phrasing such as: 'what of this?' or 'might this tie to that?' In conclusion, those citing this work should check the original sources for more detailed information about the stem's tenses, aspects, morphological derivations, uses, etcetera, than is practical for including in a reference database such as this, wherein the simple stem alone is usually listed.

3.1 THE ALPHABETIZED COMPARATIVE VOCABULARY

Able: see strong
Above: see up

Accompany: see with

Acorn: see oak

Adhere: see stick(y), pitch

ADOBE

1a. *sami 'bread, baked/solidified dough (1a) or mud' (1b): Campbell and Langacker (1978) note that the origin of this UA term is from Mixe-Zoquean, which Wichmann (1995) also lists as *šam 'to heat'; CL.Azt176 *šaamV 'tortilla, baked thing': Po šamt 'tortilla'; CN šaami-tl 'adobe'; Pl šaamaaniya 'toast tortillas'; Tl šomitl 'adobe'; many of the above items Miller lists in both M88-sa20 and M88-sa17, which Ken Hill (KH/M06) astutely sorts. To those, let's add Tbr semitá 'pan' and PYp ham-kus 'bread' in light of Tep *h < UA *s. This loan into UA means both 'bread' and 'adobe', perhaps as baked gooey stuff that solidifies. My bread turns out like brick, too. And the PYp term would suggest that it came into UA before *s > Tep h. [SUA: Tep, Tbr, Azt]

1b. *sami 'adobe, baked/solidified mud': L.Son230 *sami 'adobe'; M88-sa17; KH/M06-sa17:

Nv sami; Eu saami; Wr samí; My saámim (pl.); My sáámi 'pared'; Tbr camé; Cr šáami 'adobe brick'. Miller states that Cr is borrowed from CN šaami-tl 'adobe'. Lionnet lists Nv sami 'adobe'. Ken Hill adds TO šaamt 'adobe' as a loanword and Pl šaamaania 'toast tortillas'. Let's also add PYp saamit 'adobe' and Nv samita 'make adobes'. Curiously, we see h in PYp for 'bread' but s in PYp, Nv, and TO (i.e., Tep) for 'adobe'. Thus, the latter are apparently more recent loans into Tep from other SUA languages, since Tep h corresponds to *s (as in 'bread' above); however, to suggest that a loan could spread so wide since the sound change *s > h may present other problems; on the other hand, Tbr's c agrees with Tep s, though most terms suggest UA *s. Might UA *sami 'wet' (which includes NUA forms) be related?

[c/s; *s > h in Tep] [SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]

2. ***supa-** 'adobe': Dakin 1982-84; Stubbs2003-8: Tr supá-na-ri; Tr supá-ca-ri; Wc šïnaríiya 'adobe'. To Dakin's astute observation, let's add NT úúpasai 'el adobe'; NT úúpastai 'hacer adobe'. Because *s > Tep h, then Tep h > ø in NT, the NT úúpasai fits the 2nd Tr form perfectly, i.e., Tr supá-ca-ri. Length and two different Tr terms combine to suggest we are dealing with a compound. The 1st Tr term and Wc both have *su...nari in common, since Wc ï < *u. Furthermore, in CrC, *p > h/ø, which would encourage the loss of the isolated vowel as 2nd element of a dipthong: *supa-na > *sïa-na > *sï-na. All forms suggest a reconstruction of PUA *supa, and two forms suffix *-ca for *supa-ca (Tr, NT) and two suffix *-na for *supa-na (Tr, Wc). [medial *p > h/ø in CrC, then syllable loss] [SUA: Trn, CrC, Tep]

NB, Kw 'ariïve'e is a loan from Spanish *adobe*, but note the vowel perception or change of *o > "i, perhaps *o > "u > "i, as u > "i is common in Num.

Afraid: see fear Afternoon: see sunset

AGAVE, MAGUEY, MESCAL; see also cactus, yucca, alcohol

- 3. *amu / *(a)muwV (Jane Hill, p.c.) 'agave': BH.Cup *'amúl; HH.Cup *'amúúl; M67-482 *mu, *(h)umu; Fowler83; Munro.Cup3 *'amúú-l 'agave'; KH.NUA: Miller has overlapping forms in M88-'a25 'agave', u8 'yucca', and mu19 'yucca'; Ken Hill brings together the more sound inclusions in KH/M06-mu19; Jane Hill (p.c.) divides the *amu vs. *umu forms as below, and we agree that the two are likely linkable by vowel assimilation:
 3a. *amu(wV) / *amuwuL: Cp amúl 'agave'; Ca 'ámul 'agave'; Ls 'amúúl 'mescal'; Gb amúr 'quiote'; CN amol-li 'soapweed, agave'.
- **3b.** *umu(wV): Sr uumu-ţ 'Spanish dagger, yucca sp.'; Tb umuybïl / 'umuubï-l 'yucca brevifolia'; TO 'umug 'sotol, spoon plant'. Miller, Ken Hill, and Fowler all include Hp mooho 'narrow-leaf yucca'; Hp moovi 'yucca root' and both Ken and Jane Hill note TO moho 'bear grass' as probably involved with these words. Could the vowels and final syllable of Hp moovi (< *mupi) suggest s.th. like Tb 'umuubï-l as a loan source? Fowler lists other languages, but without specific forms, though Pima aot 'agave Americana' is likely, having lost -m-. Jane Hill (p.c.) notes that TO g suggests PUA *w (whether part of the stem or a diachronically obscured affix), and that Dakin

(1990) has shown several sets where CN oo is derived from a sequence VCV where the consonant is a labial, thus explaining why CN o instead of i < *u: *amuwu > CN amoo, and > TO umug. Jane Hill also points out that a final -l (as in CN) could easily have been reinterpreted as an absolutive suffix in the languages lacking it, as often happens in NUA languages, thus, s.th. near *amuwuL. [*a-u > u-u in Tb, Sr, Hp, TO; *u > o in Hp/Sr; m > ø in Pima] [NUA: Tak, Hp, Tb; SUA: Tep, Azt]

- **4.** *maC(C)i / *mahi 'agave, mescal': M67-3 *ma 'agave'; Fowler83; L.Son133 *mahi 'mezcal'; M88-ma25 'agave, mescal'; KH/M06-ma25: Eu meit 'mezcal ya tatemado' (see 'bury, cook underground'); Wr mahí 'agave, mezcal'; Wr mahi- 'bury, cook (e.g. agave) in the ground, vt'; Tr mé/ma-/mi-, méke 'maguey, mezcal'; Tbr mañí-t 'maguey'; TO ma'i 'a pit roast'; Wc mái 'mezcal'; Cr mwáih / mwéih 'agave'; CN me-tl 'century plant, maguey, member of agave family'. Let's add NT maí 'maguey, mescal'; PYp mai 'corn, maguey, mescal'. Also worth noting is CN meškal-li 'mezcal, distilled alcoholic drink made by cooking the heart of the maguey plant', as *maskal > *maki/meke/mahi is a typical kind of reduction in UA, with the raising of vowels before a liquid (2.15.2); and where does the *-ke come from in Tr meke 'agave, various species'? In any case, the variety of 2nd consonants—h/'/ø/x/k/ Tbr ñ (< *y)—suggests a medial cluster. [clusters; medial h/ø/x/k; Tr k vs. k > h/ø elsewhere] [SUA: Trn, Tbr, Opn, CrC, Azt, Tep]
- **5.** *kuLu / *kutu 'mescal, agave': Fowler83-3:8; L.Son109 *kuru 'clase de mezcal'; M88-ku25; KH/M06-ku25: Eu kuút/ku'út 'cierto mezcal grande'; Wr kuru; Tr guurú-(bari) 'palmilla'; Tbr kurú-t 'sotol'; My kuú'u 'mezcal, maguey'; Yq kúu'u 'mescal plant for making alcohol'. Fowler includes Wc kïveri 'lechuguilla, agave sp.', of which the first syllable agrees, and lists NT, which form I cannot find in Bascom's NT dictionary. Add Tb(M) kuuk-t 'mescal'; perhaps Tb(V) kuya-t 'yucca whipplei'. Cah ku'u fits *kuru well, since intervocalic liquids > -'- in Cah. [r > y in Tb, r > ' in Cah, > ø in Eu] [NUA: Tb; SUA: Trn, Cah, Opn, Tbr, CrC]
- **6.** *cawi 'agave': Fowler83-3:8; Tr čawirí 'a small variety of maguey'; unable to find NT(?) and Wc(?). Add Tbr camwí 'clase de maguey'. [*w > mw in Tbr] [SUA: Trn, Tbr]

NB, *nanta 'mescal': Ch(L) nanta 'mescal'; SP nanta 'yant, species of cactus (short-leaved round, spined plant about one foot high, similar to a century plant, locally known as 'yant', agave?'. When an item is only in adjacent dialects, we shan't count it with a number, though perhaps mention it.

Agree: see peace Ahead: see before

Air: see wind, cold, breathe

ALCOHOL, FERMENTED DRINK, DRUNK, PEYOTE; BORRACHO, EMBORRACHARSE

7a. *napuL / *no'paL 'prickly pear cactus/fruit': VVH16 *na_Spï 'prickly pear cactus/tuna'; M67-70 *nap; BH.Cup *navït; L.Son165 *napo; B.Tep169 *navoi 'cactus'; Fowler83 *napu; KH.NUA; Munro.Cup103 *náávə-t; M88-na5 'cactus fruit'; KH/M06-na5 *naaput (AMR): NP nabu; TSh napumpï; Sh nabombï (Fowler83); Kw navu-bï; Ch navumpï; SP nabumpï (Fowler83); Hp naavï; Sr naavt; Ktn navïh-t; Ca návet; Cp návet; Ls náávut; Gb návot 'prickly pear cactus'; TO naw/nawï; Nv nubo(nïvo); LP(B) nav; NT návoi; ST nav; Eu navúc; Wr napó; Tr napó; Yq naabo; My naabo.

- **7b.** *no'pal 'prickly pear pads': CN no'pal-li; Tetelcingo nohpali-tl. The rest of UA shows *napo/*napu, metathesizes the vowels *no'pal-li. The 2nd vowel is *ï in TO, Hp and Takic (perhaps schwa-like cause). Many SUA shows o, yet also several show u (NP, TSh, Kw, Ch, SP, Ls, Eu). Note final -i and -l (Tep and CN, respectively). Note nasals in TSh, Sh, and Ch, aligning with CN's liquid. Eu -c may also suggest a cluster -Lt-, -t-being of a fossilized absolutive suffix. AMR separates Azt, K. Hill has them all under na5. I'll do both, separate by letter, but under same number. [a-o vs. o-a; *u > ï in Hp, Tak (Cup *ə > Gb o, Ls u); SUA L > NUA N] [NUA: Num, Tak, Hp; SUA: Tep, Trn, Cah, Opn, Tbr, Azt, CrC]
- **7c.** *napa 'alcoholic beverage': B.Tep168 *navaita/i 'beer'; Miller's M88-na34 and na-5, Ken Hill rightly combines in KH/M06na-5, though Miller's na34 group with different vowel (*napa vs. *napo) might organizationally for study be kept in a different letter, as the Tep languages have separate forms for each: TO nawaiti; NT naváítii; ST navaity. With Bascom's Tep forms, note Cr nawá 'alcohol' and Tbr namwá-t 'tesgüino' though they may be loans from Tep, since they show medial w < *p, like Tep.

7d. *napa-mukki 'drunk, alcohol-smitten' (> nawa/nah(w)a-m): L.Son161 *naha/*nawa 'emborracharse'; M88-na26; KH/M06-na26: TO naumk; LP nahamu; Eu náwe/nava; Yq nawáhe; My naa-mukúra; Tbr naham / nam 'emborracharse'. Add Nv navamudaga 'drunk'. This set is phonologically difficult, perhaps due to some terms being recycled diffusions (like Yq), instead of cognates. While the TrC *nawa forms could be diffusions from Tep *nawa (< UA *napa), we also see medial h in LP and Tbr, which do not correspond to each other nor to *p, but may be lazy glottal stops representing some C. My and TO suggest a compound resembling *naw(a)-muk (< *napa-mukki). [reductions] [SUA: Tep, Cah, Opn, Tbr]

In CL.Azt47 *VwVnti 'drunk', M88-ï13, and KH/M06-ï13, are two probably related forms:

8a. *tawan 'drunk': CN tlaawaana 'get drunk'; Pl tawaani 'emborracharse'; Pl taawaana 'emborracharse'; Cr tawá 'está borracho'.

8b. *iwin-ti 'be drunk': CL.Azt47 *VwVnti 'drunk': CN iwinti 'get drunk'; CN iwintiaa 'get drunk'; T ibIntI; Z wiinti; Po unti. [SUA: Azt, CrC]

- **9.** *kama 'drunk': KH.NUA; M88-ka42; KH/M06-ka42: Gb xamá 'emborracharse'; Sr qäm|(ä)'q 'get, be drunk, crazy'. Ken Hill (KH/M06-ka42) adds Ktn ka'mïk 'be crazy, dizzy, drunk'. [transposed glottal stop in Ktn or Sr] [NUA: Tak]
- **10.** *tïku 'drunk': Wr tekú 'be drunk'; Tr ŕiku 'become drunk, sick, faint'; Tr téguri/tékuri 'ebrios, borrachos, pl'. [Tr ŕ/t; *ï > TrC e/i] [SUA: Trn]
- 11. *sikuLi (> Tep *hikuri) 'peyote, intoxicat-ed/ing': Fowler83: NT íkuli; PYp hikeri; Tr híkuri; Wr ihíguri; Cr ikuri. Cr may have borrowed the term since Tep h does not correspond to TrC h, and *u > " in Cr. More probable is that we are dealing with PUA *sikuri/*sikuLi and that the Trn languages borrowed from the Tep languages, since Tep $h/\emptyset < *s$. Fowler includes TO hikugđam 'saguaro cactus button'; TO hikug 'for a tree to drop its blossoms'; TO hikug-t 'form fruit'.

We must add Tr sugí 'tesgüino, bebida fermentada hecha de maíz nacido'. Some NUA reflexes seem apparent as well: Tb(V) šo'ogonhn-(it)~'ošogonh 'be drunk'; Tb(M) so'goonit~'oso'goon 'be high on Indian tobacco, drunk'. Doubtful is Ls ŋóóla 'drunk', wrong vowel, borrowed? Tr often does its vowel-line shift (*sikuri > suki), and Tb may have assimilated the 1st vowel toward the 2nd (*sikuli > sukuli > sokon); and often *L > n in NUA; also note the same three consonants (s-k-l) in CN meškal-li 'mezcal, distilled alcoholic drink', though other etymologies for CN have been proposed. Note also AYq sankora 'drunk, n' with nasalisation of the velar like Ls and a vowel change; and what should we think of PYp suusekar 'drunkard'—borrowed from a non-Tep langauge, since *s > h in Tep? [NUA o vs. SUA u; *L > NUA n; Tr V shift] [NUA: Tb; SUA: Tep, Trn, CrC]

NB, as a loan, no number, but note Wr peóre 'peyote' and CN peyo-tl.

ALIVE, LIVE; VIVO, VIVIR; see also breathe and sit

12. *yay 'alive one': M88-ya22; KH.NUA; KH/M06-ya22: Sr yaaint/yeeint 'one who is alive'; Gb yayt 'one who is alive, awake'. [NUA: Tak]

13. *yoLi 'live, alive, bear, be born': M67-264 *yo 'live'; CL.Azt33; M88-yo4 'to live'; KH/M06-yo4: CN yooli 'live, come to life, hatch, vi'; CN yool-li 'heart'; CN yoolloo-tl 'heart, life, spirits'; CN tlayoolitiaa 'give birth'; Pl yuultuk 'alive'; My yoore 'be born, healed'; Wc yori/yoori 'be alive, grow'. As the semantics of My also mean 'heal', so also PYp do'a 'alive' and PYp do'alim 'be born, get well' bear the same semantic combination (born, heal) as the My term; however, the differing second consonants preclude an obvious relationship. Miller also includes Cr rúu 'he is alive'. Cr in a fuller form may suggest consonant harmony, as in Cr ruúrikame 'alma, vida'. Wc yuri / yuuri 'be alive, grow' fits better with My and CN *yooli, since *o > u in Wc. Relevant to these, Sapir ties CN yool-loo-tl 'heart, life, spirits' to Wc iyali 'heart' also. Wc 'iyári / 'iyáari 'corazón, alma, espíritu' has the same consonants as CN yool-li 'heart', if only the different voweling could be explained. KH/M06-yo4 mentions Eu dor 'man', which, with its cognates, merits consideration. [*o > u in Wc; a-o; liq] [SUA: Cah, CrC, Azt]

ALL, MUCH, MANY; TODO(S), MUCHO(S); see also big

- **14.** *pï(C)ta/i 'all': B.Tep293 *vïisi 'all'; M88-pï15; KH/M06-pï15: TO wïisï, wees; LP vïis; NT vïisi; ST vïis; PYp veesi; Cp petá'ama 'all, every'. In light of Cp, this seems to be another case of *t > *c in time for *c > Tep s. Tbr wesa-t 'todos' may be a loan from Tep. [*t > *c > Tep s] [SUA: Tep; NUA: Tak]
- **15.** *mu'i 'many': Sapir; B.Tep157a *mu'i 'many'; 157b *mu'idu 'there are many'; M67-276 *mui 'many'; L.Son154 *mui 'muchos'; CL.Azt112 *məyak 'much' < 256 PUA **mï(')i 'much'; M88-mu21; KH/M06-mu21: TO mu'i; LP mu'i; NT mui; ST mui'; Eu múi 'mucho'; Wr muáe-na 'haber mucho'; Tr mu/mo 'varios, muchos, aumentativo'; Tbr mui/mui-á-r 'muchos'; Cr mwí'i 'many'; Wc mïiré 'muchos, numeroso, plural'; Wc mïişa 'mucho tiempo'; CN miyak 'much, many'. Miller also cites CL.Azt1 *močï 'all', which has a different vowel, different Azt forms, and which Ken Hill (in KH/M06-mu21) also leaves out. Sapir cites Ls muyuk 'much', which seems more likely, especially with CN miyak 'much'. The *y* of some forms may be a reduction of *mu'i... > muy... after loss of 'or excrescent as adjacent to i. ['/y] [NUA: Tak; SUA: Tep, Trn, Opn, Tbr, CrC, Azt]
- **16a.** *so (< *oso?) 'many': M88-so14 'many'; KH/M06-so14: TSh soo 'many'; Sh soon 'many'; Cm soo 'many, much'; Hp soo 'all, many' (vowel is wrong, Miller notes; thus, Hp may be a loan from Num, but from CNum?). The SUA *oso forms below are likely related, with loss of initial vowel in NUA.
- **16b.** *oso 'more, much, very': Wr osó 'more'; Wr oso-pici 'the most'; Yq ousi 'more, much, very'; AYq ousi(a) '1. hard, sturdy, strong, 2. much'. [SUA: Trn, Cah; NUA: CNum, Hp]
- 17. *yo 'many': M67-275 *yo 'many'; M88-yo5 'many'; KH/M06-yo5: Tb yoowi 'many'; My yú'uni 'much'; Wr yomá 'all'; Wc yuwaïkawa 'many (of people)'. The My vowel is u rather than expected o, but Wc u < *o is expected. [*o > Wc u; medial '/w/m?] [NUA: Tb; SUA: Trn, Cah, CrC]
- **18.** *cik 'every, all': Sr cikţ 'only, just, nothing but, all'; My čikti 'cada'; Yq čikti 'todo'; AYq čikti 'each, every'. These may possibly relate to Tep si- 'very'. [NUA: Tak; SUA: Cah]
- **19.** *ci 'very, much': TO si 'real, genuine, ultimate, of good character, precise, very'; PYp si'i 'much, very'; Nv si 'mucho (en calidad)'. [SUA: Tep]
- **20.** *napi 'all, each': Tr nabí 'always, each, every, all'; Tr nepi 'very, much, too much'; Cr naímih 'todo'; Cr naími'i 'todos'; Cr naímii 'entero'; Wc -naí-ti/me 'todo' (sbj/compl); Sh napai 'each'. Because *p > h/ø in CrC, then Corachol nai < *napi. [*-p-> CrC h/ø] [SUA: Trn, CrC; NUA: CNum]
- 21. *man(n)u 'all, every': Kw mono-yo 'all (same subject)'; Kw mono-ko 'all (acc.)'; Ch man(ó) 'every, all'; SP manno-/ mannu- 'all'; CU manú-ni 'all, every'; CU manú-ku (acc.); WMU manő-ni 'every, all (nom)'. WNum *waha-mano 'twenty, i.e., two-counts' > Mn waha-wanótu 'twenty' and NP waha mano'yu 'twenty' may suggest an original meaning of Num *mannu 'complete count, the number, all', since it appears in words for 'twenty' in WNum and 'all' in SNum. The alternate forms in TSh manukin~manikin 'five' suggest that this may relate to *maniki 'five', involving assimilation *manu-ki > maniki. [*a-o/u > o-o; and o vs. u] [NUA: WNum, SNum]
- **22.** *tuCV 'very': KH/M06-tu27 *tuHV (AMR): Tb tuwubil 'fast, very'; My tú'usi / tú'isi / túisi 'mucho, muy, bien'; CN ilwiaa 'grow in strength, violence'; CN ilwis 'much more, especially'. Good set, Ken and Alexis! [medial -C- glottal or w or cluster?] [NUA: Tb; SUA: Cah, Azt]
- **23.** *kïski 'how much? how many?': CL.Azt87 *keeski 'how much, how many'; KH/M06-in5: CN keeski; Pl keeski; HN keeski. [SUA: Azt]

ALONE, SELF; SOLO, SOLAMENTE, MISMO(S)

24. *piko / *piko 'alone, just, by oneself': Ca péqi 'just, only, yet, still, just it/he alone'; Cp píqi 'just, by himself'. The Tak q suggests an earlier *ko syllable. [Ca e vs. Cp i for the first syllable] [NUA: Tak]

- **25.** *(na)-no 'self': Sapir associates CN noonkwa' 'apart, separate' and SP nanöö-šu 'by oneself', which merits consideration, but even if fallacious, the SP form and Kw na-noo=su 'by oneself, alone'; WMU nanös / nanöös 'alone, self'; and CU nanöö-s 'by oneself, alone' are cognate with SP; and possibly the -noi portion of Tr binoi 'mismo, misma'. [NUA: SNum]
- **26.** *sïyïL(> Tep *hidïl) 'self, (one's) own, alone': TO hejel(ko) '(my, your, one's) own, alone'; PYp hedeli 'single, alone, self'; ST dïïl 'alone, unaccompanied, by oneself'. [ST lost 1st syllable] [SUA: Tep]
- **27.** *pasu 'self': Mn piïsu 'oneself, to oneself'; NP piïsu 'oneself (refl)'; NP piï si'mi 'alone'; Eu -vasu 'mismo, solo'; Eu né-vasu 'yo mismo, solo'; Eu náp-vasu 'tu mismo', etc. [NUA: WNum; SUA: Opn]

ALREADY: YA

28. *pa'i/pa'a 'now, then, already': M88-pa28 'already'; KHM06-pa28: Hp pï' 'now, then, just then, this- or at the (time referred to)'; TO wa'i 'only, solely'; Wr pa'á 'ya'; My bátte 'casi, ya'. Miller notes wrong vowel in Hp, though such assimilations (*a-i > ï-i) happen. [Hp ï: *a] [SUA: Tep, Trn, Cah; NUA: Hp]

ANGRY, JEALOUS; ENOJARSE, CELOSO

- **29.** *nawa 'jealous': BH.Cup *náw 'be jealous'; M88-na27 'jealous'; KH/M06-na27: NP nawoho ïnaggwi 'jealous'; Cp náwe 'be jealous of, vt'; Ca nawaan 'be jealous, vi'; Ls nááwin 'be jealous'; Hp nawawa-ta 'complain'. Miller includes My na'ibúke 'está celoso', which is possible, since Cah languages often lose intervocalic -w- apparent in other UA languages (cf. four, sand). [*-w- > TrC ' ?; 2nd V variation] [NUA: Num, Tak, Hp; SUA: Cah]
- **30.** *tihu 'angry': Mn tihuyee 'be angry'; Sh tuhu" 'angry'; TSh tuupïkkan 'be angry'. In light of other examples of a correspondence between TrC k and h in other languages (agave, two), a relationship between Num *tihu 'angry' and TrC *tiku 'drunk' is plausible. [k/x > h in Num, > k in Tr/Wr] [NUA: WNum, CNum]
- **31.** *somaL 'angry, provoked': CN soomaal-li 'anger'; CN soomaa 'frown in anger, v.refl.'; Ca simm 'get provoked, feel disgusted'. Ca i < *o, so both CN and Ca point to *som for the first three segments.

 [*o > Ca i] [NUA: Tak; SUA: Azt]
- **32.** *kwawa 'angry': Hp kwala(k-) 'boil, become enraged, get angry, vi'; TO baga 'be angry'; because *kwa > Tep ba and *w > Tep g and > Hp l, then TO baga 'be angry' does correspond to Hp kwala. Other Tep languages appear to have lost *w, but compounded with *-mukku/i 'die': PYp baam 'get angry'; NT baamúku 'be angry'; ST baam. [*w > Hp l; *w > TO g but > ø in other Tep] [NUA: Hp; SUA: Tep]
- **33.** *wïL / *wït 'angry': Stubbs 1995-19: Ls wóltu 'be angry'; Cp wélne-t, pl: wéwelnetim 'angry, adj'. The first three segments of Ls and Cp match well, since Ls o < *ï. A tie between CN kwalaani 'get angry' and Cp wélnet may be possible, for we occasionally see Tak w < *kw (cf. *kwasi 'tail' and *kwila 'badger'), and the consonantal sequence in CN and Cp (kw-l-n: w-l-n) make it tempting, but not secure. The near identity of CN kwalaani and Hp kwala (above) is curious, too. The clusters we see in Tak (-ln- and -lt-) as possibly reducing to Tb d may add Tb wïidi 'be angry' to the possibilities, and an -ln- cluster becoming Tr -n- as in Tr onia 'be angry', an irregular subjunctive of Tr oyo, might be added to the pool of possibles, if *wïLn > on in Tr (and we see *wï > o in Tr at *kwïki 'cry'). However, the lot need more investigation, except Ls and Cp, which quite agree with each other. [*ï > Ls o] [NUA: Tak]
- **34a.** *(na)-kuma 'upset, jealous': Tr na-kumé 'perturb e.o.'; Tr (ni)kume 'perturb s.o.'; Eu kúme('e) 'envidiar'; Eu nekúme 'envidiar'; CN ma'komana 'be upset'; CN(RJC) ma'komantinemi 'he goes about upset'. With loss of initial k or k > ', what of Yq 'omte 'enojarse' and My om-te 'está enojado'?
- **34b.** *na-kamu 'upset, angry': Wr nehkamú-na 'estar enojado'; Eu nekauhce 'enojarse'. Wr and one Eu form may suggest *-kamu, while Tr, CN, and another Eu form suggest *-kuma / -kume. Might the two be a V metathesis one way or the other? [-mC- > -uC- in Eu]

- **34c.** *naŋaN-ya'i 'angry-die': Kw naha-ye'e 'be angry'; Kw naha-(m)bištï 'one who is short-tempered'; Ch naŋá-ya'i 'angry'; SP naŋaN-y'ai 'be/get angry < anger-suffer'; WMU naái'ye-y / naái'i 'be angry'; CU naáy-'ay 'be angry'. Kw and SP also show nasalization in a 3rd C as well. Note Kw -biš and Tb *-piš suffix. This could easily be the Num version of TrC *na-kamu, with nasal anticipation.

 [-η-> -h-/-ø-, *-CC-?; *a-i > e-e] [NUA: SNum; SUA: Trn, Opn, Cah, Azt]
- **35.** *sïwa 'jealous': TO heeg 'a rival, a wife's relationship to another wife of the same man'; TO čuheegamk 'be jealous, envious'; NT iïgamurii 'ponerse celoso'; NT iïgamurii relations, adj' and TO čuheegamkam with a vowel metathesis are equivalent and lengthy (6 segments): TO < *tusiwa and Cm < *tisuwa. Or Cm may be a matter of assimilation since w following *i may motivate the change to u, and *u > i occurs in Num elsewhere. [*s > Tep h > NT \emptyset ; metathesis] [SUA: Tep; NUA: Num]
- **36.** *yamu... 'angry, stingy': KH.NUA: Sr yaam(u) 'become angry'; Cp yámuki-ly 'an insect, the stingy finder, crawls to stingiest person'; Cp yámukwi-š 'stingy, adj'. Good set by Ken Hill. Let's add Ktn yam 'be or get angry'. [NUA: Tak]

NB, for *kwuy 'be angry, scold' see at shout.

ANIMAL, DOMESTIC, PET; ANIMAL DOMÉSTICO

- 37. *puNku / *pukku(C) 'domestic animal': VVH46 *puNku 'dog, pet'; M67-135 *puku 'dog'; I.Num160 *punku 'dog, horse, pet'; L.Son220 *puku 'animal domestico'; Fowler83; M88-pu13; KH/M06-pu13 *punku: Mn puku (< *pukku) 'pet'; NP pukku 'horse'; TSh punku 'pet'; Sh punku 'horse, pet'; Cm puuku 'horse'; Ch punkú 'pet'; Ch punkuu-ci 'dog, pet'; Kw pugu-zi (< *puku-ci) 'pet, dog'; SP punku 'horse, domestic animal'; CU púku (< *pukku) 'horse' (< domestic animal); CU pukú-n 'my horse'; Tb(M) pungu-l / pungu-t 'pet'; Hp pooko 'dog, domestic animal'; Wr puhkú 'animal poseído, ganado'; Tr bukú 'animal poseído'. Ken Hill adds Tbr woku-r 'animal domesticado'. Note WMU puqqú-či 'favorite horse' with SP punqu-ci 'dear horse, diminuitive'; also WMU puqqúun(g)wa 'have a bunch of horses' shows a final nasalization, possibly anticipated in others (*pukuN > *puNku). Though with differing semantics, add Eu bukút 'esclavo' and Eu amo vuk 'tuyo' as a possessive morpheme. Tb and WMU may show a final -C. [Tb -ng-: CNum -Nk-: WNum -kk-; SNum has all 3: k, kk, Nk] [NUA: Num, Tb, Hp; SUA: Trn, Tbr, Opn]
- **38.** *aCti 'domestic animal': BH.Cup *'áci(la) 'pet'; Munro.Cup91; KH.NUA; M88-'a27 'domestic animal'; KH/M06-'a27: Cp áči-ly 'pet'; Ca -'áš, -áci-ly; Ls 'áš-la; Sr 'aači'; pl: 'aaštam 'pet'; Gb áče-n. [NUA: Tak]
- **39.** *coCiwa 'domestic animal': B.Tep199 *soiga 'domestic animal'; M88-co17; KH/M06-co17: TO šoiga; PYp soigar; NT soigádï 'his domestic animal/possession'; ST soi' 'domesticated animal, gentle, tame, humble'. Doubting PUA dipthongs, I reconstruct *cohiwa or *co'iwa rather than *coiwa since medial h and ' both go to ø in Tep. [SUA: Tep]

ANKLE; TOBILLO

- **40.** *ta(k)wi(n)coko 'ankle': Mn ta'wizógo; NP daggwiddzogo; TSh tawincoko. Ankle is a concept often described, lacking in clear proto forms. *ta(k)wi(n)coko is undoubtedly a diachronic compound. [-kkw-:-'w-:-w- and -cc- vs. -nc-] [NUA: Num]
- **41.** *koci 'ankle(bone)': Kaufman1981; Manaster-Ramer(1992b) cites this set in "A Northern UA sound law: *-c-> -y-": he lists Hp qöyi {Hp sìiqöyi 'anklebone' (Hill); Hp(V) síyiqöyi 'ankle' } and Tr baca-koci {Tr baca-go(a)-ra 'tobillo'; Tr baca-koči 'en el tobillo' (locative of Tr baca-goa-ra)}. If the UA equivalent of the Tr locative suffix Tr -či 'at, in' is fossilized in the Hp cognate, then they match. The -koš- of TO čïkoš-Da 'ankle rattle' (*-koc > Tep -kos) fits *koci, but is also listed with *ta'ko 'wrap' at circle. Add Azt *koc 'heel' with slightly shifted semantics: CN(RJC) in-koc-titeč 'on their ankles' and ikooc 'heel' in Nahuatl de Sierra de Zacapoaxtla. [*-c-> NUA y; *c > Tep s] [NUA: Hp; SUA: Tep, Trn, Azt]

ANSWER; RESPONDER; also see say

42. *nippaha 'answer': TSh nippaha 'answer, talk back to'; Kw nipaha 'answer'; Eu nivahrawa 'respuesta'; and possibly Eu níve 'responder' and Wr nehíe-na 'answer' with loss of v/p. [loss of gem C's in SUA; NUA *-pp- vs. SUA *-p-] [NUA: Num; SUA: Opn]

ANT: HORMIGA

- 43a. *a(')nïN / *aCnïN 'ant': BH.Cup *anVt; M67-4 *'ane; I.Num5 *ani 'mosquito, fly, ant'; Fowler83; KH.NUA; Munro.Cup4 Proto-Cupan *'áána-t; M88-'a9; KH/M06-'a9 *anïn: Ls 'áána-t; Cp 'ána-t; Ca 'áne-t; Hp aanï; Sr ääniht; Mn anípi 'large mosquito that lives in the mountains'; NP anipi 'ant'; Sh anin 'ant'; Sh animui 'fly'; Cm anikuura' 'ant'; Cm anímuí 'housefly'; SP aŋaa-vi 'ant'; SP aŋi-vi 'mosquito'; Tb(M) anïnt 'ant'; Tb(V) 'aanïn-t 'yellow ants'; Tb(V) paanïnt 'ants'; Tb(M) pa'nïnt 'ant'. Ken Hill adds WSh a'nin 'piss ant'; WSh aanci'i 'termite'; Ch aŋaa-vï 'small red ant sp.'; Ch aŋi-vi 'gnat'; Ktn anïht, pl: anïm 'big red ant'; and perhaps Wc áïte 'hormiga cazadora' (?) with a question mark. The vowels are identical. Are other examples of intervocalic -N- > Ø in CrC available? Ken Hill also adds Tbr alisik 'pequeña hormiga' and Eu ari-t 'ant' and the correspondence NUA *n: SUA *L makes them viable. Notice that Tb and WSh have glottal stops before the first n, but have n (as do most) rather than the velar nasal η that Ch and SP have. This contrast of η vs. n in SNum vs. the rest of NUA is odd, but may be explained by a cluster of nasal with s.th. else. Note also NP ha'inabi 'ant' with ha- prefix. Along with 'ant', meanings of 'mosquito, fly, gnat' are included in M88-'a9 and I.Num5; overlaps or interrelatedness among terms for ants, mosquitos, flies, and gnats, as 'tiny stinging/biting insects' occur elsewhere in UA; on the other hand, Sh, Cm, and SP do have phonologically similar, but different words for the other insects. [Tb pa- prefix] [NUA: WNum, CNum, Tak, Hp, Tb; SUA: CrC, Tbr, Opn]

 43b. *ana 'ant type': Ch anáá-vi 'ant': SP aŋaa-vi 'small black ant': WMU aáa-vi 'flying ant, n'. WMU shows its
- **43b.** *aŋa 'ant type': Ch aŋáá-vi 'ant'; SP aŋaa-vi 'small black ant'; WMU a<u>á</u>a-vi 'flying ant, n'. WMU shows its typical nasalized vowel for the velar nasal found in the SNum languages to the west, but not east. [nasals: medial -ŋ- in SNum] [NUA: SNum]
- **44.** *siku 'ant': M67-5; L.Son239 *siku 'clase de hormiga'; CL.Azt2 *ciika 'ant' < *301 sika 'ant'; Fowler83; M88-si12 'type of ant'; KH/M06-si12: Op sikku-ci; Eu siku-c; Wr sekúi; Tr sikú-l, sikú-wi; My ere'e-suúkim 'ant'; Tbr ali-sík 'small, black ant'; CN ciika-tl 'large stinging ant'. Miller in M67-5 also lists CN aaska-tl 'ant', which is possible, though the vowels are strange; Miller also associates Aztecan *ciika 'ant' with UA *siku 'ant'; though possible, a c/s disagreement and second vowel a/u disagreement occur. Of interest is that My ele'e siiki 'da comezón' and My ere'e-suúkim 'ant' have l vs. r in identical environments; note also My eeye 'red ant' in a possible liquid vs. y dichotomy. In addition, My -suúkim may have transposed the vowels toward the front—*siku-wi > suúki—with loss of the first. [My liquids; V-trans; l/r/y] [SUA: Trn, Opn, Cah, Tbr, Azt]
- **45.** *totoni 'ants': B.Tep228 *totoni 'ants'; Fowler83; M88-to23; KH/M06-to23: TO totoni; PYp totoni; NT totóóñi; ST tatoiñ. Jane Hill notes TSh toŋkwaapi 'red ant' and TSh toŋkwaa(n)tïn 'yellow jacket' which make a tie to NUA *toŋa 'bee' (at 'bee') very feasible. Cf. *to'na 'pierce' at 'cut'; or more likely *toN at 'hot', since stings feel hot. [SUA: Tep; NUA: CNum]
- **46.** *yuka 'ant': M88-yu20 'ant'; KH.NUA; KH/M06-yu20: Sr yukää-ç 'little ant'; Gb yoxár 'little stinging yellow ant'; Ktn yoka-č 'black medium-size ant'. [*u > o/_Ca in Gb, Ktn] [NUA: Tak]
- **47.** *kusinpa / *ku'usinapa 'ant': Ca kúvišnil^y 'small ant'; Cp kuşínval 'small black ant'; note the distant transposition of v (*p) in the Ca and Cp forms. The Ca and Cp terms are undoubtedly related since the vowel patterns are the same until the 3rd, and they contain the same five consonants and in the same order, except for the -v-jumping from 4th (in Cp) to 2nd (in Ca). To uhimal 'large velvet-covered ant' may be related with loss of initial k, expected h < *s, and the nasal bilabial cluster (np) becoming a bilabial nasal (m) is natural enough. Furthermore, the three vowels also agree. The TO form would agree more with Cp than Ca; thus, *kusinpa begins a reasonable reconstruction, though it is probably a fossilized compound. Ktn hu'usinak (pl: hu'usinakyam) 'little red ant', if *k > h, fits well too, but raises more questions. [C metathesis; -np- > -m-; loss of initial k- in Tep, cf. *kuma at 'angry'] [NUA: Tak; SUA: Tep]

- **48.** *tasi'a 'ant': Kw taasu'u-vi 'red ant'; Ch tasíavi 'ant'; WMU tahsí'a-vi / sí'a-vi / tüsí'æ-vi; CU tasí'a-vi 'ant(s)'; the first vowel in CU is voiceless, which explains the loss of initial syllable in WM Ute, since initial consonants before short or voiceless vowels tend to be so briefly whispered that they become inaudible, then lost, in WMU. While Kawaiisu's V's are enigmatic, all other forms point to *tasi'a-pi. One must wonder if the si'a portion ties to the *-si'a portion of *posi'a 'louse'? Or could this morpheme tasa/tasi be the first element in the compounds Sh tasaminci 'ant, black ant' and Sh tasimica 'piss ant'. Since words for ant often contain morphemes meaning 'prick, pierce, sting, bite, cut' (cf. *sik, *ton, *min), the element 'min' may be cognate with CN miini 'prick, pierce s.th.' [*i'a > u'u/_ bilabial in Kw; rounding influence of glottal stop in Kw here and in water Kw *po'o] [NUA: SNum, CNum]
- **49.** *mu'sa / *mo'ca 'ant': Eu móco 'hormiga arriera'; Tr mo'čá 'hormiga arriera'; Wr mocó/mocóma 'leafcutting ant'; AYq močomo 'leafcutter ants'; perhaps the latter part of Tb 'ulumuš 'big black ant' though the other round vowel appears, perhaps assimilating to the preceding u's: *u-u-o > u-u-u. (See Phonology 2.15.) [o/u; c/s] [SUA: Trn, Opn; NUA: Tb]
- **50.** *(ka)Lama 'ant': Tr kalamáčuri 'hormiga de miel'; Ls lamáqa-t 'black ant sp.' These two have at least *-lama-in common, and a -ka- syllable on either side of the *-lama. [L/liq] [NUA: Tak, Tb; SUA: Trn]

ANTELOPE; ANTILOPE, CERVICABRA

- **51.** *timina 'antelope': M88-tï24; Munro.Cup5 *təəni-la 'antelope'; KH/M06-tï24: Ls tón-la; Ca téni-ly; Cp tənily. Ken Hill adds Ktn timina-č 'antelope'. Let's also add NP tinna 'antelope'. What of Hp tiini 'game animal, game successfully hunted'? Sapir considers SP ti- 'game' a reduction of SP tigia (< *tikia) 'deer'; similarly, Hp tiivosi 'game, animals to be hunted' may suggest tii- rather than tiini. Sapir and Miller (M88-ti24) tie *tinna 'antelope' forms to Num forms approximating *tikiya 'deer, like Mn tihitta 'deer', Mn tihiya 'old buck deer', and NP tihidda 'deer'; but NP tinna 'antelope' and Tak contrast considerably; thus, I separate them due to distinct medial n vs. k/h. Ktn timina-č is key: *tin(nV) appears in three branches—Tak, Hp, and NP of Numic—all of which may be reductions, since Ktn timina-č 'antelope' suggests that the Cupan *tini forms are a reduction from *timina > *timna, just as Ktn and Sr *timi 'rock' suggest that that proto-form reduced similarly. Furthermore, the gemination in Num -nn- < -mn- also leans well for * timina. SP tinna 'hunt' etcetera may be a verbalization of the noun. [*i > Ls o; reduction] [NUA: Tak, Hp, Num]
- **52.** *wanci 'antelope': TSh wanci; Sh wanci; Kw wazi; Ch wancí; SP wanci; CU wací-ci; and the first part of NP wizi-ga'yu 'deer'. Ken Hill adds WSh wanci 'buck antelope'. Also add WMU wančí-či / wanjí-či / wanjí-či / wančí-či-či / winčíči-či 'antelope' which shows the nasal like SP to the west vs. CU's lack to the east. If the cluster -nc-prevents medial *-c- >-y- in Num, then many NUA intervocalic -c- may derive from clusters.

 [NUA medial -c- in a cluster] [NUA: Num]
- **53.** *kuwiya 'antelope': TO kuuwid 'pronghorn antelope'; Tr kuwi/kuyá 'campamocha, variedad de venado muy grande'. The same less-usual correspondence occurs in *mawiya 'mountain lion': TO mawid; Tr mawiyá. See phonology 2.13. [*w = Tep w, as in 'mountain lion'] [SUA: Tep, Trn]

NB, it seems I've seen a cognate to Hp cööviw/cööviwï-t 'pronghorn antelope' not yet found again.

Apron: see clothing Argue: see shout, say Arise: see stand

Arm: see hand, shoulder, feather (wing), right

Armpit: see at shoulder and carry

54. moved to 383

NB, for Kw soo-rokwa 'armpit'; Ch(L) sohorah 'post with U-shaped fork, notched post'; SP soor'oaa 'armpit'; WMU kiyé-söö-vü; aá-söö-vü 'underarm, armpit, n', see at *suwi 'hair'.

ARRIVE, COME; LLEGAR, ALCANZAR, VENIR

55. *piCtu (KH/M06) 'arrive': VVH143 *piutï 'to arrive'; M67-8 *pite; I.Num165 *pitï/*pihtï 'arrive'; KH.NUA; M88-pi16; Stubbs 2000a-3; KH/M06-pi16 *pïtïC: Mn pitï; NP pibitï 'hu (< *pipittï 'hu) (dual); TSh pitï; Sh pitïh; Cm pitïnu; Kw pidï; SP picï; CU picí; Hp pitï; Tb(M) pïlït~'ïbïl; Ca píš; Ls písma; Gb piyó 'llegar, encontrar'; Sr pičiïi. Hill notes the extended parallel forms of Hp pitïto 'be approaching' and Sr pičooţo' 'arrive, come (to), get to'. Add WMU píčü-ġi- / píču- 'come, sg'. This stem is prominent in all four branches of NUA, but not found in SUA. The intervocalic *-t- does not go to -l- as it usually does in Tak, nor to -r- in SP and CU, but to -c/č-, meaning that it is doubled, and NP and Mn show -t- (< *-tt-) rather than -d- (< *-t-). Not only is a medial consonant cluster evident, but Kw may suggest -Nt-, because *-t- > Kw -r-, *-tt- > Kw -t-, but *-Nt- > kw -d-. *u > ï more than the other way. [cluster: *-Nt- > c (> s) in Tak, > l in Tb; *c > s/_#/C in Cupan] [NUA: Num, Hp, Tb, Tak]

56a. *kima 'come': VVH159 *ki_uma 'to come'; M67-96 *kim; I.Num71 *kihma 'to come'; KH.NUA; M88-ki3; KH/M06-ki3: Mn kima (< *kimma M88) 'come'; NP kimma 'come'; TSh kimma 'come'; Sh kimma 'come'; Cm kimarï 'come'; Tb(M) kimat~'ingim 'come'; Sr kim / kimai 'come'; Sr kimaka 'one that comes'; and Gb kí/kíma 'venir', (mo)-kímen '(tu) venida'. Ken Hill adds Ktn kim. Consider also Tbr komu 'venir' and possibly Hp ki-ma 'to be bringing, taking, carrying things along'. Tbr may have assimilated the vowel i > o anticipating the bilabial m. Tb k > -ng- suggests a nasal anticipation rule rather than an underlying nasal, an earlier rule wherein the nasal feature is anticipated and jumps syllables, such that m influenced a nasalization of the k. We may want to keep in mind NT gíími 'ven acá!' and NT giíñ-kiaá 'ven acá!' in case the voicing in Tep is someday explained. [k: ng in Tb; nasals]

56b. *ki 'come, come to do s.th.': Sapir ties CN ki/kiiwi 'come to do s.th.' and SP -ki- 'come in order to'; Add WMU -ki 'come, moving this way'; Kw ki 'come (toward), go this way'; in compounds CU -ki 'coming this way'. [NUA: Num, Tb, Tak, Hp; SUA: Tep, Azt]

57. *ha'si / *hapsi 'arrive, reach, catch up to': Sapir; VVH59 *'asï/*'asi 'arrive'; B.Tep298 *'ai(himi); CL.Azt3 *ahsi; L.Son53 *hasï/*has-i; M88-ha9 'arrive'; AMR1993; KH/M06-ha9: TO aha/a'ahe/aa'i 'overtake, reach'; NT ááhyi 'arrive, reach, be enough'; Eu hasé/hási; Tbr así/hasé; Wr asi-néa 'arrive'; Tr sí 'llegar o nacer varios'; CN a'si 'reach, arrive'; HN 'asi' 'arrive'; Pl ahsi 'arrive, find, encounter, reach, catch up with, fit'. Sapir includes Wc aše 'llegar varias veces' which was left out of later cognate collections, but belongs. I put My yépsa with *yïpisa below. Add Yq háse 'alcanzar, perseguir' and Cp háşi/háşe 'go'. Manaster-Ramer 1993 discusses this set, where he brings evidence to bear that we are dealing with a medial cluster. There he introduces Tb apsV 'arrive' from the Harrington materials. [cluster] [NUA: Tb, Tak; SUA: Tep, Trn, Opn, Tbr, Cah, CrC, Azt]

The nature of Miller's 1988 brainstorming, rough-draft collection of possibilities and overlapping initial yï... forms in both M88yi7 and M88yi6 (with semantic variety: 'come, door, enter, close') needed sorting. Ken Hill did that for us, improving matters considerably in KH/M06, though enough complexities leave much still tentative. **58.** *vipisa (> *vipisa, *vipsa) 'come': B.Tep20a *divia 'he comes'; M67-97 *ye 'come (sg.)'; M88-yi7; KH/M06-yï7: TO jiwa; UP jiwia; LP divia; PYp devia; NT dyidyíívai/dïidïíívai 'venir, regresar, llegar'; Yq yépsa sg.; My yépsa- sg. B.Tep20b *dïvi agai 'he is going to come' is also related. The three consonants—y, p, s—are evident, though in the Tep languages, where *s > h, the resulting h in a cluster would hardly last long, leaving Tep *diva (< *yipsa), as in NT, or *yipisa > Tep *divi(h)a as expected in UP, LP, and PYp. I do not find B.Tep20a *divia 'he comes' nor B.Tep20b *divi agai 'he is going to come' listed in M88; however, Kenneth Hill includes B.Tep20 in KH/M06-yi7. Tep *diva / *divia fits Cah *yepsa quite well, with a slight vowel change, which occurs in Tep itself, since PYp and B.Tep20b *dïvi agai both show the first vowel to be ï also. Of the two—Yq háse 'alcanzar' and Yq yépsa 'viene, llega'—the latter belongs here (likewise for My yépsa) and the former belongs with *hapsi/ha'si above, though both Miller and Manaster-Ramer associate Cah yepsa with *hapsi/ha'si, which tie is not out of the question, but the variant first syllables would need explaining. However, in their present forms, a *yïpisa/*yipisa vs. *hapsi division seems preferable, since both the initial C and first V are different. Initial yforms that show no medial *-p- or *-s- follow. [cluster, s > \phi in Tep] [SUA: Tep, Cah]

- **59.** *ya... 'come': VVH82 *yahi_S(pa) 'to come, pl'; M67-98 *ya 'come'; M88-ya5; KH/M06-ya5: Hp yàyna 'start, begin'; Hp yaahinta 'be starting'; Wc yaa 'ir, empezar a ser'; Yq yahi; My yáhha; Yq yaha'; CN ya 'go'; HN yawa / yawi- / yah- 'go'; Pl yawi (pret yaahki) 'go'. Miller and Ken Hill put a question mark by WSh ya'i 'enter, pl', with which I agree, as I don't know either. In fact, with only *ya... in common, the whole set may be suspect. [NUA: Hp; SUA: Cah, CrC, Azt]
- 60. *nik 'come': Ca nék-en 'come'; Cp néqe 'come'; Cp néqa 'is coming'; Cp peneq 'he came'.[NUA: Tak]
- **61.** *wic 'come': CL.Azt 32 *wiic 'come'; M88-wi13; KH/M06-wi13: CN wiic (defective verb); Pl wiic (pret: waala(a)h); T -bic; Po wic; Z wiica. [SUA: Azt]
- **62.** *tikkaN'wi 'arrive, happen, become': Ch tikáw'i 'become'; SP tiqqaan'wi 'happen, take place'; WMU tihqqáa'wi 'happen, become, arrive, take place'; CU tigá-wi 'about to arrive, just arriving'. [NUA: SNum]

NB, *naw 'come': Tr nawa-ma 'llegar, venir'; Cp návya'a 'come here!' While *w > v does happen in NUA, this is not yet secure enough to merit a number, though it (*nawi) could possibly relate to the latter part of SNum *tïkkaN'wi above. [perhaps *w > v in Cp?]
NB, for *yï(N)ka 'enter' see go.

ARROW; FLECHA, SAETA

Mn	pága	Нр	hoohï; ïmïkinho	Eu	samát; máwot (plant)
		•	hoonavi 'a. material'	Op	ca-t
NP	poŋosa	Tb	paahuu-l 'war a.'	Tbr	wakát; wakót '&carrizo'
			'umuša-t 'a. feathers'		inyó-t 'a. shaft'; hasé/hasi 'dart'
TSh	pakan; huupakampoca	Sr	hooţ; şomaant '&bow'	Yq	hú'iwa
Sh	pakan 'arrow, penis'		ni-şoom(an) 'poss'd'	My	hú'iwa
	takkam-mucin	Ca	húya-l		
Cm paaka; si'ba'(si=feather) Ls		húú-la	Wr	úa; atapóri	
Kw	huuwa-zi	Cp	húyal	Tr	wa; cogira; we'camura
Ch	húu	TO	uuš; ho'omačuđ	Cr	ï'ïrï; támuii 'flechar'
SP	uu; u; uhkwi;	Nv	'u'u	Wc	'ïrï
paka	a'naina 'arrow game'	PYp	u'u; upas		
WMU	uu / úu / huu	NT	úyi / ui / úúyi	CN	mii-tl; miina 'shoot'
CU	'úu	ST	'u'uu		

- **63.** *huc(a) > *huC 'arrow': Sapir; VVH78 *hu 'arrow'; BH.Cup *hu 'arrow'; B.Tep334 *'u'ui 'arrow'; M67-9 *hu 'arrow' and 474 *hu 'wood'; I.Num35 *huuh 'arrow'; L.Son64; M88-hu3 *hu; Munro.Cup6 *huu-la 'arrow'; M88-hu3; KH.NUA; KH/M06-hu3 (*hu AMR) and hu22: besides many of the above, Ken Hill (KH/M06) includes several other viable forms at hu3: NP huwa /howama; WSh hua 'bow'; WSh huukkuna 'quiver, lit. arrow bag'; WSh hua'aiti / hoa'aiti/huu'aiti 'bow and arrow'; Gb hur; Tb uut 'stick, pole'; Eu humát 'quiver'; and others yet at hu22: NT úúši 'tree'; ST uuš 'tree'; NP huuppi 'stick'; Sh huu" 'wood'; Sh huuppin 'stick, wood, log'. Add Ktn hu-č 'arrow'. A few forms (like TO uuš) show *c as a second consonant, not likely a residual absolutive suffix in TO, at least. Munro and Hill both note Ca húya-l 'arrow' and Cp húya-l 'arrow' in contrast to Cp hú-l 'arrowhead' and Ca hú-l 'bow and arrow'. The *huya- forms fit *huca (like TO uuš), since *-c- >-y- in NUA and > -s- in TO. However, several UA languages have an initial *hu... form for 'arrow' and another initial *hu... form for 'wood, stick'. But the two lists show *hu and *huc forms on both sides, again suggesting that more work needs to be done. Where do Yq húya 'árbol, monte' and My huyya 'árbol, monte' fit? CNum *huuppi 'tree' (< *huu"-pi) may also derive from this stem. [*c > s in Tep] [NUA: Num, Hp, Tb, Tak; SUA: Tep, Opn, CrC]
- **64.** *suhuma 'arrow': Sr şomaant 'bow, arrow'; Ktn šumana-t 'arrow'; TO ho'omačuđ 'make a charm, lucky arrow, etc., for'; TO ho'oma 'a charm, s.th. that brings good luck'. *h > ' in Tep, so a medial h is reconstructed and is easily lost diachronically. Add Eu zamát 'arrow' if first vowel assimilated to the second. [*o vs. Cah a; s vs. c] [NUA: Tak; SUA: Tep, Opn]

NB, see at 'reed *paka/pako 'arrow': Mn, NP, TSh, Sh, Cm, SP; Tbr. These may tie to *pa-kana 'reed', as CN(RJC) aka-tl 'reed, arrow' would suggest, though NP, Tb, and Tbr suggest an alternating second vowel rounded *paku/pako. Note distinct forms in Tb pahaabi-l 'sugar cane' and Tb paahuu-l 'war arrow'. The medial consonant may be more than *-k- too, as that is often -h- in Num. [k:n:g; final -a/o] [NUA: Num, Tb; SUA: Tbr]

ARROWHEAD; PUNTA DE FLECHA

Mn	taqapága	Нр	yoysiva 'lit: rain-metal'	' Eu	kuwát (point)
NP	taka	Tb	kïyii-l; muuš- 'bullet'	Tbr	hi-sahí-t
TSh	takkampin; kaiwani	Sr		Yq	hú'iwa; bíika
Sh	takkampin	Ca	sívat	My	síbulai (punto)
Cm	tahka'	Ls	tiqé-t	Wr	
Kw	wina-huwa	Cp	hú-l	Tr	orá; kapirá
Ch		TO	uuš	Cr	
SP	wï'na''	NT		Wc	
CU	mukwá-qa-tï	ST		CN	kwateposo, yakateposyo

- **65.** *wi'naC 'flint, arrowhead': Ch(L) wïn'napi 'flint'; Ch(L) huu wïn'na-wa 'arrow's flint'; SP; Kw; cf. also Kw wina-pi 'obsidian blade'. [i vs. ï] [NUA: SNum]
- **66**. *takkaN 'arrowhead': Mn, NP, TSh, Sh, Cm, and Ls. L -q- suggests gemination and -t suggests a final C. This stem may relate to CNum *takka 'semen' as in TSh takkan 'sperm, semen' and Sh takkan 'semen'; Sh takkam-pin 'arrowhead, flint', but *taka 'male, man' does not have medial gemination, but does have final nasals, so they may be related stems. In addition to CNum, the Mn term (with p vs. b) also suggests a final -C. [NUA: WNum, CNum, Tak]

NB, for *sip 'point': Munro.Cup100 *şííva-t 'point', Ls şííva-t, Ca sív-at 'arrowhead', see edge. NB, Ktn toq-šiva-t 'flint, flint tip of arrow' and Ls tiqé-t 'arrowhead' in light of Ls e < *o and Ls i-e < e-i, but see *tikpa 'flint' at 'sky'.

ASHES; CENIZA

Mn	asiyábï; (e)siyábï	Hp	qöcvi	Eu	nápsa/naposta
NP	kutusibï	Tb		Tbr	nasí-t
TSh	kuttuhupin	Sr	kukut	Yq	náposa
Sh	ku-ttuh-sippeh	Ca	nísxiš	My	náposa
Cm	etïsipï	Ls	tééliŋi-š	Wr	nahpisó
Kw	kuca-pï	Cp	weşkíš	Tr	na'pisó (& dust)
Ch	kuca-wa; kucá-pï	TO	matai	Cr	nasí
SP	kučča"	Nv	mathai	Wc	
CU	kucá-pï; kuná	NT	mátai;	CN	neš-tli; kwau'-neš-tli
WM	kh <i>u</i> čá-pï	ST	matai	n	eškokok 'taste like ashes' (RJC)

67. *mata 'ashes, lime': B.Tep147 *matai 'ashes, lime'; M67-11 *mat 'ashes'; M88-ma20; KH/M06-ma20: TO, Nv, NT, ST, LP mat (B.Tep), and Yq and My maátu(m) 'charcoal'. [SUA: Tep, Cah]

68a. *na'i-piso 'ashes, fire-dust': M67-10; L.Son166 *naposa/*napiso 'ceniza'; M88-na3; Stubbs 2003-40; KH/M06-na3 *nasi: Tr na'pisó 'empolvarse, ceniza'. In any case, Op napot, Eu, Yq, and My suggest *naposa; Tr and Wr *na'piso; and Tbr, Cr, CN *nasi, as well as HN kwa-neš-tli' (kwa=wood). Because the Azt and CrC branches lose *p, I originally considered their form *nasi to be a reduction of TrC *napVsV (> *napsV > *nasi) and Tbr nasi- to be one of several forms suggesting Tbr's more recent tie to CrC/Azt; however, Hill (KH/M06) includes Ch nasivi, which may adjust that opinion. As Miller and Hill suggest, Ca nísxiš (< *nos...) may belong, though the vowel is unexpected. For now, it may be well to separate Cr, CN, Tbr, Ca, all of *nasi. In light of *pisu/pusi 'dust' as in Eu pusé- make dust' and Eu pusús mawan 'fill with dust', then Tr na'-pisó 'dust, ashes' may be a compound of 'fire-dust', which may underlie others of these. [V transposition]

68b. ***nasi** 'ashes': Cr, CN, Tbr, Ca. [*-p- > h/ø in CrC, Azt, Tbr] [NUA: Tak, Num; SUA: Trn, Cah, Opn, Tbr, CrC, Azt]

69a. *kukuC > *ko(ko)? 'ashes': latter of CN neškokok 'taste like ashes' (RJC), latter half of Ca nísxiš (Ca i < *o), and Sr kuku-t 'ashes' and Ktn kuku-t 'ash(es)'.

69b. *kuC-tusiC-pï / *kut-'asiya / *kut-(C)asiya 'ashes': I.Num65 *kuh ... si(h); KH.NUA; M88-ku8 'ashes'; KH/M06-ku8: Mn kuttussi 'dust'; NP kuutusipï; Sh kusippïh; Cm kusippï; Gb kosíy/kusíy.

69c. *kuccaC- / *kuC-taC-pï 'ashes': TSh kuccappïh; Kw kuca-pü 'ashes'; Ch kucá-pü; SP qučča"-ppü 'ashes'; WMU quhččá-ppü; CU kučá-pü; Ls koškuyat 'soot' (vowel is wrong, Miller notes); Hp qöcvi (vowel is wrong, Miller notes). Miller notes the wrong vowels; however, CuCa > CoCa is common in UA, then syncope of the 2nd vowel leaves exactly what we see in Hp. Though Miller has all of the above initial *ku- forms together under M88-ku8, let's give the two groups different letters under the same number. They all may be cognate, if Southern Numic c derives from a collapse of *-tus- > -c-. However, if that were not the case (perhaps *-ca- < *-taC-), then the only element that the forms have in common is initial *kut-, perhaps 'fire/wood', compounded with other etyma, possibly quite different: perhaps a reduction of an element like Mn asiya may underlie other Num forms. Hp may be a loan from Southern Numic: *kuca-pï > Hp *qöcvi. A couple of possible explanations for Hp having the wrong vowel are that an early alternation, as apparent in Gb, existed and that Hopi derived from the *o (> ö), or that the following a raised u to o before *o > Hp ö, as suggested above. Note also 1072a and Kw kuca-ki 'be gray, ash-colored' which links the two. [*u-a > o-a; reductions; clusters] [NUA: Num, Tak, Hp]

ASK, ASK FOR; PREGUNTAR, PEDIR, SUPLICAR, ROGAR

70. *tipiwa / *tipiN 'ask': M67-12 *tep; I.Num246 *tipi 'to ask (for)'; M88-ti16; KH/M06-ti16: Mn tibiyu; Mn tipiwi (M88); Mn titiwi- 'ask for (objects)'; NP tipinki; NP tibina; TSh tipina; Sh titipiah; Sh tipinka 'ask for'; Kw tivina; Ch tivini; SP tivi; CU tiviyuy; Hp tiivin-ta 'ask, inquire of, ask for'. Miller also puts here the following Tak forms: Cp tepine 'to follow, track'; Ca tépin 'to track'; Ls tópi/tupi 'to track'. However, I lean toward Ls tuvyuni 'ask a question'; Cp túvyun 'ask'; and Ca távan 'to guess', which share the same consonants and semantics as the Num forms, and the vowels may be explainable. The medial -v- (< *-p-) and 3rd consonant η might have Sr tiïvin 'find' belonging here. Note the substantial similarity between Sr tiïvin 'find' and Hp tiïvin-ta 'ask'. Could a phonological merger of *tiwa 'name' and *tiwa 'find' in Sr have encouraged a semantic shift from 'ask (seek)' to 'find' for Sr tiïvin? We see a -yu- syllable in Mn and CU, as well as in Ls and Cp; the preceding u's (or first V) in Ls and Cp may have assimilated to the u of the following -yu-. Some forms may be compounds with other morphemes. [V assim.; Tak V's; n vs. η vs. Ø vs. w; nasals; clusters] [NUA: Num, Hp, Tak]

71. *tani 'ask for': VVH92 *tani 'ask, beg'; M67-13 *ta; B.Tep212a *taanii 'he asks for'; 212b*taani 'to ask for'; 212c *tai 'he asked for'; L.Son273 *tani 'pedir'; CL.Azt6 *tlahtlani 'ask'; M88-ta18 'ask for/pedir'; KH/M06-ta18: TO taani; NT taañi; ST tañia 'pedirlo, comprarlo'; Wr ihtaní; Tr taní/raní 'tocar música, pedir, apostar'. Miller's inclusion of My náteme 'preguntar' belongs with *tï-may below. Wr ihtaní and CN i'tlani 'ask, request, beg s.th.' show an affinity as also in Wr ihkucíwa and CN i'kuč-in, both 'worm'. [Wr ih-/ CN i'] [SUA: Tep, Trn, Azt]

72. *tikka/*tiNka 'ask for': TSh natiŋkan 'ask for'; NP tikanawa'i 'beg for food'; NT tikáákai 'ask'; ST tikka' 'preguntar'. [N in Num, not in Tep; nasals, clusters] [NUA: Num; SUA: Tep]

73a. *maya 'ask': Sr maaya' 'ask, request' and Ktn maya' 'ask'.

73b. *(tï-)may 'ask': KH/M06-tï55 *tîm 'ask': Eu temáde, pret: temádi, fut: temáice 'pedir, preguntar'; Eu netémade-n, pret: netémadi, fut: netémaice 'preguntar, pedir algo'; Yq (ná)temai/nattemai 'preguntar'; My (na)temáe 'preguntar'; My náteme 'preguntar'. Sr maaya' 'ask, request' and Ktn maya' 'ask' may tie in, and could these relate to *(u)may 'say' (see 'say')? Does Yq máate 'suplicar' belong? [possible *tï- prefix] [NUA: Tak; SUA: Opn, Cah]

74. *sï'wï 'ask for': Ca sé'we 'beg, ask for' and Ls şóovini 'ask for' agree with initial *sï and a glottal stop + w > p / v happens in UA. [v and 'w, labials] [NUA: Tak]

- AT (a place), ON; EN (un lugar), ENCIMA DE; see also up, long
- **75a.** *-kwo / *ko / *ku 'at, in, on, while, when': Sapir; Stubbs1995-2; TO -ko 'in, on, or at (a place)'; Nv -ko (e.g., Nv bus-ko 'en todas partes [all-at]'; Nv vusi 'todos'); Op -ko 'gerundive verbal affix'; CN -ko/-k; Ch -mank(u) 'on'. I agree with Sapir that some similar-appearing subordinators, such as SP -ku 'when, as, while', like the -ku syllable in Ch -mank(u) 'on' above, may relate to the 'in/at' postposition: 'when you came' = 'at your coming'. Add Eu -ko 'having verbed'.
- **75b.** *ku-pa-(ko) 'on': CL.Azt120 *-(i)kpak 'on top of' and 262 ** -ku-pa; M88-ku28; KH/M06-ku28 'on, on top of': CN (i)kpak 'on or at the head of, above'; Pl -(i)hpak 'on, on top of, over'. [NUA: Num; SUA: Tep, Opn, Azt]
- **76.** *po 'in, at, while/after': My -po 'a dentro, mientras'; Tbr -vó 'en, sobre'. [*kwo > ko/bo?] [SUA: Cah, Tbr]
- Sapir; M67-229 *pan 'high'; I.Num129 *pa'a 'high, long, tall'; CL.Azt119 *-pan 'on', 261 **-pa(-n(a)); M88-pa35; and KH/M06-pa35 all somewhat combine *pa'a and *pani forms, which may belong together as some *pa'ani look-alikes may suggest, while other pairs such as Sh(M) pan 'on' and Sh(M) pa'a 'up, high' suggest different morphemes; their union seems far from certain:
- 77. *pani / *pana 'on, on surface of': CN pani 'on top, on the outside or surface'; CN -pan 'on the surface, for or at a particular time, postp'; Tb taŋaaban 'on top'; Tb wataaban 'on top'; Tr pani 'arriba en la falda'; Tbr -pá(-n) 'locativo: en, dentro de, sobre'; Cr an 'on top'; Cr hapwaán 'encima, sobre'; SP -paaN 'at'; TSh pa'an/pan 'on, above, at, about, by (means of transport)'; Sh(M) panai 'up, high'; Sh(M) pan 'on' (vs. Sh(M) pa'a 'up, high'); Sh(Cr) pan, panai", pa'ai, pai, pankai" 'up, high, above'. Many *pani/pana forms suggest a meaning of 'surface' or a 'relatively sizable, flat surface'. Note TSh pana(pin) 'chest, front of body' and CN eelpan 'chest (lit. organsurface)' relative to *pana/pani 'surface, on'; CN paan-tli 'row, wall'; CN te-paan-tli 'rock wall' (or surface); Sh(M) pana 'front of the body'; Sh(M) mappana 'palm of hand'; Sh(M) tappana 'sole of foot'; Sh(M) panapuih 'mirror'; Sh tï-pana 'rock-surface'; and Tr and Wr pana 'cheek' (at 'face') may also relate, as chest, cheek, palm, and sole are all body parts of a surface. Nevertheless, Sh shows both pa'a 'up, high' and panai 'up, high'. Is it possible that Num took on a glottal stop or that the other branches lost it? Or are we dealing with separate morphemes wherein UA *pani/pana '(on) surface (of)' semantically became more specifically 'on' then 'on, up on, high'? Or are there other instances showing a '/n alternation in Sh or a similar pattern? For now let's separate them (as does Sapir in SP), distinguishing: *pani 'on' (above) and *pa'a 'high, long, on, at' (see at long) and *pa 'at'; and *pī 'at, on'. [NUA: Num, Tb; SUA: Trn, Tbr, CrC, Azt]
- **78.** *-pa 'at, in': Hp -pa/-va 'diffusive suffix, distributed along, in, or on an area, on surface of'; Ch -va / -vah /-vaa 'at, future'; Ch upa'a 'in, locative'; CU -vaa(-ti) 'at'; CU -vá-(ti) 'on'; CU -vaa-tux 'to, toward'; SP -pa 'at'; Nv ba; aba; ubai hubana; Tr -mo-ba 'on'. Also belonging is the final *-pa in Tr ŕepó-pa 'espalda'; Tr ŕepo-gá 'dorso, espalda'; Tr ŕepo-mina 'de espaldas, sobre la espalda'; Wr tehpóba 'back'; Tbr ha-vá-n, ho-vá-n 'dentro de'; Wc -pa 'en, dentro de'. Ktn pa'pi 'on top' may suggest *pa'a + *pï. [NUA: Num, Hp, Tak; SUA: Tep, Trn, Tbr, CrC]
- **79. *-pï** 'at': KH/M06-ns10: Kw -pi/-vi 'at, on'; Hp -pe, -ve 'punctive suffix: at, in, or on', -ep 'there, at, in, on'; Gb -ve; Cp -eve'aw 'on, over, in'; Ca pé-tuk 'under, inside'; Ktn -pea, -vea 'locational/derivational suffix = 'at' etc; Eu vepé 'encima, sobre'; Eu vepévai; Yq béas 'a dentro'; *pï- of *pï-pan in Yq béppa; AYq vepa; My beppa; Tbr we-pán 'sobre, encima de'. [NUA: Tak, Hp, Num; SUA: Cah, Opn, Tbr]
- **80.** *pï-pan 'on': Eu vepán 'encima, sobre'; Tbr we-pán 'sobre, encima de'; Yq béppa 'arriba, encima'; AYq vepa 'on top of, more than'; My beppa 'sobre, encima, más que'; may be a compound of *pï and *pani. [SUA: Cah, Opn]
- **81.** *-akwi 'on': Tep *abi; TO ab 'on'; PYp ab(i) 'on'; Hp aqw 'to, toward, into, to top of'. What of NP wai; ggwai 'in, on' or Hp -anw 'along (there)'? [NUA: Hp; SUA: Tep]
- **82.** *-kaC 'at, on': TSh -kaC 'at, to, in, on'; Sh -ka" 'at'; Cm -ka/-kï 'in, at, on'; perhaps CN -ka 'through, by, by means of'. [NUA: CNum; SUA: Azt]
- **83.** *man 'on, at': TSh man 'on, at, against, in (surface, but never inside)'; Sh -man 'on'; Ch -mank(u) 'on'; Kw -ma/wa 'on, with, using, from, as a result of'; perhaps Tbr -mín 'por, localización aproximada'. [Kw m/w] [NUA: Num]

84. *-cV / *-ti / *-ti 'at': Eu -ce 'en'; Tr -či 'sufijo locativo'; -c- in Hp a-c-ve(q) 'on, on top of' (lit: 3p-on/above-PCT-(EX); Hp a-c-va(qe) 'along, in, on'. [*-t->-c-] [NUA: Hp; SUA: Trn, Opn]

AUNT, NIECE; TIA, SOBRINA

- **85.** *asi 'niece, nephew, relative': KH.NUA; M88-'a34; KH/M06-'a34: Cp ásisma 'woman's niece'; Ca 'ásis 'brother's daughter'; Sr 'aahir 'man's cross nephew, niece'; Ktn ahir 'nephew or niece'. [*s > h in Sr and Ktn] [NUA: Tak]
- **86.** *maCti / *masti 'nephew/niece (of woman)': KH.NUA; M88-ma41 'nephew/niece'; KH/M06-ma41 'woman's parallel nephew, niece': Cp mátisma 'nephew (of woman)'; Cp matíma 'niece or nephew (of man)'; Ca máti/mati', pl: máti'im 'niece'; Sr mašt 'woman's parallel nephew, niece'; Ktn mahcit (pl -am) 'nephew of a certain type, possibly through sister'. I reconstruct a consonant cluster (-Ct-) rather than only -t-, because a lone intervocalic -t->-l/r- in most Tak languages, not to mention Sr -št- and Kt -ht-; therefore, some kind of cluster likely prevented that change. [clusters] [NUA: Tak]
- **87.** *nisa / *niCsa 'aunt, mother's older sister (mos)': BH.Cup *nəş 'aunt, maternal'; M67-501 *ne 'aunt'; M88-ni7 'aunt'; KH.NUA; KH/M06-ni7 'aunt, mos': Cp neş 'mos'; Ca nes 'mos'; Ls núş 'mos'; Ls nuşmay 'nephew, niece'; Sr nim 'mos'; Wr nehsá 'mos'; My né'esa 'tía'; Ktn nihma 'aunt of a certain type'. PUA *nisa may be compounded with diminuitive *-maLa. In fact, Ls and Ktn and Sr suggest *nisma, perhaps < * nisVma. Wr and My may suggest additional segments before -s-. [Ls u, but expect o < *i] [NUA: Tak; SUA: Trn, Cah]
- **88a.** *pahwa 'aunt, father's sister (fs)': BH.Cup *-pa 'paternal aunt'; M67-502 *pa 'aunt'; I.Num134 *pah(w)a 'aunt'; Kaufman1981; M88-pa21; KH.NUA; KH/M06-pa21 'paternal aunt': Mn pawwa / páhwa 'fs'; NP pahwa 'fs'; TSh pahwa 'fs'; Sh paha 'fs' (acc –i); WSh paha 'fs, woman's nephew/niece' (acc –'a); Kw paha 'fs, mother's brother's wife'; SP paá / paha 'aunt'; CU paá-ci 'fs'; Cp -pah(a) 'fs'; Ca -pa 'fos'; Ls páa-may 'fs'; Sr pah 'cross aunt: fs, mbw)'. Manaster-Ramer and KH/M06, citing Manaster-Ramer, add Tb paawaa. Ken Hill also adds CN aawi-tl 'aunt'; CN pi'-tli 'older sister, lady's maid'; Pl -piipi 'older sister, aunt'; HN aawi 'aunt'; HN to'aawi 'lady', which fit fairly well in light of Num *pahwa and Azt loss of initial *p.
- **88b.** *pa'po 'aunt': B.Tep282 *vovoita 'aunt'; L.Son188 *papo 'hermana menor del padre'; KH/M06-po28 (not in M88): TO wowoit 'fys'; Wr papói 'fys'; Tr apó 'fys'; NT vovóítya; ST va'vooly; LP vovič. A reconstruction for both a and b is difficult. SUA shows reduplication of the initial C; TrC and ST show a voweling of *a-o (> o-o in Tep). On the other hand, many Num forms also show w as 2^{nd} C, perhaps relating to the 2^{nd} vowel o in SUA; but if we reconstruct w, then we should expect g in TO, unless consonant harmony underlies TO wVwV, though there are other instances of *-w->ø rather than > -g- in Tep. The h in Sh, Kw, and Cp, as well as the different toned vowels in SP and CU (aá) may represent an actual h or some other missing medial consonant or cluster, or could merely be some devoicing influence proximate to a long lost medial cluster. [medial cluster] [NUA: Num, Tak, Tb; SUA: Tep, Trn, Azt]
- **89.** *soLo 'aunt, father's older sister': L.Son259 *soro 'hermana mayor del padre'; M88-so5; KH/M06-so5: Wr soló; Tr soró. [liquids: *l/r] [SUA: Trn]
- **90a.** *yis 'aunt (mys)': KH.NUA; M88-yï17; KH/M06- yï17: Cp yéşma 'mys, fyb's wife'; Ca yes 'mys'; Ls yósmay 'mys'; Gb (ny)ó'oš 'tía'; Sr yïir 'younger parallel aunt'. Many of these mean 'stepmother' and 'mys'. Add Ktn yïr/yïha 'aunt of some kind, mother's sister' and Op deri- 'aunt' (Shaul 1990, 566). [Gb ny < *y; Gb o: Ls o: *i]
- **90b.** *yicika 'aunt, mother's younger sister': B.Tep19 *disika 'aunt (mys)'; KH/M06- yï17: TO jisk; LP diska 'mys'; PYp disk 'mys'; NT dyišíka/dïišíka 'mys'; ST dyišiik. Miller mentions this B.Tep19 along with B.Tep10 *daada 'mother' and B.Tep33 in M88-yï1 *dï'ïdï 'his mother'; however, let's follow Ken Hill, who leaves B.Tep33 *dï'ï- and B.Tep10 at M88-yï1 and includes only B.Tep19 here. Nevertheless, Tep *disika would correspond to PUA *yicika, so while these b forms may tie to the Tak forms (in *a*), because of c > Tak s/_C/# and a slight V change, the facts that they differ in the 1st V and perhaps the 2nd C recommends at least a separate letter, pending improvement of its probabilities. [*c/s; sibilants] [NUA: Tak; SUA: Tep]

Autumn: see gather

AVOCADO

91. *awaka 'avocado': CL.Azt8 *aawaka 'avocado'; M88-'a32; KH/M06-'a32: CN awaka-tl; Pl aawakat; Po aweket; T əwakatl; Z aawakat. [SUA: Azt]

Awake: see wake up

AWL; AGUJA; see also rope, weave, circle (for spin)

92. *'opi 'awl': BH.Cup *'évic 'awl'; M67-15 *wopi/*(h)opi 'awl'; M88-'o2 'awl'; M88-wo9 'awl'; Munro.Cup8 *éévi-š 'awl'; KH/M06-'o2: Ls 'éévi-š / 'ééva-t; Cp 'ívi-š; Ca 'ívi-š; TO owij, pl: oipij 'awl'; NT óyi / ói 'needle'. Miller includes Cm woobi, wobi 'wood' and SP opi 'wood', but in this work they are with *wopi 'wood'; see tree. As Miller (1967-15) notes, the Cm form points to Numic *wopi and Tak to *'opi, but if UA *wopi, then the Tep forms should yield Tep gowi. Miller shows overlap in M88-'o2, wo9, and wo10 'wood'; Ken Hill judiciously reduces these to o2 and wo10. [NUA: Tak; SUA: Tep]

93. *maLaka 'spindle': CL.Azt158 *malaka 'spindle'; M88-ma30; KH/M06-ma30: CN malaka-tl; Pl malakat; Po -meleg-/malage-; T malakačtlk; Z malakat. [SUA: Azt]

NB, for *wica 'thorn, awl' see at thorn. While Southern Numic *wiya- and TrC *wica may have s.th. to do with Takic *'évic and TO owij, a division of *wica (SNum, TrC) and *opi (Tak, Tep) is preferable until demonstrable otherwise.

NB, for Tep *vidinakaroi 'spindle', see *pi'ri 'spin thread' at rope.

NB, for Hp poro and Eu vúr (both pointing to *pur), see pierce.

NB, for *coma 'sew' in CN and B.Tep *soomakaroi 'needle' and *sooma 'to sew', see weave.

AXE; HACHA; see also knife

94. ***ti-pus-ta** 'axe, hatchet': CN tepus / tepos-tli; NT tupúúrai; Tr ŕipurá; Wr tehpulá; Tbr tepo-rá-t / tepu-rá-t; Yq tépua(m); My tépuam; Wc tepïa 'lámina de fierro'; Cr tepuaíh 'hacha'; Cr tepuústi'i 'metal'; Pyp teper. Note L > '> \emptyset in My, Yq, Wc, and Cr. Initial *tï- may be 'rock'; thus *-pus may be the primary stem, and may be a UA loan from MZ, for Wichmann (1995) lists MZ *puš 'cut with a machete' and MZ *puš-an 'axe'. The middle morpheme in CN te-pos-tli 'device made of metal', perhaps originally 'axe' or 'cutting tool', seems to underlie these SUA forms. The loan is most clear in CN, but underwent an amazing spread through most of SUA as well. Note that NT, Tr, Wr, and others show the voweling of the original absolutive suffix *-ta. [liquids; *t > l/r > \emptyset in Yq, My, Wc, Cr; s > \emptyset in a cluster] [SUA: Tep, Trn, Tbr, Cah, CrC, Azt]

Baby: see 'bear, v'

BACK; **ESPALDA**

Words for 'back' and accompanying reconstructions have proven problematic since UA studies began. Sapir first ties TO and SP; then Miller lists three tentative groupings with considerable overlap:

M88-ho8 'back(bone)': M67-16 'back'; NP hoppoto; Kw howaa-vi; CU 'öáa-vi; Hp hoota; Hp hot'öqa 'backbone'; TO ootk 'flesh beside backbone'; Eu hubúni-hówa, gen. húbuni-hóhte, acc. húbuni-hóhta 'spine; backbone' (hówa 'bone'); Wr otopórici 'backbone'; Tbr óva-r ho-ta-rá-n 'backbone'; Cr wárih/wári; Wc ái.tekïa 'parte inferior lumbar del espinazo'.

M88-hu20; Sapir; KH/M06-hu28: Ca húlul 'back'; Cp xútaxwe-l 'back'; Cp xútaŋa 'behind'; Hp hòota'at. M88-wo13 'back'; I.Num273 *wo'a(a) 'back'; KH/M06-wo13: Mn wo'opï 'backbone'; Kw howaa-vi; SP oaa-vi; CU 'öáa-vi; My hóo'o; Tbr ova-r/owá-r/ogo-.

While overlap exists in Miller's three groupings, all contain ho/hu forms. These might better be divided into two major sets: *hupa/hupu (c) and *huta/hota (d) (along with additional smaller sets), though some forms recommend *hupatV / *hupatwa with reductions. Miller separates the ho/hu syllables on the basis of the first vowel; however, all o preceding a could simply be the frequent UA assimilation *u-a > o-a, or other motivations altering the round vowel; yet a very different 2^{nd} consonant (t vs. p) is less attributable to sound change and may be the better criterion for sorting the forms. On the other hand, some forms (Eu, Tbr) show hints that we may be dealing with a reduction in some languages, such as: *hupa-ta > *hu(v)-ta > *huta. In fact, some of these may tie to *kupta 'buttocks' at buttocks, but those clearly belonging to *kupta are found at 'buttocks' which see (I mean, the

set). In any case, I tentatively divide them thus, pending improved plausibilities. Let's start with clear and simple SNum, though what else it may be related to becomes progressively less clear and simple.

95a. *howa 'back' (SNum): Kw howaa-vi 'back'; Ch hó(a); Ken Hill adds Ch oaa; Ch(L) ho^waavo^wak^ai 'humped-back, hunchback'; SP oaa-vi; WMU öaa-vi / öáa-vi 'back, n'; CU 'öáa-vi. [NUA: SNum]

95b. *wo'a / *ho'o (< *huCa?): KH/M06-wo13: Mn wo'opï 'backbone' (KH/M06); Mn wo'abï 'backbone' (Bethel, Kroskrity, Loether); My hóo'o 'espalda'. Mn and My and SNum are grouped at KH/M06-wo13, which union could well be, as all of these lettered groups could possibly be, but we'll let these two medial glottal-stop forms (Mn, My) rest here for now. [not grouped; too doubtful]

95c. *hupa (possibly *hupta > *hupa > *hua/howa?) 'back': Tbr ova-r, owaN-r 'espalda'; Tbr ogo-(pa-n) (loc.); Tbr óva-r ho-ta-rá-n 'espinazo'; Eu hubúni-hówa (gen. húbuni-hóhte; acc. húbuni-hóhta) 'spine, backbone' (hówa 'bone'); NP hobbodo 'back, backbone'; NP(B) hopodo 'spine, back'; Kw hubuwa/hibuwa 'behind'; Yq huvaria 'lower back'; PYp uupam 'back, returning, adv'; PYp uupa / u'upa 'skunk'. Tbr distinguishes the two forms fairly well: *hopa and *ho-ta. The Tbr variants (ova/owa/ogo) show another instance of velarizations of labials preceding round vowels. In M88-wo13, Mn wo'opï 'backbone' is the only language showing initial w, perhaps an initial intensification or metathesis ('-w > w-'). Some forms more specifically mean 'behind': Tr upá 'al fin, al último, atrás'; Tr upáka 'por atrás, detrás'; PYp opadi 'against, behind, postp'; TO owi 'an opponent, the oppostion'. Might some of these intertwine with *opa 'enemy, hostile, foreign'? Or might the two PYp forms (PYp uupam 'back, returning, adv'; PYp uupa / u'upa 'skunk') introduce the possibility that this 'back' is tied to 'backside' or 'stink (side)'; so also Tr(H) hubá 'atrás'; Tr(H) hubá 'oler'. SP uva'a 'have diarrhea' may suggest likewise, though this shows -v- while SP oaa-vi 'back' does not. [NUA: Num; SUA: Tep, Cah, Tbr]

95d. *huta > *hota 'back': Hp hòota 'back'; Wr otopórici 'backbone'; TO ootk 'flesh beside backbone'; My hóo'o 'espalda'; Ca húlul 'back'; and the latter part of Tbr óva-r ho-ta-rá-n 'backbone'; and Eu hubúni-hówa 'backbone' (ho(wa) 'bone'), Eu hubúni-hóhte (gen.), Eu hubúni-hóhta 'backbone, acc'. The glottal stop in My corresponding to the t (> r > ') of the other forms is known elsewhere, which would best keep it with the medial t set. In fact, the Eu forms may suggest that the *hota portion that we see in Hp, Eu, and Tbr may be from an original accusative, though that portion in Eu means 'bone' instead of 'back'. The others in this set could have easily assimilated the second vowel to the first (*huta > hutu/hoto in Wr, My, Ca), for all still show t for the second consonant. Could these represent a fossilization of an old accusative? The several Numic forms (oa/owa-) could feasibly belong to either set, depending on whether an intervocalic p or t was lost, yet Kw hubuwa may be key in suggesting that the general Numic shape *o(w)a is also a reduction, perhaps *hupa(t)wa > howa > owa, or *huptuwa > *huvwa > huwa > owa, wherein two consonants are lost. That would align them with the first 'back' set, and Hp's falling tone may suggest a cluster. On the other hand, Num *owa aligns well with the non-oblique Eu hówa. For Cp xútaxwe-l 'back'; Cp xútaŋa 'behind', see at *kupta 'buttocks' with Ls.

[*t > Ca l; u-a > o-a or o-o/u-u; reductions; clusters; liquids]

95e. *wati '(at) back (of)' (< *hupati?): Cr wárita'an 'detrás'; Cr warih 'espalda, lomo'; perhaps *p > ø in Cr, thus *hupa > ua > wa for the initial syllable, in which case Cr warih and PYp opadi may belong together. If that is not the case, then Tb wahti'aš 'be behind' and Cr warih may belong together, which means they should be separated from the above set. [*t > r in Cr; liquids] [NUA: Num, Hp, Tak, Tb?; SUA: Tep, Cah, Opn, Tbr, CrC]

96. *piC 'back, last': M67-17 *pi 'back'; I.Num162 *pih (pref.) 'back, behind, buttocks'; M88-pi12; KH/M06-pi12: Mn pi 'back, buttocks'; NP pi 'back, bottom'; Sh pi- 'with buttocks or back'; Cm pi-hima 'carry behind, as on a horse'; SP pi"- 'buttocks, rear'; CU pimi-cuh 'back to, returning towards'; CU pimi-na-kkwa-ppï 'behind, in the back'; and possibly My bi'am 'nuca'. Add Ktn pita-č 'youngest, last'. Tb pičool is at *piCto 'buttocks', though *piC may be a reduced form of *piCto, in which case the two would belong together. This Num *piC has been considered a staple in Num morphology so long that we can let it stand awhile longer for tradition's sake, but compounds that included it (below) may yield evidence to suggest that *piC (if not also *piCto) is reduced from *hupiC or *hupiCto. (Could NP hobbodo / hopodo represent a fuller form?) [NUA: Num]

Compounds for 'behind, in back of' may suggest that *piC (above) is a shortened form of *hupiC: 97a. *hupiC-na(-Nkwa) 'back side of': Mn -hupinaqwé-tu 'behind, in back of'; Mn hupinaqwe 'outside'; NP obi-naggwa 'after, behind, postp'; Cm (ï)pinakwï 'behind, postp'; these contain *(h)u- lacking below: 97b. *piC-na-Nkwa 'back side of': TSh pinnaŋkwa(sï) 'behind, in back of, after, last, postp. and adv.'; Sh pinna 'last one, previous one'; Sh pinnaihtïn / pinnaiki 'following, behind'; Sh pinnankatï 'in back of'; Sh(C) pi-nankwa"(-ttïn) 'in back of'; Sh(C) pinna(ih) 'last one, remaining one, old age'; Cm (ï)pinakwï 'behind, postp'. Almost identical to CNum is SP pinaŋqwa 'after awhile, soon' and the rest of SNum as well, though less clearly (Ch píikayu 'later'; WMU piináux / pinná-ku / piináuhqwa 'later'; CU piná-kwa 'later'; CU piná- 'next, later, following, second'). In light of Mn and NP showing *hupi-nakwa > *upi-nakwa > pi-nakwa, as well Cm's optional vowel in Cm (ï)pinakwï, all suggest that *piC may be an abbreviated *hupiC, and that the above forms may be a compound of *hupa/hupi 'back' and other suffixes, which length would encourage loss of the initial consonant or syllable and perhaps allow a gradual and eventual reinterpretation of morpheme boundaries and fossilization of the fusion *pina: *hupi-na > *-pina. This compound likely contains *nakw 'side, from' at 'side'. [NUA: Num]

98. *tihpo / *tiCpo 'back, shoulder': CL.Azt9 *təpoc 'back, shoulder'; M88-ti39; KH/M06- ti39: CN tepoc-tli 'back, shoulders'; Pl tepuc 'lump, back'; Campbell and Langacker, Miller, and Hill all list the Azt forms; however, several TrC and other forms exist as well: Tr ŕepó-pa 'espalda'; Tr ŕepo-gá 'dorso, espalda'; Tr ŕepo-mina 'de espaldas, sobre la espalda'; Wr tehpóba ''back'. Sr tihpi' 'back, behind, n' and Ktn tihpi-c 'loin, back' also show considerable agreement, except in the last vowel, which may be from *piC 'back'. Tr and Wr may have the locative suffix *-pa fossilized into them. The Wr -h-, Sr -h-, Tr -p-, and perhaps the Azt forms all suggest that a consonant is clustered with -p-, whether -hp- or something else. [*o > Sr i?] [NUA: Tak; SUA: Trn, Azt]

99a. *komi (< *kwami / kwahami?) 'back, bark': B.Tep105 *kómi 'back, bark of tree', *komídī 'his back'; M88-ko27; KH/M06-ko27: TO komi 'back, lower back, shell covering'; PYp komi 'back'; NT kómi 'back, bark, peel, shell'; ST kom 'back, bark'. To these we might add Wr umí 'buttocks, small of the back'; Tr umi 'lower back'; and Nv komispa 'detrás'. CNum *kwaim- 'back' may be related: TSh kwaim-pï 'back (of body)'; TSh kwaim-pi 'back (of something)'; Sh kwaihaim-pï 'back (of a body); Cm kwahi 'back (of person or animal), n'. As KH/M06 suggests, CN komi-tl 'vessel, container'; Pl kuumit 'pot' and the other Azt forms may be related since there seems to be a great semantic intertwining in UA words for 'basket (vessel, container), back, shell, turtle, bark' the basket-like back of the turtle somehow being central to it all; cf. turtle, basket.

99b. *komi 'pot': CL.Azt 127 *koomV 'pitcher, jug, pot'; KH/M06-ko27: CN koomi-tl; Pl kuumit; Po kumt; T kumIt, Z koomit. Ktn komale 'frying pan' is likely a loan. Jane Hill notes also Gb komiime 'basket shaped like a bandeja/tray; Tb hommoi 'cooking basket'; Tb hommopit 'small coiled basket'. [kw, labials] [NUA: Num, Tak, Tb; SUA: Tep, Trn, Azt]

NB, for *kota/i 'bark, shell', see at shell.

BAD; **MALO**; see also pain, sore, bitter, stink

100. *ïpïC 'bad': Ch ïvï-i 'bad'; Ch ïvï-ni 'bad'; Ch ïvï-pïwï-ni 'bad'; SP ïvï' 'bad'; SP ïvwï'i-ppa 'bad-water, whiskey'; WMU üvüü-ni 'bad'; CU 'üvüü- 'badly, poorly'; CU 'ïvïï-pï-ni 'bad, evil'; CU 'ïvïï-puu-(kway)-ni 'bad'. [final C/"] [NUA: SNum]

- 101. *tïsawa 'bad, suffer': Tb tïšawiin 'cause him evil'; Tr ŕisíwa/ŕisoa 'pena, sufrimiento, dificultad, pesadumbre'; Tr ŕisíwa-rá-ma 'sufrir, penar, padecer'; and maybe Cm tïcï 'cruel, mean, ugly, bad'or SP -rïssu'ai-na'ai 'not heeding, paying no attention.'. [NUA ï : SUA i] [NUA: Tb; SUA: Trn]
- **102.** *pu'a 'bad': ST vuam [used in compounds meaning] 'bad, ugly, bother'; Cr há'ipú puá'a [used in compounds meaning] 'bad, broken, dirty, demon'. Including a glottal stop in the reconstruction may be preferable to nothing because (1) original dipthongs hardly exist in PUA, (2) Tep languages (like ST) do not normally show PUA *', and (3) Cr does show ', though slightly transposed. [SUA: Tep, CrC]
- 103. *'atta 'bad': Kw 'ataa / 'itaa 'be bad'; Kw 'ataa-kwee-pï 'rotten, spoiled, broken'; Cm aitï 'bad, wicked, evil'; Cm ata/atï 'different, other'; whether or not both Cm forms are cognate, listing both for preliminary consideration is useful at this point. [unaccented V > i in Kw; Cm a-ï > ai-ï] [NUA: Num]

- **104.** *'aLa(La) 'bad': Ca 'eléle- 'bad, wrong, not right, adj.'; Ca 'elél-kw-iš 'bad person / thing'; Ca 'elél-kw-imal 'ugly person'; Ls 'aláxwi 'be bad'; Ls 'aláxwi-š 'bad'; Ls 'aláxwi-laka 'ugly'; Wr na'ála-ni 'be bad'; Wr na'ála 'damage, danger'. [NUA: Tak; SUA: Trn]
- 105. *paLu 'bad, say bad about': B.Tep183 *paru 'to speak evil of'; KH/M06-pa68 'bad': In B.Tep183 are NT parúnai and Upper Piman paDï. In addition, *paL appears in some Tep languages meaning 'bad' though not necessarily having to do with speaking: TO paD 'bad, evil, spoiled, deteriorated'; PYp par 'bad'; ST parvan 'defective'. [*l: UA liquids] [SUA: Tep]

106. *nina 'bad, useless': Dakin 1982-57: Tr nina- 'harm, hurt, do/say bad'; CN neen 'in vain, futilely, profitlessly'. [SUA: Trn, Azt]

BADGER; TEJÓN

107. *hunapï > SUA *huLaC 'badger' (*hunap-wïL 'bear, badger-big'): Sapir; M67-18 *huna; KH.NUA; I.Num43 *hïnan/*hunan; BH.Cup *hunwït 'bear' (badger-big); Fowler83; M88-hu10; Munro.Cupan9 *húúna-l; KH/M06-hu10 *hula: NP hunna; TSh hunnan / hunacci; Sh hunan; Kw huna-ci; Ch(L) huna; SP ïna-N, ïna-mpïci; CU 'una-ppï-ci; Tb 'uuna-l 'black bear'; Cp húna-l 'badger'; Cp húnwe-t 'bear'; Ca húna-l 'badger'; Ca húnwe-t 'bear'; Ls húúna-l; Gb húnar 'bear'; Gb hunár 'badger'; páhunar 'Great-Bear'; Sr huunavt; Sr huuna-t 'bear'; Ktn hunavi-t 'badger'; Hp honani 'badger'; Hp honaw 'bear'; My húuri 'tejón'; Yq huúri 'tejón'; Yq(J) húuri 'tejón'. Add WMU unappü-či. Ken Hill astutely includes Eu húrve 'wolf' and Wc ïrave 'wolf'. Though they may vary semantically, Eu and Wc both correspond to *huLapï, like NUA, and wolves and badgers are both similarly veracious and vicious. Also of interest is that Sr, Ktn, Eu, Wc, all show a third consonant or syllable (*-pï/pi) with a bilabial. SP and CU also show gemination there and could be taken as a double absolutive suffix, but not in Sr, Ktn, Eu, and Wc. Hill also includes Wr u'lá 'skunk' which, with its badger-like walk and feet, is also plausible. [liquids: *n > r, but -nn- in Num; *u > ï in SP] [NUA: Num, Hp, Tb, Tak; SUA: Cah, Opn, CrC]

108. *paNtu' > *paicu' 'badger/tejón': ST vaisïly 'tejón'; Cr haihcə(-te) 'tejón(es)'; and Wc háicï 'tejón' all match *paicV (*p > ST v; *p > CrC h). CN peeso'-tli 'badger' (but with p) also parallels Wc háicï, both of which point to s.th. near *paicu; however, Wr pincúri 'tejón' and Tr batúwi 'tejón' must be included, in fact, may be key to the cluster. Wr pincúri shows an *-nc- cluster and the dipthong *ai > i instead of > e, like CN. ST s agrees nicely with the c of CrC and Wr, while CN p-s (vs. ø-c expected) make CN peeso'-tli more likely a loan from ST/Tep or other, since CN's p is unexpected, while CrC h is expected. Terrence Kaufman (1991/2001, 12) has CN peeso'-tli as a loan from Zapotecan *pe-xii'cu' 'coati'. In light of many PUA *t > c before high vowels and in light of Tr's t and in light of Cr, Wr, Tr showing *u after the t/c, something like *paNtu could explain all forms, especially since other examples of UA vowels before alveolars tending toward i would explain *paicu (< *pantu). The first two syllables of PYp baahuki 'badger' may belong as another loan, if h < s < *c) and with b instead of expected v. Having *pa(n)tu' / *paicu' in all branches of SUA and *hunapV in all branches of NUA provides an interesting NUA-SUA division for 'badger', though *hunapV also in SUA, usually with different semantics, except that Cah retains the same semantics as NUA. Let's not yet tie SP pinti 'hang on to' to SUA badger, with its reputation as the most viciously tenacious (hanging on to) creature, though the phonology is compatible. Note also *pantu 'shake, bounce' at 'shake' as a possible verb source for this noun, whether referring to its bouncy gate or fur. [c/s; *t > c > s; *u > c]CrC i/e; palatalisation; nasals [SUA: Tep, Trn, CrC, Azt]

109. *kwiLa / *kwita 'badger': Stubbs2003-10: Ca wílyaly 'badger'; Tbr kwelé-t/keré 'tejón'. This is another instance of SUA l corresponding to NUA l rather than n, unless both are from *-t-. Might this relate to *kwiya 'bear, n'? [labials: kw/w; i-a > e-e; UA liquids: SUA l: NUA l] [NUA: Tak; SUA: Tbr]

110. *kap / *kapaLi 'badger': Fowler83: TO kaaw 'badger'; LP(EF) hedilkaw-súuly 'tejón solitario' (LP(EF) súuly 'tejón'). To Fowler, add NT tikavali 'tejón'. [*ti- prefix] [SUA: Tep]

BAG, SACK; BOLSA, SACO, TALEGA

- 111. *taŋa 'bag, sack': M88-ta45; KH.NUA; Stubbs2003-4; KH/M06-ta45 'to contain (several thingns)': Sr taŋat 'sack'; Gb taŋár 'sack'; Hp taŋa 'contained things'; Hp patŋa 'squash' (with pa-). Stubbs (2003-4) adds Tbr tanaté 'zurrón, mochila de cuero en que se acarrea a la espalda el ineral'; the latter two syllables of Mn kusatá'ni 'sack' and Sr qawaataŋaţ 'pocket'; CN taana'-tli 'basket with a handle'; and Yq 'ía-tana 'this shore/side' (a shore as that which contains or encloses water). Also add Ktn táŋata-t 'sack, trunk, box' and Ktn hu' 'ataŋata-t 'granary'. This morpheme compounded with *pa- 'water' produces *pa-taŋa 'squash, pumpkin, gourd' (Stubbs 2003:4 and KH/M06-pa66 'squash'): Ch paráŋar(a) 'pumpkin'; SP pataŋwataN 'pumpkin'; and Hp patŋa 'squash, pumpkin' at 'squash'. [NUA -ŋ-:SUA -n-; Mn -'n-; nasals; clusters] [NUA: Num, Hp, Tak; SUA: Tbr, Cah, Azt]
- 112. *kawa 'pocket, bag': M88-ka38; KH.NUA; KH/M06-ka38: Ca káwkun-ily 'pocket, bag, purse'; Sr qawaataŋaţ / qawaatiŋaţ, poss'd: -qaawtaŋ 'pocket'; Ch kawa'a 'kind of big packbasket made with string'. To those, add Cp qáwkuni-ly 'bag, sack'. The last part of Ca and Cp (-kuni) is *kuna 'bag' below. [NUA: Tak, Num]
- **113.** *tiso 'bag, sack': Mn tisó 'pocket'; Cm narïso 'bag, sack'. Wr kontesia 'cotense, cloth shoulder bag' is likely from Spanish cotense or cotensia with the nasal transposed. Yet the Spanish term is said to be of American origin, so is UA the Spanish source? [nasals, transpositions] [NUA: Num]

In M88-ku11 'bag'; M67-19 *ku/*kwi; and from I.Num63 *ku 'bag', Miller lists many ku/ka/kwi possibilities, which I prefer to divide into *kuna/i and *maku:

114a. *kuna 'bag, sack': Munro.Cup10 *kúúni-la 'bag, sack'; KH.NUA; KH/M06-ku11: Kw kuna-bïzi; Ch kúnavï; SP kuna; WMU kuná-vü 'bag, sack'; CU kuná-vï; Ls kún-la; Cp kúni-ly; Ca kúni-ly; Gb -kun.
114b. *kana 'bag, sack': Cr ka'aní 'talega' and Wc kanána 'cinturón, víbora para dinero'. With a V assimilation (*u-a > a-a), these two groups may belong together, expecially in light of CN's tendency for anticipatory assimilation and CrC's affiliation with Azt. [glottal and rounding?] [NUA: Num, Tak; SUA: CrC]

115a. *makuta (> *makuLa) or *makway'a / *maku'i-ta 'bag, blanket': CU moĝóy'a (< *mokoy'a) 'blanket'; WMU maaĝwáy' / moĝwé' 'blanket'; and Kw mogwi'i 'tanned hide' all show (o:w, y:i, and ':' after *mok...). Hp mokyàa-ta 'wrap up, bag or sack s.th., put into a bundle, vt' is identical to CU except for missing a round vowel between k and y, and a glottal stop. Sr mööq-kin 'fold, wrap, vt' is certainly akin to the Hp lexeme, as well as Hp mooki 'bundle, sack'. NP mago'o 'bag' also belongs with CU moġóy'a, WMU moġwái' / moġwé' / maĝwé', and Kw mogwi'i. In fact, WMU, NP mago'o, and Tb maagulat 'weasel skin purse' all suggest the first V may be a, not o, with the 2nd round vowel causing the 1st vowel to assimilate: *a-u > u-u/o-o. Tb maagulat may suggest a 3rd C t (< *makuta) and TSh mokocci 'sack, bag, pouch' and Sh mokoccih 'sack, bag' also suggest a 3rd obstruent evident in their final geminations. Consider also Tbr makorá-t 'jícara' nearly identical phonologically to Tb maagulat. My mo'oko 'basket' and Wr mo'ke-warí 'basket' may match NP mago'o with the frequent Tarahumaran glottal stop anticipation (*CVCV'V > CV'(V)CV). Also similar are Hp mooki 'bundle, parcel, sack' and SP piccammuqqu 'tie around (?)' and perhaps CN moka 'full of'. Vowel-wise these forms could derive from something like *maku (> mako/moko/muku), since NP, Tb, and Tbr all suggest a first vowel a, and both Hp and Tb suggest an original second vowel of u, that was lowered to u in most languages, probably due to the preceding low a, which itself later assimilated to o(a-u>a-o>o-o) in many languages, another example of vowel leveling. As for consonants, a 3rd C of glottal stop (as in NP, CU, Kw, My, Wr) and/or t/l/C (as in Tb, TSh, Sh) in the reconstruction would be likely. The glottal stop seems to have hopped in TrC (as it often does), while the Num forms may show its original position. A high front vowel after the glottal stop (*maku'i) is suggested in CU, Kw, Hp, and Wr. Hp mooki 'bundle, parcel, sack' and Hp mok-ta 'carrying in a sack' align with *muka 'carry on the back or in a mecapal'; in fact, these NUA (Num and Tb) forms of *maku 'bag, bundle' probably relate to *muka 'carry in a bundle' (c below) with a vowel change. [V's; CN o-a: *a-u V metathesis; cluster]

Vowel syncopation leads to a consonant cluster(-kl-), which metathesizes in Ca (-lk-), but loses the k for Ls mora. Cp also nearly shows the original vowels, and consonant harmony: *maCu'i > mamu'i. [cluster; ':l; Ls o, Ca u,] **115c.** *muka 'carry a bundle, carry on the back (with a mecapal/carrying net)': Tr muke-ma 'cargar cosas a la espalda por mecapal'; Tr muka 'mecapal'; CN meka-tl 'cord, rope'; CN mekapal-li 'tumpline, a rig for carrying a load on the back supported by band across the forehead'; Wr muké-na/ma 'carry on the back or shoulders'; Eu múke'e 'llevar a cuestas, cargar en las espaldas'; Eu mukede-n 'cargar, echar carga'; Hp mooki 'bundle, parcel, sack'; Hp mooki 'yma 'go along with s.th. wrapped/in a bundle'. The *muka reconstruction works well for CN (*muka > mika > meka-) and for the others (*muka > *muki').

115d. *-mo-/-moka- 'bag' in Tep *baimokaroi = UA *kwaimokaLoi: NT báímokoroi 'talo, costal'; ST baimkar 'talega (bordada)'; ST toom baimkar 'costal'; the -karoi portion may be the instr. suffix; regardless, this is undoubtedly a compound. [Tep] [transposition; liquid; reductions] [NUA: Num, Tak, Tb, Hp; SUA: Tep, Trn, Opn, Azt]

116. *mutu'i / *muru'i 'blanket': Kw mïri'i 'blanket'; Kw mooro'o-vï 'wool blanket'; Ch muru'i; 'SP muru'i 'blanket, robe'; and perhaps Ls móra/i 'be rolled up, curled up, v.i., roll up, wrap a package, vt' which is also considered in *b* above. The first Kw form appears to have anticipatorily assimilated its vowels toward the final vowel. Though the vowels are difficult, the Num forms (*muru'i) resemble Ls móra/i, and all have to do with 'wrapping' and 'blankets'. [Kw V's and assim.] [NUA: SNum, Tak]

NB, for *kusa 'bag' and *kwisa 'carrying net', see *kwisa 'carry' at 'carry'.

NB, if the *paLi of Wc šii-pari 'bladder' (šii 'urine'; literally 'urine-bag') is reduced from s.th. like CN mekapal-li (< *muka) 'tumpline, rig for containing/wrapping then carrying a load on the back', then the reduction was indeed severe, which means let's only list for future reference, improbable as it may be.

Bake: see cook

Bald: see naked and smooth and flat

Ball: see circle Bank: see edge

Bare: see naked and smooth Bark (of trees): see skin, hair, back

BARK (of dog, verb); LADRAR

117a. *waha / *woha / *wa'wa / *wo'a / *wa'a 'bark': M67-22; I.Num274 *wohi/*wo'a/*wa'a/*wo'o 'bark, yell, howl'; M88-wo11; KH.NUA; KH/M06-wo11: possible onomatopoetic infiltrations make this collection difficult, if partly valid; nevertheless, let's list the collaberated collection: Mn woo (Lamb says "as in woo '...ki 'to bark'); NP wohi; Sh wo'ai"; Kw ha'a-; SP wa'au-ki; Tb woowohat~'owoowoh; Ls wa'úy 'to howl, of dog or coyote'; Hp waha; Wr wo'na-ní / wo'ni-má; Tbr wo; Tbr wo-na-myá-t 'está ladrando'; Cr híhwa 'yell, crow'; CN a'wa 'scold, quarrel'; Pl ahwa 'scold, bark at, yelp'. Miller also notes 'wrong vowel' for those forms beginning with wa instead of wo; however, w is more likely to round a > o (*wa > wo) than *wo > wa; thus, initial *wa may be original. Ken Hill notes Sr wahwai'(t) 'mean person who is always angry' and Ls wá'i 'bark, v'. We might add CN wa'walca 'bark at s.o.' to the possibilities. We see an abundance of w, ', a, and o in these forms, yet the difficulty of a reconstruction is apparent in Iannucci's listing four possibilities, which are not easy to improve upon, nor do I consider mine more likely than any of his, except that I think the first vowel may be a rather than o due to the facts that there are several wa and the round vowel of wo may be due to its adjacence to rounded w. The stem may be onomatopoetic anyway (cf. English bawaw), in which case the value of a reconstruction diminishes. Initial w seems clearest, though CN a'wa is missing it, but not CN wa'walca. Medially, many show h or glottal stop, some show medial w (perhaps redupl), and some show both. Note the opposing vowels in CN wa'wanoaa 'bark at s.o.' and Wr wo'na, much like 'prickly pear cactus' in CN no'pal-li and *napu in most of the rest of UA. [a-o:o-a; V metathesis; '/n]

117b. *wahi 'coyote': KH/M06-wa7: Sr wahi' 'coyote'; Ktn wahi'; Hp waha (rdp wahahata) 'bark, v'. These have sometimes been listed with *wo'i 'coyote' (< *waLi 'cougar'); however, their first vowel and medial C favor perhaps a more probable tie here with *waha 'bark, howl'. [NUA: Num, Hp, Tb, Tak; SUA: Trn, Opn, CrC, Azt]

BASKET; CESTO

- 118. *hutca / *hoCca / *huCta 'basket, jar': Sh occa (ottsa) 'jug, pitched basket for carrying water'; SP occa (ottsa) 'water jar'; Tbr hoca-nyí-t 'colote, clase de cesto cilíndrico hecho de bambú rajado'. The preceding three align nicely; the following, less so. The semantic similarity between Tbr and the following Hp terms as large carrying baskets made of sticks is also intriguing; however, a wrong first vowel and a different medial consonant than Num prevent a certain tie, unless something like *hu'(a)-ca/ta or other explanation underlies the matter, in which case these are worth keeping in mind: Hp ho'a-pï 'wicker burden basket' from Hp ho'àa-ta 'load pl. obj's'. Is Hp -pï from the Num absolutive suffix? Or related to it? Regardless of Hp, the Tbr and Num forms agree in four segments, if the medial consonant cluster includes something besides *-c-, and if it does, could the Hp glottal stop be a possible reduction of that cluster? [medial cluster; medial NUA *-c-, -'-] [NUA: Num, Hp; SUA: Tbr]
- **119.** *koppo 'basket': KH.NUA; M88-ko27; KH/M06-ko42: Ls qéepiš 'baby basket'; Sr qöpö-t 'round kind of basket' (note also Sr qöpöt-t 'turtle'). Miller includes CN komi-tl 'vessel, container', Pl kuumit 'pot', etc, but Hill realigns them as in KH/M06-ko27 and separates *kopo and *komi, and associates Azt *komi 'pot' with *komi 'back' as I have also. [NUA: Tak]
- 120. *nïhaC / *nï'aC / *nïCaC '(make) basket': M67-24 *ne 'make baskets'; KH.NUA; M88-nï6 'make baskets'; Munro.Cup *nïha-t (p. 230); KH/M06-nï6: Cp née 'make basket'; Cp né'et 'basket'; Ca néh 'make basket'; Ca néat 'basket'; Sr nïï' 'make basket, vi' (Sr nuii'v fut, Sr nuaa'qa' imm. fut.); Sr nïaa't 'basket'. Per Munro, *nïha-t is not a bad reconstruction, though *nï'aC-t or *nïCaC-t may be as likely. A final glottal stop in Sr nïaa't and -t absolutive suffix (instead of -l) in other languages suggest an original final consonant. Jane Hill notes also Kw nehe- 'make a coiled basket'; Kw nehe-ka-pi 'small round basket'; Kw nehe-nïmbï 'pointed tool for making coiled baskets'; TSh nïhakka 'basket'; Ch nïŋá 'weave a basket, v'; Ch nïŋá-pi 'basket'. [h vs. '; t vs. l] [NUA: Tak, Num]
- **121.** *cikku 'basket': M67-23 *ciku, *siku 'basket': M88-ci6; KH/M06-ci6: Mn cikku 'seed beating basket'; NP cikku 'sieve basket'; CN čikiwi-tl 'basket'; Pl čikiwit; HN ciki(wi)-tl. In M67 are Wc cikïiwíti and Cr sikïri 'canasta', but not in M88, which let's re-include. [NUA -kk- vs. SUA -k-] [NUA: Num; SUA: Azt, CrC]
- **122.** *cippat / *cippot 'basket': KH.NUA: Sr čipat / čipöt 'shallow round, dish-shaped basket'; Ca čípatmal 'open basket for sifting'; Ktn copota-t 'narrow-mouthed storage basket or container' agrees in geminated *-pp- if the first V assimilated to the 2nd. [-a/o or *-at vs. *-ot] [NUA: Tak]
- **123.** *cay 'basket': NP cayïnu 'winnowing basket'; Cp čáyma-l 'medium-sized round basket'; -maL is a diminuitive suffix in the Tak languages, which yields *cay- in Cp and the same three segments in NP. What of the first syllable of Ktn ca'cakin-ihwa'-t 'winnowing basket' and Ktn ca'cakin 'winnow in a certain way, v'? [NUA: Num, Tak]

NB, for *wa'na 'rabbit net' and SUA *waLi 'basket', see at 'net'.

BAT; MURCIÉLAGO

124. *paCti'a 'bat'; M67-25 *paca 'bat'; Fowler83; M88-pa29; Stubbs 2000a-1 *pati'a; KH/M06-pa29: Tb pacaawa-l 'bat'; SP pačč'a 'bat'; Kw paaca'aa-zi 'bat'; Ch pááca'aci 'bat'; CU páačæ-či 'bat'; Cr háci'i 'bat'; Ca páli-l 'bat'; NP pitahana'a 'bat'; NP(B) pigahanna'a. The preceding NUA forms and Cora from SUA make this a prime example in which medial *-t- (or *-tt-/-Ct-) should be reconstructed for an apparent -c- in the UA words for 'bat'. Forty-four years ago Miller (1967-25) reconstructed PUA *paca 'bat' based on Tb and SP. Miller listed more Numic forms in M88-pa29 (but no reconstruction), and Alexis Manaster-Ramer (1992a) mentioned the NUA set as a potential anomaly to the sound law of medial *-c- >-y- in NUA. Then Stubbs (2000a) suggested a reconstruction of medial *-t-. In fact, Stubbs, for other reasons, mentally reconstructed intervocalic *-t-, rather than *-c-, before realizing its relevance to that sound law and to Manaster-Ramer's suggestion (1992a) that we seek other sources for NUA medial *-c-, besides PUA *-c-, and a closer inspection of more UA terms for 'bat' lent striking support for Manaster-Ramer's suggestion.

When considering only Tb and most Numic forms, as Miller did, *paca seemed viable at the time. But including Cr, Ca, and NP recommends medial *-t-. Cr háci'i 'murciélago' of SUA agrees perfectly with the first three segments *pac (Cr h < *p), so we can hardly suggest it is not related. Then i as fourth segment also agrees with Ca i in Ca páli-l 'bat'. However, Ca shows l instead of c for the second consonant. Intervocalic L and c have

little in common, except that universally they both often derive from intervocalic t. In fact, PUA *-t-intervocalically does result in Ca l (Sapir 1914; Manaster-Ramer 1992b), so Ca pali- aligns nicely with *pati. In addition, the most universal cause of $t > c/\check{c}$ is a following high front vowel, which vowel (i) is exactly what we find in both Ca páli-l and Cr háci'i. Thus, PUA *-t- seems a more viable reconstruction, if not a cluster, perhaps *-Ct-, since *-t- by itself usually > -r-/-d- in most Num languages.

Further supporting a reconstruction of *paCti('a) is the pita- portion of Northern Paiute pitahana'a 'bat' with two noteworthy features: (1) it actually shows the medial stop -t-; and (2) it also shows the first two vowels (a-i) as proposed, though metathesized (i-a), which metathesis probably helped preserve the t, since the vowel a, instead of high front i, would then have followed t. Furthermore, the reconstruction *paCti('a) aligns with Manaster-Ramer's suggestion that the origins of NUA -c- be sought in sources other than PUA *-c-, in light of PUA medial *-c- > NUA -y- (Manaster-Ramer 1992a). In fact, the medial consonants of neither Ca pali- nor NP pita... could possibly have come from *c, but only *t.

A proto-form of *pati or perhaps more fully *paCti'a would account for these forms, since Kw, Ch, and SP in NUA and Cora in SUA all show a glottal stop beginning a third syllable, while Tb has w. For SNum *paca'a (Kw, Ch, SP, CU), the high front vowel encouraged palatalization of *t > c, and then i assimilated to a, being between two other a's. Both steps are natural processes: *pati'a > *paca'a > *paca'a. For Ca, PUA intervocalic *-t-> -l- is usual: *pati'a > pali. For Cr, the sound change of initial PUA *p > h is regular; then the same palatalization happened as in SNum; and the last vowel assimilated to the second: *pati'a > *haci'i. [*-t-> -l-/-c-; V metathesis in NP; '> w in Tb] [NUA: Num, Tb, Tak; SUA: CrC, Tep, Trn, Cah, Opn; see also *so'o-pati 'bat' below.]

125. *so'o-paCti 'bat'; L.Son258 *sopï-ci 'murciélago'; M88-so10; Stubbs 2000a; KH/M06-so10: Tr so'péci / so'picí 'bat'; Wr so'péci 'bat'; Eu cikúrsopic 'bat (mouse-butterfly)'; Eu sopíc 'butterfly'; My sotcik 'bat'; Yq sóocik 'bat'; PYp ho'opisa 'bat'. Considering these SUA forms, the first five languages (Tr, Wr, Eu, My, Yq) belong to TrC. The last (PYp), as with all Pima dialects, belongs to the Tepiman branch. Since the sound changes from PUA to Tepiman include PUA *s > h and PUA *c > s, then PYp h (<*s) and PYp s (<*c) correspond to the consonants of the other SUA forms as expected. Thus, the SUA forms point to SUA *so'o-pVci for the consonants, and the last two vowels in PYp ho'opisa may be explained by the same kind of vowel metathesis apparent in NP (*pati > pita). PYp would suggest that syncope of the second o occurred in Tr, Wr, and Eu (*so'opVci > *so'pVci), for vowel (and syllable) syncopation is very common in UA non-initial syllables. The Cahitan languages (Yq and My), though cognate, are hardly helpful in the reconstruction, having syncopated one more vowel and then a bilabial (p) in a consonant cluster after a round vowel (o), i.e., Cah lost two full syllables— *so'o-pati > *so'pVci > *sopci > *sooci-(k).

As for the origin of *so'o- in a hypothesized compound *so'o-pVci, nothing is certain, but possibilities emerge. Note that Eu cikursopic 'bat' contains Eu cikur- 'mouse'. German fledermaus 'bat' similarly attests to the frequency of 'mouse' words in 'bat' lexemes due to the mouse-like appearance of the little flying mammals. With that in mind, Yaqui (Ya) 'asó'ola 'little mouse' contains a sequence of four segments (-so'o-) identical to the unidentified, but reconstructed, element in SUA compounds for 'bat'—*so'o-pVci. The sequence also shows the syncopated vowel (*so'o-pVci > so'peci) apparent in both Yq and PYp, but not apparent in Tr, Wr, and Eu. A more remote possibility is Hopi (Hp) sawya 'bat', but has only initial s and rounding in common with *so'o-. Yet regardless the uncertainty of *so'o-, the similarity of the latter portion *-pïci to intermediate *paci (< *pati'a) is considerable—three of four segments. Miller (1967) reconstructs the NUA forms as *paca and Lionnet (1985) reconstructs the TrC forms as *sopï-ci, but the PYp form was not available at that time. Questioning the suggested morpheme break, we see substantial similarity between TrC *-pïci and Cora háci?i (< *paci'i < *pati'a) and NUA *pac... (< *paCti'a). Furthermore, since loss of a possible third syllable and a very natural palatalization are neither one unusual in UA, the only looming difference between the NUA and SUA forms is the first vowel—a (in NUA) vs. e/i (in SUA), except for Cr a, which also agrees with NUA a. The most common reflex of *i in SUA is e. Yet while e is the reflex of PUA *ï in most SUA languages, an assimilation of a > e/_-i motivated by a following i would not necessarily have anything to do with PUA *ï. Only the twin languages Tr and Wr show e, anyway. Eu and PYp show i and i-a, respectively, which vowels do not correspond to *i. So if e was already in the repertoire of the vowels of Tr and Wr (after *i > e), then the e in -peci could as easily be an assimilation from a toward i rather than deriving from PUA *ï, for e is directly in line with a change halfway from a toward i. Assimilation of (a) halfway (e) toward (i) is highly natural (*pati > peci). The vowel metathesis in PYp (*a-i > i-a) may have occured before the assimilation of a > e/i--*pati > *paci > *pica > Tepiman *pisa—and would also recommend an original voweling of a-i; thus, the NUA and SUA forms are likely related, with a prefixed *so'o- in much of SUA:

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*paCti'a > *pita- (NP)
> *pali (Ca)
> *paci'a > *paca'a (Tb, Kw, Ch, SP, CU)
> *paci'i > háci'i (Cr)
> *paci > -peci (Tr, Wr, Eu)
> *paci > *-pica > Tepiman -pisa (PYp)

[palatalisation; V metathesis in PYp] [SUA: Tep, Trn, Cah, Opn]
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- **126.** *ho'napi 'bat': I.Num33 *ho(')nopi 'bat'; M88-ho4; KH/M06-ho4: Mn ho'nóbi; NP pitahana'a; NP(B) pigahanna'a; Sh hono-pittsihï. To these should be added TSh honnopi-cci 'bat' and the first part of Cm hïnïbi pokaa' 'bat'. The Mn, TSh, and 2nd NP forms suggest a consonant cluster 'n/nn. NP is likely a compound, the first part (pita-) belonging above with *pati'a, and the latter part (-hana'a) showing three consonants in common with *ho'napi. It seems probable that the original 2nd vowel was *a and that the bilabial (p) encouraged the rounding of preceding vowels, for NP shows a. Cm ï agrees with neither, but could feasibly result from either. [cluster; V assim] [NUA: WNum, CNum]
- **127.** *nakamïLi 'bat, lit: 'ears-run' or 'running ears' (Zarina Estrada Fernandez, p.c.): B.Tep164a *naakamïri 'bat'; B.Tep164b *nanakamïri 'bats, pl.'; Fowler83; M88-na30; KH/M-na30: LP naakmil; NT naakamïli; ST nakmïly/nakmly. To these, add TO nanakumal 'bat' which appears patterned after the plural of the other Tep langauges (cf. B.Tep164b); and it would appear that vowel-line shift or a preceding m and lack of stress or metathesis caused the previous a > u in TO. [SUA: Tep]
- **128.*cinaakan** 'bat': CL.Azt10 *cinaakan 'bat'; Fowler83; CN cinaakan; Po cinaka; To conoka-tl; Z ciinaaka; Pl cinaakan. Campbell and Langacker note that this may relate to *cuŋV 'suck'. It could be a reduction of *nakamali > nakam > nakan, with *ci(n) 'suck' or something prefixed. [SUA: Azt]
- **129.** *pïpakaC 'bat': Jane Hill (p.c.): Ktn pïvakat 'bat'; Gb po-vahkaht 'bat'. [Gb o < *ï] [NUA: Tak]

Bathe: see wash

Bead(s): see neck/necklace

BEAN; FRIJOL

- **130.** *kwapi 'beans': B.Tep4a *bavi; 4b *bavigadï 'his own beans'; M88-kwa15; KH/M06-kwa15: TO bawi; LP babi; PYp bavi; ST báv/ bavii; baav. Hp pàapï 'bean (in pods)' is probably a loan from Tep, since Hp kw = Tep b, and the Tep term itself may be a loan from outside of UA. [SUA: Tep, Hp loan]
- **131.** *muni 'bean': M67-29; L.Son157 *muni; M88-mu3 'beans'; Jane Hill 2001; KH/M06-mu3: SP muurii; Hp mori-vosi 'bean, bean seed'; TO muni; Eu mun(i); Wr muní; Tr muní; Yq múuni; My muúnim (undoubtedly a plural); Cr múhume; Wc múume; Pl muhmulu 'beans cooked with juice'. As Miller (1967) suggests, these may reflect a loan from outside of UA. WM Ute marívïsi was probably borrowed from Hp mori-vosi, although the vowels may suggest some time depth, since Hp o < *u and Num ï < *u at times. The three Yq terms show assimilation of not only the consonant n > m before a bilabial, but also the assimilation of the vowel *u > a in light of three following *a*'s in Yq mam-ba'awa 'pot of beans' (bá'awa 'stew'); Yq muuni 'bean'; Yq mum-bakim 'cooked beans'. The fact that we have liquids in NUA and n in SUA (except Pl), the opposite of the usual pattern of PUA *l nasalizing in some NUA branches, makes this suspicious, perhaps as a loan into UA from outside UA. Note that Wares (1968, 78) lists several Yuman forms, of something near *marik 'bean', which provide a more consistent agreement in Yuman than exists in UA for this term. Jane Hill (2001) also notes Seri mon, Yavapai merik, and Siouan forms resembling mVni from Rankin 2000. [liquids opposite of usual; h in Cr, Pl] [NUA: Num, Hp; SUA: Tep, Trn, Cah, CrC, Azt]
- **132.** *(tï-)poL 'bean': a case can be made for *-poL- (or *tï-poL) in Ca tévil- of Ca tévilmalem / tévinmalem 'beans, pink beans' (since Ca i < *o), the -wol/pol portion of TO hawol/hawpol 'lima bean' if wol/pol is a different morpheme and if medial reduplication suggests such a morpheme break, and perhaps Eu tépar 'kind of bean' with a vowel change, but probably not Tbr tolom 'pochote, frijol pinto' (tï-wol > twol > tol...). [NUA: Tak; SUA: Tep]

NB, *pusi 'bean, seed', as Miller (1996) and others state, is likely related to *pusi 'eye, seed'; nevertheless, it is found in words for 'bean' in a number of UA languages: Tbr voposí-t 'frijol'; Wr ciwapúsi 'frijol cabra, a kind of bean'; Hp mori-vosi; and WMU marívïsi (borrowed from Hp).

BEAR, n; OSO

- 133. *hunap-wïL-ta 'bear, badger-big': Sapir; M67-18; Fowler83; M88-hu10; KH.NUA; KH/M06-hu10: as Miller (1967-18) and others have noted, the Hp and some Takic words for 'bear' are the augmentatives of 'badger' (*huna-wïL 'badger-big'): Hp hoonaw; Sr hoona-t / huuna-t; Gb húna-r; Ca húnwe-t; Cp húnwe-t; Ls hún-wu-t; Tb uuna-l 'black bear'. Add Ktn huna(ï)-t 'bear' which lost -w-, if not the whole last syllable. Note (1) that at that stage of UA, adjectives followed nouns, and (2) that absolutive -t- (vs. -l) in Ca and Cp suggest a final C. [NUA: Hp, Tak, Tb]
- **134.** *posi 'bear': Fowler83; PYp vohi; NT vóóhi; ST voohi; Cr huúce'e; Wc húuce. Tep and CrC have much in common, if we consider a not infrequent c/s enigma. The first syllable of these five forms agree perfectly with PUA *po, since *p > Tep v; *p > CrC h; *o > CrC u. Tr/Wr *wohi (Tr ohi/gohi; Wr wohi) are probably borrowed from Tep. Nevertheless, the pattern of Wr w and Tr o/go is similar in 'salt' and 'corn cob'. Note the similarity of Tr gohi 'bear' and Keresan *gúháya 'bear' (Miller and Davis 1963) as a possible loanword from UA to Keresan. [sibilants; w/(k)o; labials; kw, puebloan loan, *o > u in CrC; *p > h in CrC] [SUA: Tep, Trn, CrC]
- **135.** *paha 'bear': Mn pahabíci 'bear'; TSh pahamicci 'bear'; and the initial syllable(s) of NP padua 'bear' and Ch papáwa 'bear' may relate as well. [labials; -Np- > m/b?] [NUA: Num]
- **136.** *kwiya 'bear': SP kwia; WMU kwiyá-ġa-tï; CU kwiyá-ġa-tï. Could Kw pogwitï (< *pokwittï) 'grizzly bear' be a compound of *posi or an assimilated *pa- (above) and truncated *-kwiya? Cf. *kwiLa 'badger'. [NUA: SNum]
- 137. *mo'oLoy 'bear': Kw mo'orii-ži 'brown or black bear'; Tb mo'olohy 'brown bear'; Ktn mo'loy 'bear sp, small bear with white throat'. Jane Hill (p.c.) noticed Palewyami Yokuts molay' 'bear' as a likely loan source for these UA terms, citing Callaghan (2001, 333). All three UA languages have the Yokuts glottal stop moved forward; and indeed, glottal anticipation is common in UA. So did all three do so independently or do these represent three descendents from an early loan into UA that did so initially? [glottal stop anticipation] [NUA: Num, Tb, Tak]

BEAR, BORN, BABY, CHILD; NACER, DAR LUZ, NIÑO/A;

see also man for son, and woman for daughter

138. *puLi 'give birth, daughter': Sapir; M88-pu21; KH.NUA; KH/M06-pu21; Cp pulíne 'give birth'; Cp pulíni-š 'baby'; Ca púlin 'woman's daughter'; Sr pulin 'woman's daughter'. Also Ca púli 'fall, be born' should be included. Sapir also ties CN -pil 'offspring, son, daughter' and Cr péri 'son, daughter, child' with the Tak forms. Sapir suggests *t > 1 for both Tak and SUA, but *puLi seems at least as likely. Normally Cr ï < *u (but e is close to ï) and CN i < *u, so the vowels work out fairly well, but some questions remain. [UA liquids; V's; *l not n in Tak??] [NUA: Tak; SUA: CrC, Azt]

139a. *tuwaC / *tu'aC 'to bear, son, child': M67-54 *tu 'boy'; I.Num233 *tu(w)ah/*tu(w)a('a) 'boy, son, child'; M88-tu9; Miller, Elzinga, McLaughlin2005; KH/M06-tu9: Mn tuwa 'child, son, son of sibling of same sex'; Mn tuwa-mï-du 'to give birth'; NP tua 'son'; TSh tua"-/ tuacci 'son'; Sh tua 'son, child'; Sh tua" 'give birth to'; Sh tutuah 'be born'; Cm tua' 'son'; Kw tuwa 'son'; Ch(L) tuwa / Ch túa 'man's son'; Ch tua-ni / tu'aa-ni 'my son' (cf. Ch tu'aa 'marrow'); SP tua" 'child, son, give birth to'; CU tua-ci 'son'; CU tuay 'give birth to'; Tb tu'mul 'baby, offspring'; Cr -tī'ïrii-múa 'son of a man'. Besides Numic, Tb, and Cr, others such as Nv tuturh 'hijo (por parte del padre') and Cp tú'a 'to bear fruit'.

139b. *tuwiC / ***tu'iC** 'boy, child': M88-tu10 'young man'; I.Num222 *tuipihci('i) 'young man'; KH/M06-tu10: NP tuipicci 'teenage boy'; TSh tui-cci; Sh tuinï-(ppï) 'boy'; Sh natuipicci/ tuicci 'young man, boy'; Cm tuinïhpï' 'boy, sg'; Tb tu'ilam 'boy'; Gb točínit 'hombre'; Sr tïčint, pl: tïčinam 'young man'; Hp tootim 'boys (pl. of tiyo)'. Tr towí 'niño, muchacho' also fits, since *u > Tr o,u. Add Ch(L) tu'waci 'young of animal'. Because final a vs. i alternations are common in UA, the *tuwa/*tuwi forms are surely related. In fact, the vowelings *tuwaC 'bear, vt'

- as a transitive form and *tuwiC as a stative result (child born) may be original. More interesting is the occasional glottal stop (in both Tb forms, Cr, Cp, Ch). [w/'] [NUA: Num, Tb, Hp, Tak; SUA: Tep, Trn, CrC]
- 140. *maLa 'child, offspring': VVH84 *mala 'child, with female reference'; M67-86 *mal/*ma 'child'; BH.Cup *-ma(l) 'diminuitive suffix'; B.Tep145 *mara 'offspring'; L.Son137 *mara 'hija del padre'; M88-ma7; KH/M06-ma7: Sr maih-c 'young one, child'; Ktn mayha-t 'child'; Hp maana 'daughter, adolescent girl, woman who has never been married'; TO maD(i) 'female's offspring, nephew or niece by a younger sister, fruit of a plant'; PYp mar 'child'; PYp mar-t 'bear a child'; PYp mar-tim 'give birth'; NT már(a) 'daughter, son'; ST mar; Op mara; Eu márwa; Yq maára; My maála; Wr malá-la (absol) / mala-wá (poss'd) 'daughter'; Tr mará. In light of PYp mar-t 'bear a child', note Sr maiha' 'bear (a child)'; Ktn mayha' 'give birth' and Nv marhta 'parir' as if from *maL-ta, a verbalized noun—'to make/cause offspring' or 'to be daughtering/offspringing'—similar to Hp tii-ta 'offspring-do'. Manaster-Ramer includes this set in "A Northern UA sound law: *-c->-y-" (1992b-3) where he has Sr maiha' and Ca maylyu and other UA forms deriving from PUA *ma'ci- 'emerge, come out, be born'; but are they tied to Tep *maL? I presently separate them. [*l/r/n; clusters in *maL-ta; nasals] [NUA: Tak, Hp; SUA: Tep, Trn, Cah, Opn]
- 141. *oN(w)a'a / *oN(C)ma'a 'baby': I.Num15 *oŋa(a)('a) 'baby, child, young (of animals)'; M88-'o15 'baby'; KH/M06-'o15: Mn 'owaa'a 'sound of baby crying'; Mn owaa'(a)cci'(a)cci'(a) / owaa'(a)'nuku'(a) 'baby'; NP(Yerington) oha'a 'baby'; NP(McDermitt Reservation) onka'a; NP oŋa'a 'baby' (Snapp, Anderson, Anderson 1982, 20); NP(B) oha'a; TSh ohmaa(cci) 'little baby' (Dayley); Sh ohmaa 'baby'; Sh pa'ohmaa 'water baby'; WSh ohaa(cci) 'baby'; WSh pa'ohaa 'water baby'; Cm ohnáa' 'a baby'; SP oa-"/N 'young of animals'; SP ïŋaa'-'baby', SP paa-ïŋaa'-ppici 'water baby'; Ch ïŋa'apici. We are likely dealing with a medial cluster. As TSh and Sh both have forms with and without -m-, the -maa forms may contain another morpheme, perhaps *maLa. [cluster in medial w/hm/hn/ŋ/ø] [NUA: Num]
- **142a.** *konï 'child, offspring': CL.Azt26 *konee 'child, baby'; M88-ko24; KH/M06-ko24: Pl kunee-t, kuneew (poss) 'baby,child'; CN konee-tl 'child, offsrping of female'. I like Hill's association of these with *kono 'cradle board' below, for a tie seems probable, especially in light of the Tb forms.
- **142b.** *kono 'cradleboard': KH/M06-ko24: TSh kohnon(cci) 'cradle board'; WSh kohnon 'cradle (basket)'; Kw kohno-ci; Ch konó; SP qonno; WMU qönő; CU qónö; Tb hono- 'fetus'; Tb honokaŋ 'be pregnant' (AMR). [Liq; N] [NUA: Num, Tb; SUA: Azt]
- 143. *piso'o- 'child, boy, children': Kw pišï'oo-či; Ch pisó'oci; Ch(L) pipiso'wa 'woman's child of either sex'; Ch(L) pipiso'oci 'child from about four months to six years of age'; SP piss'o-ci 'child, boy', pl piss'o-ci-ŋwï 'children'; WMU píščiu 'children, pl' (< *piso'otimï); CU píisčiu (pl). The two distinct Ch(L) terms merit thought. The final nasalized u in the WMU plural reflects the SNum pl suffix -imï. [NUA: SNum]
- 144. *ciLa 'hatch out, be born': M88-ci22; KH.NUA; KH/M06-ci22: Sr čilykam 'small children'; Ca čílyay 'to shell (nuts, etc.)'; Ls čiila/i 'hatch out (of chicks), remove shell'. These may relate to *caLi 'shell, hatch' and *caLa 'bark', both listed at 'skin' where are Ca čáli 'to hatch (eggs as a bunch)'; Cp čále 'to husk, shell' (cf. Cp čala-l 'bark'); Ls čáála/i 'break off pieces from a surface, as bark from a tree, flakes from a rock, vt; lose shingles in a windstorm (of a house)'. [V's i-a/a-i] [NUA: Tak]
- **145.** *kuci 'child, girl': Tr ku*či 'girls'; Tr kuči 'little ones'; Tr kúčiwa 'son(s), duaghter(s), i.e., offspring of either gender'; Wr kuh-tewé 'girl'; Wr kucitá, ku'-kucí (reduplicated form) 'son, daughter'; CN kokocin 'girl, servant girl'; note how similar are CN kokocin and Wr ku'kucí 'children'. [o/u; CN/Wr] [SUA: Azt, Trn]
- **146.** *tana 'offspring': Wr taná 'child, little one'; Wr tana-ní/tani-má 'give birth'; Tr ŕaná(ra) 'cría, hijo'; Tr ŕana-mea 'parir, dar a luz'; Ktn titini-t 'young boy, child, baby' is plausible in spite of a vowel change. [vowel change, NUA and SUA: n:n] [SUA: Trn; NUA: Tak]
- 147. *kwaki 'baby': Sr kwakii-t 'young one, youngest one'; Ktn kwaki-t 'baby'. [NUA: Tak]

NB, see 'fall' (*wïci) for the fuller treatment of Num *wï'i 'fall, be born': Mn wï'i 'born'; Kw wï'i 'be born'; Kw wï'i-ku 'fall'; CU wi'i-tií give birth to'; CU wi'i 'drop, fall, be born'.

NB, for *yoli, see 'alive'.

NB, for Tr/Wr nawa 'be born' see at 'go'.

BEARD, WHISKERS, FACIAL HAIR; BARBA

In M88-mo4, M88-mo5, and M88-hi7 are a variety of terms for 'beard' and 'mustache' that probably derive from two archaic compounds of 'mouth-hair': *mu-con and *mu-suwi. For *con/comi 'hair, hide' and *suwi 'hair' are both PUA stems. Iannucci divides these in I.Num96 *mocoN 'beard, facial hair'and I.Num95 *mosui 'mustache'.

148. *mu(N)-comi / *muC-comi (> *mu-con) 'mouth-hair': I.Num96 *mocoN 'beard, facial hair'; M88-mo5; KH/M06-mo5: TSh mocon 'beard'; Sh mocon 'beard, mustache, whiskers'; SP mončo-vi 'whiskers'; CU möcö-pï 'beard'. KH/M06 adds WSh mocon; Cm moco; Ch monco/mončo. Also add WMU möčő-či / möčő-(vi) 'mustache, beard, n'; WMU möčő-n 'my mustache'. Is this a compound of *mu(C) 'mouth' and *con(i) 'hair' (< *-comi), with transposed nasalization in SP and Ch? Hp mocovï 'front protruding facial area, bill, beak, snout' looks like a loan from SNum. Remember that *-c- > -y- in NUA, so NUA -c- from a cluster is valid, but not alone, unless it is a fairly recent compound. [CVCVN > CVNCV" in SNum?] [NUA: Num]

149a. *mu-suwi 'face/mouth-hair': I.Num95 *mosui 'mustache'; L.Son57 *himusi 'barbas'; M88-mo4; KH/M06-mu26 *musat 'mustache': NP musui; TSh musuwi 'mustache' (cf. suwi 'pubic hair'); SP mošoi 'mustache' (cf mošoa 'pubic hair'); Ch -moso in soomoso 'armpit hair' (soovi 'armpit'); Ls múúṣi-l 'beard'; Cp muṣu 'beard'; Tb umusat 'whiskers, beard' (AMR); Tbr hi-musí-r; Cr miïsí; Yq himsim; My hiímsim. These are a compound of *mu 'mouth' and *suwi 'body hair'. The facts that TSh has both mocon and musuwi (as SP also), and that the various other UA words align with one or the other all suggest that both compounds existed. Note below other compounds of mouth-hair (*ti'ni-po).

149b. *hi-mu-suwi 'face/mouth-hair': L.Son57 *himusi 'barbas'; M88-hi7; KH/M06-hi7: A hi- prefix precedes some TrC forms—Tbr hi-musí-r; Yq himsim; My hiímsim; Eu hínsi (gen. himúste)—followed by reductions in many: *hi-mu-suwi > hi-musi > himsi/hinsi (four syllables to two). Both Ls muusi above and these TrC forms show reduction of *mu-suwi > *muswi > *musi, and *hi-mu-suwi > himsi in Yq, My, Eu. [hi- pref; *u > ï Cr; syncope, reductions; -ms- > -ns- in Eu] [NUA: Num, Tak, Tb; SUA: Cah, Opn, Tbr, CrC]

150. *ïca'-po'wa 'whiskers, facial hair (chin-hair)': TO eš-po 'beard'; TO eš 'chin'; Wr ehcapóa 'barba, bigote' (< Wr po'á 'lana'); Tr ca'bó 'barba, bigote'; Eu ícva 'barba'. Cf. *po'wa 'hair'. [unusual Eu V] [SUA: Tep, Trn, Opn]

151. *tï'ni-po'wa 'facial hair, lit. mouth-hair': Nv tïnipo 'barbas'; NT tĩñíívoi. [SUA: Tep]

NB, for *kaCma in Sr qän, CN kama, and perhaps Mn qana, see face.

BEAUTIFUL; BONITO, LINDO, HERMOSO

- **152.** *sïhima / *sï'ma 'beautiful, attractive': Wr se'má 'beautiful'; Tr semá/semati 'hermoso, bello, bonito'; Hp sïhimï 'handsome, attractive'; Ca sinsimniš 'attractive, cute'; and perhaps Ca sé'ni 'decorate' may be kept in mind. Hp h aligns with the glottal stop of Wr and Ca, and many consonants and cluster combinations can reduce to a glottal stop. [h/] [NUA: Hp, Tak; SUA: Trn]
- 153. *ci'ma / *(L)a'cima 'beautiful': Cp á'čimal 'pretty, nice'; PYp la'sima 'beautiful'; Tr či'má(k)ame 'precioso, primoroso, bello'; Tr či'má-re-ma 'ser bello, primoroso, precioso'. With additional prefixed morphemes in Cp and PYp, and a glottal stop hop, the Tr form seems related to the Cp and PYp forms, as all agree in five segments—(')ci(')ma—and PYp s corresponds with c of the other two languages. With c/s alternations in UA, it is possible that these are related to *sï'ma above. On the other hand, Tr has both semá and či'má. [glottal stop hop; c/s] [NUA: Tak; SUA: Tep, Trn]
- **154.** *yawa / *yï'a 'beautiful': KH.NUA; M88-yï19; KH/M06-yï19: Ls yawáywa 'be pretty, good-looking'; Sr yï'aayï'a'n 'be pretty, beautiful'; HN yehyek-cin 'beautiful' / yeyeh-ci 'bonito'. Evidence does exist for correlations between *' and *w, so this set that both Miller and Hill have proposed is indeed valid, Nahuatl -h- / -'- are sometimes indistinguishable. HN -k- is similar to the -k- (< -'-) in CN tekpin-tli 'flea'. [w/'; w/glottal stop] [NUA: Tak; SUA: Azt]

- **155.** *uCyoLi 'beautiful': Yq 'uhyói 'bonito'; My uhyóoli/uhyóori 'bonito, pintoresco'; AYq uhyooli / uhyoi 'beautiful (inanimate)'. [liquids, clusters] [SUA: Cah]
- 156. *tutuLi 'beautiful': Yq tutúli 'bonito' (used by women); Yq tutú'im 'cosas bonitas'; Yq tú'ute 'componer, limpiar, adornar'; AYq tutu'uli 'handsome, pretty'; My tutu'uli 'hermoso'; My tú'uri 'está bueno, bien'; My a'a tú'ure 'le gusta'; My a'a tú'uli 'le agrada'; My tú'uwa 'bondad, lo bueno'; My tú'usi 'mucho, bien'; perhaps the -ţī(ţ) of Sr ceikţī|ţ 'beautiful, pretty one, n' though additional data for isolating the meaning of *-tī(t) would be nice. Keep in mind that -'- < -L- (or even from < -t-) is common in Cahitan. [SUA: Cah]
- **157.** *numa > *noma 'good, good-looking': Ktn numua-c / noma / nomo 'good, well, pretty'; Hp nööma 'wife, mistress'; AYq nuhmeela 'youth, young man'. Hp nööma matches the one variant Ktn noma, so wife (Hp) and youth (AYq) as 'good-looking' I consider more probable than not. The change *u-a > o-a is frequent in UA as well. [NUA: Tak, Hp; SUA: Cah]

NB, for *pisa/piha 'sweet' see 'sweet'; and for *pisa 'want, beautiful' see 'want'. NP, Kw, and Sr have separate forms.

BEAVER;

158. *ha'Ni 'beaver': Sh anii; Cm ha'nii. Jane Hill also forwarded NP ha'nisa 'beaver' (Thornes 2003, 53). [NUA: Num]

159. *pa'wVN / *pa-wanci 'beaver': Cm pa'wihtima'; CU pawíi-ci; SP paonci-vï. The reconstruction is tentative, and the first syllable is likely *pa*- 'water'; Givon (1979) suggests that the CU form may historically derive from *pa-wii-ci 'water-knife' while SP looks like it could be a compound of 'water-fox'. Cm suggests a C (perhaps N) before -t-. So at least two of the three are likely related. [NUA: Num]

BEE, WASP; ABEJA, AVISPA

160. *ku(N)ta(N)(pa) 'bee': Cp kutáŋva-l 'bumblebee'; Ls kúúkunta-la 'bumblebee'; My kuta kúmera 'bee that lives in wood'; Nv kuarhagi mumuva 'abejas grandes que hacen panales'. WMU kuhččá-vi / kwihččá-vü 'wasp' better belongs with the other SNum forms below at *wiCta 'wasp'. A noteworthy observation of Jane Hill (p.c.) is the perfect match of correspondences between Cp ku'a-l 'fly, bedbug' and the Nv term. While I initially considered Nv a case of vowel anticipation (*kuta > kuara), common in Tep, the Cp-Nv match is strong enough to either suggest another set or subset, or even a loan from upper Tepiman (Nv) to Cp, with the vowel anticipation apparent. Note Cp -t- (< *-Ct-) and My -t- (often *-t- > L > a') both suggest a consonant cluster, as we see in Ls. [NUA: Tak; SUA: Tep, Cah]

161. *pita > ***pica/pici/picu** 'bee, wasp': M67-32 *pis/*pic 'bee'; L.Son194 *pica 'avispa'; M88-pi6 'wasp, bee'; KH/M06-pi6: TO wiipš; Eu pica/pisat 'avispa'; Gb píčokwar 'mosca'; Sr piičičo'a-c /piiččua'-ţ 'fly, n.'; Wr pi'cá 'vuitachi (como abeja, rojo, pica, que secreta goma usada como incienso)'; Tr pičé 'avispa grande'; My bíica 'avispa'; Cr pípwa'a-na 'bee'; HN 'eca-tl 'wasp'; Pl eca-t 'wasp'. Ken Hill adds Ktn picucu'a-č and considers Ch picïcïki 'rattlesnake rattle'. To these we can also add PYp vipisi 'wasp, hummingbird'; LP(EF) wípis 'avispa, bitache'; NT pipííši 'wasp, hummingbird'; ST viipis 'wasp'; ST vipiiš 'hummingbird'; AYq viiča 'wasp' (< *piica); and the -para (< *pita) of Tr napári / tapára / wapára 'bumblebee'. Two things may suggest we are dealing with an original PUA medial *-t- rather than *-c-: (1) the fact that three NUA languages (Sr, Ktn, Gb) also show medial -c-means something besides medial *-c-; (2) Wr -'c- with a glottal *stop* may also suggest the presence of an original *stop*, if not a cluster; (3) unable to find Spanish bitache or vuitachi in three large Spanish dictionaries, I assume they are local terms, perhaps borrowed from UA and show -t-. Does *pita > para allow the varieties Tr maparí / naparí / aparí 'tábano [horsefly]' and Wc vaarái 'fly, bee' or Tr ŕapára / apára / wapára 'moscarda, insecto mas grande que una abeja' and Tr napári / ŕapára / wapára 'abejorro, jicote'? [*-t- > *-c- > Tep *-s-; clusters, palatalization; -a/o alternation] [NUA: Tak; SUA: Tep, Trn, Cah, Opn, CrC, Azt]

- **162.** *wiCta / *wi'ta 'wasp': Tr me'čé/we'čé 'avispa'; Yq wíiča 'avispa colorada'; SP wicca-vi 'bee'; SP paŋwuca 'yellowjacket'; CU whčá-vi 'wasp, hornet'; Kw waca-vü 'yellowjacket'; Ch wacávi 'bee'; WMU kwihččá-vü / kuhččá-vi 'wasp'. One could wonder whether Mn munúcu 'wasp' is a compound of *mu- and s.th. like the 2nd and 3rd syllables of SP paŋwuca. A *p/*w dichotomy between AYq viiča (v < *p) and Yq wiiča may cause us to suspect a recycled loan from *pita/pica through Tep *wis, for Tep *wis could be the source for initial w, in the *wica forms, but they did not borrow Tep s, for all the non-Tep languages show c, not s, and Num is rather distant for Tep loans. One remotely possible explanation is if *p > Tep w before *-t- > *-c- > Tep s, and this loan diffused between Tep and TrC. Of course, c/s dichotomies are nothing new in UA either; thus, this and other matters await distentanglement. [NUA: Num; SUA: Trn, Cah]
- 163. *saŋa 'yellowjacket, stinging one': M88-sa28; KH.NUA; KH/M06-sa28: Cp šéše'nimi 'yellowjacket'; Sr haaŋa-ţ 'bee'; Ls ṣaŋá-ṣŋa-š 'thorny, a thorn'. Ken Hill adds Ktn haŋa-č 'yellowjacket'. To these can be added Ls ṣááṣaŋ-la 'yellowjacket'. Cp suggests a cluster. Cr sará 'bee' is a reasonable possibility. Perhaps < *sarŋa or other cluster? But the fact that Cr keeps -r- rather than the liquid going to glottal stop as usual also suggests a cluster. [cluster] [NUA: Tak; SUA: CrC]
- **164.** *suka 'bee, wasp': M67-33 *sek, *cek 'bee'; M88-sï18; KH/M06-sï18: Ls suká' 'type of wild bee'; Cr cíhka'a 'wasp'. What of Wc şakáci/şáákááci 'especie de avispa'. Ls and Wc agree in *a for the 2nd V, to which Wc could have assimilated the 1st to the 2nd: u-a > a-a. M67 and M88 include CN šiiko'-tli 'large bee, bumblebee' since Ls and CN šiiko'- point to *u for the 1st V; however, the CN form is also listed at 'fly, n'under *sïkwo-ti, so the whole matter awaits a secure resolution, though I think *suka and *sïkwo(ti) are separate etyma and CN belongs with *sïkwo(ti). But what of CN šoošokpaltoon 'red hornet (< CN šokpal-li 'sole of foot, red wasp')? The fact that Ls has two terms, one of which (Ls ṣaŋá) agrees with Wc ṣáká in 3 of 4 segments, but differs slightly in the 3rd (ŋ vs. k), and the other of which (Ls suká) also agrees in 3 of 4 segments, but differs in the first vowel (u vs. a) only adds to the enigma. [k/ŋ, but not SUA n] [NUA: Tak; SUA: CrC]
- **165.** *wa'waL 'wasp': Ls wááwa-la 'mud wasp'; Cp wá'walim 'yellowjacket'; Tb weweehyuu-l 'yellowjacket'. [assimilated/raised V in Tb?] [NUA: Tb, Tak]
- **166. *hupi** 'bumblebee' ('flower' compounds): Mn hibíwu 'bumblebee'; NP huupi nodda 'bumblebee'; Sh hipi-muih 'bumblebee' < 'flower-fly' perhaps; cf. *hupi(n)-ka 'flower'. [*u > i in Num] [NUA: Num]
- 167. *toŋa / *toNk(w)a 'bumblebee': TSh totoŋkwaa(n)tïn 'yellowjacket wasp'; Sr rooroŋaţ 'bumblebee'; Ktn róroŋa'a-č 'bee sp, wasp or honeybee'; perhaps Tb toomoogal 'bumblebee'. One might make a case for Tb approximating the proto-form, as a V syncope would result in a nasal velar cluster—*tomoka > *tomka > *toNka/toŋka—then reduplication, but these possibly tying to Tep *totoni 'ant' (at 'ant') would make all such obsolete and eliminate Tb. Cf. Tep *totoni 'ant'. [NUA: Num, Tak, Tb?]
- **168. *piko** 'bumblebee, large bee': AYq viko 'bumblebee'; Wr pihkó 'jicote, type of flying insect'. Might this tie to CN xiikoh-tli 'bumblebee' in some way, the source of Spaniah jicote? [SUA: Trn, Cah]
- **169.** *hoya/*hayo 'wasp': Hp hööhöya 'a kind of thin black wasp'; Wc hayú/haayúú 'abeja carpintera, avispa solitaria, jicote'; since both Hp ö and Wc u correspond to PUA *o, all four segments correspond with a vowel metathesis (*hoya/hayo); while that metathesis and thus this set are not certain, they seem more probable than not. [V metathesis] [NUA: Hp; SUA: CrC]
- NB, *nawta / *nawLa 'bee, wasp': NP nodda 'bee'; NP(B) noda 'bee'; NP(B) nota 'wasp, bee'; Wc naušá 'avispa peluda, hormiga velluda' [hairy wasp/ant]'. No number until more data answer some questions. NB, for *sïk^woti and *say(a)poli 'fly, bee', see 'fly.' NB, for *mu... 'bee, fly', see 'fly.'

beetle: see bug

BEFORE, BEGIN, START; ANTES DE, EN FRENTE DE, ADELANTE, EMPEZAR; see also new **170.** *pïwa(t) 'first, begin': B.Tep292 *vïïpïga 'first'; CL.Azt13 *peewa 'begin, v'; M88-pï4 'first'; KH/M06- pï4: UP wïïpïga; LP vïïpïg; NT ïïpïga; ST vïïpi'; TO weepeg 'first, adj/adv'; TO weepegat 'become the first, vi'; Nv bupuga (probably < *vïpïga) 'antes, primero'; PYp veepegi 'first'; NT ïïbïgidïïri 'behind, before'; ST vïïpï' 'first'; CN peewa 'to begin'; Pl peewa 'begin'; HN peewa' 'begin'. Let's also add Eu viwát 'primera vez'. One can observe frequent intervocalic voicing of *p in the Tep languages. I moved the Aztecan forms from M88-pï3 'new' to be here with the forms of M88-pï4, as the two overlapped. Cf. also *pïtu 'new' whereat is M88-pï3 'new' and B.Tep289 *vïtudï 'new'. Note the frequency of final -t or glottal stop in the reflexes. [*p > Azt p; Tep g < *w] [SUA: Tep, Opn, Azt]

171. *pacaC / *paca'a / *pacu (< *patu'a ?) 'first': M88-pa37 'in front, first'; KH/M06-pa37 *pacaC: Eu vacút 'primero'; Tr bacá 'delante, adelante, primero'; Tr bacá/bacó 'al principio, antes, primero, delante'; Wr pahcá / pacá 'older, first, ahead'; My páca'a 'primero'; My paci 'delante'; Wc haitïa; HN 'actowi' 'first'. Manaster-Ramer includes some of these forms in his article "A Northern UA sound law: *-c- > -y-" (1992b), wherein he reconstructs *pacaC and lists: Wr pahca 'older, first, ahead'; Tr pahca; CN ac-to 'first'; Tb paya-wa'i 'its front'; and Sr -paa-mkw 'front, before'. As for choosing between *pacu and *paco for forms showing a second round vowel, the facts that Eu and Wc both show *u (Wc ï < *u) and that the low vowel a would tend to lower an adjacent vowel combine to favor *u over *o. Also noteworthy is the glottal stop in My and Wr, perhaps deserving representation in a reconstruction. PUA *paci 'older (sibling)' as in 'firstborn, older, or ahead in birth order' may be related. The following may suggest that most final vowels go to i when taking a suffix: Eu vacídavai 'delante, por delante' (derived from vacút and vai 'por', ivai 'por aquí', avai 'por allí'. [*p > Azt ø; *a-u > *a-o; w/glottal] [NUA: Tb, Tak; SUA: Trn, Cah, Opn, CrC, Azt]

NB, for *kopi(-na) 'before', see 'forehead'.
NB, for *mu... 'first, nose, face', see nose.
NB, for the Tep forms *baso, see 'chest' *kwaco.

Begin: see before and new

Behind: see back

Belch: see cough, vomit

BELIEVE; CREER

172. *yawamin 'believe': KH.NUA; M88-ya27; KH/M06-ya27: Sr yawamin 'to believe'; Gb yawáyno 'believe it'. Gb lost -m-, which is otherwise identical to Sr through 6 segments. Ktn yaŋam 'believe' and Ktn yaŋamineana 'they believe all of it' belong as well, as some *w > ŋ; see *tïpiwa / *tïpiŋa 'ask', *siwa / *suŋa 'girl', *kowa / *koŋwa 'snake'. Also add Tb yahn~'aayanh 'believe him, vt' though tremendously truncated. After *-awa- > -o- in My yomnia 'contesta [answer], responde [respond]' (yawamin > yomin > yomni), My also shows both -m- and -n-. 'Believe' > agree > 'answer' is a plausible semantic shift. Ca hée'an 'believe s.o., agree on s.th.' will be explained. [reductions; -m- lost in Gb] [NUA: Tak, Tb; SUA: Cah]

173a. *pittiwa 'believe, be true/real, trustable': Eu vícwaci 'creer'; Eu vicwaterá 'creer'; Tbr wicimwá 'creer' (*w > mw in Tbr); Wr piciké-na 'believe s.o.'; Wr piciwá-ni 'tell the truth'; Wr piciwári 'the truth'; Tr biči/wičí 'creer, tener fe'. NUA shows a *tï- prefixed to *pitiwa: Hp tïpciwa 'believe'; CU tïvïci-gyay 'believe, vt'; CU tïvïci 'very, truly, adv'; CU tïvïci-tï 'truth'; Sh tïpi-ci 'really, true'; Kw tïvi-ži 'real, really, genuine'; Kw tïvi-ži-ga 'believe in'; TSh tïpici 'very, really, truly, adv & adj' (also in b below). The perceived morpheme break in Kw may be exactly that—perceived—but not diachronic. A third syllable (wa) is clear in Eu, Wr, Tbr, and Hp. The Tep forms—Nv ibiga/ibigida 'confiarse de alguno'; PYp hivig 'believe'—are probably also related, with a prefix: *pittiwa > *piciwa > Tep *hi-pis(i)ga > *ipisga > *ipiga, as s in a cluster evaporates quickly in UA, especially in Tep; thus, the -viga portion aligns well. As for a reconstruction of medial *-tt-, -c- exists in both NUA and SUA, and thus suggests something other than PUA *-c-. Add Ktn pucuk 'very, hard'. Note both here and at *pow 'road', Ktn has k < *w. [syncope; *tï- prefix; *-t- > -c-; palatalisation; reductions]

173b. *tï-pitti 'very, really': I.Num248 *tïpici 'very, really'; M88-tï34; KH/M06-tï34: Mn tïbizi-túsu 'it's true, for sure'; Mn tïbizi-tu 'great, important'; NP tïpicci 'very much, really, authentic'; TSh tïpici 'very'; Sh tïpih-sïh 'true';

Sh tïpi-ci 'very, really'; tïpicaan 'real good'; Cm tïbici 'really, surely, very'; Kw tïvi-šï(m)bi 'really? Is that so? It is so. It is true'; SP tïvi-ci 'very, really'; SP tïviciġa 'obey, v'; SP tïvi-šu 'sure enough'; CU tïvïci 'very, truly'; My tépa 'muy/very'. Add Ch(L) tïvici 'real, genuine'. This likely ties to *pittiwa above with a *tï- prefix. [*-p-] [NUA: Num, Hp, Tak; SUA: Tep, Trn, Opn, Tbr, Cah]

174. *paso (> *papso) 'true, consider true/believe, truly, indeed!': TO wohoh/wehoh 'truly, indeed, in fact'; TO wehohcuđ 'believe in'; PYp vohovi 'correct, true'; PYp vohovig elid 'believe, vt'; PYp vohgelia 'obey, vt'; PYp vo'gelca 'believe, vt'; NT váávoitïudai 'make or consider true'; NT váávoi 'true, certain'; NT vááviava 'be true, certain'; perhaps Tep *vaho (<*paso) since NT and TO wehoh may suggest an original *a* that assimilated toward the following *o* in the other forms: *a-o > o-o/e-o, and reduplication is apparent in NT. [V assim] [SUA: Tep]

175. *mim 'true, right': Sr mimq 'true, right'; Ktn mimk 'true'. [NUA: Tak]

NB, for B.Tep337 *iridai 'believe, etc.', see 'think.'

NB, Kw pucugu 'know how to' and other Numic forms at 'know' may tie to *pittiwa or *paso/pasiw: TSh pusikwa; Ch putúcuga; SP puhcúcukwaN; CU pucúcugway, with medial reduplication. Knowing s.th. is akin to believing s.th. to be the case, and a voweling like TSh *u-i-a may explain assimilations either direction (*u-i > i-i or u-u), and *w > kw for a 3rd syllable in Numic is plausible. Note Ch actually shows -t-, which is what we should reconstruct for the medial -c- in these NUA languages. Are there cognates for Hp pasiwna 'plan, plot, design, vi/vt'; Hp pasiwta 'be finished, completed'?

NB, a pair in *cawa 'true, consider true/believe' (Mn cáú-tu 'true'; Cr -caawa- of rá'acaawate 'lo obedece, lo cree') has potential here, but is presently listed as an afterthought at *caw 'good'.

Belly: see stomach Below: see down Bend: see circle

BELT; FAJA, CINTA, CINTURÓN; see also waist, clothing

176. *wipuLa 'belt': B.Tep44 *givurai 'belt'; M88-wi14 'belt'; KH/M06-wi14: UP giwudï; TO giwud; LP givar; NT givúúrai. Add PYp givil/givora 'belt'. The following likely belong as s.th. wrapped around one, whether belt, clothing, or blanket: CN wiipiil-li 'indigenous woman's blouse'; NP mabïta wïpodda 'cover with a blanket'; NP wïpodda 'to pile on'. Eu wipil 'cotón de mujer' may be a loan from CN wiipiil-. [L/liq] [NUA: Num; SUA: Tep, Azt, Opn]

177. *wikosa 'belt': L.Son337 *wiko 'faja'; M88-wi14; KH/M06-wi14: Eu wikosa/vikosa 'faja'; Yq wikósa 'leather belt, waist'; My wikosa 'cintura'; My wikohpo 'en la cintura'; My wikósam 'faja'; Tr wikó 'entrañas, descortezar los árboles en cinturón'. My wikosa 'cintura' and My wikoh-po 'en la cintura' demonstrate the vulnerability of sibilants in clusters. [*-sC->-hC- in Cah] [SUA: Trn, Cah, Opn]

178. *natti 'belt': Mn náti 'belt'; NP nati 'belt'. [NUA: WNum]

179. *nakki 'belt': TSh nekki; Sh naikki; Cm (kohi/nï'i)-nehki'. This set appears to have undergone a typical vowel change for CNum: *nakki > naikki > nekki. [*a > ai > e] [NUA: CNum]

180. *pakkaC 'belt': Ch náápagapï 'belt'; Ca tépaqa-l 'belt'; Ca tépaqa 'tighten (as belt), vt'; Ca tépaqa'-vi 'have a belt on'. A possible final C is suggested in Ch -pï and note Ca's glottal stop, but not apparent in Ca's -l. [NUA: Num, Tak]

181. *mo 'belt': Tb mohka-t 'the belt'; Eu móitepura 'cinta del cabello'; Tbr moó-r 'cincha'. [NUA: Tb; SUA: Opn, Tbr]

182. *sutka 'belt': Sr suutka'(t) 'belt'; Ktn šutkï-t 'belt'. [NUA: Tak]

BERRY, ELDERBERRY, CURRANT, GRAPE; BAYA, SAÚCO, MORA, CAPULÍN

- **183.** *ku'u / *kuhu 'elderberry': KH.NUA; M88-ku34 'elderberry'; KH/M06-ku34: Cp kú'u-t; Ls kúú-ta 'elderberry'; Ls kúú-tpa-t 'elderberry bush'; Sr kooht/kuuht; Ktn kuhuč 'fruit of elder tree'; Gb kohút / kuhút / húkot/húkat 'saúco'; Ca kú'ut 'cattail, soft-flag'. Add Tb kuuhupi-l 'elderberry'. [NUA: Tak, Tb]
- **184.** *kunuki 'elderberry': Fowler83 *kunuki 'elderberry': Mn kunugíbï 'elderberry bush'; SP kunnuġui 'huckleberry'. [NUA: Num]
- 185. *kosi / *wosi 'mulberry': Fowler83: TO gohii/gohui 'mulberry tree'; PYp kohi 'mulberry'; NT koóhi 'la mora'. Whether PYp and NT devoiced an initial g or TO voiced an initial k, a reconstruction is difficult; or they may all be loans from an outside source. Fowler lists similar forms that I could not find in my sources; Fowler83 'mulberry': Tr koi and Wc koyi. The V of Wc may recommend a loan, perhaps from Tep? [SUA: Tep, Trn, perhaps CrC]
- **186.** *pikwa 'berry sp': KH.NUA; M88-pi28; Munro.Cup12 *píikwi-la 'berry sp.'; KH/M06-pi28: Cp pípi-ly 'strawberry' (reduplicated, Munro notes); Ca pík-ly-am/píkw-ly-am 'blackberry, raspberry, any kind of berry'; Ls píkw-la 'blackberry'; Gb pikwár, pl: pipíkwar 'mora'; Sr pikwa-c '(black)berry'. Add Ktn pikwa-č 'berry sp'. While either is possible, let's reconstruct 2nd V *-a (over *-i), since Sr and Gb both show *a*, and final *a > i happens more often than i > a, and often happens when preceding alveolars, which may explain the i in the other languages. Ken Hill queries whether Ch pipikura(vi) 'tomate de bolsa' is cognate. Probably! [*a > i/_#] [NUA: Tak, Num]
- **187.** *pokoN 'berries, currants': M67-38 *poko; I.Num150 *pokoN 'berries, currants'; M88-po11; KH/M06-po11: NP pokopisa 'currants, gooseberry'; Sh pokom-pih 'currants'; WSh pokompih; Cm pokopï 'berries, fruits, nuts, goodies'; SP pokoN-/pokompi 'currant'. We might add Kw pugusï-vi 'wild grape sp.' and NTpoopókosoli/vopóósoli 'tomatillo'. [NUA: Num; SUA: Tep]
- **188. *cami** 'wild cherry': Munro.Cup22 *čáámi-š 'wild cherry'; KH/M06-ca20: Ls čáámi-š; Cp čámi-š 'chokecherry'; Ca čámi-š. [NUA: Tak]
- **189.** *'attuC 'chokecherry': Munro.Cup26 *'áátu-t 'chokecherry'; KH/M06-'a40: Ls 'áátu-t; Ca 'átu-t. Consider also Kw 'aatuu-vï 'western chokecherry, Prunus demissa'. Tak and Num intervocalic *-t- (vs. -l-/-r-) would be from *-tt- or a cluster of some kind. [NUA: Tak, Num]
- **190.** *hup / *hu'up 'berry type': Mn hubuhuyï/-hiya/-hiya 'mountain elderberries'; NP hubu 'elderberry'; NP(B) hubui 'elderberries, wild blueberries'; TSh huuppi 'Lycium red berries, desert tomato, Lycium andersonii'; Sh(C) huu-pih 'wild strawberry'; Ch(L) hu'upï 'squawberries'. Jane Hill also notes Gb pah-hó-pe 'blackberry' (C. Hart Merriam reel 59, p. 381) adding the Tak branch to this set. [NUA: Num, Tak]
- **191.** *(h)iya- 'berry type': the -hiya portion of Mn hubuhiya 'mountain elderberries'; Ch iyáávi 'grapes'; Ch(L) iyaavi 'wild grape'; and Ch(L) iyaavimpï 'wild grapevine'? [NUA: WNum, SNum]
- **192.** *isawanawa 'wild grape': Ca suwánawet / 'eswánawet 'wild grape'; Cp swánewet 'wild grape'; probably Mn seenowa' 'elderberries' with reduction and Vs anticipating the point of articulation of the next consonants, i.e., raising and fronting the V before n and rounding the V before w (*suwanawa > seenowa'). Jane Hill notes TSh isampu 'wild grapes' in addition to TSh isawana 'plant, sp.'; the former agrees better semantically while the latter better agrees phonologically and may suggest *sawana, and TSh has an initial V like one of the Ca variants. I reconstruct *a* for the 1st V, because WM Ute, like the one Ca form, also rounds a > o/u in unaccented syllables before w. [NUA: Tak, Num]
- 193. *paLasi '(wild) grapes': Yq páa'asim 'uvas'; My párasim 'uvas'. Jane Hill (p.c.) adds Gb pah-váhs-keet 'wild grapevine'. [liquids] [SUA: Cah; NUA: Tak]
- **194**. *ci'aN 'wild rose, berry (sp.)': -cia- in NP muguciabui 'gooseberry' (bui 'eye, seed'); SP ci'a-mpi 'wild rose berry'; TSh ciampippih 'wild rose'. Jane Hill (p.c.) also noticed Kw čiya-vi-pi 'wild rose'. [NUA: Num]

- **195.** *sipi 'berry tree': Hp siïvi 'sumac'; Hp sivipsi 'sumac berry'; Tbr sipí 'capulin'.[ï-i > i-i] [NUA: Hp; SUA: Tbr]
- **196.** *capo 'capote': CL.Azt198 *capo 'zapote'; M88-ca15; KH/M06-ca15: CN capo-tl; Po cepot; Te capo-tl; Za capot; Pl caput. [SUA: Azt]
- **197.** *makwV / *maku 'wild grape': Ls mákwit 'wild grapes, Vitis girdiana'; Tr makógari 'cereza'; NP muguciabui 'gooseberry'. [medial kw/ku] [NUA: Tak, Num; SUA: Trn]
- **198. *poso** 'berry of some type': Mn aposówa 'manzanita berries'; Kw poso-vï 'desert almond, Prunus fasciculata'. [a- prefix] [NUA: Num]
- **199.** *wi'aN 'buffalo berry': Fowler83-4:13 *wi'a 'buffalo berry, Shepherdia argenta'; NP wiapui 'buffalo berry, buck berry'; SP wiampi 'berry sp.'; Fowler also lists Sh and Ute, but without forms. [NUA: Num]
- **200.** *tiwa 'service berry': Fowler83-3:35 Proto-Num *tiwa (Fowler has forms): Hp tiwvi / tiwavi 'shadblow, serviceberry' (Hill); Hp tivavi (Fowler); Cp tewa 'brush sp.'. Hp's final -vi has it susceptible to being a loan from Num. [NUA: Tak, Num, Hp]
- **201.** *iski 'tree/bush that produces flowers and berries': SP 'išši 'squaw-berry'; CN aama-iiski-tl 'cherry tree, capulin'; CN iiski-tl 'any tree or plant that produces clusters of white flowers, popcorn'. Or is CN from *saki?

NB, for *pusi/pui syllables, see 'eye' (*pusi/pui 'eye, seed').

NB, what of *kutipis 'grapes': NP kudibisa 'grapes; TO uuDwis 'grapes'. Saxton has the TO form as a loan from Spanish 'uvas'—maybe, but the d is extraneous, and the NP form is not from Spanish, yet is lengthy and has much in common with the TO form, which only lacks an initial k and a final vowel of the four-syllable NP form, but TO should have h < *s, so one or the other or both may be some kind of loan.

BEWITCH, WITCH; HECHIZAR, HECHICERO

- 202. *pi'a / *pip'V 'bewitch': BH.Cup *pi 'bewitch'; KH.NUA; M88-pi22; KH/M06-pi22: Cp pí'a 'bewitch, kill'; Ca pí'; Ls pí'; Gb pí'a 'throw'; Sr pii'(pii'a) 'throw (sg obj) at, bewitch'. KH.NUA notes also Sr piivi' 'throw'; Cp pív'ene 'bewitch'; Ls píva(n) 'throw stones'. The latter three may be reductions of former reduplications: *pipi'a > pip'V; and these may derive from *pipa (< *tïpa) 'throw'. Also note Ktn pi' 'throw a stone at, bewitch'. See also 'throw'. [NUA: Tak]
- **203.** *sakwo > *sikwo/sikwi 'witch, bewitch': M88-sa27; KH.NUA; KH/M06-sa27: Cp sekwíte / sakwíte 'curse, whip'; Cp sekwítxe-l 'whip, n.'; Sr şakwi' 'whip, vt'; Sr şakwitkin(a) 'whip, swat, vt sg.obj.'; Gb sakwít 'castigar'; Ls şíqwi 'to punish, whip' (1st vowel is wrong, Miller notes). The 'curse' semantic dimension of Cp, with *kwo > bwo / bo in Cah, likely ties these to My sisibo 'hechizar'; My sibori 'hechizado'; Tr siku- 'hechizar'; Tbr sigu-l 'hechicero'. Interesting is Ls -qw- rather than -kw-, suggesting a non-high 2nd vowel, i.e., a 2nd vowel of *o instead of *i originally (Langacker 1970), which agrees with SUA TrC. As for the first V, *a likely went to the schwa options—i and ï—suggesting it may have been unaccented previously, with Sr and Gb maintaining the original a. Note Tak -kwo- and My -bo-. Perhaps Tr and Tbr ku < kw after loss of V. Ktn kwitea 'bewitch, kill by witchcraft' may belong with loss of the initial syllable. [labials; kwo, u/o; t > ' in Sr] [NUA: Tak; SUA: Trn, Cah, Tbr]

BIG; GRANDE

204a. *wïL, redupl: *wïLwïLu > *wï'ïwiLu/*wï'Lu/*wï'Lu 'big, much, many': Sapir; VVH100 *wï 'big'; BH.Cup *wət? 'augmentative suffix'; B.Tep51a gï'ï 'big'; 51b *gï'ïgïrï 'big, pl.'; M67-39a we 'big'; L.Son340 *wï 'mucho'; KH.NUA; M88-wï1; KH/M06-wï1: Sr wïï'r 'much, many'; Sr wïwïht 'lots of it, much of it'; Ca -wet 'augmentative suffix'; Ls wut 'augmentative suffix'; Gb awé'e 'very'; Hp wïiko 'extensive(ly)'; Hp wïipa 'long, tall'; TO ge'e(đa); PYp ge'e; pl: ge'eger; NT gï'i/gïï; gïdu; pl: gïïgïrï; ST gï'; pl: gï'ïgïr; Eu wéi; Wr werú mucho; Wr werumá; Wr weisá 'muchas veces'; Tr wa'rú/e'wéri; Tbr weé; Tbr wetu 'be big'; Cr ve'é; CN weei. Add Ktn wïr 'lots, a lot, many'. AMR's reconstruction *wït also shows a final consonant effecting the absolutive suffixes of NUA. Note the absolutive suffixes added to 'badger' and 'bear' in the Tak languages: Cp húna-l

'badger'; Cp húnwe-t 'bear'; Ca húna-l 'badger'; Ca húnwe-t 'bear'; after *huna the suffix is -l, but after *wï- the suffix is *-t, which suggests at least a second consonant *wïC.

204b. *kwi'ïLu 'big' (or *wi'ïLu'): M67-39d *kwe 'big'; L.Son127 *kwiru 'grande'; M88-kwi'l: Wr werú mucho; Wr werumá 'grande'; Wr weré 'ancho'; Tr wa'rú 'grande, mucho'; My bwé'uru, pl: bwéere; Tbr weé 'alto, largo'; Tbr we-tú ser grande; Wc kwi 'mucho' (cognate Hill asks?). The w/kw dichotomy is discussed in Stubbs (1995). While it is possible that two separate stems exist, I think it more likely that an apparent Cah *kwi'L developed from *wi'L. Miller lists the My, Wr and Tr forms under both *wi' and *kwi', as Wr/Tr w corresponds to both *wi' and *kwi'. However, the Cah bwe.... forms have their initial consonant aligning with *kwi', while Tep *g definitely aligns with *w. Because Cah is the only sub-branch (i.e., only part of TrC) that really suggests *kw and all others point to *w, including NUA w (rather than kw), Tbr w (rather than kw) and Eu w (rather than b) also in TrC, then it may be that PUA *wiL or initial *w was original and somehow was reinterpreted in Cah as a Tr/Wr w < *kw. B.Tep52 gi'ïri 'boy' belongs here or in c below.

204c. *wïL 'old': Sapir; M88-wï2 'old'; I agree with Hill's combining wï2 'old' with wï1 'big or great' yet a separation by letter for the semantic fork may be helpful: Hp wïiyo, wïiyïw-ta 'be old'; TO gï'ïl 'maturity'; Wr wela 'ser viejita'; Tr weráame 'vieja'; CN weewe' 'old man'. Miller lists My ó'ora/ó'ola 'viejo', but it better belongs at *yo'o 'old'. B.Tep52 gï'ïri 'boy' may belong here, as the above TO form is included therein. Besides Tep, both Cp and Wr show L in *wïL(ï). [liquids NUA r = SUA r; and kw/w]

204d. *wïC- 'with long object, instrumental prefix': Sapir; I.Num283 *wïh- 'whip' (instr. pref.); KH/M06-ip14: Sh wï'-; WSh wï'- 'with a long instr, generic instrumental' (p. 110); Sh(C) wï'- 'with a long or cylindrical or general instr, instrumental prefix'; Kw wï- 'instrumental prefix'; SP wï'-. Like the semantic shift in Hp wïipa 'long, tall' from 'big' > 'tall/long', so in Num is it 'long' in this instrumental prefix rather than 'big'. Note Hp -p-(vs. -v-), suggesting gemination due to a final -C on the first morpheme wïC- / wï'-. [NUA: Hp, Tak, Num; SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]

205. *patawa 'wide': CL.Azt192 patla(awa)-k 'wide': CN patlaawak 'wide'; CN patlaawa 'widen'; Po patek; T patlowak; Z pataawak; Pi pataawak. Consider also Tb piišwabïïl 'enormous' with a hyper-palatalization. [SUA: Azt; NUA: Tb]

206. *'apa' 'much, big': Kw 'awa-(tü) 'be much, many'; Ch(L) 'ava'a-/'ava'ana 'many'; SP ava'- 'much, great, big'; SP ava'-na 'much, v.n.'; SP ava'-tï 'big, participle'; WMU avá'ni 'big'; WMU avá'ne / avátne / avá'ni; prefixed: avá'a- / avá'an- 'many, much, lots, adv'; CU 'avá-tï 'big'; CU avá'-na 'many'. Jane Hill adds Ca a'avuk 'grow'. [NUA: SNum, Tak]

207. *pa- 'big': M88-pa63; KH/M06-pa63: Ca pa-sukat 'horse' (sukat 'deer'); Cp paşukat 'horse' (suqat 'deer'); Ls paaşuka-t 'elk, horse' (suukat 'deer'); Ls paakišla 'chicken hawk' (*kisa 'hawk'); Gb pasokat 'horse, lit. big deer'; Gb pahunar 'Great-Bear'; Gb pakisar 'chicken hawk (*kisa hawk); Sr paakiha-ţ 'chicken hawk'; Sr päähavit 'supernaturally powerful being'; Hp pas 'very'. Ken Hill adds TSh patïhïya 'elk, moose' (tïhïya 'deer'); SP parïia (< *pa-tïkiya) 'elk' (tïġiya 'deer'); Ch parïya 'elk' (tïhia 'deer'); and Wc pa- 'grande'. [greater lenition at end of long word: *k > ġ in *tïkiya, but *k > ø in parïia] [NUA: Num, Hp, Tak; SUA: CrC]

NB, for *piya 'big' (< *piya 'mother'), see at 'mother': I.Num168 *pi(y)a 'big' (clearest in CNum). Considerations suggest that this is probably a semantic extension of Numic *piya 'mother'; for in the animal kingdom, the big one is the mother in contrast to the little one.

BIGHORN SHEEP, MOUNTAIN SHEEP/GOAT

208a. *pa'aC / *pa'at (*paa'at (AMR)) 'bighorn sheep': M67-369 *pa 'mountain sheep'; M88-pa34; Munro.Cup75 *páá'a-t 'mountain sheep'; KH.NUA; KH/M06-pa34 *paa'at (AMR); Jane Hill 2007-44 *paa'at: Sr paa'-t; Ca pá'a-t; Ls páá'a-t; Cp pá'a-t; Gb pá'a-t 'mountain sheep'; SP pa'a 'animal'; CU pa'a-vuku 'livestock'. Voegelin's Tb paa'a-t 'mountain sheep' also matches Takic well, while the form in Munro (Tb pahaat) with h may be interesting in light of Hp paŋwï 'bighorn sheep', pl: paavaŋwt, which also shows a unique second syllable. Ken Hill adds Ktn pa'-t and Ch tïvipïa pa'a 'all people and animals that live on earth'. What to think of Hp -ŋw-, Tb -h- and Takic -'-? Alexis Manaster Ramer (in 1991 "Blood, Tears, and Murder" and 1991 "UA *tw") proposes that a cluster of -tw- underlies Hp -ŋw- in this and other terms: in *pa'at-wït > *paŋwï 'bighorn sheep (lit. bighorn-big')' and in the Hp reflexes of 'blood' and 'crow'. Lexemes for 'bighorn sheep' are mostly in NUA. Davis (1989) and Jane Hill (2007) note the similarities of Hp paŋwï and Kiowa-Tanoan (KT) forms such as Tewa pææh 'deer' (with nasalized (underlined)

vowels). The KT form is probably the loan source for Navaho b<u>ii</u>h. 'deer'. Miller and Hill rightly include the SNum forms, which are here separated by letter only for the different semantic considerations.

208b. *pa'a 'living beings': Kw pa'a-vi 'meat' whose unexpected animacy also suggests it originally meant bighorn, as Azt *naka 'meat' and SNum *naka 'bighorn'; Ch pa'á-vi 'worm'; Ch tïvipïa pa'a 'all the people and animals that live on earth'; SP pa'á-vi 'animal, any living thing except man and plants'; WMU pa'á-vi/vü 'insect, bug, maggot, n'; CU pa'á-vi 'insect, larva, worm' and CU pa'a-vuku 'livestock'. However, SNum does not seem to show a final -C like Tak and Tb. [medial cluster] [NUA: Num, Hp, Tb, Tak]

NB, for SNum *naka 'bighorn sheep' see at 'meat' with Azt *naka 'meat.'

BIRD; PÁJARO; see also buzzard, crow, dove, duck, eagle, hummingbird, owl, quail, turkey **209a.** *wiCtiki 'bird': Sapir; M67-40 *wici/*wiki; Fowler83; M88-wi7; KH/M06-wi7: rather than either *wici or *wiki, consider *wiciki (<**witiki); Tb čikii-t 'bird', Sr wičit, and SNumic *wiciki: Kw wižiki-ži; Ch wici'ici; SP wici'-ci; CU wici-ci; and Yq wičik 'owl'. Note the lenition of the third consonant, depicted in the SNum languages from west to east: -iki- > -i'i- > -i-. Some forms and Manaster-Ramer's law suggest a medial cluster such as *-Ct- or *wittik/wuttik as more probable. Sapir ties CN wiicil-in 'hummingbird' with Sr and Num wici..., which is possible if < *-Ct-; but whether CN belongs or not, he was the first to propose the Sr and SP forms as related.

209b. *wikici (< *wikit(t)i) 'bird': L.Son336 *wikici 'pájaro'; M88-wi7; North Eu wíkci; Eu vikic/wikic, vikci (acc.) 'pajarito'; Yq/My wiikit; Wc víikíi 'pájaro'; and possibly CN aawakaacin 'swallow'. Ca wíkikmal/wíkitmal 'bird'; Cp mukikmal 'bird of any kind'; and Cp wukíkmal 'wren' are apparent instances of consonant harmony—*witiki / *wikiti > *wVkik(i)—especially in light of the alternate Ca wíkitmal. It is easy to jump to the conclusion that *wiciki and *wikici be from metathesis; however, perhaps as likely are reductions to consonant clusters then reductions of those clusters:

**witiki-tV > *witki-tV > *wiki-t/ci

**witiki-tV > *wiciki-(ci) The long vowel in the *wiikit forms may further suggest such.

209c. *hutti / *huttu 'bird': Miller includes some Numic forms of I.Num261 *(hu(i)(h))ci: NP hucipa'a; Mn ciipa('a); TSh huttui 'small bird'; Cm huhcúu; Sh huiccu. Ken Hill (KH/M06-hu23) astutely sorts M88-cu10 and creates hu23, adding TSh huiccu 'sage grouse'. Miller has Sh huiccu in M88-cu10 with *cutu below, but there is a possible tie between *huti and *witi: *huti/huci > *huiti/huici > *witi/wici. Nevertheless, the TSh form with -tt- strengthens the case of this being a good example of *-tt- > -c- preceding a high, possibly front vowel. While I do not vehemently ascribe to *hutti, s.th. near it does much to explain other forms: *hutti > huci > hucu > huicu. [*-tt- > -c-; C harmony] [NUA: Num, Tb, Tak; SUA: Cah, Opn, CrC, Azt]

210. *cutu / *cuLu-(ka'i) / *cuLaka'i 'bird, woodpecker': M67-41 *cutu; L.Son49 *curu 'pájaro'; CL.Azt204 **cuutu; Fowler83-2:22; M88-cu10; KH/M06-cu10: Of 13 forms in M88-cu10, Hill (KH/M06) correctly extracts the three that belong together: Hp cooro 'bluebird'; Tr čurugí 'bird'; Wr cu'rukí 'bird'. The others belong with *witiki or elsewhere. Probably also related are My čóroi 'woodpecker' and Yq cóllo'i 'woodpecker'. Fowler adds Mn soroki 'speckled woodpecker'; Ls soo-la 'California woodpecker'; Tb culus-t 'woodpecker'; Tr pacoruri 'woodpecker'; Cr cuurrka'i 'woodpecker' (Fowler); Cr cuuraaka'i 'woodpecker' (CL.Azt204). While inclusions of Pl tuutu-t 'bird' and CN tootoo-tl may be possible, let's be hesitant. Ls o may also suggest *u lowered slightly by following a (like the u in Wr); otherwise, we would expect Ls e < *o; or it could be a loan. An interesting case could be built for *coraka'i 'woodpecker': Cr cuuraaka'i 'woodpecker' and Tr koraca 'woodpecker' may be an unusual, but apparent metathesis of 1st and 3rd consonants, in an exceptional agreement with *coraka'i through the first six segments; Wr cu'rukí also shows the glottal stop hopped and the same four consonants, but the other round V: *curaka'i; likewise, Mn and Tr suggest *coroki, a reasonable reduction of *coraka'i. Could Tbr cuhú-l 'magpie' belong? An interesting web of woodpecker forms! [glottal stop hop]
[NUA: Num, Hp, Tb, Tak; SUA: Trn, Cah, CrC]

211. *cito 'meadowlark': Hp ciro 'bird, small bird'; Tb čiidoobilah 'meadowlark'; Mn nozído 'meadowlark'; NP pazidono 'meadowlark'. After differing first syllable prefixes assumably, the two WNum languages (Mn, NP) have *-cito- in common. Hp should have ö (< *o), but the other three agree with PUA *o. Could these be variants of *cutu after assimilation (fronting) of u > i when anticipating an alveolar consonant (i.e., *curu > *ciru)? Or could the *cutu forms be an assimilation of vowels from *citu, though Hp has both? What of Tbr cirí-t 'saltapared' with yet another assimilation possibility? [NUA: Hp, Tb, WNum]

- **212.** *uhupsiwi / *uhusiwi 'bird': B.Tep333 *'u'uhigi 'birds'; M88-'u6; KH/M06-'u6: TO u'uwhig/u'uhig 'bird'; LP u'ug; NT uhúrugi; ST 'u'uhi'. The first reconstruction is what the TO suggests; the second is the PUA version of Bascom's Tep reconstruction; and probabilities are that neither is exactly right. As for the consonant before g (< *w), the **r** in NT is curious; and TO shows an underlying *p; but both TO and ST also show *s (> Tep h). So a lot could be happening in the middle of such a long term, with potential clustering possibilities from *s, *L, *w, and/or *p. Further complicating matters are the similarity of NT uhúrugi (*s > h) with Tr curugí 'bird' and Mn soroki 'speckled woodpecker'. [SUA: Tep]
- 213. *ca'i 'blue bird': BH.Cup *cá'ic 'blue bird sp'; M88-ca10 'blue bird'; Munro.Cup18 *čáá'i-š 'blue jay'; Fowler83; KH/M06-ca10 'blue jay': TSh caippiccih 'pinyon jay'; Sh cai-piccih 'blue jay'; Tb 'aadzay; Cp ča'iš; Ca čá'-iš; Ls čáá'i-š. [' > ø in Tb, CNum] [NUA: Num, Tb, Tak]
- **214.** *tapi 'bird sp.': Munro.Cup13 *táávi-š 'bird sp.'; KH/M06-ta51: Ls táávi-š 'a bird, the flicker'; Ca távi-š 'big woodpecker'; Cp távi-š 'red bird with spots on breast'. Jane Hill (p.c.) also notes the plausibility of Mn tapidigidí' 'little grey very fast hawk sp.' Ken Hill, in addition to Munro's Cupan trio at KH/M06-ta51, also cites My tááwe 'gavilán'; Tr ŕawíwi 'gavilán pollero'; Wr tahi'iwe; and CN tlo'tli 'sparrow hawk', noting that CN's vowel is wrong, though -aw- > -o- is common. That tie may well be, as *-p-/-v- > -w- is plausible, but for now, the two are separated due to differing medial consonants. [*p > v/w?] [NUA: Tak; SUA: Trn, Cah, Azt]
- **215.** *wosa 'bird sp': Munro.Cup14 *wéésa-l 'bird sp.'; KH/M06-wo15: Ls wéésa-l 'white brant'; Cp wísa-l 'mud hen'. [NUA: Tak]
- **216.** *toL(i) 'domestic bird': M67-85 *totoli; CL.Azt15 *tootoo 'bird', 178 *tootol 'turkey', 316**totolii 'turkey'; M88-to16 'chicken'; KH/M06-to16: Wr to'torí 'chicken'; CN tootoo-tl 'bird'; CN tootol-in 'domestic fowl'; HN tootoo-tl / tootoolih 'turkey'; Pl tuutut 'bird'. Other possible inclusions or recycled loans are TO čučul 'chicken'; Nv totori/totoli/totoni 'gallina'; Yq tótoi; My tótori; Tr torí 'gallo, gallina'; Tr čúri/číuri/čiburi 'pollo, pollito'. A slight vowel change in TO would have triggered palatalization *to > *tu > ču; and of course the Tep and TrC forms could be Azt loans. In some cognate collections is overlap between *topa 'turkey' and *toL(i) 'domestic bird'; however, the entirely different 2nd syllables make their union prohibitive. [*o vs. *u] [SUA: Tep, Trn, Cah, Azt]
- **217.** *(w)aLo 'parrot': L.Son5 *'alo 'guacamaya'; M88-'a32; KH/M06-'a32 'parrot': Eu háro; Op haro; Tbr waló; Tr wará; Wr walá 'tipo de pájaro como juajalote, tamaño de un pollo'; TO ahDo 'pavo real'; Nv arho. Ken Hill adds CN alo 'lora grande'. [-L-; initial w/ø; a/o] [SUA: Tep, Trn, Opn, Tbr, Azt]
- **218. *isa** 'meadowlark': Munro.Cup69 *'isáá-l 'meadowlark'; KH/M06-'i13: Ls 'isáá-l; Cp 'isá-l; Ca 'isa-l. [NUA: Tak]
- **219.** *tama-wïL 'mockingbird': BH.Cup *tamá-wət 'mouth-big, mockingbird'; HH.Cup *tamááwət 'mockingbird'; Fowler83; M88-ta15; KH/M06-ta15: Cp tamáwe-t; Ca támaw-et; Ls tamáa-wu-t 'talkative person, mockingbird'; Gb tamávet 'hechicera'. Bright, Jane Hill, Ken Hill, and Miller all agree that this is a compound of *tama-wïC 'mouth (tooth)-big'. [NUA: Tak]
- **220.** *yaNpa 'mockingbird': M67-285 *yapa 'mocking bird'; M88-ya10; KH/M06-ya10: TSh yampa; SP yampa-(ci); Hp yàapa. Ken Hill adds Ch yaampa. Jane Hill adds Kw ya-(m)bï 'mockingbird(?), cactus wren(?)'. Note the nasal in Num, and Hp -p-, not -v-. [cluster > Hp -p-] [NUA: Num, Hp]
- **221.** *sayaC 'mud-hen': Fowler83 lists Tb, Ls, and Proto-Num *saya 'mudhen': Tb saaya-l 'mud-hen'; Ls şáy-la 'coot, mud hen'; Mn pasáya 'mudhen'; NP saya 'mudhen'; TSh saiyappïh 'mudhen'; Sh saiyan 'mudhen'; Kw saapï-zi 'mudhen'. Most Num forms suggest a final -C, which seems to have been lost to Ls and Tb. Any potential for a tie with *sa'i 'duck' at duck? [*-y->ø in Kw] [NUA: Num, Tb, Tak]
- **222.** *hitto 'meadowlark': Fowler83-4:27 *hito 'meadowlark': Sh hittoon 'meadowlark; SP iittoo 'meadowlark'. Fowler also says Mn, NP, and Kw have reflexes, but I could not find such in my sources. [initial h] [NUA: Num]

- **223.** *suku 'robin, Turdus migratorius'; Fowler83-4:28 *suku 'robin, Turdus migratorius': Mn súúgu 'robin'; NP sugu 'robin'; Sh(M) suikkokko 'robin'; Sh(C) suikkokko 'robin'; TSh suku 'robin'; SP -soġo- is the third morpheme in SP tïmpwi-kie-soġo 'rock-laughter, sparrow sp'. The i in Sh is curious. [o/u] [NUA: Num]
- **224.** *'aŋa '(blue)jay, bird sp.': Ch(L) 'aŋa 'bluejay'; CU 'áa-vi 'Mexican Jay, bird sp'. Intervocalic -ŋ- in Ch and SP goes to nasal vowels in WMU but disappear in CU. So this is a good match. [NUA: SNum]
- **225.** *saknoppina 'swallow': Jane Hill (p.c): Mn pazigopiina' 'swallow'; NP soggobbina 'mudswallow'; TSh pazzahnopidah 'barn swallow' (Merriam 59: 335); SP towah passarovip (Merriam 59: 465). Assuming pa- is a prefix, the two WNum forms pair nicely, and TSh and SP pair nicely. The first cluster might be a velar and nasal clustered, for NP -gg- could feasibly be such, as we would need to see -k- or -kk- to be from *-kk-. From a possible *-kn- (> WNum velars), TSh -hn- is of interest, from which SP shows -r-. Then again, another reflex may change everthing. [NUA: Num]
- **226.** *paakoŋa (Jane Hill) 'red-winged blackbird': Jane Hill (p.c.): Ls pááxiŋi-š 'red-winged blackbird'; Cp páxani-š 'blackbird'; Ktn pakoŋyat.'redwinged blackbird'; SP paġaN-, paġančaxqappi 'black bird which makes a clicking sound' (SP čaqqappi 'make a click-like sound'); SP paġačaxqappi 'red-winged blackbird'. Good set, Jane! [NUA: Tak, Num]
- **227.** *hay 'pinyon jay': Jane Hill (p.c.): Ktn hayha'y 'bluish bird sp'; Gb hai-iŋ 'pinyon jay' (Merriam 60:421). [NUA: Tak]
- **228.** *kimaC 'flicker, yellowhammer': Jane Hill (p.c.): Ktn kima-č(r) 'flicker'; Gb kimar'' (Merriam 60:421). [NUA: Tak]
- **229.** *mama'kwa'iya 'magpie': SP mamma'qqwa'ya-vi 'magpie'; WMU mamá'qwa'iyé-či / mamá'qway'yé-či / mamákkwe'ya-či / mamá'kwe'ya-či 'magpie (bird), n'; CU mamá-kway'á-či. [NUA: SNum]
- NB, *takaLu 'bird, chicken': the likelihood of words for crowing birds being onomatopoetic is high; nevertheless, something near *takaru '(perhaps domestic) bird' may underlie ST takaarui 'chicken'; CU qaqXáarī-ci 'chicken', and Cr tekwaára'i 'chicken', though borrowing between the neighboring ST and Cr is also possible, since the correspondences do not match, yet the lengthy words match better than the correspondences. The labialization of *k > kw in Cr does occur following ï, to which e is close.
- NB, a possible *cipa (perhaps < *hutipa) 'bird sp.': Fowler83 mentions Tr cipi 'small bird sp.' and Mn ciihpa/ciipá' 'bird'; they match each other well enough, yet Mn ciihpa/ciipá' is likely cognate with NP hucipa'a, which Miller associates with forms listed above, i.e., *hutu/hucu.

BITE; MORDER

230. *kï' / *kï'ca 'bite, v.': Sapir; VVH43 *kïu('i~ï) 'bite'; B.Tep130 *kïi 'he bit'; M67-42 *ke/*key; I.Num72 *kïh 'with teeth, by biting'; BH.Cup *kə-'; L.Son81 *kï; M88-kï2; KH.NUA; KH/M06-kï2: Mn kï"- 'by biting'; Mn kïyï 'bite, vt'; Mn kïcoho 'chew'; NP kï- 'with mouth'; NP kïka'a 'biting with mouth'; NP kïipï 'bite, v'; NP kïhanni 'biting on to loosen up'; TSh kï''/ku''/ko'' 'with teeth or mouth'; TSh kïcci'ah 'bite, vt'; TSh kïceohi 'chew'; Sh kï"- 'with the teeth or mouth, instr. pref.'; Sh kï"-ci'ah; Cm kïh-kka'a 'bite off a piece of s.th.'; Cm kïhka'arui; kïcïbakitï; Kw kï- 'with mouth or teeth'; SP kïï; kï''; CU kï'í; Hp kïiki; Hp(S) kyatkï 'nipped, bit, took bite from'; Tb(V) kïï-, kï'īt~'ïīgī' 'bite'; Tb(V) 'ahaaijat / 'ahaaič 'chew it, vt'; Sr kïï'; Ca ké'; Cp qé'e; Ls kó'i; TO kï'ï, kïh; ST(B) kïi 'he bit'; kya; Eu ké'e; Tbr ke; Yq ké'e; My ké'eye; Wr ki'cu 'bite'; Tr ki'su/gi'su 'bite, nibble, gnaw'; Tr ki'ca 'chew'; Tr i'kí 'bite'; Cr če'e-/čey-/če'i-; CN ke'coma 'bite s.th.' Ken Hill adds Ktn kï'; NT kïi 'he bit'. Let's also add Ch kï'í 'bite, v'; Wc kée/kéi; Nv kuku(kïkï)/ku'i 'bite'; PYp kekim 'bite, vt'; NT kïí / kïkïiyi; NT kikííšapai; kííšaka 'have in mouth, bitten'; perhaps Cr ná'ice 'it bit me' (also allomorph -cei-) with na- prefix. This etymon is one of the few to have a reflex in all UA languages. How is a verb like 'bite' so stable, one of the most consistently retained words throughout UA? Many UA languages show a reflex of *kï'ï, though Tr, Wr, and CN (*kï'c-) and other details suggest a medial cluster, perhaps *-'c-, since a glottal stop

is apparent in some, medial *-c- in others, and both in a few (Wr, Tr, CN). Could early meshing movements explain that some languages (eg, Tr, Hp, Tb) have two forms (Tb 'ahaaič and Tb kï'īt)? [cluster] [NUA: Tak, Tb, Hp, Num; SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]

BITTER, SOUR; AMARGO, AGRIO, ÁCIDO

- **231.** *cipuC / *ci'puC 'bitter': VVH13 *cihpu; B.Tep *sivu'u; M67-43 *cipu; L.Son33 *cipu; M88-ci1; Munro.Cup16 *číívu-t: KH.NUA; KH/M06-ci1: Ls číív 'be bitter'; Ls čiivu-t 's.th. bitter'; Cp číva-t 's.th. bitter'; Sr čivu' 'bitter'; Sr čivu' t's.th. bitter'; Ktn civu'; Cp čiv; Hp ciivo; TO siw/siwo; LP sivu; PYp civo; sivi; NT šívu; ST šivu'; Eu čipú; Yq čííbu; My čiibu; Wr sihpú; Tr či'pú; Wc cíwi/civi; and perhaps Cr (an)cíhivi (McMahon); Cr ancihvi'i (JM). Tr po(y)á 'ser amargo'; Tr či'pú-ame 'amargo, amargoso'; and Tr či'kórigame 'agarroso, de sabor muy astringente, quemante' are a befuddling trio for that language. The -t absolutive suffix in Munro's Takic forms, the glottal stop in ST, Bascom's Tep reconstruction, and the glottal stop in Sr may suggest a lost but lingering final consonant. What of Miller's inclusion of CN čičik/čičika-tl 'bile, bitterness'? [Wc ï < *u; medial *-p- > ø in Wc; TO, PYp o < *u; c/s in Wr] [NUA: Tak, Hp; SUA: Tep, Trn, Cah, Opn, CrC]
- **232.** *hu... 'bitter': M67-44 *hu/*huhu; M88-hu7 'bitter'; KH/M06-hu7: Mn huhuqamma 'to taste bitter'; Tb 'uu' 'bitter'; Tb 'u'uwaa-n 'the bitter one, white emitic roots'. We see reduplication in Mn and one Tb form; the *uwa* pattern in that Tb form resembles what might be compounded with a preceding morpheme below. [NUA: Num, Tb]
- **233.** *muhuwa 'bitter': TSh muhwa-pi-(cci) 'bitter, adj'; TSh muhwa-kamman 'taste bitter'; Sh muhwa / muha 'bitter'; Cm mohakamarï 'taste sour, bitter, acid'; Kw moho-gama 'be bitter'; Ch mohára 'bitter'; Ch(L) muhwaratï 'bitter'. The element *-kaCma 'taste' is seen in some, but something along the lines of *muhwa or *mu-huwa remains in CNum and SNum. [NUA: Num]
- **234.** *ciya 'bitter': Tb ceeyee'ït~'eceeyeeu 'be bitter' and CN čičiya 'become bitter, sour'. Vowel leveling appears to have occurred in Tb: *i-a > e-e. [glottal = w in Tb; V leveling] [NUA: Tb; SUA: Azt]
- 235. *cina 'sour': M67-404 'sour'; M88-ci19; KH/M06-ci19: Cr an-cináh 'it's sour'; Cr cináaka 'lemon'; Wc cináá 'ácido'. Miller also lists NP siïta 'bad', which KH/M astutely excludes, as it better belongs with *si'ta below; M88 lists Pl šuku-k 'sour' with both M88-ci19 and M88-co3 (*co'oko below), while it better belongs with the latter. [SUA: CrC]
- 236. *si'ta > sï'ta 'sour, bad(tasting)': Sapir: Sapir ties Ca seta-xa-t 'salty' and CN ista-tl 'salt'. Be those as they may, to Ca, we must add Mn sïta-qama 'taste bitter'; NP sïïta 'bad'; and Cp si'táx 'sour'. The languages are divided on *i vs. *ï for first vowel, yet final a is more likely to draw *i > ï than *ï > i. Many put CN ista-tl 'salt' with *tosa 'white', but CN tiisa-tl 'whitewash, white earth' fits *tosa / tusa 'white'. [*i-a > ï-a] [NUA: Tak, WNum; SUA: Azt]
- 237a. *sikaC / *sïkïN 'sour': M67-404; M88-sï21; KH/M06-sï21 'sour': TSh sïkïmpi(cci) 'sour'; Sh sïkïn 'sour'; Cm sïkï 'sour'; Kw sïgï-ga-dï 'sour'; Kw sïgï-gama 'taste sour'; CU sïgï-kamáy 'taste bitter, vi'; CU sïgï-karï 'bitter, sour, acid, adj.'; and Hp sikya 'sour, bitter'. Ken Hill adds WSh sïkïn kammanna (kamman 'to taste'). Do we have vowel leveling between Hp sikya 'sour, bitter' and Num *sïkï 'sour': *i-a > ï-ï? Num forms may suggest a tie between these and the above by consonant harmony (*sita-kama > *sïkïkama) or a cluster reduction (*-kt-/-'t-/-tk->-'t-/-k-). Or Hp sikya 'sour, bitter' may also suggest a tie between *si'ta/sï'ta and *sika/*sïkï, as *sika possibly reduced from a cluster *si'ta-kama > *sitka > *sikya (Hp), since alveolars in clusters with *k* have produced *ky* elsewhere in Hp (Cf. rotten). CU -k- rather than -ġ- or -x- suggests a cluster between morphemes (*sVkVC-kaCma). [NUA: Num, Hp]
- **237b.** *sihiw(kV) 'sour': PYp he'egi 'sour'; PYp he'egker 'vinegar'; TO he'ek(a) '(be) sour, v'; TO s-hi'ik 'be sour'; TO he'ekču 's.th. sour, n'; NT iko 'agrio, acedo'; ST hkum 'que es agrio (mezclado con dulce)'; Hp sihi '(be) salty' fits well since *s > Tep h and *h > Tep ' (glottal stop). Perhaps Cp sáwit 'sour'. If related, Cp may suggest some original *a > i, possibly PUA *sahawa-tu > Tep *hi'ig-tu > *(h)iktu > *(h)iko. [Num -k-: Hp and Tep h; Tep '] [NUA: CNum, SNum, Hp; SUA: Tep]

238. *co'(o)ko/*copko (< *cupka?) 'sour, salty': M67-403 *cuk/*suk 'sour'; L.Son38 *coko 'agrio'; M88-co3 'sour'; KH/M06-co3: Sr čuka' 'sour, salty'; Sr čuka'n / čuka'nin 'add salt to' (wrong vowel, Hill notes), but may be the original voweling with leveling elsewhere; Eu cokóe-n 'agrio'; My čó'oko 'estar agrio, salado'; Yq čó'oko 'agrio, salado (de fruta, etc.)'; Wr co'kó; Tr čo'kó; CN šoko-tl 'fruit, plum'; HN šoko-k 'sour'; Pl šuku-k 'sour'.

Add AYq čo'oka 'salty'. Ken Hill rightly adds Ktn čukwa' 'bitter, sour, salty' (noting wrong vowel) and CN čokolaa-tl 'chocolate' as its initial consonant agrees better than Azt šoko-. Note also Nv subko 'agrio' and Nv suhkodaga 'agrio'. Since Tep s < *c, Nv subko may reflect the underlying cluster -pk-, whick cluster could be the source of the glottal stop in TrC *co'(o)ko. When only Cahitan shows a glottal stop, we might doubt whether or not it is original; but when Wr and Tr also show glottal stops, it might be more likely. On the other hand, the glottal stop could be original and not necessarily have to represent another consonant, since its absence in Tep is consistent with Tep usually showing *' > Ø. Might the Aztecan forms be a loan from Tep, as an explanation of š? Sr and Ktn may show the original vowels (*u-a > o-o) and Nv subko may best represent the original cluster. [c/s; VCCV > V'VCV, loss of C > ' then added vowel to separate cluster]

[NUA: Tak; SUA: Tep, Trn, Cah, Opn, CrC, Azt]

239. *kïsa 'sour': Ls kóşa/i 'be sweet or salty'; Ls kuş-úla 'be sour' (listed with koşa/i); Cp kešelvekéšelva'a-š 'too sour, adj'. [*ï > Ls o > u] [NUA: Tak]

NB, often 'sour' and 'salty' and 'plums, (sour) fruit', in a sweet-and-sour kind of combination are semantically associated or listed, as under four of the above five reconstructions!

BLACK; **NEGRO**

There exists in UA a large number or a tangled mass/mess of initial *tu forms having to do with 'fire go out, dark, black, night, charcoal' that UAnists have divided nearly as many ways. I divide them *tuL 'charcoal, soot, black' and *tukV 'fire go out, dark, black, night', for when the fire finally goes out at night, it is dark/black, and 'fire go out' is likely the original meaning of that group. PUA *yuppa below has the same semantic array: 'fire go out, be dark, black.'

240a. *tuku / *tuku / *tuki 'fire go out, dark, black, night': Sapir; VVH23 *tu_{II}(ku) 'black'; VVH144 *tu_Ski / *tu_ska 'night'; BH.Cup *tuk 'pass the night'; B.Tep231 *tukaga-i 'darkness, night'; B.Tep232 *tuku 'black'; M67-45 *tu, *tuhu 'black', *tuk 'night', *cuk 'night'; I.Num228 *tuka 'night'; I.Num224 *tu(h)u(h) 'black'; I.Num230 *tuki 'fire goes out'; L.Son320 *tuku, 320b *cuku 'obscurecerse'; Dakin 1982; let's combine much of M88-tu2 'night', M88-tu3 'black', M88-tu12 'put fire out', and M88-cu4 'black'; KH/M06-tu2 *tuku 'black, dark, night' and tu12 'fire, to go out' and KH/M06-tu25 *tuka 'night': Mn toqawano 'night-time'; NP tuka 'extinguish fire'; NP tokano 'night'; NP toka cïpïa 'dark'; TSh tukwanni / tukwawani / tukwanippïh 'night'; Sh tukani 'night, be dark'; Sh tuki" 'put out the fire'; Cm tukani 'evening, night'; Kw tuku 'be dark, be night'; Kw tukwa 'be dark, be night'; Kw tukwa-nu/no 'night'; SP tukwi- 'fire go out'; SP tukwa- 'put out the fire, be dark, night'; SP tukwanu 'night'; CU tugwa-na-ti 'night-time'; CU tugwami 'extinguish'; CU túukwari (<*tuukkwati) 'black, dark'; Tb tuugït~'uduuk 'be dark/black'; Tb tuugit 'night, the dark'; Cp túkmu-t 'night'; Cp túke 'pass the night'; Cp túku 'yesterday'; Ca túk 'go to bed, stay overnight'; Ca túkmiyat 'night'; Ls túúk 'camp for the night, v'; Ls túúku-mi-t, tuk-va 'night'; Sr tuuk 'night'; Hp tooki 'last night, to go out (fire)'; Hp tookila 'night-time'; Hp tookiwma 'for fire to be going out'; Tbr tu-/tukúr/tokúr 'negro, apagado'. Ken Hill adds WSh tuu" 'black'; Ch tuga 'night'; Ch tugarasi'avi 'big black ant sp'. Relevant to B.Tep232 'black' are TO čuuk 'stop burning or giving out light'; LP tuku; PYp tuk; NT túku 'black'; ST tyuk (Bascom); ST čuk 'black'; relevant to B.Tep231 'night' are TO čuhug 'night'; LP tuahag; NT tukági; ST tukaa'; TrC forms include Eu čuki 'noche'; Wr tugaó 'noche'; Wr togapá-ni 'become dusk'; Tr ruká-wa-ri 'noche'; Tr ru-/ro- 'be black/dark'; My tukáária 'noche'; Tbr tokú-r; and in CrC (where *u > i) is Cr wa-tika'a 'it's night-time'.

Note the semantics of AYq tuuka 'yesterday', Cp túku 'yesterday', Hp tooki 'last night, to go out (fire)', and Ktn tuka / 'atuka 'at night, last night' and Ktn tuk 'yesterday'. In English, 'the night' often means 'last night, the previous night just finished': I spent the night in pain; the baby cried through the night. Also note the semantic combination in Hp tooki 'last night, fire went out': the nearest or most recent 'fire-going-out' was last night. I also like Dakin's (1982-104) tie of CN tooka 'plant, bury, v' with the above, since the sun's disappearance seemingly into earth at dark/night resembles the disappearance into earth when seeds are planted or buried. See *tuka 'plant' at seed 1918 and 1919.

Many forms show a -wa- suffix: in *tuka-wa-: Mn toqawano; Tr ŕuká-wa-ri, and Tepiman *tukV-gV. Num forms are either reduced by a vowel syncopation (*tukawa to *tukwa) or the u vowel is carried past the-k- (*tuka > tukwa) or in some, perhaps both, e.g., TSh tukwawani. Four forms show *-nu / *-no: NP tokano, Mn toqawano, Kw tukwa-nu/no, SP tukwanu.

Undoubtedly, *tuku 'black' and *tuka 'night, dark' are related even though VVH, Miller, and Bascom separate them, and some Num, Tep, and other UA languages show separate forms for the two. In fact, an original *tuku, somewhere becoming *tuhu, then tuu, may then have become a widespread recycled stem taking other suffixes. Consider Mn tummu 'black'; TSh tuppa 'black'; Sh tuu" / tuun 'black'; Sh(SV) tuu" 'black'; Cm tu / tuh / tuhupi 'black'; Kw tuhu- 'black'; SP tuu" 'black'; WMU tuu-kwa; CU túu-kwa-rï 'black, dark'; Sh(M) tuki" 'put out a fire'; Sh(Cr) tukwi"/tui" 'go out (fire)'; Sh(SV) tukwih / tuih 'put out a fire'; NP tokasïpïaga'a 'sun goes down.' [*-k-> h in Num, > Tb -g-; *u-a > o-a; V syn]

240b. *cukV (<*tukV): M67-45c *cuk 'black'; L.Son320 *cuku 'obscurecerse' and *cuk-i 'oscuro'; M88-cu4: Yq čukui; My cukúri/cukuli; Tr čóka; TO cuk 'negro'; TO s-čuk 'black, be black, in darkness'; TO čuku 'become black'; Op cuki-gwa 'causar obscuridad'; Eu cukí-en 'obscurecerse'; Yq cukú-i; My cukú-ri 'negro'; Wr o-hcó-na-; Tr co-. TO čuuk 'stop burning or giving out light'; ST tyuk (Bascom); ST čuk 'black'. The second syllable of Cr wačuíhsa 'está oscuro' may be borrowed from TrC, because Cr watïka'a corresponds to the other UA languages. As Miller (M67-45c), Hill (in combining M88-cu4 and tu2), and Lionnet (L.Son320) all suggest, *cuk is a palatalization of the rather pervasive *tuk, which *cuk may have then exhibited considerable mobility recycling through the dialect chains of SUA; for many of those languages also have *tuk forms.

240c. *tuhu / *tuu (< *tuku): Mn tuhutïpi 'black rock'; NP tu / tuhu 'black'; Cm tu /tuh / tuhupi 'black'; Kw tuhu-'black'; SP tuu" 'black'; Sh tuu"/tuun 'black'; Sh(M) tuki" 'put out a fire'; Sh(Cr) tukwi"/tui" 'go out (fire)'; Sh(SV) tukwih/tuih 'put out a fire'; Sh(SV) tuu" 'black'; Cm tu/tuh/ tuhupi 'black'; Kw tuhu- 'black'; Ch tuupï 'black paint'; SP tuu" 'black'; WMU tuu-kwa; CU túu-kwa-rï 'black, dark'; Hp toho 'blackish pigment' may be an early loan from Num *tuhu (< *tuku), in light of Hp tooki existing as well. Sh's variant forms—tukwi and tui—above show how easily/quickly an intervocalic -k- can be lost, likely passing through an -h- phase, which is likely for the *tuhu forms: *tuku > *tuhu > tuu (in some cases). In fact, Shaul (1994, 289) shows in PYp tuhu and redupl PYp tutuk that -h- is intervocalic and that k is found in the same stem, and *-k- > -h- is common in 'deer' and elsewhere. Ken Hill lists, but queries whether CN tekol-li 'charcoal' and Pl tekunal 'live coal' are cognate; it's a good question. Could CN tekol-li be a recycled loan from Cah *tukuri > *tVkol-li? [*-k- > -h-, *tu > cu] [NUA: Num, Hp, Tb, Tak; SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]

241a. *tuL 'charcoal, soot, black': BH.Cup *túla 'charcoal' {Cp tul; Cp tulnək-ic 'black'; Ca tul; Ca túlek-iš 'black'; Ls túúlaa, túú-la}; Munro.Cup21 *túú-la 'charcoal' {Ls túú-la; Cp tú-l; Ca tú-ly}; KH.NUA{Sr too-ţ 'charcoal, coal(s), ember(s)'; Gb tur; Tb tuul; Ls; Cp; Ca}; M67-45 *tunu; CL.Azt *tiil- 'soot'; M88-tu23 and some of tu3; KH/M06-tu3 *tul and tu23: Cp túla 'get black, get a tan'; Cp túlnine 'make black'; Cp tultúlaxwe 'it is soiled'; Sr tïnäänä'n 'be black': Sr tïnää'a 'bec, turn black': Ca túl-nek 'black': CN tliil-li 'black ink, soot': Pl tiil 'soot': Pl tiil-tik 'black'. AMR (1996d) and Hill add TO čuuD 'charcoal'; TO čuuDt 'make embers of wood, etc.'; TO čuuDagi 'embers, charcoal', which works since TO D often aligns with liquids or *L. Not only that, but Ls *tu-la rather than *tu-l, may suggest *tul-ta > *tul-la which helped preserve the final -a of -la (*-ta). Munro justifiably separates *-la as an absolutive suffix, but the keeping of the vowel in -la suggests a cluster or an underlying doubled *-LL-; thus, like CN tliil-li, an L existed that was absorbed by the absolutive suffix (*tul-la > tu-la) to become rather invisible in Tak, but helped preserve final -a. While it may be a fossilized absolutive suffix, the l as second consonant seems at least intermediately justifiable in many Tak compounds, such as *tul-nïk 'black' (Sr, Ca, Cp), Cp tultúlaxwe 'it is soiled', and in CN tliil-li and Pl. On the other hand, whether the *-la/li was originally absolutive or not, Tr čorí 'cosa negra' and Cah *cukuli open the possibility that *tul derives from reductions that lost the medial syllable -ku-: *tuku(-la/li) > *tu'li > *tulV. Sr tïnää'k 'turn black' probably shows a reduction of the cluster apparent in Ca túl-nek and Cp tulnək-ic. Perhaps Ktn tu-č 'charcoal'.

241b. *tiLu / *taLu 'eye, black round thing': Stubbs2000b; Stubbs2003-41: the only UA language not showing *pusi for eye is Tbr telu- / tilu-r 'eye', which likely ties to Wr telúla 'smooth black stone for polishing pottery'. And they tie to CN tliilloo-tl 'blackness' and CN(S) tlilloa 'cubrirse de negro, ponerse color negro', and the lot of them tie to *tuL 'charcoal, soot, black' above, this being the longer original form. Note also UA *talu 'egg': Tbr ne-telu-r 'huevo'; Cr ta'u 'blanquillo, huevo.' (intervocalic liquids > ' in Cr). The Tbr form may tie to Tbr telu-t / tilu-t 'eye.' Note also the Tbr-Azt-CrC tie. [SUA: Tbr] [NUA: Tb, Tak; SUA: Tep, Tbr, Trn, CrC, Azt]

- 242. *yu'pa > *yuppa 'go out (of fire), (get) dark, black': M88-yu27 and yu26 'fire go out'; KH.NUA; KH/M06-yu27 and yu26 'fire go out': Cp yúpi-š '(paint) brush'; Ca yúpi 'be overcast (of sky), cloudy, color term base + yúpi = to turn into a colored appearance'; Ls yúúva 'be dark'; Ls yuvá/i 'bec. black'; Ls yuvá-ta/ti 'bec. black, vi, blacken, vt'; Ls yúúpa 'go out (fire), not burn'; Sr yupq 'go out (fire)', yupu; Gb yuvívkomok 'be getting dark'; Gb yupíxa' 'black'. Hill adds Wc yïvi / yïivi 'black' which corresponds perfectly (Wc ï < *ü) and Ls yupáqa/i 'go out (fire), vi; put out (fire), vt'. Also related are forms under M88-yu26; KH/M-yu26: Ls yúupa 'go out (fire), not burn'; Sr yupk 'go out (of fire)'; Gb yupí 'ahogarse'; Gb yupíxa' 'black'. Hill adds Ktn yupk 'extinguish fire or lamp'. Note also Ktn yovo'k 'dark, dirty, black'; Ktn yo'vok / yo'vïk 'be dark/black'; Ktn yuvitïk 'get dark'; and with p- prefix, Ktn p-yïvïk 'dark colored, brown-gray'. Note that Ktn may show the original cluster *-'p- > -pp-, emerging as simple gemination in most other languages, then some forms lost gemination, others did not: e.g., Ls yúúpa 'go out (fire), not burn' vs. Ls yúúva 'be dark'. At 'night', the forms of Azt *yo'wa 'night' may be cognate with these. [NUA: Tak; SUA: CrC]
- **243**. *so'opa 'black, dark': Eu sóbei / só'obei 'black'; Eu soba / sobé 'become black'; Cr sú'umuara'a 'está negro o prieto (persona)'. [SUA: Opn, CrC]

BLANKET, WRAP, MAT, BED; FRAZADA, COBIJA, PETATE, ENROLLAR, ENVOLVER; see also tie, fold, dress, circle (as in surround)

- **244a.** *ha-pït 'blanket': KH.NUA; M88-ha15; KH/M06-ha15: Gb havót 'blanket'; Sr havït 'clothes, blanket'. Ken Hill adds Ktn havï-t 'skin, blanket, clothes' and considers the possibility of Hp havìi- 'sleepy'. This *ha-pït 'blanket' may relate to *pïta 'mat', below, possibly with a ha- prefix for these Takic forms, similar to TrC's *hi*-prefix: Tak *ha-pït; TrC *hi-pïta. [*ï > Gb o]
- **244b.** *(hi-)pïta 'woven mat': M67-277 *peta 'mat, bed'; CL.Azt194 *petla 'woven mat'; CL.Azt 317 **pata; L.Son205 *pïta 'estera'; M88-hi2 'sleeping mat/petate'; KH/M06-hi2; M88-pï8 'mat, bed, petate'; KH/M06-pï8: Eu hipét; Wr ihpetá; Tr péra; My hípetam; Cr péeta 'mat, bed, petate'; CN petla-tl 'woven mat'; Pl petat; Po-pot/b'tet. Cr péeta is likely a loan (as also the Azt forms), but Cr hitá-ri with the expected *p > h is a genuine CrC cognate. Takic shows a *ha* prefix, and some TrC forms show a *hi* prefix, while others show only *pïta; yet all have *pït(a) in common. Miller lists many of the same forms in M88-hi2 and M88-pï8; therefore, Miller's two sets pï8 and hi2 are here combined. [Wr prefix = CN] [NUA: Tak; SUA: Trn, Cah, Opn, CrC, Azt]
- **245.** *pak 'mat': M67-278 *pak 'mat'; M88-pa31; KH/M06-pa31: Tb pah-t 'tule mat'; TO vakus (wakus) 'mat, skin, rug' (M67 cites Dolores); NP kappa 'bed' (Hill rightly queries whether this belongs, only if metathesis?); Miller also lists CL.Azt194 *pətla 'woven mat'; but it belongs above, having a different 1st V and 2nd C. These may derive from *paka 'reed' as in 'reed mat'. Let's add ST vakšidya-ra/vakšidya-kar 'rug'; ST vakšidya 'to spread for sleeping'; this agrees well with TO vakus / wakus; in fact, the Tep forms (ST, TO) show more segments and may suggest something like *pakuciya. [NUA: Tb; SUA: Tep]
- **246.** *kimaL / *kamaL (> kimiL) 'blanket, wrap (in blanket)': L.Son82 *kima 'cobija'; M88-ki8; KH/M06- ki8: Wr kemá; Tr gemá; Tr komabi/gemabi 'wrap oneself in a blanket'; Tr gimí-mea 'wrap oneself (as with a blanket)'; CN keemi 'put on, wear (clothes)'; CN keemi-tl 'garment'; Pl kimilua 'wrap, cover, vt'. To these let's add Ca kámiš 'surround, vt'; CN kimil-li 'bundle of clothes, blankets'; CN kimiloaa 'wrap in a blanket, vt'; CN tlakeemi-tl, -tlakeen 'garment, wrap'; CN tlakeen-tia 'get dressed, dress s.o., vt, vrefl'; CN tlakin-tli 'garment'. Tb kam'-(ut) ~ 'angam' 'it fits' likely fits as well. Possibly also belonging (with a prefix) is SNum *wVkka'mi 'cover, put blanket over, vt': SP wüqqam'mi 'put a cover over, cover, vt'; WMU ká'mi / qá'mi / gá'mi / gám'mi / hwikka'mi 'cover, put blanket on, vt'; CU whká'mi 'cover, vt'. [variety of V's; Ca -š] [NUA: Tak, Tb; SUA: Trn, Azt]
- **247.** *mana/i 'grass mat': B.Tep144 *mainai 'grass mat': M88-ma32; KH/M06-ma32: NT máíñi; ST maiñ; TO mainï; LP maiñ. Add Nv maina 'petate'. Could Cp méneni-š 'clad, dressed up'; Cp méne 'dress up, change clothes' be related to the Tep forms? The semantics and vowel leveling (*mani > mene) seem plausible enough. Cf. *ïsiman below. [SUA: Tep; NUA: Tak]
- **248.** *'isi(C)- 'blanket': NP ïzïggwi 'blanket'; Tb(M) 'ïsï-t 'blanket'; Tb 'ïsï'dit 'wear or wrap oneself in a blanket'; Tb 'ïsï'danat 'to put a blanket around s.o.'; the final -t (instead of -l) of Tb 'ïsï-t and the glottal stop in Tb 'ïsï'danat both suggest a final consonant no longer obvious; furthermore, the gemination in NP ïzïggwi suggests a C cluster.

- The following Hp terms may belong: Hp ïsimni 'a wrap for the body, blanket, shawl, robe, cape'; Hp ïsiman-ta 'make a wrap'. If up for a speculative adventure, perhaps worth keeping in mind are the SNum forms *sam'aC 'spread, rug, cover' at 'stretch', such as Kw sa'ma-pï 'blanket, mat'. We cannot count such, but can contemplate. Jane Hill notes also Cp hisexve-l 'clothing'. [C > ' in a cluster] [NUA: Hp, Tb, Num, Tak]
- **249.** *piL... 'wrap': CL.Azt195 *(pi)pilowa 'wrap, hang up'; M88-pi25 'wrap'; KH/M06-pi25: CN piloaa 'hang self, hang s.th. up'; Pl piluwa 'hang, hang up, wear around the neck'. We might add My bi'itia 'wrap it', since l > l in Cah is frequent, but liquids to glottal stop is not so well established for NP in the -bi'a of NP nanobi'a 'wrap, v', though examples of *t > l exist. The Aztecan forms are certainly cognate with each other, and Cah probably with Aztecan. [Azt p < p; -t/l- > -l- in Num] [SUA: Cah, Azt]
- **250a.** *kwisi-capa 'wrap, surround': PYp bihsa/bihis 'wrap, spin, make thread'; NT bibííšapai 'envolver, vt'; TO bihag 'surround, wrap (around), vt.'; TO bihi-wig 'wrap around, vt'; and SP kwocai / kwocayai 'wrap around' may tie in. The Tep forms are certainly cognate with each other. SP agrees in two consonants, but shows a different vowel; however, the CV combination k^wo is not in UA generally; therefore, we would expect that SP o is not original, but a result of kw-reduction, i.e., assimilated to the labio-velar nature of the first consonant, perhaps *kwisa > kwos/ca. Nonetheless, the Tep forms also suggest the possibility of another consonant; e.g., PYp bihsa / bihis recommends Tep *bihis < PUA *kwisic, and NT often loses the h present in other Tep languages, which corresponds to PUA *s, so NT bibííšapai similarly suggests *kwisi-capa. For another example of *s > SP c, see 'head'.
- **250b. *kwisi-ηoLa** 'wrap around': TO bihi-noD 'wrap, vt'; Nv vinorha 'envolver alguna cosa' (< Tep *bihi-nola < PUA *kwisi-ηoLa). [-l/r/d- in Tep; c/s] [SUA: Tep]
- **251.** *pikku 'wrap, entangle': Eu navíkura 'enredar uno con otro'; CN piiki 'wrap s.th. up, enclose s.th., invent, fabricate something'; CN piikki 's.th. wrapped up, firm, solid'; CN piikka-tl 'wrapping'. [Azt *p, i < *u] [SUA: Opn, Azt]
- **252.** *(i'-)kwiya 'wrap, wind around': CN i'kwiya 'wrap, coil oneself, coil one's hair up'; CN te'kwiya 'wrap, entangle s.th.'; Tr i'wi*-ma 'enlazar, enredar, envolver'; Tr wi*-ma 'lazar, amarrar, persogar'; Tr i'wi-tu-ma 'enredarse'. [*-kw->-w- in Tr] [SUA: Trn, Azt]
- **253a. *witta/i** 'wrap, tie': Kw wiči 'wrap up'; SP wičča 'wrap around, tie'; WMU *hwih*ččé-y 'wrap, vt'; CU wočá-y 'wrap, bind, bandage (with), vt'.
- **253b.** *wïtta (< *witta) 'tie': Mn wïtawa 'tie, vt'; Mn wïtapo'na 'to bundle up (s.th.), vt'; NP wïcakïna 'tie (horse, shoe, willows)'; NP wïcabiggï 'fasten, tie together'; NP wïcakana 'tie, vt'; TSh wïccokwah 'tie, vt'; TSh wïccokwah 'tie, vt'; TSh wïccamanaa 'tie an animal up'. Mn -t- < *-tt-, and all suggest *-tt-. Jane Hill notes also Tb ïttïša-l 'clothing' with a question mark as to whether loan or cognate. [*i-a > ï-a] [NUA: SNum *witta, W/CNum *wïtta]
- **254.** *kwi'aC / *kwitaC 'wrap, surround': Sh kwïa-ppï/koa-ppï 'corral, fence, antelope surround'; SP kwi'a-pï 'fence'; CU kwi'ay 'surround as a fence, encircle'. The initial C of Mn kwïta 'wrap, wind around (of bandage)' better belongs here, but the semantics abide with the above. Both Sh and SP suggest a final -C. [*-t->-'->ø in Num; kw-reduction] [NUA: Num]
- 255. *taLuma' / *taLumaC 'blanket, garment': CN tilma'-tli 'cloak, blanket, indigenous man's garment fastened on one shoulder'; Eu terúwa/teruva 'tilma, frazada'; TO čïDhum 'blanket'; Tb taluuma-t 'breech clout'; ST tidya 'wrap with a blanket'. In TO čïDhum (< *tïLum?), the h may be excrescent devoicing (as in TO o'odham); nevertheless, TO has *tVLum in common with Tb, and an u with Tb and CN. Tb, TO, Eu are an intriguing set, in that they agree in five of six segments *taluma, outside of a liquid raising a vowel in TO and Eu (*a > ï, i/_r, l, which is common in UA), an extra h in TO, and perhaps *m > w in Eu. Note how easily CN tilma'- can derive from *taluma', since CN i < *u: *taluma' > tul(u)ma' > tilma' or > *talima' > til(i)ma'. Interestingly, Tb taluumat may show the original voweling as also in *makuLa at bag, and Tb also has two verbs that may relate— Tb tuluumiin ~ 'utuluumiin 'to roll his blanket' and Tb tulu'uma ~ 'utulu'uma 'it rolls'—though of different vowelings. Also note the final glottal stop in CN and -t (vs. -l) in Tb, both suggesting a final consonant, if not a glottal stop itself. [m > w; -l/d- in Tep; *L in both NUA/SUA] [NUA: Tb; SUA: Tep, Azt, Opn]

256. *tawa > redupl. *taLawa 'wrap around' (note Ls tawááyiš): Tb tala'awa ~ 'atala'awa 'it (rope) encircles it'; Tb talaawïš(-ït)~'atalaauš 'go around'; Tb talaaw~'atalaauš 'he encircles it'; Eu hitárawe / hitárawe 'vestirse'; Ls tawááyiš 'rabbit-skin blanket'. Note that both Tb and Ls show a final -s, suggesting possibly a longer reconstruction like *tawayis. If tempted to tie these with *taluma above, note Tb and Eu exhibit distinctive forms. Jane Hill notes 495 may belong here. [NUA: Tb, Tak; SUA: Opn]

257. *tapic 'bed': CL.Azt12 *tlapəč- 'bed, frame'; M88-ta35; KH/M06-ta35: CN tlapeč-tli; Pl tapeč; Po tepošt; T tlapečtlI; Z tapeč 'mat'. Might this tie to *pit with a *tV- prefix? [tV- prefix] [SUA: Azt]

NB, for *makuta > *mulku/*muka/*maku, see at bag.

NB, for *sono 'blanket, grass', see grass.

NB, for *sam'aC 'spread, rug, cover', see at stretch.

NB, for *ta'ko 'wrap, encircle', see circle, where are found: Wr ta'ko-ná 'envolver'; Tr tagó 'ponerse el taparrabo, vestirse (el varón)'; Tr tagótu 'estar vestido (el varón)'; TO čekoš 'wrap around the ankle, vt'; TO čekoš-da 'an ankle rattle'.

NB, Ken Hill notes Spanish *frazada* is the source of Hp pösaala, and is the likely source of Ca sáala'a, Tbr pirisál, Yq piisam, and probably other UA words for blanket. Comparing Tbr and Yq, note Yq's quick loss of r since European arrival. Also note the tendency of alveolars to raise and front preceding vowels (a > i/_r/l/s/t) in Tbr, Yq.

BLOOD; SANGRE

Mn	páápi; paaqa 'bleed'	Hp	ïŋwa	Eu	erát; vavíka 'bleed'
NP	bïïpi	Tb	ïkwa-l	Tbr	ará-t; avá
TSh	pao"; paoppi	Sr	ïçç; ïçava' 'bleed'	Yq	ohbo
Sh	pïï"-pin	Ca	'éw-ily	My	ohbo
Cm	pïihpi	Ls	'ów-la	Wr	elá
Kw	рії-рі	Cp	éw	Tr	e*rá; lasí
Ch	páï-pi	TO	ïh'ïd	Cr	suúre'e
SP	paï"	Nv	ï'ïrha	Wc	šuuríya
CU	páa-pï	PYp	e'er		šuure 'red, blood-colored'
WM	páá-pï	NT	ïïrai	CN	es-tli; tlapalloo (tlapal-li 'dye')
		ST	'ï'ïïr	CN	espipika 'blood flow out'

UA terms for blood are among the most complex for sorting and reconstructing definitively. Among the complexities are approximations of TrC / Tep *ïLa, Azt *ïs-/*əs, CrC *soL/*sot, Tak *'əwi, Hp ïŋwa, and Num *paC. Miller puts them all together in M88-ï4, perhaps for consideration or viewing all in one place rather than by conclusion that they are all cognate, since M88 was a brainstorming work in progress, for no one has explained phonologically how such a diverse group could be reconciled as derivatives from a single proto-form. Manaster Ramer (1991, 1993a) has come the closest with a fairly reasonable explanation for the TrC, Azt, Tak, and Hp forms—*ïtwa—and a medial cluster does seem likely. M88-ï4, KH/M06-ï4, and CL.Azt205 include forms found in the next four letters of the same number.

258a. *ïta/ïLa 'blood': Sapir; B.Tep *'ï'ïrai; M67-47a *'et; CL.Azt16 PAzt *əs, 205 PUA **ï-; L.Son13 *'ïra; M88-ï4: KH/M06-ï4 *ïtwV: Eu erát; Wr elá; Tr lá/lé-/lasí; Tbr ará-t, avá; Tbr avá-ma-li-r 'corazón'; TO ïï'ïD; PYp e'er; Nv ï'irha (probably ï'ïra); NT ïïrai; ST ïï'ïr; Sr 'ïţļţ 'blood' and Sr ïçava' 'to bleed'; and Ken Hill adds Ktn 'ïč. These may result from *ïs-ta as the Azt forms below. [liquids] [NUA: Tak; SUA: Tep, Trn, Opn, Tbr] 258b. Azt *ïs-/*əs 'blood': CL.Azt16 PAzt *əs, 205 PUA **ï- 'blood': CN es-tli; Pi es-ti, etc. [SUA: Azt] 258c. *ï(N)twa > *ï(N)kwa / *ïtwV (AMR) 'blood': CL.Azt205; M88-ï4: KH/M06-ï4 *ïtwV (AMR): Hp ïŋw; Tb 'ïkwal, 'ïkwan (poss'ed); Yq and My 'ohbo 'blood'. These could be related to the Takic forms above, but the Takic forms lack the velar and nasal dimensions, whereas Hp and Tb's labiovelars better agree with each other, though Hp includes a nasalized dimension not apparent in Tb. Also of interest are Yq and My ohbo 'blood' (*kwV > Cah bwV > bo). These Cah forms (with -hb-) suggest a consonant cluster also (as does Hp), and with an assimilation of the first vowel anticipating the following rounding, kw-reduction has the Cah forms matching the Hp and Tb forms better than other UA forms frequently associated with them. Given NUA's nasalization of liquids, *ïL(a) begins like ïNkwa (<*ïLkwa), but we still have kw in Hp, Tb, Yq, and My, not apparent in Tak and TrC, perhaps due to a cluster, as AMR suggests. Or *ïLa could have lost the labial quality of an original cluster of

nasal and labial, while *ïwV lost the liquid, nasal, and velar dimensions of the cluster. Such ties are possible, but not at all obvious, least of all certain. In other sets, Uto-Aztecanists have not tied lexemes together so phonologically diverse as these, so the habitual association of *ïta/*ïLa, *ïNkwa, *ïwi, and *sor is puzzling. [kw-reduction, labials, nasals, cluster] [NUA: Hp; SUA: Cah]

258d. *ïwi 'blood': BH.Cup; M67-47b *'ew; KH.NUA; Munro.Cup17 *'əəwi-la 'blood'; M88-ï4: Ls 'ów-la; Cp 'əwə-l; Ca 'éwi-ly. At least one other example of medial -*kw- > -w- in Tak (where did I see it?) encourages a possible tie with Hp/Tb *ï(N)kwa, after loss of k and possibly a nasal. [NUA: Tak]

Manaster Ramer (in 1993a "Blood, Tears, and Murder" and 1991e "UA *tw") suggests *ïtwa 'blood' and that a cluster of *-tw- underlies the complexities, stating that the only known source of kw in Tb is *tw: e.g., Tb tuugukwï-t 'mountain lion' < *tuugut-wït-ta 'big-wildcat' (cf. Ls tuk-wu-t 'mountain lion' and Ls tuuku-t 'wildcat'). He cites other evidence to suggest that at least some Hp -ŋw- may derive from *-tw-. (See also crow and bighorn sheep.) If so, his is a very astute insight, the most comprehensive and explanatory thus far: *ïtwa > Tep/TrC *ïta/*ïLa, Hp ïŋwa, Tb ïkwa, Tak *ïwV, and Azt ïs-. [*-kw- > -w- in Tak; nasal in Hp]

259. *soL / *sor / *sot 'blood, bleed': M88-ï4; CL.Azt205: Cr suúre'e; Wc šuuríya; Wc šuure 'red, blood-colored'; Azt soo 'pierce, draw blood by piercing'. CrC and Azt both correspond with *soo; thus, I have my doubts that Azt *ïs- is also cognate with *soo. [SUA: CrC, Azt]

260. *païC / *pauC / *paC / *pap 'blood, bleed': I.Num128 *païhpi; M88-ï4; KH/M06-ï4: Mn paa"- / páápi; NP biïpi (< *piïp-pi); TSh pao"-, paoppi; Sh piï"-pin; Cm piïhpi; Kw piï"- / piï-pi; Ch páï-pi / païwa; Ch(L) païpita; SP paï"-/ paï-ppi; CU paa"- / páa-pi (vs. -vi), poss'd páa-pi-n 'my blood'. Note that the first part of Eu vávika 'bleed' aligns well, and Tbr avá 'blood' somewhat. Mn paaqa 'bleed' and Eu vávika 'bleed' and CN(RJC) espipika 'blood flow out'and ST rpukia 'bleed'all yield *p-k consonant sequences, and Eu and CN p-p-k sequences. Sr ïçava' 'bleed' also yields a -va syllable. A second bilabial in at least Eu, perhaps evidence of it in Num geminations at the same place, round vowels in TSh, and the fact that CU takes the suffix after *-pi instead of dropping it as usual, all combine to make one wonder if a second bilabial is involved, but lost in a cluster: *pap-pi > *pa"/ *pau-pi. Miller and Ken Hill list this at ï4, with the other initial ï forms above, suggesting that they take this as a compound of s.th. like *pa-ïC-, which could be. Ls páá' 'to menstruate' may also be cognate with the Num forms, at least. [NUA: Num, Tak; SUA: Opn, Azt]

Bloom: see flower

Blow (of wind): see wind and cold.

BLOW (with the mouth); **SOPLAR**; see also wind

261a. *puca 'blow' (AMR): B.Tep286 *vusitai-i 'blow'; M67-49a *puc, 49b *puhi; CL.Azt17 *piica 'blow', 43 *aapiica 'defecate, have diarrhea'; L.Son219 *puca; KH.NUA; M88-pu12; AMR 1992b; KH/M06-pu12 *puca (AMR): TO wus 'exhalation'; TO wuso(t) 'blow on obj'; Nv bustana; busiota 'soplar'; NT vúšt^yai / vúštïai; ST vušt^ya; Eu pupúca; Wr pupúce; Tr pučá; Wc hïcie; CN piica 'blow on s.th., huff and puff with anger, play wind instrument'; CN tlal-piica 'blow, huff, v.'; CN il-piica 'inflate, blow s.th. up'; Yq púhta; My puhtía(k); Sr poihkin; Gb pú'i; Cp puwe; púwine 'blow on, into'; Ca pú'an / púwan; Hp poya(kna). If an example of medial *-c- > -y- (AMR 1992b), then Tb(M) puskat/'upusk vi.; Tb(V) pušk is curious. SUA is quite consistently *c, and Hp shows expected y (< *-c-), while other NUA languages show a variety of reflexes, probably from clustering with *-ka/-ki. Of course, y is vulnerable in the clustering environments apparent in many of the forms. For example, as Cah shows *c > h when clustered with t, NUA may show clustering with -k/-ka / -ki/-kin/-k(V)na: *puc-ka/ki (> *puhi) 'blow'; thus, those showing puhi may result from the whole -ck- cluster reducing to -h-. Tb shows s/š more like SUA, perhaps protected by the cluster, in contrast to the expected y of NUA. *puca is clear in SUA, but most NUA forms (except Hp) have the added morpheme *-ka/-ki, which yields NUA forms below in b:

261b. *puc-ka > *puhki / *pukki > *pukkwi 'pant, blow, v': Tb(M) puskat/'upusk vi.; Tb(V) pušk; Ls púxi; Sr poihkin; Sh puhki / puhkwi; Mn puuhi; NP puuhi'yu; TSh puuhi"; Cm puuhkitï; Ch pukwí; Ch(L) pukwi-gyah 'blowing (with mouth or bellows, not wind)'; SP puqqwiai-ŋqï- 'to pant, make panting noise, v'. Medial cluster? [CN p; *-c- > NUA y, > ', > h in clusters] [NUA: Num, Hp, Tb, Tak; SUA: Tep, Trn, Cah, Opn, CrC, Azt]

NB, for Numic *nïai, see wind.

NB, for *sïkpï, see wind and cold.

NB, for *hïka, see wind.

BLUE; AZUL; see also green

262. *sakwa 'blue, green': M67-50 *sakwa 'blue'; M88-sa10; KH/M06-sa10: TSh sakwa 'green'; Kw sakwa / sako 'blue'; SP sakwa 'blue/green/gray'; CU saġwá-ġa-rï 'green, blue'; Hp sakwa. Ken Hill adds Ch sagwamuvin'nankavï 'turqoise'. Add Ch sawá-ga 'green' and WMU sawágar / sowagar / saġwagar 'green (to mean blue, it often takes help, e.g. sky-green)', which sometimes faintly includes ġ; and perhaps Ca sáw-et 'unripe'. Jane Hill (p.c.) notes also Mn saġwanowí' 'green garden worm'. It is possible that Wr sa'wa- 'yellow' and other TrC terms under *sa'wa 'yellow' are related, since the usual reflex for PUA *kw in Tr/Wr is w initially and 'w/w medially. Or forms under *siwa / *si(y)o 'green, blue' with loss of the velar dimension of kw (*sakwa > sa'wa/sawa; or the other direction, acquiring velar contact in NUA) and a vowel change are not out of the realm of possibility, though not necessarily probable. [NUA: Num, Tak]

263. *tayawi > *tiyawi / *tiyowi 'blue/green': B.Tep249 *tiïdogi 'green, blue'; L.Son305 *ti'yo 'verde, azul'; M88-ti'46 'green/blue'; KH/M06-ti'46: TO čiïdagi; LP tiïdi'g; stugdogi; studowivita; NT tiïdó(gi) 'blue/green'; ST t'ïido'. Let's add PYp teedag and Eu tadei 'blue'. For a reconstruction of *tiyawi, TO, PYp, and maybe Eu show the 2nd vowel as *a*, while other Tep forms likely assimilated *a* > *o*, anticipating the following *w. And Eu tadei 'blue' may show the original first vowel *tayawi, while the other languages simply did not allow the jaw to drop far enough for *a*, but moving the vowel higher or closer to the points of articulation of both t and y, remaining high between the high fronted consonants on both sides of *a, thus motivating i. Does Ktn yawvik / yawvu'k / 'ayawvik 'clear, bright, clean, light blue' belong, lacking initial t(a)-? Cahitan *tiwiLi (My teweli 'blue, sky color'; Yq téwe 'azul'; Yq tewéli 'azulito'; AYq tewei 'dark blue') may belong since syncope of a vowel and assimilation are common in the Cahitan languages: *ti'yawi > *ti'ywi > *ti'wi. For loss of medial syllables in Cah, compare 'bat': *so'o-pati > so'opeci > Cah sooci-k. [reductions; *V > o/ bilabial] [SUA: Tep, Opn, Cah; NUA: Tak]

264. *kwato 'blue': Cr kwatúmua 'dark blue'; Wc kúutušíe 'light blue, brown'. We reconstruct final *-o because both Cr u and Wc u correspond to *o. Cf. also *koto 'brown'. [labials] [SUA: CrC]

Bobcat: see lion

BODY; CUERPO

265. *sona / *hona 'body': TO hon 'body'; Nv hona 'cuerpo'; PYp hona 'body'. [SUA: Tep]

NB, 'body' as a semantic category is not so common in Native American languages as in European languages. In UA, words for 'person', 'dead (corpse)', or 'meat' more often serve as terms for 'body'; e.g., UA *tukkuwa / *takkawa at 'meat' includes B.Tep *tuukuga 'body, meat' found in other UA forms.

BOIL; HERVIR; see also cook

266a. *sawa 'boil, apply heat, cause to melt': Mn sawa/saawa 'boil, cook by boiling'; Mn pasawa 'heat a liquid' (probably contains *pa- 'water'); TSh saawah 'boil, vt'; TSh tïsaawah 'boil, vi' This is related to *sawi 'melt' below. TSh has both sawa 'boil, vt' and TSh sawi 'melt, vi', fitting the UA pattern of CVCa 'transitive, active' vs. CVCi 'intransitive, stative'.

266b. *sawi(y) 'melt': TSh sawi 'melt, vi'; TO haagid 'melt, thaw'; TO hagito 'burn up, melt away'; PYp haag 'melt': NT aágyi. [-a/i alternation]

266c. *sawa 'make tortillas or bread' and *sawiC-ta 'bread': BH.Cup *şáw 'make bread'; M88-sa20; KH/M06-sa20: Ca sáw 'make tortillas'; Ca sáwi-š 'tortilla'; Cp şáwi-š 'bread, acorn bread'; Sr şaawt 'bread, acorn bread'; Ls şáwa/i 'singe, get singed'; Ls şááwa-kaa 'cook tortillas'. [NUA: Num, Tak; SUA: Tep]

267. *sa'aC 'boil, cook': Sapir; M67-282 *sa 'melt'; I.Num176 *sa'i 'melt'; M88-sa4 and sa8; KH/M06-sa4 and sa8: NP sa'a 'cook'; NP saa 'cook'; NP sai 'melt'; NP saibidu 'snow-melting warm wind'; Sh sai" 'melt'; Sh saa" 'boil meat, vt'; Cm saati 'boil'; Cm saa 'boil s.th.'; Cm saapi 'boiled meat'; Kw šee 'melt'; Kw sa'a 'boil, cook'; SP sa'ai 'melt'; SP sa'a 'make mush'; CU sa'áy 'boil, boil-cook'; Wr saipá-ni 'quemarse'. Miller includes TO hagito 'burn up, melt away'; TO haagid 'melt, thaw', which we list with *sawa/sawi above. Of considerable interest is that much of SNum, by its past/perfect forms, shows whether a stem ends in -a or -i. WMU sa'á-y 'boil, cook (mush), vt' (past: sa'á-qa) vs. WMU sa'ái-y / sa'éi-y 'melt, vi/vt' (past: sa'éi-kye) shows the same difference we see in SP sa'a- 'boil, make mush' vs. SP sa'ai 'melt'. Kw shows a difference as well: Kw sa'a 'boil, cook' vs. Kw šee 'melt'. This verb (*sa'aC) also shows a final -C in all SNum forms having gemination for the absolutive suffix: Ch sa'á-pi 'gravy';

SP sa'a-ppi 'what is boiled as mush'; WMU sa'á-ppi 'soup'. Though both may originally derive from the same stem, as in perhaps an early addition of the -i stative suffix creating differing stems (*sa'a + i > *sa'a-i), as of now, they are quite differentiated. Then we also have *sawa above, again complicating matters as to whether we have a glottal stop/w alternation, apparent in both Num and in Tep g, or a separate stem. They do show different medial consonants ('vs. w). In any case, cf. Tewa s<u>ee</u> 'stew, boiled food'. ['/w] [NUA: Num; SUA: Trn, Tep]

268a. *muLa / *muta 'boil': M67-51; M88-mu23 'to boil'; KH.NUA; KH/M06-mu23 'boil': Cp mule 'boil'; Ca múlul 'come out steaming or bubbling, swarm out'; Ca pis-múlul 'come out, bubble up, boil, v'; Ca múlul-iš 'steam'; Ls múl'a/i 'bubble up, vt, boil, vi'.

268b. *muLa / *muna 'boil': Sr munaank 'boil, vt'; Sr munaana'n 'be boiling'; Sr munaankin 'cause to boil, vt'. To the above, we should add Tb mon'moonot~'omon'mon' 'boil'. I divide them only by letter, not number, in that Sr and Tb show medial -n-, while the Cupan languages show medial -l-, though *tuL at 'black' shows a similar contrast between Sr and the other Tak languages. [l/n; liquids; nasals]

268c. *moLo 'boil, waft upward': CL.Azt18 *moloonV 'boil, v' < **molo 'boil'; M88-mo9; KH/M06-mo9 'boil': CN moloon(i) 'waft, rise and drift on air currents, to effervesce'; Pl muluuni 'dry, fly or blow away (e.g., dust, flour, chaff)'; Po molun-; T molunI; Z molooni. [*u-a > o-o; liquids] [NUA: Tak, Tb; SUA: Azt]

269. *nu'ya > *nu'yo 'boil': I.Num113 *no(')yV/*nu(')yV; M88-no9 'boil, vi'; KH/M06-no9: Cm no'yaikïtï 'boil, steam, v'; SP nuyo-ka 'boil, vi'; CU niyokway 'be boiling'. Add WMU niyőġwa-y / niyóġwe-y / niyáġwa-y / niyáoġwe / niőőgwa-y 'boil, steam, vi'. CU's first V assimilated to y, and *u-a > o-a in Cm. [NUA: Num]

270. *poso 'boil' (perhaps < *pasu): CL.Azt66 posooni 'to foam'; posoonal 'foam'; M88-po21; KH/M06-po21: CN posoonia 'to boil'; CN posoonal-li 'foam'; Pl pusuni 'foam, froth, v'; Z posoni 'foam, v.'; etc. To these Aztecan forms, we must also add Cah *poh-: Yq pohte 'hervir'; AYq pohta 'boil, vt'; AYq pohte 'boil, vi'; AYq pohtia 'boil for s.o., vt'; My pohte 'está hirviendo'. Numerous other examples show s > h in a cluster for the Cahitan languages, e.g. *tasikaLi at bread. Parallel to Yq pohte is Ktn vo'rīk 'boil, vi' though Ktn voro' 'boil, vt' raises questions. Ca pis-múlul 'come out, bubble up, boil, v' may also belong, since Ca i < *o. We must also add Wr pasu 'cook by boiling', which could possibly show the original vowels, as a final –u could have rounded *a > *o: *pasu > *poso. [*s > h/_C] [SUA: Cah, Azt; NUA: Tak]

271. *kwu'ipV 'boil': Stubbs1995-25: TO ku'ivo-ni 'boil'; Tr o'wiba- 'be cooked, boiled'. [SUA: Tep, Trn]

NB, for *tono, see hot.

NB, for *kwasï 'cook, boil, ripen', see cook.

BONE: HUESO

272a. *oho / *oCo 'bone': Sapir; VVH61 *'oho; B.Tep324 *'oo 'oi/o 'bone' and *'oo 'odï 'his bone'; M67-52 *'o/'oho; I.Num13 *oho; L.Son14 *'o; M88-'o1; KH.NUA; KH/M06-'o1: WNum: Mn óho; NP oho; SNum: Kw 'oho-vï; Ch ohóvï; Ch(L) hohovï; SP o(h)o-; WMU öő-vü 'bone (of dead animal)'; WMU öő'a- 'bone (of living being, usually poss'd)'; CU 'öő-vï; but not in CNum. Hp ööqa; Hp öqala / öqal- /öqaw- 'strength, strong'; Tb 'oo-n (poss'd) and Tb ooban 'bone' (Tb oobal 'strong'); Sr ööt; Ktn oc; Gb -én. TO oo'o; LP 'oo'o-; Nv 'o'o-di; PYp oo'or; NT óóyi/óói; ST 'a'oo; B.Tep324 *'oo'oi/o 'bone' and *'oo 'odï 'his bone': NT óódï; ST 'a'ood; UP 'oo'ojï 'his bone'. Eu hówa (gen. hóhte; acc. hóhta); Tbr ho-ta-rá-k/t; o(-la); Yq ota; My otta; Tr o'čí; Wr o'á 'bone'; Wr u'á-ni, u'aré-ma 'be strong' ('Is this related?' Miller queries, and it probably is, in light of a frequent semantic tie between 'bone' and 'strong/strength' in UA). Ken Hill adds Ktn oc. Miller and CL.Azt include CL.Azt19/208 Azt *oomV and Wc uume with these other UA forms, but for clarity let's separate them by letter. It appears we are dealing with either an array of suffixed elements attached to whatever the stem is or an underlying medial cluster that surfaces in the variety of medial consonants that we see, as this is a horribly difficult set for the second consonant (h, ', p, k, t, m). At least the Num and Tep forms are consistent with *oho; and -ta (TrC) and -ka (Hp) may be fossilized affixes. Judging from the Eu forms, it appears that the *ota forms (Tbr, Yq, My, possibly Sr and others) may derive from an old accusative; and Tr o'čí may derive from a genitive. **272b.** *ohomï 'bone': Sapir; VVH61 *'oho; M88-'o1; CL.Azt19 *oomV < **oho-mï; KH/M06-'o1: Wc 'umé;

272b. *ohomï 'bone': Sapir; VVH61 *'oho; M88-'o1; CL.Azt19 *oomV < **oho-mï; KH/M06-'o1: Wc 'umé; CN omi-tl 'bone, awl'; ZN oomit; HN 'omi-tl; Pl uumi-t. Sapir and VVH are unsure what to think of the *-mi* syllable in the Azt and CrC forms; CL.Azt propose a fossilized plural suffix -mï added to *oho*- apparent in Num and Tep. [*o > Hp ö, Wc u, Gb e] [NUA: WNum, SNum, Hp, Tb, Tak; SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]

273. *cuhmi 'bone': I.Num260 *cuhni; M88-cu11; KH/M06-cu11: CNum: TSh cuhmi/cuhni-ppïh; Sh cuhni/cuhwi-ppïh; Cm cuhni. Because *m > n is more likely in UA than *n > m, I reconstruct *m. [-m/n-] [NUA: CNum]

NB, for *to'i 'bone/belly', see stomache.

Born: see bear

Borrow: see trade and give

Bottom: see down

BOUNCE

274. *yuCtV 'bounce': M88-yu1; KH/M06-yu1 'bounce, v': Ca –yú'i- 'trot, v'; Cp yutyút- 'trot, v'; Ls yúhi 'trot, v'; TO čuDwua / judwua 'bounce, land on one's feet, v'; Wr yu'ri- 'caer solo, mismo'; My yú'a 'empujar [push]'. Good set, Wick! [NUA: Tak; SUA: Tep, Trn, Cah]

BOW; ARCO

275. *aCta 'atlatl, bow': Sapir; M67-53; I.Num10 *etï; M88a4; KH/M06-'a4: Mn édï; NP adï; TSh huu'etïn, aitïn; Sh (huu)'aitïn; Cm eetï; Kw 'edï; Ch acï; Ch(L) 'aci; SP acï; WMU ačá-rü / ačúr (some speakers say a voiceless/silent r) 'bow'; CU 'áa-ci; Tb 'aali-t; Wr atá 'arma'; Wr atapóri 'arco'; Tr (w)ata; CN a'tla-tl 'spear-thrower, atlatl'. Note *t > c in SNum east of Kw. Both Azt and Num suggest a consonant cluster. The Tr alternate forms ata/wata may indicate a possible tie between *ata above and *wata below; nevertheless, separating them as Ken Hill does is safer for now. [*-tt-> c in SNum; initial *w in Tr?] [NUA: Num, Tb; SUA: Trn, Azt]

276. *wata 'bow': B.Tep36 *gaatoi 'bow'; M67-53; M88-'a4; KH/M06-wa32: Hp awta, combining form: aawat / awat; TO gaat, gatwua; Nv gato; Nv gata 'make a bow, v'; PYp gaato; NT gaátoi; ST gaat. As Miller (1967-53) says, if the Numic languages and CN lost *w, then the Tepiman and Hp forms are related to the *ata forms above. However, if that is not the case, then Tr and Tep still agree well in *wata, and Hp *awata has yet another initial segment in front of w. [extra initial segments in Hp] [NUA: Hp; SUA: Tep]

277. *pakoti > *pikoti 'bow, bowstring': Stubbs2003-42: Tb pihooli-t 'bowstring' and Tbr wiko-lí-t 'bow' both agree with *pikoli-t, and Cah *wikori 'bow' (Yq wíko'i; My wíko'ori / wíkori) may be borrowed from Tbr, as Cah does not have w < *p like Tbr does. Such a loan would suggest that Tubar was once a larger entity or a more prominent influence than it was later. Eu bákoci/vákoci 'bow' and Eu vákota'a-n 'make a bow' also agree well, since they share five of six segments, differing only in a vs. i for the first vowel, which, in fact, may have been *a originally, since i is often the UA neutral unstressed vowel. [*k > h in Tb; *t > c/l/r, then l/r > '] [NUA: Tb; SUA: Cah, Opn, Tbr]

278. *kuCta-pi 'bow': Sapir; M88-ku36 'bow'; KH/M06-ku36: Cp kútapi-š; Gb -kúčap (poss'ed); Ls kútupi-š 'ash tree, bow'. Sapir includes Wc tupí/tuupíi 'bow', which aligns with Ls's 2nd and 3rd syllables, though CrC u < *o usually. We do need to add AYq kuta wiko'i 'bow'. A reconstruction of *kuCta is suggested by Takic since intervocalic *-t-> -l- in Tak; so we probably have a consonant cluster. [*t > c in Gb] [NUA: Tak; SUA: Cah, CrC]

Bowl: see pot Boy: see bear, man

BRAIN; SESO, CEREBRO

279. *coC-pikki 'brain, lit: head-goo': I.Num *cohpi(h)ki 'brains'; M88-co5; KH/M06-co5: Mn copígi; NP igicopigi (<iki-coppiki) 'brain'; NP mubigi (< mu-piki) 'nose-snot'; Ch copíki; SP čo''-pikki / soppikki / cöppikki 'brain, lit. head-fluid'; WMU čöhppíkki 'brain(s)'; CU cïpiki-vi (< *coppikki-pi); Hp cöqya 'brain'. NP, SP, and Miller all suggest that Num *co"-pikki is probably a compound of *co"- 'head' and *pikki 'gooey or coagulated fluid' because Num *mu-pikki 'snot' contains *mu- 'nose'. Kw wiya-biki-vï 'brain' also agrees with the same morpheme boundary. Hp is interesting in perhaps having apparently reduced the medial syllable—*co"-pikia > *copkia > *cokya—and in having acquired or preserved final -a that the other languages do not show. Note also *u/o > ï in CU. [bilabial > \$\phi/C\$; *o > ï in Num] [NUA: WNum, SNum, Hp]

- **280.** *ku(p)-pisiC 'brain < head-goo' CNum: TSh kupisi" 'brain, marrow'; Sh kupisi; Cm kupisi; TSh mupisippï 'mucus' (nose-gel/fluid), suggests *ku-pisi 'brain' is a former compound of 'head-marrow/fluid/snot'. [NUA: CNum]
- **281. *opawa** 'brain': Stubbs 2003-33: TO oag (< *owag < UA *opawa) 'brain, nerve'; Nv ovagadui 'sesos'; LP oopaga 'sesos, médulas'; PYp obgar 'brain(s)'; NT ováágai 'los sesos'. [SUA: Tep]
- **282.** *mo'o-co(ko-ta) 'brain': Wr mo'cógóla; Tr mo'čógówa. Cr mú'učusa'i has three syllables in common with Tr and Wr *mo'(o)co because Cr u < *o. Minus the initial morpheme (*mo'o 'head'), perhaps Tb či'igoo-l 'brain' should be kept in mind relevant to the latter part of the Wr and Tr forms. [SUA: Trn, CrC]
- **283.** *atoLV 'brain': Eu atóra; AYq o'oream; My ó'oriam. While AYq and My are certainly only dialectal variants, the tie to Eu is probable with a vowel assimilation and intervocalic -t- > -l/r- > glottal stop, which is common in Cah—*ato > *olo/oro > o'o—and a later suffix. $[t > r/l > \emptyset]$ [SUA: Cah, Opn]

BREAD; PAN, TORTILLA, TAMALE

284. *timaL- 'tortilla, tamale': M88-ti8 'tortilla'; KH/M06-ti8: TO cimait; Wr temei; Tr ŕemé 'tamale, hacer tamales'; CN tamal-li 'bread made of steamed cornmeal, tamale'. "Is Hp tima 'stone griddle' cognate?" Miller queries. Probably. Ken Hill adds Cr temwá 'tamal'. Jane Hill (2007) adds ST timaiči 'tamale'. PB timi-ta 'tortilla' (Estrada Fernandez 2003, 184) also belongs. We can also add the latter part of Nv vivak timaita 'pan de piciete'. The SNum forms below may represent the underlying verb as well. I include the liquid L in the reconstruction due to (1) its presence in CN, (2) the general lack of proto-dipthongs in UA, which dipthongs are usually due to loss of an intervening C or assimilation (i.e., ai < *aCi or aiCi < *aCi), (3) the fact that UA liquids often encourage assimilation toward, if not become, high front vowels (*L > i/i), and (4) the presence of such a high front vowel in other reflexes where CN's liquid is. These may tie to *tim'a / *ti'ma 'bake under ashes or underground': Ch tim'a-'bake'; SP ti'ma- 'roast under ashes'; WMU tim'ma-y 'bake or roast (usually underground)' and others found at 'cook', including Kw ti'ma at both ti8 'tamale' and ti54 'roast, bake'. [Liquids and high front V's] [NUA: SNum; Hp; SUA: Tep, Trn, Azt]

285. *tasikaLi 'tortilla': Dakin 1982-78; Stubbs2003-43: though it may be a regional loan from Nahuatl, a number of languages have a reflex of tasikali 'tortilla': CN tlaškal-li 'tortilla, baked bread'; CN tlaškaloaa 'make tortillas' (cf. CN iška 'to bake'); Pl taškal; Tbr tasekalí-t / tasikalí-t 'tortilla'; Yq tahka'i; NT táškali 'tortilla'. NT is obviously a loan since Tep h should correspond to PUA s. A reconstruction with the high front vowel (i/e) separating the cluster, as in Tbr, would explain the palatalized š of CN (Stubbs 2000b), both of which suggest an original presence of a high front vowel following s. Could Wc kakariyári 'masa dulce' contain a consonant harmony or reduplication of the latter part of the compound *tasi-kali? [*-sk-> -hk- in Cah] [SUA: Tbr, Cah, Azt, loan in Tep]

286. *tikkaC-pii 'bread, food': NP tikaba tomica 'bread dough'; Sh tikka-ppih 'food, bread'; WMU tiihkká-ppii 'food, n'; Num tikkaC- 'eat' + nominalizer = 'food, bread' in other Num languages as well. [NUA: Num]

NB, for *saw 'make tortillas or bread' and *sawiC-ta 'bread': BH.Cup *şáw 'make bread'; M88-sa20; KH/M06-sa20: Ca sáw 'make tortillas'; Ca sáwi-š 'tortilla'; Cp şáwi-š 'bread, acorn bread'; Sr şaawt 'bread, acorn bread'; Ls şáwa/i 'singe, get singed'; Ls şááwa-kaa 'cook tortillas', see at 'boil'.

NB, Nv vivak tïmaita 'pan de piciete' and Wc papá/paapáa 'tortilla' nearly agree if considering that CN and CrC often do anticipatory V assimilation. But Wc h < *p is expected. Hp piiki 'wafer bread' may be of interest if *pipaki > *pipki > piiki, but those are too many if's.

NB, for *sami 'adobe, bread', see 'adobe'. Miller joins BH.Cup *şáw 'make bread' and CL.Azt176 *šaamV 'tortilla, baked thing' in M88-sa20, but until m vs. w is explained, we put 'adobe' terms with Azt, as in CL.Azt.

BREAK; OUEBRAR

287. *sani 'crack, v.': B.Tep58a *haini 'to crack', 58b hai 'it cracked'; M88-sa6; KH/M06-sa6: TO haiñi; NT aiñí; ST haiñi. Tepiman's prevalent tendency to anticipate the V after a coming C (i.e., *aCi > aiCi) suggests UA *sani > Tep *haini. [Tep V anticipation] [SUA: Tep]

- **288.** *'omica 'break pl. obj's': B.Tep323 *'oomisa 'break pl. obj's'; not in M88, added by KH/M06-'o28: TO 'oomi; NT óómiša; ST -'oomis. [SUA: Tep]
- **289.** *kappi 'break': M88-ka37; KH.NUA; KH/M06-ka37: Ca qápi; Sr qapi' 'break (by bending) multiple obj's'. Ken Hill soundly moves SP kappi-/kapi- 'cut, break through' from ko15 to ka37. NP kaapi 'break, cut off' in I.Num60 aligns. Also add Kw kavi 'cut, cut down'; Kw kapi-nü 'cut off'; Ch kapák*i* 'snap, break'; WMU q*ah*ppáq*i* 'snap, break'; Ls qapúti 'chop, cut off'. These may tie with *koppi below. [NUA: Tak, Num]
- **290.** *koppi 'break': M88-ko15: I.Num60 *ko(h)pi/*ko(h)pa/*ka(a)(h)pi/*kï(h)pa 'break, cut'; KH.NUA; KH/M06-ko15: Mn to"-qopi 'cut'; NP koppi'i'hu 'break board'; CU koppokki 'break, snap'; Tb hoboo'at 'be in pieces'; Tb hoboo'in 'cut in pieces'; Sr qöp(k) / qörpör' 'break, shatter (of hard surface, like glass, pottery, eggshell)'; Hp qöhi(kna) 'break'. Ken Hill adds Ktn kopïk 'break, vi'; Ls qépa 'splinter off'. Both *kappV and *koppV are consistant for consonants (*k-pp), but the first vowels vary between a/o, though the 2nd vowel's a/i variation is common in UA. But the fact that Sr and Ls have distinct forms for each recommends their separation, until new data directs differently. [initial *k > h in Tb; a/o] [NUA: Num, Tb, Tak, Hp]
- **291.** *kow 'tear': KH.NUA; M88-ko36 'to tear'; KH/M06-ko36: Cp qiwe 'tear, vt'; Ca qiwiw 'tear, vt'; Sr qiwivk 'tear, vi' (Ken Hill 1994 notes that this may be a Cupan loan). We must reconstruct *kow instead of *kiw because of q instead of k, since PUA *ko > Tak *qo > Ca/Cp *qi. [NUA: Tak]
- **292.** *muLi 'break': B.Tep154 *muuri 'to break (stick)'; M88-mu18; KH/M06-mu18: TO mul(i)n 'break off obj by bending'; TO muliñ 'broken'; LP mïli, mïrina; NT muúli. [liquids] [SUA: Tep]
- **293.** *taCpa(na/i) 'split': B.Tep213a *taapanai 'to split'; 213b *tahapai 'he split'; L.Son274 *tapa 'rajarse'; M88-ta17; KH/M06-ta17: TO taapan 'split, divide, crack'; NT taapánai; ST taapñi; Eu tapána- 'rajar'; Wr ta'pá 'rajarse'; Tr rapá / rapú/tabú 'partirse, rajarse'; My étahtia 'partir, abrir'; CN tlapaani 'for s.th. to break into pieces'; CN tlapaana 'break, split s.th. open'; Pl tapaana 'break open, explode, vt'; Pl tapaani 'break open, explode, vi'. Ken Hill astutely adds Hp tàapakna 'knock on, hammer on'; Sh tappiyuih 'break, shatter'; and puts a question mark by Wc tara 'break'. As *p > ø happens in Wc, *ta (whether reduplicated or with another morpheme) is easily possible. I like Bascom's additional C in B.Tep213b, for much besides Tep suggests another consonant: the glottal stop in Wr, the long vowel glide in the Hp form, and the gemination in Sh. Do these suggest Hp -kna < UA *-(C)na? [*pt- > -ht- in Cah; C cluster; -a/i active/passive] [NUA: Num, Hp; SUA: Tep, Trn, Cah, Opn, CrC, Azt]
- 294. *kasi 'break': Tr kasi 'break in pieces'; Wr kasí- 'break (of brittle obj's), vi'. [SUA: Trn]
- **295.** *piCtaC / *piNtaC 'break, slice': Sh pitta'' 'slice, cut s.th. flexible'; Ls pída/i 'break long obj'. If *-t- > Ls -l-, and if *-tt- > Ls -t-, then Ls -d- may mean the first consonant of a cluster is voiced, perhaps *-Nt- or such, as both Sh and Ls suggest a cluster. [*-Ct-] [NUA: Num, Tak]
- **296. *pihwa** 'break': TSh pihwah 'break (soft obj), vi'; Sh pihwa" 'break'; Tb(V) piha~ipiha 'it is broken'; Tb(M) pihat~ipih 'to be frayed, broken (rope)'. [NUA: Num, Tb]
- **297.** *yoka 'break apart': Sh yokai 'fall apart, vi, knock down, tear down, vt'; CU yö'ac'ay 'shatter, break to pieces'. [*-k->-'- in CU] [NUA: Num]
- **298.** *si'u 'break to pieces': Yq síu-ta 'romper'; Yq sí'u-te 'rajar'; AYq siuta 'tear, vt'; AYq siute 'be torn, vi'; Tr si'o-kame 'broken to pieces'; Tr si'o-ca-ma 'destroy, break to pieces' (*u > Tr o,u). Wr ci'wána 'break off a little piece' may be related. [c/s] [SUA: Trn, Cah]
- **299.** *pus 'break': CL.Azt171 *pos 'throw, break'; M88-po24; KH/M06-po24: CN posteki 'split, break lengthwise'; HN posteki 'snap, break'; Pl pusteki 'fold, bend'. These may tie to 94 *ti-pos-ta 'axe' and to Mixe-Zoquean (MZ), for Wichmann (1995, 429) lists MZ *puš 'cut with a machete' and MZ *puš-an 'axe', and to the middle morpheme in CN te-pos-tli 'device made of metal'. What of Kw tapuzi 'to break' and Ch tapok(a) 'chop'? [SUA: Azt]
- NB, for *pina 'crumble, break apart, vi' see grind.

BREAST; PECHO DE MUJER; see also milk, suck, kiss, chest

Mn	pizí'	Hp	piihï	Eu	víit / biít		
NP	pica 'milk'	Tb(V,M) pii-l; Tb(M) pi'iš-t/n					
	pici 'suck',	Tb(M) piišanat/'ipiš 'suck, nurse' Tbr wimú-r					
TSh	pici	Sr	pi'	Yq	pípim		
Sh	pici	Ls	pí-t	My	píppim		
Cm	picii'; picipi 'milk'	Ca	pi-ly; táw	Wr	pi'wá		
Kw	pihi-vï	Cp	pi-ly	Tr	či'wá-ra; g/kasó-ra		
Ch	pihívi; pihivovi 'milk'	TO	baašo; wipih	Cr			
SP	pi(h)ici-vi	Nv	vipidi (of woman)	Wc	cící		
WMU	piíči- <u>a</u> 'her breast'	PYp	vipi	CN	čiičiiwal-li		
CU	píi-vi	NT	vípi/pípi	CN	eel-pan-tli 'organ-on'		
		ST	vipii	CN	eel-čikiwi-tl 'organ-basket'		

300. *piCti 'breast': VVH6 *pi 'breast'; B.Tep271 *vipi 'breast'; BH.Cup *pi 'breast'; M67-58 *pi 'breast'; I.Num166 *pici('i)/*pica 'breast, milk, suckle'; L.Son191 *pi 'teta'; M88-pi9; Munro.Cup19 *pí-t; KH.NUA; KH/M06-pi9 *piX: Mn; TSh; Sh; Cm; Kw; Ch; SP; WMU; CU; Hp; Tb; Sr; Ls; Ca; Cp; TO; LP; PYp; NT; ST; Eu; Tbr; Yq; My; Wr; and CN pipicoaa 'to suck'. To M88, Ken Hill adds Ktn pi'c; Gb pin 'breast, milk'; Ch pihivi; WSh pici 'breast'; WSh picci" 'suck'; and WSh pica 'milk'. Note also Sh(M) pici" 'breast'; Sh(M) picci" 'suck'; Cr ce'e 'mamar'; Cr waci 'mamó'; WSh pici 'breast' vs. WSh picci" 'suck'. SP and WMU and others show that the final syllable with affricate is part of the stem, and a medial consonant cluster seems apparent. Num *pici, the absolutive -t (rather than -l) in Ls, and the glottal stops in Sr, Tr and Wr suggest *-Ct-. As we see elsewhere, a cluster with t (*-Ct-) is the best candidate for medial *-c- in NUA. If only *-t-, then *-t- > -r- in Num and > -l- in Tak usually. If the final -ci syllable were a fossilized Num absolutive suffix *-ci, it seems we would not see so many glottal stops after *-ci. While a compound with *-ci... 'suck' is often the case, note that in most Numic languages the verb geminates the medial consonant (*picci 'suckle) while the noun does not (*pici breast), which may mean that the compound is *pic-ci 'breast-suck'. Some languages show separate forms: e.g., Sr pi, piiha 'suck' vs. Sr pi' 'breast, nipple, milk'. The -h- in SNum might introduce a sort of echo vowel anticipating the cluster, since it does not show up anywhere else. The pi'i of Yq hipi'ikim 'milk' also aligns with *piCti > *piri > pi'i, as liquid to glottal stop is often the final step of intervocalic clusters with -t- in Cah. [c/h; glottal stop metath in Tb; cluster; Gb -n] [NUA: Num, Hp, Tb, Tak; SUA: Tep, Cah, Opn, Trn, Azt]

301. *ci'i-wa 'breast': note the similarity between Tr či'wá-ra and CN čiičiiwal-li, as well as CN čiičii 'suckle s.th., vt', CN čičiina 'suck s.th. in', Wc cící 'breast', and the several forms under UA *ci'i 'suck, suckle, nurse' which are probably cognate with the first morpheme of *ci'i-wa. Also compare Tr či'-mu 'have milk' and Cr či'iméh 'milk'. We are likely dealing with a compound: the stem *ci'i 'suck' perhaps with suffixed -wa, as '(what is) sucked'. (cf *ci'i 'suck'). [SUA: Trn, Azt]

BREATHE; RESPIRAR, ALENTAR

302. *hikwis 'breathe, spirit, heart': VVH55 *hikwï(sï) 'breathe'; B.Tep308 *'iibïdaga 'soul, heart'; M67-60 *hik/*hikw; BH.Cup *hikwVsa; M88-hi3; KH.NUA; KH/M06-hi3: Tb 'ihk-(it)/'iixk/'iihk; Sr hiik 'breathe, be alive, come to life, get/be well'; Ca híkus 'breathe, take a rest'; Cp hiqsá'e 'rest'; qusá'e 'breathe'; Ls hakwís; Gb híkin 'wind, spirit'; Hp hikwsi; Eu híbes 'heart'; Wr iwí; Tr iwí/ew; My híabite 'breathe, rest'; My hiapsi 'heart'; My hiapsa 'alive'. Ken Hill adds Ktn hikaw 'breath, to breathe'; CN ikwšoaa 'sneeze, vi'; and queries whether Wc iweme 'vía respiratoria' is cognate. Might it be borrowed from Tr, since Wc kw is the usual reflex for PUA *kw, while *kw > Tr w? Miller also included TO iibhïni 'to breathe'; TO iibsïi 'a breath'; TO iibdag 'heart' to represent several other Tep forms (such as PYp ibda 'breathe'; PYp ibdaga 'heart, fruit'), though they contain different morphemes beyond initial iib- and other doubts emerge. Much remains to be sorted in this batch of data, but let's include the above which Miller had gathered for rough draft consideration. Besides My above, other Cah forms are Yq híapsa 'vivir'; Yq híapsi 'corazón'; Yq híabihte 'respirar'; AYq hiapsi 'heart, soul, spirit'; AYq hiavihte 'breathe'; AYq hiapsa 'live'. Note medial *-kw-> -w- in Tr/Wr. Eu b < *kw and Tr, Tak, Hp, and Azt also show medial *kw, so could Cah p suggest a lost consonant (e.g., Cah hiCapsV) which when clustered with p caused a gemination that resulted in kw for the other languages: hiCapVsV > hiCpVsV > hippVs / hikwVs? [*kw/*p; labials; medial *-kw-] [NUA: Hp, Tb, Tak; SUA: Tep, Trn, Cah, Opn, Azt]

303. *sumaC 'breathe': I.Num187 *su(w)ah 'breathe'; M88-su16; KH/M06-su16: Mn suwaqa; NP soŋaha (Miller reinterprets it as sonkaha); Kw soo-ki (< *sookki) 'breathe'; Kw soo-kopi 'pant'; SP šua" 'breathe'; SP šuaqqa 'breathe'; CU söá-qay. Add TSh sumakkain 'breathe, vi' and TSh suma-ppi 'soma-ppi 'breath, soul' and Sh(C) sua" / suakkaih 'breathe'. (What of Sh soŋo 'lungs'?) Miller's inclusion of Hp somi 'sniffle, breathe deeply' is good and perhaps HN šošopaaka' 'make an inhaling noise'. These are very close to and thus easily confused with *suwaC 'want, etc'; however, TSh sumakkain 'breathe, vi' and TSh suwa" 'want, desire, think, feel' show a difference of medial *-m- vs. *-w- in TSh. On the other hand, WSh and SNum yield single -m- > -w-, creating mergers like WSh sua" 'think, want, need, feel; seem; breathe' which makes sorting difficult. Yet even SP distinguishes SP šua" 'breathe'; SP šuai 'be glad'; and SP šummai 'have in mind' whose cognate sets are here, at 'want', and at 'think' respectively. Add Ch(L) suwapi 'breath' (which also suggests a final -C); Cm sua'sua'miari 'breathe', which shows a glottal stop at the place of gemination, and Cm suahketi 'breathe' and AYq hasohte 'breathe hard'. Though many languages agree with *so, the lowering influence of following a is reason enough to stick with Miller's su. The identity of 5 of 6 segments in Mn and HN (*su_aka) and both showing bilabials for the differing consonant is of interest. [medial -n-,-m-, -w-] [NUA: Num, Hp; SUA: Cah, Azt]

NB, for *puca > *puska / *puhki / *pukkwi 'pant, blow', see at blow.

Breechclout: see after clothing

Bring: see carry

BROTHER, OLDER; HERMANO MAYOR

304. *papi 'older brother': M67-489a *pa; I.Num139 *papi('i); M88pa2 'older brother'; KH/M06-pa2: Mn pabi'; NP pabi'i; TSh papi; Sh papi; Cm pabi'; Kw pavi; SP papi-ci; CU paví-ci; Hp paava. Ken Hill has this (perhaps as a reduplication) with *pa'ci below, which could be. [NUA: Num, Hp]

305. *pa'ti / *paCti'i / *pa-ci (AMR) 'older sibling': Sapir; M67-489b *paci 'older sister'; BH.Cup *paṣ? 'older brother'; I.Num143 *paci('i) 'older sister'; L.Son183 *paci 'hermano mayor'; AMR *pa'-ci 'older brother'; KH.NUA; M88-pa1 'older brother'; KH/M06-pa1 *pa'-ci: the following mean 'older brother': Ca pas; Cp páṣma; Ls páá'aṣ; Sr paar, pl: paaham; Tb paadzi; Eu bácwa/vácwa; Tbr wací-r; AYq avači (of a woman); My ábači (of a woman); Wr pa'či; Tr ba'či; Cr haaci'i; CN aač-tli 'older brother of younger sister'; note CN ačto 'first'. The following Num forms mean 'older sister': TSh paci; Sh paci; Cm paci'; Kw pazi; SP paci-; CU pací-ci. Ken Hill adds Ktn -par 'older brother', pl: paham. This etymon *pa'ti means 'older brother' in SUA and Takic, but 'older sister' in Numic; thus, it may have originally meant simply 'older sibling' or 'oldest' or 'first'. Add Op vapaci 'older brothers' (Shaul 1990, 565). Note CN showing nearly the same morpheme in both 'older brother' and 'first' except for differing vowel length. Also note the prevalence of the glottal stop (Wr, Tr, Cr, Ls, and Num); Iannucci's reconstruction (*paci'i) may work here for all of UA since the glottal stop hop is a frequent phenomenon in UA, especially in SUA, where Tr and Wr show that pattern in this set also. Manaster-Ramer (1992b) includes this set in his article "A Northern UA sound law: *-c-> -y-." His reconstruction *pa'-ci is also noteworthy. He considers Numic *pa-pi and UA *pa'-ci to contain the same root but different suffixes, a plausibility. Or these may derive from medial *-t- or *-Ct- insead of *-c-. ['; cluster] [NUA: Num, Tak, Tb; SUA: Trn, Opn, Cah, Tbr, Azt]

306. *ci'ï / *cï'i 'older sibling, relative': B.Tep188 *siisi 'older sibling'; M88-ci'2; KH/M06-ci'2: TO siis / si'ihe / si'ihegi 'older sibling (brother or sister), cousin of older ancestor'; LP sisi / šiiši; NT šiiši 'older sibling'; ST šiiš 'older sibling'; Wr ce'é 'husband of older sister, vice versa'; Tr če'e 'to have a brother-in-law'. Miller combines the TrC forms *ci'i 'brother-in-law' and Tep *cii/ci'i 'older sibling', and their disagreement in the vowel (i vs. i) is not great. The following have the 2nd vowel as i: NT šiiigi 'older brother (formal)'; NT šiiigimi 'son hermanos', possibly lending support to Miller's combining the two. If one vowel of each were original, then assimilations both directions are possible: *ci'i. [i/i] [SUA: Tep, Trn]

BROTHER, YOUNGER; HERMANO MENOR

The words for 'younger brother' show nicely the three divisions of Numic: **307.** *wan(k)a'a 'younger brother': Mn qwaná'/ waná'; NP waŋŋa'a. [*w > kw in Mn as in *wita 'wrap' at blanket, n vs. η] [NUA: WNum]

- **308.** *tamiC 'younger brother': TSh tami(cci); Sh tami; Cm tami'. [NUA: CNum]
- **309.** *cakka'i 'younger brother': Kw čaka'i; Ch cakí'i; SP cahkai; WMU č*ah*qqá'i-či / č*ah*qqá'i 'younger brother'; CU čaqXá-či. Note that WMU preserves a glottal stop lost in both SP and CU, and retains the voweling of Kw. [NUA: SNum]
- **310a. *poni** 'younger brother': M67-490 *po; L.Son213 *poni 'hermano menor'; M88-po8 'younger brother'; KH/M06-po8: Eu bonwa/vónwa; Tbr woní; Wr poní; Tr boní; Cr huu. [Cr u < *o; Cr h < *p] [SUA: Trn, Opn, Tbr, CrC]
- **310b.** *po('ot) 'younger brother': KH.NUA; KH/M06-po8: Ls péét; Gb pé'ec; Sr pö^rit. Ken Hill adds Ktn -pit (pl pitam) 'younger brother or sister'. Beyond initial CV, the Tak forms show little resemblance to the SUA forms (*poni), which is reason enough for at least a separation by letter. [NUA: Tak]
- **311.** *cipi / *cippiyi 'younger brother' (> Tep *sipi(di)): Nv sipidiri; ST sïpji'n 'one's younger sibling'. [SUA: Tep]

BROWN; PARDO, MORENO, CASTAÑO

- **312.** *oNtam / *oNta(N/C) 'brown': NP otï-ggwiddadî 'sorrel colored, brown'; TSh ontïmpi(tïn) 'brown'; Sh(M) ontïn 'brown'; Sh(C) onton 'brown, orange'; Kw odo- / ondo- 'brown'; Ch ontó-ka 'brown'; Ch(L) ontokwarïmï 'woman's name referring to brownish color of hair'; SP onto" 'reddish brown'; WMU attó-qqwa-rü / attőőqqwarü 'brown'; CU 'ötó-qwa-rï 'brown'; TO o'am 'brown, orange, yellow'. The -t- (vs. r/d) of CU and WMU, Kw, NP, and SP all suggest a cluster, besides the other forms showing a cluster *-Nt-. [-(N)t->' in TO] [NUA: Num; SUA: Tep]
- **313.** *(mu/hu)-saL(awi) 'brown': AYq husai/husali/husari 'brown'; TO muhaDagi '(be) greasy, (be) brown'; Eu temósei 'descolorido, pardo' (-ei is a common ending for adj's in Eu). *-saLV- seems apparent in AYq, TO, and Eu, compounded with whatever else. [1] [SUA: Tep, Cah, Opn]
- **314.** *koto(pi) 'brown': Cm koropiti 'brown, khaki, tan, dust-colored, beige'; Yq kohkóhtibí'aka 'have brown hair'. Also Wc kútušíe 'light brown, blue' has its first four segments matching *koto, though it also aligns well with Cr kwatúmua 'dark blue'. (See at blue.) Ktn ropitk 'dark brown' aligns with Cm's 2nd and 3rd syllables, and a later loss of the first syllable would explain initial r. A problem with *kwato is that we would expect Yq (bo)botV or (bwa)bwatV instead of kohtV reduplicated. That is, *koto > kwatu in Cr, if CrC even belongs, would not derive from an original *kw. In addition, Cm and Yq not only both agree with *ko, but also share a third syllable: *kotopi. They vary only in the 2nd vowel, which I reconstruct as o rather than i, since anticipatory vowel assimilation to the following vowel is more frequent in UA than preservative assimilation. Ktn and Cr both suggest *o for the second vowel also. [NUA: Num, Tak; SUA: Cah; perhaps CrC]

NB, for *koma 'dark, black,brown, gray' in Hp qöm-/qöm(a)vi 'dark, black'; Tep *komagi 'gray, brown' see 'gray'.

BUFFALO; **BUFALO**, **BISONTE**, **BUEY**(**ES**) (Spanish buey also 'ox')

315. *kuC(c/t)u 'buffalo': I.Num68 *kuhcuN 'buffalo, cow'; Fowler 83; M88-ku22; KH/M06-ku22: NP kucu / kuhcu 'cow'; Sh kuiccun 'buffalo'; Cm kuhcu'; SP kuhcuN; CU kúcu. Kenneth Hill adds TSh kuiccun 'buffalo'; TSh piakwiccun; Ch kucú 'buffalo'. To these we might add NP bagucu 'buffalo' and WMU kučú-puk 'cow, i.e., buffalo-pet or pet buffalo'. As it is no longer acceptable to reconstruct medial *-c- for NUA languages, conveniently many terms suggest we may be dealing with a medial cluster, perhaps *-Ct-, which could easily palatalize (*-Ct->-cc-) or *-Cc- possibly *-cc- itself, though the latter seems less likely. It is interesting that neither Mn nor Kw, the inner-most Num languages, show a word for buffalo, only those that spread out into the Great Basin. Yet if they acquired it from outside UA, how did all the languages of the separate branches acquire the same word? Hp mosayrī 'buffalo' is the only other UA language with a word of non-European appearance, that I could find. TO pisin (bison), Tr bóisi and Eu boides (< Spanish bueyes) are all SUA languages with borrowed terms from Spanish. Interestingly, Eudeve's phonological rule of Eu *y > d was still productive when that term was borrowed. [*y, *-Cc-] [NUA: Num]

BUG, INSECT, TICK, BEETLE; see also ant, fly, louse, spider, worm, etc. INSECTO, CHINCHE, GARRAPATA, ESCARABAJO, CUCARACHA

316. *matta / *maCti 'tick': BH.Cup mac-? 'tick'; Fowler83; M88-ma1 'tick/garrapata'; KH.NUA; Stubbs 2000a-6; KH/M06-ma1: NP madabi (< *matapi); Kw muu'maa-ci; CU mata-ci (< *matta-ci); Cp máči-ly; Ca máči-ly; Ls 'amáča; Sr maca-c; Hp màaca; TO maamş; Wr macá; Tr mačá; Wc mate. Ken Hill adds Ch matavi, which is also in Ch(L) mata-vi 'tick, flea'. Let's also add Ktn muma-c 'reddish tick'. Miller includes My téemai 'garrapata', which, if cognate, would involve a metathesis or other explanation; Miller also queries whether CN atemi-tl 'louse' is cognate; however, it agrees better with *atī 'louse' and even other UA languages show -m (i.e., *atim 'louse'), such as My ette/éttem 'louse'. So I would not include CN, and My téemai is questionable. NP, CU, and Wc suggest a cluster, perhaps medial *-Ct-; in fact, CU and Ch have underlying medial *-tt-, in contrast to CU mara-ci < *mata-ci 'mortar', though NP suggests ungeminated *-t- in d surfacing instead of t (Stubbs 2000, 132). Tak medial *-t- instead of -l- also suggests a cluster something like *-Ct- or *-tt-; thus, we might posit *maCti(a); for Cp and Ca do show i as the second vowel. We ought also to add Mn mitábi/midábi 'tick' which may have metathesized the two vowels in a pattern similar to *pati('a) 'bat' and NP pitahana'a 'bat' (Stubbs 2000, 127-8). [NP t = Num c, WNum V metath like bat] [NUA: Num, Hp, Tak; SUA: Tep, Trn, CrC]

- **317.** *wippusa > *pippusi 'stink beetle': Mn pipóísi/piboisi 'stink beetle'; NP pipuzi 'stink beetle'; Sh pippusi 'stink beetle'. Jane Hill astutely adds Ch wiposat '13-line beetle' (Harrington noun list), which puts reflexes of this in all 3 Num branches, and Ch may reflect an original form, from which the others harmonized consonants. [NUA: WNum, CNum, SNum]
- **318.** *sisko(Nko-) 'stink beetle': Ca sískiŋily 'stinkbug'; Cp sísqinqily 'stink beetle'; Ls şísqi-la 'stink beetle'. Ca and Cp i < *o, and the -q-'s suggest *o, but we would expect Ls şísqe-la; therefore, the Ls form assimilated the vowel or may be a loan. Ls absolutive -la (vs. -l) may indicate a final C that is perhaps a N or L, vs. a stop, as stops tend to yield -t. $[*k > q/_*o in Cp and Ls]$ [NUA: Tak]
- **319.** *huhuCa (< *hu'a reduplicated?) 'stink beetle, stinkbug': Hp hohoyaw; Sr huuhua'ţ; Ktn hu'hu'a-č 'stinkbug'. This likely ties to *hu'a 'break wind' at stink. [NUA: Hp, Tak]
- **320.** *kwita-poLV 'stink beetle/stinkbug': Wc kwitaapúrí; Eu bitaporós. A good match! Eu b (<*kw) and Wc u (<*o), so all segments correspond perfectly until the eighth; for the stinkbug, which habitually has its rear upward, the *kwita (buttocks/defecate) portion of these compounds aligns with several other UA compounds meaning 'stink beetle' containing *kwita plus other compounded elements: Nv vitatai 'escarabajo'; CN kwitlaalooloo; and probably TO bitikoi / bititoi with a rather recent change of the 2nd vowel (*bita- > biti); otherwise, *-ti- > -ci-should be the case. [Eu b < *kw, CrC u < *o; C harmony in TO terms] [SUA: Opn, CrC]
- **321.** *hukku-pï- / 'u'-pï-ci 'stink bug': Kw huku-vi-dïzi; SP uqquviča; WMU úuppïči 'stink beetle'; CU 'úu-pï-ci 'stink bug'. Givon (1979) has the CU form deriving from 'uú'i 'fart, vi' and 'uú'-pï 'fart, n', which is possible and which may tie these to *huhuCa above, as Jane Hill notes as possible (p.c.). On the other hand, Kw and SP show *hukku-pï-, which with loss of a vowel could result in *hukku-pï- > *hukk-pï- > *úuppï-. In fact, the falling vowel recommends a lost or clustered consonant, though the glottal stop could create a cluster too. [NUA: SNum]

NB, for *yamuki 'bug that stings' see 'angry'. NB, for *ku'a 'worm(y)' see 'fly'.

Bumblebee: see bee Burn: see fire

BURY, GRAVE; ENTERRAR; TUMBA, SEPULTURA, SEPULCRO; see also close, die, dig 322. *ku'way / *kupaL 'bury': M67-65 'bury': Mn kuu; Ca kúy 'bury (s.th.), fill up hole (with dirt), vt'; M67 includes Tb woohat ~ owooh 'bury'—possibly. More in line with Mn and Ca, let's add NP ku'u 'bury, vt'; NP tïku 'bury, vi'; TSh kuu 'bury, vt'; TSh nakuuh 'bury, vi/passive'; Kw kuwa 'cover up, cover over'; Kw kuwa-kwee 'bury'; Ch kúú 'bury, v'; Sh naku-ppï 'grave'. Possibly tied to these, but definitely belonging to 666 are TO(M) kovoD-k 'shallow hole with flat bottom surface' and TO(M) kovol-kad 'make in s.th. a shallow hole with flat bottom surface'. [medial consonant] [NUA: Num, Tak]

- **323.** *hi'acapa 'bury, cover, grave' (> Tep *hi'asapa): B.Tep60 *hiasapai 'bury, cover'; KH/M06-si24; TO hiašp(a) / hia; NT yáásapai 'bury, cover'; ST yaasap. Dipthongs in Tep usually signify anticipatory assimilation or a lost intervocalic consonant. I reconstructed *hi'acapa > Tep *hi(')asapa, because I doubt PUA dipthongs, then later found the same in PYp. To Bascom's Tep forms, we can add PYp hi'asa 'bury, vt'; PYp hi'aspa 'grave, n'; Nv i'aina / i'asa 'enterrar'; Nv isa'akarhami 'sepultura'; Nv i'aspi 'casa enterrada'. Eu héca 'tapar, cerrar', with vowel leveling (*hi'aca > heca), resembles the PYp and Nv forms and would mean we may have initial h (vs. s). [h/'/k] [SUA: Tep, Opn]
- 324. *ma'a / *mahi 'bury': M67-108 *ma 'cover'; L.Son129 *ma 'cocer al horno'; M88-ma10 'cover' and ma24 are correctly combined in KH/M06ma10: My máá'a 'enterrar'; Wr mahi-ná 'bury, cook in the ground'; Tr má-'cocer al horno'; TO ma'i 'cover (food) in a roasting pit'; Op hima; Eu himá; Yq má'a 'enterrar'; AYq ma'a/hima'a 'bury, vt' (in contrast to Yq hímma'a 'tejer'); AYq ma'ari 'buried'; AYq hima'awa 'burial, funeral'. L.Son129 includes Eu(north) hima and Opata hima. Ken Hill adds SP na-ma'ni or SP na-soko-ma'ni 'cover self with moist earth'; Cm mana'koroomi 'cover s.th. over'; TO ma'išp 'cover, vt'; TO ma'i 'pit roast'; TO mamma'ikuD 'roasting pit'; Eu meitemon 'echar a tatemar mescal'. Perhaps also Tbr mwai-rá-n 'asado'. Miller includes Tb masat~'amas 'cover, vt'; Tb maasat 'bag' though the variety of medial consonants (h, ', s) creates problems beyond initial syllable (which is all Miller reconstructs), but for Tb, cf. the last NB of *masa 'cover' below at 'close'. [medial ', h, s] [NUA: Num; SUA: Tep, Trn, Opn, Cah, Tbr]
- **325.** *cu'ma 'bury, cover': Kw cuma 'bury, cover up'; Ch(L) čum'makatï 'anything covered with earth'. It is possible that this is a variant of *ti'ma 'bury, cook underground' with a palatalization of *t > c. [NUA: SNum]
- NB, 'bury' is half its semantic leaning, but listed at 'cook' is *tī'(a)ma 'bury, grave, roast under ashes or underground' where SP tī'ma 'bury' and Hp tīī'ami 'grave' have much in common (*tī'ama), as well as Eu témo 'enterrar'. Tb(M) tī'ma'at 'gasp for breath, for instance, while drowning, choking, or suffocating' [or while covered] is nearly identical to SP phonologically, but varies semantically, and similar to SP are other SNum terms: WMU tīm'má-y 'bake (usually underground)'; Ch tīm'á 'bake, v'; SP tī'ma- 'roast under ashes'; CU tu'máy 'bake, roast'. Reflexes in several branches.

BUTTERFLY, MOTH; MARIPOSA, POLILLA

- **326.** *yïLa / *yïLCa 'moth': Hp yïïyïŋya 'moth'; Wr sunú yelá 'moth'; Yq yuéria 'moth'; minus Wr sunú 'corn', Wr yelá 'moth' and Yq yuéria 'moth' show four segments in common—*yeLa—though a reconstruction to include the other Yq segments (*y(u)ïl(i)a?) looks horrible. Hp yïïyïŋya 'moth' also shares much with Wr, Yq since PUA *L is often realized as a nasal in NUA, though usually n instead of ŋ, unless clustered. Yet the ugliness of most reconstruction options recommends a cluster at least. [*L/N, Yq dipthong; liquids] [NUA: Hp; SUA: Trn, Cah]
- **327.** *nakamuLi > *kimuLi 'butterfly': Nv tatkimurhi / 'o'kimurhi 'butterfly'; PYp nakmuli / makmuli; Wc kaimúrie 'moth'. Following Nv tat-, Nv 'o'-, PYp na/ma-, and nothing in Wc, all five forms contain something like -kimuli, probably akin to the *-kimara forms in B.Tep71 below. In fact, NT totóókimara would suggest the same morpheme boundary. Similarly, Tr kunúwi / konói 'especie de mayate, en su primera fase es gusano' may be related to *kimuli with m > n and loss of l. Zarina Estrada Fernandez (p.c.) told me that *naka-mïLi 'bat' literally derives form 'ears-running/flying', and these appear to be similarly derived, if not a semantic variant of the same proto-stem. Note the consonant harmony in the second PYp form. [C harmony] [SUA: Tep, CrC, Trn]
- **328. *soso-kimaLa** 'butterfly': B.Tep71 *hohokimara 'butterfly'; M88so13; KH/M06-so13: TO hohokimal; NT totóókimara 'butterfly' (different 1st morpheme); ST hookmar/hokmar. [medial C, Vs, liquids] [SUA: Tep]
- **329a.** *paLo / *papaLo 'butterfly': CN paapaaloo-tl 'butterfly'; the -val- in Cp málval; Hp poovoli/poli-; the *papi- in Ls páávicuk-ma-l 'type of large butterfly'; the *-pola- in Ls 'avélaka 'butterfly' (Ls e < *o); and the *paLo in Cr ácipa'u-se (Cr u < *o; Cr ' < *L) all have much in common with *(pa)palo (Cr, Cp) > *(po)polo > *(po)poli (Hp). Did Ls *'apolaka switch the vowels (*palo > *pola) and Sr lalavaţ 'butterfly' the consonants: *papalV > *lalapV? However, Sr is also at *atatap below. As for CN, we would expect CN ø and Cr h < *p.

- **329b.** *paLi- > pa'i-(sïkwoLi / sïpoLi) 'butterfly': Yq bá'esé'eboli; AYq vaisevo'i; My bai-sé'ebori / bai-sé'eboli; these all appear to contain *sïkwori / *sïpori 'fly/bee', following *paLi (> *pa'i/pai-), since *-l- > -'/ø- is common in Cah. However, CN, Cr, Cp agree with *palo. In other words, the vowel after *L, whether o or i, may be problematic, though I lean toward *palo since final i seems to be something of a tendency in UA. If these are European loans, they seem closer to Latin paapilioo 'butterfly' than to Spanish polilla 'moth'; yet the UA forms seem too diverse geographically and phonologically to be loans from Spanish. [vowels, *L] [NUA: Hp, Tak; SUA: Cah, CrC, Azt]
- **330.** *...kupïpika / *(C)Vkupïpika 'butterfly': Ca héveveqalet and Ls xuvóoviqa-l 'moth' certainly appear related and align fairly well through the 2nd, 3rd, and 4th syllables. Perhaps also Hp pïvïwi 'moth'. Ls initial x- suggests a lost initial syllable, after intervocalic *-k->-x-. [NUA: Tak, Hp]
- **331.** *tipi-simuCta 'moth': Cm tipi simuhta' 'moth (i.e., rock-nose)'; SP tiviššira-ci / tiv^Wišira-c 'moth'. SP appears to be a contraction or reduction of a compound like the Cm form, with some vowel assimilation; the syllable -mu- is missing: *tipisimuta > *tipisimuta > [NUA: CNum, SNum]
- **332.** *ata(pa)tapa 'butterfly': Sr lalava|t 'butterfly'; Ktn 'atavatava 'butterfly, moth'. Sr's initial liquid suggests a previous intervocalic position, as also Ktn's vowel preceding -t- may suggest as well; thus, the two have much in common. [NUA: Tak]
- **333.** *asiNpu(tonki) 'butterfly': TSh aasiputunkwi; Sh a'ipputoonkih; Kw 'aasibï-zi; SP aïšï-vwïci. While Numic *asiNpu has much in common with Cr ácipa'u 'butterfly', the aci- portion is likely from Cr aci'i 'bat'; another UA term for bat became butterfly in Eu (see *so'o-pati'a 'bat'). Sh, Cr, and Kw all suggest a cluster, and Kw suggests *-Np-. A tie with TrC *sï('ı)pori/*sikwori 'fly' is questionable. [reductions; *u > ı] [NUA: CNum, SNum]
- **334.** *akaL... 'butterfly': Nv agari 'polilla'; Wr akároari 'butterfly'. Four segments (agar / akar) largely agree, perhaps with intervocalic voicing, unless Wr be a loan from a Tep language. Tbr hata-ká-r 'mariposa' may be relevant. [k/g] [SUA: Tep, Trn]
- **335.** *ayatta'niya 'butterfly': Kw 'ayata'niya-zi, ayatanii-zi; WMU aá'naasiji / aá'naasiji / aná'i-či 'butterfly, n'; CU náa'naasi-či. WMU and CU look like reductions of something like the Kw form, so might we presume s.th. like Kw for the proto-form? If Kw 'ayata'niya-zi and Hp yïïyïŋya 'moth' and Yq yuéria 'moth' above have anything in common, I'm not sure I want to hear about it, except that Hp -η- aligning with Kw -'n- or perhaps a more severe cluster reduction like -tt'n- > η. It also appears that CU reproduced via consonant harmony the medial -n- to initial position also. [NUA: SNum]

NB, in Num, *ïnïC-pi 'moth, spirit'derives from Kw ïnï-pi 'spirit, ghost, deceased person' which with an extra absolutive suffix yields Kw ïnï-pi-či 'moth'. [NUA: Num]

BUTTOCKS, ANUS; NALGAS, ASENTADERAS, ANO; see also hip

336. *kupta 'buttocks': Ls kupča-t 'buttocks'; Cr kïcá 'buttocks'; Wc kïcá 'buttocks'; Tr gósi/kósi 'buttocks'; and probably Cp xútaxwi 'back' whose -t- suggests a cluster since intervocalic *-t- > -l- in Cupan. The first three (Ls, Cr, Wc) perfectly agree in *kupta, because PUA *u > Cr/Wc ï, PUA *p > ø in CrC even without the medial cluster, and NUA -c- < *-Ct- usually, as the -t- in Cp. A bilabial as first element of a medial cluster has been seen to be fragile elsewhere in UA (e.g. *kapsi > *kasi 'thigh'). M67-126 cites Sr kukt-č 'anus' which is very possible with reduplication or may belong with *kwita, where Miller had it. Terms like CU kutú-pï (< *kuCtuC-pï) 'buttocks' may belong here or at *kwiCta, if the two are not related themselves. Tr, which does have o < *u, further lenited the affricate to a fricative: *kuca > kosi. Affrication of an original *-t- to *-c- is common in UA: e.g., CU kwica-y 'defecate, vi' (<*kwitta). Also with affrication, the first two syllables of SP kučuŋ'wa 'sit on one's haunches' may belong, for SP kwica already exists for the competing stem *kwitta. Without affrication, Hp kïri'at 'buttocks' may belong. [bilabial loss as 1st C in a cluster; t > c] [NUA: Tak, Hp, Num; SUA: Trn, CrC]

As for Miller's rough draft collection in M88-co9 (M67-66 *co)—NP capu 'buttocks'; Hp como 'hill'; My cóbbe 'nalgas'; Tr čo-/čo-kí 'extremidad inferior, tallo'; Wr cohkí 'tree trunk'; Cr kïca; Pl cupi 'arse, anus'; CN co-tl 'sweat, bodily waste'—Miller himself queries whether the CN term is cognate. Hill (KH/M06-co9) rightly eliminates the Hp term, and I moved the Cr term to *kupta above. The rest are possible, and My and Pl seem most probable, with perhaps NP, if the vowel changes could be explained. Nevertheless, I prefer to divide them thus: 337. *cum 'buttocks, anus': with Hp como 'hill'; Hp como'-ma 'go along with the knees drawn up'; Hp comòl-ti 'draw the knees close to the body'; consider My čúmim 'ano' and CN ciin-tli 'buttocks, anus, base, foundation', all three of which quite agree with *cum. The facts that PUA *u > Hp o and *u > CN i, and that final m in CN, especially when clustered with an alveolar, is likely to become n, align all three forms with *cum. The Hp semantics are not exact, yet 'knees up' sets the buttocks more prominently out, as in 'squatting position'. [NUA: Hp; SUA: Cah, Azt]

338. *ata / *ato 'bottom, buttocks, anus': VVH60 *'ato 'anus, bottom'; M88-'a33; KH/M06-'a33: VVH list Hp àatö 'underneath, below' and TO at 'anus, buttocks, bottom of basket or jar'. Let's add NT atáádï 'el ano' and Nv atabihoia 'la división de las asentaderas' (Nv vihoga 'principio de una barranca [beginning of a ravine, gorge])'. [SUA: Tep; NUA: Hp]

339a. *atapuLi 'buttocks': TO atapuD 'a buttock'; Nv atuporha 'nalgas'; ST atpor 'nalga' (pl: a'tpor; poss'd: ataa'n / a'tpora'n). NT túpuli 'buttocks' is likely related also, but TO has a match below for the NT form as well as a match for the Nv form given here. [SUA: Tep]

339b. *tupu(L..) 'hip, buttocks': NT túpuli 'buttocks'; TO čuul, pl: čučpul 'corner, hipjoint'. Intervocalic *p > TO w would be invisible between two u's (uwu > uu), but it appears in the TO reduplicated pl form. [SUA: Tep]

340a. *pittuhu 'buttocks': (not in M88) KH/M06-pi29: NP pituhu (< *pittuhu); TSh pittuhu(cci); Sh pittuhu; WSh pittuhku. The set below may share *piC-, but the 2nd morphemes must be different as Sh and WNum have quite distinct forms in the two sets. For *piC 'back' see 'back'. [NUA: WNum, CNum] **340b.** *piCto 'buttocks, hip': Mn picóga 'hip, low back'; Sh(M) piccoko 'the body from the waist to the knees, hip and buttocks'; Sh(Cr) piccoko 'the body from waist to knees, buttocks'; WSh piccoka 'waist'; WSh piccuhku 'buttocks'; Mn picóga 'hip, low back'; Tb pičoo-l 'buttocks', pičoo-n (possessed). These may relate to *piC 'back(side)'. Does Hp pi'ala 'pelvis, hip bone' contain the same element, possibly < *piC-awa 'hips < backside-horns'? [NUA: Tb, Num]

NB, 341 became 340b.

NB, for *cuppa > *copo, see at 'edge' where are most of M67-66 'buttocks' *co; M88-co9; KH/M06-co9 with cu19: Pl cupi 'arse, anus'; Yq čóbe 'nalgas'; My čóbbe 'nalgas'; AYq čove 'buttocks' (what of AYq čopoi 'hill'; AYq čopoi 'rough, uneven'?); NP capu 'buttocks'. Cah b (= AYq v) has traditionally been thought a variant of PUA *p in Cah, yet in AYq we see four varieties of medial bilabials: -pp- is a gemination of -p-, of course, but what of -v- and -vv-? They are not bw < *kw. Perhaps they are all from *cupa (and NP capu a metathesis?) and should be combined?

NB, *kwiCtaC / kwiCtuN 'buttocks' and related Num forms are at 'defecate'; CU kutú-pï 'buttocks' (< *kuptuC-?). NB, for *piC (< *hupiC), see 'back'.

NB, for *cuCki/*co(k/') 'stalk, base, bottom' see stalk.

NB, for *sati 'tail' > 'dog' (in Num) > 'anus' (in Tak, Mn) see 'tail'.

Buy: see trade

BUZZARD, TURKEY VULTURE; AURA, BUITRE, ZOPILOTE

342. *nupi 'buzzard': B.Tep175 *nui; M67-68 *nu; Fowler83-3:70; M88-nu2 'buzzard'; KH/M06-nu2: TO nuwi(opa); TO ñuuwi; TO ñuuwi; TO ñuuwi (Dolores); LP nui; PYp nui; NT nui; ST nuí. This set exemplifies a near loss of medial *p. Miller (M67) lists Wr honoori or later Wr onóri 'zopilote, buzzard' (Miller 1996a)—not impossible if the -no- syllable of Wr onóri 'zopilote, buzzard' had a prefix, then loss of *p in a cluster with -ri (likely a noun suffix) or -p- > -w- adjacent to round vowels, also common in TrC. But let's not count it pending improved probabilities. [SUA: Tep]

343. *wiLhukuN 'buzzard, turkey vulture'; M67-67 *witu 'buzzard'; I.Num277 *wi 'buzzard'; L.Son339 *wiru 'aura'; Fowler83; M88-wi8 'buzzard'; KH.NUA; KH/M06-wi8:

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*wiLhukuN 'buzzard, turkey buzzard, zopilote'
PUA
Mn
               wiho
NP
               wi'ho/wiho
TSh
               wihnumpi(cci) / wihumpiccih / wiyombic
Sh
               wikkumpiccih
Kw
               wikku-mahaa-zi
Ch(L)
               wikkumpï-ci
SP
               wikkuN
CU
               wəkúci-ge-tï (< * wVkkúci)
Hp
               wisoko
Tb
               wišokombiš-t 'song of the turkey buzzard'
Sr
               wirok-t
Ktn
               wirukuh-t
Yq
               wiiru
My
               wiiru
Tr
               wirú
Tbr
               wilú
Wc
               wirïkï
Cr
               viskï
               wiiloo-tl, pl: wiiloo-me' 'dove'
CN
Ρl
               wiilu-t
                         'bird, dove'
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The correspondence of or devoicing of UA *L to Hp *s* is evident in 'turkey buzzard' and other words, as also in Tb and Cr in this word. In this wonderful example of rampant syllable reduction in UA, notice that Wc (SUA) and Sr (NUA) show all three syllables of *wiLhukuN, while most of the rest are reductions. The 1st syllable *wi- is apparent in 17 of the 18 reflexes; only CU's short non-descript unstressed V varies from i. Eight languages show 2nd syllable *-Lu-; three show devoicing of *L > s, perhaps due to *L in a cluster with a voiceless C: *-Lh-. WNum *wi'ho hints at a cluster with a voiceless C adjacent to *L. Nine languages show a 3rd syllable *-ku; and Tb and Num show nasalization after that. Except for the CrC branch, most of SUA lost the third syllable, leaving *wiLu in most of SUA. In Num, syncope appears to have clustered *lk which led to the loss of 1 or doubling of k in most instances (*wiLhuku > *wilku > *wikku or *wiLhu > *wi'ho in WNum), though the n in one TSh form (wihnumpi) smacks of the presence of PUA *L. Add Ch(L) wiku / wikumpïci 'buzzard' (< *wikkuN-); Ch(L) wikontoci 'buzzard head'. [*u > Num ï; L/liq *L > ' in NP (cf. 'blanket'); *L > s in Hp, Tb, Cr; *L > n; medial h; clusters] [NUA: Tak, Tb, Hp, Num; SUA: Trn, Cah, Tbr, CrC, Azt]

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344. *yuŋápi 'buzzard': BH.Cup *yuŋávic 'buzzard'; HH.Cup *yuŋááviš 'buzzard'; M88-yu12; KH/M06-yu12: Ca yúŋaviš; Cp yuŋáviš; Ls yuŋáávi-š. [NUA: Tak]
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345. *copiLo 'buzzard, copilote': CL.Azt23 *copiiloo- 'buzzard'; M88-co14; KH/M06-co14: CN copiloo-tl; Po cupilut; T copilutl; Z cohpiiloot. [SUA: Azt]
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346. *kupahï 'type of buzzard/bird': Yq kúpahe 'clase de pájaro, como zopilote, pero diferente in los colores de las alas'; Wr kohiwé / koiwé 'zopilote, pelícano, quien, con Cuervo, llevó a Coyote al cielo'. With a metathesis of h and p/w, the tie is plausible. I reconstruct the 2nd vowel as a so that we can blame it for the lowering *u to o in Wr. Besides, *a > i in Wr is more likely than *i > a in Yq, since i in UA behaves like the schwa in English. The phonological changes and the appearance of the word in mythology suggest a word of some antiquity and not a loan one way or the other, but it is a skewed (not perfect) match. [SUA: Trn, Cah]

347. *aLawVka / *ata'Vka 'vulture': Ls 'aláwaka 'turkey buzzard, vulture' and Cr mwá'ara'ika 'zopilote, aura'. Minus Cr's first syllable, this NUA and SUA pair agree in five of seven segments. [NUA: Tak; SUA: CrC]

- **348.** *mo'a 'vulture': Dakin 1982-47: Dakin relates the first part of Azt *moo-ši-m with the first part of Cr mwá'ara'ika 'zopilote, aura', suggesting *mo'a to underlie both. Thus, Azt *moo- and Cr mwa/mua- while the rest of the Cr term parallels the Ls term above. [SUA: CrC, Azt]
- CACTUS; CACTO, PITAHAYA, TUNA; see also yucca, alcohol, and thorn
- **349.** *naka(w) 'prickly pear cactus': Fowler83: Cr naká 'prickly pear cactus'; Wc nakári; TO naakag 'sp. of prickly pear cactus, Opuntia'; NT nakisi; Eu nakó 'nopal'. [SUA: Tep, Opn, CrC]
- **350. *sacani** 'saguaro cactus': B.Tep56 *haasani 'giant cactus'; Fowler83; M88-sa23; KH/M06-sa23: TO haaşani 'saguaro cactus'; NT aasáñi; LP harsani (Fowler83). Add ST haašáñi. [SUA: Tep]
- **351.** *ikwasi 'fruit, prickly pear': B.Tep307 *'iibahi 'prickly pear, fruit'; M88-'i5; KH/M06-'i5: TO 'i'ibai / iibhai; LP(B) 'iibi; Nv ibai 'tuna'; NT iibí; NT ibáávorai 'biznaga, sp. of cactus'; ST 'iibai/iibai; Wr iwasí 'fruit'; Wc 'ikwáši 'fruit'. These probably derive from UA *kwasi 'ripen' and Bascom's Tep reconstruction corresponds well with the Wr and Wc forms for fruit (UA *'ikwasi 'fruit'). Tewa bee 'fruit' (< *bai/bahi) and such Kiowa-Tanoan forms are likely Tep loans. [medial *kw] [SUA: Tep, Trn, CrC]
- **352.** *hunupa 'yucca mohavensis': BH.Cup *hunúvat; HH.Cup *hunúuvat 'yucca mohavensis'; M88-hu16; KH/M06-hu16: Cp henúva-t; Ca húnuvat; Ls hunúúva-t. Miller (M88) includes Tb 'umuybïl 'yucca'; but it belongs better with *'amuL at 'agave'. [NUA: Tak]
- **353.** *muCta 'cholla cactus': BH.Cup *mútal 'cholla cactus'; Munro.Cup27 *múúta-l 'cholla'; Fowler83; M88-mu9; KH.NUA; KH/M06-mu9: Cp múta-l; Ca múta-l; Ls múúta-l; Sr muutu|ţ; Miller's inclusion of Pl muutah 'a food of pineapple fried with eggs and tomatoes' is okay: the phonology is identical, though the semantics vary. Let's add Sh(C) mïca 'cactus, pincushion cactus'; again *u > ï in Num. In light of Tak medial -t- instead of -l-, and Sh -c-, a cluster must be reconstructed. What of SP mïttïŋwa 'point of hill'? [*u > ï in Num] [NUA: Tak, Num; SUA: Azt]
- **354.** *yuŋa 'cactus fruit': M67-71 *yun 'cactus fruit'; M88-yu10 'cactus fruit'; KH/M06-yu10: Hp yöŋö 'prickly pear cactus'; Wc yïna; TO juni 'dried saguaro cactus fruit'. Add SP yu'ávimpï 'opuntia' and SP yu'á-vi 'opuntia fruit' as SNum does often lose intervocalic nasals. Hp ö < *o normally, yet SP, Wc, and TO all agree with *u, and *u-a > o-a could have preceded o > Hp ö. [Hp V; *ŋ > SNum '] [NUA: Hp, Num; SUA: Tep, CrC]
- **355.** *sawaro 'saguaro cactus': Tbr samwiró-t; Yq sáuwo. Spanish saguaro (sawaro) is thought to be borrowed from a UA language, perhaps Opata sawaro. [liquid; V > i/L; for a-a-o > a-o in Yq, cf. deer] [SUA: Tbr, Cah]
- **356.** *(h)usi 'thorny plant(s)': Tb(V) 'uuši-l 'cactus, with stickers'; Tb(M) uušil 'thorn, any plant with thorns'; Cm husi 'cactus, peyote'; maybe Wc yïisíki 'tuna'. [NUA: Num, Tb; SUA: CrC]
- **357.** *iLa 'prickly pear cactus sp.': Wr ilá 'nopal, Opuntia'; Tr erá / elá / irá 'nopal, chumbera'. [liquid; *i-a > e-a] [SUA: Trn]
- **358.** *packo'or 'prickly pear sp.': PYp pasko'or 'type of prickly pear, durasnilla'; Tr péčuri 'nopal o tuna de conejo, Opuntia'. The Tr c and Tep s correspond, and a cluster being reduced in Tr is expectable, as is the raising and fronting of the first vowel in anticipation of the alveolar consonant; we must assume, however, that we are dealing with a compound. What of Eu úcvor / úcbaro 'pitahaya'? [cluster, vowel assimilations] [SUA: Tep, Trn]
- **359.** *wicu 'prickly pear cactus': ST gisuly; TO gisoki 'the purple-fruited prickly pear cactus or its fruit, Opuntia'. [SUA: Tep]
- 360. *aki 'pitahaya': Yq 'áaki 'pitahaya'; Tbr aki-mal 'pitahaya marismeña'. [SUA: Cah, Tbr]
- **361.** *tuci / *tutuci 'pitahaya, saguaro cactus': Nv tutusi; LP(EF) túutes; TO čučuis 'organ-pipe cactus'; what of Tr tu*či 'viola umbraticula, planta de hoja comestible y parecida a la de la malva, y flores azules'? [SUA: Tep]
- NB, for *na'puL 'prickly pear cactus, alcohol, drunk', see at 'alcohol'.
- NB, for *wica 'thorn' (sometimes meaning 'cactus'), see thorn.
- NB, for *mana 'cactus, thorn' see thorn.

Calf (of leg): see foot

Call: see name, shout, say, cry, noise

Cane: see reed

CANYON, WASH, VALLEY; CLIFF, LEDGE, SLOPE, STEEP; CAÑÓN, ARROYO, VALLE, PRECIPIO, PEÑASCO, ESCARPA, CUESTA, DECLIVE, BAJADA, FALDA; see rock and wall

- **362.** *(h)aki 'arroyo, waterway, canyon, valley': VVH57 *'aki 'arroyo'; B.Tep299 *'aki 'arroyo'; M67-348 *'aki; L.Son50 *haki 'arroyo'; M88-ha2 'arroyo'; KH/M06-ha2: NP tïhaga'yu 'canyon' (Miller has < NP *tï'aka); NP(B) tïakai 'canyon'; NP(B) tïhaga 'a hollow, little valley'; TO aki 'ravine, arroyo, wash'; NT áki; LP(B) 'ak; NT akíívi 'el arroyo'; ST 'ak; Eu hakít 'arroyo, valle'; Yq hakia 'arroyo'; My hakía 'arroyo'; Wr akí 'arroyo, creek'; Tr aki- 'water channel'; Cr áči/háči 'arroyo'; Wc 'áki. Add PYp aki 'arroyo, wash'. Note h in Cah, NP, Cr vs. ø elsewhere. [*k > č/_i in Cr] [NUA: Num; SUA: Tep, Trn, Cah, CrC]
- **363.** *tumawa (> *tïmawa (PYp)) 'steep slope, cliff': Ca túmaw- 'be steep, precipitous, hazardous to climb'; Ca túmaw-iš 'steep one, cliff'; Nv tumagi 'cliff(s)'; PYp temoga 'ravine, canyon, gully'; PYp temgara 'narrow'. [NUA: Tak; SUA: Tep]
- **364a.** *yaway 'river, canyon': Kw pa-rii-yawi-di' / Kw pa-rayïwïi-di' 'wash, arroyo' (pa- 'water', tii- 'up', yawi-'hold'); Ch(L) yïwaa-vi 'valley'; Ca yáwaywet 'canyon'; Cp wéwyaxwenet 'canyon, wash' (perhaps from Cp wewe 'rain' + Cp yawe 'bring, carry'); Tbr yawá-n / yavá-n 'river'. The one Kw term suggests the *yawi morpheme may be from *ya'wi 'hold', but the Ca and Tbr terms may suggest otherwise, and the Cp word shows a different form than for 'carry' and the other Kw term is less sure to be such a compound, all of which leaves much in doubt. [NUA: Num, Tak; SUA: Tbr]
- **364b.** *yakuN 'valley': TSh yookompin 'valley, flatlands'; Sh yakun 'valley'. The two Num forms nicely reconstruct to *yakuN, since a final nasal is apparent in both and vowel leveling in TSh (*a-u > o-o). Does the middle part of Cp wéwyaxwenet, and Ca yawaywet 'canyon' tie in here? [NUA: CNum]
- **365**. *yïppa 'valley': NP yïpï (< *yïppï) 'valley'; Cp yïpá-š (< *yïppa) 'valley'; Tb yï-t 'valley'. The facts that Tb has absolutive suffix -t instead of -l and Cp -p- instead of -v- suggest a consonant cluster. NT dïhoi 'level land' is less likely, but worth mentioning. [Tb *-t; l/r] [NUA: Num, Tb, Tak; SUA: Tep]
- **366.** *tïpaL(-ka) 'canyon, valley': Hp tïpqa 'vertical-walled canyon, gorge'; Nv tïparka 'valley'; CN tepeei'tik 'valley or ravine among mountains'; CN tepe'šiyo' 'ravine' and CN tepe'ši-tl 'precipice, large rock, cliff, ravine'. Karttunen says the CN forms are from *tïpï 'rock' and the others may be also, yet the glottal stop in the CN terms and the liquid -r- in Nv both suggest a 3rd C, perhaps a liquid as in Nv. Hp and Nv may share an additional affix -ka, and others with other compounding elements. [NUA: Hp; SUA: Tep, Azt]
- **367.** *huwiC 'canyon, water way': Kw huyu / huwi-pi-dï 'canyon'; Ch huwipi (< *huwippi) 'wash, canyon'; SP ui" 'canyon, gully'; WMU wii-ppi 'flood, where flood flows/washes, a wash, canyon, n'; CU wii 'be flooding, vi'; CU wii-'a-ga-tï 'valley, gully, canyon, lit: that has flood'. Might Ktn wïvït 'level ground, valley' belong? Like *hupiC > piC 'back', this also lost the first syllable, in fact, same syllable *hu-. [NUA: SNum]
- **368**. *kom 'valley, canyon': CN komool-li 'gully, depression'; Tr komiči 'canyon'. Cf. *komi 'back', which is a semantic stretch, but some may want to know about the possibility. [SUA: Trn, Azt]
- **369. *cawi** 'steep/cliffed canyon': TO šaagig 'canyon, ravine, gorge'; Nv aagiga, pl: sasagiga 'barranca'. [SUA: Tep]
- **370.** *siki 'slanted (terrain)': Mn siki 'napaa 'slanted, on a slant, slantwise'; Hp sikya 'small valley, ravine, canyon with sloped sides'. [NUA: Num, Hp]

- **371.** *paya 'slope, hillside': SP payaa 'slope, bottom surface, breast'; SP payaa-vi 'slope of a hill'; WMU payáa / payaa 'side, slope, surface, chest (of body), n'; WMU payaa-n 'my chest'; WMU payaa-va 'on the side/slope'; CU payá 'side, flank, slope, hill-side'; CU payáa-vi 'slope'; ST vaavaidya 'walk up a steep slope'; PYp ipar 'slope of hill'. Tb wayaa-l 'steep side of mountain' agrees in 3 of 4 segments, but not the first. [*y > d in Tep; r > y?] [NUA: Num; SUA: Tep]
- **372**. *hunuC/*hunup 'canyon': TSh hunuppin 'ravine, gully, narrow canyon, gorge, ditch'; Sh(M) hunu"-pin 'ditch, ravine, wash'; Tb humboyaam 'Kelsi canyon'. Perhaps NP(B) hunagapïni 'hollow, ditch'. [n > m/_bilabial] [NUA: Num, Tb]
- 373. *ta'i 'slope': TO ta'i 'up'; PYp ta'i 'steep'; ST tai 'uphill slope'; Nv tai 'cuesta arriba'; SP ittai 'to slope'; Tbr taí-r 'cabeza'; from compounds it appears that NT taí generally means 'up': NT tai kaátï 'lying down face up'; NT tai tïīsadyi 'climb, go up'. [NUA: Num; SUA: Tbr, Tep]
- **374.** *ti(N)kwiniti(n) 'cliff': NP tibbi tiggwinidi; TSh tinwinitin. This may contain 'rock' as first element of a compound. [NUA: Num]
- 375. *pan 'valley': Cm haapane 'level valley'; SP paŋkwi- 'mountain valley'; SP paan'noa 'be hollow, open valley'; Ca pánu-wen-ik 'canyon'; it may not hurt to keep in mind CN *pani 'on, surface' in regard to this, but we do not count it. [NUA: Num, Tak]
- NB, for Tep *papa / *papo 'rock, cliff': B.Tep264 *vavoi 'cliff'; M88-pa54; KH/M06-pa54: TO waw 'bedrock, a cliff, a rock'; NT vávoi; ST vaapai; PYp vava 'hill, mountain, cliff'; PYp vaves 'rocky terrain'; Nv baba 'roca, peña, peñasco', see *pa(pa)yu 'ceremonial staff' (M88-pa64) at knife.

NB, for *kopa 'forehead, edge, descent' see forehead.

NB, for *capa, see edge.

NB, for *poso (Nv vihoga and Hp pösö), see cave.

CARE FOR, TAKE CARE OF, TEND, GUARD; CUIDAR, GUARDAR

- **376.** *aCk(y)a 'take care of': M88-'a38; KH.NUA; KH/M06-'a38: Ca 'áqyaw 'to rock or take care of a baby'; Sr 'ahqa-i 'to babysit, take care of (baby or child)'; Ls 'aqíni- 'to deliver a baby' (cognate? Miller queries; good question). [NUA: Tak]
- **377.** *piya 'care for': ST vipiada 'to herd'; CN piya 'take care of s.o. or s.th., protect self from s.th., hold s.th., have stewardship over s.th.'; Wc 'ïvíya 'guardar, cuidar'. Could these relate to forms under *piya 'mother, big' as one who watches and cares for offspring? [SUA: Tep, Azt]
- **378**. *nukaya 'care for': B.Tep176 *nuukadai 'to take care of'; M88-nu3; KH/M06-nu3: TO nuukuđ; LP(B) nuugud; NT nunúúkadai; ST nuukad. [intervocalic voicing in LP] [SUA: Tep]
- **379.** *kwapiCtu 'take care of, watch': Ca kwáaviču 'take care of, vt'; Cp kwáaviču 'take care of, bring up'; Cp kwáavičuva'a-š 'warden'; Ls qwááviču 'guard'. [SUA: Tak]
- **380.** *(na)map 'take care of': TSh namaappa'i 'take care of oneself, be made, fixed'; Cm namabiciapï 'care for self'; Mn wabicabi 'care for, take care of (an object)'. [m/w] [NUA: Num]

CARRY, FETCH, BRING, TAKE, HOLD, GRASP, GRAB, SQUEEZE; see also hug LLEVAR, TRAER, TOMAR, QUITAR, AGARRAR, APRETAR, COMPRIMIR

381. *ki 'bring, take to': M67-61a *ki 'bring'; M88-ki2; KH/M06-ki2: NP kia 'give'; Tb kinat~ 'ingin 'bring'; Hp ki-ma 'take, bring pl obj's'. To the above we might add Hp ki-va 'bring many things'; AYq kivača 'bring sg obj'; AYq kiima 'bring pl obj'. [NUA: Num, Hp, Tb; SUA: Cah]

- **382.** *pa-'iwï / *pa-hiwï 'fetch water': B.Tep266 *va'igïi-i 'to fetch water'; TO wa'ig/wa'igï; LP va'ig; NT váígïi; ST va'igi-. Note the similarity between the latter parts of Tep *va'igï... 'fetch water' and Tep *ku'agï... (< *ku'awï '(get) firewood'; they both show Tep *-'Vgï 'fetch'(?) (< *-'Vwï). I hesitate to reconstruct h in Tep, because a cluster or other things could yield a glottal stop besides the traditional h; so 'may be better than h. [SUA: Tep]
- **383.** *kwaLma 'put arm around, carry under arm': BH.Cup *kwal- 'armpit'; M88-kwa14; KH/M06-kwa14: Cp kwál'a 'side, armpit'; Cp kwalma 'carry under the arm'; Ca kwálma 'hold under armpit, put arm around s.o.'s neck'; Ls qwálma 'armpit'; Gb kwár 'armpit'. While it is possible that *kwalma is a compound, none of the authors of the works on the three Cupan languages show it hyphenated, so Cp kwál'a 'side, armpit' (vs. Cp kwalma 'carry under the arm') may have shortened or lost the final syllable.

 Ktn kwačuhpic 'armpit' may contain the morpheme as well. [NUA: Tak]
- **384.** *koma 'hug, carry in arms': M88-ko3 'hug, carry in arms'; KH/M06-ko3: TO koom-k 'hug'; TO koom-č 'have in one's arms'; Wr komí 'hug, carry a person or animal'; My kóomim 'los gatos (biceps)'. To these can be added PYp komi 'carry in arms'; Tr omabi 'cross or fold arms, wrap or dress oneself in s.th.'; NT koomiáátugai 'carry in the arms'; NT kokóómityukui 'abrazarlo, vt'; ST koomkia / koomkk / koomkiču 'hug'. These may be *kwo(L)ma from *kwaLma above. Tr suggests so, for Tr lack of k fits Tr w < kw. [NUA: Tak; SUA: Tep, Trn]
- **385.** *kopa / *kwapa 'carry in the arms, hug': TSh kopanai'ih 'carry in the arms'; Sh kopa" 'carry in arms, embrace'; Cm kwabarï 'hug, squeeze, carry in the arms'. This could be *kwapa > kopa or *kopa > kwapa if an anticipatory assimilation began in the first syllable. [*kw] [NUA: CNum]
- 386. *yawi / *ya'wi / *yaŋwi 'carry, grasp': BH.Cup *yaw 'bring'; M67-79 *ya 'carry'; I.Num289 *yaa 'take, fetch'; M88ya4 'carry'; KH.NUA; KH/M06-ya4: Mn ya 'put on, wear'; NP yahita 'carry'; Sh yaa" 'get, carry, pick up'; Cm yaa 'take'; Kw yaa 'carry sg. obj'; Kw yaa-ki 'bring'; Kw yawi 'hold'; SP yaa 'carry one obj'; SP yaŋwi 'carry'; CU yáa'way 'carry, take by hand'; Cp yawiči 'carry'; Cp yáwe 'bring, carry'; Ca yáw 'to catch, touch, have, hold, take care of'; Ls yááw 'have, hold, take'; Sr yaa' 'take, carry'; Sr yaa(i) 'take, seize, catch'; Gb yáw 'tener'; Gb yá'a 'carry it!'; Hp yaaw- 'carry in/by hand'; Miller also lists Aztecan forms like HN yawa'/yawi 'to go', which might be related with a semantic change from 'take, go get' to 'go', but support for such would be nice. The semantic identity of Tb yiïw 'hold, keep it' makes it probable, in spite of a vowel change. Add Ch(L) yawi- 'carry in hand or arms'; TO đagi 'action with hands'; TO đagi-mun 'to massage, knead'; TO đagio'id 'take care of, support'; Ktn yaw 'grasp, grab, catch'; Ktn ya' 'carry, bring, vt'. Note the similar semantic range between the TO terms and Ca yáw 'catch, touch, have, hold, take care of' and the segmental identity to *yawi. ['/w, medial cluster?] [NUA: Num, Hp, Tb, Tak; SUA: Tep; but Azt?]
- **387.** *yaw-nïma(k) 'carry, have': KH.NUA: Sr yaanïm 'have, vt'; Ca yáwnemax 'bring s.th. for s.o.'; Hp yawnïma 'be carrying by the hand, go about carrying by the hand'; Ls yáwmona 'carry, bring'. This is a compound with *yawi- 'hold'. [NUA: Hp, Tak]
- **388.** *hitapa 'carry': Mn hida 'carry, hold using both arms'; NP hida 'carry in arms'; Eu hítava-n/hitáwa-n 'carry'; Wr ihtába-ni 'carry a heavy load'. [NUA: Num; SUA: Trn, Opn]
- **389.** *himaC 'get, carry pl obj's': TSh hima" 'carry in the hands, get'; TSh himakin 'come to get'; TSh himakkin 'bring'; Sh hima" 'get, carry pl. obj's'; Cm hima'arï 'pick up, take (several obj's)'. In all these CNum languages, this suppletive plural form complements the singular *yaa*-. [NUA: CNum]
- **390.** *pina 'bring': M67-61b; M88-pi15; KH/M06-pi15: Tb pin~'imbin 'bring it'; Sr pinai 'bring, bring back'; Cr anpíí 'take it' and Cr -pii-. Ken Hill adds Wc piini 'be the property of' with a question mark; I agree. We might also add Nv vino'o 'for river to carry s.th.'; Tr bi'ni/be'ná 'recoger uno a uno, pepenar'. Note nasal anticipation in Tb. [no *p > zero in CrC; N in Tb] [NUA: Tb, Tak; SUA: Tep, Trn, CrC]
- **391. *pana** 'carry, bring': Nv babana 'traer, llevar'; Nv ay vappana 'traígase aquí'; PYp vavaneg 'carry in hands'; Cr hahana 'carry s.th. vertical'; Wc háana 'carry s.th. flexible'. [*p > h in CrC] [SUA: Tep, CrC]

- **392.** *u'... / *uNwa 'take, carry': M67-431 'take'; M88-'u1 'carry'; KH/M06-'u1: Gb 'ú' 'take'; Sr 'uu' 'take, pick up, marry (woman)'; Sr na'uu' 'marry (either a man or a woman)'; TO u'u/ui 'accept, get, take pl objs'; TO u'a/u'apa 'bring, arrive carrying'; Eu úu 'traer, coger'; Wr u'i 'bring'; Cr ï'ï 'carry (flat sg obj)'. Miller also lists Hp oya 'put pl objs'. Let's add Ca 'ú' 'put s.th. on the head, carry' and SP uŋwara 'catch (?)'; the 2nd consonants of both Hp and SP differ from the glottal stop of other forms, but we do see glottal stop alternations with w/ŋw and due to clusters. Note that at both 386 and 392, SP shows -ŋ- where most show -'-. [*' = ' in Tep] [NUA: Tak, Hp, Num; SUA: Tep, Trn, CrC]
- **393.** *tu'u 'take': I.Num223 *tu(')u 'take, pick up, fetch'; M88-tu19; KH/M06-tu19: Cm tuu 'fetch water'; the SNum forms reconstruct to s.th. much longer, s.th. like *tu'uCma / *tu'umma: CU ti'umay 'pick up (off), take (off)'; SP tu'uhma / tu'umma 'take pl obj's'; SP tuumai 'pick up'. Add Ch tu'úma 'catch, take pl objs'; WMU tu'úma-y 'take (many things)'. We might also add AYq maču'unama 'hold in hand, grasp while moving' (with palatalisation *t > č) and AYq maču'uweyek 'hold while standing'. [cluster] [NUA: Num; SUA: Cah]
- **394.** *tuku 'carry on the back': BH.Cup *tuk 'carry a load'; M67-78 *tu 'carry'; M88-tu11; KH.NUA; KH/M06-tu11: Cp túku 'carry, vt'; Cp tukwíve 'load, n'; Ca túk 'carry on the back'; Ls tukwáni 'carry on the back'; Sr toka-i 'carry on the back, pack, vt'; CN itki 'carry s.th., govern people'. Ken Hill astutely adds Wc tiki 'acarrear, cargar'. Let's also add TO čuuk 'carry on one's back'; Nv tukua 'carry children on the back'; NT tutúúkui 'throw on the back'; NT tuukútïi 'carry it on the back'; ST tuukču; ST tukia'/pres: tuuk 'carry (on the back)'; Tr tugú 'irregular present of Tr tu- 'fetch / haul / carry water'; Cr ra'a-tïhkï 'las lleva (cosas redondas)'. Cr and Wc show the expected vowel ï < *u, while Wc tu/tuu 'llevar, bajar' agrees with and is found with *to below. [k/'; cluster] [NUA: Tak; SUA: Tep, Trn, CrC, Azt]
- **395.** *tu / *to (perhaps *toha) 'carry, fetch, go get, go to do' (often compounded with *'u' 'take' in *'u'-to): KH.NUA; some from KH/M06-tu11: Sr uu'ţu' 'go get, go marry' (vs. Sr 'uu' 'take, pick up, marry (woman)'); Gb úuro' 'voy ir a traer' (vs. Gb 'ú'a 'take'); Hp oyato 'go to put several (vs. Hp oya 'put several'); Hp -to 'go/come intending to do s.th., be about to' (as in Hp kwis-to 'fetch, go to get (sg. inan. obj)'; Hp yïkï-to 'fetch (pl obj)'; Hp wik-to 'fetch (anim. obj)'; Cr(JM) tya'antú'utu'u 'take them (small round objs)'. Add Tr tó-mea 'traer consigo, llevar consigo'; Tr -to- 'go do s.th.'; AYq tovo'ote 'carry with the hand'; Eu -too in Eu zóktoo 'carry in arms'; Eu mato 'carry on shoulder'; Yq tóha 'llevar, traer, echar, dejar'; AYq toha 'carry sg. obj'; Nv toabada 'acarrear'; Wc tu/tuu 'llevar, bajar'. Why Hp o, not ö? We might combine this with *tuku above, except for differing Cr, Wc, Nv, and Tr forms. We might combine it with *tu'u above, except that Yq has very different forms there also. [V problem] [NUA: Tak, Hp; SUA: Tep, Trn, Opn, Cah, CrC]
- 396a. *kwïsïC (AMR) / *kwïsa/i (< *kwisa?) 'take, carry': Sapir; VVH52 *kwï(sï) 'to take, get'; M67-76 *kwe 'carry'; I.Num88 *kwïha 'catch, take'; M88-kwï2; AMR (1990) *kwïsïC; KH/M06-kwï2 *kwïsïC 'carry'; Jane Hill 2008: NP kwïhï 'carry'; TSh kwïï' / kwïïn 'catch'; Cm kwïhï 'catch, capture'; SP kwïi 'take sg obj'; Tb wiiš(at)~'iwiš 'catch, rope, vt'; Hp kwïsï 'receive, take, pick up'; TO bïhi 'acquire, get'; Yq bwíse; My bwisse; Cr -čue- in Cr rá'-a-čue-nyi 'he is going to take it away'; Wc kwe 'llevar algo largo y sólido'; Pl kwi grab, take'; CN kwi 'take, vt'. Num appears to have lost intervocalic -s- or *-s- > -h-. Miller's inclusion of the 2nd Tb form, Tb wïkït 'get, catch, grab', with a very different medial consonant is possible if from a compound something like *kwïs-kV, but see *wik 'take by hand' below. Be that is it may, we must add PYp behe 'carry, get, grasp, seize'; ST bïïya' (pret. bïi) 'adquirir, obtener, conseguir'. The Cahitan vowel (ï) may be original; Azt also, with loss of the final syllable. Sapir, VVH, and Miller have all included the Azt forms. The forms in b also belong after reduction of kwV > ku:
- **396b. *kus** 'take': BH.Cup *kuş 'take'; M88-ku18; Stubbs 1995-6; KH/M06-ku18: Ca -kús- 'take'; Cp kuşa- / kuşáánə- / kuşá- 'get, fetch, take'; Ls kuşááni 'take, grasp sg. inan.obj'. These are related to the above by *kwïs > kus. [labials *kwV > ku, Tb w < *kw; V problem; *s > h in Num] [NUA: Num, Hp, Tb, Tak; SUA: Tep, Cah, CrC, Azt]
- **396c.** *kwisa > *kwiha 'carrying net': at KH/M06-ku11 'bag' Hill lists Sr kwiih-t 'carrying net' and Ktn kwiha-t 'net, carrying net' as maybe with the *kusa 'bag' forms, and could be. Be all that as it may, an interesting side note is that Ktn kwihaka / kwihak 'woman' may derive from *kwisa-ka 'carrying-net-haver', the one who does the carrying. I also put with these *kusa 'bag' below. [NUA: Tak]

- **396d.** *kusa 'bag, sack': M88-ku11; KH/M06-ku11: Mn kussa/kúsa; Sh kussa; WSh kusa (acc. –i) 'pants'; TSh kusa 'pants'. To these, add Wc kïsíuri 'talega, bolsa' whose vowel agrees (Wc ï < *u). Miller includes the *kusa with the *kuna 'bag' forms, but unless the 2nd syllables are separate morphemes, the differing 2nd consonant suggests a different etymon, with which Wc agrees. [NUA: Num; SUA: CrC]
- **397.** *po'i 'take s.th. away, dispossess': TO wooppo'id 'take away from, deprive of'; Nv vopoida 'quitar'; Tr bo'e 'quitar, disposeer'; Wr po'é-na 'take s.th. away'. [SUA: Tep, Trn]
- **398.** *pu'a 'carry': AYq pu'ate 'carry, transport, take along, vt'; AYq pu'akte 'load, vt'; AYq pu'akti 'load, pack, n'; Yq pu'a 'carga, v' (pres); Yq pu'ak 'cargó (pret)'; Yq pu'akta 'cargar, v'; Yq pu'akti 'carga,n'; My a'a pú'aate 'lo va cargando (en hombros), v'; My pú'akte 'está cargando'; My a'a pú'aktia 'lo carga (en los hombros), v'. Could these tie to *po'i above? [*u-a > *o-a > o-i] [SUA: Cah]
- 399. *wayaka > *wika / *wiki 'take by hand, lead out': Ca wík- 'carry with the hand'; Hp wiiki 'take along, lead, escort, kidnap, steal (anim obj)'; Hp wikikit-ta 'hold s.th. suspended from the hand by a handle'; Hp wiki 'strand, items on a string for hand carrying'; Hp wikikiti-ma 'go along carrying s.th. in the hand'; Yq wiike 'estirar, jalar, sacar'; Tr wi-mea 'coger y llevarse, arrebatar, robar'; perhaps Mn wïi-(kï) 'get, have, catch'; Sr wiq-kin 'take out, cause to exit fast (sg obj)'; Sr wayaq-kin 'take out, cause to exit fast (pl obj)'; Sr wiq-q 'go out, come out, exit fast (sg sbj)'; Sr wayaq-q 'go out, come out, exit fast (pl sbj)'; Nv gika 'llevar algo colgado de la mano'; CN wiika 'take, carry, go together, accompany'; CN tee-wiika 'take or conduct s.o., take s.o. away, carry s.o.' (Bierhorst 1985, 138). The inclusion of Tb wïkït~'ïwïk 'get, catch, grab' may better belong here than with *kwïs where M88 has it, though a close but different vowel is inconvenient. The Sr forms may well suggest *wayak > wik? This may tie to *wika 'make rope' at rope. [NUA: Hp, Tak, Tb; SUA: Trn, Cah, Tep, Azt]

M88-ca3 includes M67-234 *ca/cak; I.Num254 *caŋka 'lead by the hand'; L.Son29 *capi; B.Tep186a *saada 'to herd cattle'; CL.Azt29 *cakw(a); Hp caama 'take, lead pl.obj's'; Sr čawuu-i 'gather, pick'; TO saakum; Num *ca'i / *caka forms; TrC *capi forms; and Tak *cakwi forms. We might divide Miller's collection of initial *ca syllables according to 2nd consonant or cluster:

400a. *cakwa / *cakwi 'catch, grasp, close (grasp or s.th. else), lock': M88-ca3; KH.NUA; Stubbs1995-9; Stubbs 2003-35: KH/M06-ca3: Ls čáqwi 'seize, catch'; Cp čáqwe 'catch, grab, cling to'; TO šaakum 'catch, grasp'; NT saakómi 'handful'; ST saakum 'handful/fistful (of grain)'; CN cakwa 'close, enclose, lock up'; CN cakwi 'close, get closed, vi'; Pl cakwa (pret cak) 'close, shut, cover'. Add Mn cakwiti'i 'close, lock, bolt'; WMU čahqqwí / čahqqwí / čahkkwí 'lock s.th., vt'; WMU čühkkwí'na-y 'turn, vt'; SP čuġwaa-ŋqü 'fasten on'; CU cugwí 'adhere to, stick to'; CU čühkwíi 'turn, twist'; CU čühkkwí'napï 'key, n'; Ch čikwí-čui 'turn'; Kw caagu-bï 'glue'. [labials, TO; -a vs. i] [NUA: Tak, Num; SUA: Tep, Azt]

400b. *ca'wi 'take': Mn ca'winoo 'carry (by use of a handle), vt'; NP caggwï'huk 'carry off'; Sr čaweei 'gather, pick, harvest'. [NUA: WNum]

400c. *ca'pi 'take': L.Son29 *capi 'coger': Eu zápa-/cápa- 'coger, agarrar'; Tr ča'pi-mea 'coger, agarrar, casarse'; Tr na'cabi 'coger pl objs'; Wr ca'pi-ná 'agarrar, sostener'; Op capi. Note the glottal stop hop in Tr *ca'pi and *na'capi. TrC *ca'pa/i may be related to *cakwa/i as another item showing some evidence of clustered or geminated noninitial p relating to kw, and the glottal stop may suggest a cluster. Same division as cold. [glottal stop hop in Tr; *-kw-/*-p-] [SUA: Trn, Opn]

401a. *ca'ay 'grasp, hold': M67-234 *ca 'hold'; I.Num 253 *ca(')i /*cee 'hold'; M88-ca18 and ca3; KH/M06-ca18: Mn cee; NP ca'i 'hold'; TSh cai"/ce" 'grasp, catch'; Sh cai" 'hold in the hand, lead'; Ch ca'i 'grab'; SP ca'i / ča'ai 'catch'; CU ča'ái 'catch, grab, hold, seize, take-in-hand'; Sr čaya'kin 'select, choose'; Cp čayú'ə 'harvest'; Ls čááyi 'sift, winnow'. Add Kw ca- 'with the hand, grasping' and WMU ča'á-y / ča'ái-y / če'é-y 'grab, catch, touch, hold, vt'. I had my doubts about the Tak forms until KH/M06 added Ktn ca'yk 'select, choose, pick out' which provides a credible bridge between the Num forms and the Tak forms both phonologically and semantically. Hill also adds Hp caacaya 'winnow' and Hp caayan-ta 'be sifting, winnowing' and Hp caama 'take, lead, conduct (pl obj)' with a question mark.

401b. *ca"- / *caC- / *co'- 'with the hand': Mn ca- 'by hand'; TSh ca"-/co"- 'with the hand by grasping'; TSh co'i / co'e 'gather, pick up'; Cm co'meetï 'gather, pick (harvest plant product)'. This verbal prefix is in most WNum and CNum languages and likely derives from *ca'ay 'grasp'. [NUA: Num, Tak, Hp]

- **402.** *cakka 'catch, hold': Mn caqqa 'catch and lead back'; NP caka 'lead s.th., bring' (< *cakka); NP caka'hu 'grab a woman, horse, etc.'; NP cakati 'hold, vt'; NP cakadïno 'handle'; NP(B) caka 'lead along'; perhaps Cp čiqačíqa'a 'fetch it over!' All forms show a geminated medial *-kk-. The first part of TSh caikkan 'hold, grasp' is TSh cai' 'grasp' like Sh cai' 'hold in the hand, lead' which means that *cakka may be a compound of *ca'i/*ca'ay and s.th. else, but not certain, in light of differing forms in Mn, NP, Cp. [NUA: Num, Tak]
- **403a.** *nu'u 'grab, get, bring': My nú'uye 'lo está agarrando, cogiendo'; My nú'upa 'lo está trayendo'; AYq nu'e 'get, acquire, vt'; AYq nu'upa 'bring, deliver, receive, vt'; AYq nunu'e 'grab, seize, vt'; AYq nunu'ubwa 'have on one's person, have in one's possession'; Yq nú'u 'traer, llevar'; Yq nú'upa 'traer'; Yq nu'e 'agarrar, escoger, juntar, recoger'; Yq nu'upa 'traer'. What of Ca nu'in 'tell to do, send, send for, vt'; Ca nun'umi '(distr) send here and there'?
- 403b. *nunu 'hold, carry': Ca núnu 'carry, take along'; Cp nenú 'have, hold, vt'. [NUA: Tak; SUA: Cah]
- **404.** *nuk 'carry, take, get': My nuksiika 'cargó'; My a'a nuksiime 'lo carga (sg sbj)'; My a'a nuksakka 'lo cargan (pl sbj)'; AYq nuksiime 'llevar (sg.sbj)'; AYq nuksaka 'llevar (pl. sbj)'; Yq nukseeme 'lleva sg sbj'; Yq nuksaka 'llevan (pl sbj)'; Cp nuke 'get, vt'. One might want to combine these with the above, but Cp has a different form in b and the Cah languages have other forms in a. [NUA: Tak; SUA: Cah]
- **405.** *noC 'carry on back': I.Num112 *no(')o 'carry (on the back)'; M88-no6; KH/M06-no6: Mn noo 'carry, pack, haul'; NP no; TSh noo" 'carry on the back'; Sh noo"; Cm noo 'haul'; Kw noo" 'pace or carry on the back'; Kw noo-pï 's.th. packed' (having p instead of v shows the final gemination); SP noo / noo"; CU nöö-'way 'carry, on back, in hands, on vehicle'. Add Ch(L) noogwah 'carry on back'; Ch(L) 'avi-nyooci '(one who) carried white clay on his back' ('avi 'white clay'); NP(B) noo- / noo'o- 'carry, transport'; NP(B) noobidïu 'to camp'. Note Mn nobi 'house' and Mn nobiha 'pack, bundle up, vt' as well as Mn noo 'carry, pack, haul' and Cm noo- 'hill, knoll, hauling' and others, all suggesting a relationship between *nooC 'carry/haul one's stuff' to campsite, WMU nööppi 'blankets, bedding, camping place, one's stuff in a pile or place' and *nopi 'make windbreak, wikiup, campsite, camp pile of stuff' (temporary house) and *noo'o(vi) 'hill' (mound or pile looking like a pithouse). [NUA: Num]
- **406.** *ma(ma) 'carry (on shoulders), govern': CL.Azt25 *maama 'carry'; M88-ma29; KH/M06-ma29: CN maamaa; Po mama; Z maamaa; T moma. Might Wc maamá 'brazo, mano' tie to the Azt forms as 'arm s.th.' meaning 'carry s.th.'? Wc is a reduplication of UA *ma(n) 'hand' which may underlie the Azt verb. [SUA: Azt]
- **407.** *kucupu 'carry on back/neck': B.Tep124 *kusuvui 'carry (on the back)'; M88-ku27; KH/M06-ku27: Nv kusubio 'cargar en las espaldas'; UP kušïwï; LP(B) kušu; NT kušívu / kusúvui; ST kusvi. Add also PYp kusvim 'carry on the back' (PYp kusiv / kusuvar 'neck') and TO kušwi'ot 'shoulder a load, vt' (TO kušo 'back of the neck'). Cf. *kucipu 'neck'. [SUA: Tep]
- **408.** *nawa 'take away, grab': Eu nanáwa-n 'quitar'; Ca náwan 'take s.th. away from s.o.'; Ca náwas 'to grab, fight over s.th.'; Ca náwiči 'bring it here!' [NUA: Tak; SUA: Opn]
- **409a.** *ma(N)-cuka 'hand-squeeze': AYq mačuktia 'handful'; My mačuktia 'empuñar'; Mn macoga 'hold in hand'; NP maducoga 'squeeze with hand'; Ca čuk 'grab a handful of s.th., claw (as a cat), stick (as a bur)'. A cluster may preserve *-Nc->-c- in Num.
- **409b.** *(man)-tu'u/cu'u (sometimes compounded with hand *man-cu/co) 'squeeze, knead': SP -cuu- 'squeeze'; Ch mancú 'squeeze'; CU ma-cóy 'squeeze, knead'; Tr ma'so 'squeeze/wring out, knead'; Tbr maso 'knead'. The glottal stop in Tr intrigues—did it hop (*(man)-cuk > *man-cu' > ma'cu > ma'so) or is it the result of an original cluster? The Ch term may be further evidence of -n in hand (see discussion at 'hand'. Though also at *tu'u above, what of AYq maču'unama 'hold in hand, grasp while moving' and AYq maču'uweyek 'hold while standing'? [glottal stop hop, o/u] [NUA: Num, Tak; SUA: Trn, Cah]
- **410.** *yawipina 'knead': B.Tep16 *dagivinai 'he kneads'. M88-ya17; KH/M06-ya17: NT dagiviñai 'he kneads'; UP daguwinï 'he kneads'; ST da'aviñ 'knead, v'; LP dagaviñ 'knead, v'. [SUA: Tep]

- **411.** *pak 'squeeze': M88-pa25 'squeeze'; KH/M06-pa25: TO wak'ï 'to milk, squeeze'; Wr ihpáge 'ordeñar' (Wr forms frequently contain a ih- prefix); Tr pačúnti 'exprimir'; My pipí'ike 'exprimir, ordeñar ("cognate?" Miller queries). TO and Wr are related; and My's transposition of a glottal stop would not be unusual. Could Tr's č be a palatalization of a velar, as Miller presumed, I presume? Yet it also has much in common with *patu/patta forms at 'flat'. [Wr ih-CV vs. *CV] [SUA: Tep, Trn, Cah]
- **412.** *taCci '(be) squeeze(d)': Wr tahcí-na/ca 'apretar, squeeze'; Tr ŕačí-ca/na 'apretar, oprimir'; Tr ŕačí-'apretarse, estar apretado'. [SUA: Trn]
- **413.** *wï 'carry': M67-77 *we 'carry'; M88- wï7; KH/M06-wï7: Mn wïï 'get, have, catch, take'; Mn(M67) wïï 'hold in arms'; Ls womi 'carry on one's shoulder'; My weria 'carry'. Wide 2nd C variation leaves this set suspect. [NUA: Num, Tak; SUA: Cah]
- **414.** *yu'a 'take': Sapir lists the following pair, which seems reasonable enough: CN yua 'enviar a una persona a algún lugar, conducir a alguien [send, lead, take person to some place]'; SP yu'a 'carry away more than one object'. Not in M67 or in M88. [NUA: Num; SUA: Azt]
- 415. *ŋï'a / *ŋï'i / *ŋïha/i 'grasp, catch': Hp ŋï'a 'grab, catch'; Hp ŋï'i-wa 'get caught'; WMU güű/güű-y 'grasp, catch, get, take, vt'; Kw ku'u 'catch, get, receive'; CU kïí 'take, pick up, obtain'. Sometimes initial k can sound like either k or g to English speakers; however, WMU never sounds like k for this etymon, only g. Above at *kwiha are Ch kwïhï 'catch, take, receive sg obj'and SP qwïi- 'take sg obj'. [ŋ / k] [NUA: Hp, SNum]

NB, for *ku'awï '(get) firewood', see 'tree'.

NB, for *mato 'carry (on shoulder)', see at 'shoulder'.

NB, for *pacu 'squeeze, mash', see 'flat(ten)'.

NB, for *ci'a, see at 'gather'.

NB, for *ay 'pick, get, take', see 'gather'.

NB, for *mukï 'wrap, bundle, carry a bundle', see at 'bag'.

NB, for *kwiCtV 'wring (clothes), squeeze' (Cp kwiča 'wring out, squeeze'; Ls kwiiči 'wring') see wash.

Cat: see lion

Catch: see hunt, carry (take, grasp)

Caterpillar: see worm Cattail: see reed

CAVE; CUEVA, CAVERNA

'Rock' (*timi') and 'house' (*ki, *kani) are frequent morphemes in compounds for cave: **416.** ***tim-kani** (> *tiN-kani) 'cave (rock-house)': KH/M06-ti56: TSh tiŋkahni; Sh tin-kahni; Kw ti-gahni; SP tiŋkani. [NUA: CNum, SNum]

- **417.** *tim-ki 'cave (rock-house), hole, storage cave': BH.Cup *təkic 'burrow'; M88-tï49; KH/M06- tï49: Cp téki'š burrow; Ca téki-š 'cave, hole'; Ls tóvki-š 'storage cave'. The *-ki syllable is likely 'house'. As for the first syllable, Miller (M88-tï49) has Cp and Ca deriving from *tïN- 'rock' and Ls from *tïp 'earth'. While that distinction may be so, we might add Tb tïŋgiil 'rock ledge', which would derive from rock. Ca and Cp could feasibly be from either, as a cluster eliminated the first -C-. However, the clearest example of the compound is Ktn tïmki-c 'cave'. [NUA: Tak, Tb]
- **418**. *tawin-(tin) 'cave, hole': TSh tawintin 'hole, cave, burrow'; Sh taintin 'hole'; Cm taina 'hole, cave, room'. Relevant to the TSh term are TSh tawin 'be a hole, v' and TSh tawin-coko 'ankle'. [$w > \emptyset / V_V$] [NUA: CNum]
- **419**. *(tï)-koma 'cave': Eu komát 'cueva'; Tr fekomí 'cavidad, hueco en la peña'; Tr gomí 'cavidad'. [SUA: Trn, Opn]

420. *tïN-so (< *tiN-poso (?)) 'cave'; VVH118 *tiso 'cave'; B.Tep239 *tihoi 'cave'; M67-81 *te-so 'cave'; CL.Azt212 *tiiso; L.Son300 *tiso 'cueva'; M88-ti13; Stubbs2000b-43; KH/M06-ti13 *tin-so 'rock-burrow': the Tbr and Hp forms may suggest reductions in other languages, when considering the following UA words for 'cave':

Tbr te-veso-lí-t 'cave'

Hp tùuso / tihso 'rockshelter, cliff overhang'

Hp(S) tïpïvi 'cave'

Hp(V) pösö 'interior corner, box canyon, cave'

TO cïho; NT tihoi; ST tyiov; Nv tiho; Yq téeso; Wr tesó; Tr ŕesó; CN oostoo-tl 'cave'. Miller, VVH, Lionnet, Bascom, Campbell and Langacker all reconstruct s.th. near *ti-so, which fits nicely with Yq, Wr, Tr, TO, NT, and perhaps Hp tihsö. However, Hp tùusö/tihsö suggests a consonant cluster, like Hill's reconstruction *tin-so. Other UA words may hint of something like *tiN-poso: Hp(V) pösö is listed as meaning 'cave, corner' in Voegelin (1957), and as 'interior corner, box canyon' in Hill. Nv vihoga 'principio de una barranca [beginning of a ravine, gorge]' and Nv atabihoia 'la división de las asentaderas' show *piso 'indention, concave' perhaps, and V > i before alveolars is frequent in UA. Since CN drops initial *p, CN oos- 'cave' may point to *poso. Both Tbr te-veso-lí-t 'cave' and ST tyiov 'cave' also reveal a bilabial associated with this etymon compounded with *tiN 'rock': assimilation or vowel change in Tbr (*te-poso > *te-peso) and metathesis or anticipation in ST (*ti-poso > *tiop). Spirant h in Hp tihsö/tùusö also suggests a previous underlying cluster. In addition, many languages showing *tiso typically do not hold clusters well. So some may be from *tiN-poso 'rock corner/concavity' followed by reduction—*tiN-poso > *ti-pso > *ti-hso (Hp) > *tiso (TO, NT, Yq, Wr, Tr)—with bilabial remains in ST, Hp, Tbr, but not expected to remain in CN. If such is the case, then Tbr is the most complete form of that compound (Tbr teveso). As well, Hp, ST, NP, and CN show hints of the compound *tiN-poso for this Hp and SUA form. [medial C, maybe cluster] [NUA: Hp; SUA: Tep, Trn, Cah, Tbr, Azt]

421. *tïN-po-ki 'cave': Mn tapogi; NP tibbogi. Perhaps *tïN-po-ki 'rock-in-house'. Could *tïN-poso above be part of this compound? In fact, Ls tóvki-š may be tied to WNum *tïpoki 'cave'. Ls is the only Tak language showing *-p- (as only Ls shows -p- in *kupta 'buttocks'), but Ls tóvki-š could possibly align with the *-po- syllable in WNum, since we see many cases of WNum containing 3 syllables, which are reduced to only the 1st and 3rd in other UA languages, which apparently lost the 2nd syllable. [reduction of WNum] [NUA: WNum]

CEDAR, JUNIPER; CEDRO, ENEBRO, TÁSCATE, JUNIPERO

422. *wa'aC / *wa'aN 'juniper or cedar tree': M88-wa25; KH.NUA; KH/M06-wa25: Ls wáa'at 'California Juniper'; Sr waa't 'juniper'; Gb wá'at 'guata' (juniper? Miller queries). To the Takic terms Ken Hill adds Ch wa'apï; Hp làapï 'shreddy bark, esp. of juniper'; Ktn wa'-t; Eu woá-t, gen woaté, acc. woata) 'sauce, arbol'; Tbr amoat (< *awa-t) 'encino'; and Cah wáta 'sauce' (with a question mark). We can also add Tb and other Num forms for 'cedar tree': Mn wa'apï; NP waapi; Sh waa"-pin; Cm waa(pi); Kw wa'ada-bï 'white cedar'; SP wa'a"- 'cedar tree'; CU wa'á-pï; Tb waa'a-t 'juniper berry'; Tb 'išwa'adu-l 'Tamerack, like juniper' and NT gááyi 'táscate, i.e., cedro blanco' whose initial syllable agrees, and is not impossible, but see below. Tb, Ls, Ch, SP, CU, Sh, etc, show a final consonant. In fact, Kw -d- might suggest that it is a N, as Kw -d- < *-Nt-, Kw -r- < *-t-, Kw -t- < *-tt-. [Hp l < *w] [NUA: Num, Tb, Tak, Hp; SUA: Opn, Tbr, Cah]

423. Tr gayorí / kaorí / kawarí / aorí / aborí / waorí / awarí 'enebro, táscate' provides a plethora of forms that all seem to be related variants, some of which parallel Wr aóri 'táscate, juniper'; in addition, Tr gayorí looks much like NT gááyi 'táscate', but without the usual correspondences. The variety of forms in Tr may suggest a collection at the central position of a dialect chain that includes Tep languages. Both sides of something like *wapari / wapori > Tep *gawari / gawori offers resemblances to many of the forms, but exactly what happened is hard to say. Whether NT gaayi is a truncated loan from Tr, or vice versa, or whether NT is related to *wa'aC above, the Tr and Wr forms seem to be tied, as their different accent patterns might preclude borrowing; however, I know better than to offer a reconstruction on this one. But to *kawa-, Cr kwaapé 'cedro' may be of interest here, in contrast to Cm eka-waa-pi 'juniper, red cedar (eka 'red' + waa 'cedar'), a compound showing *aNka 'red', which is found only in Num, and so the Cr form seems not likely related to the Cm form. [SUA: Trn, CrC]

424. *sama- 'cedar tree': TSh samapi 'juniper, cedar'; Sh sama-pin 'cedar or juniper tree'. [NUA: CNum]

NB, for *yuy in Ca and Cp, see pine *yuwi / *yuy.

NB, Tascate appears to be a CN form; if so, AYq tahkali 'cedar' would be related to or borrowed from it.

Centipede: see worm

Ceremony: see religious terms

Change: see different Charcoal: see fire Chase: see hunt Cheek: see face Cherry: see berry

CHEST: PECHO

425. *tawi 'chest'; Sapir; M67-59 *tawi 'breast'; L.Son280 *tawi pecho; M88-ta29; KH/M06-ta29: Hp tawicqa 'chest'; Ca táw; NT tagí; Op tawa; Tbr tamwí-t 'body'; Tbr tamwí-ta-m 'chest'; Wr tawiráci; Tr ŕawí; Yq táwi; My tauwi; Cr tabí; Wc tawí/taavíi. [NUA: Hp, Tak; SUA: Tep, Trn, Tbr, Opn, Cah, CrC]

426. *tunu 'chest': KH.NUA: Sr tuun|u' 'chest'; Gb túnon 'chest'; Ktn tunu-c 'chest'. [NUA: Tak]

427. *nïN- / *nïŋaC / *nïNCaC 'chest': I.Num125 *nïŋa(h)pï(h) 'chest'; M88-nï13; KH/M06-nï13: NP niŋabï 'chest'; TSh nïŋappïh 'rib cage area just below the breasts'; Sh nïnka"-ppïh / yenka"-ppïh (I.Num125 has Sh nïŋka-ppïh, nïna-ppïh). Miller includes other forms that appear to be identical to or derive from Num *nïmï 'person': Mn nïmm(î) 'torso, upper body'; from Bethel et al: Mn nïmï 'body (dead or alive), torso, upper body' and Mn nïmï 'person, Indian'; SP nïŋwïaa-(vi) 'body' and SP nïŋwï 'person, Indian'; CU núa-'aa-vi 'body' is also from Ute nuu < *nïmï 'person' as also the Mn and SP terms, whereas CU nïa-vï 'chest, breast' is different and may fit better. The Bannock Northern Paiute dialect also shows 'torso' deriving from 'person'—NP(B) nïmï 'people, Paiute people, somebody'; NP(B) nïmïa 'body, torso, inside'—whereas the Yerington dialect has separate terms in NP nïmï 'Indian' vs. NP niŋabï 'chest'. It is possible that *nïŋaC is a compound including s.th. like *nïmï + kap > *nïŋaC, but the two sets should be distinguished. [N/m/nk/kw, clusters] [NUA: Num]

428. *kwaco 'chest': TO baašo 'the chest, the breast, the front of'; Nv vaso 'pecho'; Nv vasogiva 'enfrente'; LP(EF) baas 'pecho'; PYp baaso 'chest'; ST baasot 'pecho'; pl: babastu. Tbr pesoñ-vá-r 'pecho del hombre' is likely borrowed from a Tepiman language, since Tbr is a kw-language and also should have c instead of Tep s < *c. [SUA: Tep]

Chia: see plant Chicken: see bird

Child: see bear, little, man (for son), woman (for daughter).

CHILI, CHILE

429. *ciLV 'chile': CL.Azt27 *čiil chile; M88-ci10; KH/M06-ci10: CN čiil-li 'chili'; Hp ciili 'chili pepper'. As Miller and Kenneth Hill suggest, the Hp term is probably borrowed from CN; nevertheless, Mn ciini' 'chili' does show the expected NUA sound change *L > n, though other NUA terms may also be borrowed from CN, especially Cp čiilyi; Cp and Hp fit a later loan pattern; however, Tb and other Num forms match *cira/cita, with a final *a*, instead of *i*, though Azt originally had *-ta as the absolutive suffix: TSh cita 'chili pepper'; Cm ciira'; CU čiriï; Tb čiira'/čiida'. It is curious, however, that so much of NUA has s.th. similar to the CN form, while all of SUA, CN's closest neighbors, have a different word *kokoli. Due to the hollow rattling sound of ripe chile in the wind, CN čiil- could be from verbs like CN ciliin(i) 'to sound, of a bell'. See at 'shake' *ciLi 'shake' and M88-cï9. [liquids] [NUA: Num, Hp, Tb; SUA: Azt]

NB, for *ko'okoLi 'chili pepper', see 'pain'.

NB, Zuni čili and Zuni koło both mean 'to make rattling sound'.

Chin: see mouth

Chipmunk: see squirrel

CIRCLE, BALL, SPHERE; ANY CIRCULAR FORM OR MOTION, ROUND, CURVE(D), CROOKED, CURLY, TURN, SPIN, TWIST, ROLL; CIRCULO, PELOTA, ESFERA; CIRCULAR, REDONDO, CURVO, ENCORVAR(SE), GIRAR, VOLTEAR, DAR VUELTAS, ATORAR(SE), RODAR 430a. *kapoL / *kapuL 'ball, sphere': Sh takapoon 'ball'; Nv kaborhi'ka-usi 'ball'; PYp kaver 'ball'; ST kavuulyik 'spherical'; ST kavulykada 'to form like a ball'; Eu kapóris 'ball'; Tr ka*po-či 'bolitas, esferitas, grumos en forma de bola'; Tr ka*po-ma 'hacerse bola, apelotonarse, inflarse'; and perhaps CU ta-pöötï-gwa-'napï 'ball' with reduction; CU p instead of v suggests an underlying cluster, perhaps *-kp->-p-), because CU pöötï-kway 'be round, circular, spherical' alone with a prefixed ta- should be tavö.... We also see a *ta- prefix in Sh and CU: *ta-kapol (like Sh) > takpol > CU tapöötï-; thus, the *poL/*pot forms below may be related also. [*l, cluster,

nasals, liquids, *ta- prefix, Ls V]

430b. *poLa / *puLa / *pot 'round, spherical': Sapir; M67-357 *pot; I.Num151 *pono; M88-po15; KH.NUA; KH/M06-po15: Mn 'atti"-pono 'round'; NP paccippono'a 'spherical'; Sh pono 'round, spherical'; SP potto(") 'round, spherical'; CU pöö-ti-kway (< *pootti-kkway M88) 'be round, circular, spherical'; Hp pöla- 'globular shape' in Hp pölà-η-pï 'round, spherical' and Hp pölaviki 'loaf bread, bread with a rounded shape', etc; and perhaps Hp pööla 'hump, hunchedback'; Cp púve 'be spherical (vowel is wrong notes M88); Ca púmle 'be round'; Ls pééva 'be round' (from Ls péva 'roll away'); Ls purúpruš 'round, a ball' (vowel is wrong M88); Hp pölànpï 'round, spherical'; Wr poló 'knot'; Cr ú'uraara 'ball'; Cr hú'ura-ra'a 'it is rounded'; Cr hure 'eine Kugel, eine Ball machen' (in Sapir). The CrC forms fit well (since *p > h/ø and CrC u < *o) or could belong with *oLa below. Ken Hill groups the following Sr terms with the preceding Hp and Tak forms: Sr potopo'-k 'be round/spherical'; Sr potop-kin 'make round/spherical'; Sr potopka 'round/spherical one'. Note Mn ïtïponogi 'be round' (Bethel et al) may also belong, if the other Num forms do; however, one thing that bothers me about this set is that if we assume *pot, then intervocalic *t > 1 is acceptable, and *l > n is acceptable also for NUA languages. But to have some Num languages still showing *-t-/*-tt- (SP and CU), while others are assumed to have undergone the full circle through two sound changes *t > *l > n (an undocumented sequence of sound shifts) is unsettling. That is, either *t > l or *L> n is documentable, but for some Num languages to proceed through both presumed changes while others went through neither has me thinking PUA *-L-, or maybe clusters. [liquids, medial C] [NUA: Num, Hp, Tak; SUA: Tep, Trn]

431. *oLa 'ball': M67-20 *'ol ball; M88-'o16; KH/M06-'o16: TO ola; NT oróóši 'ball, ball game'; Cr ú'uraara; CN te-ololtik; CN ololtik 's.th. ball-shaped, spherical; Pl ulul-nah 'round, spherical'. In M88-po15, Miller also includes the Aztecan forms *olol- with *pol/pot; and of course *p > Ø in Azt allows that possibility; but Azt cannot stay in both sets unless Mn and the Tep forms are considered loans from Azt. So this is likely a different stem, but identifying the source of the Azt forms is difficult. Miller (1967-20) includes Mn 'ohnoowi; Mn onoowi' 'ball' (Bethel et al). Hp ηöla 'hoop, ring, wheel, tire' may be relevant, since Hp initial η is problematic in PUA, though most have it with other initial nasals (*NoLa) a few sets below. [*o > Cr u, liquids] [NUA: Num, Hp; SUA: Tep, CrC, Azt]

432. *(po)Lo'oma 'bend, v': Tb polo'oma 'it is bending, vi'; Tb(M) polo'mat~'opoloom 'bend, vi'; Tr lo*mi-ma 'to bend'; Wr lo'mi-ba-ni / lo'mi-pá-ni 'be bent'; Wr lo'mi-na-ni / lo'mi-ca-ni / lo'mi-ná-ni / lo'mi-cá-ni 'bend something almost double, s.th. supple like a sapling, vt'. These form an interesting trio, in spite of Wr and Tr losing the first syllable. While Ca lámi- 'fold, wrinkle, vi' has an unexpected first vowel, the consonants merit its consideration, and the a/o alternation is frequent enough to recommend it, which we can hardly put with *nom 'bend' because we already have Ca ními 'bend, vi' there. [a/o, liquids] [SUA: Trn; NUA: Tb, Tak]

433a. *takoLa / *takuLa 'round, (en)circle': Eu takóris 'circle'; AYq tekolai 'round'; My tékolai 'redondo'; Sr ta'kï'q 'be round, circular' (Ken Hill, 2001). In light of AYq and My tekolai, and Sr ta'ku'k (Hill, 1994), these forms of *takuLai may be related to Tep *sikoLa/i, following a vowel change (a > i), and then a palatalization of *t > c (*takuLai > *tikuLa > cikoLa); the scarcity of *ti syllables in UA supports that. They might also be related to *ta-kapul showing the same reduction as *ta-pol except retaining the other consonant of the cluster, retaining k and losing p instead of retaining p and losing k: *ta-kapol > takpol > takpol > takpol : *u-a > o-a] **433b.** *cikoLa/i (> Tep *sikoLa) '(a)round': VVH148 *cikuri/cikori; B.Tep190 *sikora 'round'; B.Tep191 *sikori 'around'; M88-ci15; KH/M06-ci15: TO sikoD 'round, circumscribed'; TO sikol 'circular, round'; NT šikóra;

- NT šikóóraka; ST šikar. Ken Hill adds Cahita číkola 'alrededor'. For B.Tep190 *sikora 'round' (NT šikóra, ST šikar), and B.Tep191 *sikori 'around' (NT šikóoli 'around'; ST šikooly, UP sikoli), note that before the vowel *a*, r and TO D appear, and before i, this proto-phoneme becomes l. We ought also to add some CrC forms: Cr sikiïrara'a 'circular'; Wc šíkiï.ráïye 'redondo'; Wc šíkirí 'girar, caminar en círculos'; Wc šíkirávi 'redondo'. CrC ï < *u, so the vowel is slightly off (PUA *u vs. *o); however, the UA schwa equivalent (ï, instead of u < *o) may simply be the result of an unstressed vowel between two stressed vowels, or from assimilation in the other UA languages (**u-a > *o-a). The CrC forms may be loans from Tep, and the forms of a, b, and c may all relate if *tako > *tiko > *ciko.
- **433c.** *ta(C)ko 'wrap around': Wr ta'ko-ná 'envolver'; Tr tagó 'ponerse el taparrabo, vestirse (el varón)'; Tr tagótu 'estar vestido (el varón)'; TO čïkoš 'wrap around the ankle, vt'; TO čïkoš-Da 'an ankle rattle'. [*liquids] [NUA: Tak; SUA: Tep, Trn, Cah, Opn, CrC]
- **434.** *kawa(La) 'crooked, bent': M88-ka39: KH.NUA; KH/M06-ka39: Cp kawlekáwla'aš 'crooked'; Sr qawä'ka' 'crooked one'; Sr kawalawa'n 'crooked'; Ca káwla 'bent, inclined'; Ls kawaláwa 'be gap-toothed'. [liquids] [NUA: Tak]
- Miller and Iannucci combine the various forms in M88-ko14 'bend, bent' and I.Num58 *ko(o)nih 'bend, bent': NP wïkkono' o 'ring, circle'; Sh koonih 'curved, bent'; Kw nokkomi 'to bend, be bent'; SP nokkommi/nokko'mi 'bend, vi, be bent'; CU komo'ni-ci 'bend, twist, curve, turn, n'; My kónilai 'curva, arco'. But let's separate them thusly for now:
- **435.** *koLi / *koni 'bend': Sapir; I.Num58*ko(o)nih 'bend, bent'; M88-ko14: Sh koonih 'curved, bent'; My kónilai 'curva, arco'. Sapir lists CN kooliwi 'turn, curve'; SP konni 'return, come back by same road'; and Cr kuri-pin 'sich auf dem Boden wälzen'; Cr kuri-pua 'einen umherwälzen'. Note also Hp qöni(k-) 'go around s.th., make a circuit, surround, revolve around'; CN kooloaa 'twist, bend, fold, change directions'; CN kweeloaa 'fold, bend s.th.'; CN kweeliwi 'bend, twist'; and perhaps NP konono'i 'to roll along'. Since PUA *L = NUA n is often so, these could fit *koL, except that My kónilai should not show *n* if that were the case. And what of forms like Kw -kuri-move in a circular manner'? [nasal in SUA] [NUA: Num, Hp; SUA: Cah, CrC, Azt]
- **436.** *wakoL 'round(ed)': TO gakoDk 'curved'; ST gakoly 'go around'. The Num forms approximate *wikono: NP wikkono' o 'ring, circle'; Mn wigo' onogi 'crooked'; SP wikkonui' 'round, circular'. Add Tb(M) wiiginat ~ iwiigin 'stir, v' for SP and Tb had alveolars to raise preceding vowels. Does SP wikkwinta 'to wrap around, coil' belong? Or Kw woko 'big' (< 'round'?) as in Kw wokotinihi 'be round'? [NUA: Num, Tb; SUA: Tep]
- **437.** *nom / *noyom 'bend': BH.Cup *némi-? 'bend'; M67-36 *no 'bend'; M88-no1 'bend'; KH.NUA; KH/M06-no1: Cp ñími 'bend'; Cp nyíme 'bend, fold, vt'; Ca ními 'bend, vi'; Ls néma 'bend, string a bow, return, recur'; Sr nöö^rm'k 'bend, vi'; Sr nöö^rm'kin bend, repeat, v.t.; Ktn nomïk 'be folded'; Ktn nomk fold, vt'; Hp nömö 'folded, bent'; Hp nömö(k-) 'fold, vi'; Hp nöhi(k-) 'folded at joint' (Ken Hill astutely queries whether this is cognate); Tb noyoomiinat ~ 'onoyomiin 'bend'. Hill does a good job of sorting this set. Miller also lists again CN nekwiloaa 'to bow or bend' and Pl nekwilua 'lean to side, bend, curve' which better belong above. The first three segments of the Tak forms and the one Hp form match since *o > Hp/Sr ö, > Cp/Ca i. However, the y in both Tb and Cp are curiously consistent with one another. Cp does not seem to be a palatalization, since both ni... and nyi... forms exist in Cp; thus, s.th. near *nVyom must be considered possible as well.

 [NUA: Tak, Hp, Tb]
- 438. *(noC)-ko'mi 'bend': M88-no1 'bend'; KH/M06-ko14: Kw nokkomi 'to bend, be bent'; SP nokkommi / nokko'mi 'bend, vi, be bent'; CU komo'ni-ci 'bend, twist, curve, turn, n'. (SNum) Miller has these SNum forms combined with *koLi forms above, though they differ in the second consonant. Let's add WMU hiaqqwö'mi 'bend (in road), crook (in arm)'. The *komi forms of SNum may be an assimilation in a compound with another morpheme (*noC-ko'mi; see *ko'mi below) or they may be a different stem, although the semantic identity suggests we work with it yet. [NUA: SNum]
- **439.** *so'mi 'bend, be bent': M88-so3 'be bent'; KH/M06-so3: TO homi 'the inside of basketry coils'; Wr so'mí-'estar doblando'; Tr so'mí 'doblarse, flexionarse'. Miller also lists My súmma 'atar, amarrar'; however, it is at *suma 'tie'. [SUA: Tep, Trn]

- **440.** *to 'bend, fold': M67-37 * 'to bend'; M88-to10 'to bend'; KH/M06-to10: AYq totta 'fold, vt'; AYq totte 'be curving, winding, folded, vi'; AYq tottila 'folded, adj'; AYq tottotte 'be flexible, vi'; My tottia 'estar doblandolo'; Cr raatátuta 'lo dobla'; Wc tuná 'doblar'; Yq toté'e 'curve'. Could these tie to *tutu (< *tawiya) 'twirl, dance' at 'dance'? [CrC u < *0] [SUA: Cah, CrC]
- **441a.** *maLi 'twist': M88-ma33; KH/M06-ma33: Pl maliina 'twist, twist string'; CN tlamaliina 'roll thread on the thigh'; CN malakatl 'spindle, bobbin, spiral' (cognate? Hill queries; maybe, but see at awl. *maLi and *mïLï may be related by vowel assimilation/leveling; thus, I include them under the same number, but different letters. **441b.** *mïLï / *mïtï 'twist, v': M88-mï9 'twist'; BH.Cup *məri- 'twist'; KH/M06-mï9: Cp mélekwe 'twist'; Ca če-méli-n 'to twist'; Ls móra/i 'be rolled up, curled up'; Ls móora/i 'dance the tatahuilla, bore, drill fire'; Hp mïrï 'twisted'; Hp mïrïkna 'curl it, twist together'; Sr mïraqk 'be untied, loose'. As for *a vs. ï, the vowels may be explainable in that UA ï often serves as the UA schwa, the lax central vowel that most any vowel could gravitate towards, especially in unaccented syllables, like English ə: thus, *malaka > NUA *mïlï(k-). Also sharing the same consonants, but different vowels are the Tb and Num forms below: [liquids]
- **441c.** *muLu / *mutu / *muLu'uNkV 'round': Tb mulu'una 'become round'; Ch mun'unki 'round'; Ch(L) munuukwa 'round'; TSh -munuh/-monoh 'to turn around, turn over'; SP m'unuqqwi 'be round'; SP m'unuqqwa 'become round'; Kw mudu-ki 'to be spherical'; Kw mudu-'ni-dï 'round'; Tb and Ch appear to have extra morphemes that may point to a reconstruction of a compound. However, the liquid in Tb vs. nasals in Num is food for thought. [l/r: liquids in Tb, but n in Num] [NUA: Num, Hp, Tb, Tak; SUA: Azt]
- **442a.** *mina 'to turn': Mn minaa 'to turn, turn back, return, change direction'; NP -mina 'to turn' (suffix in compound verbs meaning to turn some thing or turn in some way'; NP mananui 'rolling'; Tb(V) mininii'at 'to roll'; Tb(V) minina 'it rolls'. Note the difference between Tb(V) mulu'una 'become round' and Tb(V) mininii'at 'to roll'. **442b.** *mintisa/i 'return, turn over/back': Ch minisi 'return, pl'; Kw minisi 'turn around'; Kw miisi 'return, pl'; SP min'išši" / minissi" 'turn over, several turn back, vi pl'; SP minissa 'turn over, vt'; SP mintisi 'turn over to a side'. For evidence of possible cluster reductions in different directions, note the two Kw forms and the two SP forms, found in the same language, no less: SP min'išši" and mintisi.
- **442c.** *man... 'turn, change': M88-ma39: KH.NUA; KH/M06-ma39: Ca méni 'to turn over/around/ into'; Cp méne 'dress up, change clothes'; Sr manom'(k) 'turn (on axis), turn over/around/into, change, change into'; Sr naminkin 'change'. Add Ktn manu'mk 'turn, turn s.th. wrong side out, vt' and Ktn manu'm-manu'm-k 'roll, vt'. **442d.** *mana 'return, turn back': Sr mana'(k) 'return, go or come home, vi'; Ktn mana'y 'roll over, vi'; Ls mayáqa 'return, turn back' may be related to Ktn and Sr mana'-, since *nuk 'cross cousin' also shows Ls *y* corresponding to Tak *n* of other Tak languages. [liquids; L/y/n] [NUA: Num, Tb, Tak]
- **443.** *mïyï 'twist, v': M88-mï11; KH/M06-mï11: Cp méye 'squirm, wriggle'; Ca méye 'turn, curve, get crooked, twist, vi'; Sr mïyïmïyï'n 'shimmering'; Sr mïyï'kin 'cause to shimmer'. What of Ls mayáqa 'return, turn back'—here or above? Considering *mïLï 'twist' above, do we have *L > y? Yet many Tak languages have forms in both places. [NUA: Tak]
- **444.** *ca'i / *cawa 'twist': CL.Azt157 *caawa 'to spin thread'; M88-ca1 'twist'; KH/M06-ca1: Wr ca'í 'atorado'; Tr ča'í 'atorarse'; CN caaw(a) 'spin (thread)'; CN caawal-li 'spider web'. Glottal stop does sometimes correspond to w. ['/w] [SUA: Trn, Azt]
- **445.** *ci(C)tuL 'be circular, rolled up': M88-ci3 'roll'; KH/M06-ci3: TO siđolim 'in a coil, adv'; Wr cihtú-la 'rollo'; Tr čitú 'be round, circular'; Tr čitúra 'rueda, disco'; pl Tr čirúra 'ruedas, discos'; CN čittoliwi 'torcerse, hacerse curvo, doblarse'; CN čittoloa 'hacer circulos'. A nice set, Wick; we can be fairly confident that the second vowel is *o, since *u should correspond to CN i; therefore, the high back vowel u in Tr and Wr was probably raised from *o, possibly due to the preceding high vowel i; in addition, alveolars tend to raise vowels in UA as well, and o/u is between two of the two t's—*cito-(ta). In addition, we should add ST šid^yol^y 'in a circle, rolled up'. Note also the intervocalic voicing in TO and ST: *t > d/V_V. [intervocalic voicing; liquids; V] [SUA: Tep, Trn, Azt]

- **446.** *cïnV / *cïLV 'roll': KH.NUA; M88-cï13 'to roll'; KH/M06-cï13: Cp čéne 'to roll'; Ca čénen 'to roll'; Ls čóra/i 'to roll'; Sr čïnïnk 'to roll'. Either a denasalization in Ls or nasalization in the other three. [Liquids: 1/n] [NUA: Tak]
- **447.** *suyuy 'whirl': KH.NUA: Ca súyuy 'spin, whirl (e.g., of water)'; Sr suyuuyu'n 'whirling (like boiling water), vi'. [NUA: Tak]
- **448.** *kwinu 'turn around': Stubbs1995-56; Stubbs2003-31: TSh kwinu 'go round in twisting motion'; TSh kwinnukwi 'go round and round'; Ch kwinú'unu 'spin, turn'; TO binašvua 'spin a top'. Add Cm kwinu'yarï 'spin around, turn around'; Ch kwiin'a 'to turn'; SP kwinu'nu 'revolve, turn around'; ST biññia 'turn around'. For SUA -ia vs. NUA -u'(y)a, cf. worm.

 [Tep b: Num kw; nasals: SUA n = NUA n] [NUA: Num; SUA: Tep]
- **449a.** *puni 'turn (around)': KH.NUA: Ca puni 'to whirl, spin'; Ls puna/i 'to be round, form a circle, watch over'; Ls puní-va 'to whirl'; Hp poni(k-) 'coil up, vi'; Hp ponìl-ti 'turn, vi'; Hp ponila 'turn, vt'; Hp poniw-ta 'have a bend, curve or turn (as a road)'. KH.NUA offers Sr poah-kin 'put in a circle, make a circle of as a possible cognate to the above. Add Ktn punink / punihnïk 'coil (as a rope), go around'.
- 449b. *puni 'turn, look, see': I.Num159 *puni/*puh- 'see'; M88-pu6 'see'; KH/M06-pu6: Mn puni/poni; NP puni; TSh puni" 'see, look at, study'; Sh puni"/pui" 'see'; Cm puni-ti; SP pinni 'see'; CU pini-kya 'see, vt'; CU pini-'ni 'look at'; Hp poniniyki 'start moving, wake up' (cognate? Miller queries); I say yes as 'turning' and 'seeing' are waking up. Note the segmental similarity of Ktn punink / punihnik 'coil (as a rope), go around' to the Hp term. Add Ch puunii 'see, look'. Ktn and Hp poni-ni-yki probably is cognate with Num *puni 'see/look' as would the more basic stem Hp poni- 'turn, bend' be also, as in Hp poni-l-a 'turn, make turn, steer' since 'he turned to look' and 'he turned' and 'he looked' can all apply to the same event/context. The Tak and Hp forms may suggest that *puni originally meant 'turn' or 'turn to look' in CU pini-kya 'see' containing the perfect morpheme and more literally meaning 'have looked'. Jane Hill (p.c.) raises a good question as to whether these Sh forms tie in: Sh puinu 'round, circular (spherical)'; Sh puinuinuih 'spin'; Sh(C) puinuah / puinui" / puinukka" 'turn, spin'. They are similar enough to the Hp and Ktn forms above (especially Sh(C) puinukka") to have potential, though some are likely compounds involving other morpheme(s). [*u > i in SP and CU, i.e., eastern SNum] [NUA: Num, Hp, Tak]
- **450.** *cokwiya 'head off': B.Tep200 *soobidai 'to head off'; M88-co18; KH/M06-co18: TO şoob|id 'stop, prevent obj from doing s.th., vt'; NT soobidyai 'head off, v'; NT soóbi 'he headed off'; ST soobidy 'head off'; ST soob 'he headed off'. [SUA: Tep]
- **451.** *(m)ahowi '(go) around': Mn ahowée / howée 'around, on the edge'; Cm mahoinitï 'go in circles, encircle'; SP oa- 'around'; SP oa- ġittuġwa '(circling) around'. [NUA: Num]
- 452. *kwVti'a > *kwita / *kwi'aC 'surround, fence': SP kwi'a-ppï 'fence'; CU kwi'áy 'surround as fence, fence, encircle, v'; CU kwi'a-pï 'fence'; WMU qwi'(y)é 'build fence'; WMU qwi'(y)á-qqa-ttü 'fence, n'; Sh kwïa-ppï / koa-ppï 'corral, fence, antelope surround'; Ch takwi-ntui 'encircle'; Mn kwitaa 'surround, go around, v' (this contrasts in final vowel length with Mn kwita 'defecate'); NP kwïdi'a 'fence corral' and NP *kwïti'a in NP bbuggu ggwïdia 'horse corral' (bbuggu 'horse') and NP na'unaggwai kwïdiadu 'enclose with fence'. Jane Hill (p.c.) adds Ktn kwitu'mïk 'turn, v'. The NP forms are noteworthy in that final *-ti'a > -tia when later in a phrase. Perhaps the glottal stop hopped forward (transposed) to create a cluster (> *kwi'ta), which then became variously *kwi'a and *kwita in other Num languages. [cluster *tt/'] [NUA: Num]
- 453. *mo'a 'put in' is moved to 1245 at 'In/enter'
- **454.** *LuLa(k) / *Luya(k) 'roll, turn, twist': My ro'akte 'to roll over'; AYq roakta 'roll up s.th., vt'; AYq roakte 'roll, vi'; and perhaps Hp róya(k-) 'to turn, twist'. It has a wrong vowel and other questions, but where does initial r come from in any UA language? Liquids sometimes go to -y- or glottal stop in UA, so an underlying liquid could feasibly be the 2nd C. [liguids; *u-a > o-a in Cah] [NUA: Hp; SUA: Cah]

455a. *ηοLa 'go/turn back': VVH152 *ηοla/*(ηο) ηοwa/i 'return, bend, coil'; BH.Cup *ηé 'go away'; B.Tep173 *noragi 'to go back' and *nora 'he went back'; Kaufman1981 *ηοyV; L.Son178 *nora, nor-i 'regresar'; M88-no2 'go back, return, bend'; KH.NUA; KH/M06-no2: Hp ηöla 'hoop, ring, wheel'; Hp ηölöla 'bend, crook, vt'; Hp nölö(kna) 'bend, make crooked'; Tb noo'ot~'oono' 'go/turn back'; TO noD 'turn, bend, return'; TO noD(agiđ) 'answer, return s.th., cause to turn'; LP norag 'return'; LP nonori 'zigzag'; PYp nor 'turn'; PYp norag 'return'; NT(B) nóra 'he went back'; NT(B) norági 'go back, vi'; NT nolííšai 'doblar, vt'; NT noolíñi 'torcido, curveado'; ST(B) nor 'he went back'; ST(B) norgi 'go back, vi'; ST(W) norgia' 'dar la vuelta, llegar y regresar'; Eu noró 'volverse'; My nótte 'vuelve, devolver'; Wr nori- 'dar vuelta'; Wr no'lá- 'ir y regresar'; Wr nori-ná 'to circle or walk around s.th.'; Tr nori 'vuelta'; Tr nori-ro-ma 'rodear, caminar en torno'; Tr noro-mea 'rodear, dar vueltas'; Tr norí-ro-ri 'giro, vuelta'; Tr no-rí-na 'regresar'. These may tie to Tak *ηVLVL 'circle around' below. Where does Sr ηöhääh(k) 'change direction, go around a bend' belong? having two h's instead of -L-? **455b.** *ηVLiL / *ηVLVL 'circle around, head off, catch up to': Ktn ηilil-k 'catch up with, overtake, vt'; Cp ηelele 'be surrounding, be all around'; Cp ηelele-ηiye 'go around visiting'; Ca -ηélel- 'go along the edge (of mountains, waters), vi'; Ls néli 'go along the side of a hill, vi'; Ls(E) néela/i 'be turned, curved, vi, go along the side of a curve, vt'; Ls(E) nelénli-š 'curvy, curve'; Ls(E) neléela/i 'be repeatedly curved, vi, repeatedly go along the curve of s.th., vt'. However, Sr ηϊrïr-q 'move, move over, vi' and Ktn ηϊrïhr-ϊk 'edge down over, vi' are at 'shake'. Ktn's two different forms suggest separate proto-stems, though dialect recycling is always possible. Borrowing may be involved for some forms, but besides *n-L-L in nearly all forms, semantically Ca and Ls are identical; Cp is nearly so in 'going around' approximating 'go along the edge' of a round lake or curving mtn; and one way to catch or 'catch up with' is to circle around a different route and head off s.th. or s.o. Thus, most seem more likely than not, though Ktn ηϊrïhïrïk 'edge down over' and Sr ηϊrïr-q 'move, move over, vi' are paired at 'shake'. The 2nd Ls form et all may suggest these tie to * η oLa 'return'. [initial h; SUA L and NUA L/'; *L > y in Cup; L > h in Sr] [NUA: Hp, Tb, Tak; SUA: Tep, Trn, Cah, Opn]

456. *ŋoya 'leave, go away, go home': VVH152 *ŋola/*(ŋo) ŋowa/i 'return, bend, coil'; BH.Cup *ŋé 'go away'; B.Tep173 *noragi 'to go back' and *nora 'he went back'; Kaufman1981 *ŋoyV; L.Son178 *nora, nor-i 'regresar'; M88-no2 'go back, return, bend'; KH.NUA; KH/M06-no2: Ls ŋée 'leave, go away, go home'; Ca ŋii/ŋiy 'go home, go away'; Cp ŋiye 'go away, leave'. As Ken Hill notes, Hp ŋöya 'surround, form a circle around' fits these phonologically perfectly. Most tie these with the *ŋoLa set above, but a case for separation from the above seems plausible in that (1) these show medial -y- vs. medial -L- of the above and (2) Hp and the Tak languages have separate forms, such as Ls ŋée 'leave, go away' vs. Ls(E) ŋéela/i 'be turned, curved, vi, go along the side of a curve, vt' and Ls(E) ŋeléŋli-š 'curvy, curve'. Now Ls(E) ŋéya/i 'meander, vi, make meander, vt' is more likely a variant or other dialect infusion also belonging to this set. [NUA: Tak, Hp]

457. *nawi 'coil': Cp náwe 'coil (as rope), vt'; Ls(E) náawi 'tangle, coil, vt'; Hp nawi-ta 'be making into strands, skeins, coiling'. [NUA: Tak, Hp]

NB, for *piyina/*pi'rina 'twist, spin thread, make rope' see at rope.

NB, for *wiya 'bend over/down', see at *wici 'fall'.

NB, for *yani 'enclosure' see wall.

NB, where have I seen cognates to Ca súvuvey 'to whirl around'?

NB, are there cognates for Tb šiiub 'back again'?

CLAW, NAIL; GARRA, GARFA, UÑA

Mn	caġwabo 'claw'; masído 'nail'	Hp	maqtö; soki;	Eu	sutút
NP	cidu; maccidu 'claw, nail'	_	malasoki 'fingernail'	Tbr	ala-pé-r
TSh	tasitun(cci)	Tb	šulun-t 'nail, hoof'	Yq	sútu
Sh	ma/ta-situn	Sr	mäčüč; waţ	AYq	sutumi
	'claws; finger/toe nails'	Ca	sálu-l; čúk; čúkla 'to claw'	My	sutu kócho'oria
Cm	tasiito; masiito	Ls	șulá-t	Wr	suhtú
Kw	ta-šito'o-bï	Cp	şul'a	Tr	sutú-ra
Ch	tasíco'o, masico'o	TO	huč	Cr	(sïté)kucape'e
SP	šïcu	Nv	'utu; PYp huhut	Wc	šïïté
CU	sïčuppï, wəkú-ci	NT	úútu	CN	iste-tl
		ST	huut		

458. *saCtuN > *siCtuN / *suCtuN 'claw, nail': Sapir; VVH26 *suutu/*siutu 'fingernail, claw'; B.Tep82 *huutu 'fingernail'; M67-298 *sut; I.Num193 *situN 'claw, nail'; L.Son265 *sutu 'uña'; CL.Azt59 *ïstə; M88-su1; Munro.Cup77 *şulá-t 'nail, hoof, claw'; KH/M06-su2 *sutïn (AMR): The Num medial -t- and -c- (vs. -r-) suggest a medial cluster *-Ct-, though Tb and Tak lost the evidence for a cluster (-t-), softening to -l- as do most intervocalic *-t-. I like Iannucci's, Ken Hill's, and Manaster Ramer's reconstruction with a final nasal, for Tb and CNum show it, Kw (-b) suggests it, and others of both SNum and Tak suggest a final -C of some kind. The vowelings of these forms divide themselves into SUA and Tb *sutu, Tak *suta, and Num *situ; and Ca sálu-l 'claw, nail'; Ca saluki 'scratch' suggest and original *saCtun:

458a. *siCtuN: Mn; NP; Sh; Kw; SP; CU sïcu-ppï 'fingernail'; Tb.

458b *suta: Cp; Ls; Ca sálu-l 'fingernail'; Gb čúr 'hoof, nail'.

458c. *sutu: TO; Wr; Tr; My; Wc šiïté; Cr šityé; CN. Ken and Jane Hill add Tbr sutu-r 'mano'—a huge oversight for the rest of us. Tbr often has *-t- > -r-/-l-, so it suggests a cluster as well. Miller also includes Hp soki 'fingernail, toenail, claw, talon', which may be possible if an additional morpheme caused apocopation of the last syllable. This etymon is represented in at least seven branches, perhaps all eight. [*t > c in SNum, *t > l in Tak, V > i/_t] [NUA: Num, Tb, Tak; SUA: Tep, Trn, Cah, Opn, CrC, Azt]

459. *wati 'claw, finger': M67-169; M88-wa13; KH.NUA; KH/M06-wa13: Sr waţ 'claw(s), fingernail(s), toenail(s)'; Hp malaci 'finger'; Sr waţu' 'claw, scratch, vt'. Let's add Ktn waci-č; and probably ST goota 'scratch with claw, vi'. Hp l < *w and Hp -c- must be from something like *-t- (-ti > -ci), so Hp -laci, Ktn waci, and Sr waţ are a good match. [Hp l < *w] [NUA: Hp, Tak; SUA: Tep]

Clay: see earth Clean: see wash

Cliff: see canyon and *papayu at 'knife'

CLIMB, ASCEND, GO UP, ARISE; SUBIR, ASCENDER; see also up, go

460. *hamu 'go up': L.Son52 *hamu 'subir'; M88-ha10; KH/M06-ha10: Eu hamú 'subir'; Eu hámudauh 'subida'; Yq há'amu 'subir'; My há'amu 'subir'; AYq ha'amu 'climb up'; Cr apú ha'uhmé 'sube (camino)'. [SUA: Cah, Opn, CrC]

461a. *tï'pu 'climb up': NP tïbbu'ya 'climb up'; Wr mo'tepú-na 'climb up s.th.'.

461b. *ciCpuhi 'climb': Mn cibuhi 'climb with arms and legs'; NP cibui 'climb up on s.th.'. With a vowel change, these are much like Kw čipii 'climb,v'; CU cipí 'mount, climb on, go on top of', except that SNum seems to show a final -N. Another example of reductions vs. preservation in WNum. SNum -p- instead of -v- suggests a cluster. These may also be a palatalization of the above *tï'pu > ciCpu. NP having a term in each may only mean previously active dialect chains/contact.

461c. *ciCpiN / *cippiN 'climb or come out or onto': Stubbs(2011) reconstructs PSNum *cippiN from: Kw čipii-'climb'; Ch cipí- 'come out'; SP cippiN 'come out, appear, ride'; WMU č*ih*ppí-y 'come out, bubble out (like a spring), climb into (car), onto (horse)'; CU čipí 'mount, climb on, get on top'. Perhaps also related are Ca čípi 'get covered (hole), vi' and Ca čípi-n 'cover, vt (causative)' which also show geminated *-pp-, and covering (a hole) is causing s.th. to get on top of, and a hole getting covered is as a spring bubbling out, its hole being covered by water'. [SNum -p- vs. -v-; redtn] [NUA: Num, Tak; SUA: Trn]

462. *cawa 'climb': Ca čáwa 'crawl, climb, ascend'; Cp čáwaye 'climb'. [NUA: Tak]

463. *tïcayi 'climb': TO češaj 'climb, ride, raise, elevate'; Nv tïsadï 'subir de lo bajo'; PYp tesedi 'climb, mount'; NT tïïsaidyi/tïsaadyidyi 'subir'; ST čïsdi' 'climb easily'; ST tïsdia' 'climb'. [SUA: Tep]

CLOSE, COVER, DOOR; CERRAR, TAPAR, CUBRIR, PUERTA

464. *timaC / *timam 'to close': Sapir; M67-90 *tem 'close'; KH.NUA; I.Num241 *tima/*tama 'close'; M88-ti38 'to close'; KH/M06-ti38: NP wi-tima 'lock up, tie shut'; NP ma-tima 'close (book)'; Cm timari 'fill, cover, put lid on'; TSh timah; Sh timah 'to close in , lock in'; Sh timih 'to close in , lock in pl. obj's'; SP tinwa 'to close'; CU tuwáy 'to close, lock, shut'; Cp téme 'to cover, close, enclose'; Ca témi 'to close, lock up'; Sr timk/timihk 'close, shut, vi'; Sr tim(ih)kin 'close, shut, vt'. Add Ktn timk 'shut, lock, plug up'; Ktn timki-t 'lid, door'; and WMU tuwámpü(ġ)a 'door (itself), of cubboard or whatever'; WMU yüüruwampü(ġ)a 'door or doorway (of house)'; Ch tiwá 'close, v'; Ch tiwá-pi 'door, closing'. Sapir ties the SP form with CN teema 'cause s.th. to fill up, pour into a container, vt'; CN teemi 'fill up, be full, vi'. Sapir's association seems reasonable in light of other forms like NP to/ci-timma 'plug a hole', where the notions of filling, plugging, and closing are closely associated. Iannucci's reconstruction (*tima) seems good, adding a final underlying -C, evident in Ch, CNum, and specifically a nasal in WMU. Other Num terms for 'door' could be added. [nasals] [NUA: Num, Tak; SUA: Azt]

465a. *yïCï / *yïkï / *yï'i 'close, v, door(way), n': M67-91a *ye 'close'; I.Num295 *yï 'doorway'; M88-yï6 'to close'; KH/M06- yï6 'to close': NP yïhï-ppï 'doorway'; SP yï(h)ï 'doorway'; yï(h)ï-pa 'at the doorway'; SP yïï 'door-way'; SP yügü-va 'at the doorway'; CU yüü- 'door'; CU yïï-ruwa-ppï 'door'; Hp yïïp 'way back in'; Hp yïimo 'way back in'; Tb(M) yi'pat~'iyi'pa 'to close'; Tb(V) yïhpa; Sr yïivanu' (ablative), yïi(v)ukya' (dat.) 'outside'; and perhaps Wr ye'epú 'abrir'; Wr ye'eté-/yeeté- 'cerrar'; Tr é/yé 'cerrar, cercar'; Tr yé-pu 'abrir'. Add WMU yüűruwampü(ġ)a 'door or doorway (of house)'; Ktn yïva-č 'door(way)'. Sapir ties SP yïï and Cr yei-ri, yi-ri 'es ist ein Zugang (entrance)'. Miller's includes Sh yïwi" 'enter' and Cm yïwi 'swallow s.th., go out of sight', but phonologically they look more like the SUA medial *-w- terms below, or semantically seem to resemble *yi'ki 'swallow, enter'. Moving from insecure speculations back to more concretely observable realities, SP medial -ġ- (< *-k-), appears on occasion, though usually softened to -h- or nothing in SP and the rest of SNum, as with *tikiya'deer'. However, Tb and Wr with medial -'- may suggest something else. [NUA: Num, Hp, Tb, Tak] 465b. *yawa / *yïwa 'door, hole, opening': Sapir; VVH108 *yïwa 'space, opening'; B.Tep29 *dïga 'hole', 30 *dïgava- 'make a hole'; M88-yï5; KH/M06- yï5: Tr yéwa-ri 'entrada, vano de un muro o roca, puerta'; Wr yawetá 'door to the house'; Tr ewa 'abertura, perforacion'; Wr yewá 'hole'; Wr yewá- 'have holes'; Wr iéwaci 'entrance, exit'; Tr ewá/hiwá 'agujerarse'; Eu déwa 'agujerar'; Eu hidéwa 'agujero'; PYp dega 'deep'; PYp degar 'hole'; PYp devger 'pierce, make a hole, vt'; LP(E&F) deeg 'agujero, agujerar'; TO jïg 'outside, a clearing, opening'; Nv dïga 'agujero'; Nv dïgara 'agujerar'; NT dïga 'hole'; ST dï'; CN kiyaawa-tl 'entrance, door'; CN kiyaawa-k 'outside'. Wr ié-/iéla 'door' may belong below. While Ktn yïva-č 'door(way)' is above, what of Ktn yawvïk / yawvu'k 'clear, bright, clean, light blue' as a hole/opening in clouds makes for a clear, light-blue sky? [NUA '/h and SUA w?] [SUA: Tep, Trn, CrC, Azt]

466. *ïta / *ïC-ta 'door, close, v': M67-91b *'eta 'close'; M88-ï8 'door'; KH/M06- ï8 'door': Hp ïïta (falling tone)/ ïhta 'close s.th'; Hp ï'cpi 'closure device, lid, door, cork'; Hp ïïci 'closed thing'; TO ïDpa 'door'; Wr ié 'door'; Wr iéla 'door'; Wr iéwaci 'entrance, exit'; Yq 'éta 'close'; Yq 'étapo 'open'; My étah-tia 'open'; My étapo(ri) 'open(ed)'; Wr ye'etáe-na 'be closed (door)'; Wr ye'eté 'to close'; Tr é-ra 'puerta (é- 'cerrar' + -ra 'instr', according to Brambila); Tr e-/ye- 'cerrar'; Cr te'itáhnasi 'lo cierra'; Cr te'itánami'i 'está cerrada'; Eu hécan 'tapar, cerrar'. Are ye- and te- prefixes to *-'ïta in SUA? Miller would probably reconstruct *ïta, yet TO D, Wr, and perhaps Ls héda/i 'open, v' may suggest a liquid in a cluster *ïLta/ïrCa, because intervocalic *-t-> -l- usually, not d. KH/M06-ï8 adds Wc itópari 'puerta, parte que se mueve'. [liquid, cluster] [NUA: Hp; SUA: Tep, Trn, Cah, Opn, CrC, Azt]

467. *ï-ka 'close': Tr é-ka 'cerrar' (gerund of é-ma 'cerrar'); Eu híka 'tapar, cerrar'. This could have a morpheme in common with *ïC-ta above, but such is hardly yet obvious. [SUA: Trn, Opn]

468. *pata 'cover, close': Nv 'iabata 'cubrir algo con tierra'; Nv i'abatki 'lo así cubierto'; Yq páta 'tapar'; AYq patta 'cover, barricade, vt'; AYq patti 'covered, closed'; My pattia 'close, vt'. [cluster; -a/-i = active, vt/stative, passive, vi] [SUA: Tep, Cah]

- 469. *ku'pa / *kuCpa 'close (eyes)': VVH153 *kuup(i) 'to close—especially in reference to eyes, and hence, sleep'; B.Tep128 kuupa 'to close'; BH.Cup *kup 'sleep'; M67-386 *ku/*kup 'sleep'; L.Son108 *kupu / *kup-í; M88-ku14 'sleep'; M88-ku15 'close the eyes'; M88-ku16; KH/M06-ku15 wisely combines M88-ku 14, 15, 16 into one—ku 15. The specific meaning 'close eyes' seems to have extended to 'close' generally in some languages and shifted to 'sleep' (with eyes closed) in other languages; nevertheless, let's divide them semantically as Miller did: 469a. M88-ku14 'sleep': Cp kúpə-; Ca -kúp-; Ls kúp-; Cr hi'ipe 'lie down to sleep' (? strange phonology); Miller and Hill include the possibilities of Sr kuuman 'sleep' and Ktn kum 'sleep' which I list separately at sleep. 469b. M88-ku15 'close the eyes': Eu kupú; Yq kúpe, kupek, kupikte; My kupíkte, imp: kupe'e; Tr kupi / kupu-; Wr kuhpi; Wr kuhpéca 'wink, blink the eyes'; Tr kupí- 'cerrar los ojos'; Tr kupi-ca- 'parpadear, cerrar y abrir los ojos'; Tr kupí 'tizón, palo quemado y humeante'; Wc kïpe; CN i'kopi 'to wink, blink, close eyes'. 469c. M88-ku16 'close': TO kuup 'close, lock, vt'; NT kuupa/i 'close'; ST kuupa 'close'; Nv kupu 'close, v'. Add PYp kuupa 'shut, cover'. The lack of fricatives for the medial bilabial may mean a medial C cluster. [C cluster] [NUA: Tak; SUA: Tep, Trn, CrC, Azt]
- 470a.*cu'ma/i /*cumma/i 'close eyes': M67-92 *cum; I.Num259 *cu(')(h)ma/*cu(')(h)mi; M88-cu5; KH/M06-cu5: Sh ïccïmih 'to close the eyes'; SP čum'maa/-čum'mi 'close one's eyes'; CU wəcu'mi 'close the eyes'; Ca ïhcuma/i 'to close the eyes (sg.)'; Ktn cu'mik 'close eyes, vi'; Ktn cu'mk 'close eyes, vt'. Add WMU hwiču'mi-kye / kuhču'mi-(kye) 'close the eyes'. Miller also includes the pair (Mn, NP) below. As such a metathesis is possible, but hardly certain, let's separate that pair by letter, at least. Might Kw cuma 'bury, cover up' and Ch(L) čum'makatī 'anything covered with earth' at 'bury' belong here? [NUA: Num, Tak]
 470b. *mucu(C)-ka 'close eyes': Mn mucuqqa-t 'have one's eyes closed'; NP mucoga 'close eyes'. [WNum]
- **471a**. *noma 'cover': Hp nööma 'wrap, cover up, vt'; Eu nóma 'tapar, cubrir'; Eu va-nóma 'inundar, vt' (watercover); Eu va-nóme 'inundarse, vi'. [Hp ö < *o] [NUA: Hp; SUA: Opn] **471b. *nama** 'cover': NP namabima 'cover'; NP namatïmpï 'cap, cork'; Wc náma 'cubrir, tapar; Wc náme cubierto, tapado'. [active, vt/stative, passive, vi -a/i] [NUA: Num; SUA: CrC]
- **472.** *koLom 'cover': Cm mana'koroomitï 'cover s.th. over, cover head (as with cloth)'; AYq lomti patti 'covered (with tarp or blanket)'; My lomti 'covered'. [liquid] [NUA: Num; SUA: Cah]
- **473.** *kina 'cover': Sh kinah 'cover, vt'; Cm nii/hih-kinari 'cover s.th. over with s.th.' We must consider a possible relationship to *kina 'cloud'. This may tie to *kanas 'cover' of *pit-kanas 'rear-cover, loincloth' at 'cloth(ing)'. [NUA: CNum]
- 474. *hin 'cover': Nv 'ina 'cover with cloth'; PYp iinia 'cover, vt'; Yq hínte 'taparse'. [SUA: Tep, Cah]
- **475.** *tupuka 'cover': Cp túvuke 'rub, cover, efface'; Ca vuk-čípi'n/vuk-'úmin 'cover up'; SP wittuvua 'cover (part of body)'. Note the alignment of Cp túvuke and SP -tuvua. [NUA: Tak, Num]
- **476.** *pu'u-(ki) 'door-(of)-house, hole': Ls púú'uk 'door'; Cp púki-ly 'door'; Hp poksö 'ventilating hole, window, smoke hole' (Hp o < *u); and probably the *puu portions of ST vuusan 'passage, way'; PYp vuupi 'hole'. [NUA: Tak, Hp; SUA: Tep]
- **477.** *wVkka'mi / *wV-kkaCmi 'cover, put blanket over, vt': SP wüqqam'mi 'put a cover over, cover, vt'; WMU ka'mi / qa'mi / ga'mwi / gam'mi / hwikka'mi 'cover, put blanket on, vt'; CU whka'mi 'cover, vt'. This could feasibly tie to *kamaL 'wrap, blanket' or to *koLom 'cover' above. [NUA: SNum]
- NB, for *cakwa 'grasp, close, ' see carry.
- NB, for *naka 'copulate, cover, close' see copulate.
- NB, for *cupa 'gather, close eyes', see gather.
- NB, what of Ca túlu 'close eyes' and Tbr telú- 'eye'?
- NB, *masa 'cover': Tb masat~'amas 'cover, vt'; PYp maskova 'cover, conceal, vt' is hindered by a c/s difference. What of Tb massat 'bag'?

CLOTH, CLOTHING, SHIRT, SKIRT, DRESS, LOINCLOTH (below), WEAR, PUT ON; TELA, TEJIDO, PAÑO, ROPA, CAMISA, VESTIDO, ENAGUAS, VESTIRSE, PONERSE

- **478a.*ikuci** (< *hikuti) 'cloth': B.Tep310 *'ikusi 'cloth'; M88-'i7; KH/M06-hi6: NT ikúši; TO ikusï; LP ikiš. Hill astutely combines i7 and hi6 (here, a and b). Miller includes Wc 'íšuu-ríkí 'tejido, tela', though beyond intial 'i, the next consonant and vowel are wrong. On the other hand, Cr kïstí 'está tejido, tranza' fits, since Cr ï < *u, and Cr ra/ru-kïsta 'weave it' is missing only initial i-. Let's add Nv ikusta 'tejer'. [CrC ï < *u; *-t->-c->-s- in Tep] **478b. *hikuta/i** 'weave, twine thread': L.Son56 *hiku 'hilar'; CL.Azt187 *ihkVti 'weave'; M88-hi6 'to thread/hilar'; KH/M06-hi6: Eu híkra 'hilar'; Wr ihkurí 'hilo'; Wr ihkuná/-má 'remendar'; My híkua 'hilar, tejer'; CN (i)'kiti 'weave cloth'; Pl ihkiti 'weave, v'; Pl ikpa-t 'thread'. [SUA: Tep, Trn, Cah, Opn, CrC, Azt]
- **479.** *cini 'cotton, cloth/clothing made of cotton': L.Son32 *cini 'cotton'; M88-ci2 'cloth'; KH/M06-ci2: Eu čin 'algodon'; Wr ciní 'tela'; Tr činí 'manta, tela blanca de algodón'; My cííni-m 'algodon'; Yq čiinim. [SUA: Trn, Opn, Cah]
- **480.** *ipuLa 'skirt': B.Tep312 *'ipurai 'skirt'; M88-'i9 'skirt'; KH/M06-'i9: {NT ipúrai; ST 'ipuur; TO 'ipuDī; LP 'ipar}; Wc 'íví/iwi 'skirt'. To Miller's list of the preceding, let's add NT ipúúrui 'vestido'. Note PYp ga'ipur 'a dress, n' and Tr wa'pora 'cloth head-cover'; thus, Tr wa/ma/na-'pora 'cloth head-cover' and Tr na'pora 'be covered' share *-'(V)pur with the Tep forms. Cf. *wipuLa 'belt' at belt. [liquids, wa- prefix] [SUA: Tep, Trn, CrC]
- **481.** *ko'aLi 'skirt, enaguas, probably originally a general undergarment': CL.Azt150 *kweey 'skirt'; M88-kwï6 'skirt'; KH/M06-kwï6: CN kweei-tl 'skirt, pettycoat'; Pl kweeyi-t 'skirt, native skirt'; My koá'arim 'enaguas'. To the My and Azt forms in M88-kwï6, we can add Yq kó'arim 'enaguas'; AYq koarim 'skirt'; AYq ko'arek 'wear skirt'; Eu kóa 'falda'; and Tbr koayí-t 'enaguas'; all of which suggest *k, not *kw, and *a instead of *ï. But note Tbr as a bridge from TrC to Azt. [SUA: Azt, Cah]
- **482.** *wakaLa 'clothing': Wr wa'kilá 'shirt, clothes' and Hp -wqay- in Hp 'ati-wqay-napna 'underclothes' ('ati 'under' and napna 'shirt' leaves -wqay-) are related to each other, at least, if not to the *ko'ali forms above, i.e., if a truncated initial syllable reduced to rounding, like Hp -wqay-, and then carried that rounding into the next syllable—*wakala > *wkal > *kwal/*kway (Azt nearly). The i in Wr is due to the raising and fronting effect of the following alveolar. Consider also Ca xél^ya 'wear' with loss of initial syllable. [liquids: l/r > y; reduction] [NUA: Hp, Tak; SUA: Trn]
- **483.** *atisa 'clothes': Tb(V) 'ïtiša-l 'clothes'; Tb(M) tïsa-l 'clothes'; Yq 'áttea 'ropa'. [*s > ø Yq] [NUA: Tb; SUA: Cah]
- **484.** *kwasu 'dress, shirt': M88-kwa12 'dress, shirt': I.Num79 *kwasu/*kwasï 'dress, shirt'; KH/M06-kwa12: NP kwasï 'clothing, shirt'; TSh kwasu 'dress'; Sh kwasun 'dress'; Cm kwasu'u 'dress, coat, shirt'; Kw kwasu-pïci 'dress, skirt'; Hp kwasa 'dress'; My bwáhhi 'sapeta'. Ken Hill adds Ch kwasu 'woman's dress'; Ch kwasú-ntu 'dress, put on dress, v'; TSh kwasu'un 'dress, n'. Let's also add Yq bwahim 'calzones'; AYq bwahim 'diaper, loincloth, breechclout'; and NP kwasïiya 'put on clothes, v'. Note Cah (Yq, AYq) loses -s- both here and above in *(a)tïsa. [Num ï < *u] [NUA: Num, Hp; SUA: Cah]
- **485.** *nawi 'apron, skirt': Tb nawii-1 'woman's apron'; Tb(H) nawwii-1 'woman's apron, double-apron skirt'; Ch(L) nawi 'apron'; Cp -nawilyqam'a 'front apron made of string' (poss'd, rare absolutive in -l); Ls náwxami-š 'gift, feather skirt, glass beads'; TO iinagi/naagi 'skirt of ancient style'; Sr naawt 'dress, n'; SP naŋwi 'apron'. In light of *nawi 'hang down', might that tie to this *nawi 'skirt, apron' as s.th. that hangs down? [NUA: Tb, Tak, Num; SUA: Tep]
- **486.** *yuLa 'put on': BH.Cup *yú(l) 'put on'; M88-yu14; KH/M06-yu14: Cp yúle 'put on stockings, gather on a stick, v'; Ls yúla/i 'wear, put on clothes, pen up, imprison, lasso, v'; Ls yúúla-pi-š 'rabbit net'; Ls yúli-š 'prisoner'. Enclose, wrap, and wear are semantically associated elsewhere in UA. [NUA: Tak]

- **487.** *napa(N) 'shirt'; *napan-ta 'put on shirt': M67-370 *nap 'shirt'; M88-na17; KH/M06-na17: Hp napna; Hp naavan-ta 'wear a shirt'; Tr napaca 'shirt'. Tr na-pata (ma-/na-/o-pata-ma) 'put on a shirt' and the Hp terms point to something like *na-pa(n)-ta as a verb form, SUA doing its frequent loss of nasals that are still apparent in NUA. [NUA: Hp; SUA: Trn]
- **488.** *kutun 'shirt': ST kutun 'traditional tunic'; TO kotoni 'shirt'; NP pina-kkïtï 'shirttail' < (back-shirt; ï < *u). Saxton suggests that TO kotoni 'shirt' is from Span cotorina 'jacket'; however, unless they were all borrowed from Spanish and all left out the -ri- syllable, similar terms in NP and ST suggest a PUA term. [SUA: Tep; NUA: Num]
- **489.** *nato'on 'shirt, clothing': Mn nató' 'shirt'; TSh nato'on / noto'on 'shirt'; Sh(C) natoon 'shirt'; Kw naro'o 'shirt' (to'o 'hole'); Ch naro'o 'shirt'; SP naro'o-N 'clothes'; SP naroo'a 'to have on'; SP kwiinnoro'-N 'blanket'. This etymon appears in all three branches of Numic. Hp atö'ö 'traditional cape, used by women in rituals' lacks only initial n from being quite identical to the Num forms. Sapir ties the three SP forms together. [initial *n > \emptyset in Hp; *-t-> r; Hp t and SNum r; liquid] [NUA: Hp, Num]
- **490.** *paki < *pakati 'shirt': M67-371 *pak 'shirt'; M88-pa33; KH/M06-pa33: Sr pakiït 'shirt'; TO váaki 'put on a shirt'. To these, we must add Eu vakaci 'clothing'; Eu vakace 'get dressed, vi'. This may relate to *paki 'enter' since entering a piece of clothing equates to putting it on to wear, as Hp paki 'enter' and Hp aŋ paki 'put article of clothing on' show. [NUA: Tak; SUA: Tep, Opn]
- **491a.** *sipu' > *si'pu / *sikpu 'shirt, clothing': Wr si'picá 'skirt'; Tr sipuca 'skirt, enaguas, gown'; Tr siputa-ma 'put on skirt, enaguas, gown'; Cp hísexve-l 'clothing, goods'; vowel leveling could explain Cp, since ï is between i and u: *si'pu- > *sïkpï. The fact that Tr shows t rather than r, the usual for intervocalic -t-, suggests the glottal stop may have been at the end but jumped to before p in Wr and Cp. Cp -x- aligns with glottal stop of Wr. **491b.** *supï 'shirt, clothing': Yq súpe/súupe 'camisa'; Yq supe-téne; AYq supem 'shirt, blouse'; AYq supete 'put on shirt or dress, v'; My súpe-te 'está vestiendose, v'; My súppem 'vestido, camisola, camisa, n'. This Cah etymon is likely a vocalic metathesis of the above. [V metathesis] [NUA: Tak; SUA: Trn, Cah]
- 492. *iLaC / *ita'a 'dress, wear, v': Munro.Cup119 *'əəla-t 'skirt'; KH/M06-ï21: Ca 'éla-t 'dress, n'; Cp éla'a 'put on skirt'; Cp éla-t / éla'a-t 'skirt or eagle feather-dance skirt'; Ls 'ólva-t / 'ólva-l 'capelike garment, skirt'. Ls likely has another suffix. [liquids] [NUA: Tak]
- **493.** *aya 'put (clothes) on': PYp aade 'put on clothing, dress s.o., vt'; NT áadai/áádyidyi 'poner ropa'; ST aada 'dress oneself, vr'. Perhaps NP -iya in NP kwasï-iya 'put on clothing' vs. NP kwasï 'clothing' if the first V assimilated to the palato-alveolar C: *aya > iya. [SUA: Tep; NUA: Num]
- **494.** *kïc-kïmi 'indigenous Mesoamerican garment with hole for neck, shawl, quechquemitl': CL.Azt88 *kəčkeemV-; M88-kï12; KH/M06- kï12: Po keškemit; CN kečkeemi-tl; T kečkiemI-tl 'shawl'; Z kečkeemi-t. [SUA: Azt]
- **495.** *ta'V 'shirt, clothing': SP taa'ï 'shirt'; WMU taá' 'clothes, shirt'; CU táa' 'shirt, clothes'; perhaps Ktn tavï-č 'taavï-č 'buckskin' (Ktn tavï 'refers to clothes'). Jane Hill notes these may tie to 256 *tawayi. [NUA: SNum, Tak]

LOINCLOTH, BREECHCLOUT; TAPARRABO, PAMPANILLA, CULERO

- **496.** *caL 'loincloth': PYp sal- ''crotch covering'; PYp sal-vena 'breechclout'; PYp sal-vira 'pants'; Tbr komo-calí-t 'calzones' (Lionnet hyper-divides it komo-ca-lí-t); Cm ca'nika' / ca'anika' 'loincloth, underwear, G-string' with NUA n corresponding to SUA L. [SUA: Tep, Tbr; NUA: Num]
- **497.** *kwasi-kwuLa/i 'loincloth' (< *kwasi 'tail, penis'): Tr basi-bura, wasi-bura 'loincloth'; NT bakúúli 'pantalón'; *kwasi-kwulV > bahi-kulV (Tep) > ba(h)kúúli (NT). [*kwu] [SUA: Tep, Trn]
- **498.** *pit-kanas 'loincloth, rear-cover': Hp pitkïna 'kilt, breechclout' and Tb pigiiniš-t 'shirt'; the latter portion of these may possibly be related to *kïna 'cover' above, and the *kanas of Cr ra'ankanasiin 'lo cierra (en un bote), lo tapa'; Cr te'itáhnasi 'lo cierra'; Cr ra'abá'anasiin 'lo cubre, lo entierra, lo sepulta'. Cr appears to match the three consonants of Tb. [NUA: Hp, Tb; SUA: CrC]

499. *tapaca '(put on) loincloth': Tr tabáca 'put on loincloth, v.refl'; TO atoša 'loincloth, diaper'. In TO, *p > w and *c > s; then TO w causing rounding of adjacent vowels leaves only TO initial *a* to be explained: *(a)tapaca > (a)tawasa/atawsa (Tep) > atosa (TO). Then again, Ktn tavï-č 'buckskin' and Ktn tavï / a-tavï (referring to clothes) 'back apron or flap, also modern dress, clothes' may help explain the lot of them. [SUA: Trn, Tep; NUA: Tak]

NB, for *nawi 'apron, skirt' see above under cloth(ing).
NB, have I seen cognates for Ktn kaha'c 'front flap or apron, front of buckskin dress'?

CLOUD, FOG, STEAM; NUBE, NEBLINA, VAPOR

500a. *(pa)-kïnaC 'cloud, fog (perhaps literally 'vapor-cover'): M67-186 *pa-ki 'fog'; I.Num137 *pakïnah 'fog, cloud'; M88-pa13 'fog'; KH/M06-pa13: Mn pagïnápe (< *pa-kïna") 'fog'; NP pagïnaba 'fog'; TSh pakïinappï; Sh pa-kïna-ppï 'thundercloud'; Kw kïna-vi; Ch pagïnavi; SP paġinna 'cloud, fog'.

500b. *paki / *paki 'fog(gy)': Sapir; M88-pa13: Ca páxi-š / páyi-š 'fog'; Ca páye 'be foggy'; Sr pakiit 'fog'; Sr pakiitu' 'be foggy'; Ktn pakit 'fog'; Cp páxeye-t 'foam'. The two (a & b) may be related, as Miller's union of both under M88-pa13 suggests, though the Tak forms lack the third syllable of *pa-kina; thus, a separate letter, but under the same number. [NUA: Num, Tak]

- **501.** *(si)kuma 'cloud(y)': B.Tep65 *hikomagi 'cloudy'; M88-si17; KH/M06-si17: NT ikómaga; ST hikma'; ST hikoom/hikma 'cloud, fog'. Note also NP kummi-bï 'cloud' and TO koomhai 'mist, fog' and Tepiman *koomagi 'gray' at 'gray'; therefore, these may relate to *kuma 'gray, dark color' with a prefixed element; see at 'gray'. [NUA: Tep]
- **502.** *mosi 'cloud': L.Son150 *mosi 'nube'; M88-mo7 'cloud'; KH/M06-mo7: Ls més-ma-l 'fog, mist'; Hp pamösi 'fog, mist'; Eu mosí-t; Tbr mosí-t; CN miš-tli. A nice and rare set; cognates match through four segments (except usually CN i < *u, not *o > i), and six branches are represented, from both NUA and SUA. Is Cp mesmel 'fog' a loan from Ls? The *-misi- part of Tb paašuumiši-t 'fog' and Tb paašuumišiigim ~ 'aabaašuumiš 'get cloudy' probably belong with a vowel assimilation (mosi > misi), which could possibly explain the CN vowel as well? [NUA: Hp, Tak, Tb; SUA: Tbr, Opn, Azt]
- **503.** *tommo 'cloud, rain': M67-93 *to/*top/*tom 'cloud'; Num215 *to(o)(h) cloud; M88-to13 'cloud'; KH/M06-to13: Mn too" 'cloud'; NP tommo'a 'storm'; Sh too-ppih 'thundercloud'; Cm tomoa 'to cloud up'; Wr tomóari 'cloud'; Wr tomóa-ni/ma 'be cloudy'; Wr tomó 'winter'; Tr tomóa 'be cloudy'; Tr fomo-wá- 'llover [rain]'; Tr fomo-sá- 'lloviznar [drizzle]'; PYp toom 'sprinkle'; NP tommo'a 'storm'. Do these tie to *tommo 'winter'? [SUA: Trn, Tep; NUA: Num]
- **504.** *(pa)-hawa 'fog, steam': Stubbs2003-20: Yq báhe(wa) 'fog'; AYq haawa 'vapor, steam, n'; AYq vahewa 'mist, fog'; AYq vaiweče 'fog, mist'; My baihwo 'neblina, brisa'; My háawa 'vapor'; Eu baúua (baúwa) 'rocío, neblina'; Eu bei(g)wat 'neblina'; Ca háway 'be foggy, vi'; Ca háway-š 'mist, fog'. The diachronic fragility of h results in a dipthong and the loss or near loss of the middle syllable after the prefix *pa-. Also of interest is the fact that all forms without the prefix *pa- show *hawa (Ca, My, and one AYq form) because the first syllable was likely stressed, while all forms with the prefix show a higher vowel—(h)ïwa/(h)iwa—and/or 2nd syllable reductions because pa- was stressed and thus not the first syllable of *hawa. Those high vowels are the UA schwas, and, like the English schwa, sometimes result from lack of stress in unaccented syllables, not from PUA *ï or *i. Add Wr(MM) ba'awí 'neblina [fog]'. [V change in unaccented syllables; reduction] [NUA: Tak; SUA: Cah, Opn, Trn]
- **505.** *kosowaC 'steam': TSh kosoowa 'steam, vi'; TSh kosoowappï 'steam, n'; Kw kosowaagi 'steam, v'; Kw kosowaagi-dï 'steam, n'; Ch(L) kosowagah 'steaming'; Ch(L) kosowavi 'steam, vapor'; the *-kosa of CU paġósa 'sulfur, sulfur-spring water, original Ute name for Pagosa Springs [area of hot springs]'. [NUA: Num]

NB, for *uma 'be cloudy' (Hp oomaw 'cloud'; Tr na'oma 'become cloudy, erased'; Tbr homé-k 'be cloudy') and for Sr and Ktn *woŋ 'rain, cloud, cloud up', see at *(w)umaC 'rain'.
NB, for *tïpawi (Tep *tïvagi) 'sky, cloud' see sky.

COCOON; CAPULLO

506. *kwoci / *koci 'cocoon': TO koswul 'cocoon'; Tr o*čé 'capullo que algunas mariposas ponen en los árboles, y los indios recogen para cascabelería de las piernas en sus danzas'; Wc kusí/kuusí 'capullo de mariposa'.

[Wc u < *o; *kwo/*ko, labials] [SUA: Tep, Trn, CrC]

507. *ca'ïku / *caCCïku 'cocoon attached to plant': Wr ca'égori 'rattles of cocoon'; Tr čayéguri 'cocoon attached to tree'. Tr and Wr do not often have a correspondence of ':y, which may suggest a consonant cluster. [SUA: Trn]

COLD, FREEZE, ICE; FRIO, HELAR(SE), CONGELAR(SE), HIELO; see also snow, numb, winter

Uto-Aztecanists have long massed together UA terms for 'cold' that begin with *sï, cï, or *ïcï. Regarding
the distinction of *ïcï from others, many languages, e.g. Gb očó' and Gb sovó' (Gb o < *ï), distinguish these as
separate stems. Forms that begin with a sibilant (*sï, or sometimes cï) seem to align with *sïpï or *sïppï or *sïkwï.
Following sï we find a variety of medial consonants, perhaps due to a medial consonant cluster or other
morphemes. Many are likely reductions from something longer than *sï (*sïk 'snow'-plus-else is a favorite, started
by Sapir). A typical and considerable range appears in Ktn šïvït 'cold'; Ktn šipïk / šikwa' 'get cold, vi'; Ktn šip-k
'chill, vt'; Ktn šivïk 'blow (wind)'; and Ktn šivivi 'cool, fresh'. Many terms double as 'windy' throughout UA.
The facts that many branches (Tep, Tak, TrC) show both geminated (*-pp- > -p-) and non-geminated (*-p- > -v-)
forms may suggest an intensification, a sort of reduplication, rather than a cluster *-kp- as many theorize. But until
new data directs differently, let's divide them thus:

508a. *sïCpï > *sï'pï / *sïppï 'cold': Sapir; B.Tep90 *hiïpida-i 'it is cold'; M67-94a *se/*sep 'cold', 94b *si/*sip, 94c *sap, 94d *ce/*cep; M88-sï7: KH.NUA; KH/M06-sï7 *sïp 'cold/frio': SP šï"- 'cold'; SP šï-ppa 'cold feeling, suffering from cold'; SP šï-ppi 'cold (of objects)'; CU sïpïr-'ay 'be cold (things, persons, or weather)'; CU sïpï-vï 'cold, low temperature, n'; Tb sï'bït~'ïsïp 'be cold'; Cp sevél 'wind'; Ls şuvóo-ŋa 'in winter'; Ls şuvóo-wu-t 'winter'; Ls şuvó-lku 'to shiver with cold'; Gb sovó' 'cold'; Sr şïvït 'wind'; TO heepi; LP s'hïpi; PYp heepi 'cold'; PYp heve 'cool'; NT ïïpíd^yi; Yq sé(e)be; AYq seve; sevele 'feel cold'; My sébbe 'hace frio'; My sébele / sébere 'siente frio'; Tbr sevé/sewé 'frio, hacer frio'; Tr sipi-mea 'freeze, vi'; Tr sepe-ca-ma 'freeze, vt'; Wc šeere 'enfriar'; Wc kaa.šíivari 'stormwind'; Cr wá-see 'be cold outside'; Cr seeri 'ice, snow, frozen'. Add Add Ch(L) sïpaŋuci 'cooled off' and WMU s(i)ppūra-y / sūppūra-y / spūra-y 'be cold (weather or object)'. Ch(L), CU and SP also show underlying *-pp-.

508b. *sïpïL / *sïppï 'cold, windy': B.Tep89 *hïvïri 'wind': in contrast to *-pp- in TO heepi 'cold', are TO hewel 'air, wind'; TO hew-kk 'to become chilled (person)'; TO hew-kon 'to blow on, vt'; TO heweD 'to blow (wind)'; TO hewajiđ 'vt, cool, chill, relieve (pain)'; TO hewastk 'be able to endure wind and cold'; LP s'hïpi 'cold'; LP ïbïri 'wind'; PYp heepi 'cold' vs. PYp heve 'cool'; PYp hevel 'wind'; PYp heve-lim 'to blow'; NT ïïpíd^yi 'adj, cold'; NT ïïpíar^yi 'vi, be cold' vs. NT ïvïli/ïvïîli 'wind'; ST hïïpidy 'cold' vs. ST ïváámuku 'tener frio'; ST hïvïīly 'wind'; ST hvr 'windy'.

508c. *sappa / *sïppa 'freeze, ice': M67-94c: Ls şáápa/i 'freeze'; Eu sebát/ sebáwa 'ice'; Yq sápa 'ice'; My sáppam 'snow, ice'; Tb šip-t 'ice'; CN sepayawi-tl 'snow'. These 'ice' terms may tie to *sïpï 'cold', though the languages listed here have other forms matching *sïpï 'cold'; on the other hand, the Eu terms suggest a tie: Eu sebá 'helar'; Eu sebé 'helarse'; Eu sebí 'helado'; Eu sepá 'enfriar'; Eu sepé 'enfriarse'; Eu sepíce 'estar fresco'. Notice that all terms whose first V is *a* also stress that vowel; thus, that is likely the original vowel, and the other schwa-like variants e/ï/i are the unstressed variations. Note also -p- (vs. v/b) in Ls, Ch(L), and some Eu suggest *-pp-. **508d.** *sïpï 'rain': Hp sïvïyoyaŋwï 'long and steady drizzle'; Tr sepewá 'lloviznar'; Eu sipupé 'lloviznar'. These 'drizzle' terms belong too. [NUA: Tak, Tb, Num; SUA: Tep, Trn, Tbr, Cah, Opn, CrC, Azt]

509. *sï(N)kopa (>*sï(N)kwV?) 'cold': some of these are noted in the sources above (*sVpV 'cold'), but show a different medial *-C(C)- or other morphemes: NP pasïkoa 'icy'; NP pacïgoba 'ice'; NP pasïgobi 'icicles'; Sh sï"- 'by means of cold'; Cm siïkoitï 'freeze'; Ca síi 'feel chilled'; Hp sïŋwa 'cold'; Hp sïmi 'frozen ground'; Wr sehko 'freeze (of plants)'; Tbr se-kwé 'tiene frio, v' (vs. Tbr sevé/sewé 'frio, hacer frio'); CN sekwi/seuk/sek 'to be cold, have chills, tener frio'; CN se-tl 'ice'; CN sek-tli 'snow'; CN seewa 'be cold (weather), hacer frio'; CN seewi 'calm down, take a rest, cool off; CN se'selia 'cool off, vrefl, vt'; Pl sesek 'cold'; Pl seseya 'cool off, get cold'. Note the similarity between Tbr and CN again. The NP and Cm forms could suggest loss of intervocalic p that leaves a kwV appearance (*sïkopa > *sïkoa >*sïkwV); they and CN sekwi and Ktn šikwa' 'be cold' and Ktn šikwato' 'freeze, vi' could feasibly suggest *sikwV. [*-CC-] [NUA: Hp, Num, Tak; SUA: Azt]

- **510.** *ïti'ï 'cold': M88-cï3 and M88-ï18: M67-94d *ce/ *cep; I.Num262 *-cï/ *sï; KH.NUA; KH/M06- ï18: Mn ïzi'ï; NP ïcïti; NP ïcïti; TSh ïicï'in; Sh ïicïi; Tb 'ïdzïi'it~ïdzï' 'be cold; Sr ïčï 'cold'; Sr ïčïi'n 'be cold (of person)', Sr ïčïivk 'become cold (of weather)'; Gb očó. All five languages agree in having the vowel ï before cï, thus *ïcï'i. Ken Hill adds WSh ïïcï'in 'be cold' and Wc etïríya 'be in the shade', both of which fit well. Wc's t is likely original since most NUA –c- < *-t-. Hill correctly disbands M88-cï3, redistributing that collection elsewhere. To these we can add Cm ïcï'itï 'cold, adj, n', totaling ten languages with reflexes resembling *ïcï'i, four of which show a glottal stop as 2nd consonant, beginning a 3rd syllable. [*-t- > -c-/_high vowel] [NUA: Num, Tb, Tak]
- **511a.** *sittu'i or *siC-tu'i 'cold': SNum *situ'i: Kw šittu'i 'be cold'; Ch sitú'i; SP štu'i 'cold (weather)' (< *si"-tu'i, Sapir 1930, 136; 1931, 658); CU stí'i 'be cold weather'. Miller has these forms dispersed among other sets, perhaps considering only first syllable *si"; however, in light of a different second syllable, this Num set merits independent consideration, even if as a compound with that syllable, which it may or may not be. [NUA: SNum] **511b.** *sitta'i 'freeze': Mn sita'i; NP sida'i 'freeze to death'. The fact that these WNum terms (*sita'i 'freeze') are identical to the SNum terms (*situ'i 'cold') in five of six segments would recommend a relationship, though exactly why such a difference as *u* vs. *a* in the second vowel is not immediately clear. Of interest may be Eu sutéwa 'nevar'; Eu sutéhri 'nieve' (gen: sutéwate, acc: sutéwata); Eu sutéi 'blanco'. [NUA: WNum]
- **512a.** *tu'La 'be cold, freeze': Wr tu'la-ní/-má 'freeze, be frozen, vi'; Wr tulá-wa/-ni, tuláre-ma 'be cold (of things, liquid, weather)'; Tr ŕurá- 'cold'. [liquid]
- **512b.** *tuy 'freeze': Cp túyuye 'freeze, vi; Cp túyuyi-š 'cold, freezing, adj'; Ls tóóyi 'freeze, vi'; Ls tóóyi-t 'frost, ice'; Eu tuvé 'cuajarse (to curd, curdle, coagulate)'. The forms in a and b have much in common with the 2^{nd} and 3^{rd} syllables of *sïttu'i, and we do see loss of first syllable (si-) in Tak elsewhere. Miller and Hill have the Ls forms listed at tïl *tïha 'hail' which fits the first V, but the medial consonant better fits here, though they could be right, so I list it in both places until the matter becomes clear. [liq; L > y] [NUA: Tak; SUA: Trn, Opn]
- **513.** *tihtu 'ice': Eu sutéuhri 'hielo'; Wr tehtúri 'ice'; Tr ŕitú 'hielo'. Could this result from *tï-tu 'rock-become'? Besides the foregoing, could the initial *tï- in some of the other nearby forms derive from 'rock' as well? [SUA: Trn, Opn]
- **514a.** *ta'asïC 'freeze': Mn tï'asï 'be frozen'; NP tïasï 'icy, slippery'; NP ggïggï tïasïggï 'freeze feet, v'; NP tïazïpï 'frozen'; TSh tïasï 'freeze, tingle (of body part when asleep)'; TSh tïasïppïh 'frozen, pp'; Sh(M) tïasï" 'be frozen'; Sh(C) tïasï' 'be frozen'; Cm tï'asïitï 'freeze (liquid), v'; Kw ta'asi 'freeze, v'; Ch tï'ásï 'freeze, v'; CU tï'ási 'freeze, vi'.
- **514b.** *pa-ta'asïC 'ice, water-freeze': TSh paa tïasïppï 'the water is/has frozen'; TSh patïasï(tai)ppïh 'ice'; Kw pa-ra'asï-pï; Ch pa-rïasï-pï; Ch(L) pa- rï'asï-pï 'frozen water, ice'; CU pará'si-pï 'ice'; perhaps Tbr tusa-ne-y 'se congela'; Tbr ba-tá tusa-ne-y 'ice'. [unaccented V] [NUA: Num; SUA: Tbr]
- **515.** *hïCta'wï: Mn hïca'wï 'be cool'; NP hïcawipïnni 'cool outside'. [NUA: WNum]
- **516.** *icu 'cold, freeze': AMR 1992; KH/M06-'i12: Hp iyo-ho'o (rdpl: i-'yoho'o) 'cold, adj, n'. Hill correctly moves the Hp form from M88-ï18 where it was with the Tak forms (Sr 'ïčï; Gb 'ocó') and follows Manaster-Ramer's law: *-c-> -y-" (1992) which ties it to CN iic-tik 'something cold' and CN iic-tiya 'be cold', which works correspondences-wise. What of Tr koro-čé 'cuajarse, congelarse el agua'. Cocopa qyaw 'be cool, vi' and Tewa ooyii 'freeze, v, ice, n'? Could the latter be a vowel metathesis of Hp iyo? [NUA: Hp; SUA: Azt]

NB, for *kïpa 'ice, snow', see snow.

Cold, n; have a cold, vi: see mucus, cough, and sick

COLOR; see also draw, dye, and the specific colors

517. *ma'ai / *mayï 'color, be the color of, paint': NP namayïadï 'mixed colors' (perhaps contains the na- prefix); Ch ma'á 'to paint, mark'; Wc kapé-maïye 'coffee-color'; Wc kwíe-máïye 'earth-colored' (kwie 'earth'); Eu vámei/bamai 'oscuro'; Eu bamei 'medio verde, pardo' (probably 'water-colored'; otherwise, what else could be both green and brown?); Eu mái/ma'ai 'pardo, color'. ['/y] [NUA: Num; SUA: Opn, CrC]

COMB; PEINARSE

518a. *ciyuk 'comb': CU ciyú'wa-y 'comb, vt'; WMU čiy<u>u'w</u>a-y / č<u>ii'w</u>a-y 'comb (hair), vt/vrefl'; Tb(V) 'iišiug- ~ šiuk 'comb one's hair'; Tb(M) 'išyuugat ~ 'išyuuk 'comb one's hair, v'; Tb(M) šiuugišt 'comb'; the Tb verbs may have the hi- prefix. Cahitan forms and possibly the others in M88-ci9 below may be related with loss of medial segments: *ciyuk > ciyk > cik/cikk. [Num, Tb]

518b. *cika 'comb, sweep': CL.Azt30 *cikaawaas 'comb'; L.Son31 *cika 'peinarse'; M88-ci9; KH/M06-ci9: Yq čike 'peinarse'; Yq híčike 'sweep'; Yq híčikia 'broom'; My čikke 'peinarse'; Eu atecíka 'peinarse'; Wr cí'ihká 'comb, n (Lionett); Wr ci'iká 'type of cactus (Miller)'; Tr(S) tičí 'peinar'; Tr(S) tičíkari 'comb'; Tr tičí, čiká, ti-čík; Tbr cikát; CN cikawaas-tli 'comb, n'; CN cika-waas-wiaa 'comb hair, v'; Pl ciikuwas 'comb'; Pl ciikwastia 'to comb'; HN cihwaas-tli' 'comb'. To Miller's collection, let's add the latter part of Cr muacikï 'comb, n' and possibly the -cih- segment of Cm nacihtu'ye' 'comb, hairbrush'; but most certain and most interesting is NT šikiúúmai 'peinar con el chino'—a reflex among the Tep languages to match the rest and it matches well since NT š < *c; NT ikiúúmai 'peinar, vt' appears to be an alternate form. The cikaa- portion of CL.Azt30 *cikaawaas 'comb' < 215 *wïis 'comb' likely belongs here as well.

518c. *hi-cikï 'sweep'; *hi-ciki-ta 'broom': Yq híčike' sweep'; AYq hičike 'sweep'; AYq hičikia 'broom'; My híčike 'sweep, v'; My híčikia 'broom'; and Wr icikíla 'broom'. These tie to the others except with a hi- prefix. [reduction] [NUA: Num, Tb; SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]

519a. *was / *wis 'comb, sweep': M67-95 *wes/*wen 'comb'; I.Num282 *wi 'sweep, comb, brush'; CL.Azt30 *cikaawaas 'comb' < 215 *wiis 'comb'; M88-wii9; KH/M06- wii9: Hp wiisi 'brush, broom'; CN cikawaas-tli 'comb, n'; CN cika-waas-wiaa 'comb hair, v'. Miller and most combine the *wiis and *wiin forms, which we separate here, though separation itself clarifies little; for example, some forms, such as NP wi'uni and WSh wisunaih 'comb, sweep' may suggest that lost segments or considerable reductions may underlie *wiin: *wisuna > *wiin (see c below). Other forms, like the *wii/tV-sonai/conai below, insert the possibility that the wii-sV may derive from separate morphemes. So all these 'comb/sweep' groupings are quite tentative.

519b. *wacipa/u 'comb, sweep': B.Tep39 *gasívukaroi 'brush'; KH/M06-wa31 *wac-: TO gasva 'comb the hair of'; NT gašiúúvikaroi 'comb, n'; ST gašvukar 'brush'. The latter syllable -kar... have to do with instrument; thus, to those we might add Nv gasibua 'peinar, v'; PYp gasvia 'comb, rake, sweep'; NT gašiúúvai 'comb, vt'; ST gašvu 'peinar (s.o. else's hair), vt'. Campbell and Langacker (CL.Azt215) suggest Tep *gas < PUA *was/*wïs, which is plausible since c/s dichotomies happen in UA. If that is so, then *was rather than *wïs may be a preferred reconstruction, since both Azt and Tep show *was, and both s and the following high front vowel of some forms, like Hp wïisi, could encourage the fronting and raising of *a > ï. Whatever the case, I concur with Campbell and Langacker that the set is problematic. [a/u] [NUA: Hp; SUA: Tep, Azt]

519c. *win 'comb': M67-95 *wes/*wen 'comb'; I.Num282 *wii 'sweep, comb, brush'; CL.Azt30 *cikaawaas 'comb' < 215 *wiis 'comb'; M88-wii9; KH/M06- wii9: Mn wiinaccu 'comb, n'; NP wiinaco 'comb or brush hair, v'; NP wiini 'sweep, comb hair, v'; Cm wiinua 'to sweep'; Kw na-wiini-wii(m)bii 'comb' and Kw na-wiini-niibii 'comb'; Kw wiini 'sweep'; Kw wiini-zii 'soap-root brush, comb'; Tb wiingal/wiingist 'broom, rake, comb'; Tb wiingiit 'to sweep'. See discussion in a above. [NUA: Num, Tb]

520. *cona / *sona 'comb, sweep, gather': M67-95 *wes / *wen 'comb'; I.Num282 *wï 'sweep, comb, brush'; M88-wï9; KH/M06- wï9: Miller astutely compares all of the following Sh forms, which means we may have *cona/*sona prefixed by wï'- or tï'-: Sh conai 'gather, sweep'; Sh tecconai 'broom'; Sh wïconai/wïcconai 'comb'; Sh sonai 'scratch, rub'; WSh wïsonai 'comb, sweep'; TSh wïsone 'comb, sweep'; TSh sone 'brush, wipe'; TSh tosone 'wipe up'; perhaps NP wï'uni 'sweep, comb hair' and others above if a reduction occurred like *wïsonai > *wïsna > wïna or loss of final segments as in *wïsonai > *wïsV. [NUA: Num]

Come: see arrive and go Complete: see finish Consume: see eat

COOK, BOIL, BAKE, ROAST; COCER, COCINAR, HERVIR, ASAR; see also boil

Mn	kupï'a	Нр	kwasi		Eu	basá/basé/basí
NP	kwasïpï	Tb	wïš-(ït)/'ïwïš		Tbr	kwasi-(rá-t) v.(adj.)
TSh	kwasi"	Sr	kwah yi	AYq	bwasa, y	vt; bwase, vi; bwasi 'cooked, ripe'
Sh	kwasi"	Ca	-kwás-		My	bwasse, bwassi
Cm	kwasïpï	Ls	kwáşi-š		Wr	wahsí 'asar'; iwa-ná 'be ripe'
Kw	kwasi/kosi	Cp	kwáșe		Tr	wasá-/wasí-; o'e-
Ch	kwasï	TO	baha/bahi/bai/ba	ikam	Cr	kwasí
SP	kwašï-ppï	Nv	bahida 'sazonar'		Wc	kwášee/kwáašíi;
WMU	qw <i>ah</i> sű-y	PYp	bahi			'ikwáší.šïacie
		NT	báhi/baáhyi		'ti	iempo de madurar'
CU	kusï-ka-tï	ST	baaya; baikam;		CN	(i)kwasi, wiksi,
			baidya 'ripen rap	idly'		yoksi/iuksi

- **521.** *kwasiC / *kwasaC 'cook(ed), ripe(n)': VVH50 *kwa₁₁si', kwa₁₁si; M67-152c; BH.Cup *qwas; I.Num80 *kwasï; L.Son117 *kwasï/kwas-i; M88-kwa1; Munro.Cup30 *kwáási-š/kwasí-š 'cooked, ripe' (Munro notes the Cupan forms are deverbalized forms); AMR 1993a *kwasiC; KH.NUA; KH/M06-kwa1 *kwasiC: Mn ku(')-qwassï 'get/be ripe'; NP kwasi-ppï 'cooked, ripe'; TSh kwasï 'ripen'; Sh kwasï" 'cook'; Cm kwasï-/h 'cook'; Kw kosi/kwasi-'cook, roast, be cooked'; SP kwašï- 'be ripe, done, cooked'; SP kwašï-ppï 'passive participle'; WMU qwahsú-y 'ripen, cook, simmer, vi'; CU kusí / kwasí 'burn, scorch, be ripe, cooked'; Tb wïsït/'ïwïs 'ripen, cook'; Cp kwáše 'get ripe'; Ca -kwás- 'ripen'; Ca -kwasni- 'ripen, make ripe, make fruitful'; Ls kwási-š 'cooked, ripe'; Ls kwasú-'a become cooked, ripen'; Sr kwahyi 'ripen, become cooked'; Sr kwahaan /kwahaanin 'cook, vt'; Sr akwahi' 'cooked, ripe'; Ktn kwahan 'cook, vt'; Hp kwasi- 'get cooked, baked'; Hp tikwasi 'bec. mature'; TO bahi/baha 'bec ripe, cooked'; Eu basá-n 'cocer, madurarse'; Wr wasi-pá-ni 'cook, especially with water'; Wr iwasí 'fruit'; Tr wasí 'cocerse'; My bwássi 'maduro'; My bwásse 'madurar'; My bwassa 'cook, vt'; My bwasse 'cook, vi'; AYq bwasa 'cook, vt' (past: bwasa'a); AYq bwase 'cook, vi'; AYq bwasi 'cooked, ripe'; Tbr kwase/kwasi 'madurar'; Tbr kwasite-'cocerse, hervir'; Wc kwásee/kwasi 'ripe'; Cr kwasí 'it is ripe, cooked'; CN (i)kwasi / ikwsi 'ripen, cook'; Pl uksi 'ripen, be cooked/done'. Ken Hill adds Ktn kwah / kwaha 'be cooked'; Ktn kwahan 'cook, v'; Ktn a-kwahi 'cooked, ripe'. Let's add Nv bahida 'sazonar'and Nv bahidaga 'ripe fruit'. Employing different prefixes, CN wiksi 'cook, ripen' and CN yuksi / yoksi 'cook, ripen' also belong. This is one of few sets having reflexes in nearly all UA languages. I like Manaster-Ramer's and Ken Hill's reconstruction with a final consonant as is apparent in the final gemination in some Num languages, -t (vs. -l) in Tb, and AYq's 3rd C glottal stop. Note that this stem is the base of many derivatives for fruit; I suspect that Tewa bai/be 'fruit' is a loan from a Tepiman (*bahi) language. [kw-reduction in Kw] [NUA: Num, Hp, Tb, Tak; SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]
- **522.** *siyo(La) 'cook': B.Tep62 hiidora(i) 'cook'; M88-si15; TO hidoD(a); NT iidyóra; ST hiidyoor. To these we should add Nv idorha 'cocer'; PYp hider 'cook, vt'. [*L liquids] [SUA: Tep]
- **523.** *noko 'roast (often meat), v': I.Num114 *no(h)ko 'to roast meat'; M88-no10 'to roast meat'; KH/M06-no10: NP no'ho 'to roast, bake'; Sh nokko 'to roast, bake'; Cm nohko/noki 'bake biscuits'; Tb nohot~'onoh 'to roast in the ground; Tb nohoo'yat~'onohooi' 'roast, vi'; Tb nohoo'yiin 'roast, vt'; Hp nöq- 'word-forming element having reference to meat'. [k vs. h; Tb h < *k] [NUA: Num, Hp, Tb]
- **524.** *saki 'toast, parch': VVH157 *saki 'to parch, as corn; parched corn'; B.Tep55 *haaki 'parched grain'; M67-328 *saki 'popcorn' and M67-352 *sa 'roast'; L.Son229 *saki/sak-i 'tostar'; M88-sa2 'make esquite/hacer esquite' and M88-sa8 'roast'; Jane Hill 2001, 2007; KH/M06-sa2: TO haak(i) 'to roast grain with coals in a basket'; LP haahak; NT ááki; ST haak; Eu sakít 'maíz tostado'; Wr sakí 'esquite'; Tr sakí 'esquite, maíz tostado'; Tr sakí/saké hacer esquite, tostar maíz'; My sáaki; My sáake 'tostar grano'; Wc şaaki 'popcorn'; CN iiski-tl 'popcorn'; Pl iška 'roast, fry'; CN iška 'bake s.th., fire pottery'; CN seki 'to toast'. Some of the above forms Miller repeats in M88-sa8 roast. We should add Tb šaak 'to roast'; Tbr hika 'cocer'; Tbr hika-ma-li-t 'esquite'; Cr šahčéh 'popcorn'; and Cr we'iška 'fry, v' (Casad 1984, 165). Jane Hill (2001, 2007) adds Ls sááki-š 'grain, wheat'. Interestingly, the Tbr forms show perhaps a pre-Azt voweling. [Tb k < *k; Tbr ≈ CN voweling] [NUA: Tb, Tak; SUA: Tep, Trn, Cah, CrC, Azt]

- **525.** *soka 'cook': KH.NUA; M88-so15; KH/M06-so15: Cp síxnine 'cook'; Ls şééxa 'simmer'; Ls şéx-la 'to warm water'; Ca séx 'cook (food in water)' (mishearing for síx? Miller asks; or loan from Ls? Hill asks); Sr höqän 'to boil'; Gb sehíy 'temascal'. [*o in Tak; k > h in Gb] [NUA: Tak]
- **526.** *wa'a / *wa'i 'roast'; *wa'i 'meat, i.e., s.th. roasted': VVH162 *wa_s'i/*wa_s'i 'to roast'; BH.Cup *wá 'to roast'; BH.Cup *wá'ic 'meat'; M67-280 *wa'i 'meat'; Munro.Cup70 *wáá'i-š 'meat'; L.Son330 *wawï / *waw-i 'asar'; M88-wa2 'to roast meat'; KH/M06-wa2: SP waï 'roast in ashes'; CU waay 'roast'; Tb wa'at/wa'ït~'awa' 'bake, broil, roast'; Cp wá'e; Cp wá'i-š 'meat'; Ca -wá'-, wá'at 'roast meat, v'; Ca wá'i-š 'meat'; Ls wááwa 'roast meat, v'; Ls wáá'i-š 'meat, cattle'; TO ga'a, gai, gaa'i 'roast, broil, vt'; Eu wáve 'asar'; TO ga'i 'roasted meat'; Tr awé 'asar, asado, carne seca'; My wáawa 'asar elotes'; Cr wá'ira'a 'meat, body'. Ken Hill adds Tbr mwai-ra-n 'asado'. To these we can add Nv ga'a 'asar'; Nv ga'i 'asado'; PYp ga'a 'roast'; NT gagáïyi 'asar'; NT gái 'asado'; ST gaya 'roast'; AYq waawa 'roast in coals'; Cr wá'ihčii 'asado'; and the first part of Cr we'iška 'fry, v' (Casad 1984, 165). Note 2nd C '> w in Eu and Tr. [-a/-i = active, vt/stative, vi; '/w] [NUA: Num, Tb, Tak; SUA: Tep, Trn, Opn, Cah, CrC]
- **527.** *fi'ma / *ti'ama'a 'roast, bake (under ashes, under ground), bury': M67-353a; KH.NUA; M88-ti54 'roast'; KH/M06- ti54 'roast, bake': Sr tiï' 'roast, bake, vi'; SP ti'ma 'roast under ashes, bury'; and perhaps Hp tiïpe 'roast, bake' (perhaps reduced from < *ti'm-pi); Hp tiïpa 'hot water'. The other Hp term below may better belong. M67 lists other possible forms that agree as far as initial CV, but each brings with it more difficulties than the three forms listed, which also agree only in initial CV. However, relative to the SP form, several other SNum forms are consistent among themselves: WMU tim'má-y 'bake (usually underground)'; Ch tim'á 'bake, v'; SP ti'ma- 'roast under ashes, bury'; CU tu'máy 'bake, roast'. Some terms point to *ti'ama 'bury, grave': SP ti'ma 'roast under ashes, bury' and Hp tiï'ami 'grave' have much in common (*ti'ama), as well as Eu témo 'enterrar'. Tb(M) ti'ma'at 'gasp for breath, for instance, while drowning, choking, or suffocating' [or while covered] is nearly identical to SP phonologically, but varies semantically. [V's] [NUA: Num, Hp, Tb, Tak; SUA: Opn]

NB, for *ma'a / *mahi 'bury, cook underground', see bury NB, for *sa'a / *sawa, see boil

COPULATE; **COPULARSE**

- **528.** *yuma > *yoma 'copulate': VVH111 *yoma 'copulate'; M67-99 *yo; M88-yo3; KH/M06-yo3: VVH list TO doom and Tb yoom; Ca yím 'have intercourse' also corresponds to TO and Tb, since Ca i < *o. Add Hp yomi(-k-) 'give a pelvic thrust, simulate copulation'; Yq nau yuuma-k 'unir', both of which may display the original vowel—*yuma > *yoma—TO, Tb, and Ca possibly subject to lowering of *u > o/_a. I separate the *yoko forms from *yoma on the grounds of entirely different second syllable in contrast to Miller's including both in M88-yo3 and M67-99; in fact, the vowel of the first syllable may be different as well, in light of a possible *yuma and CN yekoaa below. [NUA: Tb, Tak; SUA: Tep, Cah]
- **529.** *yïkoC / *yokoC 'copulate': Sapir; I.Num291 *yo(h)ko 'copulate'; M67-99; M88-yo3; KH/M06-yo3: Mn yoqqo; NP yoko (from Hittman); TSh yoko"; Sh yoko"; Kw yoko-; SP yogo-; CU yogo-. Sapir's observation of CN yekoaa 'taste, sample food or drink, copulate with s.o.' and its similarity to Numic *yoko seems more likely valid than not, since a vowel assimilation could easily unite them. [NUA: Num; SUA: Azt]
- **530.** *toC 'copulate': M67-100 *to 'copulate'; M88-tol1 'copulate'; KH/M06-tol1: Tb tooyan~'oodoyan; Ls tó'ma '(of a man) to marry a wife, (of animals) to mate'; Ls -tó'ma 'wife'; Ls -tó'ma-vu 'husband'. One problem with this pair, listed in both M67 and M88, is that we should expect Ls e < *o; however, Cp tily'á'a 'make love' matches Tb well, because it has the expected vowel: Cp i < *o; it also shows y, like Tb does, and we see l's in Tak lost in other UA branches elsewhere. Note also the -to- syllables in Tr nató 'fornicar (varios), practicar el cóito'; Tr netó/wetó 'fornicar, practicar el cóito extramarital'; Tr foki / loki / eloki-mea 'fornicar, abusar la mujer, violarla'. [NUA: Tb, Tak; SUA: Trn]
- **531.** M67-101 *nase 'copulate'; M88-na20 'copulate'; KH.NUA; KH/M06-na20: The history of this challenging set has only SP naï 'have sexual connection, mate' remaining from M67 to M88 to KH/M06. Originally Miller (M67 *nase) had Sr näčk 'stick together, copulate' and SP naï 'have sexual connection, mate', suggesting Sr may be from *nasï > *nas-k > nač-k, causing the sibilant to become an affricate before a stop. In M88, Miller leaves out Sr and adds two others that both Ken Hill and I have left out. Ken Hill, a Sr specialist, also leaves out the Sr form (in

- KH/M06-na20), but pairs SP naï and Tr načú 'pegarse, contagiarse', but with a question mark on Tr. Forms actually having a 2nd syllable -sa are in 518a:
- 531a. *nasa: CU násaa-vi 'sexual desire' and Tr nasawi 'fornicar'; Tr nasabu 'violar, fornicar'. SP in 518b:
- **531b.** *na...: better belonging with SP naï-ġa 'mate' may be CU náa-ĝay 'make love' and CU náa-'iní-kh 'be in heat'; and I am hoping that CU náæ-vi 'teenage girl' does not belong with them, but it may.
- **531c.** *naC-tu (?): Tr and Sr are quite identical semantically, but NUA c and SUA c can only correspond if from *-t- or a cluster, perhaps s.th. like *nak-tu or a dozen other possibilities. So mere possibilities that are not necessarily probabilities include: Tr(H) načú 'pegarse, contagiarse'; Tr(H) načúpa 'conectar'; Sr näc-q 'stick together'; and Sr näcü'-q 'be stuck together'. However, Sr näc-q is also mentioned below at *naka as a possibility. [NUA: Num; SUA: Trn]
- **532.** *na'pa 'join/be together, copulate': Tr na'pe 'unirse a alguien en union sexual, copulate'; Tr napa 'union, joining'; Wr na'pa 'a pair, the two joined together'; Wr na'pe 'mix, join'; Yq naápo 'a lado de, junto de, at the side of, together with'; Ktn nap-ïk 'be stuck together' (Ktn would have -v- without an underlying cluster, thus evidence for medial *-'p-); Ktn napa-wicu' 'splice a rope (< together + twist)'. [NUA: Tak; SUA: Trn, Cah]
- **533.** *naka 'copulate, cover, close': Ca náki 'join o.s. to, get together with, close, vi'; Ca naki-n 'put together, join'; TSh naake 'mate with, copulate (usually of animals)'; NP naga'aggï'hu 'put blanket over s.o.'; CU naġá-tií 'cover with, wrap around, spread over'; Ls(E) naka/i 'be closed, blocked, vi; close, block, cover, vt'. Sr näc-q 'stick together, copulate' and Sr näcï'|q 'be stuck together' may belong if another morpheme created a cluster s.th. like *nak-tu. Also likely is the -nek of My baánek 'se inundó de agua' as in 'water-covers'. Might this whole set tie to *naki 'want'? [NUA: Num, Tak; SUA: Cah]
- **534.** *ahaya(y) 'copulate': Mn ahïyee 'mate, v'; Mn nanna'ïhïyee 'mate (with one another), v'; NP na'ahiyai 'mate (of two animals)'. [NUA: WNum]

CORN, EAR OF CORN, GRAIN; MAIZ, ESPIGA, ELOTE

- 535. *suŋu 'corn': VVH93 *sunu 'corn, corn cob'; B.Tep81 *huunui 'corn'; M67-102 *sunu corn; L.Son263 *sunu; CL.Azt50 *sən 'dried corn, ear of corn'; M88-su5; KH/M06-su5; Jane Hill 2007: TO huuni 'corn, ear of corn'; LP huun; NT úúnui; ST huun; ST hun vaa 'elote'; Op sunu-t; Eu súnu- 'caña de maíz'; Wr sunú 'corn'; Tr su*nu/suunú 'corn'; My sunu 'milpa'; CN sin-tli 'dried ears of maiz'. Ken (KH/M06-su5) and Jane Hill (2005, 2007) add Hp soŋowï 'sand grass' as the first four segments are as expected and a stand of seed-bearing plant is semantically similar. Jane Hill (2005, 2007) also notes the first morpheme of Gb şoŋ-áxey 'tortilla'.. [nasals] [NUA: Tak, Hp; SUA: Tep, Trn, Cah, Opn, Azt]
- **536.** *muLa 'ear of grain': M67-149 'ear of corn'; L.Son158 *mura 'espiga'; M88-mu1 'grain of wheat, tassel'; KH/M06-mu1: TO muDa 'tassel'; Eu murát 'espiga'; Yq móa 'espiga'; My mówwa espigar; Wr mulá 'espiga'; Tr murá 'espiga'; Cr mwée-yu 'spike/espiga'. We can also add NT muurádadï 'la espiga' and Nv murhadaga 'espiga'. Note that both Cr and Cah show *-L->-'-.>-ø-.
 [Liquid > ' > ø in Cah; *u-a > o-a] [SUA: Tep, Trn, Cah, Opn, CrC]
- **537.** *pus-ka 'harvest corn': CL.Azt80 *pïška 'harvest corn'; M88-pu19; KH/M06-pu19: CN piška 'to harvest maíz or wheat'; Pl piška 'harvest, pick, v'; Pl piški 'for cooked corn to lose its skin'; Z piiška 'shell, husk'; and other Azt forms in CL.Azt80. Ken Hill adds and queries whether Hp poswa 'pick clean, v' is cognate. It could well be, since its vowel aligns (*u > Hp o, *u > Azt i) and the semantics are reasonable with the semantics of Pl piški and Z. Is Hp pìikya('at) 'immature ears of corn' as possible, though suggestive of *i instead of *u? For *-sk- > -ky- in Hp, cf. rot. I like Ken's query better, semantics more amenable. [SUA: Azt; NUA: Hp]
- **538.** *si... 'put on ears, tender ear of corn': L.Son245 *sita 'jilotear'; M88-si14; KH/M06-si14: Op sita; Eu sít-we-'jilotear el maíz'; Yq sí'ita-rókka 'barba verde del maíz'; Wr sitá / sitapóa 'corn silk' (sitá + po'á). Add Wc şítá 'milpa tierna'. Miller also includes CN šiiloo-tl 'tender ear of green corn', which might be: *-t- > -l- does happen and so does an -a/-o alternation on occasion; but not being certain of either in this case, let alone both, I put it below with *siLo/soLi. The glottal stop in Yq may be significant, so I shan't reconstruct the medial consonant or cluster yet. [SUA: Trn, Cah, Opn, CrC]

- **539.** *siLo / *soLi 'ear of corn': M88-si14; KH/M06-si14: CN šiiloo-tl 'tender ear of green corn' and Tbr solí-t 'ear of corn' are identical except for a vowel metathesis in one or the other; Pl šiilu-t 'small, immature, green ear of corn before it develops kernels'. Miller combines these and Lionnet's set above both in si14, which is possible, but I separate them for now. [Tbr~Azt; liquids; V metathesis] [SUA: Tbr, Azt]
- **540.** *(w)o'na 'corn cob, olote': L.Son17 *'ona 'olote'; M88-'o20; Stubbs1995-41; KH/M06-'o20; Jane Hill 2001, 2007: Wr wo'ná / ho'oná-ra; Tr o'na/ko'ná. L.Son's Yq náo and My naawo, I put with *naLo below. Ken and Jane Hill add CN ooloo-tl; Pl ulu-t; TSh onno''-cci 'pine cone hook'; and Kw onoci 'hooked stick used to pull down pine cones'. Jane Hill (2001) offers a decent case for Hp öö-vi'at 'cob heel'. [NUA: Num, Hp; SUA: Trn, Azt]
- **541.** *iLo 'elote': CL.Azt135 *eeloo 'roasting ear'; M88-ï14; KH/M06- ï14: CN eeloo-tl 'ear of fresh young maize with the kernels already formed, corn on the cob'; Pl eelu-t (poss. $-\emptyset$) 'ear of corn, roasting ear'; Po elut; T yelutl; Z eeloot. [liquid] [SUA: Azt]
- **542.** *wïC 'sift, winnow': KH/M06- wï13: TSh wïppu'ah 'winnow, v'; Hp wïhita 'be sifting (using wind), winnowing'; Hp wïtaqa 'corn gruel'. [NUA: Num, Hp]
- **543.** *tu'i-capi (> Tep *tuisapi) 'corn flour': B.Tep230 *tuisapi 'corn flour' (*tu'i 'flour'); M88-tu8: NT túíšapi; ST tuisəp. See also *tu'a/*tu'i at grind where KH/M06-tu8 includes this compound with its first morpheme *tu'a/*tu'i. [Tep ø < *'] [SUA: Tep]
- **544.** *tomoc 'corn husk': CL.Azt35 *tootomoč- 'corn husk'; M88-to19; KH/M06-to19: CN totomoč-tli; Pl tuutumuč; Po totomošt; T tutomočtlI; Z tootomočti. [SUA: Azt]
- **545.** *iku 'corn': Fowler 1994: Cr 'iku; Wc ikïïi. Fowler cautiously notes their similarity with Southern Tiwa iechuri, suggesting further investigation. [SUA: CrC]
- **546.** *naLo 'olote': Eu néhro 'mazorca desgranada, olote'; Yq náo 'olote'; My naawo 'olote'. Liquid > ø is common in Cah. [*L, liquids] [SUA: Cah, Opn]
- **547.** *apaLi 'elote, new/fresh ear of corn': Yq'ába'i 'elote'; My ábari/ábarim 'elotes, mazorca'; AYq avae 'fresh corn'. [liquids: *-L->-'->-ø-] [SUA: Cah]
- **548.** *kawi-ta 'type of corn': Wr kawila 'type of corn'; Tbr koi-t 'corn'. [SUA: Trn, Tbr]
- **549.** *yawi (> *yowi) '(ear of) corn': Hp yoowi 'corn silk, beginning ear on stalk'; Cr yuuri 'maíz'; CN yaawi-tl 'type of corn with dark kernels'; Wr mayowáci 'type of corn'. Hp, Wr, Cr all show round vowels, though they do not entirely agree on which round vowel. CN yaawi may be nearer the proto-form, because if the first vowel of s.th. nearer CN yaawi-tl were to have anticipated the w and become round (as in Hp, Wr, and Cr), then assimilation toward -w- would explain the inconsistent round vowel correspondences. [NUA: Hp; SUA: Trn, CrC, Azt]
- **550.** *hani 'corn': Jane Hill 2007: Cm haniibi/hani- 'corn, maize, ear of corn'; Hp haani 'corn flour ground to the desired consistency'; Hp haana 'complete the corn-grinding process, v'. [NUA: Hp, Num]
- **551.** *huma 'corn meal/flour': KH/M06-hu25; Jane Hill 2007 *huuma: Hp hooma 'ceremonial cornmeal'; Cm homobi / homo- 'powder/flour'; CN iima 'an element in words having to do with respect, prudence, seriousness, fear'. What of a semantic reversal Ls humáhma-š 'worthless, nothing, nonsense, bogus, invalid, absurd, wrong'? Nice set, Jane! [NUA: Hp, Num; SUA: Azt]
- **552.** ***oLa/i** or ***wo'La** 'shell, degrain (ears of grain), v' or ***wïra** (Karen Dakin): L.Son21 *ora/i 'desgranar'; Dakin 1982; M88-'o19 'to shell (corn)'; Jane Hill 2001, 2007; KH/M06-'o19: Eu hóra; Op hora; Wr ola-ní, pl: ori-má; Tr ori-mea; Tr orá-; Wc 'uu.ríyáari; HN 'ooya'; Pl ta-wiya, ta-uuya; CN tla-ooya; CN tlaool-li 'dried kernels of maize'; CN oolooteconte-tl 'instrument for removing kernels from corncob'; TO oD 'harvest, vt'; and perhaps Tr ohó 'desgranar' if from a reduplication (o'o > oho) whose lengthening causes the end to reduce. Jane Hill (2007) adds Cm hani wo'ora 'corncob'. [r > y (HN)] [SUA: Trn, Opn, Azt; NUA: Num]

NB, for *kuNmi 'corn' see *kuNmi 'eat (s.th. like corn), nibble, chew'—a prominent verbal stem in SUA, which in NUA appears as 'corn'—SP kummia/kommi 'corn'; WMU kïmwí/kumwí 'corn'; CU kïmïy 'corn'; e.g., TO kuum 'chew, crunch; TO kuumikud 'corncob' (lit: 'eating tool, s.th. with which one eats).

NB, for *kïLipi 'shell/shuck corn, v.', see at 'scrape'.

NB, for *kwuhV 'scrape off, degrain (corn)' see at 'scrape'.

Corner: see fork, cave, in

COTTON: ALGODÓN

553. *pihi 'cotton': Mn pííbi; Kw pii-vï; CU píi-vï. Ktn pi-c 'down'; Ktn tïm-pic 'fine feathers, used to describe cotton plant, apparently like down'; NP pihiga'yu 'cotton'. [NUA: SNum, WNum, Tak]

554. *toko 'cotton': TO tokii; Nv toki; NT tóki; ST tok saua 'cotton blanket'; Tbr tokó-l 'algodón'. Tbr shows a different 2nd vowel than the Tep forms, so it does not seem borrowed, yet exhibiting the same first three segments merits its inclusion. As in English too, stressed vowels (NT's 1st, Tbr 2nd) are more likely to retain their quality, so I reconstruct those. [SUA: Tep, Tbr]

555. *mosa 'cotton': Cr (rï'i)musá; Wc kwiemúša. [SUA: CrC]

NB, Wr to'sá 'cotton' and Tr rosá 'cotton' are at the UA words for 'white'.

NB, for *wipuhu > NUA *wiivuhu 'plant whose seeds float in cotton-like tufts' (Kenneth Hill), see 'reed'.

COTTONWOOD TREE, POPLARS, ASPEN, BIG TREES; POCHOTE, CHOPO, ÁLAMO; see also tree

556a. *sohopim 'cottonwood tree': M67-104 *so 'cottonwood tree'; I.Num180 *soopih 'cottonwood tree'; M88-so4; KH/M06-so4: NP so'o 'aspen'; TSh sohopimpï 'cottonwood'; Sh soho-pin; Cm soho obi 'cottonwood'; Cm sohopokóó' 'mulberry tree'; Kw soovi-pï; Ch soovimpï 'cottonwood'; SP soovi"-/ soovipï 'cottonwood'; Hp söhövi. Also NP(B) soobi 'cottonwood'. Cm soho obi may suggest a compound, or perhaps a term as long as a compound. SP gemination, Ch, and Kw's -pï (instead of -vï) all recommend a final -C; -m is what Ch shows. Ken Hill in 2003 (KH/M03-so4) queries whether CN šoomee-tl 'elder tree' is cognate, but took it out of his KH/M06 edition; I'd say keep it as probable, since *p > Ø in Azt, -h- is fragile, and the vowels fit: *sohopimV > soome. If both intervocalic -h- and -p- were lost (likely in Azt), then a reduction could yield s.th. much like the CN form. One might be tempted to separate the final -pi as a fossilized absolutive suffix in Num; however, the facts that other morphemes come after it in many languages and that the Tak forms have the pV syllable well-embedded argue against an old abs suffix. A reconstruction *sohopi(mV), perhaps an old underlying plural, works for Num, Hp, and CN. [NUA: Num, Hp; SUA: Azt]

556b. *sapo 'sycamore tree': BH.Cup *sevéla 'sycamore'; HH.Cup *savéela 'sycamore' (Ca vowel is unexpected); M88-sa25; Fowler83; Munro.Cup126 *şivéé-la / *şavéé-la 'sycamore'; KH/M06-sa31 *sapo: Ca sívily 'maple, sycamore'; Cp ševí-ly 'sycamore' (vowel unexpected); Ls şivée-la/savéé-la 'sycamore'; Sr havöö'ţ 'sycamore'. Ken Hill adds Ktn havoč; Gb şevér; and CN sapo-tl 'sapota (fleshy fruit), sapota tree'. Every Tak second V agrees with PUA *o. The variations in the first V are likely due to unaccented schwa-like behavior (> i/i), when the V was once unaccented, as it still is in most languages. However, Sr, Ktn, CN, and show a first V of a, as do Miller, Munro, and Hill's choice of first vowel, with which I concur. [C cluster; -a vs. -o/-i] [NUA: Tak; SUA: Azt]

557. *poCta / *poCcV 'cottonwood tree': CL.Azt146 *počoo- 'silk-cotton tree'; Fowler83; M88-po23; KH/M06-po23: CN poočoo-tl 'silk-cotton tree'; Hp pööca 'type of fuzzy caterpillar or worm found in cottonwood trees, skunk (2nd Mesa dialect)'; Pl puučut; Po počut. Most *-c- > -y- in NUA, yet an agreement of the first three segments and the fact that this particular caterpillar approaches the appearance of a cottonball crawling along make this match more probable than not, likely from something other than PUA *-c- as Manaster Ramer says, perhaps a cluster and a palatalization of *poCtV (and many a/o alternations for final V occur in UA). [-a/o] [NUA: Hp; SUA: Azt]

558. *apa(ka) 'cottonwood tree': Cp aváxat; Ls 'avááxa-t; the first three segments of AYq avaso 'cottonwood tree' match the Tak forms. Though not likely enough to include in the count, TO a'uppa 'cottonwood tree' is worth noting in that they all share *a...pa, in spite of TO's extra segments. [NUA: Tak; SUA: Cah]

559. *siŋŋa(C) 'cottonwood and/or aspen tree': Fowler83: NP(Y) siŋŋabi 'cottonwood'; NP(Y) gaiba siŋŋabi 'aspen'; NP(B) siŋabi 'tree'; NP(B) siŋabi 'willow'; NP(B) kaibasiŋabi 'quaking aspen tree'; Sh sinka-pin / sinna-pin 'aspen'. Note also TSh siŋapin 'aspen'; Sh(C) sinka-ppi / sinka"-ppin 'aspen tree, tree (generic), any mountain tree'; WMU siiá-vii / siiá-vii 'cottonwood tree, quaking aspen, n'; SP šiiya-vii 'quaking aspen'; SP šiia"- 'sapling'; CU siiu-vii-pii 'cottonwood'; CU siia-vii 'quaking aspen'. The velar nasal occurs in all three branches of Num, considering the nasalized vowels in WMU. Some Sh dialects show *-ŋ->-n-, while most of SNum lost the nasal altogether. NP(B) seems to have merged the forms that most languages separate forms for 'willow' (*sihi, *saka) though close enough to be confused at times. [NUA: WNum, CNum, SNum]

NB, for *wipuhu > NUA *wiivuhu 'plant whose seeds float in cotton-like tufts' (Kenneth Hill, p.c.): Hp wipho 'cattail' (combining form wivòo-) and Gb wívor [wíívo-r] 'milkweed', see at 'reed'.

Cougar: see lion

COUGH; TOSER

Miller combines many forms in M88-'o12 'cough' (KH/M06-'o12) from M67-105 *'oh; I.Num14 *ohni; B.Tep314 *'i'ohogïi 'cough' (which may all be related), but problems recommend sorting them, though its onomatopoetic subjectivity makes its priority for comparative purposes debatable:

560a. *oho / *ohaC 'cough, v': Mn ohi; NP ohi; TSh ohii"; Sh ohai" / ohoi; Hp öhö / öhöhö-; Tb(V) hooh / 'ohooh; Tb(M) hoohat / 'oohooh; Ca 'ú'uhu. [NUA: Num, Hp, Tb, Tak]

560b. *oka (?) 'cough': KH.NUA; Cp ixa; Cp axí'a / áxi'a / íxa-; Ls 'íxa; Sr ööqa'. Sr and Cp agree with *oka, but if *o, then Ls should show e, though Cp i corresponds to *o. Maybe some borrowing has occurred that needs to be unraveled. The SNum forms may fit *oka—SP ohkw'i and CU 'okwáy—if rounding was preserved past the C: *oka > okwa. [NUA: Tak, Num]

560c. *iho... (> Tep *i'oh... ??) 'to cough': B.Tep314 *'i'ohogïi 'cough'; TO i'ihog; LP ihoga/ihosana; PYp i'osin; NT yóógïi; ST 'i'oo'; ST iogia. [SUA: Tep]

560d. *ohni(C) 'cold, have/be sick with a cold': Sh ohni-ppïh; Cm onibwekakat; Cm ohnitï 'to cough'; Kw 'ohni; and perhaps Mn ohiyee; NP ohibba wïmma; TSh ohi kammanna. [NUA: Num]

561. *taCsa / *taCsi 'cough': M67-106 *tas 'cough'; L.Son278 *tasa/*tas-i 'toser'; M88-ta28 'to cough'; KH/M06-ta28: NP taci-yaipï 'measles'; Eu táca-n; Wr tohsoá-ni/ma; Tr ŕosó-wa; Yq táse; My tásse; CN tlatlasi. Lionett's reconstruction *tasa/tasi is reasonable, except that the -c- in NP and Eu is curious, but might be explained by a cluster *-Cs-. [c/s] [NUA: Num; SUA: Trn, Cah, Opn, Azt]

562. *ka... 'belch': M88-ka41; KH.NUA; KH/M06-ka41: Ca qéwi 'to belch'; qékwem (distr.) 'belch many times'; Ls kára/i 'belch, croak (of frogs), ring (bells)'; Sr qääk/qää'kin 'belch'. [NUA: Tak]

563. *ko... 'cough': KH.NUA: Sr qöi'mu'k 'cough'; Ca ke-xékin 'cough up'; Gb xoxáto. [Gb V] [NUA: Tak]

564a. *hikki' / *hikhika 'have hiccoughs': M88-hi'4; KH/M06-hi'4: Mn hi'kki'i-t; Sh hikkii; Tb hikhiigat. **564b.** *hi(C)na 'hiccough, vi': Cp helyépe; TO hinihopt 'hiccup, sniffle, v'; TO(M) hinhuniig 'hiccough, n'; Wr e'na. This may be another instance of Tep h < *h.

564c. *hiwaka / *hi'wVk: Eu hiwáka; My hé'okte. Much remains tentative. [NUA: Num, Tb]

COUNT; CONTAR

565. *tiN 'count': M67-107; I.Num263 *ce; KH.NUA; M88-cï4; KH/M06-cï4: Mn (ta)cïwï 'to count'; NP taciŋa 'to count'; Sh tïcïih 'to count'; Eu hicéma-n 'to count'; Cr ti'-itïi' 'he is counting'. Miller suggests *cï; however, in light of the *t* in Cr and Manaster-Ramer's suggestion that a different source than *c be sought for NUA medial -c-, as we see in the Num forms, unless the segments preceding them are recent prefixes, then we might better presume *tï, although I do not feel very comfortable with single syllable reconstructions, though sometimes that is all that is clear. Nevertheless, if *tï is reconstructed, then Sr tïi'wan 'count, join'; Ktn tï'uh / tï'ur 'count, v' and Cp tekwíne 'to count' also loom as possibilities. Ca téwan 'to count, tell, name, call' also begins with *tï, but is tied to the prominent UA stem *tïwa 'name' while Sr shows a different stem for Sr tïwan'kin 'name, call (by name)' and Eu, etc. The fact that the 2nd C is -w- in Mn, -m- in Eu, -ŋ- in NP -'w- in Sr suggests a cluster perhaps involving m: *tïmCa or *tïCma. [medial C cluster] [NUA: Num, Tak; SUA: Opn, CrC]

566. *powa/*puwa 'count': CL.Azt38 *po(wa) count; M88-po19; KH/M06-po19: CN poowa 'to count, recount, relate, read'; CN -poowal-li 'twenty in the vigesimal system (the count)'; Po po; Te poa; Za powa; Pl puwa. The pòo- portion of Hp pòotoyla 'to count' may belong, since a Hp word of that length must be a compound historically, though we would expect ö for *o, or o for *u, as Pl has, unless final *a* lowered the round vowel in Azt: *u-a > o-a. If so, Num *po'oC 'to draw, mark' may be related. [SUA: Azt; NUA: Hp]

Cousin: see relative Cover: see close

COYOTE, FOX; COYOTE, ZORRO

567. *isa'a(N)pa 'coyote': M67-109 *'is; I.Num20 *isa/*ica; BH.Cup *'iswït 'wolf'; Munro.Cup31 *'iísi-l 'coyote'; Fowler83; M88-'i2; KH/M06-'i2: Mn 'issa'a 'coyote'; NP ica'a 'coyote'; NP isa 'wolf'; TSh 'icappï 'coyote'; TSh 'isampapi 'wolf'; Sh isapai-ppï 'coyote (mythological name)'; Tb 'išt 'coyote'; Ca 'isi-ly 'coyote'; Cp 'isi-ly; Ls 'is-wu-t 'wolf'; Gb 'isát 'lobo'; Hp iisawï, pl: ii'ist 'coyote'. Note the Tb form aligns with the Hp pl form. The -c- in NP and TSh, but -s- elsewhere, may be due to an underlying glottal stop *-'s-> *-c-. [c/s] [NUA: Num, Hp, Tb, Tak]

- **568**. *kwana 'coyote': M67-110a *kwa; B.Tep3 *banai; CL.Azt217 **kwa 'coyote'; Fowler83; M88-kwa7 'coyote'; KH/M06-kwa7: TO ban; UP ban; LP ban; NT bánai; ST ban; Hp kwewï 'wolf (kwe- combined form)'. Add Nv bana 'coyote'. Fowler includes Sr wanaţ 'wolf or cougar', which is possible, since a comparison of Sr wanaţ 'wolf or cougar' with *kwana and *kwasi 'tail' with Sr -wad 'tail' would have two *kw > w in Sr. However, Sr wanaţ < *waLi (at lion) may be as likely. Might the -wï syllable of Hp be 'big', and thus *kwe* be only a vowel off from agreeing with *kwa, though the missing n is an additional concern? Cm waani 'fox' may agree with Sr wanat, whether either agrees with Tep or not. Might *kwana 'cry' relate to these? [*kw > w in Sr?] [SUA: Tep; but NUA?]
- **569.** *sïna'a- / *sinawa 'coyote': Dakin2004b: Kw sïna'a-vi; Ch sïná'avi; Ch(L) šïna'avi 'coyote'; Ch(L) šïnawavi 'Mythic Coyote, the pre-human, immortal personage'; SP šïnna-'avi 'wolf, dog'; SP šïnna-ŋwa-viN 'coyote'; WMU sïnáwa-vi / sūná'a-vi 'wolf'; CU sináæ-vi 'wolf'; Cm ceena' 'gray fox, coyote'. Jane Hill astutely notes that Cm may be a loan from SNum in light of its lack in other CNum languages. Karen Dakin (2004b) makes a case for including CN šooloo-tl 'paje, mozo, criado, esclavo' (Kartunnen); 1. hermano gemelo de Quetzalcoatl, 2. siervo de su gemelo, 3. se representa como perro (Dakin 2004b, 194)' and CN aa-šooloo-tl 'edible salamander (water-?); CN šolopi'-ti 'be foolish, joke, lie like a fool'; CN šooloopi'yoo-tl 'foolery, deceit'; CN šolopi'-tli 'idiot, fool, dolt'. Or might these relate to SP šïnna 'maternal uncle/nephew' or to *sina 'shout' (Wr siná 'shout'; Tr siná 'shout'; and Tep) at shout, when considering the identity of the first four segments and the frequency of 'cry, call' verbs as sources for coyote and wolf words? [w and glottal stop] [NUA: Num; SUA: Azt]
- **570.** *kayoC 'coyote, fox': CL.Azt 39 *koyoo 'coyote'; Fowler83; M88-ko26; KH/M06-ko26: CN koyoo-tl 'coyote'; CN koyowa 'lanzar, dar grandes gritos, aullar' (Simeón); CN i'koyoka 'roar, whir, crackle'; HN kayoč-ih 'fox'; Pl kuyuut; T koyutl; Z koyoot 'white man'. To everyone's foregoing, let's add Tr keyóči 'fox'; Wr keóci 'fox'. The first vowel is difficult, since it could have been anything, assimilating to the following o in CN or being raised and fronted by the following y, as in Tr and Wr; thus, the vowel a seems to be the best reconstruction, especially since HN actually has the *a*. As is well known, CN koyoo-tl is the source of Spanish coyote, later borrowed into English also. [SUA: Trn, Azt]
- **571.** *kawosi (<*kawasi or *kawaCti) 'fox': BH.Cup *qawé ... ic? 'fox'; HH.Cup *qawée; L.Son78 *kawasi 'zorra'; M88-ka22 'fox'; KH.NUA; KH/M06-ka22: Cm kaawosa' 'fox'; Ca qáwisi-š; Cp kawísi-š; Ls qiwéé-wi-š; Sr qööčat; Gb kawé'ŋa; Eu káos/ká'os 'fox'; Op kaosi/kawasi; Yq kááwis; Wc kaušai 'fox'. Add Ktn kawčač 'fox'. Miller includes Tbr kahi-lóvi, kahu-lówi 'fox' (kahu 'hill') and Tr kibó-či 'fox' and Tr kiyó-či 'fox'. Yet Tr wasači 'fox' seems to better belong here, with a lost first syllable, as Tr often loses first C's, at least. I put Tr kiyoči with *kayo-above, but *kapoci may underlie Tr kibóči and the above. The Tak languages and others certainly show *o* in *kawosa, though Lionnet's reconstruction *kawasi is feasible. The *a* in both Op kawasi and Tr wasači suggest *a* may be the original V, and might the *kawosi forms may be from an earlier *kawasi? The Tak 2nd vowels agree with *o even though they are high-front. [Tak V's; Gb e < *o] [NUA: Num, Tak; SUA: Trn]

- **572a.** *wanci'a 'fox': Fowler83 *woci'a; NP wacia'a 'fox'; TSh wocia; Sh wocia; Kw woziya; Ch oncia; and SP paonci 'beaver' may be a compound of 'water-fox'. Note that Ch and SP show the nasal; thus, it is in the reconstruction. Furthermore, intervocalic PUA *-c- >-y-; so these -c- are from something else, and a *-nc- cluster serves well; and NP shows *a*, suggesting the adjacent w changed the others' vowels change from *a > o. **572b.** *wacio > Tep *gasio > *kasi 'fox': B.Tep96 *kasio 'fox'; Fowler83; M88-ka22 'fox'; KH/M06-ka22:

 TO gaso; Nv kaš; PYp gas; NT kašíó; ST kašio. Miller combines these with *kawasi above; however, the s in the rest of UA should be h in Tep, and the *w should be g, but does not exist. The Tep forms better belong with *wanci'V as paired here. Bascom reconstructs initial *k, which could be; on the other hand, two of the five Tep languages show g instead of k, which raises the possibility that these are from *waci > Tep *gasi, followed by devoicing of initial g in Tep *gasi > *kasi. Devoicing of an initial voiced consonant is more likely than voicing of an initially devoiced consonant in the two Tep languages, and the *wa(n)ci'a forms in Num also agree with that reconstruction. In fact, we should not be surprised at Tep lacking the nasal, because the nasal in the -nc- cluster in Num appears in only 2 of the 6 languages, and Tep typically shows fewer nasals than Numic. Given that and the division g/k more likely being from g < *w in initial position, Tep *gasio (< *wacio) and Num *wanci'a agree through the first four segments. [devoicing of initial *w > Tep *g > k] [NUA: Num; SUA: Tep]
- **573.** *yïppa(C) 'red fox, Vulpes fulva(?)': Fowler83: TSh yïppe"-ci 'red fox'; Sh yïppai 'fox'. Add Ch(L) yïpaci (< *yïppa-) 'fox'. [NUA: Num]
- **574.** *yoko-pï-ci 'coyote (the copulater)': SP yoġo-vïci 'coyote' (< SP yoġo/*yoko 'copulate'); CU yoko-vï-ci; WMU yoqő-vi-či / yoqő-vü-či / yogówü-ci / yogówü-či / yogó-vi-či 'coyote, n'. This SNum form shows a fossilized absolutive suffix *-pï to which a later suffix *-ci was added. [NUA: Num]
- **575.** *kaLop 'fox': Tb(V) 'iklooba-l 'fox'; Tb(M) yekalooba-l 'grey fox'; and Tbr kahu-lowi/kahi-lówi 'fox'. Suspending Lionnet's choice of morpheme break may have Tbr being a reduplication *kaklopi > kahu-lowi, which may agree with Tb, sharing *kalop. Tr kibóči 'fox' has much in common with Tb and TrC. [NUA: Tb; SUA: Tbr]
- **576.** *waCNi 'fox': Fowler83 *wani 'gray fox': NP waŋŋi'i 'fox', WSh waahni' 'fox'; Cm waani / waa'ne' 'fox'; and perhaps Sr wanaţ 'wolf or cougar' belongs here. This is often associated with *waLi 'cougar' due to NUA n: SUA L; but NP η does not correspond to SUA L, and most Num forms suggest a medial cluster, so I lean toward its being a different set, though Sr could feasibly belong at 'mountain lion'. [NUA: Num, Tak]

NB, for *wo'i 'coyote' (< *waLi), see *waLi at 'lion'.

CRAB, CRAWFISH, SHRIMP; CANGREJO, CAMARÓN, CANQUI, ACOCIL

- **577.** ***pa-koCci** 'shrimp': My baa koóčim; Yq ba'akoči; AYq vaa koočim; CN akosili / akosilin. Wr kohcí 'shrimp' and others at 'skin' *koCci tie to the second morpheme. CN has its expected loss of initial *p, though the s < *c is open for explanation. [SUA: Trn, Cah, Azt]
- **578.** *cakaLi 'crab, shrimp': CN ačakalin / čakali 'shrimp'; Pl čakalin 'shrimp'; Yq ača'akari 'cangrejo'; AYq ačakari 'crab'. If CN ačakalin vs. čakali contains *(p)a 'water' in the first form, it may be that the TrC forms may be loans from Azt, since TrC does not lose initial *p like Azt does. [SUA: Azt, Cah]
- **579.** *tikwici 'crab': CN atekwici-tli / tekwici-tli; Pl tekwisis 'crab'. [s/c] [SUA: Azt]
- NB, Nv tasani 'camarón' and Eu tásan 'camarón' are likely a loan one way or the other, since Eu s should correspond to Nv h or Eu c: Nv s. So with either *tasani or *tacani, other forms need yet to be found. NB, for *koyo 'shell' occasionally meaning 'crayfish, snail' see 'skin'. NB, *sattun 'claw, crab' also sometimes means 'crab, crayfish'.

CRANE, HERON, EGRET; GRULLA, GARZA

580a. *koto (< *kuta?) 'crane': L.Son94 *koro 'grulla'; Fowler83; M88-ko18 'grulla'; KH/M06-ko18: Pg kookoD; Nv kokorh; Op koro-ci; Eu koró; Tr goró; Yq kórowe; My kóorou; Tbr koló 'pájaro'; NP kodïdï 'crane'. Fowler lists Mn kodito 'sandhill crane'; Mn kodi'i 'sandhill crane'; Sh koandata 'sandhill crane'; Kw ko'ota 'a kind of goose'; Ch cakora 'sandhill crane'. To these we can add TSh koto 'crane' and if a separate

- initial syllable can be explained, perhaps CU saqó-rï 'crane', which would match Ch cakora, if Givon's morpheme break in CU is not secure. The forms in a and b are likely related as KH/M06 has them, though reconciliation of the V's and medial C may not be clear yet.
- **580b.** *kaLu 'sandhill crane': Munro.Cup15 *qarəə-t 'bird sp': Ls qarúú-t 'sandhill crane'; Cp kərə-t. Munro states that the raising of Ls \acute{o} > \acute{u} is not uncommon; on the other hand, if it is Cp that has changed the vowels, then Ls and thus Tak *qaru show possibilities with the TrC forms above in something like PUA *karu, with vowel leveling in TrC (*karu > koro) in many cases, but remaining as is in Ls qarúú-t. In light of CU kurá-nöö-ci 'crane' and CU kurá-vi 'neck', could these UA forms be tied to an archaic form or variant of *kuta 'neck' since a crane's most prominent feature is its long neck? [vowels; *L liquids: r/L or t/r; synchronically perceived morpheme diachronically untenable in CU] [NUA: Num, Tak: SUA: Tep, Trn, Cah, Opn, Tbr]
- **581.** *pa-kon... 'heron': B.Tep259 *vakonoi 'heron'; Fowler83; M88-pa53; KH/M06-pa53: LP vakiñ 'heron'; NT vakóñi 'heron'; ST vakoon 'heron'. This probably contains prefixed *pa- 'water'; Sh koontïx 'blue crane' lends support to that probability since the initial three segments kon- are identical in both the Sh form and the Tep forms. And if there were a cluster, similar to that in Sh -nt- (*konto), could these possibly be related to the *koro/karu forms above? A change of -nt- > -t- > -r- is possible. Tep *-koni also looks much like B.Tep *kokonoi 'crow'; so could this be a compound meaning 'water-crow'? Cf. *kono 'crow'; perhaps *pa-kono 'water-crow'? [SUA n and NUA n] [NUA: Num; SUA: Tep]
- **582a.** *kwaso 'crane, heron': Fowler83: Tb waaša-l 'grey crane'; Cr kwaasuú 'heron'; Wc kwaašúu 'heron'. Perhaps not the kusi- syllable in Sh kusikkwan 'crane' and Cm kusikkwa'aa' 'crane, lit: gray thing that flaps wings'? What of the bwa syllable in Yq kóobwa'abwawi 'garza, grulla'; AYq ko'obwabwa'i? In light of *s > Tbr h, Tbr wahó 'garza' matches Cr, Wc, and *kwaso in all segments except the first where we would expect kw in Tbr. However, a kw/w dichotomy already afflicts these stems, as seen below. Or take out CrC, and the others point to *waso / *wasa, as below: [Tbr w < *kw?]
- **582b.** *wassa 'crane, heron': Fowler83: NP wassa 'great blue heron'; TSh waisa 'crane, heron, egret'; Sh wassa 'heron'. At 211 *wosa 'bird sp.' (Munro.Cup14 *wéésa-l 'bird sp.'), Ls wéésa-l 'the white brant' and Cp wisa-l 'mudhen' have all segments matching perfectly, so leave that as is, but w perhaps rounding the adjacent vowel (*wasa > *wosa in Cup) makes a possible tie with this set worth keeping in mind. Considering other matters, could NP wassa and the other Num forms derive from a loan from Tb waaša-l 'grey crane' above, or do the Num forms constitute a separate set that may include Tb and Tbr wahó? Are kw/w meshing movements (*kwaso/*wasV) involved in the forms above? [*kw/*w; Tbr ~ CrC] [NUA: Num, Tb; SUA: Tbr, Tak]

CRAWL; ARRASTRARSE, GATEAR

- **583a.** *nuyu'a 'crawl, as a snake, v': NP noyu'a 'to crawl (as snake)'; NP canuyui 'move, drag' (hand crawling ?); NP(B) nuyua 'crawl (as a snake)'; TSh nuyua 'to crawl (as snake)'; Sh nuyua 'crawl (of a snake or worm)'; Cm nuhyimi'arï 'to crawl (of snake)'. [NUA: Num]
- **583b.** *nuhia / *nuyua 'snake': NP nuyuadï 'snake', Sh pasinnuyua 'water snake'; Cm nuhya' 'snake of any sp (archaic word)'. What of Wr nawí 'corua, kind of snake' or Wr noí 'worm' or *sinawi 'snake'? [NUA: Num]
- **584.** *citikwa / *ciLikwa 'to crawl on the belly, like a snake': Kw čirïgwi 'crawl on belly (e.g., of a snake)'; Ls líqwa 'to crawl (of a snake)'. [Ls missing initial CV] [NUA: Num, Tak]
- **585.** *maN-wapa 'crawl on all fours': TSh mapah 'crawl'; Kw maava- 'crawl on one's hands and knees' (lost 2nd C cluster); Ch wavá 'crawl'; Ch ma-wáva 'creep'; SP maŋwava 'crawl, creep'; WMU mawáva-y / mowáva-y 'crawl'; CU mowóvwá-'æy 'crawl'; perhaps the first morpheme in CU mavá-tö'ö-way 'stoop on all fours, move or crawl on all fours'. Note nasal feature in SP and WMU. [NUA: SNum and TSh]
- **586.** *to... 'crawl': Mn matoo (< *mattoo) 'crawl'; NP mato'a (< *matto'a) 'crawl'; TSh mattotoon 'brace oneself with the hands, be on all fours' (vs. TSh mapah 'crawl'); Sh mattoo 'crawl on hands and knees'. Regarding the *to'a, consider Hp tooto 'creepy-crawly (baby talk)' though we would expect \(\bar{o} < *\text{o}\). If *maC- is 'hand', then we might expect the *to'a to be independent (as in Hp) or first (as in CN): CN toomaa-ne'nemi 'to crawl on all fours' and CN toomaa-keca 'get down on all fours, vrefl, set s.o./s.th. down on all fours, vt'.

 [NUA: WNum, CNum, Hp; SUA: Azt]

587. *kwani-mïLa 'crawl, v': TO baani-meD 'to crawl, creep'; NT baañímïrai 'to crawl (of babies)'. [SUA: Tep]

NB, for *cawa, see climb.

CRICKET; GRILLO

588. *(tuku-)cor(cori) / *tukaw-capaLa 'cricket': Miller lists the following forms in M88-tu17 'cricket/grillo'; KH/M06-tu17: TO cukugšuaD 'cricket, one who cares for a baby'; Wr tuhkucúrumi; My kííčul, kučúlim (pl.); Tbr toko-súl, tuko-súl; HN cicikame-tl. To those can be added others listed below, all of which together suggest a compound something like *tukaw-capaLa:

```
TO
       cukugšuaD
Nv
       tukag'sabarha
LP(EF) tuksáawer
PYp
       tuksarvar
NT
       tuukúsuli
ST
       kaalyi soi
Tbr
       toko-sol / tuko-súl
Wr
       tuhkucúrumi
Tr
       ŕukúčari
         kíičul
Yq
My
         kiíčul, pl: kučúlim
       cicikame-tl (<*tutuka....), but no *sor/cor syllable
HN
       selyimselyim
Cp
Ca
       sé'lyem (pl)
Ktn
       corcor
       su'usuí
Cr
Wc
       šuušúi
Eu
    bawisoróc
Hр
        -coro of Hp laqan-coro / naqan-coro / yaqan-coro 'cricket'; Hp laqana 'squirrel'.
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The Tep languages, especially TO and Nv, best show all the segments of a reconstruction approximating *tukawcapaLa (> Tep *tukag-sawaDa). I reconstruct *tukaw due to the a in HN and Nv tukag'sabarha, which a would naturally assimilate, its environment between u and w helping it to round to u in other languages; however, it is also possible that the a is due to the following a's. This first morpheme may be derive from *tuka/*tuku 'black'. Tbr may have been influenced by Tep languages, since it has s instead of c and is quite similar to NT. The other TrC languages show c instead of s. After *tukaw > *tuku-, the assimilatory rounding may have affected the next V as well: > *tuku-cupal (TO, NT). Perhaps *-capal or *-cupal lost its second vowel and then the resulting consonant cluster reduced to something of sibilant-round vowel-liquid-vowel: *-cu'l/cul/soro in NT, Eu, Wr, Yq, My, Tr, Cr, and Wc. In Cahitan (Yq, My), the whole compound lost the first syllable, and then the 2nd, I would guess, was also previously unstressed, which assisted its assimilation (*u > i), anticipating the place of articulation of the following alveolar consonant (c): *tukaw-cupli > *tukuculi > *kicúl > *kícúl > *kícúl > *kícul. The frequency of a c/s dichotomy in UA would have us consider the forms of Cp, Ca, Cr, Wc, and Eu to tie at least to the 2nd etymon of the compound. Hp and Tak involve only the 2nd etymon. The Tak forms (Cp, Ca) se'lyem may have glottal stop where the previous C was. Cp and Ca do have the sibilant and the liquid like others, and *s may be, and *-Cs->-c- when clustered. As for vowels, Cr, Wc, and Eu agree with *o rather than *u, perhaps from assimilation. [reduction, alveolar raising fronting preceding vowels, c/s; clusters, liquids] [NUA: Tak, Hp; SUA: Tep, Trn, Cah, Opn, CrC]

589. *tïpos 'cricket': M88-tu17 'cricket/grillo'; KH/M06-tu17: Eu tepósti 'grillo, hierro para herrar'; Wc tiïpuuši. Against these belonging to 'flea' is both Cr and Wc having tepï 'flea' at 'fly, n', though a recycled resemanticization may be possible. Does the 2nd semantic dimension of Eu tepósti tie in with *tï-pus-ta 'axe' and CN tepus/tepos-tli 'workable metal' and the other forms there in some unusual yet-to-be-explained way. [SUA: Opn, CrC]

Crooked: see circle

CROSS (OVER), OTHER SIDE OF, WADE (ACROSS); (TRAS)PASAR, ATRAVESAR(SE), (AL/DEL) OTRO LADO, VADEAR

- **590.** *nama/i 'cross over': M88-na37 'to cross, go over'; KH.NUA; KH/M06-na37: Cp nam- / náme 'cross, go over'; Ca námi 'cross, go over'; Ca námi 'change (clothes, mind)'; Sr naminkin(a) 'change into'. To these can be added Ls nááma/i 'go across, pass over'; as for Ls náámi 'run, race, pl' and the related terms, a race crosses a distance. [NUA: Tak]
- **591.** *nakutu 'cross, pass': M88-na38; KH.NUA; KH/M06-na38: Cp náaxčine 'to pass (on), spend a period of time'; Sr nakutk 'to cross'; Sr nakutu'k 'cross, be across'. [NUA: Tak]
- **592.** *wasi (> Tep *gahi) 'to/on the other side of': TO gahi 'on the other side of'; PYp gahi 'across, postp'; NT gahi 'atravesado'. [SUA: Tep]
- **593.** *kuwa (> Tep *kuga) 'other side of, behind': NT kugááhoga 'al otro lado'; NT kuugá/kuugáko(ga) 'a otro lado, volteado, para allá, para atrás'; PYp koakan 'on the other side, adv'; PYp koakid 'across the river, on the other side, adv'; ST ku 'al otro lado, para atrás'. [SUA: Tep]
- **594.** *mokoL 'other side of': NT móókoro 'on other side of, on other bank'; ST momkoran 'al otro lado, muy lejos donde no se ve'; and Tbr oko 'hundirse, vadear' since 'wading' often equates to crossing in UA. [liq] [SUA: Tep, Tbr]
- **595a.** *panowa / *panu 'pass, cross': CL.Azt125 *panowa 'to pass'; M88-pa49; KH/M06-pa49: CN panoo 'ford, cross a river, v'; CN panoaa 'to carry s.th. across, to go by, cross over'; Pl panu 'to pass, cross, go by'; HN pano' 'pass, vi; pass, visit, vt'. Add Eu vánu'u 'regar [water, irrigate]' as one does much wading when irrigating. **595b.** *panawia 'pass, cross': CN(RJC) panawia 'pass it, cross over it'; Eu vanavi 'por allá [through there]'. [SUA: Azt, Opn]

CROW: CUERVO

Terms for 'crow', though prime candidates for onomatopoeia, are worth noting if groups of terms appear similar and reconstructable to a proto-form. Miller and others combine several initial *a(t) forms together in M67-111*'at 'crow'; BH.Cup *'alwVt 'crow'; M88-'a13 'crow'; AMR1991d *ata-t-wït; KH/M06-'a13 *at. However, viewing them according to the differences after initial *a(t)... may be helpful:

596a. *attaC 'crow': NP ada; SP atta"-, atta-ppïci > ahtá-ppïci; Kw 'ataka-zi. In addition, CU táq'ö-ci 'crow' has much in common with Kw, at least.

- **596b.** *atawï-t 'crow': Cp álwet; Ca 'álwet; Ls 'álwu-t (perhaps augmentative *-wu- Miller suggests); Sr äṭawt; Ktn 'ačawa-t. Miller also lists Gb 'áwkot/'akáwkoc, pl. 'akáwkcam 'crow' though it does not fit as well as the other Tak forms do with each other. Note that the second vowel correspondences (e, e, u, after w), if applied to 'cricket' above, might say something for Tak *selyi < *sulV in 'cricket'. Miller compares these with Ls 'aláwaka 'turkey buzzard'. Manaster-Ramer (1993a) in "Blood, Tears, and Murder" and in "UA *tw" (1991d) observes that *-tw-> kw in UA languages; thus, PUA *ata-t-wït would account for Hp aŋwïsi 'raven, crow' and the Hp ¬ŋw- < *-tw-. Tb 'akapiš-t and SP atta-ppïci have much in common, especially if a t and/or k is clustered at one of the places of gemination in the SP form, as may be separate in CU táq'ö-či and Kw 'ataka-zi. Altogether Tb and SNum may suggest something like 'ataka-pi. Anyone inclined to wrestle this one may do so, but I agree with Miller and others that these NUA forms are likely related. [NUA: Num, Hp, Tb, Tak]
- **597.** *kakV / *kakawa (AMR) 'crow, n, make sound of a crow, vi'; M88-ka34 'to croak or make noise of a raven'; KH/M06-ka34 *kakawa (AMR): Cp qáaq; Ls qáqi 'cackle (of hen), croak (of raven)'; Sr qaaqk; TSh kaakki 'crow'; TO kaakag. Perhaps from M88-ka19: My káakte'era 'cuervillo'; CN kaakaaloo-tl 'crow'. [NUA: Tak, Num; SUA: Tep, Cah, Azt]
- **598.** *kono (> redupl *kokonV) 'crow': B.Tep103 *kokono-i 'crow'; Fowler83; M88-ko31; KH/M06-ko31: TO kookoD 'either pelicans, sea gulls, or cranes, goose'; NT kokóñi; ST kakoon. Besides the onomatopoetic probabilities, the Tep forms may be a reduplication of things like AYq kooni 'crow' and My kooni 'crow'. Also note that Tr koráči (from ka19 below) and TO kookoD pair well and show -L- rather than -n-. This seems to be in a compound at *pa-kono 'crane'. [SUA: Tep, Cah]

599a. *kaLa 'crow': L.Son73 *kara 'cuervo'; M88-ka19; KH/M06-ka19: Eu karac; Wr kaláci; Tr koráči; Tbr kará; CN kaakaaloo-tl 'crow'. Hill lists with a question mark My káakte'era / kaakté'era 'cuervillo'.

599b. *kwaLasa 'crow': Cr kwá'aca / kwa'acá 'crow' and Wc kwasa 'crow' align somewhat and may fit the above (in light of r > ' in Cr). Kw worosoo- in Kw worosoo-'ataka-zi 'raven' and Kw worosoo-'odï-ci 'small crow' share similar consonants with *kwaLasa, but with a vowel that preserves the initial rounding of *kw. In fact, Tr koráci in light of the above may suggest *kwara-ci > koraci or *koraci > kwaraci, though a reconstruction that nicely accomodates them all plus the *kara forms is difficult, but we can always blame the difficulties on onomatopoeia, when dealing with crows. [*L > '; SUA L and NUA L] [SUA: CrC, Trn; NUA: Num]

CROWDED, TIGHT (FIT); APRETADO, ATESTADO

600. *naCta / *nacca 'be crowded, tight, not fit, v': M88-na36; KH.NUA; KH/M06-na36: Sr naača' 'be too crowded, not fit'; Ls naca 'be too tight, fail to fit'. [intervocalic -c- in NUA] [NUA: Tak]

601. *ŋattas 'tight(en)': Ca ŋátaš 'be too tight (screws, doorknob, drawer), vi'; Hp ŋùūtsū(k-) / ŋīīcī(k-) 'for weaving to get tightened down, become a tighter weave, as from the addition of sticks in the basketry'. Syncope of the 2^{nd} V would create the cluster seen in Hp, and with vowels relaxing, this is easily plausible, and very specific semantically, and Hp falling tone often signifies a cluster. This pair has much in common with the pair above, except that the contrast between initial η vs. n does not normally exist within Tak itself. [NUA: Tak, Hp]

602. *cukka 'be crowded, constricted, tight': I.Num *cïhki 'mixed, crowded'; M88-cï5; KH/M06-cï5: Cm cïhki-/cïkk- 'be crowded, v'; SP cïkki 'be mixed with, v'; CU čïku'mi (< *čïkku'mi) 'be narrow, be constricted (in terms of space or gap or opening), v'; CN ciciika 'stuff s.th. tight, compress s.th. in a container, v. Because Num ï < *u often and CN i < *u, PUA *u may be the first V, and CN shows transitive *-a while SP and Cm show stative -i, both in accordance with their respective semantics as well. [NUA: Num; SUA: Azt]

Crush: see grind

CRY; LLORAR

603a. *opsi (AMR) > *ospV 'tear, n': BH.Cup *'es 'teardrop'; M88-'o6 'tears'; AMR1993; KH/M06-'o6: Cp -is; Ca -'is; Ls -'és; Sr -'ooṣp; Eu opét 'lágrima'; My ópwa-m 'lágrimas'; Pl iiš-aayu 'tear' (really?). Manaster-Ramer (1993) adds Tb opsi-, which fits Tak, Eu, and the above My forms, two of which (Tb and Sr) show a medial cluster. Add Ktn 'opši-č 'tear, n' and Kw opiya 'tear (from the eye)' and Sh oppai-ppï 'tears'. I agree with AMR's reconstruction, as *-ps- > -sp- is more likely than the reverse.

603b. *opowa / *opwa 'tear(s)': Additionally cognate with My ópwa-m 'lágrimas' are Yq 'opóawam 'tears' and AYq oppoa 'to cry', all of which relate well with Tak and the suggestion of *osp..., since s in a cluster goes to h/ø in Cah and would hardly be visible in these Tep forms either: TO oo'og 'tear';

NT óógai 'tears'; LP ooga 'tear'; Nv ovga oanna 'enjugar las lágrimas, v'. Nv ovga (v < *p, g < *w) certifies a Tep tie to Cah *opowa/opwa at least. For the others, UA *opowa/opwa > Tep *owoga/owga > ooga could be nearly expected. [NUA: Tb, Tak, Num; SUA: Tep, Cah, Opn, Tbr]

604. *(k)wïkï / *o'kï / *kwakï '(shed) tears': M88-'o6 'tears': AMR1993; Stubbs1995-28; KH/M06-'o6: Tr weke/oke 'shed tears'; Wr o'kéwa 'lágrimas'; Tr oke-wá 'lágrimas'; Ktn kwakit 'baby, newborn' as a crier seems as likely as not. Wc úkai 'lágrimas' corresponds to the TrC forms, or may possibly be borrowed from TrC. [SUA: Trn, CrC loan; NUA: Tak]

605. *coaka (< *cuwaka) 'cry': M67-114 *coak; B.Tep204a *suakai 'to cry, sg'; B.Tep205a *suaha'ni 'to cry, pl'; CL.Azt40 *čooka; CL.Azt304 *coaka; M88-co10 'to cry'; KH/M06-co10: TO šoak; LP šoakï; PYp soakim; NT súákai/suaákai; ST suak; Wc cua-/cuaka; CN čooka; Pl čuuka; HN čooka' 'weep'; HN čook-ilia 'weep for s.o.' Ls čááqa 'weep, cry' likely belongs, having assimilated the *o* to the following *a*'s: *coak(a) > *caaka. [dipthong, *oa > oo/aa; no w in Tep] [NUA: Tak; SUA: Tep, CrC, Azt]

606. *kwana 'cry': M67-115 *kwa 'cry'; L.Son114 *kwana 'llorar'; M88-kwa13; KH/M06-kwa13: Eu báana; My bwáana; Yq bwána 'cry'; AYq bwaana 'cry, weep'. This may tie to *kwana 'coyote', which see. [initial *kw] [SUA: Cah, Opn]

Miller lists several forms beginning with *na in M88-na10 'cry' and from M67-113 *na 'cry'; BH.Cup *ŋa 'weep'; L.Son167 *nara 'llorar'. I feel uneasy about lumping initial *na- forms, since they may be entirely unrelated stems, merely containing the fossilized reflexive/reciprocal prefix na-. So because after na- they bear no mutual resemblance, in addition to a *na vs. ŋa discrepancy, let's divide them into three groups: *namo'i, *ŋa, and *naLa: 607. *namo'i 'cry': M88-na10 'cry'; KH/M06-na10: Sh nawoi / namoi 'to cry, d/pl subj'; WSh nawoi; TSh namo'i 'cry, make noise (of animal), vi pl/dl' (vs. yakai' sg/dl); Cm nawoo'i /nahwooi 'cry, v pl'. This is the plural suppletive form in Num to *yaCka-i 'to cry, sg' below. [m/w] [NUA: CNum]

608. *ŋaŋa 'cry': BH.Cup *ŋa 'weep'; M88-na10 'cry' (also at nï4); KH/M06-na10: Cp ŋaŋa; Ca -ŋáŋ-; Ls ŋáá-. Jane Hill's (p.c.) astutely adds Tb: Tb(M) 'anaŋa'at ~ 'anaŋa' 'be weepy, cry slowly, sob'; Tb(H) annaŋat, perf: naŋ, inf: annaŋ 'cry, cry out' (C.F.Voegelin 1935, 109); anaŋat 'mourning ceremony' (Kroeber 1925, 609). Add Tb(V) 'anaŋ~naŋ 'make him cry'. Tb does not have initial ŋ, so change the first ŋ > n, i.e., naŋa < *ŋaŋa? [initial ŋ in Cup, but not Tb] [NUA: Tak, Tb]

609. *nata / *naLa 'cry': L.Son167 *nara 'llorar'; M88-na10 'cry'; KH/M06-na10: Op nara; Wr nalá-; Tr nará; HN nanalka' 'snort, bark (of dog)'. [liquids] [SUA: Trn, Opn, Azt]

610. *yaCkaC 'to cry, sg': I.Num290 *yake/*yaka 'cry'; M88-ya11 'cry'; KH/M06-ya7,11: Mn yaġa 'cry, vi'; NP yaka 'cry, sg' (< *yakka); TSh yakai"/yake; Sh yakai" 'cry, sg'; Cm yake 'cry, sg'; Kw yagi 'cry, sing (of bird), crow (of rooster)'; SP yaġa 'cry, neigh (horse), hoot (owl)'; CU yagá-. Add Ch(L) yaga- 'cry' and Cp -yax 'say, do'; Ca yáx 'to be so, to say'; Ls yá(x) 'say, tell'; Hp yaw 'quotative particle: it is said, they say, I've heard'. Both NP(B) and NP(Y) have yaka 'cry, vi' (< *yakka) showing gemination, though others lost it. [NUA: Num, Tak, Hp]

611. *yu'n 'cry, play instrument': M88-yu21 'cry'; KH.NUA; KH/M06-yu21: Sr yuu' 'cry, weep'; Sr yuu'nin 'play instr'; Gb yú' 'cry, play instr'; Gb yuyún 'estar llorando'. [NUA: Tak]

612. *paka 'cry, v': Hp pak- 'cry'; Tb(M) pahaa'at/'apahaa' 'cry, bawl, howl' (Tb h < *k); Ktn paka' 'ceremonial yeller, clown who shouts all day to announce a fiesta'. Tbr waha 'llorar' may belong since Tbr initial w < *p, though h < *k is less established for Tbr. [Tbr h < *k] [NUA: Hp, Tb, Tak; SUA: Tbr]

613. *otoNwa / *otoNkowa 'groan': SP oronwi 'roar, growl'; WMU oróġo<u>a</u>'nI'ni 'groan in pain'; CU 'oróġwa'ni 'suffer'. [NUA: SNum]

Cup: see bowl Cure: see heal Currant: see berry

CUT, PIERCE, STICK IN; CORTAR, PERFORAR, PUNZAR, ENSARTAR, AGUJEREAR, CLAVAR

614a. *sika / *siki 'cut hair, clip, mow': VVH115 *siki/sika 'to cut hair, mow'; M67-118 *sik 'cut'; L.Son238 *sika/sik-i 'cortar'; B.Tep64 *hikiti 'to cut'; M88-si1 'cut hair, mow grass, etc.'; KH/M06-si1: TO hiik 'clip, cut, mow (grain, etc.)'; PYp hikica 'cut, vt'; LP iktï/hïktï, pl. hïkïmia / ikumiaku; NT iíkai 'cortar'; NT ikítïlkïi 'cortar'; NT ikumai 'picar'; ST hiktyi; ST hiika; Wr sihka / sihki; Tr seká/sikí; My síkka 'cortar pelo'; Tbr sika 'cortar'; Cr tyí'i-sih-če 'he is slicing it with a knife'. To these we should add Wc šíka 'cut with knife or scissors, v'. For inspection and pondering, let's separate Num's initial c forms from the s forms:

614b. *cïkkaC 'cut (off, to pieces)': NP cikka'a 'cut with scissors'; Kw cïkavidï (< *cïkkapintï) 'cut off, saw'; CU cïkïray (< *cïkkïtay) 'cut to many small pieces, shred'.

614c. *caka 'cut': Hp càaqa 'cut down, cut a living plant off at the base'; Mn caha-t 'cut meat'. WNum languages sometimes show h < *k. Cf. *pukuL below and *wakay 'two' etcetera. [Mn h < *k; split of NUA c vs. SUA s] [NUA: Num, Hp; SUA: Tep, Trn, Cah, Tbr, CrC]

- 615. *fika / *fiki' 'cut': Sapir; VVH113 *ti'ski'/*ti'ska 'to cut'; M67-117 *tek 'cut'; I.Num240 *tek 'cut'; L.Son289 *tik-so 'picar'; CL.Azt218 **tik- 'cut'; M88-ti'23; KH/M06-ti'23 *tikat: TO -čk/-čik; Hp tiki' 'cut'; CN teki 'to cut s.th.'; Tb tidi'ha~'īti'di'ha; SP tixánni 'to cut up meat'; Mn tihee'na 'scissors'; Sh tikoa 'scissors'; Sr tihtii 'to work'. To these we can add the latter part of NT ikiítiikii 'cortar'; Eu mé-teka 'cut with an axe' (Eu mé-teki pret); Eu síteka 'cortar' (Eu sí-teki pret); and Ktn tik 'break ground with a stick'. I like Miller's inclusion of Sr tihtii 'to work' which with Ktn tik 'break ground with a stick' and CN teki-panoaa 'work' show this stem (CN teki- 'cut') as work, tilling, or agriculturally digging/cutting the ground. Note the SP forms differ in SP tikka 'eat' vs. SP tiganni 'cut up meat'. Add Kw tihani 'dry meat, jerky, butcher'; WMU tiánni / tüáni 'butcher animal, cut up meat, skin (an animal), vt'; CU tiáni 'skin, vt'. This UA stem *tika is probably the 2nd morpheme of Wr & Tr me'te- and Eu méteke 'cut with axe', perhaps from *mik-tikV 'smite-cut'. See other forms with *tikV under 'axe'. Eu síteka appears to contain *tika (and possibly Wc šíitée). [*-k- > Tb -h-] [NUA: Num, Hp, Tb; SUA: Tep, Trn, Opn, Azt]
- **616.** *tikso 'pierce': Eu tékso 'pierce'; Eu hi-tekso-rat 'bordon'; Op tesso-a 'punzar'; Tr teso 'apoyarse en el bordón'. Miller had these combined with *tika 'cut' above; however, Eu has separate forms: Eu tékso 'pierce' vs. Eu teka in Eu síteka 'cortar' (Eu sí-teki pret) and Eu mé-teka 'cut with an axe' (Eu mé-teki pret). [SUA: Trn, Opn]
- **617. *puku**L 'pin on': M88-pu20; KH.NUA; KH/M06-pu20 *pukul: Cp púkulva'a 'brooch'; Sr pukulq 'bec pinned'; Sr pukul-kin 'pin, vt'. Let us consider also CU capúukway 'pin on'; Mn (na)cipohínu 'anything pinned on'. [Mn h < *k, Num n < *L, V > i/_L; liquids] [NUA: Tak, Num]
- **618.** *ka'a 'cut (sg flexible obj)': M88-ka32; KH/M06-ka32: Sh ka'a 'cut s.th. flexible'; Cr tyi'i-ka'a 'he is cutting firewood'; Cr kaí-ri 'firewood'; the preceding Sh and the first Cr form certainly agree. Add CU küáy 'cut, mow, chop off' (the sg obj form vs. mass). The others of this collection in M88-ka32 seem dubious and are listed elsewhere in this work. [NUA: Num; SUA: CrC]
- **619.** *mak / *ma'k 'chop': Tbr mak 'hachar' and Tbr isá-/ih- 'cortar' combine to yield Tbr mak-isa-mwa-y 'corta'; Yq má'ako 'chop'; My má'ako 'cut with an axe'; Tr me'té 'chop'; Wr me'te- 'cut with an axe or machete'. Tr and Wr may be compounds from *mak-tïk. [SUA: Trn, Cah, Tbr]
- **620.** *katu' 'cut, wound': Sapir: CN kotoona 'cut s.th., break s.th. off, wound s.o., vt'; CN kotooni 'snap, break (of thread, rope), vi'; SP qur'u/quttu 'poke in a hole'. Added to the preceding pair (CN, SP) noted by Sapir, Sr katu' 'cut up, cut (into several pieces), vt' fits well and likely shows the original voweling; for whenever two similar vowels occur, probabilities are 80% (vs. 20% in a 5 vowel system) that one assimilated to the other rather than originally being identical; in this case, the first vowel probably assimilated to the second in SP, and the vowels leveled in CN. Semantically, Sr fits CN better than SP. In spite of the two variant, but both round vowels, I would accept this set of Sapir's as probable, though it appears that intervening Uto-Atecanists did not or lost track of it. [V assim] [NUA: Num, Tak; SUA: Azt]
- **621.** *to'na(C) 'pierce, stab, hit': Mn tona 'prick, stick (with a sharp object), nail, vt'; Mn tonakï 'puncture, nail, vt'; Mn to'noo 'hit by throwing, shooting'; NP tona 'hit with fist, vt'; TSh tonna" 'poke, stab, stick, pierce'; Sh tona"/tono" 'pierce, stick with sharp point'; Cm tonarï 'stab, pierce, sting (of insect)'; Kw tono 'hit, strike, pierce, puncture, stab'; Ch toná 'hit, punch, stab'; SP tonna / ton'na 'hit, stab'; CU tö'náy 'hit, strike, punch (only once)'; CU töná-pagá-y 'strike (of lightning)'. The k in Mn (vs. g), the p in CU (vs. v), and the gemination feature of the CNum forms all point to a final consonant. [NUA: WNum, CNum, SNum]
- **622a.** *sowa 'pierce, prick': CN soo 'pierce, draw blood'; CN so'soo 'string things together by piercing and threading them'; CN so'soowa 'pierce, nail s.th., vt'; CN so'solwiaa (applicative of so'soo); Yq sóa 'apuñalar, picar'; Yq sóosok 'clavarse una atilla, espinarse'; AYq soa 'poke, prick, puncture'; AYq hih/his-soa 'poke, prick, vt'; My sóiya 'picarse'; Tr so- 'pierce'; Tr čihiso- 'pierce, prick, puncture'; Tr nata 'abertura'; Tr nata-so- 'pierce'; Wc šuu 'ensartar'.
- **622b.** *so'a/*so'i 'pierce, sew, shoot arrow': KH.NUA: Sr hö'ai 'sew'; Ls şé'i 'shoot with a bow, pierce one's body'. The semantics of 'pierce' in both a and b, as well as Sr 'sew' and CN 'thread' likely tie these together, pun intended. [w/'] [NUA: Tak; SUA: Trn, Cah, CrC, Azt]

- **623.** *puta / *puLa 'pierce': Hp poro(k) 'get a hole in it, get perforated or punctured'; Eu vursiven 'lia, aguja'; Ls póra/i 'prick, poke, stab'; we would expect the Ls vowel to be u, as both Hp and Eu agree with *u, but the Ls vowel can be explained by the assimilative raising phenomenon very common in UA: *u-a > o-a. Why r not l in Ls? [liquids; *u-a > o-a] [NUA: Hp, Tak; SUA: Opn]
- **624.** *mina / *muna 'pierce': CN miina 'shoot (arrow)'; CN tla-miini 'bite, sting (of insect)'; ST moiñña 'gore'; consider also Sh tasaminci 'ant' in light of Num *tasi'a 'ant'. Miller includes the CN form with several forms of initial *mu 'throw' at shoot, which is not out of the question for this set; however, Sh shows the same vowel as CN, while ST is enigmatic. [nasals] [NUA: Num; SUA: Tep, Azt]
- **625a.** *wï(h)k 'cut': KH.NUA; KH/M06-wï14: Cp wéke 'cut, slice'; Ca wék 'cut, slice, plow'; Ls wóki 'cut, let bleed'; Sr wïhkuv 'beat, vt, distributive of Sr wïgööv 'hit, vt'. [NUA: Tak]
- **625b.** *wu(hu)k 'pierce': AYq wohoktila 'pierced'; ST gu'kia'/guguukia' 'be nailed, stuck in, vi, pl subj inanim, stand up, pl subj anim'; ST guguuk 'be stuck in, be standing, v stative and pret'; ST kiïka' and kiïk are the suppletive singular forms of ST gu'kia'/guguukia' pl. The glottal stop in ST is the Tep correspondent for PUA *h, besides the facts that one of the Sr forms has -h- and that a cluster of *-hC- reduces to -'C- (h to glottal stop) throughout much of the rest of UA. Furthermore, a final syllable of ku with a vowel of -u matches the Sr distributive form and may also explain the assimilation to it in ST even if the other u's were not original: *wVku > wuku > guk. Or if something like *wu(hu)ku were original, Kenneth Hill raises the possibility that the rarity of *wu syllables in (P)UA, due to the usual merger of the similar sounds, may have encouraged a dissimilation: to -o-in Wr and to -i- in Tak (p.c.), if 588a and b are related at all. For both i and o are next to u, though different directions. [SUA: Tep, Cah]
- **626.** *cuk 'jab, peck, cut': Dakin 1982-118: Ca čuk 'claw, vt (as cat), stick, vt (bur), grab a handful of s.th.'; Ca -čúčuk- 'peck (of bird as fruit)'; Yq čuk-ta 'cut, v'; My čuk- 'cut, v'; perhaps Tr ču'a- 'point, beak'; Tr ču'kura / ču'kora 'woodpecker, n'. [NUA: Tak; SUA: Trn, Cah]
- For M67-415 *cek 'stick, poke'; M88-cï8; KH/M06- cï8, I split Wr ceha- and Tr čéra into a and b, and put Cr ná'ice 'it bit me' (also allomorph -cei-) with *kï'c 'bite' perhaps with na- prefix:
- **627a.** *ciha 'poke, stab': Wr ceha- 'be pricked, stabbed'. With Wr's medial -h- term, consider NP u cihanni 'poked, vt'; NP cihi 'poked, v' which terms contrast with medial -C- of NP cika('a) 'cut into s.th.' above. [NUA: Num; SUA: Trn]
- **627b.** *ciLa 'poke, cut': Tr čéra 'garrocha, dardo para pescar'. With Tr's medial -r-, consider Eu céde 'clavar' and Cp čéle 'snip, cut'. [NUA: Tak; SUA: Trn]
- **627c.** *ci'- of SNum *ci'-nVkki 'stick in/through': Kw cünü-ki 'put through a hole'; SP ci-'nikki 'stick with a point'; WMU či'-nüga-y 'stick in (once and leave in)'; WMU čihčí-nihgi 'stick/poke in and out'. [NUA: SNum]
- **628.** *(ciC)-kuLa/i / *kutV 'pierce': Tr go'ri-su 'pierced'; Wc kïrapúši-(ma) 'nail, n.(v.); Wc kïrušui 'stick, fix in place with s.th. sharp'; CU cikúrïy 'poke with, stick into' (< *cikkutïi); Kw či-kuri 'poke'. Jane Hill (p.c.) adds Sr cikïïn 'poke, prick, stab, stick in'. There may be the consistency that NUA shows the *ciC- prefix, while SUA does not. The first morpheme *ciC/*cik- (of this compound) is cited at 'edge'. The Num terms are usually cited as compounds of *ci"- 'do with a point, instr prefix' (see at edge); so might the *kutV morpheme in these terms be cognate with the *-kura of Tr ču'kura / ču'kora 'woodpecker, n' (Tr ču'a- 'point, beak'), also listed above at *cuk? [NUA: Num, Tak; SUA: Trn, CrC]
- **629a.** *ta-pusa 'pierce': Sh(Cr) na-ta-pusa 'attach by piercing through s.th.'; Sh(M) pusa 'pierce through and connect with (e.g., nail, bolt, needle)'; last half of Wc kïrapúši-(ma) 'nail, n.(v.); perhaps Tr natabu 'perforar, traspasar, agujerar de lado a lado' (cf. Tr nata 'abertura'; Tr nata-so- 'pierce'). Cf. *pos at break. **629b.** *tupusi 'pierce': Mn tupusudugi 'be punctured'; Ch topósi-gi 'stab, v'; Ch topósi-ki-nkï 'stab, pierce, v'. [NUA: Num; SUA: Trn, CrC]
- **630.** *saLa' 'chop, split': Sr şara' 'split'; Ktn šara' 'chop'; perhaps Ca sali 'tear, rip, vt'; Ca saslame 'tear, rip, caus'. [NUA: Tak]

- **631. *cappakin'a-** 'tear, rip, cut': Kw cïpïgiina- 'tear, rip'; Ch capïkin'a 'tear, v'; WMU č*ah*ppáqa'na-y / č*ah*ppáġaná-y / č*üh*ppáġaná-y 'tear, rip, cut, v'; CU č*a*páġay-'næy 'tear up, tear open'. [NUA: SNum]
- **632.** *kïta 'cut (hair, weeds)': Sh kïta 'cut (flexible pl objs)'; WMU gürá-y / güré-y / qüra- / qüré-y 'cut (hair, weeds), mow, haul water, vt'; SP qüra- 'cut in the hair'; CU küræy 'mow, cut (obj mass)'. This verb is generally for pl or mass obj, and pairs with *ka'a sometimes for sg obj, but a cognate tie is doubtful in that a medial *-'- vs. *-t-alternation in Num is not usual. [NUA: Num]

NB, for *cikka / *ciNkV 'cut, pierce, thorn', see at edge.

DANCE; BAILAR

- **633.** *nïkkaC 'to dance': M67-121 *neka; I.Num120 *nïhka 'dance'; M88-nï8; KH/M06-nï8: Mn nïga; NP nïkka; TSh nïkkantïn; Sh nïkka; Cm nïhkana/nïhkarï; Kw nïka (< *nïkka); CU nïkáy. Add Ch(L) nïkapï 'any dance danced in a circle'. All but Mn suggest medial *-kk-; and Ch(L) and perhaps CNum suggest a final -C. M88 and KH/M06-nï8 note a possible tie with B.Tep181 *nï'ïi 'sing, dance, v'. It is possible if medial *-kk- > Tep *-'- is solidified. [medial C cluster > glottal stop in Tep?] [NUA: Num]
- **634.** *tawiya / *tuwiya > *tuya 'dance' and > redupl *tu(w/v)tui: CL.Azt41 *ihtootia 'dance'; KH.NUA; M88-tu21 'to dance'; KH/M06-tu21: Sr tohto' 'dance, vi'; Gb tóvtu'ax 'tatahuila, kind of dance'; Gb tóvto'ar 'the tatahuila dancer'; CN i'tootiaa 'dance, v'; CN mi'to'-tli 'dance, n'; Pl ihtutia 'dance, vt/refl'. Add Ktn tuhtu' 'dance, v'; Ktn tuhtuic 'dance, n'; Ktn tuhtuhyit 'dancer, n'; and probably AYq tatawiilo 'turn around, vi'? Add also PYp tuuda (< *tuya) 'dance, vi' and TO čuuđ 'do a squaw dance, v.r.' which may most clearly show the underlying form of the other reduplications. [Gb -v- < -w-] [NUA: Tak; SUA: Tep, Cah, Azt]
- **635a.** *yawa/i / *yaCwa/i 'dance, v': Wr yawí 'fiesta, ceremony, dance, n', Wr yawi- 'dance (especially of women), v'; Wr yautá-ni 'dance, v'; Tr awí-mea 'dance, v'; Eu dáve/dawe 'dance, v'; Eu dáhdauh 'dance, n'; Tbr mi-nyamwa-lí-t 'rain dance'; and probably Cp yawe 'sing (of bird), v' since verbs of sing and dance and fiesta often overlap semantically. [SUA: Trn, Opn, Tbr; NUA: Tak]
- **635b.** *yï'ïwa / *yi'iwa (< *yaCwa ?) 'dance, v': Yq yé'e 'dance, v'; Yq yí'iwame 'dancers'; My yé'eye/yi'i-; AYq ye'e; yeye'eme 'dancers'; AYq yi'iwa 'a dance'; yi'iwame 'act of dancing'. The glottal stop in all the Cah languages may reflect a lost -C- in a cluster, simply lost in Tr/Wr (*yaCwa > *yawa), but realized as glottal stop in Cah, then separated. [SUA: Cah]
- **636.** *winima 'dance, v': Hp winima 'dance, vi sg'; Ch winimi 'dance, v'; Kw winimi 'dance, v'; TO wiinim 'dancer in a harvest ceremony' may be a loan from Hp, though other instances of Tep w = *w exist (cf. *mawiya 'mountain lion'). [TO w = NUA w] [NUA: Num, Hp; SUA: Tep loan?]
- 637. *tani 'dance, v': Ls táni 'do a certain dance, v'; Ls tan'i-š 'that certain dance'; Cp táne 'dance, vi'. [NUA: Tak]
- **638.** *muLawi 'dance, v': TO mualig '(of a person) to spin or dance'; Tb muuluwat 'dance, v'; Tb muuluwiil 'dance, n'. While the vowels are difficult, this pair shows three consonants in agreement. If the Tb vowels assimilated between the initial syllable's u and the third C w, not to mention Tb's tendency toward preservative vowel assimilation; then perhaps TO's vowels are closer to the proto-vocalization, and later transpositioned relative to consonants (phon 2.15.4); regardless, three consonants agree, though only the first of the three vowels is secure. [Tep V anticipation] [NUA: Tb; SUA: Tep]

NB, for B.Tep180 *ni'ii 'to sing, dance', and *ni'i 'song', see 'sing'.

Dark: see night and black Daughter: see woman

Dawn: see sun Day: see sun Dead: see die Deep: see down

DEER; CIERVO, VENADO

639. *suCkaC / *sukkawi 'deer': BH.Cup *súqat; M67-124a *su/*suka 'deer'; Munro.Cup32 *şúúka-t; L.Son261 *suha 'venado bura'; M88-su8 'deer'; KH.NUA; KH/M06-su8: Ls şúúka-t; Cp súqa-t; Ca súka-t; Gb sukát; Sr hukaht; Tbr suhá-t/ suká-t; Tr sohawí; TO huawi; Op sua. Add Ktn hukaht 'deer'. Lionnet separates -wi in *suha-wi for TO huawi and Tr sohawí. The absolutive -t consistent in Tak suggests a final C, which could possibly be that -w-: *suCkawi > sukaw / sukaC. All the Tak languages also suggest geminated *-kk-. [*-kk-> h (Tbr) > Ø (Tep); Tep w = *w] [NUA: Tak; SUA: Tep, Trn, Tbr]

640. *cu' 'deer': M67-124b *cu 'deer'; M88-cu3; KH/M06-cu3: Tr čo'marí / čumuri 'venado, coliblanca'; NT suiimáli 'el venado'; ST suimal 'venado'; and perhaps Eu súpuc 'a certain spotted deer'. Most forms compound with *maLi. [*u-a > o-a in Tr] [SUA: Tep, Trn, Opn]

641a. *masa / *maso 'deer': M67-125 *mas; L.Son140 *maso 'venado'; CL.Azt42 *masaa, 305 **maso; Fowler83; M88-ma5 'deer'; KH/M06-ma5: Eu masót; Wr mahói; My mááso; Yq mááso; AYq masso; Op maso-t; Cr mwašá; Wc máşa; CN masaa-tl. Jane Hill astutely adds Tb(H) maašatt 'antelope'. In this set CN, CrC, and Tb agree in *masa, while Trn, Opn, Cah show *maso. [Wr h < *s?; final a vs. o] [SUA: Trn, Cah, Opn, CrC, Azt; NUA: Tb] **641b.** *masa-pu 'sacred items': M88-ma5; KH/M06-ma5: Gb másavot 'sacred objects'; Ls máaşavut 'ceremonial bundle'; Cp máasivet 'sacred treasure of the lineage'. Miller's inclusion of these three Takic forms with M88-ma5 'deer' on the basis of phonological similarity is not out of the question, but not out of being in question either, as to their cognation with 'deer'. As compounds, they at least form a set themselves. [Cp e = Ls u] [NUA: Tak]

642. *maLi 'young of deer': L.Son138; M88-ma8 'cria de venado'; KH/M06-ma8: Tbr malí-t; Op marici; Tr maríci. These may be a variant of *mara 'young one, offspring' and they may be part of the compound above: *cu'-maLi. [SUA: Trn, Opn, Tbr]

Tep *ciki and Num *tihiya/*tikiya are likely related; they only differ in a palatalization and a slight vowel variation and missing final segments in Tep: *tikiya > *tihiya (Num), > *tikiya > *ciki > *siki (SUA: Tep).

643a. *tīkiya 'deer': Sapir; M67-123 *te/*tek 'deer'; I.Num237 *tihi' 'deer, horse'; Fowler83; M88-ti24 'deer'; KH/M06-ti24 'deer': Mn tihita (< *tihitta) 'deer'; Mn tihiya 'old buck deer'; NP tihida; NP(B) tihiča 'deer'; NP(B) tihida 'horse or deer'; TSh tihiya(n); Sh tihiyan; Cm tihiya 'horse'; Kw tihiya; Ch tihiya; SP tigia deer; SP ti- 'deer, game'; CU tiíyi (tií-yi is Givon's syllable division); Tb tišiibat 'to scrape, shave a deerskin (*sipa 'scrape, shave'); therefore, ti- 'deer'. Though the first vowel is problematic, I would guess that Tb tohii-l 'deer' is also related, since the other three of the first four segments agree. From Sapir on, some have mixed these with *tinnV 'antelope' (< *timina), which is another example of syllable reduction causing a cluster: *timina (Ktn) > timna > *tinna. The SP form definitely suggests k, while the other Num forms show h or nothing. So again, *k > h in Num, as in 'two' and 'three'. [*-k- > -h- in Num]

643b. *ciki 'white-tailed deer': TO siiki 'white-tailed deer'; PYp siiki 'white-tailed deer'. [NUA: Num, Tb; SUA: Tep]

DEFECATE, EXCREMENT, FECES, INTESTINES; DEFECAR, ESTIERCOL, HECES, TRIPA(S)

644a. *kwiNtaC > *kwittaC 'defecate, v; feces, n': Sapir; VVH54 *kwiuta 'excrement'; B.Tep9 *biitai 'excrement, defecate'; M67-126 *kwita 'defecate'; I.Num87 *kwi(h)tah 'excrement, defecate'; L.Son125 *kwita; CL.Azt53/224 *kwitia / **kwita 'excrement'; M88-kwi1; KH.NUA; KH/M06-kwi1: unless noted otherwise, the following are verbs meaning 'defecate, v': Mn kwita (< *kwitta) 'defecate, vi'; Mn kwidápï 'feces, n'; TSh kwita"; Sh kwita"; Cm kwitapï 'feces, n'; Kw kwida; Ch kwicá; Ch(L) kwičapï 'excrement'; SP kwica; SP kwicá-ppï 'feces, n'; CU kwicay; CU kwicá-pï 'feces, n'; Hp kwita 'feces, n'; TO biit; PYp biit; NT biityai; ST biity; ST biič 'feces, n'; Eu bitát 'estiercol, n'; Tbr kwitá-t 'feces, n'; Yq bwita; My bwita; Wr wihtá; Tr wita-mea; Tr witá/guté 'feces, n'; Cr ču'ita 'he is defecating'; Cr čwitá 'excrement, n'; Wc kwitá 'feces, n'; CN kwitla 'excrement, n'. Ken Hill adds Ls kwiláli 'to soil, make dirty'—good inclusion! Add WMU qwiičá-y / kwičé-y 'defecate, vi'. Though Ls lost it, a medial cluster apparent in all of Num is certain. Kw -d- suggests a nasal, as *-t-> Kw -r- and *-tt-> Kw -t-, but *-Nt-> Kw -d-. Gemination in most Num absolutive *-ppï forms means a final -C. This stem is in all branches of UA except Tb. Note that the Tr pair exemplify the erratic behavior of *kw: witá/guté. *kwitta 'buttocks' and related Num forms (TSh kwita; Cm kwiita; Kw kwita) are likely related to *kwiCta 'to defecate'.

- **644b.** *kwittuN 'buttocks': the same may apply to *kwiCtu(N) 'buttocks': Kw kwita 'buttocks'; Ch kwitú-mukwi; Ch kwitu 'anus'; Ch(L) kwitumpi 'anus'; SP qwittuN 'buttocks, anus'; SP qwittua 'bottom'; WMU q*oh*ttúwa 'rear, hind end'; CU kutú-pï 'buttocks' (< *kuttú-ppï).

 [*-t->-c-, not -r-, in CU, SP, Ch] [NUA: Num, Hp, Tak; SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]
- 645. *şa'a 'defecate, v'; *şa'i 'intestines': M88-sa12; Munro.Cup58 *şaa'i-š 'guts'; KH.NUA; KH/M06-sa12: Tb ša'; Sr şaa' 'defecate, vi'; Sr şaii'č 'what has been defecated, feces'. KH/M06-sa12 has. Cp şá'i 'guts'; Ca sá'ily, poss'd: -sá'i 'guts'; Ls şá'a 'defecate, v'; Ls sáa'iš 'feces'. Ken Hill adds Ktn ša' 'defecate, v'. Some Uto-Aztecanists have tentatively tied these with *sappu 'stomache' (or Num *sap-pï 'entrails', which could be), but see discussion at stomach. Miller (M88-si7) includes these Tak forms with *si below. [NUA: Tak]
- **646.** *si 'intestines': VVH66 *si 'guts, entrails'; B.Tep61a *hihi 'intestines'; B.Tep61b hihidï 'his intestines'; M67-476 *si/*ci 'yellow (guts, gall)'; L.Son246 *siwa 'tripa'; M88-si7; KH.NUA; KH/M06-si7: Mn sihi 'entrails'; NP si 'guts'; Kw šii/sii-vi 'guts'; Cp şá'i 'guts, belly'; Ls şíi 'intestines, guts'; Gb -sin tripa (poss'd); Sr şi/şii 'intestines'; Hp siihï; TO hihij; Wr siwá; Tr siwá; My sííwa. Ken Hill adds Ktn ši-c 'intestines'. Though the *sa'i forms have a differing vowel, a vowel assimilation (*sa'i > si'i) could have the two sets related, but a number of languages have differing forms in each set, so I follow Miller and Hill in separating the sets (sa12 vs si7). [*s vs. ş] [NUA: Num, Hp, Tak; SUA: Tep, Trn, Cah]
- **647.** *ci... 'gall, bile, yellow': Cr(MN) cí'iruhci 'gall, bile'; Cr(JM) ci'irúška / ci'irúhka 'yellow'; Pl čičiika 'bile, gall'. Miller has these combined with *si above, which union is possible, but as the same two languages (Cr and Pl) that begin with a different consonant also have a more specific meaning in common (gall, bile), let's separate. [SUA: CrC, Azt]
- **648. *poroC** '(have) diarrhea': My bórohte 'tener diarrhea, v'; My bórohtiria 'diarrea, n'; Yq bohtia 'diarrhea, n'; AYq voohtia 'diarrhea, n'; AYq voohte 'have diarrhea, v'. [r > ' > ø in (A)Yq] [SUA: Cah]
- **649.** *aNta 'have diarrhea': TSh antakai 'have diarrhea'; Mn atayéé- 'have diarrhea, v'; NP adda'ibï 'diarrhea, n'. The first two syllables of each of the three languages match *'anta fairly well, as NP's doubled, yet voiced -dd- fits a nasal-plus-stop cluster well, for *-tt- would be -t-, and *-t- would be -d-. Of additional interest, these may be the same morpheme as *atta 'buttocks' which appears in other branches, but perhaps more clearly here, if we could be sure of the tie. After that, matters are less clear. [*-nt- cluster] [NUA: Num]
- **650.** *pa-kwiCtaC 'diarrhea': CU páa-kwicá-pï 'diarrhea, n'; CU páa-kwicá-y 'have diarrhea, v'; Hp paakwïci 'diarrhea, n or v'; Wc háa kwíisi 'diarrea'. The CU terms rather transparently show a compound of 'water plus the *kwiCtaC above, but Hp also has *kwita cognate with CU kwica. But the two Hp terms differ in the vowel and 2nd C, though not greatly. It might be that the Hp term is a loan from Numic. The Wc term also differs from Wc kwita 'defecate' though the initial *p > h is expected in Wc. They are all likely tied, though sorting possible borrowing or meshing movements remains. [*-t-/-c-/-s-] [NUA: Num, Hp; SUA: CrC]
- **651. *pakpu** 'diarrhea': TO wakui-đag 'diarrhea'; ST vakvu' 'tener diarrea'; ST vakvuija 'diarrea' (ST vuija 'echar, aventar'). [SUA: Tep]
- 652. *hupa'a 'have diarrhea': Kw huve'e 'have diarrhea'; SP uva'a- 'have the diarrhea'. [NUA: SNum]

Deity: see religious terms

Desert: see earth

DEW; ROCÍO, ROCIAR

- **653.** *pusi 'dew, v': Eu vapúsika 'rociar'; My baa-puh-tia 'está rociando'. [s > h/_C] [SUA: Cah, Opn]
- **654.** *(pa)-uci 'dew, n': NT vauši 'rocío'; Wc háïci 'sereno, rocío'; Hp oy-nïp-ti 'become covered with frost'. NT and Wc agree well with *pa-uci in all five segments, since Wc h < *p; Wc ï < *u; NT s < *c. *pa- 'water' likely in NT, Wc, and Azt. The *oy* of Hp oy-nïp-ti 'become covered with frost' also fits *uci, since *-c-> NUA -y-, and *u > Hp o. CN huič-tli 'dew' (Herrera 2010, 88); Hueyapan Nahuatl ahueč-tle 'rocío' (Baeza 2016, 118), ahwič-(ti) 'rocío, sereno' (Walters et al, 2002). [*-c->-y- in NUA; Wc ï<*u; Tep s<*c] [NUA: Hp; SUA: Tep, CrC, Azt]

DIE, DEAD; MORIR, MUERTO

655a. *mukki 'die, be sick, smitten': Sapir; VVH86 *muuki/*muuku die; M67-126a *muk / *muki; BH.Cup *mukii? 'a sore'; B.Tep155 *muuki; L.Son155 *muku/*muk-i; M88-mu2; KH.NUA; KH/M06-mu2: Tb muugït~'umuuk 'die'; Tb mugiinat~'umugiin 'hurt'; Tb muugut 'spirit of a dead person'; Ls múúkil 'sore, boil, knot in wood'; Ls múúki- 'fester, v'; Ls múú- 'be in eclipse, of sun, moon'; Ca -múk- 'get sick, weak, die'; Ca múk'il^y 'sore, n'; Ca múki-š 'sick person, dead person'; Hp mooki 'die, faint, be numb, suffer from or be afflicted by'; Ktn muk 'be sick, die'; Ktn mukic 'disease'; Ktn mukim 'dead people'; Hp mokpï 'corpse'; TO muuki 'die, corpse'; Eu mukún 'morirse'; Wr mugu-ná/mugi-má 'morir, sg'; Wr muguré 'corpse'; Tr mukú-mea; My múúke; Yq múúke; Cr mï'iči 'dead person, he is dead; etc.'; Cr wamï'ï 'se murió'; Wc mïïki 'dead, adj/n'; CN miki 'die, suffer from'. See below at c for Sapir's inclusion of SNum terms such as SP čaŋwïqqa, čaŋwïkki, čawukki (< *ca-mukki) 'die off, disappear'. It and Tak -k- (vs. -x-) suggest *-kk-, but SP moġoa does not; thus, Ken Hill rightly separates those (see at 'spirit'). [medial *-kk- > Tb g, Wr g, Tak k, not x]

655b. *mukki 'sore': Munro.Cup121 *múúki-l 'sore'; M67-128a; KH.NUA: Ls múúki 'fester, v'; Ls múúki-l 'a boil, knot in wood'; Cp múki-ly 'sore'; Cp múkilya'a-š 'sore, pl'; Ca múk'i-ly; Sr mukţ 'a sore, n'; Sr moki' 'be getting sore, vi'. Is Cp muhí'i-š 'suppurating, sore, adj' a variant with softened medial consonant? [-kk->h?] This is one of the few etymons found in all eight branches of UA, even if c were separate.

[NUA: Num, Hp, Tb, Tak; SUA: Tep, Trn, Cah, Opn, CrC, Azt]

655c. *caŋwiC-ka/ki (perhaps < *ca-mukki) 'suffer, die, pl': Kw cowiki 'be sick, afflicted with, pl'; Kw cowiki-kwee 'die off, pl'; SP caŋwüqqaa / caŋwükkii 'disappear, die off'); WMU čawí-qqaa 'they are all dying off (more present)'; WMU čawí-kki 'they have died off (more past)'. [NUA: SNum]

656. *ya'ay 'die': M67-132 *ya 'die'; M88-ya6 'die'; KH/M06-ya6: NP ya'i; SP ya'ai; CU ya'ay; My yáate 'está cesando, terminando'. Add Ch ya'í 'tired, drunk, dead, suffer, sg'; and Kw ye'e 'be sick, suffer from, be afflicted with, by'. Miller has cross listed both here and at *tV below, initial t- forms, such as the following: Mn tiyawit; TSh tiyaih 'die, suffer from, sg'; Sh tiaih 'die, sg'; WSh tiyaih 'die, sg'; Cm tïyaaih 'die, sg'. [NUA: WNum, CNum, SNum; SUA: Cah]

657. *tü'a / *tïya 'die': M67-131 *te 'die'; I.Num251 *tïya 'die'; M88-tï20; KH/M06- tï20: Mn tiyawi 'die, v'; Mn tïya-wi (M88, Lamb); Mn tïya 'grave'; NP tï'ai; NP tï'ai'hu 'die, pl'; TSh tiyaih; Sh tiai; Cm tïyaai-. Jane Hill (p.c.) also wonders whether these were a compound of s.th. like *tï-ya'i involving *ya'i 'die'; very possible; that is, *tï-/*ti- prefixed to *ya'i seems more likely than not. NP glottal stop may be an anticipation: *tV-ya'i > tï'ai. Miller has many of these forms also at M88-ya6 'die'; and here at tï20, Miller also includes SP ïttï'ŋwa 'in one's sleep' and Hp tïï'ami 'grave' and Hp tïï'amqölö 'graveyard', which may be worth retaining in case a single syllable stem (*tï') is involved. Note a vowel distinction in Loether's Mn tiyawi 'die' and Mn tïya 'grave'. [medial C?] [NUA: Num, Hp]

NB, for *mik, see kill NB, for *ko'yi 'kill, die, pl', see hit. NB, any cognates for Ktn nipik 'die, vi'?

DIFFERENT, OTHER, CHANGE; DISTINTO, OTRO, CAMBIAR

658. *kimmaN 'different': Mn kima'ani-tu 'different'; Mn kima'adugúsu '(in) a different way'; NP nanakimma'a 'different colors'; Sh kimmai 'different (one)'; Kw kimi-gi 'be different, be other than'; Ch kimán 'different'; Ch kimanči 'different one'; Ch(L) kimá 'other than self, different'; SP qümma 'other, stranger'; SP qümma-na-šu 'another one, stranger'; SP qümma-mmu-šu 'strangers, anim pl'; WMU kumac / kumač 'different'; CU kümáči 'enemy, foreignor, Comanche'. [NUA: WNum, CNum, SNum]

659. *sïnu 'another one, different': Cm seni 'different ways, various ways'; Tr se*nu 'otro, distinto, diferente'. Tr se*nu also aligns with Yq sénu/séenu 'uno, otro'; AYq seenu 'one, someone'; and My seenu 'one'; and Hopi sino 'person, individual, human being, man'. The TrC *sïnu forms are often associated with *sïm 'one' but Cm sïmï 'one' contrasts with Cm seni, suggesting separate stems. [NUA: Num, Hp; SUA: Cah, Trn]

- **660.** *sï'ïwï 'different': Tb šï'ïwï 'looks different'; Tr sewéti 'distinto, diferente'; Tr siwiná(ti) 'distinto, diferente'; Ktn hïwa-č 'other, separate' (*s > h). [V: i vs. ï] [NUA: Tb, Tak; SUA: Trn]
- **661.** *sum 'different, apart': Sh nasumuan-tikku 'different'; Cm nanisusumatï 'different kinds'; Eu aresúme 'aparte'; Eu aresume-teri/arebece-teri 'distinto, diferente'; Eu napmo súme néhrem 'tu hablas diferente'. [NUA: Num; SUA: Opn]
- **662.** *atta 'different': TSh attapisi 'different(ly), adj, adv'; Cm ata/ati 'different, (an)other'; Cm atīma 'it is a different one'; Cm atapu 'doing differently, doing another way'. The geminated *-tt- is apparent in both languages, as Cm shows -t- (<*-tt-) vs. -r- (<*-t-). [NUA: CNum]
- **663.** *awo(-ŋa) 'other, different': Hp alönö 'different, stranger'; Ls awóó 'other'; Ls awóó-ŋa 'differently'. Hp l < *w/_ö and Hp ö < *o, but *o > Ls e usually. [V problem] [NUA: Hp, Tak]
- **664. *pata** '(ex)change: Dakin 1982-70: CN patla 'change, exchange s.th.'; Cr raa-pwáta'ataka'a 'lo cambió (dinero)'. [p > pw] [SUA: Azt, CrC]
- NB, for *su-pul 'other, different one': Ca supul(em) 'other(s)'; Ca supul-a'an 'different'; Cp súpul 'different, one'; Sr hovaa'i' 'different, changed'; Sr hova(t) '(an)other'; ST hup duñia 'become, change into, make', see at 'one'. NB, for *wa-puL 'different, separate': TO gawul 'different, separate'; PYp gavil 'different', see 'one' at numbers.

DIG, SCRATCH; (EX)CAVAR, ESCARBAR, AHOYAR, RASCAR, ARAÑAR

- **665.** *hota 'dig': I.Num34 *hota 'to dig'; M88-ho1; KH/M06-ho1: NP tihonna 'dig roots'; TSh hota; Cm hora-; Kw horo-; SP ora"; CU oray. To these we can add Ch hóóra 'dig'; Mn tihoowi 'dig, dig up, vi, vt'; Tr ho- 'cavar, escarbar, hacer agujeros, sacar algo escarbando'; Tr hora- 'cavar, escarbar, hacer hoyo(s)'. [medial C L/t/r?; liquid?] [NUA: Num; SUA: Trn]
- **666a.** *kopa 'dig': B.Tep114 *kovai he digs'; M88-ko34; KH/M06-ko34: TO kow 'dig in a hard place'; LP kov; PYp kov; NT kóvai; NT kovóóltïudai 'make a hole'; ST kov. Add Nv kokova 'cavar'. Miller queries whether CN koyooni 'to get full of holes' and Hp qölö 'hole, pit, low area with a collection/lot of s.th.' are cognate? I doubt it, though Wr te'kopá-ni 'be a hole or slight depression' probably is. [SUA: Tep, Trn] **666b.** *kapa/i '(make) hole': Ca kávi-ve 'hole'; Cp kápal 'make hole' at least agree with each other; Sr kïvïhka' 'hole', showing k-v-k, may tie to Ca and Cp. [NUA: Tak]
- **667a.** *waLi 'dig': BH.Cup *wáli 'dig'; M88-wa17; KH.NUA; KH/M06-wa17: Cp wále/wáline 'dig, vt'; Ca wálin/wáli 'dig, dig up, vt'; Ls láwa/i. Ken Hill lists both Sr waan'kin/waana'k 'dig' and Sr waţo' 'scratch' as possibilities for the above set; I include both, as I often respect his opinion more than my own. BH.Cup appropriately claim metathesis in the Ls form, which metathesis occurs in a Cp alternate form as well; yet let's grant the metathesized forms their own letter under the same number:
- 667b. *Lawa 'dig': Ls láwa/i 'be a hole, be deep, v.i., dig a hole, vt'; Cp lyáwe 'dig'. [metathesis?] [NUA: Tak]
- **668.** *haci 'dig, scratch': Stubbs 2003-32: Ls heya/heyi 'be dug, vi, dig, vt'; AYq hečihtia 'scratch, vt'. In light of Manaster-Ramer's sound law of medial *c > NUA *y, Ls heyi and AYq heči- are a good match if the V's assimilated from *haci > heci > NUA *heyi, in light of Manaster-Ramer's sound law. Otherwise, *ī should be o in Ls. [V assim; *-c- > NUA -y-] [NUA: Tak; SUA: Cah]
- **669.** *hanwa 'dig hole, make hollow': Kenneth C. Hill (p.c. 2004), KH/M06-ha19: Hp hanwa 'dig, dig a hole'; WSh hawo 'hollow, empty'. [NUA: Hp, Num]
- **670.** *(hi)-kwahi/kwiha 'dig': Stubbs2003-18: Eu bihá- 'escarbar'; My hí'ibwehe 'está excavando, escarbando, cavando'; Yq hí'ibwehe 'escarbar'; AYq hi'ibwehe 'digging, vi'; AYq bwahe 'dig, vt'.

 [V leveling, perhaps V metathesis] [SUA: Cah, Opn]
- **671.** *cuCna- > *cu'na- 'scratch': Ch coon'a- 'scratch'; SP čun'na- 'scratch around'; WMU č<u>aa</u>'na-y / č<u>á</u>n'ne-y 'scratch, vt'; CU čáa'næy 'scratch, vt'. [NUA: SNum]

DIGGING STICK, PLANTING STICK, DIBBLE STICK; COA

- **672.** *wika 'digging stick': B.Tep42 *giika 'dibble stick, plow'; M67-326 *wika 'planting stick'; L.Son334 *wika 'coa'; M88-wi2 'dibble, digging stick'; KH/M06-wi2: Hp wiikya; TO giiki; NT giikai; ST giik; My wi'ika; Wr wika; Tr wiká; Cr vi'iká; CN wik-tli. In addition to CN wik-tli, other CN terms also meaning 'digging stick' are CN wekpal-li and CN we'kol-li. We might also consider Mn wagii 'dig a ditch, vi'; Mn wagii'i 'tend ditches, keep them clear'. [SUA: Tep, Trn, Cah, CrC, Azt; NUA: Hp, Num]
- **673.** *poto 'digging stick': Mn pódo 'digging stick, cane'; NP podo 'digging stick'; TSh poton 'cane, staff, digging stick, club, crutches, stick used as tool'; Sh(M) poton 'digging stick'; Sh(C) poton 'digging stick, walking stick, cane, crutch'; Kw poro-ci 'cane, stick'; Kw poro- 'walk with a cane or stick'; probably CU pïrū-ci. [NUA: Num]
- 674. *-citu 'digging stick': NP u cidupa 'dig with digging stick'; TSh kuccitu'u 'digging stick'. [NUA: Num]

Dip: see sink and wash

Dish: see pot Dirt: see earth

Divide: see fork and break

DIZZY, FAINT; MAREADO, DESMAYARSE, DESVANECIDO, DESFALLECIDO

- **675.** *tamu 'faint': Yq taamu 'faint, be knocked out'; My taamu 'está atarantado'; Tr itému 'darle a uno vertigos, mareos, estar mareado'; Cr taúhtïïtïmwai 'desmaya'; Cr rutïmwa'i 'mareado'. [SUA: Trn, Cah, CrC]
- **676.** *siwa/i 'be dizzy': Mn siwakwiyunuhi / suwakwinunuhi 'be dizzy'; Hp siiwi 'become dizzy, lightheaded, feel faint'. [NUA: Hp, Num]
- **677.** *ŋïL 'be faint, dizzy, drunk': Cp ŋéye 'dizzy'; Cp ŋéle 'faint'; Ls ŋóla 'be dizzy'; Ls ŋóóla 'be drunk'; Sr ŋïïyk 'get dizzy (as when drunk) vs. Sr yuuyk 'be/get dizzy' below. [initial ŋ; *L; l/y; C harmony] [NUA: Tak]
- 678. *yuyi 'dizzy, weak, shaky' combined with 1932 at shake
- **679.** *kwiCnu / *kwiyunu 'dizzy': the -kwi(y/n)unu portion of Mn siwakwiyunuhi / suwakwinunuhi 'be dizzy'; Cm kwinumakati 'dizzy'; Cm kwinumapi 'drunk, intoxicated person'; Cm kwinumasuari 'feel faint'; Cm makwi'numaiti 'be made dizzy, drunk, intoxicated'. [NUA: Num]

DO, MAKE, HELP; HACER, AYUDAR; see also finish

- **680.** *pu'ay / *pu'aL 'do': B.Tep283 *vuai 'is doing'; KH/M06-po29: TO/UP wu'a / wua / wui 'do'; PYp vuihim; NT vueí / weí / vuééyi; ST vua; ST vuidya 'do, happen'. Note the high similarity between Cr baïre 'help' and ST palvuidya 'help'—a loan? [SUA: Tep, CrC]
- **681a.** *hanni 'do, make': I.Num29 *(ha(h)ni 'to cook, do, make'; M88-ha7: 'cook, make'; KH/M06-ha7: NP hanni 'do, make, fix'; TSh hanni 'do, use'; Sh hanni 'do, make, fix, prepare'. Miller asks, "Is CN ai 'do, make' cognate?" **681b.** *'ani / *kani 'do, cause': Langacker 1977, 41, 45 and Shaul 2003, 33 note Eu eni 'do, be'; SP -'ni 'do'; Hp ni; Sr ñihai 'do'; Tr nii- 'be'; Tep denV (< *ye-ni); etcetera, focusing on *ni. Add Kw 'i-ni- 'do'; Kw ha-ga-ni 'do s.th.'; CU 'iní-k (variants 'uni-k, 'aní-k) 'do, act, make'; Yq 'ania 'help'; Yq aane 'be'; AYq aane 'do, be around/about, vi'; AYq ánia 'help'; Tb 'in 'do it'; Hp -k-na; Sr -k-in; Eu éni 'estar'; Ch úúnii 'be, do'; Ch uní-nupïru 'make, v'; Ch hagá-ni 'do what'. Perhaps TSh kan 'do' in TSh suwakkan 'think about doing' (TSh suwa" 'think'). Note Ktn tama-wï-t 'sharp (< tooth + aug)' and Ktn tama-'n 'sharpen (< tooth- do)'; in other words, -'n = 'do/make'. SNum *uni; in fact, SNum languages have three vowelings: *'uni, *'ani, *'ini. Cf. Tewa 'an/kan 'do' (Martinez and Povijua 1982, 103; and Stubbs 2008). This also appears in many compounds, such as Tb tugaa'anït 'make deep' from Tb tugaa'īt 'be deep'. [NUA: Num, Hp, Tb, Tak; SUA: Cah, Tep]
- **682.** *yun / *yuŋ 'do, make': Sapir; M67-271 *yu 'make'; M88-yu8 'make, do'; KH/M06-yu8: TO juni / juuni; NT duí 'do'; NT dunui 'make'; ST duna-'in 'make'; ST duna' do, happen'. Let's add PYp duna 'do, make, vt' and Ktn yuŋa'n 'help, v'. Miller includes Wc yii; and Ken Hill adds Wc yia 'hacer'; Wc yiane 'hacer, actuar en cierta manera'; Hp yiki finish; Cr a'iñí pa-riki 'what are you doing?'; My yáwwa 'hacer'. Ktn fits the Tep forms (< PUA *yun or *yuŋ); and the Wc forms have the right V (Wc yi < *yu). [SUA: Tep, CrC; NUA: Tak]

- **683.** *ku'iyV 'help': L.Son102 *ku'i 'ayudar'; M88-ku23; KH/M06-ku23: Eu kuíde-n; Wr ku'í; Tr ku'wí / kwí. [SUA: Trn, Opn]
- **684.** *mayaw 'help, do': M88-ma37 'help'; KH.NUA; KH/M06-ma37: Cp mámayu 'help'; Ca mámayaw 'help, lend a hand'; Ls máámayu 'help'; Sr mamayïvk. We might also add Mn mai 'do, become, be'; CU -máy 'make/change into, make/cause to do'. [*w > v in Sr] [NUA: Num, Tak]
- **685.** *niwa / *nïwa 'make': Tbr nemwa-/nemo-/newá- 'hacer'; Tr newá- 'hacer, fabricar, elaborar, construir'; Ktn niw 'do'. Perhaps *i-a > e-a in TrC. [SUA: Trn, Tbr; NUA: Tak]
- **686.** *ni... 'do': Langacker 1977, 41 *ni 'do'; KH.NUA: Sr ñihai 'do'; Hp nii-, ni- 'a nexus, empty verb base for affixes, sometimes joined to adjectives'. [NUA: Tak, Hp]
- **687.** *iLi / *yaLa(wa) / *ya'a(wa) 'do, make, finish': My a'a yawwak 'lo hizo'; Yq ya'a 'hacer'; Yq yá'ari 'lo hecho'; Yq yáati-ne 'acaba'; My yáa-te 'está cesando, terminando'; Tb ya'awa 'finish it'. Cr -ri 'make' and Cr -iri applicative (Casad 1984, 160) may be of a different stem. [SUA: Cah; NUA: Tb]
- **688.** *(**V**)caywa/i 'do, make': Cp á'čiwi 'make, do'; Cp ičáaywi 'do, make'; CN čiiwa 'make, do'; perhaps Ls 'íči 'work off obligation'; and Tb 'ïhcaw 'help'. [NUA: Tak, Tb; SUA: Azt]
- **689.** *kumma 'create, make': CU maróġumay 'create'; Mn qoomai 'do s.th. in honor of, sacrifice for, mourn for'; NP puhagïma 'medicine man' (*puha- 'medicine' so -gïma, with *u > ï, is as likely to mean 'medicine-maker' as anything else); Ktn kïm 'make'. [NUA: Num, Tak]
- **690.** *tīkaha 'measure, imitate': Kw tīgīhaa 'try, try on, measure'; Kw tīgeki 'act'; Ch tīġái 'act'; Ch tīġá- 'take picture'; SP tīġai 'happen, take place'; SP tīġaa 'bring about, causative of tūġai'; SP tīġaa- 'measure, practice, imitate'; WMU tīġáa-y 'measure, happen, stretch (a hide)'; CU tīġáay 'measure, copy, duplicate'. [SNum]
- **691.** *yïkwi 'do, make': Mn yïgwi 'act, do' (vs. Mn yïkwitïgï 'sit'); NP yïgwi 'do with s.th.' (vs. yïkwi 'sit'); TSh yïkwi" 'do, make, go after, get' (vs. yïkwi 'sit'); Sh yïkwi" 'do, make' (both Miller and Crapo separate Sh yïkwi" 'sit' (< *yukkwi) though identical in both dialects, but different in Mn, NP, TSh). [NUA: WNum, CNum]

NB, for *nato 'do, make, complete', see finish.

NB, perhaps *kwan / *pan 'pledge, vow': ST vanoosa 'do religious rite, make pledges'; AYq bwaniari 'bestowed a name by vow, adj'.

DOG; PERRO

- **692.** *awa 'dog': BH.Cup *'awái; HH.Cup* 'awáál; Fowler83; M88-'a26; Munro.Cup35 *'awáá-l; KH/M06-'a26: Ca 'áwa-l; Ls 'awáá-l; Cp 'awá-l. [NUA: Tak]
- **693.** *koCti 'dog': Sapir; Ken Hill (p.c. 2004); KH/M06-ku39: Sr koči'; Tr kočí. Sapir also lists Kitanemuk guci and suggests that CN čiči is assimilated from *kuci > *kici > cici; however, CN better fits *cu below. Ken Hill adds Wr ku'cí 'puppy' and considers Gb wossí with lenition of both consonants. [NUA -c- < *-t- or cluster] [NUA: Tak; SUA: Trn]
- **694.** *woci 'dog': B.Tep *gogosi 'dog'; Fowler83; M88-wo12 'dog'; KH.NUA; KH/M06-wo12: Gb wosí', pl: wowósi'am (vowel unexpected, o < *o usually only after k, says Miller); TO gogs, gogogs pl; LP gogiš/gogš; NT gogóši, góógoši pl; ST gagooš / gagoš. The Tep sg forms seem to be built on a plural reduplication, and the pl forms on a double pl or double reduplication, which does happen in UA, especially in Tep or as in CN's double plural suffixes. Ken Hill notes also Gb wosí 'dog' and other forms for 'bark, v' which complexities need to be considered. [NUA: Tak; SUA: Tep]

695. *cu 'dog' in SUA: M67-137 *cu; Fowler83; L.Son45 *cu; M88-cu2; KH/M06-cu2: Eu čúci; Wr cuhcúri; Tr ču*ri; My cúu'u; Cr cï'ï; Wc cïïkï; CN čiči. Miller includes Sr čooŋ 'suck', which is not impossible, but debatable. CN čiči 'dog' and CN čiičii 'suck' contrast in vowel length, though some authors did not contrast the two. [SUA: Trn, Cah, Opn, CrC, Azt]

NB, for Num *sati 'dog' see 'tail'. Hp sïrï 'tail', Ktn šïri-c 'anus', and Mn céde 'anus, butt, bum' suggest the sememe in the neighborhood of 'tail, anus' to which Num *sati 'dog' is probably a semantic extension, as a dog's prominently wagging tail is a unique feature of that animal. Hp sïrï 'tail' relative to Num *sati 'dog' shows vowel leveling (*sati > sïrï), a phenomenon common in Hp.

NB, for *puNku, see 'animal, domestic'.

NB, for *isa, see coyote.

Door: see close

DOVE; PALOMA

696. *hayowi 'dove': M88-ho3; KH.NUA; KH/M06-ho3: Two languages (Hp, Tb) agree with *howi: Hp höwi, pl: höwiit 'dove, mourning dove, white-winged dove'; Tb 'owii-t 'dove'. In contrast, two Numic languages show hewi: Mn heewi' 'mourning dove'; TSh heewi-cci 'dove'. However, Sh haaiwi 'dove' may be key. Numic forms showing hewi (Mn, TSh) leveled the V's from *haiwi. Furthermore, CU 'ayö-vi and Sh haaiwi both suggest that the first vowel was a (as in Sh haaiwi). Kw hoyo-vi 'mourning dove' and CU 'ayö-vi both show y. Add Ch(L) hiyovi and Sapir's SP iyovi- 'mourning dove' with the final syllable as part of the stem, as in CNum. Kw and CU may have reinterpreted the final -vi as an absolutive suffix. In fact, most of NUA could accommodate *haywi or *hayowi. NP ihobi 'dove' transposed the h. The change of the dipthong ai > e happens often in Numic, as we see in the Mn and TSh forms (hewi < *haiwi). But if *howi were the original form, it makes little sense to suggest a change of *o > a in Sh haaiwi, especially when immediately before a rounded consonant like w. In other words, *a was probably original, as suggested by the a in Sh haaiwi, CU 'ayö-vi, and Wc haïmi' (whose m is enigmatic). *hayowi > haiwi (Sh) > hewi (Mn, TSh)

Wc háïmï''áïmï 'dove' and the -howa- of Tr čohówari / čohóbari 'turtle dove' may be related as well. Wc ï could be a leveling of -yow- (*hayow > haï). TO hoohi 'mourning dove' is of interest, and probably related in some way difficult to explain, perhaps with preservative consonant harmony (*howi > hoohi), and TO does keep PUA *h sometimes. [TO keeps *h; wN > m in Wc?] [NUA: Num, Hp, Tb; SUA: Tep, CrC]

697. *maka-hayowa/i > *makahowa 'dove': BH.Cup *mVxél 'dove'; M67-139; HH.Cup; Fowler83; M88-ma27; Munro.Cup36 *maxéé-l 'dove'; KH.NUA; KH/M06-ma27: Tr makáwi / makábi 'paloma'; Ch makahiovi; Sr maqahwt 'dove'; pl: maqahum 'doves'; Gb maqáho' 'dove' (Hill); Ktn makahot; Ktn makahoaï-t 'dove sp, bigger' (< *makaho(C)a-wït); Ca máxayi-ly / maxi-ly 'dove'; Cp mexí-ly / maxí-ly 'dove'; Ls mixéé-l 'dove'. Add Eu makáwa 'paloma/dove'; Wr ma'kawé 'paloma azul'; PYp makavi 'dove'; Tb mokowiš-t (< *mokkowišt) 'bandtailed pigeon'; Yq 'omó'okol 'tortolita/turtledove'; My 'ómmo'okol 'tortolita'.

First Bright and Hill (Takic *mVxél 'dove') and then Hill and Hill (Takic *maxéél dove) note the word in Takic. Miller (1988: ma27) notes their noting it, but does not list Tb nor any of the TrC forms, of which Eu makáwa, Tr makáwi, and Wr ma'káwe all bear a strong resemblance to Sr maqahwt, at the least, and to the other Tak forms for at least the first three segments *makV. KH/M06-ma27 adds Ch and Tr. All in all, Eu, Tr, Wr, Tb, Ktn, Sr, and others show a 3rd C w or hu/ho that could be perceived as w, suggesting something like *makawV or *makaho.... Yq, and My may align with *w, with assimilated round vowels, as the *mokow... forms may show anticipatory assimilation of *a > 0 in the presence of w, for both vowels (a-a-w/o > 0-0-0) in some language(s) of both NUA (Tb) and SUA (TrC), as in Tb of *hayowi 'dove' above. In fact, Ch makahiovi would suggest that *hayowi is the 2nd etymon of a compound. In fact, Ca makayi (< *makayo < *makah(a)yo) suggests the same. Sr and Gb show something near *makaho, losing -ay- from *makahayowV, and Ktn seems to display a fuller form (as

elsewhere: antelope, rock), with final *-wit > it ('big') on the longer of the two forms: Ktn makahoaï-t < *makahayowa-wiL-t. [v/w in Tep or < -kw-?] [NUA: Tb, Tak, Num; SUA: Tep, Trn, Cah]

DOWN, DEEP, BELOW, UNDER; ABAJO, HONDO, PROFUNDO, DEBAJO DE

698a. *tukkaC / *tukka' (AMR) 'deep': Sapir; M67-122 *tuk 'deep'; M67-34 'below'; I.Num227 *tuh(kw)e(h) 'under, below'; L.Son309 *toko 'ser hondo'; M88-tu14 'deep'; KH.NUA; KH/M06-tu14, but overlaps with pa67; KH/M06-tu14 *tukka' 'deep': Mn -duhe(e) / -duheti 'underneathe'; NP tukapu (< *tukkappu) 'deep'; Sh tukkan 'under'; Cm tuhkati 'deep, down(ward)'; Kw tukkwi 'down'; SP tukkwa 'be deep'; SP tuhkwa' 'under'; CU tukwa-ti (<*tukkwa-tti) 'be deep'; Tb tugaa'it 'be deep'; Tb tugaa'anit 'make deep'; Sr pohtk 'below/under it'; Sr nihtk 'below me'; Sr hörörö'n 'deep'; Eu téptu 'debajo'; Eu téptukai 'por debajo'; Tr ro'ko 'ser/estar hondo'; Wr to'kó-ni 'be deep'; Cr ty-a-'u-tī'ï 'where (the river) is deep'; Pl tuuka 'to bury, plant'. Sapir includes CN tlok 'with, near to', which is plausible. To the above listed in M88 we can add TSh tukkwappih 'deep, adj'; Ch ruka 'under'; Hp atkya(q) 'down (there/below), low(er)'; Ls hulúka 'fall, descend, vi'; latter part of Tb 'omholok 'underneathe'; TO juuk '(be) deep'; ST čuuk 'deep (of water)'; Tr(B) fokóre 'be deep'; Wr te'tú. [*kk > Num kk, > Tb g] [NUA: Tak, Num, Tb; SUA: Tep, Trn, Opn, Azt]

698b. *pï-tukV / *tukV-pï 'down, under' (perhaps *-pï 'at, in' so 'at-down/under' or 'down/under-at' (ST): My bétuku 'debajo'; Yq bétuku(ni) 'below, down'; Ca pé-tuk; ST tuukav 'deep (of hole, well)'. Add Ktn pïhtuk 'downstream'. TO wečo 'under' and Nv buto (*pïto) 'bajo' may belong as well.

698c. *patu-t (AMR): KH/M06-pa67: Sh pattun 'deadfall trap'; CN i'ti-tl / i'te-tl 'stomach, inside'; TO wečo 'under'; Nv buto (*pïto) 'bajo'. Some forms appear under more than one letter, as also under tu14, pa67, and pï12 in M88 and KH/M06.

698d. *tip(a)tu 'under': Eu téptu 'debajo'; Eu téptukai 'por debajo'; Wc tetïa 'inside'; Wc is expected to lose *-p-. **698e.** *pitaha 'under': B.Tep288 *vïta'a 'under'; M88-pï12; KH/M06-pï12: LP vïta; NT úta; ST vïta' / vuta; TO wečo 'under'. Let's add PYp veta 'below, under, ground, floor' and Nv buto (*pïto) 'bajo'. The Tep forms ending with o (TO and Nv) resemble the Ca, Yq, and My forms of *pï-tuk above. Wr witú 'below' may be a Tep loan. These Tep *pïtaha forms may be a V assimilation and C lenition of *pïtuka > *pïtaka > *pïtaha. That may also explain why two of the forms (TO, Nv) still show round vowels. A complex collection! [SUA: Tep]

699. ***yuma** 'low': B.Tep23 *dumari(ka) 'low'; M88-yu17; KH/M06-yu17: UP jumali' / jumaliki'; NT dumalika; ST dumaaly. [SUA: Tep]

700a. *ti...N 'below': M67-35 *ten 'below'; CL.Azt44 **temo(wa) 'descend'; M88-ti28; KH.NUA; KH/M06-ti28: Ls tóo-ŋax 'down, below, underneath'; Gb tóŋko 'abajo'; Cp téyka 'go down there'; Cp té- 'down, below', té'aw 'down there'; Sr tiīvukya' 'down below'; Cr hetyé-n 'beneath it/him' (M88); Cr nye-hetyá 'beneath me' (M88); Cr heteén 'debajo' (McMahon & McMahon); CN temoowa 'descend'; TSh tinaa 'down' and Sh tinnaa 'down'; Wc hee.tia(na) 'al pie de'. The medial consonants vary, and a CV morpheme is possible, but risky. Yet even languages showing only *tiN include Ls, Gb, TSh, Sh, and possibly Cr, or the Num, Tak, and CrC branches. [NUA: Tak, Num; SUA: CrC, Azt]

700b. *tip 'down': Consider also Mn tibéewi 'down (hill)', NP tibonodi 'downhill', Kw tivee 'down'; CU tivwa 'in'; CU tuway-kh 'descend, go down', CU tuvwa-tux 'down to , down toward, downward', Hp atvel- 'slope'. Other forms go perhaps further to show s.th. near *tipan: Sr tiïvano' 'down below', PYp tevindim 'go down, descend', and possibly Tbr tewa-ná, te, te-wa-na 'bajo'. Note the similarity of NP tibonodi and Sr tiïvukya' 'down, on the ground (locative of ground)'. Do these derive from 'earth' or earth-ward'? [NUA: Num, Tak; SUA: Tep]

701. *tana / *tani 'down, below': Tb(V) tana 'get down'; Tb(M) ta'na~andaa'an 'get down, get off'; NT táána 'abajo, adv'; CN tlani 'below, underneath'. It is possible that the leveling of vowels (such as the a-i as in tlani) may be a source for *tin; and thus these forms may relate to the above (M88-ti28: M67-35 *ten 'below'); however, a variety of medial consonants (m, ', n) raises many questions; regardless, Tb, NT, and CN all clearly show *tan. [NUA: Tb; SUA: Tep, Azt]

702. *ko'om 'down, low': M88-ko5 'below'; KH/M06-ko5: Eu kom 'para abajo'; Wr ko'miná 'cuesta abajo'; Tr go'ná 'abajo'; My kóm (appears in phrases meaning down(ward)); My kó'omi 'abajo'; ko'mi 'abajo'; but HN komol-li' 'pit in the earth'? Maybe first part of Tb 'omholok 'under' as *k > h in Tb. Also add AYq kom/ko'om(i) 'down, below, under, downward'; Yq kom 'para abajo'. What of TO komaDwua 'cause to be low or flat'; TO komaD 'in a spread out or creeping position'? (listed at flat) [SUA: Trn, Cah; NUA: Tb]

703a. *'uppi (> *opa) 'dive, sink, go down in': Ca 'upi 'dive, vi' and Ktn 'op-ïk 'dive, sink, vi' both agree with medial cluster (*-pp-/*-Cp-). Though it seems to have lost the gemination, Tb likely belongs as well: Tb(H) op|at 'dive'; Tb(M) *'oobat- 'dive'; Tb(V) 'ob~'o'op 'dive', with vowel assimilation (u-a > o-a). [NUA: Tak, Tb] **703b.** *huppa 'untie, come loose, let down': Ch hupá 'untie'; Ch hupá-ki 'come untied'; SP uppa (Miller uhpa) 'untie'; WMU uppaa 'untie'; Kw nohopï 'unravel'; Kw nohopï-kwee 'get loose'; ST hupaañ 'deshilado' (pl huupak 'deshilados'); Hp hòopa 'peel the skin or covering off a stem by pushing it all to one end, like the paper off a drinking straw'. The semantic tie between Hp and the other forms (meaning 'loose') may seem a stretch, but also seems more probable than not: when peeling off s.th., the coming off is usually downward, and one must loosen before whatever can come down. So 'loosen/untie' and 'peel off' (Hp) are both semantic extensions of 'let down'. This is the active/transitive form *huppa 'let down, cause to go down (by untying)' vs. intransitive *(h)uppi 'go down, sink'. [NUA: Num, Hp; SUA: Tep]

704a. *wa'awa/i (< *wahawa ?) 'slope down': Mn waawi 'go down, come down (slope, hill, etc.)'; Tb wa'awa ~ 'awa'awa (come down'.

704b. *wahawa 'in, under': Yq wáhiwa/waiwa/ wahuwa 'dentro de, debajo de'; AYq wahu/waiwa supem 'underwear'; My waihwa 'adentro'; My waihwa suppem 'fondo, refajo, camiseta'; AYq kar-po waiwa 'in a house'. [NUA: Num, Tb; SUA: Cah]

705. *wakam / *waŋam 'down, deep': Ca wáŋam 'deep (of water, ditch, etc.)'; Tb (V) wahaminaš 'downward'; Tb(M) wahominas 'down at an angle'. Ca and Tb show 4 of 5 segments as identical, and in light of the velar *k > h in Tb and the velar nasal in Ca, a relationship between the two seems more probable than not. [n/k] [NUA: Tb, Tak]

706. *muiLa 'be deep, of water': the first vowels do not exactly agree, but Ls móóra 'be deep (of water)' and Eu múira 'estar hondo el río' are identical meanings, and what is midway between the two vowels of the Eu dipthong ui? --The high central ï, and Ls o < *ï. So if ui leveled to ïï in proto-Tak, for example, then the Ls and Eu terms match and are likely cognate. [vowel leveling; liquid] [NUA: Tak; SUA: Opn]

707. *kwu'p / *kwu'ipo 'downhill, descend': Stubbs1995-24: TO kuivo 'downstream'; TO kuivodam 'sloping downward' (Mathiot); Tr o'pi- descend, go down, lose altitude'. It would be nice if (an)other reflex(es) could solidify this less-than-secure set. [SUA: Tep, Trn]

DRAGONFLY; LIBÉLULA, CABALLITO DEL DIABLO

708. *(pa)kumaLiw 'dragonfly': Yq baikumareewi; AYq vaikumareewi; Ls kamariwri; Wc aïkwérïka; perhaps the *pak- syllable of LP(EF) waaktar. Ls's first four syllables and Cahitan's (Yq, AYq) last four syllables match well. Wc with *p > h/ø and -um- > w (loss of m) is also likely. [liquids] [SUA: Cah; NUA: Tak]

709. *mukta/i / *mutta/i 'dragonfly': Sh muttenaaci; the -mura- of Kw wiiya'muragi-ži; TO mukčiwiđam. [NUA: CNum, SNum; SUA: Tep]

710. *piya 'dragonfly': Pl piipiyahcin 'dragonfly' and the *piya (wiða) portion of TO mukčiwiðam 'dragonfly'. Let's list Ktn picalala 'dragonfly' for contemplation. [SUA: Azt, Tep]

DRAW, MARK, PAINT, WRITE; DIBUJAR, BOSQUEJAR, PINTAR, ESCRIBIR; see also 'line' and 'dye'

711. *osa/i / *oswa (Tb, Eu) 'paint, draw, write': L.Son22 *osa/os-i 'write'; M88-'o11 'write, read'; KH.NUA; KH/M06-'o11: Cp íse 'have lines, be colored'; Cp is-nin 'write, color, paint'; Ca kwá'isne 'paint, put design, write'; Ls 'éskani 'make a pattern (as on baskets), paint, mark'; Tb 'oo'owaan 'to mark, write'; Gb eša 'pintar'; Gb 'ésin 'pintura, body painting'; Sr 'ööşan 'write'; Ktn 'ošan 'paint, write, tattoo'; TO o'ohan 'write, draw'; Eu óosa-n 'pintarse, embijarse como hacen los indios'; Eu hioswa-n 'escribir, pintar'; Wr osa-ní/osi-má 'escribir, leer'; Tr osí-mea 'escribir'; Tr osá 'irregular present and imperative of osi-mea'; My hio'ohte / hioste 'escribir'; My hio'sia 'papel'; Tbr yosá-t 'papel'; Tbr yosa-ñá-t 'escribe'; Wc 'utïa 'escribir'. We should add Cr ne-tá'usiïhmwa 'yo dibujo' as the -usi- portion agrees perfectly with *osi. Note -yu'usa in Cr té'eyu'usa 'escribiendo'. Add Tr osí-ma 'hacer' and it is used as an auxiliary verb! Eu and Tb may suggest *os-wan; and though only those two show -w-, many show -n, as if *osan or *osa-ni. [Gb e <*o] [NUA: Tb, Tak; SUA: Trn, Cah, Opn, Tbr, CrC]

712. *(iC)kwiLo 'write': CL.Azt196 *(tla)-ihkwVlowa 'write, paint'; M88-'u5; KH/M06-'u5: CN (i)'kwiloa 'for s.th. to get written'; Pl tahkwil 'braid'; Pl tahkwilua 'write, be writing, v'. [SUA: Azt]

713. *po'oC 'mark, write, read': Mn taqapoo 'mark'; NP bo 'write'; Sh poo / tïpoo 'write, mark'; Cm tïboorï 'write'; Kw po'o 'mark, write'; Ch po'ó 'draw, write'; SP po'o"- 'mark, write'; WMU pö'ő-y 'draw, write, mark, go to school, v'; WMU pö'őC- (when compounded); WMU pö'ő-tti'i / pö'ő'-ti'i 'teach, v'; WMU pö'őqqwa-ttü 'book, s.th. written, n'; CU pö'őy 'write'; CU pö'ő-pïní-'ni 'read'; CU pö'ő-tií 'teach'. All SNum languages show a final consonant. [NUA: Num]

NB, for *humay 'smear, paint', see at 'touch'. NB, for *wilya 'make/mark a line', see at 'line'.

DREAM; SOÑAR, FANTASEAR

714. *tï-mukki 'dream, v': Whorf 1935; M67-140 *te-moki; Dakin 1982; M88-tï19 'dream'; KH/M06-tï19: Hp tïïmok-; Eu temúka-; Wr temú-; Tb 'undumuuga~tumuuga 'dream, v'; Tr ŕimu-(gú); Cr tyí'i-maara 'he's dreaming'; My téénku; CN teemiki; Pl teemiki; HN teemiki. Add Sr kwahčumu'k 'dream, dream about'; ST tïïtkia' 'soñar' (see 716 below); and AYq tenku. Cr has strange vowels and no k, if related, which I don't count yet. A reconstruction of *tï-mukki fits most, and, as many have noted, likely contains *mukki 'die, sick'. Note the vowel loss and resulting cluster in Cah: -muku > -nku, and even greater reduction in ST/Tep. Note the nasal anticipation in Tb. [nasals in Tb] [NUA: Hp, Tb, Tak; SUA: Trn, Opn, Azt, Tep]

715. *ti'ayaw 'dream': Ca tét'ayaw 'dream, vi'; Cp té'eyu (also té'eyew, Ken and Jane Hill, p.c.) 'dream, vi'. [NUA: Tak]

716. *(tï)tïki 'dream, v': TO čiïčk 'dream, v'; NT tïïtïkyi 'dream, vi'; ST tïïtkia' / ttkia 'dream, vi'. All three languages do reduplication; this may tie to 714 *tï-mukki above with loss of nasal in a cluster. [SUA: Tep]

717. *nosi 'dream, v': Mn nosidabi 'dream (about), vi, vt'; NP nosi 'dream, v'; Kw no-noši, noosi 'dream,v'; Ch nonósi 'dream,v'; SP nonnossi 'dream, v'; CU nönösi 'dream, vi'; and Wc -nïsi (< *nusi) of Wc héinïïsi 'sueño'. [NUA: WNum, SNum; SUA: CrC]

718. *napusa 'dream, v': TSh napusawi 'dream (about), vi,vt'; Sh napusai / napuise 'dream,v'; Cm nabusi'ai-tï 'dream, v'. [NUA: CNum]

Dress: see clothing

DRINK; BEBER

719a. *hiCpV / *hi'pa / *hiypi (> *hippi / *hi'a) 'drink': Sapir; VVH77 *hi 'drink'; M67-141 *hi/*hi'i; I.Num40 *hipi; L.Son55 *hi; B.Tep313 *'i'ii 'to drink' and *'ii 'he drank'; M88-hi1; KH/M06-hi1: Mn hibi; NP hibi; TSh hipi"; Sh hipi" / hippi"; Cm hibiti; Kw hivi; Ch hivi; SP ivi; CU 'iví; Hp hiiko, hikwya pl.; Tb 'ii'it/'ii'ii"; Cp héye; Ls hípi 'sip, suck, of Shaman in curing'; TO ii'i /i'im; PYp i'a / ie'e; NT yiï; NT íí 'he drank'; ST 'io'; ST 'ii' he drank'; Eu hiá-; Tbr hé/ihé-; Yq hé'e; Yq hí'i-ne 'puede beber'; AYq he'e; My hé'eye; hi'i-; Wr ihí; Tr ba-hi-; Cr raye'e 'lo bebe'; Cr néheye 'bebo'; CN ii. A UA stem found in all branches, but not without difficulties. Sh and Ls show a geminated medial consonant *-pp-, and a cluster likely explains the variant medial reflexes: -pp-, -'-, -y-. A reconstruction of *hiypi may or may not help explain why -y- appears in Cp, Cr and My. However, when medial p is not apparent, such forms as PYp i'a/ie'e and other TrC and Tep forms suggest that we are dealing with first vowel i, but a lower second vowel, which assimilated toward the first in other cases. The Numic forms (Mn, NP, TSh, Sh, Cm, Kw, Ch, SP, CU) and Ls show a syllable (*hippi) not as apparent in the others, though PYp and Hp may show hints of it. Despite none of us being able to explain all in this set, I agree with Miller and Hill, that these are probably all related.

719b. *pa-'i 'drink (water-drink)': KH.NUA: Ca pá; Cp pá'e; Gb pá'-; Ls páa'i; Sr paa', fut: paii'v 'drink'; CN aatl-ii 'water-drink'; Tr ba-hi-. The Takic forms involve the same stem as above with 'water' prefixed (*paa'i), which the following also suggest: Tr ba-hi-; AYq vahi'itua 'give s.o. water to drink'; and CN aatl-ii 'water-drink'. [h/'; -y-; medial *-CC- > *-p(p)- in Num] [NUA: Num, Tak, Hp, Tb; SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]

Drum: see sing
Drunk: see alcohol

- DRY, WITHER, SHRINK; SECO, SECAR, MARCHITARSE, ARRUGARSE, ENCOGERSE; see also thin 720. *waki 'dry, shrivel, thin: VVH99 *waki 'dry'; M67-143 *waki; BH.Cup *wáx 'to dry'; B.Tep38 *gaki; L.Son325 *wakï, wak-i 'secarse'; CL.Azt48 *waaki; KH.NUA; ; M88-wa4; KH/M06-wa4: Tb waagii'ït~'awaagii' 'be skinny'; Hp laaki 'dry, become thin, v'; Cp wáxe 'dry, vt'; Ca wáx 'become dry, vi'; Ca wax-ne 'make dry, caus.' Ls wáxa 'dry up, heal, v.i'; Ls wáxni 'dry, vt'; Sr waak 'dry, vi'; Sr waaqan 'dry, vt'; Sr awaaki' 'dry, adj'; TO gaki 'be dry, skinny, bony'; PYp gak; NT gáki; ST gak; Nv gaki 'cosa seca'; Nv gaku 'estar seco/flaco'; Eu wáke; Yq wakía 'dry, thin'; Yq waake 'dry, vi'; My wakía; Cr wahči 'dry, thin'; Wc vaváki 'seco, flaco, delgado'; CN waaki 'dry out, evaporate, wither'. This prominent stem in 8 of 11 branches; many reflexes suggest this also means 'thin', ie, to dry and become thin. [v in Wc; -'ni caus in Sr, Ca] [NUA: Hp, Tb, Tak; SUA: Tep, Opn, Cah, CrC, Azt]
- 721. *(ta)-pasa 'dry' (SNum *tapasa) I.Num140 *pasa(h) '(be) dry'; M88-pa19; KH/M06-pa19: Mn pasa 'be dry, dried out'; Mn pasakkï-t 'dry (acorns, etc.), vt'; Mn kupasa 'be dried out'; NP wïpasa'hu 'wind dries it'; NP mabasaga 'dry food'; TSh pasa"; pasaŋkïn; Sh pasa("); pasa-nkï 'dry s.th.'; Cm pasa(kï)rï; Cm pasapï 'dry obj'; Kw tavasï 'dry, v'; Kw tavasï-kwee-pï; SP tavašu 'dry, v'; SP tavášï-i 'is drying'; CU tavási 'be dry, get dry'. To these add Ch tavásï 'dry'. Note *pasa for WNum and CNum (Mn, NP, TSh, Sh, Cm) and *tapasa for SNum (Kw, SP, CU). As the concepts 'thin' and 'dry' are closely tied in UA, add My tapsiólai 'thin' and AYq tapsiolai 'thin'; Sr vaşi-vaşi 'thin (as cloth)'; Eu tasúkei 'thin' (loss of *p in a cluster is not unlike My's cluster followed by a round V); Cr tïsiisčira'a 'thin (of person)', loss of *-p- expected in CrC; and probably Ls tavíiča/i 'dry up, vi, drink dry, vt'. PYp vahakisi (< *pasakici) 'something hung out to dry for preservation' adds the Tep branch. [ta- prefix; -p- lost in Cr] [NUA: Num, Tak; SUA: Cah, Opn, CrC, Tep]
- **722.** *moLV / *mora / *mota 'dry': Hp mööya 'spread out to dry, hang out to dry'; Cp míte 'dry, v'; Tbr moro-ní-r 'seco'. The initial CV (*mo) of the forms in these three languages from three different branches all agree, and in light of *t > r > y in UA, especially NUA, or *t > *c > y in NUA, there is something to be said for Cp míte (Cp i < *o), Tbr moro-ní-r, and Hp mööya (Hp \ddot{o} < *o), though particulars would be nice. [t/r/y, liquid, medial C] [NUA: Hp, Tak; SUA: Tbr]
- 723a. *(yï)-kwa(ta) 'dry': NT diïbátai 'dry (of ground), vi'; Nv dubaga[dïbaga] 'marchitarse'; ST baata' 'marchito, seco (planta)'. Short the first syllable, ST baataya 'marchitarse, secarse (planta)' matches NT.
 723b. *tasakwa 'dry season': ST taaba' 'llegar la época de sequía'; ST taabak 'dry season (from Dec to May), n'; PYp tahabda 'dry season'; these point to *tasakwa, though much remains unclear. [SUA: Tep]
- 724. *coLo 'dry, wither' has been moved to 1228 'hungry, wither'
- 725. *tuna 'shrink': Ls tuná-qa 'shrink'; Ca (-če-)túnuš 'have a cramp, shrink'. [NUA: Tak]

DUCK, GOOSE; PATO, ÁNADE, GANSO, ÁNSAR, OCA

- **726.** *cika / *cika 'duck': M67-145 *cek; Fowler83; CL.Azt221 *cika > *ïcka 'duck, down'; Dakin 1982-4 *cika 'plumón / down'; M88-cï7 'duck'; KH/M06-cï7: Kw čiga-zi 'duck'; Ch cïga 'duck'; SP čïġa 'duck'; WMU čïġá-či / čihqqá-či / čuká-ji / juga-či 'duck, n'; CU čïgá-či 'duck'; Hp cïkïmana 'mudhead duck'; CN ička-tl 'cotton'. CL.Azt221 note 'down' as the probable intermediate meaning between duck and cotton. KH/M06 queries whether the Hp term is a compound of cïkï 'clown' and mana 'girl'. Though the majority of languages align with *cïka, a reconstruction of *cika is feasible as well; Kw does show it, and due to the schwa-like nature of ï, it seems that *i > ï is more likely than *ï > i, especially before a; Azt shows i as well. The 2nd vowel being *a* in both WNumic and Azt suggests that it assimilated in Hp: *cïka > Hp cïkï. [CN prosth; V leveling] [NUA: WNum, Hp; SUA: Azt]
- **727.** *pïcïN 'duck': I.Num169 *pï... 'duck'; Fowler83; M88-pï9; Miller, Elzinga, McLaughlin 2005; KH/M06-pï9: Mn pïyï; NP pïhï; TSh pïyïn; TSh pïyïcci; Sh pïyïn; Pl pišiiši 'duck, sp'. Add Cm pïïyï and Eu bavíci/babici 'duck' with *pa- prefixed. This is a good candidate for Manaster-Ramer's sound law *-c- > y in NUA. Note also that we have NUA *pïcï and SUA *pici. [*-c- > NUA -y-; medial, h, y, c, š] [NUA: Num; SUA: Opn, Azt]

- 728. *kan 'duck': Wr kaní 'duck'; Tbr kaní 'pato'; CN kanau'-tli 'duck, ánade'. [SUA: Trn, Tbr, Azt]
- **729.** *La'a 'goose': Munro.Cup50 *láá'a-la 'goose'; KH/M03-la1: Ls lá'-la; Cp lə'ə-l; Ca lá'la'. [NUA: Tak]
- **730.** *pa-wiLikan 'duck': Tb paawiligan-t 'geese'; Hp paawikya 'duck or other waterfowl'. *pa is likely water; Hp ky is sometimes from a cluster like -lk- > -ky-, as Tb may reveal. [NUA: Hp, Tb]
- **731.** *-sa'i- 'duck ': *-sa'i- in Ca sásaymal 'em 'wild ducks'; Cp qewísa'i-l 'duck, sp'. There is potential for a tie with *sayaC 'mudhen' though phonological differences (*sa'i vs. *saya) and a semantic difference (mudhen vs. duck) separate them for now. [NUA: Tak]
- **732. *nakï** 'goose': Fowler83: NP nagïddï 'goose'; TSh nïkïnta 'goose'; Sh(M) nïkïntan 'goose'; Kw; SP. [*-Nt->-dd- in NP] [NUA: Num]
- **733.** *somi 'duck sp': Dakin 1982: CN šomo-tl 'pato triguero'; Te šomi-li 'jumil'; Xal šomi-li-n 'jumil'. [SUA: Azt]
- **734.** *kuta 'mallard duck': Jane Hill (p.c.): NP kuda 'duck' (in Yerington), 'mallard duck/anas boschas' (in Merriam); Ch kurásïŋ*a* 'mallard duck' (Harrington noun list). [NUA: WNum, SNum]
- NB, Cr pwáatu-te -pl from Spanish pato interestingly has pW instead of p.

Dusk: see night, sunset, and black

Dust: see earth Dwell: see sit

DYE; TEÑIR, TINTURAR

735. *yuka 'dye': My yokka 'está tiñendo'; Wr yohke-ca-ni 'teñir, vt'; Wr yohke-pa-ni 'be stained, dyed'; Tr yóga-'tentir, entintar'; Cp yúče (< *yuk-tV) 'soak, dye, put into water, leach'. Cp u may portray the first vowel to be *u; otherwise, *o > Cp i, but *u > o/_Ca, i.e, or *u being lowered to o in anticipating low a in the other languages. [*u- a > o-a; possibly -kt- > č- in Cp] [NUA: Tak; SUA: Trn, Cah]

736. *pu 'dye': ST vua 'dye'; Wc hi'ye 'color, form'. Both initial syllables reflect *pu, though 2nd syllables vary. Is Wc hi'ye part of Wc mai'ye 'color' which is attached to many color words? [SUA: CrC, Tep]

EAGLE, HAWK, FALCON, BIRDS OF PREY; ÁGUILA, GAVILÁN, HALCÓN, FALCÓN, AVES DE

PRESA: The many UA words for eagle and other birds of prey that begin with kwa need a more thorough study and sorting. Nevertheless, cognate collections attempting to deal with this conglomeration include: Sapir; VVH49 *kwa 'eagle'; M67-146a *kwa, 146b *kwi, 146c *ku; I.Num86 *kwi(')naa('a) 'eagle, large bird'; B.Tep5 *ba'agai 'eagle'; L.Son118 *kwawe 'águila'; L.Son115 *kwasa 'aguililla'; M88-kwa3; M88-kwa4; M88-ku10; KH/M06-ku10: for an initial sorting, let's begin with *kwasa/kwisa, *kwa'a, *kwa'awï/ai, and *kwi'na. Lionnet and Miller separated the forms containing second syllable -sa from the others, so let's start there:

737a. *kwasa 'eagle': L.Son115 *kwasa 'aguililla'; M88-kwa4; KH/M06-kwa4; NP pui kwasa 'blue heron'; Tbr kwasá 'clase de ave pescadora grande'; Ca kwasanemčíip 'baldheaded bird'; Wr kusá 'tipo de gavilán'; Tr kusá 'aguililla'.

737b. *kwisa 'eagle': M67-146b *kwi 'eagle'; Fowler83; M88-kwi5; KH/M06-kwi5: Cr čuíhšï 'hawk'; Wc kwíişï yïï.yári 'aguililla'; CN kwiiš-in 'large bird of prey, hawk'; Pl kwiş-ti 'hawk'; and perhaps Kw kïsa-vi 'chicken hawk'; Wc kwíişï yïï.yári 'aguililla'. These two sets may be the same; whether *kwisa was original and the first vowel assimilated to the second (*i-a > a-a) or whether *kwasa was the proto-form and the first vowel raised and fronted toward the alveolar is hard to say; either is possible, and thus these two are likely variants of the same etymon *kwVsa. [*u > ï in Kw] [NUA: Num, Tak; SUA: Trn, Tbr, CrC, Azt]

- **738a.** *kwa'a 'hawk sp': Sapir; B.Tep5; Munro.Cup161 *kwáá'a-la 'chicken hawk'; M88-kwa3; KH.NUA; KH/M06-kwa3: Sr kwaa'-ţ 'large hawk, buzzard, vulture'; Cp kwáva'ma-l 'big spotted bird'; Ca kwá'al 'chicken hawk'; Ls kwá'-la 'kind of hawk'; Hp kwaa-hï 'golden eagle'; Tb waa'a-l 'hawk'.
- **738b.** *kwa'awï / *kwahawai / *kwaCwV 'eagle': Sapir; B.Tep5 *ba'agai 'eagle'; Fowler83; KH/M06-kwa3: NT baagai; ST ba'aa'; UP ba'agï; LP ba'ag. Add Nv baagi 'águila'. In addition to every Tep language showing a form of *ba'agai (< *kwahawai), evidence more specific to a longer form such as *kwa'awï is strong in Eu páwe/páve; Tbr kwamowé-t; Tr wa'wé/ba'wé; Wr wa'wé; Op pa'a-(g)we (Shaul 2007); Cr kwa'ïra'abe 'eagle'; and CN kwaau'-tli as well. This may be the same as *kwa'a above, with the augmentative *-wï 'big' or s.th. else suffixed to it. Cr kwa'ï < *kwa'u aligns well with the reduced forms in Tr, Wr, CN. [reduction; Tb w < *kw] [NUA: Tak, Hp, Tb; SUA: Tep, Trn, Opn, Tbr, CrC, Azt]

I initially had *kwi'na / *kwana together, but later noticed that only *kwi'na forms show glottal stops (even if transposed to other syllables) while none of the kwana forms do, thus, separate letters.

- **739a. *kwana** 'eagle': Sapir; Fowler83; M88-kwa3: Kw kwana-zi 'squirrel hawk'; SP kwanna-(nci) 'eagle'; CU kwana-ci 'eagle'. [NUA: SNum]
- **739b.** *kwi'na / *kwiCna (as suggested by Iannucci: I.Num 86) 'eagle': Mn kwi'naa'a 'eagle'; TSh kwinaa 'eagle, large bird'; Sh kwinaa/kwi'naa 'eagle, large bird'. Add Cm kwihnai 'eagle'. [NUA: WNum, CNum]
- **740.** *kwayo / *kwayu: Hp kwaayo 'small eagle'; TSh kwiyoo 'red-tailed hawk'.

In the above groups are three instances of a *kwi/kwa split: kwasa/kwisa; kwana/kwina; kwayo/kwiyo. For the last of the three I reconstruct *kwayo because the a-vowel or first vowel is longer in Hp, while the o or latter vowel is longer in TSh. And since short vowels are more likely to assimilate to surrouding environment than long vowels, the a seems more likely original; furthermore, an assimilation of a > i/_y is natural, while i > a in the same environment is not. The second vowels do not agree exactly either: Hp o < *u. [vowel; a>i/-y] [NUA: Num, Hp]

- **741.** *'asa-wïL 'eagle': BH.Cup*'ašwït; M67-147 *'as; KH.NUA; M88-'a12; KH/M06-'a12: Sr 'ahïŋ-t / ahïn-t 'eagle'; Ls 'aṣ-wu-t 'golden eagle'; Cp 'ašwe-t 'eagle'; Ca 'aswet; Gb 'asáwt 'golden eagle'; Tb 'aašawï-t 'eagle'. As Miller suggests, the -wï syllable in these forms probably means 'big'; nevertheless, a second vowel *a* after *s* is apparent in both Gb and Tb. Note also Sr's η where others have w. [η/w] [NUA: Tb, Tak]
- **742.** *kisa 'chicken hawk': Munro.Cup62 *kííşi-la 'chicken hawk'; M88-kï9; KH.NUA; KH/M06-kï9: Cp kísi-ly; Ca kísily 'chicken hawk'; Ls páakiš-la 'chicken hawk'; Gb pakísar 'chicken hawk'; Sr paakiha-ţ 'chicken hawk'. In connection with these, we can include Hp kiisa 'chicken hawk'; Kw kïsa-vi 'chicken hawk'; and Ch(L) kïsavi 'hawk species'. [*i > ï/ Ca; liquid] [NUA: Num, Hp, Tak]
- **743.** *kïLï / *kïtï 'small kind of hawk': M88-kï9; L.Son84 *kïrï 'clase de gavilan'; KH/M06-kï9: Hp kyeele 'sparrow hawk'; Wr kelecí 'gavilancito'; Tr kiričí 'gavilán pequeño, cola amarilla'; My keré'ere 'quelele'. What of Ktn kïyïkïyïč 'read-tailed hawk'? PUA *L in both Hp and SUA. [L in Hp and SUA] [SUA: Trn, Cah; NUA: Hp]
- **744.** *tahawi / *ta'awi 'hawk': Yq táawe 'gavilán'; My taawe 'gavilán'; Wr ta'iwé 'gavilán pollero [chicken hawk]'; Tr ŕawiwi. For another example of Tr w = Wr', cf. left. The glottal stop is apparent in Wr, lost in the others, but consonantally harmonized in Tr. Tbr tahamwé-t 'chicken hawk' also belongs here. Ken Hill lists some of these at KH/M06-ta51 (see at 'bird') as well as CN tlo'tli 'sparrow hawk', noting that wrong vowel, though -aw-> -o- is common. He may be right, but Tak *tapi 'bird sp' at bird has medial *-p-, and though *-p- / -v- > -w- is possible, the two sets are presently kept separate due to differing medial consonant. [w/'/h; C harmony in SUA; unaccented V > i/i?] [SUA: Trn, Cah, Tbr, Azt]
- **745.** *tokwapi / *topapi 'hawk': Fowler83: TO tobaw 'a species of hawk'; NT tobáávi 'el gavilán'; ST tovaab 'gavilán pajarero'. TO and NT point to *tokwapi, while ST may have metathesized the consonants. The second consonant or consonant cluster involves a bilabial and the other segments are quite in agreement. [SUA: Tep]
- **746.** *naka'i 'marsh hawk': Fowler83: NP naka'i; Cm nakaai; Fowler also lists Sh, SP, but does not provide forms. [NUA: Num]

- **747.** *pancaya / *paŋaCca 'hawk, sp': TSh pancayaa 'marsh hawk'; Sh(C) pancaiya 'hawk sp., large, black, low flying'. Ktn paŋaca' 'duck' may tie semantically with 'marsh hawk' and phonologically with both: *-η- > -n- after loss of vowel and clustered with -c-: *paŋaca > *panca > panca. [cluster] [NUA: CNum, Tak]
- **748.** *(pic)-sawa 'chicken hawk': TO wishag 'the sharp-shinned hawk, the chicken hawk'; PYp visaga 'hawk, chicken hawk'; Tbr samwé-t / samowé-t 'águila, halcon'. Tbr shows the latter part (*-sawa) of a probable compound. Note the vowel insertion and perceived consonant cluster separation in Tbr: *sawe > samwé-t > samowé-t. I think similar happened to glottal stop clusters often in SUA: *-V'C->-V'VC-. [cluster separation] [SUA: Tep, Tbr]
- 749. *pik 'hawk, sp': TSh pikkitiki(cci) 'sparrow hawk'; Hp pìikwa 'lesser nighthawk'. [NUA: Num, Hp]
- **750.** *hop(a)paLi 'predatory bird sp': Yq hóopopol 'pájaro cazador'; NP wobbo'i 'sparrow hawk'; and perhaps TO haupal 'red-tailed hawk', possibly as a loan, though the 2nd a of TO seems more original. Much must remain tentative for this set, yet two or three seem relatable, whether borrowed or not. [NUA: Num; SUA: Cah, Tep]
- **751.** *hutahi 'hawk sp': Yq hučáhi 'gavilán'; Ls hičéé-ma-l 'small hawk'. This pair is hardly certain, but plausible in *hutahi > *hotehe > Cup *hicee. For Ls we would expect more exactly e < *o, but i/e dissimilations happen enough in Ls to make the above plausible enough. [NUA: Tak; SUA: Cah]

NB, see also buzzard and bird

EAR; OREJA, OIDO

Mn	náqa	Нр	naqvï	Eu	nakát 'oreja'
NP	naka	Hp	naaqa 'ear pendant'	Eu	kéisiven 'oido'
		Tb	naŋha-l 'ear, leaf'	Tbr	naká-r
TSh	naŋki	Sr	qävaač 'ear, leaf'	Yq	náka
Sh	nainki	Ca	náq-al	My	nákka-m
Cm	naki	Ls	náq-la	Wr	nahká
Kw	naga-vi-vi	Cp	náq'a	Tr	naká
Ch	naŋkávï	TO	naak	Cr	našaíh
SP	naŋkava-vi	PYp	naaka	Wc	naaká
SP	naŋka 'hear, v'	NT	naáka	CN	nakas-tli
CU	nïká-vi	ST	naak/nak	Pl	nakas

752a. *nakka / *naNkapa (< *na(N)kasapa ?) 'ear': Sapir; VVH47 *naNka 'ear'; M67-148 *naka; I.Num109 *nanka/*nanki; BH.Cup *naqala; Munro.Cup37 *nááqa-la; L.Son163 *naka; M88-na1; B.Tep162 *naaka; KH/M06-nal *nanka (AMR): some terms of interest include Mn naqqa 'ear, to hear, vt'; NP naka (< *nakka) 'ear, to hear'; SP nanka 'to hear, ear ornament'; SP nankava 'ear'; Cr našáih 'ear'. WMU has a variety of pronunciations: WMU nügáv / nüügáva / nüÿáva / nugáv / nIgávačü- 'ear'. 'Ear' is one of few pervasive UA words. Some pecularities are s in Aztecan, Eu, Cr, and p in SNum, Hp, Sr, Ktn kava-c (and lacking na- in Ktn, Sr), and *-p- in Eu; and both in Eu kéisive 'oído'. Eu ke 'hear', Eu keívuve 'listen' and many other initial *ka... forms are at 'hear'. Those forms and the Sr and Eu forms, which show the same consonants as Num and Azt/Cr (i.e., k-s-p) could suggest that *nakasapV contains a fossilized verb prefix *na-. TO nahagïw 'flap the ears, v. (of certain animals)' is a verb and may show the same consonants (*n-k-s-p) with s anticipated (*n-s-k-p) and voicing of k > g. PUA *s clustered with either k or p would disappear quickly, so its survival in Azt, Cr, Eu, and TO is noteworthy.

752b. *na(N/k)ka 'hear, v': M88-na1 'ear': Mn naqqat 'hear, vt'; NP naka 'ear, hear'; TSh nanka 'hear' vs. TSh nanki 'ear'; Sh nanka 'hear'; Sh nenki 'ear'; Cm nakarï 'hear'; Kw naga; Kw naa-kee-; Ch nanká-kai; SP nanka 'hear'; CU nïká-y; Ca náqma 'hear, listen'; Cp náqma 'hear'; Cp náqma 'hear, Isten, understand'. [cluster; na-] [NUA: Num, Hp, Tb, Tak; SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]

EARTH, LAND, DIRT, CLAY, MUD, DUST, DESERT, PRAIRIE, PLAIN; TIERRA, BARRO, ARCILLA, POLVO, DESIERTO, YERMO, PRADERA, LLANO, LLANURA, SÁBANA, CAMPO

753. *kwiya / *kwiLa 'earth': VVH112 *kwiya 'dirt, earth'; B.Tep6 *bidai 'clay'; M67-151 *kwi/*kwiya 'earth'; L.Son126 *kwiya 'tierra'; M88-kwi2 'land, earth, dirt' KH/M06-kwi2 *kwiy= *kwin: TO bid 'adobe, mud, clay, plaster'; Wr we'é; Tr weé/we-/wi'yé; My bwiya 'tierra, suelo, piso'; AYq bwia; Yq bwía, pl: bwiam/bwiram; Tbr kwirá-t 'tierra, mundo'; Cr čwéh; Cr čuáa-ta'a 'on the ground'; Wc kwí(y)e. Note the *r* instead of *y* in both Tbr and the Yq pl., which liquid also aligns with the NUA n in several Takic and Numic forms that KH/M06-kwi2 adds to Miller's list: Sr pääkwiñit 'mud' (water-dirt) and Gb kwenár 'mud'. NP pakkwinapa 'clay' may be 'water-earth' as also Ktn pakwinit 'clay, mud' and Sr. I agree with Hill's moving Ls kwiláli 'to soil, make dirty' from here to *kwiCtaC 'defecate'. [L/r > y; liquid] [NUA: Tak, Num; SUA: Tep, Trn, Cah, Tbr, CrC]

754. *wiya 'mud': Kw wiya-vï 'mud, clay'; WMU wiya-vï 'mud'; CU wiya-vï 'mud'. Could these be a development from *kwiya, in spite of w instead of kw? [NUA: SNum]

755. *yïpïLa 'earth, dirt': B.Tep32 *dïvïrai 'earth, dirt'; M88-yï14; KH/M06-yï14 'canyon': TO jïwïD 'soil, earth, world'; PB dïvar (B); NT dïvïrai; ST dïvïïr. Add PYp dever 'earth, land' and Nv duburha [dïvïra] 'tierra'. Ken Hill's union of these with *yïppa 'valley' (at canyon) is very possible, though the geminated consonant in Cp and slightly different semantics have me wanting to keep them separate, pending improved probabilities otherwise. [SUA: Tep]

756. *yawa > *yuwa 'open country, flat land, outside': AYq yeewi 'towards outside'; Yq yeu- 'para afuera'; TO jeg 'ouside'; Kw yuw-a=aka 'desert, plain'; CU yúaa-vi 'plains, open country, wild country'; CU yúaa-vatï 'outdoors, out-country, in the open'; WMU yuwaa-v*i* 'level country or land'; CN kiyaawak 'outside' a compound with ki- house. Yq, AYq, TO, CN, WMU, and CU all point to *yawa. Note also Tbr -yá(n) 'fuera'; Tbr (ki)-yá-n 'fuera de (casa)' and Tb yahawaa-l 'red earth' be related. [NUA: Num, Tb; SUA: Tep, Cah, Tbr, Azt]

757a. *tïpaC / *tïpaL 'earth': Sapir; I.Num247 *tïpi(h) 'earth, land, ground'; M88-tï36; KH.NUA; KH/M06-tï36: Mn tïpi; NP tiipï 'earth, land' (vs. NP tibbi 'rock, stone'); Sh tïpia 'home country, land, property'; Miller includes Cm tïp/tïpi 'a stone, rock'; Kw tii-pï (< *tiip-pï) 'dirt, earth, world, year' (vs. Kw tï-bi/tï(m)bi/ tï-bi-ci 'stone, rock, earth'); SP tïvi"-/tïvi-ppï 'earth, ground, country' (vs. SP tïmpi" 'stone, rock'); CU tïvï-pï 'earth, world, soil, dirt, ground, country, land' (vs. CU tïpïy-ci / tïpï (< *tïppï) 'stone'); Gb tová-r 'tierra'; Ls tóóva-l 'white clay'; Ls tóvki-š storage cave (earth-house?); Sr tiïva-ţ 'earth, ground, land, world, country, floor, dirt, dust'; Ktn tïva-č 'dirt'. Add Op teve 'earth' (Shaul 2007) and Ch(L) tïvi-pï 'earth, land, territory'. Numic words for 'earth' vs. 'rock' differ in both the middle consonant and the final consont, so some are included for contrast. For example, *tïmï-pï 'rock' > tï(N)pï has SNum showing nasalization (at times medial -m-) or gemination (a definite medial cluster), while *tïvi"-(< *tïpaC) 'earth' shows no medial cluster and thus the usual spirantization. In SUA, the distinction is less discernible. Miller includes CN tepee-tl 'hill, mountain, precipice' which is listed at *tïpï 'long, tall' in this work. Cf. rock and tall. Sapir also ties the above *tïpaC 'earth' with *tïpï 'mountain', but Ls tavu- 'long' vs. the above Ls term and differing semantics (earth vs. long) and a final consonant in *tïpaC all suggest differing stems. That the 2nd V is *a* in Ls, Gb, Ktn is strength enough to reconstruct it, as any V > ï/i in UA is common, especially if the vowels became unstressed.

757b. *taL (< *tïpaL) 'land, earth': CL.Azt 96 *tlaal 'land, earth'; 130 tlaalia 'put, place'; M88-ta39; KH/M06-ta39: CN tlaal-li; Pl taal; Po tal; T tlolli; Z taal. The frequent loss of *-p- in Azt (2.4) and Aztecan's anticipation of following vowels (2.15.3) allow a very real potential for a tie of *tïpaC 'earth' with Azt *taal 'earth': *tVpaL > tapaL > taal (Azt). [NUA: Num, Tak; SUA: Opn, Azt]

758. *tipi-c 'white clay': M88-ti52; KH/M06-ti52: Ls tóovi-š 'white clay' (synonymous with tóóva-l); Sr tiïvi-c 'white clay, cement'; Gb tóviy 'white clay'. While very close to *tipaC above, note that these three languages have separate terms in the two sets, almost only a different final vowel and different absolutive suffix. [NUA: Tak]

759. *tima 'earth': BH.Cup *tə- 'down'; *tə-mal 'earth'; M88-ti36; KH.NUA: Ca téma-l; Cp temá-l; Hp tiima 'ground lime, kaolin' (cognate? Miller queries)—possible. [NUA: Tak, Hp]

- **760a.** *tïwaC 'sand, dust': Hp tiïwa 'sand'; Tb tiïwï-t 'dust'. Jane Hill (p.c.) notes Cp tïw- 'dust' as a welcome addition. Ls toowu-t 'dust in the air' (Ls o < *i); Cp tewvaŋa 'where dust was'; Sr tiüva-ţ 'earth, ground, land, world, country, floor, dirt, dust.' Hp compounds suggest an originally larger semantic range to include 'dust, earth': Hp tiïwaqal- '(at) the edge of the land, seashore, horizon' (qal 'edge'); Hp tiïwanasave 'the center of the earth'; Hp tiïwaŋw-ti 'decompose, turn to dust, become part of the earth'.
- **760b.** *to'o / *ta'a 'dust': Yq to'očia 'dust'; My toro'očia (redupl); AYq to'očia 'dust.' Cr sáa-ta'a 'sandy ground' (sáa = 'sand'). [NUA: Hp, Tb, Tak; SUA: Cah, CrC]
- **761.** *sokoC / *coka 'earth, mud': Sapir; M67-297 *so/*sok/*cok 'mud'; I.Num *soko 'ground, earth, dirt, land'; M88-so6 'ground, earth'; KH/M06-so6: NP soko 'ground, dirt; TSh sokopi 'ground'; Sh soko-ppïh 'earth'; Cm sokoopï 'earth'; SP soġo 'moist earth'; Hp cöqa 'mud, clay, plaster (cognate? Miller queries;)'; CN soki-tl 'clay, mud'; Cr hásu'u 'lodo, pared, pretil'. Add Wc hášu 'mud' (since CrC u < *o) to Cr. And Tr sugúri 'greasy dirt'; Yq tečóa; and My tečóa 'mud' might be considered also, if the Cah terms lost intervocalic *k. [c/s;-k-] [NUA: Num, Hp; SUA: Trn, Cah, CrC, Azt]
- **762.** *kwi-so' 'mud': L.Son124 *kwiso 'lodo'; M88-kwi13; KH/M06-kwi13; Tr we-so; Tbr kwisó-t 'lodo'. We might include an alternate form in Tr bisogá 'mud', showing the range for initial *kw in Tr. Wr wehcóri 'clay' belongs here. These may be a compound of *kwi(ya) earth and *-so(ka) 'earth, mud' or *cuLV 'mud' (see below). Other representations are Wr weh-có-ri 'clay'; Wr oh-có-re 'dirt'; Tr wečorí / wecolí 'mud' (< *we-co'-rí 'earth-sticky-noun suffix'). Brambila has -čo'- ('sticky') as the main morpheme; the glottal stop may tie these to *coka. [liquid, nasal] [SUA: Trn, Tbr]
- **763.** *cuLV 'mud': Tb culuta 'stuck in mud'; Yq tečoa 'mud'; My tečoa mud'. Cah languages (Yq, My) typically lose intervocalic -r-, so -coa (< *cora), they may tie to Tb, but certainly to each other. In *soka and *cuLa, Yq, My, Cr, Tr, whether the glottal stop is from lost -k- or -r-, decides their leaning toward *sokV or *cuLV. But ST ču du'npik 'lodoso, pantanoso' is unlikely. [liquid] [NUA: Tb; SUA: Cah]
- **764.** *huCkuN 'dust': I.Num36 *huhkumpï(h) 'dust'; M88-hu11; KH/M06-hu11: Sh hukkun 'dusty'; WSh hukkumpïh; Cm huhkuppï; Kw hukubï, hukwabï 'dust, fallen dry pine needles'; SP ukkumpu / ukkumpa; Ch hukump(ü) 'dust'; WMU *huh*kkúppü 'dust'; CU kukupï (< *kukkuppï). Miller's inclusion of NP kusipï is possible, but questionable. [C harmony in CU] [NUA: CNum, SNum]
- **765.** *pa-sakwinaC 'mud' or *pa(-)sa-kwiLa (see *kwiLa above): M88-pa16 mud: I.Num141 *pasïhkwi(na) 'mud'; KH/M06-pa16: Mn pasïkwinábï; NP pasaggwabï; TSh pasakkwinappï; Sh pasakwinappïh; Sr pääkwiñit. We should add Cm sekwipï 'mud'. Jane Hill (p.c.) notes that this could well be *pa 'water' + -sa- 'mud' (see below) + kwiLa 'earth/muc'. [-Ckw-] [NUA: Num, Tak]
- 766. *sa 'mud': Cr ša-rí 'mud'; Wr wehsá 'mud' (Wr weh- < we'é 'earth'). [SUA: Trn, CrC]
- **767.** *tuCca / *tuCCa 'dirt(y)': Mn tocábi 'dirty one'; NP tocaggïti 'dirty clothes, v'; TSh tuccaappï dirt, dirty'; Ch tucá-vi 'dirt'. [V assimilation: *u-a > o-a] [NUA: Num]
- **768.** *tis(-na) 'clay, grimy dirt': Hp tïsna 'human dirt'; Ca tésnat 'clay for pottery, pot'; Ca tésel 'yellow clay'; Mn tïzaga-bï 'clay'. [NUA: Num, Hp, Tak]
- **769.** *muLi 'dust': Ca múli-š 'dust'; Wr moréwa 'smoke, dust'; Tr bemorí 'dust'; ST čumoik 'dusty, pulverized ground, soft' (consider ST -moik since ST ču- may be a separate morpheme in light of ST čukuubs 'dust; ST kuubïš 'dust'). [l/r/t/ø] [NUA: Tak; SUA: Tep, Trn]
- 770. *papu 'clay': AYq vaavu 'clay'; My baabu 'clay (for making pottery)'; Yq baabu 'barro'. [SUA: Cah]
- 771. *pisu / *pusi 'dust': Eu puse'é- 'hacer polvo [make dust]'; Eu pusús mawa- 'llenar de polvo [fill with dust]'; Tr na'-pisó 'dust, ashes < fire-dust'. [SUA: Trn, Opn]

- 772. *pa-waha/maha 'grassland': I.Num144 *pawaha / *pamaha 'meadow, prairie'; M88-pa36; KH/M06-pa36: Mn pa-waha 'meadow'; Sh pamuha 'meadow'; Kw pa-waha-vï, pa-wahaa-ka(n)dï-(mbï) 'hay, bromegrass, meadow' (compound of pa- 'water' + mahaa-vï 'brush' suggested). Add NP wahabï 'hay'; NP pawahabï 'meadow, prairie'. This Num compound likely has pa- 'water' and suggested is *maha 'brush, plants' for the second, as *-m-> -wworks intervocalically for some languages, but normally not initially as we see in NP. [ma > wa or wa > mu?] [NUA: Num]
- 773. *tipoN 'plains, flat land': Mn tibóópi 'countryside'; TSh tupoompi/tupoon 'desert, flatland'. [NUA: Num]
- **774.** *tohono 'desert, plain': TO tohono 'desert, the south'; PYp doho 'plain, field' (if PYp d was a voicing or mishearing of t). [SUA: Tep]
- NB, for *yïpïLa 'earth, dirt', see canyon.
- NB, for *('/h)oka 'earth/land/sand' see rock.
- NB, for Hp halasami 'mud', see adobe *sami.
- NB, for Tep *'oidaga/'oidigi 'world, mountain', see mountain.
- NB, for *pasa 'cultivated field': Hp, Ch, see 'plant, v'.

East: see sun

EAT, CHEW, SWALLOW; COMER, MASTICAR, TRAGAR; see also bite, suck, yawn

775. *kwa'a 'swallow, eat': Sapir; VVH48 *kwa('a) 'eat, swallow'; M67-152a *kwa 'eat'; BH.Cup *qwa- 'eat'; L.Son113 *kwa/*ko'a 'comer'; M88-kwa5 'eat'; AMR 1993a *kwa'aC 'eat'; KH.NUA; KH/M06-kwa5: Cp kwá 'eat'; Cp qwe'í-š 'food'; Ls kwá/qwá 'eat'; Gb kwa'á; Sr kwa'-i; Eu hibáa-; Yq bwá'a; My bwá'a; Tbr ko-; Cr kwa'á; Pl kwa; CN kwaa. Miller includes Tr go'á/ko- and Wr ko'á, though Tr wa'a/a'wa 'swallow' exhibits the expected sound correspondences of *kwa'a. Tr go'á/ko- and Wr ko'á better fit the forms of *ko'a below, where is also Tep *ko'a. However, let's do add Tep *ba'a/ba'i (<*kwa'a/kwa'i) 'swallow': TO ba'a/ba'i 'swallow'; Nv ba'a; PYp ba'i'ia; NT bááyi; ST baya. [NUA: Tak; SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]

- 776. *ko'a 'eat': VVH131 *ko'a 'eat'; M67-84 *ko 'chew'; B.Tep115 *ko'ai 'eat'; M88-ko4; KH/M06-ko4: NP sanakko'o 'chewing gum'; Ls qé'ni 'feed animal'; TO ko'a; Wr ko'á-; Tr go'-mea / ko'mea / go'á / go'yá / ko-; Tbr koa. In M88-ko4 Miller combines the *ko'a and *kwa'a forms, which in the kw-languages can easily alternate (thus some forms are in both lists here as well), but they are clearly distinguished in the Tep and Cah branches where ko'a and ba'a/bwa'a forms sometimes exist in the same language: e.g., TO ko'a 'eat' and TO ba'a 'swallow', though an early *kwo > ko in Tep/Cah would make the set even more complex than the mere complexity that we presently think we are dealing with. Ktn kwa' 'eat' and Ktn ko' 'eat' hardly help. Is Kw ka'a 'eat' an assimilation (*ko'a > ka'a) or loss of first syllable (*tïkkaC > ka'a) or neither? [NUA: Num, Tak; SUA: Tep, Trn]
- 777. *kuCma/i / *kuNma / *ku'mV 'chew, nibble': VVH88 *kuumi/*kuuma 'eat' (as corn, to nibble); M67-152d *ku/*ko 'eat'; L.Son104 *kumi 'masticar'; Kaufman1981 *kunmi; Dakin 1982-30; M88-ku12; KH/M03-ku12: TO kuum 'chew, crunch'; Wr ku'mi; Tr gumí / kumu 'eat small things, like corn'; My kúume 'chew'; Wc kïmée 'mochar, eat small bites'; Cr kï'ima / kï'imi 'eat'. In light of the glottal stops (Wr, Cr), we may be dealing with another consonant, i.e. a cluster or a glottal stop as well. Dakin (1982) ties these to CN kimičin 'mouse' (as a nibbler, good inclusion). Ken (KH/M06) and Jane Hill (2001) add SP kummia 'old Indian name for corn, rarely used now'; Hp kokoma 'dark red, almost purplish corn'; Hp koma 'coxcomb, Amaranthus cruentus, a plant used to make red piki' (Hill queries whether the two preceding are cognate; I would say so); CU kïmïy 'corn'; TO kuum 'eat, chew on s.th. that comes in little pieces'; Cm kukïme-pï 'parched corn'. Let's also include AYq kumme 'chew'; PYp kuum 'chew'; WMU kïmwi/kumwi 'corn'; TO kuumikuD 'corncob' literally as 'eating tool'. I like Kaufman's *kunmi, as a very plausible reconstruction. [NUA: Num; SUA: Tep, Trn, Cah, CrC, Azt]
- 778. *kaNma(C) / *kaCma / *kanma (Kaufman1981) 'taste, have taste or a quality of taste, such as sweet or salty': I.Num50 *kahma '(have a) taste'; M88-ka2 'be sweet or salty'; Kh/M06-ka2 'be sweet or salty': Mn qama (*qamma) 'taste, v'; NP kama; TSh kama/kamma; Sh kamma"; Cm kama/i 'have a taste, be tasteful'; Kw kama 'taste, vi'; CU kamáy (Miller *kammay) 'taste, have taste, taste good'; CU kamá-tï (< *-ttï) 'tasty, good tasting'. Add Ch(L) kama- 'have taste or flavor, vi' (also in compounds such as Ch piya-gama 'sweet'and WMU kamma- 'have

taste'. In M88-ka2, Miller includes M67-427 *kaka 'sweet'; L.Son71 *kaka 'dulce' as *kaka may be a reduplication of *kaCma 'taste'—easily possible, but not entirely certain. ST kaak 'have a certain taste'; Yq kám-ta 'swallow, put in mouth'; ST kaam / kaamta / kaamik 'carry/hold in the mouth' may be semantically pivotal between *kaCma 'taste' and *kaCma 'mouth, cheek' and possibly tie them together. Sh and CU may suggest a final -C. Relative to Kaufman's reconstruction *kanma, note Ca ken-ma 'delicious, tasty'. [NUA: Num; SUA: Tep, Cah]

779. *koki 'graze, v': M88-ko38; KH/M06-ko38: Cp qíxin 'graze, pull out (hair)'; Ls qéexi 'graze (of animals)'. The q- in both languages points to *ko for initial syllable. [NUA: Tak]

780. *kwi 'food, feed, give food': VVH53 *kwi 'food'; M67-152b *kwi 'food'; M88-kwi6; KH/M06-kwi6: TO bia/bi 'dish out (food)'; Miller (M67-152b) shows Sr kwi'a-t, -kwi'a' 'food' but Hill (1994) has only Sr kwa'i'aaţ 'food', whose first vowel better agrees with *kwa'a above; Hp kwiivi 'boiled or stewed food'; Hp kwiiva 'cook by boiling'. Add NT biááhai 'serve (food)'; NT bíídyi 'give to eat'; ST biidya 'serve (food)'. [NUA: Tak, Hp; SUA: Tep]

781. *suwa / *su(C)wi(C) / *suCCaC 'eat up, consume(d), die': VVH72 *suwi/*suwa 'consume, eat up, finish'; M67-130 *sua / *suwa 'die'; M67-153 *suwa 'eat'; I.Num183 *su'a 'eat, consume, finish up'; L.Son266a *suwi 'agotarse'; 266b *suw-a 'agotar'; B.Tep75 *hugi 'eat'; B.Tep75a *hugi 'eat'; M88-su3 'finish, consume, use up'; KH/M06-su3 *suCHaC (AMR): Mn su'a 'eat all, eat up'; NP sua 'consume'; Kw soo-kkwee 'consume, eat up'; SP šua 'consume (usually food)'; CU suwa-y 'eat up'; Hp sowa 'eat up, consume, devour'; TO hugiog 'destroy, spend, use up'; TO huhug 'perish, die' (cf. Hp so'a 'die, perish, pl'); Wr soa- 'consumir'; Tr suwí- 'acabarse, agotarse, morir'; My súwwa 'kill pl. obj's'; Tbr suhi / zuwi / zuñwá 'acabarse'; Wc siï 'acabar'. Miller includes Pl seewi 'go out, die out, be extinguished'; CN seewi 'calm down, take a rest, cool off'. Either that set or, CN tetešoaa 'gnaw, chew' or CN tlan-čoaa 'chew'—or whatever combination of dialect recyclings. Others to consider are AYq sauwa 'use, vt'; Wr suení 'acabar'; NP soo'a 'eat up, consume'. [NUA: Num, Hp; SUA: Tep, Trn, Cah, Tbr, CrC, Azt]

782. *tikkaC 'eat': VVH163 *ti_uka to eat; I.Num238 *tihka 'to eat'; M88-ti27; AMR 1993c *tikka; KH/M06-ti27 *tikka: Mn tika; NP tika; TSh tikka; Sh tikka, tiki"-; Cm tihka-; Ch tüká-; SP tikka; CU tikáy; Tb tika-t~'itik. This is a good example of medial geminated -kk-, showing k vs. g in WNum and -kk- in the other two branches of Num as well as a final -C. [*-kk-] [NUA: Num, Tb]

783a. *y**ï'ïki** 'swallow': VVH168 *yï_{ll}'ï 'to swallow'; M67-425 *ye 'swallow'; M88-yï9 'swallow'; I.Num299 yï(h)wi; KH/M06-yï9: Mn yïkwï (<*yïkkwï) 'swallow'; NP yïggwi'hu/yïkwi; Sh yïmi"; Cm yïwi 'swallow s.th., go out of sight'; Kw yï'ïgi-; Ch yï'ïki; SP yï'ï-ġi/qqi; WMU yü'ûġi-y / yü'ûġi-y 'swallow, v'; CU yï'ï-ki; Cr ra-yé'e 'he's drinking it' (also at drink). Miller also lists TSh yunwïh / yunuh 'swallow, suck' and Wr ye'ni 'suck, smoke' which, if valid, would tie these to other proto-forms at 'smoke' but let's not, as the medial cluster is too different. As for SNum *yi'iki, WNum *yikkwi, and CNum *yiwi, rounding developing after a previous i is common in UA, and the following is not atypical: *yï'ki > yïkkwi > *yïwi. [medial C] [NUA: Num; SUA: CrC] 783b. *yīkī 'taste, finish': VVH170 *yīkī; M88-yī16; KH/M06-yī16: Hp yīkī 'make, fix, finish, taste, copulate'; TO jiik 'taste, vt'. Kartunnen does, but Molina did not distinguish the CN forms CN yekoaa 'taste, sample (food/drink), copulate'; CN yeekoaa 'finish, conclude'. Sapir and most since tie the former to Num *yoko 'copulate', which is sound, but the semantic range of the Hp term envelops both CN terms, is enough to make one wonder if both sets are not connected. Following Ken Hill, who is smarter than I am and who continues Miller's separation of yi9 and yi16, I'll concede while we think awhile more, though the complementary sets of branches (ie, no contradicting forms in the same language or branch), and nearly initial *yïk in common, with the major difference being a few glottal stops scattered about (*yï'(ï)k) in one of the groups, all combine to make one wonder. [NUA: Hp; SUA: Tep, Azt]

784. *'aki 'open mouth, eat, take/put into one's mouth': M67-294 *hak 'open the mouth'; M88-ha4 'open the mouth'; M88-'a36 'eat pinole'; KH/M06-'a36 rightly combines M88-ha4 and 'a36: Cp áxine 'eat pinole'; Gb 'áx 'comer pinole'; Sr 'aak(u) 'eat flour-like object or mush, throw it in the mouth'; SP agi 'take into one's mouth'; Tb aagït 'open the mouth, yawn'. Jane Hill (p.c.) also adds the following: Kw agi 'lick or eat mealy substance'; Ca 'áqi 'to open'; Sh ake" 'to open up'; and perhaps Tb(H) ahhaayč|at 'chew'. [NUA: Tak, Num, Tb]

- **785.** *kwïLuC 'swallow': Hp kwelo 'taste, v'; Tb weleeh 'swallow'; Eu béru'u 'swallow'. AYq wi'ukta 'swallow' and My wi'ukta look as if borrowed from Tr/Wr, unless Cah w < *bw, for the vowels and glottal stop for a liquid are as expected. Might Eu be a loan source for CN(RJC) palo 'taste, swallow'? [Liquids in both NUA and SUA; Tb 2nd V assimilated to 1st like elsewhere] [NUA: Hp, Tb; SUA: Cah]
- **786.** *mïLï 'swallow': Sr mïnï'kin 'swallow, vt'; Ls móóli 'swallow, v'; Ca méŋkwa 'swallow, vt'; Cp méle / méte 'swallow, vt'. Two n's (Sr, Ca) and two l's (Ls, Cp) suggest *l > n; on the other hand, in light of Cp, then *t > *l > n is not out of the question either. [t/l/N] [NUA: Tak]
- **787.** *kacako'a 'chew': Kw kacago'o-kwee 'chew up' (Kw ka'a 'eat'); SP čoġw'a-y 'chew'; WMU qahčőġ'wa-y / qahčő'wa-y / qöhčő'wa-y 'chew'; CU kučóĝway. [NUA: SNum]

NB, for *cu'mi 'suck, eat' see at 'suck'. NB, for *ki' / *ki'ca 'bite, v' see at 'bite'.

EDGE, SHORE, END, POINT, SHARP;

BORDE, MARGEN, ORILLA, RIBERA, FIN, CABO, EXTREMO, PUNTA, AGUDO, AFILADO

788. *capa- 'ridge, edge': L.Son28 *capa 'loma'; M88-ca13; KH/M06-ca13: Eu zápsi (capsi) 'loma'; Wr cahpá 'borde, filo, ridge, edge'; Wr cahpací 'leg, shin bone'; Tr capá-ci 'espinilla'. [SUA: Trn, Opn]

- **789.** *hay... 'edge, shore, end': M88-ha17; KH.NUA; KH/M06-ha17: Cp háyve 'end, edge, shore'; Cp háye 'finish, tire of'; Ca háyva 'edge, end'; Ls háylu / háyla 'edge, end'; Gb háykom 'quedar'; Sr hiïvia 'side, edge, shore, by, beside'; Sr 'ayiït 'end' (cognate? Miller queries); Hp hay 'near'. In relation to Cp háye 'finish, tire of' etc., PYp had 'finish, vt' is noteworthy, since Tep d < *y, and also Tr gayena-ma 'acabar, terminar', though the first consonants of both are unexpected. [Tep h < *h][NUA: Tak, Hp: SUA: Tep]
- 790. *kima 'edge': I.Num74 *kimaa / *kima'a '(sharp) edge'; M88-ki5 '(sharp) edge'; KH/M06-ki5: Mn kiwaa 'sharp-edged'; NP ggimai 'edge, on sides'; TSh kima 'side'; Sh kima 'sharp'; Cm kima' 'beside, along edge of'; Kw kuwa 'edge'; CU kúwaa 'edge, margin, sharp edge'; CU kuwá-pi 'sharp point' (-p vs. -v means final -C). We might also add Ch kiiwaa 'edge'; Ch kiwágai 'sharp'; SP kiŋwaa 'edge'; SP pa-xiŋwa-vi 'shore, water-edge'; WMU quwáa-va / qiwaa-va 'at the edge'. Since *kima is the primary form in WNum and CNum, this *m > ŋw > w is the case in SNum. Hp qala (=UA*kawa) being from *kima is a stretch, and only possible if borrowed from a SNum language before the Hp sound change of *w > 1. For Hp qala, see *kawaC below. NT gimúúkadai 'afilarse' with voicing of initial *k > g? [NUA: Num]
- 791a. *kuwa 'sharp, point': B.Tep *kuuga 'point, tip'; M88-ku29; Stubbs 1995-4; KH/M06-ku29: TO kuug/kugii 'edge, end'; NT kuugá; ST kuug; Pl kwa-, ku- 'head' (in compounds). Let's add Eu kuwát 'point'; Wr kuá 'point'; Tr owa- 'sharpen to a point'; Tr guani-/guwani- 'terminar, concluir'. Though CU kuwá-pï 'sharp point' looks like it could belong, it is above with *kïma. I once thought *kwawi (ku4) might tie to the *kuwa forms, but am doubting now; separate by letter while thinking about it: 791b. *kwawi 'sharp, tree': part of M88-ku4; KH/M06-ku4: AYq bwaawi 'sharp'; Yq/My bwawi-te 'sharpen'; CN kwawi- 'tree' and perhaps Cr kïye (< *kuye) 'tree, stick'; less conforming is Cp kwiti 'sharp-point'. *kwawi > kuwV is possible, but debatable. Some forms may suggest a final C. Cf. also *kuwa '(on) other side' at 'cross'. [SUA: Tep, Trn, Opn, Cah, CrC, Azt; NUA: Num, Tak]
- **792.** *suwiL 'edge, shore, border': B.Tep76 *hugida 'edge'{NT ugídya; ST hugdya; UP hugidī; LP hugd}; M88-su7 'edge/orilla'; KH/M06-su7: TO hugid 'edge, side'; Wr suéla 'edge, border'; Tr suw-é 'orilla, ribera, margen'. From other sources, consider also PYp hug 'end'; PYp hugid 'edge, shore'; ST hugiñ 'shore'; and possibly Sr a-hiïvia 'bank, edge, side'. Note the close parallel between Wr suéla and Tep *hugida. [*w > v in Sr] [SUA: Tep, Trn]
- 793. *mayoa 'shore': Yq mayóa 'ribera' and My mayóa 'orilla'. [SUA: Cah]

794. *kaCtuC / *kaku(n) 'end, tip': I.Num56 *kacun 'top/end'; M88-ka20; KH/M06-ka20: Mn taqqacún(a) 'tip, top, point of a long object'; Sh kacun 'end (of story, stick)'; SP kačoa 'top-end'; Miller includes TSh kakkuusi 'small conical basket'. It raises questions. However, one can include the first two syllables of NP kacuggwa 'end of s.th. (rope, stick)'. [NUA: WNum, CNum, SNum]

795. *mu'ka / *mukka 'sharp point': M67-368 *muk / *muc 'sharp'; I.Num99 *muki(h) 'sharp point'; B.Tep158 *mu'uka(ga) 'sharp'; M88-mu15; KH/M06-mu15: Mn mugituwi (< *muki"-ttu) 'sharpen, be pointed'; NP(B) mugu 'sharp'; NP mugupï 'sharp stick, splinter, quills'; Kw muku / mukwi (< *-kk-) 'point'; CU mukwáy (< * muhkwáy) 'come to a sharp point'; Tb muu'išt 'hill, peak'; Tb muwaal 'mountain' (cognate? Miller queries); TO mu'uk 'sharp, point'; LP(B) mu'uk; PYp mu'uk; NT múúkaga; ST mu'uuk. Note also *muka > mukwa-y (CU) > muku/mukwi (Kw). A few Kw forms raise some questions: Kw mogowa- 'edge'; Kw mogowa-ga-dï 'sharp'; Kw muku/mukwi 'point' (< *mu- 'nose' is suggested). The Tep languages suggest a fuller form *mu'uka(wa), though suffixed -ga (<*-wa) may be another morpheme, according to NT múúkaga 'sharp, adj'; NT múúkadai 'sharpen, vt'; NT múúkaryi 'become sharp, vi'. [*-k- > ' in Tb?] [NUA: Num, Tb; SUA: Tep]

796. *muCti / *muCci / *mucci 'point (of s.th.)': M67-368 *muk / *muc 'sharp'; M88-mu15; KH/M06-mu15: Ls múčvi 'point, tip, summit'; Hp mooci 'awl, long pointed stick used in weaving'; TSh muci 'point'; Sh muci 'sharp'; Cm mucipï 'sharp pointed'. Only Cm (< *-pp-) shows potential for a final consonant. Miller combines these with *mukka above, and if velars palatalized, then yes. However, velars palatalizing (*muka > *muki > *muci) is not well established for these languages. One question is that if the *muci (< *mukki) forms in these languages (CNum, Ls, Hp) are related to *mukka/i, then why did not *mukki 'die' and other -ki syllables in other words in NUA behave similarly? A cluster like *-kt- might more easily palatalize in NUA. What of SP mïttïŋwa 'point of hill'? Cf. also *muCta 'cactus'. Even if they possibly share a *muC morpheme, they are different compounds. For those reasons, I separate *mukka and *mucci until provisions for improved probabilities appear.

[*-k-> c in Hp, Ls, > ' in Tb?] [NUA: Hp, Tak, CNum]

797a. *ciC- / *ciC-kuta 'pierce, poke, (do with) a point, thorn': VVH164 *ci- 'point'; M88-ci7; KH.NUA; KH/M06-ip6 'with a sharp point'; KH/M06-ci7: Mn ci- 'with end of long object, with point'; Mn ci- 'with a long, pointed object, by poking'; NP ci- 'with the point of a long object, instr prefix'; Sh ci"- with a sharp point, instr prefix'; WSh cikkïah 'dig out with a sharp pointed object, vt'; TSh cikkïniih 'put pointed object on top of'; Kw či-kuri (< *cikkuri) 'poke, stir'; SP ci"- 'with the point of a long object, instr prefix'; CU cikúrïy (< *cikkutïi) 'poke with, stick into'; Hp cïkï('at) '(its) point, tip'; Sr čikï'īn 'poke, prick, stab, stick in'; Ktn cïk 'stick, stab, v'; Tb cïhk ~ ïcïhk- 'prick, v'; TO siiş|p 'nail, pin obj in one place, v'. We might add NT šiikánai 'cornear'; NT šiúkuvidyi 'poke, prod, vt'; CU ciká-vi'nay 'chop, cut off, cut a piece off'; NP cika('a) 'cut into s.th.'; and those below in b:

797b. *cikka / *ciNkV 'thorn(y)': Tb činjya-l 'red thistle'; Cp séčinjly 'thorn bush'; Cr cíkare'e 'espina'. Loss of nasal dimension in SUA (Cr) is typical. [vowels, medial C; *ki > ci; V anticipation in NT]
797c. *ciCni(C)ki 'poke, stick in': Kw cünü-ki 'put through a hole'; SP ci-'nikki 'stick with a point'; WMU či'-núga-y 'stick in (once and leave in)'; WMU čihčí-nihgi 'stick/poke in and out'. Interestingly, two of WMU's four syllables have voiceless vowels, which has almost elimintated them.
[NUA: Num, Tb, Hp, Tak; SUA: Tep, CrC]

798. *cuppa 'point, prick': L.Son48 *cup 'punta'; M88-cu19; KH/M06-cu19: Wr cuhpá 'punta aguda'; Tr čupí 'picar'; Pl cupina 'sting, stab'. Note also Pl cupi 'arse, anus'; Tr čupá/ču'á 'point, peak, snout'; Tr (wi)čubére 'tener puntas or picos [have points or peaks]'. From M88-co9; KH/M06-co9, we move here forms along the lines of 'buttocks, point, hill': Pl cupi 'arse, anus'; My čobbe 'parte trasera, posterior', with vowel leveling (u-a > o-o > o-i) rather than at *capa 'edge, ridge' where Lionnet had them; and NP capu 'buttocks'; NP(B) cabo 'buttocks'; NP(B) caboi 'rectum'. Add Yq čópoi 'hill'; AYq čopoi 'hill'; Ch(L) čupi (< *cuppi) 'anything gathered to a point, e.g., a bunch of grass tied together at one end'. The Ch form and possibly Wr, AYq, and others suggest a doubled medial consonant. The alternate forms in Tr make Eu cuwat 'aguijón de avispas' intriguing. The *copo forms may involve vowel leveling (*cupa > copo) and NP's vowel metathesis happened at 'bat' also (*pati > NP pita). [p/w] [SUA: Trn, Cah, Opn, Azt; NUA: Num]

- **799.** *sipaC 'point': Munro.Cup100 *şííva-t 'point'; KH/M06-si22: Ls şííva-t 'crystal wand tip'; Ca síva-t 'arrowhead'; Ktn tokšivat 'arrowhead, flint'; Hp siiva 'metal, silver' (cognate Ken queries? I say yes). Note also My sibulai 'punto'; My siiba 'paredon, peña'; Ca sívalu 'sharpen to a point'; Ca pásiva-t 'knife, sword'; Hp yoy-sivï 'arrowhead' (rain-metal); Eu siba 'raspar, acepillar, madera'; Eu sisvi wecát 'awl' and Eu vusiven 'awl'. Add Sr wisipka' 'pointed thing'; Sr wisip-kin 'make pointed'; Sr wisipu'-k 'be pointed (forming a single broad point)'; and Sr wisisu'-k 'be pointed (forming more than one broad point)'. Some forms agree more with *sipu. [a/u] [NUA: Tak, Hp; SUA: Cah, Opn]
- **800.** *ŋapaC 'sharp(en)': Ca ŋavay 'sharpen'; Cp ŋave 'sharpen'; Ls ŋáva/i 'be ground/sharpened, vi, grind (as a tool), sharpen, vt'; Gb ŋava'aa 'sharpen'; Ls(E) ŋávili-š 'whetstone'. [NUA: Tak]
- **801.** *yuLa 'sharp': Wr yolá-ni 'be sharp'; Tr oráre 'ser filoso, tener filo'; probably Sr ayuut 'end' with a fossilized a-prefix. [SUA: Trn; NUA: Tak]
- **802.** *kawaC 'sharp': AMR; KH/M06-ka46 *kawaC (AMR) and not in M88: Hp qala 'sharp, keen, having a sharp edge'; CN a'wa-tl 'long slender thorn'. [NUA: Hp; SUA: Azt]

NB, for Yq 'ía-tana 'this shore/side', see *tana 'container' at 'bag'.

EGG, TESTICLE; HUEVO, TESTÍCULO

803. *kappa / *kakwa (> *ka'wa / kowa) 'egg': M67-156 *kawa 'egg'; L.Son77 *kawa 'huevo'; M88-ka10; KH/M06-ka10: Yq kába; My kábba; Wr ka'wá/ká'awa-rá; Tr kawá/gawá/ka'wá; Tbr kowa-ló 'gallina ponedora'; Eu ákavo-ra 'huevo, genitivo'; Op akkawo-ri. The o of Eu ákovere 'lay an egg' agrees with Tbr while the o of Eu ákavo-ra agrees with Op, but adjacence to -w- could cause either. The medial consonant is difficult. The only certainty is that it is not *-w- alone. *-kw- or *-p- seems involved and in a cluster. [a- prefix in Eu] [SUA: Trn, Cah, Opn, Tbr]

804. *no'pa > *noppa (SNum) / *noCCa / *no(y/k/p/h)V 'egg': B.Tep172 *nonoha 'egg'; M67-154 *no 'egg'; I.Num115 *no(yo) 'egg, house, dwelling'; M88-no3 'egg'; AMR1993a *nok 'egg'; KH/M06-no3 *nok 'egg': Mn nóyo; NP noho; TSh noyo-pin; Sh noyo-; Kw nopa-vi / nopo-vi (< *-pp- for both); Hp nöhï; TO nonha; NT -nóno; ST na'no. To these we can add Ch nopávi 'egg'; WMU nahppaa-vi; CU napáa-vi 'egg'; and perhaps SP noo'rua 'be pregnant' and all the forms at *no... 'pregnant' (M88-no4 'pregnant'). The medial consonant (cluster) is difficult, and SNum *noppa may have another morpheme compounded. Note WSh noyo 'egg, testicle' vs. WSh no'i-pïh 'womb'; WSh noicci'i 'ejaculate' [Tep h and NUA h like hwopali at eagle and *hay at edge; medial C] [NUA: Num, Hp; SUA: Tep]

805. *pano 'egg, testicle': BH.Cup *pán 'egg'; M88-pa42 'egg'; Munro.Cup128 *pááni-l 'testicle, egg'; KH.NUA; KH/M06-pa42: Cp páni-ly 'testicles'; Cp páñi'a-t 'egg'; Ca pánit 'testicles' (Hill); Ca páne-t 'egg' (BH, Munro); Ls pááni-l 'egg, testicle'; Sr a-pään / paa'n 'egg'; Ktn -pano; Tb pompt 'egg'; Tb po'mt~'opo'm 'to lay an egg' (cognate? Miller queries; probably; last vowel anticipated). Munro notes the different forms for 'egg' and 'testicle' in Cp; different forms are listed in Ca as well; in fact, the lowered second vowel in Ca 'egg' is the leveled average of the two vowels (i'a) in the Cp form for 'egg'. [*-i 'testicle'; *-i'a/-e 'egg'; Tb V] [NUA: Tak, Tb]

806.*pa-tï 'testicle, water-rock': M88-'a33; Cr atá 'testicles'; CN aate-tl 'testicles, water-rock'. Miller queries whether these should tie into *at 'anus, bottom' in Tep and Hp. While a CN loan northward is possible, the meaning is clear in CN and is okay for Cr, but loss of initial *p in CN and Cr did not apply to other UA languages; therefore, initial a/'a forms in other languages, if indeed from *pa- 'water' could possibly be loans, but hardly cognates. [SUA: CrC, Azt]

807. *taLu 'egg': Tbr ne-telu-r 'huevo'; Cr ta'u 'blanquillo, huevo'. [*l > ' in Cr; Tbr-CrC/Azt] [SUA: Trn, CrC]

808. *tapaC 'testicle': Mn tába 'testicles'; TSh tapa-ppïh 'testicles'; Tbr tepalá-r 'testicles'. [NUA: Num; SUA: Tbr]

809. *piyso 'testicle': Yq bíčo 'testicle'; Tr bičó/wičí 'testicle'; and the -pedho portion of TO wiipedho 'testicle' (< *piipïyso) fits nicely since TO d < *y and a previous C in a cluster often causes *-Cs- > -c-, and the vowel change *pïy- > pi in Tr and Yq is quite expectable. Borrowing may have taken place between Yq and Tr, though they both occasionally show b < *p. If we exclude TO, a reconstruction of *pico might emerge, but pïyso with TO explains all forms. [reduction] [SUA: Trn, Cah, Tep]

810. *cakka-(pusi) 'testicle': Kw coko-vi'i 'testicles', Ch(L) čakwaivu'wi; SP caqqivu'i-(vi) 'testicles'; CU cïxá-vi 'testicles'; Wr cihká 'testicles'. The vowels are difficult even in SNum, yet it would be unwise to insist that these terms in this string of four SNum languages are not related. Lack of accent may have changed some vowels. Wr agrees in a medial cluster of some type as well. SP -vu'i-vi is identical to SP pu'i-vi 'eye', and the two's appearance is analogous to two eyes on either side of a long nose. [vowels; note round Vs in Kw as in Kw po'o 'water'] [NUA: Num; SUA: Trn]

ELBOW; CODO

811. *ciko > *cicko > *cico (Tep) 'elbow': B.Tep189 *siiso 'elbow'; M88-ci14; KH/M06-ci14: UP siisï; LP šiši; NT šiíšo; TO siiš. To Bascom's collection, Miller adds Eu itzót 'codo, esquina', showing the o, which appears only in NT of the Tep languages, but lacks some initial segments, and NP macihi, which if *ma- is 'hand', then NP cihi would correspond to Tep si'i, since glottal stops are far from durable in Tep. Hill adds Wc cikóri with a question mark. Certainly possible, along with Cr cikúri 'codo' / Cr ne-cikú 'mi codo'. In fact, might Tep *cico be a redupl'n that lost -k-: *ciko > *cicko > *cico / Tep *siso? Cr u and NT o both < *o, and *c > Cr c / Tep s. [' > ø in Tep] [NUA: Num; SUA: Trn, Opn, Tep, CrC]

812. *kippu 'elbow': I.Num70 *kii(h)pï 'elbow'; M88-ki5 'elbow'; KH/M06-ip8; KH/M06-ki5: Mn ma"-kiipï; TSh kiippïh; TSh kii(")- 'with the elbow, instr prefix'; Sh kii" 'with elbow'; Kw kiippu-pï; SP kiippï; CU kii-ppï; Miller also queries whether CN molikpi-l 'elbow' is related (cf. CN molik-tli 'elbow'). It is a good candidate since kipu > ikpi involves two changes that are typical of CN, but of moli, perhaps CN(RJC) molinia 'move, stir' might be helpful. [NUA: Num; SUA: Azt]

ELK; ANTA, ALCE

813. *pa-suCka 'elk, horse, lit. big-deer': M88-pa63: Ls páa-şuka-t 'elk, horse'; Cp pášuka-t 'horse'; Ca pásukat horse; Gb pásokat 'horse, lit. big deer' (cf. Gb pá-hunar Great-Bear; pa-kísar 'gavilán pollero'); Ktn pa-hukah-t 'elk'. Miller shows several Takic forms to establish pa- 'big' as a prefix on other hawk, eagle, and 'big' animal forms; likewise, he mentions Hp pas 'very' as possibly tied to this prefix. [NUA: Tak]

814. *pa-tikiya 'elk < big-deer': TSh patihiya; Sh patihiyan; Cm paria kuhma 'bull elk'; Kw pa-rihiya; SP pariia; CU pariyi. Comparing 'deer' vs. 'elk' terms, one can see the greater phonological deterioration toward the end of longer words when a prefix is added. [deterioration at end of long words] [NUA: CNum, SNum]

Embarrass(ed): see shame

Embrace: see hug Empty: see throw End: see edge or finish

ENEMY, FOREIGNER, STRANGER, DISLIKE, HATE; ENEMIGO, DESPRECIAR, ODIAR

815. *opa (< *ohopa?) 'strong, foreign, hostile, enemy, fierce, tough, brave (person)': B.Tep321 *'oobai 'foreigner, enemy'; L.Son18 *'opa 'enemigo, bravo'; M88-'o3 'fierce' and 'o26; KH.NUA; KH/M06-'o3: Cp ív'a 'strength'; Cp ívawe-t 'strong'; Ca 'íva 'be strong'; Sr ööva' 'be strong'; Ktn 'ova' 'force, have strength' (perhaps also Ktn 'ova' 'up, high, over'); Hp ööva 'be tough, hard-skinned'; Mn ohopi 'people or things that are strong, hardy'; Mn ohowani-t 'be strong, made sturdy'; Kw 'ohowa 'fast, loud, strong'; Tb 'oobaal 'strong'; Tb 'ooba-l/n 'muscle'; Tb 'oobawal 'strong person'; UP oobï; TO obga 'enemy'; TO owi 'opponent, the opposition'; LP 'oob 'Indian person'; PYp ooba 'person, Indian, Pima'; PYp im ooba 'enemy'; NT óóbai; ST 'oob 'enemy'; Eu ovíwa 'enemigo'; Op oppa (is this the source of Opata?); Wr opá (o'óba) 'large, broad-shouldered (person)'; Wr obatú (o'óbaru) 'be wild, ferocious'; Tr opa- 'bravo'. Add Nv obagga 'enemigo'. Tb, TO, Nv, and Eu show a *-wa suffix: *opiwa; the consistency of Tep b (<*kw) vs. *p in most other branches is disconcerting, though if *p, it is always in

environments easily voiced; therefore *p is preferable to *kw. Miller mentions in M88-'03 that the Num forms (Mn, Kw) may relate to M88-'01 *o/oho 'bone, strong' (only for Num), but not necessarily the others. KH/M06-'03 combines M88-'026 and M88-'03. Mn, Kw, and Wr recommend a light consonant like *ohopa or *o'opa. Could the long oo of CN yaaoo-tl 'enemy' be related? [*p > b in Tep or kw/p] [NUA: Num, Tak, Hp, Tb; SUA: Tep, Trn, Opn]

- **816.** *kaytu 'enemy, opponent': M88-ka36 'enemy'; KH.NUA; KH/M06-ka36: Cp -qáytu 'enemy'; Ls káytu-š 'enemy, opponent in a game'; Sr -qaiš 'opponent, enemy'. Add Ca káytu 'rival, competitor in a game, enemy'. [NUA: Tak]
- **817.** *say- 'enemy, opponent'; M67-158 *say 'enemy'; L.Son236 *sayo, sa-i 'enemigo, enfrentarse'; M88-sa14 'enemy'; KH/M06-sa14: NP sai 'enemy'; Wr sahí 'adversary, opponent in a game'; Tr na-sayé 'enfrentarse entre varios'; My sáyyo 'enemigo'; Cr sáayu 'successor to one's ritual role'; CN tesa'say 'dangerous'; Pl sahsayti 'for one's hair to stand on end from fear'. We might add Tr saye/sayi-ra 'enemy', pl: na-sayira. NT sááyu 'el enemigo, el contrario' may be a loan since NT s does not correspond to TrC s. [NUA: Num; SUA: Trn, Cah, CrC, Azt]
- **818.** *timmu 'opponent': Mn timu' 'enemy, opponent, member of the opposite moiety'; TSh timmu 'enemy, opponent'; Sh timmo 'opponent, competitor'; and maybe Hp tiwqa 'enemy' if m > w/ C in a cluster. [NUA: Num]
- **819.** *woho 'enemy': NP ggwoho 'enemy'; Sh woho/woo'o 'enemy, rival'; Cm tawohho 'enemy tribes, enemies'; but probably not Kw tuhu-ga-dï 'enemy, murdered' unless *tawoho > tuhu. [w > kw] [NUA: Num]
- **820.** *kï'iy 'hate, v': M88-kï15: Ls kó'ka 'hate, v'; Sr kïiyihk 'hate, v'. We must add NT kïïdai 'odiar' and TO kee'i 'hate, scold, vt' which agree fairly well with Sr. Ls agrees in initial *kï since Ls o < *ï, and it could appear that another suffix truncated the rest. [NUA: Tak; SUA: Tep]
- 821. *pihi(ri) 'enemy': AYq vehe'eri 'enemy, against'; My behri, béhreme 'enemy'. [SUA: Cah]
- **822.** *om 'dislike': Eu óme-/dome 'aborrecer'; Eu ómedauh 'aborrecimiento, n'; AYq omta 'dislike, hate, detest'; My omtía 'le tiene odio'; and perhaps Cp múm'etu 'hate'. [SUA: Cah, Opn; NUA: Tak]
- **823.** *piso'a 'hate': Sh pisoaima 'to become tired of or disgusted with something'; Cm tïmapiso'aitï 'hateful, troublesome, ornery'. [NUA: CNum]

NB, for Numic *kima(n)-ci 'foreigner, different, enemy' (origin of the name of the Comanche tribe), see different.

Enter: see in Equal: see like Erase: see wipe

Evening: see afternoon and night

Excrement: see defecate

EYE; OJO

Mn	púsi'	Hp	poosi	Eu	vusít/busít
NP	bui	Tb	punzi-l	Tbr	telú-r / tilú-r
TSh	pui	Sr	huvaaţ	Yq	púusi
Sh	pui	Ca	púč-ily	My	puúsi
Cm	pui	Ls	púš-la 'eye, seed'	Wr	pusí
Kw	pu'i-vi	Cp	púči-ly/-puš	Tr	busí
Ch	pu'i-vi	TO	wuhi	Cr	hï'ïsí
SP	pu'i-vi 'eye'	LP	vuhi/vui	Wc	hïší
	pu'i-vï 'seed'	PYp	vuhi/vui	CN	iiš-tli 'face, surface, eye'
WM	pwí'/ pwi'í / pu'í-vi	NT	vúhi/vúi	Pl	iiš 'eye, face'
CU	pï'í-vï	ST	vui		

- **824. *pusi** 'eye': Sapir; VVH5 *punsi 'eye'; M67-160 *pusi/*pu 'eye'; I.Num155 *pu'i(h) 'eye'; BH.Cup *pucila 'eye, seed'; Munro.Cup39 *púúči-la 'eye, face, seed'; L.Son181 *paci 'semilla'; L.Son223 *pus-i 'ojo'; B.Tep284 *vuhi/vui 'eye'; CL.Azt55 *iiš 'face'; M88-pu4 'eye'; KH.NUA; KH/M06-pu4 *punsi (AMR). Let's add Nv vui / vuidi 'ojo'. A reflex of *pusi 'eye' occurs in every UA language except Tbr. For Sr püv 'face, cheek', see *pusi-paca 'face' at 'face'. Miller has the Takic forms also in M88-pu23 'seed; eye', in addition to Gb púcin 'fruit, seed'; Sr pooč 'seed'. Note AYq 'open eyes': puhte; remte. [*c > Num '] [NUA: Num, Hp, Tb, Tak; SUA: Tep, Trn, Cah, Opn, CrC, Azt]
- **825.** *pusi-tusi 'eyelashes, eyebrows' (> Num *pu'i-tusi > pu'tusi/puttusi): I.Num158 *pu(h)tusi(i) 'eyelashes, eyebrows'; M88-pu5 'eyelashes, eyebrows'; KH/M06-pu5: Mn pu-tussi 'eyelashes'; Sh putusii 'eyebrows'; Sh putusii-ppïh 'eyelashes'; Kw puttïsii-pï eyebrows, eyelashes'; CU pïttï-sïï-vï 'eyelashes, eyebrows'. Miller also includes Mn pu"-taqqaa 'eyebrows' and NP pu'noccipa 'eyelashes', though both have different morphemes after initial *pu'i-. Note *u > ï in SNum. [NUA: Num]
- **826a.** *sipo / *siCCV 'eyebrow': VVH14 *sispo 'eyebrow'; M67-161 *se/*sep 'eyebrow'; L.Son253 *siwi 'parpados'; B.Tep86 *hihivo 'eyebrow'; M88-si2; KH.NUA; KH/M06-si2: Tb šupi-1 'eyebrow(s)'; Tb(H) sivi-1; Hp siivi 'eyebrow'; TO hihiwo; Wr se'wekómori 'ceja, pestaña'; Tr sekobóara 'pestaña'; My bus sé'ebe-m; Cr sé'e-ki-ri; NP pu'noccipa 'eyelash'. I like Hill's Sr inclusions in his 2003 edition for consideration: Sr huvaaţ 'eye' and Sr uuvča' 'eyelash'; and from his 1994 draft dictionary: Sr hiïy-ţ 'eyebrow'. Add Ca yulséve-l 'eyebrow'; NT iïvo 'eyebrow'; ST hiïvo 'eyebrow'. Some reflexes show medial *-p-, others otherwise.
 [NUA: Hp, Tb, Tak; SUA: Trn, Cah, Tep, CrC]
- **826b.** *hupaC / *hupa' 'eye': Sr huvaaţ 'eye'; Ktn uva' 'eye'. These two certainly belong together, and in light of *s > h in Sr/Ktn, a tie to 'eyebrow' (*supo) above is possible, especially since the vowels of Hp and most of the others could be a leveling of *u-a > ï-ï. We see *u > ï in Num often. [NUA: Tak]
- **827** was moved to **241b** *tiLu / *taLu 'eye, black round thing': Stubbs2000b; Stubbs2003-41: the only UA language not showing *pusi for eye is Tbr telu- / tilu-r 'eye', which likely ties to Wr telúla 'smooth black stone for polishing pottery' and to CN tliilloo-tl 'blackness' and CN(S) tlilloa 'cubrirse de negro, ponerse color negro', and to *tuL 'charcoal, soot, black' at 241 'black'.

FACE, CHEEK(S); CARA, MEJILLA(S)

- 828a. *kaCma 'cheek(s), mouth': Sapir; VVH87 *ka_uma 'mouth, cheek, to taste'; B.Tep91 *kaama 'cheek'; M88-ka26; KH/M06-ka26 'cheek': TSh kamma 'taste'; Sr qäŋ, pl: qaŋam 'beard, facial hair' (cognate? Miller queries, and it could well be.); TO kaam 'cheek'; PYp kaama 'cheek'; PYp kamar 'face'; LP kama/kaam; NT kááma 'cheek'; ST kaam 'cheek'; CN kam(a)-tl 'mouth'; HN kamak-tli 'mouth'; HN kama-wia' 'speak to'; Pl kamačal 'jaw'; Pl kamak 'cheek'. Likewise, NP gamu 'chin' and Yq kámta 'swallow, put in mouth' may tie these to *kama 'taste' as suggested by VVH. See at eat *kaCma 'taste' (Mn, TSh, Sh, Kw, Ch, and Sr qämä'k 'drunk').

 828b. *kaCma(C) > *kaŋa / *kana 'beard, facial hair': if Sr qäŋ 'beard' and Ktn kaŋa-c 'beard' are includable in KH/M06-ka44 'chin, whiskers', then Mn qana 'beard' and Tb kaŋaa-l 'facial hair' seem so also, though we shall assign different letters for different nasals. Sapir cites Tb gaŋa 'beard' (kaŋaa-l 'facial hair' in Voegelin and Munro) and Kitanemuk qaŋa and CN kan-tli 'cheek' (Simeon), perhaps a related form of CN kama-tl above. Add WMU ganáqqö' / qaná-qqö-ppü / gannáqwö' 'jaw, chin, n'; SP qannaqqo'o(N) / qannaqqo'-mpi 'chin'; CU kaná-qö-pü 'chin'. [medial m/n/ŋ] [NUA: Num, Tb, Tak; SUA: Tep, Cah, Azt]
- 829. *pana 'cheek': Tr baná 'mejilla, carrillo, cachete, cara, rostro'; Wr paná 'cheek, face'. [SUA: Trn]
- **830.** *hoppï 'cheek': Eu opét 'mejilla, lágrima'; Yq hópem 'cachetes'; Yq hopeboam 'barba (boa=hair)'; My hóppem 'mejilla, cachetes'. Note Eu -p- (< *-pp-) vs. -v-, and Eu is a sg form and the Cahitan languages show plural forms. [Opn, Cah]
- **831.** *sopa (> so'o ?) 'cheek': Mn só'o'cheek'; NP coba 'cheek'; NP copata 'flathead'; TSh (mo)-so'opï(cci) 'upper cheeks over cheek bones'; Sh sohoh-pïh 'cheek'; Kw sovi-vï 'cheek'; SP sovavu-vi 'cheek'; CU siváá-vï 'cheek'. [c/s; unaccented a > o/i] [NUA: Num]

832. *pusi-paca 'face, eye-in': B.Tep284d *vuhivasa 'face': TO vuhioša 'face'; LP vuhivšï; NT vúívasa / wívasa; vuivas / wiivas. Note also Eu vúsva; Yq púhba; My puhba; Sr püv 'face, cheek' and Ktn pïvï-c 'cheek'. This is a compound of *pusi 'eye' and s.th. else, perhaps *paca 'in/enter' in the sense of 'face' being what the eyes are in. Note wa > o in TO and s.th. similar in NT vúívasa/wívasa. [NUA: Tak; SUA: Tep, Opn, Cah]

NB, for *mu 'nose/face', see 'nose' (M88-mu12/13; M67-162a *mu 'face', etc.)
NB, for *kopa 'forehead' (in Tak, Tep, TrC), 'face' (in Num) and 'head' (in Cahitan), see forehead

Faint: see dizzy

Falcon: see eagle (birds of prey subsumed)

FALL, TRIP, STUMBLE; CAERSE, TROPEZAR, TROPETEAR

833a. *wïcï > Num *wï'i 'fall, be born, v': Sapir; VVH101 *wï_scï 'fall'; M67-163 *we 'fall'; I.Num285 *wï'i fall, drop; BH.Cup *wiíc 'throw away' (vowel wrong, Miller notes); L.Son341 *wïcï/*wïc-i caerse; B.Tep53 *gïisïi 'he falls'; CL.Azt57 *wəcï 'fall' (< *wïcï); M88-wï3; KH/M06-wï3: Mn wï'i 'fall, be born'; NP wïi 'drop, fall'; Sh wïttai 'to empty, spill'; Kw wï'i 'be born'; Kw wï'i-ku 'fall' (*wï'i-kku); SP wï'i; CU wi'í 'drop, fall, be born'; CU wi'í-tií give birth to'; Hp wïita 'pour it out'; TO gïiš 'fall, bow, descend'; PYp gesia; NT gïisï; ST higšia; Op gweca 'fall, sg'; Tbr wece / mwece; Yq weče; My weče; Wr wihcí; Tr wičí; Cr a-k-áh-ve 'he fell down'; CN weeci; Eu wecé 'fall'. Add Tb wïi'wïi'ït 'fall off riding'. Manaster-Ramer includes this set in his article "A Northern UA sound law: *-c-> -y-" as a good example of the phenomenon. Note *-c-/-s-> -'- in Num for both *wïcï and *pusi 'eye', and medial *-c-> -y- in Tak. This widespread stem is found in all branches in one form or another. [*w > gw in Opata]

833b. *wïcï > Tak *wïyV 'fall, bend down, sway': M88-wï11, wï12; KH.NUA; KH/M06-wï11: Cp wéye 'collapse'; Ca wéyi 'incline, nod, sway back and forth' Ls wóya 'be bent down (as branches of a tree), be felled'; Sr wïiyï'k 'be bent over, swayed over, nod'. KH/M03 agreeably combines wï12 with wï11; I would also combine both with wï3 *wïcï 'fall', a large well-known set, as the Tak forms have the expected -y- < *-c-, as well as the notion of falling in two of the four languages and downward motion in all four, though admittedly a slight semantic variant of 'fall'. [medial *-c- > y and Num '] [NUA: Num, Hp, Tb, Tak; SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]

834. *cuLiwa 'fall, pl': KH/M06-cu15; M88-cu15: B.Tep206a *suriga-i 'fall, pl'; B.Tep206b suuri 'they fell'; TO šulig; LP šulg; PYp suli; NT suuliga/suuligi 'fall, pl'; ST suulygi fall, pl'. Miller includes Pl šiini 'scatter, fall (šiini-k pret)', which might be, but I do not include it in the count yet. However, let's do add Wc šïri 'fall, pl', both Wc and Tep are plural even. [SUA: Tep, CrC]

835. *yuC 'fall': M67-164 *yu fall; M88-yu6 to fall; KH/M06-yu6: Cm yuma 'fall, be born, attack'; SP yunnia ''fall'; NP yonko 'evening'; Wr yu'ri-ná/má 'fall'; perhaps Tb 'uyuugat ~ 'uyuuk 'fall'. Ken Hill adds WSh yummah 'fall (from tree)', to give us two 2nd consonants to agree in CNum, though the others vary greatly. *yu'Li 'throw' overlaps this set in Wr and SP. [NUA: Num]

836. *maya 'fall': Yq mámaya 'caerse, caer'; CN maayawi 'fall, throw'. [SUA: Cah, Azt]

837a. *kuLi 'fall': Sr kur-k 'fall, pl'; Ca kúli 'fall (in a hole), stick (in), rush in'. What of Ktn kuhyïk 'fall over flat, of a tall thing' or Wc kurūpiya 'knock down'? Eu hioru 'fall when ripe'? [NUA: Tak] **837b.** *kaLa 'fall': Ktn karara'y 'fall, vi'; Ls kara 'fall (of leaves)'; Ls qára 'spill out, slide off (as leaves, fruit, hair from the head'. [NUA: Tak]

838a. *(tiN)pah(a)iC 'fall off/down': TSh pahe"/timpahe" 'fall off/out of/down, come down'; Sh pahai" 'fall off'; Cm pahiti 'fall off, be born, drop off (as leaves from tree)'; Cm tipiheri 'fall (off or down from)'; Cm tipehemi'ari 'fall off'. [NUA: CNum]

838b. ***tïpi** 'trip': KH.NUA: Sr tïpiñi'k 'stumble, trip, catch one's foot'; Ca če-tépin 'trip, cause to stumble (of wood, stone), vt'. Possibly Hp rïïpa-k 'slip/slide down/off, dislodge'. [NUA: Tak]

838c. *(su)tupi perhaps Tep *hutuvia (< *sutupi); Nv 'utubuia 'tropezar'; PYp hutvia 'stumble'; NT úútuvakyi 'tropezar, vi'; ST bia' 'tropezar, vi'; probably Tr fotowe- 'tropezar' (with reduplication). [-p-> -w-; reductions] [SUA: Tep, Trn]

839. *muCta 'trip, stumble': Eu mútava 'tropezar'; Sh muccamuya 'stumble, v'; Wr mo'tocí-na 'trip'; with a preceding CV..., Tb(M) tomocka'at ~ otomocka' 'trip, stumble' may belong. Sh, Wr, and Tb all suggest a medial cluster. [cluster] [NUA: Num, Tb; SUA: Opn, Trn]

840. *anni(C) 'fall': TSh annih 'fall over or down, vi'; Sh(C) annih 'fall, vi'; Cm anitï 'give up exhausted, die in accident, vi'. [NUA: CNum]

841. *aCCakka / *aCcaCka 'fall, collapse': WMU *ah*ččááq / *ah*čáqqa-y 'fall, collapse, fall down'; SP aččaqqï 'fall'. Both consonants are geminated, which makes reconstructions less certain, as many combinations of consonants could reduce to -cc- or -kk-. If -c- were one, it might combine with 8 others to yield -cc-, and whether the -c- is first or second multiplies whatever that number might have been by two. And the same applies to -kk-. [NUA: SNum]

NB, for *mana/i 'fall, lie flat, pour, spill', see 'lie down'.
NB, for *η/kalaw 'fall (into)' (Ca ŋálaw 'fall in a hole' and Cp xálewe 'fall, sg'), see throw.

NB, for *puLi 'give birth, fall' see 'bear'.

FAR; LEJOS

842a. *miCka / *mihka 'far': M67-165 *meka; B.Tep161 *miïka 'far'; L.Son146 mika; CL.Azt58 *wəhka 'far', 306 **mi(h)ka (Proto-Aztecan *w < lenited **m); M88-mi² 'far'; KH/M06-mi²: TO miïkođam; LP miïk; PYp meeka; NT miïka; ST miïk; Eu mekú(r); Yq mékka; My mekka; Wr mehká; Tr meká. Cr imi 'lejos' may belong. Campbell, Langacker, and Miller include CN *we'ka and other Azt forms of *wəhka 'far' as w being a lenited *m. How many cases have we of Azt w < *m? [SUA: Tep, Trn, Cah, Opn] Possibly the SNum forms in b below: **842b.** *miyho 'far': Kw miho; Ch miyó(to); SP mio 'far off, at a distance'; CU miya. These two sets may be related as reductions, perhaps from s.th. like *miyhoka, in light of h in Kw and some SUA forms.

843. *pïyan 'far': M88-pï16; KH.NUA; M88-pï16; KH/M06-pï16: Gb pwan 'lejos'; Sr pïyaan 'far away'; Ktn pïyan 'far'. In SNum, pïa and pïi can sound like pwa and pwi, so Gb fits well. [NUA: Tak]

Fast: see go, where run is also located

FAT; GORDO, GRASA

844. *wip / *wiCp / *wi'p (>*wi'i) 'fat': VVH102 *wi 'fat'; M67-166 *wi 'fat'; KH.NUA; BH.Cup *wi 'fat'; L.Son331 *wi'i 'grasa'; B.Tep41 *giigi 'animal fat'; M88-wi1 'fat'; KH/M06-wi1: NP wisokko 'greasy like a mechanic'; Sh wi"- 'greasy', as in wikkamma 'to taste greasy'; Cm wih-kkama 'taste oily, v'; CU wina-tta-ppï 'animal's fat'; CU wasókway 'be oily'; Hp wiihï 'lard, fat, grease'; Hp wimcapï 'omentum, inside lining of stomach fat'; Tb wip-t 'fat, n'; Tb wiibït~'iiwiip 'be fat'; Sr wipt 'fat, grease, fat one'; Ktn wipt 'fat, lard, butter', pl: wipim; Ktn wipcu' 'get fat'; Ls wí' 'fat, grease, oil'; Ca wí-ly 'grease, fat'; Cp wí-ly 'lard, fat, tallow'; Cp wíwat 'fat'; TO giigi 'be fat'; TO gi'i/gii 'become fat'; PYp gi'i 'fat, n'; NT giigi 'animal fat'; ST gi'iig; ST gio 'greasy'; Wr wi'í; Tr wi'í; Yq 'áwi 'gordo'; My áwwi 'gordo'. Add Ch(L) wiwavi 'oil, grease'. Sr, Ktn, and Tb show *p for the 2nd C, Tep a glottal stop, and Num shows gemination. As Sr and Ktn often show later consonant clarity not available in other UA languages, I go with *wip or wi'p / *wiCp, since Ktn -p- in the pl suggests a cluster. [NUA: Num, Hp, Tb, Tak; SUA: Tep, Trn, Cah]

845. *yuhu 'grease': I.Num294 *yuhu grease; M88-yu11; KH/M06-yu11: Mn yuhu 'grease'; Mn yuhúbi 'fat'; NP yuhu 'fat'; TSh yuhupin 'fat, oil'; Sh yuhu/yuhi 'fat, grease, oil'; Cm yuhu 'fat, grease, lard'; Kw yïhuu/yuhuu-vï 'fat, grease, lard'; Ch yuhú-vi; SP yu(h)u-vi 'fat, grease'; CU yïú-vi 'fat, oil, grease, lard'. Add ST jua(kam) 'que es gordo'; WMU yuú-vi 'fat, grease, oil, n' (vs. yu'ú-vi 'leg'). [u > ï in unaccented syllable] [NUA: Num; SUA: Tep]

NB, for *sa'pa 'meat, fat' see meat.

FATHER: PADRE

- **846.** *apu / *(h)apu(ti) 'father, parent, mother': I.Num2 *ahpï 'father'; M88-'a18 'father'; KH/M06-'a18; TSh 'appï; Sh appï; Cm ahpï'. I concur with Miller's inclusion of Cahitan, i.e., My hapči 'woman's father' and AYq hapči 'woman's father' (< *haputi). Also add the first syllable of TO apkii 'father in the clans of the Coyote moiety' and Tb(M) 'aabuu 'mother'; Tb(H) aapuu-/aabuu- 'mother'. [NUA: CNum, Tb; SUA: Tep, Cah]
- **847.** *muwa 'father': Kw muwa; Ch móa; Ch(L) muwa; SP moa; WMU m<u>uuwá-</u>; CU múa. Found in all SNum languages and from WNum, NP nïga mumuatïpï naha 'both parents'. NP moa 'old' suggests this is from 'old one' and as in colloquial English 'my old man' for 'father'. [*u-a > o-a] [NUA: SNum]
- **848.** *na'a / *nawa 'father': M67-483 *na 'father'; BH.Cup *na; KH.NUA; M88-na12 'father'; KH/M06-na12 'father': Mn nawa 'father, father's brothers'; NP naa/naa'a; Cm nanahtena 'men relatives' (cognate? Miller queries; probably); SP nana-ppï 'old man' (Sapir suggests this may relate to *nana 'grow'); Tb 'aanaa; Cp -na; Ca -na; Ls -ná'; Gb -nák; Sr -na'; Hp na/na'a 'father, father's brothers'. ['/w] [NUA: WNum, Hp, Tb, Tak]
- **849.** *owa 'father': B.Tep322 *'ooga 'father'; M88-'o14; KH/M06-'o14: TO ooga 'one's father'; TO ogol 'one's father in the bear clan'; LP 'oog; NT óóga/óóka; NT oógai/oókai; ST 'oo'. M88-'o14 and M67-485 have *'ok tied to both Tep *'ooga 'father' and Aztecan *okïč 'male' (CL); but the two are separate stems; for Azt *okïč 'male', see 'woman'. [SUA: Tep]
- **850.** *tata 'father': M67-484a *tata/*ta 'father'; M88-ta42 'father'; KH/M06-ta42: Hp taata/taa'ta 'father (child speaking)'; Cr taata; CN ta'-tli; HN taata'. Add also Ca táata. [NUA: Hp, Tak; SUA: CrC, Azt]
- **851.** *no'no 'male's father': Eu nono 'have a father'; Eu nonówa 'man's father'; Wr no'nó 'father of a male'; Tr onó 'father of male'. [SUA: Trn, Opn]
- **852.** *masi 'father': M88-ma11; KH/M06-ma11: Eu maswa 'woman's father'; Eu masi 'have a father (of women)'; Wr ma'má 'woman's father'; Wc kemaasi 'man's father'; TO maam 'one's father (in a clan of the buzzard moiety'. Add Op mas 'father' (Shaul and Yetman 2007). [SUA: Tep, Trn, Opn, CrC]
- NB, 'father' clearly divides the three Numic branches: WNum *na'a/nawa; CNum *ap-pï; SNum *muwa.

FEAR, AFRAID, FRIGHTEN; TEMER, (TENER) MIEDO

853. *ïkwiya 'be afraid': B.Tep345 *'iïbiida-i 'to be afraid'; M88-ï16; KH/M06-ïl: TO ïïbid; UP 'iïbidi; LP iïbiji; NT iïbiidyi; ST 'iïbidy. Sufficiently similar for addition is WSh kwiya'a 'be surprised, startled, frightened'. [SUA: Tep; NUA: CNum]

Several initial *ma... forms dealing with 'fear' are listed in M88-ma6 'be afraid': M67-167 *ma; L.Son132 *mahawa 'tener miedo'; KH/M06-ma6; however, beyond intial *ma, they are difficult, if even related. Nevertheless, CN, Wc, and Hp all agree with a longer form of s.th. near *makasi; and many TrC forms show some consistency:

- **854.** *makasi 'fear': Hp maqasi 'fear, fright'; Wc maakaše 'tener mieda, temer'; CN iimakas(i) 'hold in awe, fear, respect, vt'; the -mq- portion of Sr tiïmq 'fear, be afraid, scared (of)' with a prefix; after truncation of the middle syllable, perhaps Mn masito-t 'have one's hair stand on end (as in fright), bristle' if: *makasi > ma'si > masi-. [NUA: Hp, Tak; SUA: CrC, Azt]
- **855.** *maha(-ri)wa 'fear': Wr maha- 'be afraid'; Wr mahariwae 'fear, vi; Wr mahaté 'frighten, vt'; My maihwa 'hay miedo'; My mahwe 'tiene miedo'; Yq máhhae; AYq mahai 'scared, adj'; AYq mahiwa / mahe 'be scared, vi'; AYq mamaiwači 'scary'; Tr mahá; CN mawi 'be frightened'; CN ma'mau'-tiaa 'frighten, get frightened'. The last two CN forms vs. CN iimakasi show distinctive sets. The Cah forms seem to be a reduction from s.th. like Wr mahariwa. Ch(L) mahai-/ mai- 'with intent to harm' is as likely as not. [SUA: Trn, Cah, Azt]
- **856a.** *sawi(ya) 'fear, v': CN iisawiaa 'be overawed, vrefl, frighten, outrage s.o., vt'; Eu sevíce 'tener miedo, v'; Eu sevíciúrawa 'miedo, n'; Ls şuwó' 'to be afraid of' (if *sawi > suwï > Ls suwo); and possibly AYq suumeiya 'afraid of, vt' may belong. Those below may belong if *sawi > *suwi > *sïy.

- **856b.** *siya 'afraid': Mn siyee 'to be afraid of'; NP sii'hu 'to be afraid of'. [*-w->-v-] [SUA: Opn, Azt; NUA: Tak, WNum]
- **857.** *iya-paka 'fear, v': Kw 'iya-vaga 'to be afraid of'; Ch iyávaga 'afraid'; SP iya-vaġa 'to be afraid'; SP yaa-vaga-i 'is afraid'; WMU iyá-vaġa-y 'be afraid'; CU iyá-vagáy 'be afraid of'; Sh tï'ïya-pïkkah 'be afraid'. [tï- prefix] [NUA: Num]
- **858.** *toya 'fear, v': NT toodašd^yi 'espantarlo, vt'; NT toodákyi 'palpitar (el Corazon), espantarse'; PYp tood 'fear, n'; PYp toodim 'frighten, vt'; PYp toodk 'be afraid, vi'; and the tod- of TO todk 'snore, growl, roar'; TO todwin 'irritate, disturb'. [SUA: Tep]
- **859.** *hota 'lose courage': L.Son63 *hota 'aflojarse'; M88-ho5; KH/M06-ho5: Eu hótadaa-; Tr otá / oto- / orá. [SUA: Trn, Opn]

FEATHER, WING; PLUMA, ALA

- **860a.** *ma'sa 'feather': M67-466 *masa 'wing'; L.Son139 *masa 'pluma'; KH.NUA; M88-ma22 'feather'; KH/M06-ma22 *masaR (AMR) 'feather': Hp masa 'wing, wing feathers'; Sr mahaa-č 'feather, wing', Sr nï-maha'/maho' 'my ~'; Gb a-másan 'his wings'; Ktn mahac 'wing, feather'; Wr ma'sá 'feather'; Tr ma'sá/-mísa 'feather'; Yq mása 'feather'; AYq masa 'wing'; My mássa 'wing'; Tbr masá-r/t 'feather'; Cr mwa'askïbaúri 'feather'; Miller likely rightfully includes Pl maš 'pubic hair'; Pl mašak 'groin'; Pl mašta-t 'loincloth'. Wr, Tr, and Cr show a glottal stop, perhaps *ma'(a)sa. If k > ' in a cluster, could Num *kasa 'wing' tie into these: *ma-kasa > *ma'sa? [NUA: Hp, Tak, Tb; SUA; Trn, Cah, Tbr, CrC, Azt]
- **860b.** *hu-ma'sa '(arrow-)feather': Hp homasa 'wing feather'; Ls húmṣa-t 'wing or tail-feather, arrow feather'; Eu humsa / hunsa 'feather'; Tb 'umuša-t 'arrow feathers'; Tbr humé-t 'arrow-feather'. These are probably a compound of *hu-ma'sa 'arrow-feather'; for some languages have both *masa and *humasa: Tbr masá-t 'feather'; Tbr humé-t 'arrow-feather'; Hp masa 'wing, wing feather'; Hp homasa 'wing feather' (also mentioned by Hill as a possible compound of 'arrow-feather'). In addition, the specific semantics of 'arrow-feather' in the Tb and Tbr forms solidify that supposition. Note the late-word phonological deterioration in the longer Tbr word with prefixes. [NUA: Hp, Tb; SUA: Opn, Tbr]
- **861.** *'aŋapu 'wing': Sapir; VVH58 *'auŋa 'wing, feather, arm'; B.Tep302 *'a'ana 'feathers, wing'; M67-465 *ana 'wing'; L.Son4 'ana 'ala'; M88-'a3 'wing'; KH/M06-'a3: NP aŋa 'armpit'; Sh ahna 'armpit'; Cm ahna 'armpit'; Ch aŋávï 'arm'; SP aŋavu-vi 'arm'; WMU aá-vü / aáo-vü 'arm, upper arm, n'; WMU aá-vü-n 'my upper arm' CU aá-vï 'upper arm'; Tb 'anambiï-l 'feather in band'; TO/UP a'an / 'a'anï 'wing, feather'; LP 'a'an; PYp a'ana 'wing'; NT áána/ánai 'feather, wing'; ST ana / 'aa'na 'feather'; Eu haná-t 'wing'; Wr aná 'wing'; Tr aná/ganá/gané 'wing'; Cr aná / haná / -'ana 'wing'; Wc 'ánaa 'wing'. Though it came to mean 'upper arm, armpit' in Num SP, Tb, and WMU's possessed forms all suggest an additional *-pV syllable. [ŋ:n] [NUA: Num, Tb; SUA: Tep, Trn, Opn, CrC]
- **862.** *kasa 'wing, feather': I.Num54 *kasa 'wing, feather'; M88-ka17; KH/M06-ka17: Mn qása 'feather(s), wing'; NP kasa 'wing'; TSh kasa; Sh kasa 'wing, feather'; Cm kasa 'wing'; Kw kaso'o-pi 'wing'; SP kïššavï-vi 'wing'; SP kasavï 'striking wing'; SP kasavu-ma-ni 'with my wing'. Add Ch(L) kasa 'wing'. This may tie to *masa 'feather/wing'; Cr, Wr, and Tr ma'sa all have glottal stops, so maybe *ma'sa < *maksa < *ma-kasa; so *masa in Hp, Sr, and SUA may tie to Num *kasa, with prefixed ma- and reduction: *ma-kasa > *maksa > *ma'sa > *masa. [u > ï in SP] [NUA: Num]
- **863.** *piwi / *piCV 'down, feathers': M67-168 *pi 'feather'; KH.NUA; M88-pi4 'down (of bird), plumón'; KH/M06-pi4: Tb piiwii-l 'down feathers'; Sr piihč 'down feathers'; Ca píi-l^y, -píh'i; Hp piphö 'downy feathers of the lower belly of a bird' (< *pi-pöhö 'down-fur' as suggested by Hill); TO wiigi 'down of a bird, pin feathers'; Cr pína'a 'feather'; Mn pipi 'cotton'; Kw pii-vï 'eagledown, cotton'; Sh piisi-ppïh 'fuzz (e.g., of cotton, wool, peaches)'. Miller also lists NP pïhï 'skin, feather, duck'; TSh pïhï 'skin'; Cm pïhï 'hair, fuzz'; CU pïtï-vï (<pïttï-pï) 'plumage, feathers'; CU pïi-a 'skin'; Wr piwí 'granos finos'; Tr biwí 'pulverizarse, molerse'. However, the Num *pï forms also appear in M88-pï11 at 'hair'; cf. M88-pï11, po2, and KH/M06-po30. Tb piiwii-l and TO wiigi quite agree with *piiwi-; however, the 2nd C or cluster of the others awaits explanation. [NUA: Num, Tb, Hp, Tak; SUA: Tep, Trn]

864. *pïyaw 'feather, fly': Hp pïïyaw/pïïyal- 'fly, v' and the -wiðag portion of TO mačwiðag 'wing feather, ritual feather' show 4 of 5 segments agreeing with *pïyaw, only a slight discrepancy in the first vowel (i/ï). PYp vereg 'buzz, drone, v' also belongs, though the 2nd V assimilated to the first. CN i'wi-tl 'feather, down', poss'ed forms: i'wiu'/i'wiyoo 'feather, down' may belong with loss of *p: *pïyawi > *ïyawi (loss of Azt p) > i'wi, or it may belong with *piwi above. [NUA: Hp; SUA: Tep, Azt?]

865. *coya 'feather headdress': Munro.Cup40 *čééya-t 'feather headdress'; KH/M06-co22: Ls čééya-t; Cp číya-t; Ca číya-t 'bundle of feathers'. [Cup vowels] [NUA: Tak]

866. *wakap / *wakaC > *waki / *wiki 'wing, feather': BH.Cup *kawi 'wing'; M88-ka18; Munro.Cup139 *wakí-t 'wing'; KH/M06-wa29: Ca wáka-t 'wing', -wák'a (poss'ed); Ca wiki-ly 'feather'; Ls kawí-t 'wing'; Ls no-wki 'my wing'; Cp wíki-ly / wáki-ly 'feather'. I agree with Munro's reconstruction and explanation of metathesis (*waki > kawi): "the Ls possessed form is conservative and the absolute form is metathesized." Add SP wiġivï-vi 'eagle tail-feather'. Ca and Ls absolutive -t suggest a final consonant, and SP shows a 3rd consonant *-p-. [NUA: Tak, Num]

867. *wisi'a 'feather, wing': Kw wiši'aa-vï 'feather'; Ch wisia-vi 'wing, feather'; WMU husi'æ-v(i) / wəsi'æ-v(i) 'wing'; CU wəsia-vi 'feather'. Jane Hill (p.c.) notes Cm sia- 'feather' as well. The first WM Ute form gives us something to think about. [NUA: SNum, CNum]

Female: see woman Fetch: see carry Fever: see hot

FIG; HIGO

868. *cuna 'fig/higo': L.Son47 *cuna 'higo'; Fowler83; M88-cu12; KH/M06-cu12: TO suuna 'fig'; TO suuna-je'e 'fig-tree'; Op cuna; Eu čúna 'higuera [fig tree], higo [fig]'; Yq čúúna; My cúúna 'higo'; Tr čuná 'higo'. [SUA: Tep, Trn, Cah, Opn]

869. *ama 'fig tree, paper': CL.Azt 124 *aama 'paper, a species of fig tree'; Fowler83; M88-'a30; KH/M06-'a30: CN aama-tl; Pl aamat; Po amet; To omatl; Za aamat. [SUA: Azt]

Fight: see hit Fill: see full Find: see see

Finger: see hand and claw

FINISH, QUIT, END; CUMPLIR, ACABAR, TERMINAR, CESAR; see do, edge (for end)

870. *nato 'make, finish': B.Tep165 *naato 'finish'; M88-na31 'finish'; KH/M06-na31: TO naato 'accomplish, complete, make ready, make, build, create, earn'; LP naat; PYp naato 'make, finish, complete'; NT nááto/nanáátoi; My -náate 'sufijo de terminar'. [SUA: Tep, Cah]

871a. *cuCpa/i / *cuppa 'finish, be end of s.th.': I.Num258 *cu/*co 'disappear'; M88-cu1 'finish'; KH/M06-cu1: Mn cuppa 'disappear'; NP coppa 's.th. sinking'; Sr 'ičo'kin 'make, fix, finish'; My cúppe 'terminarse, vi'; My cúppa 'terminar, vt'; AYq čupa 'finish, complete, fulfill (vow)'; AYq hi(t)čupa 'completing, fulfilling (vow), harvesting'; AYq čupe 'get completed, finished, married, ripe'; AYq čupia 'be complete'; Wr cu'píba-ni 'acabar'; Wc sīī 'finish'; Pl cupi 'anus'. Add Yq čúpa 'terminar (bien)'. This may relate to *cupa 'point, prick' as in end of sharp object; see at edge(/end). The over-lapping semantics (finish/harvest) in Cah (My, AYq) may have this tie to *cuppV 'gather, close eyes'.

871b. *copa / *cupa 'braid, finish weaving': Tr čobá/čóba- 'trenzarse, hacerse la trenza'; Tb tadzuub 'braid it'; CN copa 'finish weaving/constructing s.th.'; CN copi 'piece of weaving or construction to get finished'. [NUA: Num, Tak, Tb; SUA: Trn, Cah, CrC, Azt]

- **872.** *himV / *humV 'end, finish': Ca hému 'end, edge, tip'; Sr ïimi'-k 'be finished, ended'; Sr ïim'-kin 'finish, vt'; probably NT úúmai 'finish up, consume'. [NUA: Tak; SUA: Tep]
- **873.** *matïNka 'finish': Mn madïqa 'to finish'; TSh matïŋka 'finish, complete'; Sh matïnka 'to finish something'; Cm (ti)marïkarï. [NUA: Num]
- **874.** *ma'aku / *ma'akwV 'finish' (see NP for origin): Kw ma'aa-ku 'let go, finish'; Ch -ma'aku 'finish'; SP mau'qqu 'finish, vt'; SP mau'ppa 'stop, v'; WMU -ma'ku- / -makku'- 'finish (doing s.th.), vt'; CU makú 'finish'; NP makwï (< *makkwï) 'beat, win, finish (verbing)' (Thornes 2003, 422-3) highlights the source; TSh -mmaahwan 'cessative, just finished' (Dayley 1989b, 55). [NUA: Num]
- **875.** *tapa/i 'finish, end': Ls tápa/i 'finish, end, vi, vt'; Hp so'tapna/so'tavin- 'conclude, finish, stop' (< so'-tap-na 'end-put-cause'). Eu tabína 'acabar, consumir'; Eu tabíkda'a 'acabarse, consumirse'; ST taa'vidya' 'obstruir, vt'. While these may tie to *tapa 'put (down)' as done when finished, Ls has a separate form: Ls taváni 'put, place sg obj' though they still may be related with a geminated intensive or such. [NUA: Hp, Tak; SUA: Tep, Opn]
- **876.** *tama/i 'finish': CL.Azt53 *tami 'end, run out'; M88-ta38; KH/M06-ta38: CN tlami 'come to an end, to finish, to bring an activity to an end'; CN tlamiaa to end, conclude, to conclude something, to finish something'. To the Azt forms, let's add ST tiïmo' 'terminar (de hacer)'; Kw tirimaa 'to finish, be finished'. [SUA: Azt, Tep; NUA: Num]
- **877.** *cu'ma 'be gone, disappear from sight': M88-cu1 'finish'; KH/M06-cu1: Cm cu'ma 'use up, finish, vt'; WSh cumah 'run out of, be out of'; Miller includes Sh cuna 'run out of, disappear'; perhaps Sr huumu'k 'be gone from sight, not to understand' (c/s problem)? Miller combines some of these with *cuppa 'finish, disappear' and *suma 'forget', but with separate Cm, Sh, and Sr forms, we more likely have separate sets. [NUA: CNum]

NB, for *suwi 'consume, finish up', see eat. NB, for *yaLV 'finish, do' see at do.

FIRE, BURN; FUEGO, LUMBRE, ARDER, QUEMAR, ENCENDER

878. *na'ay 'fire'; *na'aya 'build/light a fire': VVH95 'to light a fire'; VVH95b *na₁₁'a 'to burn'; B.Tep162a *naada 'build fire'; B.Tep162b *nai 'he built a fire'; M67-62a *na/*nai; BH.Cup *na 'burn, vi'; I.Num106 *na'i 'burn, vi'; L.Son171 *naya 'prender lumbre'L.Son172 *na'i 'lumbre'; M88-na7 and M88-na8 and M88-na9; KH/M06-na7 'fire' and KH/M06-na8 'make a fire' (Lionnet, Miller, and Hill distinguish 'fire' and 'make a fire'—a nice distinction, since many languages have a reflex of both forms—yet as they appear to be derivations built on the same stem, let's combine them, to more easily compare the comparable forms, mostly in SUA): Mn ani 'burn, vi'; NP nai 'fire, burn vi'; NP na'i'yu 'burn, vi'; Sh nakaya 'burn out of control'; Kw ne'e 'burn'; SP na'ai 'burn'; CU na'ay 'burn, vi'; CU na'ay-ttï 'fire, light'; Ca ná' 'burn'; Ls ná' 'burn'; TO naada 'fire, n' and TO naad (pret: nai) 'make fire'; UP naadï 'build fire' (B.Tep); Wr na'í 'lumbre' and Wr na'yá-ni/na'i-ma 'make a fire'; Tr na'í/ na'y-/na-'fire' and Tr na'yá-'make a fire'; My na'-'burn, v' and My náyya 'hacer lumbre'; ST naada' 'make a fire' (prêt: nai; pres: naanda); NT naadá 'build a fire'; Nv nadda 'hacer fuego, encender lumbre'; Cr á-úu-na'ara 'go build a fire'; Wc náiwame 'combustible'. Note that CU na'ay-, WMU na'ay-y 'be a fire, burn, vi'; TO naada, Wr na'í / na'yá-, and Tr na'í / na'yá-, representing three widespread branches of UA, all show s.th. akin to *na'ay(a); and the verb *na'aya usually shows an extra or final V, and UA's typical reduction of three syllables to two eliminates the middle vowel; thus, most of the verbs resemble *na'ya (*na'aya > *na'ya / naya). AYq naya'i 'fire' is curious, and so is Cr's -r-. [y/r][NUA: Num, Tak; SUA: Tep, Trn, CrC]

879a. *taha / *taka 'burn': Sapir; VVH150 *tahi 'fire'; B.Tep215 tai 'fire'; M67-423d *tai 'fire (burn)'; L.Son268 *taha/*tah-i arder; CL.Azt20 *tlatia 'burn'; *tlatla 'burn, be hot'; CL.Azt60 *tlai(h)- 'fire'; M88-ta1 'burn, v'; M88-ta2; KH/M06-ta1; KH/M06-ta2: the differences between M88-ta1 and ta2 (perhaps *taha 'burn' vs. *tahi 'fire') overlap unclearly enough that their common stem might best be taken as a whole, whatever later derivations afflicted an earlier clarity; so let's combine them under the same number, but grant separate letters: 'burn, vi': Hp taq-ti; Eu tahá; Wr taha/tahi; Tr ŕahá/ŕahí; My táhha 'quemarse, vi'; My táyya 'quemar, vt'; Tbr taha; Wc ta'á; CN tlatla 'burn, vi'; CN tlatiaa 'burn'; Pl tata 'burn, vi'; Pl tatia 'burn, vt'.

- **879b.** *tahi 'fire' (AMR): CN tle-tl 'fire'; Wc tái 'fire'; Cr táih 'fire, flame'; TO tai 'fire, match(es)'; NT taí; ST tai; Eu te; My táhi; Tbr tahamét; Wr taihénani 'prender la lumbre'. Add Nv tai 'encender lumbre'. [NUA: Hp; SUA: Tep, Cah, Trn, Tbr, CrC, Azt]
- **880.** *tax-kwa (< *taka-kwa ?) 'ceremonial official, fire tender': Gb táxkwa 'kind of religious officer'; Ca tákwa 'ceremonial official'; Ls tááxku 'ceremonial official'; Cp təkwəva'aš 'fire tender (type of ceremonial official)'. This may be a compound involving *taha / *taka above, though most of those show *-h-, except for Hp and these suggest *-k-. [h/'/k/y] [NUA: Tak]
- 881. *kut 'fire' (AMR); *kut-tu / *kut-ta 'make fire' (AMR): M67-170e *kut 'make fire'; I.Num61 *kohtoo / *kuhtuu 'make fire'; I.Num64 *kuh- 'fire, heat (instr. prefix)'; BH.Cup *kut 'fire'; Munro.Cup44 *kú-t 'fire'; M88-ku4; AMR *kut; KH/M06-ip10 'by means of heat/fire'; KH/M06-ku4 *kut: NP kutuuna 'put wood in fire'; Kw kuttunuhi 'make fire w/ drill'; Kw kukkoppi / kikkwappi 'piece of wood, stick'; CU kukkwappi 'firewood, wood'; Sh ku- 'by means of heat' (instrumental prefix); SP ku" 'with fire'; Tb kut 'fire'; Tb kutugat 'gather firewood'; Hp kotqa 'wood pile'; Hp koho/ kòo- 'wood, stick, firewood'; Sr kut 'fire'; Sr kuçaai 'gather firewood'; Sr kuçaaït 'firewood'; Ktn kut 'fire'; Ktn kučat 'stick, firewood'; Ca ku-t 'fire'; Cp ku-t; Ls ku-t; Gb kotá 'palo, leña'; My kútta '(fire)wood'; Eu kut 'palo'. Sr, Ktn, Cp, Ca, and Ls all show *kut, and in Munro.Cup44 *kú-t 'fire', note final -t, not -l, suggesting a final consonant, like t itself as AMR reconstructed for us. Miller also includes the Takic forms *kelawa gather firewood, CN kwawi- tree, wood, and others, but see them at 'tree/wood'. Note in *(ku)-saypa below, that this morpheme seems compounded in Tep as well.

 [NUA: Num, Tb, Tak, Hp; SUA: Cah, Opn, Tep]
- **882.** *kuCti (< *kut-ti'i ?) 'burn, fire-cause': Ch kucíki 'burn, v'; SP quččü'a 'burn, vi'; WMU k*uh*ččí-kki 'burn, vt'; CU k*u*čí'i 'be hot'; CU k*u*čí-tií 'heat up, vt'. This may or may not involve the SNum causative suffix *-ti'i suffixed to 'fire' but it is plausible enough to be worth listing. [NUA: SNum]
- **883.** *kotto (< *kut-tu/ta) 'make fire': M88-ko1; KH/M06-ko1: TSh kottoo 'set fire'; Sh kottoo 'make fire'; Cm kohtoo; Hp qööha / qööyi 'get burned, scorched on the body'. [NUA: Num, Hp]
- **884.** *kunnaC 'firewood': I.Num 69 *kunah; M67-170b *kuna; M88-ku5; KH/M06-ku5 'firewood': Mn kun(n)a 'fuel, wood'; NP kuna 'wood'; TSh kunna" 'firewood'; Sh kuna" firewood'; Cm kuuna/kuna; Kw kuna 'fire'; Ch kuná 'fire'; SP kunna" 'fire'; CU kuná-vi 'ember, ashes'; CU kuna-či 'matches'. Miller and Hill include Eu kumáni 'leña', and a Num reduction like *kumanV > *kumnV is feasible, or is it a compound of *kut 'fire' and *na'ay 'fire'? [NUA: Num]
- **885.** *mik/h 'burn': B.Tep159 *mihi 'burn': mihida-i 'burn something'; *miihimi-i 'is burning, vi.'; M88-mi5; KH/M06-mi5: Hp miki 'hot, warm from heating'; Pl mimilaka 'for fire to burn'; TO mehe; mei; NT mihi/mihii 'vi'; miidya 'vt'; NT mihiíkami 'burned'; NT miimiltiudai 'atizar lumbre'; NT miihimi 'is burning'; ST miihim; vt: miidya; ST mii 'is burning'. Note *k in Hp vs. h in the others, both here and in *taxa/tahi above. And Tep h < *s normally, though some PUA h are occasionally retained in Tep. [medial C?] [SUA: Tep; NUA: Hp]
- **886.** *so 'burn': CN šootla 'burn, catch fire'; Wr koso-ná 'burn, vt'; Eu kúso pret: kúsoi 'burn'; Eu híksoo 'burn grass where one must plant'. All these may suggest an element like Eu -ku-so; and perhaps Sr hu'ai 'burn' as *s > Sr h; these forms may have *kut- 'fire' prefixed and at times assimilated to *-so. [SUA: Trn, Opn, Azt; NUA: Tak]
- **887.** *paLaw / *pataw 'to burn': Ca pálaw 'to spark, go up in flames'; Tb(M) poloo'at~'opoloo' 'burn, vi'; Tb(M) polooŋat ~'opolooŋ 'burn (of fire), vi'; Tb(V) poloŋ ~'opoloon 'heat, vt'; perhaps ST vapoikia / vapoisa 'singe, scorch'. This presumes Tb vowels assimilated toward w. [w/'/ŋ] [NUA: Tak, Tb; SUA: Tep]
- 888. *waya / *kwaya 'burn': TSh wayantin 'fire'; TSh wayan/wayan/wayankin 'burn'; Sh waihya-ppï 'fire'; initial syllable (we') of Cm wesikiri, we'hari 'to burn'; Cm we'haki' 'fire'. Remote possibilities might include CU kwiyá-'æ´y 'burn'; Hp ïwiŋw 'flame, fire'; Hp ïwi (k-) 'catch fire, vi'; Hp ïwi-kna 'light (a flame), vt'; CN kawaani 'to catch fire', but only CNum sure. [NUA: CNum]

889. *pita 'build a fire': M67-63 'burn': Mn pida 'build a fire'; NP pidapi 'fire'. Let's add My beete 'burn, vi'; Yq beete 'burn, vi'; and perhaps TO iiwiđ 'make fire with a stick', though a prefix and second consonants not matching make TO less likely, unless *piyta; however, for t = TO đ, see TO wađađ at 'flat'. [V leveling] [NUA: WNum; SUA: Cah, Tep]

890. *say(pa) 'burn': Wr saipá-ni 'quemarse'; TO kohađk 'something dried and burned'; Nv kusada 'quemarse'. Once again, *kut- appears to be prefixed in the Tep languages, though Nv s vs. TO h is unexpected and may have to do with different behaviors of the cluster *-ts-. [SUA: Tep, Trn]

NB, for *kut-tunuhi 'firedrill', see 2704 in additions at the end.

FIRE GO OUT, EXTINGUISH; APAGAR(SE); see also 'black'.

891. *cuppa < *cu'pa 'fire go out': M67-171 *cupa 'fire go out'; CL.Azt54 *seewi 'extinguish'; 236 *cu 'go out (of fire)'; M88-cu9; KH/M06-co21: Tb cupat, 'ucup 'be out (of fire)'; Tb(H) cuppat 'fire to be out, go out'; Wr co'a 'put out fire'; Wr co'i 'be out (of fire)'; Tr čo'á-ri- 'have another put out fire; Tr čo'wi 'dark'. [SUA: Trn; NUA: Tb]

NB, for *yuppa/i 'fire go out, black', see 'black'.
NB, for *tuk 'fire to go out, night, black', see 'black'.

First: see before, new, one

FISH; PEZ, PESCADO

892. *kicu / *kucu(C) 'fish': Sapir; BH.Cup **keyúl?; HH.Cup *kiyúul; L.Son103 *kucu 'pescado'; Fowler83; M88-ku20 'fish'; Munro.Cup45 *kiyúú-l/kəyúú-l; KH.NUA; KH/M06-kï18: NP kuyui 'Pyramid Lake sucker'; SP pa-kïu 'fish'; Hp paa-kiw; Tb kuyuu-l; Cp qeyú-l; Ca kíyu-l; Ls kiyúú-l / kuyúú-l; Sr kihooţ; Ktn kihuč; Gb kyur; Eu kučú-t; Tbr kičú-t; Yq kúču; My kúču; Tr kočú; Wc kecï.

*kicu > *kicu (Tbr, Wc) SUA > *kucu (Eu, Yq, My, Tr) SUA > *kiyu (Ca, Cp, Ls, Sr, Gb, Hp kiw < *kiyu) NUA > *kuyu (Tb, Ls, NP) NUA

Manaster-Ramer (1992) cites this set, which nicely demonstrate his "Northern UA sound law: *-c-> -y-" since all the SUA languages show c, while NUA languages show y and two h. Some show the 1st V as high-front (Tbr, Wc, Ca, Cp, Sr, Gb, Hp, SP) and others show u (mostly in SUA languages: Eu, Yq, My, Tr) and two in NUA (Tb, Ls) or is it i'? Whether *i/i-u > u-u (the 1st assimilated to the 2nd) or *i/u-u > i-u (the 1st V assimilating to the palatal -c-/-y-) is debatable. Tr o (oft < *u) and Wc e (less likely from i than an unaccented dissimilation from *i) have me leaning slightly toward *kucu, but not very far. Do Sr and Ktn medial -h- suggest a cluster? AMR (1992) reconstructs *kicuC, with a final consonant, while Munro (1990) kiyúú-l, with an absolutive -l (as also in Tb), not -t, may suggest no final stem consonant. PYp kekota 'fish, vt' may be related by consonant harmony. [*-c->-y- in NUA] [NUA: Num, Tb, Tak, Hp; SUA: Trn, Cah, Opn, Tbr, CrC]

893. *paNkwi / *pakkwi < *paC-kuyu < *paC-kucu 'fish': I.Num146 *peŋkwi/*paŋkwi 'fish'; M88-pa9 'fish'; KH/M08-kï18 *kïcuC (AMR): Mn pákwi (< *pakkwi M88); NP paggwi; Sh penkwi; TSh paŋwi / peŋwi; Kw pagïi-zi; Ch paġú-ci; SP pa-kïu; CU paġú; Hp paakiw. Add WMU pagúü / paġú 'fish, n'. I agree with Hill's associating this with kï18 *kVcu above, yet it is a compound that the above is not, and where does the nasalization come from? From the end of *pa- 'water'? [reduction at end of word] [NUA: Num; Hp]

894a. *(pa-)topa 'fish': B.Tep263 *vatopa-i 'fish'; M67-174 *top 'fish'; Fowler83; M88-to15 'fish'; KH/M06-to15: TO watopi; PYp vatopa; LP vatap; NT vatóópa; ST vatoop; mostly in Tep, perhaps Tr ŕo'či. *pa- 'water'. **894b.** *topo 'fish sp': CN(RJC) topo-tl 'small fish'; Mecayapan Nahuatl topoh 'fish'; Tbr tepó 'catfish'. Elliot (2000, 1410) finds enough Ls fish words ending in -pu, he suspects -pu 'fish'. [final -a/o alternation] [SUA: Tep, Azt, Trn, Tbr]

- **895.** *musi / *muci 'fish': L.Son160 *musi 'bagre'; M88-mu17; KH/M06-mu17: Op músi; Tr mu*sí; Eu musít; CN mičin 'fish' (cognate? Miller queries)—perhaps, or Tr mo'tereči 'fish' (mo'-tere 'head-step/mash' says Brambila) with *-Ct- cluster to *-c- in CN, while *musi may be a different term. What of the -mu- of Tb 'uimu-1 'sucker fish'? [*-t-> -c-> -s- in Tep?] [SUA: Trn, Opn, Azt]
- **896.** *akai 'trout, salmon, a good-eating fish': Mn aagáí 'salmon'; NP agai 'trout'; TSh akai 'trout'; Sh akai 'salmon, fish'; Sh(GL) agai 'salmon'. [NUA: WNum, CNum]
- **897.** *so... / *so' / *coC 'kind of fish': Wr so'cí 'fish'; CN šowil-in 'catfish'; Ktn coh 'fish sp., perhaps salmon'. ['/w; s/c] [SUA: Trn, Azt; NUA: Tak]
- **898.** *kaLpuC 'fish sp.': Ls 'álpu-t 'a type of ocean fish'; Eu kapúr 'pezcadito barrigón'; the p in Eu suggests a cluster, so this match seems more likely than not. [NUA: Tak; SUA: Opn]
- **899.** *'aya 'fish sp': Tb ha'ayah-l 'trout'; Eu adávo 'pez blanco del rio' (Eu d < *y). Is Elliott's (2000, 1410) suspicion of Ls -pu 'fish' relevant to Eu's last syllable? [Eu d < *y] [NUA: Tb; SUA: Opn]

FISHHOOK; ANZUELO

900. *po'a 'fishhook': L.Son209 *po'a 'anzuelo'; M88-po17 'anzuelo/hook'; KH/M06-po17: Tr pówa 'pescar con anzuelo'; Wr po'ácula 'fishhook, net'; My bó'aria; Tbr wohá-t. [SUA: Trn, Cah, Tbr]

Five: see under numbers toward the end

FLAT, LEVEL; PLANO, LLANO, NIVEL(ADO), PAREJO; see also smooth, slip, lie down 901a. *takka 'flat': BH.Cup *táka 'flat'; M88-ta33; AMR 1993c *takka; KH/M06-ta33: Ca taqtáqa 'be flattened'; Ls táka/i 'be straight'; Ls tááki-š 'stone for smoothing pottery'. AMR lists SP takkaa-vi 'flat country'; SP mut-takka 'forehead'; Ls –taak 'palm of hand'. Let's also add Ch(L) takagani (< *takka-kani) 'flat-topped house'; Kw takka- 'flat part'. Jane Hill (p.c.) notes Ch taka(a) 'roof, top' from Harrington's noun list. Miller includes Cp táşuqa 'straighten, vt' which is only possible if these others are reductions: *tasuka > *taska > takka, which not necessarily probable. [NUA: Tak, Num]

- **901b.** *Lakka(pa) 'flat, smooth': Ls laqápa/i 'be smooth, v.i., make smooth, vt'; Ca lákaa 'be flat (as balloon, stomach)'; Ca lákaš 'collapse, cave in'. [NUA: Tak]
- **902a.** *komaL 'griddle': CL.Azt74 *komaal; M88-ko25 'griddle'; KH/M06-ko25: CN komaal-li 'griddle'; Pl kumaal 'comal, tortilla griddle'; Po komal; Z komaal; T komolI; Hp qöma 'to make qömi'; Hp qömi 'oblong cake of baked sweet corn flour'. I agree with Ken Hill, who removes Miller's question mark, that the Hp terms are cognate, for the first four segments agree (Hp \ddot{o} < *o; Hp q < k/ $_{\ddot{o}}$), and a > i before liquids or as final V is common in UA, even if no liquid is apparent in Hp.
- **902b. *komaL** 'thin': B.Tep104 *komarika 'thin'; M88-ko32 'thin'; KH/M06-ko32: TO komal; UP komaliki; LP komilk (Bascom); Nv komarika 'thin (as paper)'; NT komálika; NT komáli 'delgado'; ST komaalyik. It is easily possible, even probable, that this is the same stem as *komal 'flat griddle for making flat thin tortillas'. [NUA: Hp; SUA: Tep, Azt]
- 903. *kapaL 'flat': M88-ka5 'flat'; KH/M06-ka5: TO kawaDk 'be flat'; TO kapaD 'lie flat'; TO kawaD 'war shield' pl: kakawaD; PYp kaper 'bent down, low, flat'; PYp kaper-ek 'flat'; NT kapááraturui 'become flat'; NT kapáárakami 'flat, level'; Wr kapó 'flat'. What of CU paáy 'be smooth' and Ls laqápa 'be smooth' and Ls laqapi 'make smooth'? Certainly related, but with semantic tangent, are shield terms: TO kawaD 'war shield'; Nv kava'arha, pl: kavparha 'adarga'; Nv kavar'ha 'make a shield'. [SUA: Tep, Trn]

*patta (> pata) 'flat, level, smooth, slippery, bare, naked, bald, uncover, open up, blossom' (Stubbs2000a-2) yields considerable semantic variety:

904a. *pata / *patta (> *pita / *pala) 'flat, spread, i.e., flatten/smooth, vt': M67-410 *pata 'spread'; I.Num142 *pata 'spread, straighten out'; CL.Azt192 patla(awa)-k 'wide': M88-pa32 'spread'; KH.NUA; KH/M06-pa32: CN patlaawa 'widen'; CN patlaawak 'wide'; Po patek; Te patlowak; Za pataawak; Pl pataawa 'extend, widen'; Mn patanuyu 'straight (of long narrow obj)'; Mn tunapaati 'straight (one)'; NP capada (< *cappata) 'spread out s.th. thin like a blanket'; WSh cappata 'spread out by hand'; Sh pata 'spread out s.th. of cloth'; Kw patta'nimi 'erect, straight'; SP para 'straighten out'; Sr paţk 'lie down flat, as on one's stomach'; Ca pálaa 'be flat'; Ca palpála 'be flat (leaf, rock, etc.)'; Ls pálvun-la 'a plain, valley, level ground'. Add Ktn vačk 'flat and wide or circular'; AYq patalai 'flattened, crumpled, formless'; AYq vetala(i) 'flat, even, smooth'; Yq bétalai 'plano' (Yq bétala 'boca abajo'); Hp piïci 'wide, broad, long and flat', since NUA c < *t/*tt or other consonant besides *c. Besides the preceding, some languages have 2nd form that may tie by a different route: Sr vääci'|q 'be flat, flattened'; CN patla-čoaa 'flatten, press, crush, vt, bec. flat, collapse, vi'. Tb payaawat ~ apayaau 'be spread out' and might Tb piišwabïil 'enormous' be related by another route? CN alaktik / alaawak 's.th. slippery, crumbly'; CN alaawa 'slip, slide s.th., vt'. Note CN forms with and without *p. [*-t- > -l-, -c-]

904b. *sikki-patta 'flat': Mn sikibadagi; NP sikipatadï (< *sikkippattatï) 'flat, adj'; probably Cm sïïpetï. This may well be a compound containing *-patta above. [NUA: WNum]

904c. *hi-patta 'flat': TSh hippatta; Sh hippatta; if not a reduction of *sikipata above, it obviously contains at least a common morpheme *-patta, which stem is prominent in TrC. With vowel changes, I would have to consider the following probable as well: PYp hepelik 'flat, lowlands'; Ls hivé-li 'flatten'; Ls hivél-vi-š 'flat, wide'.

904d. *patta / *patti 'bare, smooth': Mn padagwinigi 'be naked, vi'; NP patakwïnï'a (< *pattakkwïnï'a 's.th. smooth'; Sh pacci" 'smooth, shiny'; Sh(M) pacci 'smooth, shiny'; Cm pahci bapikatï 'bald'; Cm pahciketï 'slick, smooth'; NP copata kwa'ama 'bald'; perhaps TO wađađk 'bald' if t > đ. [Num]

904e. *pici 'naked': Tr biči; AYq viiči. This likely relates to *patta/patti above with assimilated vowels: *patti > paci > pici. Likewise, Hp pïrï(-k) 'get uncovered, open up, unfold' may be vowel leveling of the same. Ls pála 'put out sprouts, come into leaf' may tie to Hp pïrï, all of which tie to *pala 'leaf'.

904f. *pïci / *pVcV < *pat(t)a/i 'flat, prone, flatten, widen': Tr peči 'cama, tendido para dormir [bed, stretch out for sleeping]'; CN(RJC) pečitk 'flat, flat-based, wide'; CN(RJC) pečithki 'flat'; CN(RJC) pečia 'underlie s.th.' If *-t->-c-, Hp pïc- may tie to CN *pac... or CN *pat...: Hp pïc-qa 'flat < wide-extended'; Hp pïc-lawï 'be widening s.th. linear'; CN patlačoaa 'become flat, collapse, flatten, press, crush s.th.', v.refl, vt'; CN patlaawa 'widen/ensanchar(se)lo angosto y estrecho, vi, vt'; Hp pïcqata 'be flat, v, flat area or surface, n'; CN paacka 'wring out, squeeze liquid out'.

904g. *pacu 'squeeze, smash': CN paacoaa 'bruise s.th., mash (fruit), crush s.o.'; CN paac-tik 's.th. dripping wet, juicy, bruised, mashed, soft'; in compounds CN paac- 'liquid (perhaps squeezed out); CN paacka 'squeeze liquid out of s.th., wring out, press out, give forth liquid'; Tr pačunti / pačuinti 'hacer gotear, exprimir a gotas'; NP capicuna 'pinch' (if ca- prefix meaning 'do with the hand'); Mn -wïpizizihi 'squeeze, vt'; Yq pitta 'aplastar'; My pittia 'estar apretandolo'. The *pacu forms and the *pïc- of the others may all be related, especially since we see a vowel change of *pacu > picu in one of the *pacu forms (NP), and fronting and raising of vowels is common before alveolar consonants in UA. Dakin 1982-66 has Tr basú- 'desincharse' (loan from Tep?) and CN paaciwi 'get crushed, swelling go down'. [NUA: Num, Hp, Tak, Tb; SUA: Tep, Cah, Trn, Azt]

905. *tapi (> *tatpi/talpi redupl?) 'flat, smooth': Hp talvi 'smooth, slippery'; Cp tavááne 'be flat (of ground)'; CU taví'ni 'flat'. The Hp form may result from redupl. [NUA: Num, Hp, Tak]

906. *Luma 'flat(ten)': Wr luma 'be very straight, flat'; Ca -lumaš 'knock down, crumple'; Ca če-lumaš 'crumple, mash, vt'. [initial L?] [SUA: Trn; NUA: Tak]

NB, for *mani, see 'lie down'.

Flea: see fly, n. Flint: see knife Flow: see river

FLOWER, BLOOM, BLOSSOM; FLOR, FLORECER, FLORAR, BROTAR

UA words for 'flower/bloom' are challenging, but fit a general pattern of *si'a in NUA and *siwa in SUA, all listed under M88-si6 'flower, grow'; KH/M06-si6; M67-178a *se, 178b *si, 178c *so:

907a. *sï'aC (NUA): BH.Cup *şə 'bloom'; I.Num196 *sï'a(h) 'blossom, grow (of plants)'; KH.NUA: NP sïa 'plant, v'; Sh sïa" 'grow, v'; Cm sïa 'grow, v'; SP šï'i"/šï'i-ppï 'blossom'; CU si'i 'bloom, flower'; Cp -šé'a 'flower' (poss'd); Cp šé'e 'bloom'; Ca se-l / sé'i-š 'flower'; Ca sé 'bloom, v'; Ls şóó'- 'bloom, v'; Ls -sóó' 'flower, blossom' (poss'd only); Gb sóyn/swin 'flower'; Sr sï/sïi 'flower(s)'; Sr sïi' 'bloom, v'; Ktn –šï; Hp sihï. Add Ch(L) sï'ipï / sï'icï 'flower' and Mn sï'a 'sprout'. SP, Sh, Ch(L) show final -C.

907b. *sïwa (SUA): L.Son252 *sïwa 'flor'; Eu séwa/sewá-t; Tbr sewa-rá-t; Yq sééwa; My sééwa; Wr sewá; Tr sewá; Cr šúúšu'u 'flower'; CN išwa 'sprout, germinate'.

907c. *siso-ciwa 'flower': B.Tep67 *hiosigai 'flower'; *sïsoci/hïsoci-ta(i) 'flower, v' and *sïsociwa 'flower, n' may fit TO hïosig 'blossom, flower, n'; TO hïotap 'bloom, v'; NT yooštyai 'florecer,vi'; NT yoošíga 'está florecida'; NT yoošígai 'la flor'; ST yoota; ST yooši flower'; LP(B) hioškam. Add PYp hiosga / hios 'flower'; PYp hiosia 'flower, vi'; PYp totsigar 'sprout, n'; Nv 'ï'osiga 'flower'.

[NUA: Num, Tak, Hp; SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]

907d. Azt *soci 'flower': CL.Azt63 *šooči 'flower', 231 **sïyotu 'flower'; CN šooči-tl 'flower, n'; CN šoočiyoaa 'blossom, v'; CN iiššoowa 'blossom, burst forth, v'; CN išwa 'sprout, germinate'; Pl šuuči-t 'flower'; Pl -šuuči-w (poss'd). L.Son 252 equates *sïwa with Tep -siga- in Tep *hio-siga-i, though Tep s < *c usually. Pl suggests *(i)soo-ci-wa > Tep *ihosiga > hiosiga. Note how both CN šoočiyoaa 'blossom' and Tep *hihosiga could derive from *sisociwa. [SUA: Tep, Azt]

908. *hupiN-ka 'bloom': M88-hu18; KH/M06-hu18: Mn hïbiga 'bloom, vi'; Mn hïbigá' 'flower, blossom, n'; TSh hïpiŋkï 'bloom'; TSh hïpinkii 'flower'; TSh hipiŋkippii 'flower, blossom'; Sh hïpinkii 'to bloom'; Sh hïpinkippih; Kw hïvi-vi 'flower'; Tb 'ibii'ït~'ibii' 'to bloom'; Tb 'ibii-l 'flower'. Because *u > ï in Numic is frequent, I'll side with Miller's *u. [NUA: Num, Tb]

909. *huya 'bud, branch': M88-hu5 'brotar'; KH/M06-hu5: Wr uyá-; uyáwi 'rama'; My húyya 'tree, branch, forest'. Miller includes CN išwa 'sprout, germinate'; but the CN form better fits *sïwa with Eu, Yq, Tr, and several others. [SUA: Trn, Cah]

910. *ci'aN 'flower': Fowler83 *ci'a 'wild rose': NP ciabbi 'rose'; Sh ci'ampi 'wild rose berry'; Kw ciya-vi-pï 'wild rose'; SP ci'ampi 'wild rose berry'. Fowler also lists Mn and Ute, which forms I could not find. Jane Hill (p.c.) adds TSh ciapi-ppïh 'rose bush'. [NUA: WNum, CNum, SNum]

911. *usa 'wild rose': M88-'u9; Munro.Cup113 *'úúsa-la 'wild rose'; KH/M06-'u9: Cp úşa-l; Ca 'úşa-l; Ls 'úš-la; Gb 'ucú-r. Jane Hill's (p.c.) reconstruction *'uṣa-ta is better, as soon as we can prove *-ṣ- (vs.s). [NUA: Tak]

FLUTE; **FLAUTA**

912. *wiLu 'play a reed flute': M88-wi18 'to play a (reed) flute'; KH.NUA; KH/M06-wi18: Ca wfiru; Ls wfiru; Sr wiiroi'n 'play a reed flute'; Sr wiiroi'ni-t 'reed flute'; Miller also queries whether Hp leena is related. Let's add Ktn wiro'i / wiroi'i 'play (instrument)'; Ktn wiro'i-n-ihwa'-t 'flute, any musical instrument'; WMU viyu'/eviiyu'ni 'flute, whistle' even shows the glottal stop found in Sr and Tb, and, in fact, is very similar to Sr wiiroi'n. Kw woyo 'flute' (archaic) belongs; and WMU ia'nap 'flute' is similar to Kw woya'a-nï(m)bï 'musical instrument, flute' (archaic). And TSh wooino 'flute' and NP kocokkwoino resemble the first 3 segments of the Kw form. Miller's listing of Hp leena is feasible in that the general pattern in other UA languages is *w-high front vowel-liquid, and Hp 1 < *w/_e, and *1 > n sometimes; therefore, it is possible. Ken Hill lists CN wiiloo-tl 'dove' querying whether related or not. A very decent possibility! Tb luulu'~'uuluulu' 'play a flute' is questionable or may not be related.[L > y, cf. Sr, WMU] [NUA: Tak, Num, Hp; SUA: Azt]

NB, for *kusu 'flute, play flute' see 'noise, for animals to make their characteristic'.

FLY, FLEA, MOSQUITO, GNAT; MOSCA, PULGA, ZANCUDO, CINIFE

perhaps borrowed from languages with medial bilabials:

913. *sak*oti > *sik*oti, or *sakwoti > Cah *saboLi > *saipoLi 'fly, bee': M67-181 'fly, n'; M67-33 *sek/*cek 'bee'; L.Son227 *saiwori 'mosca'; M88-si5 'fly'; M88-si18; Stubbs 1995-13; Stubbs2000b-42; KH/M06-si5; KH/M06-si18: the following forms appear to divide themselves into those that show *kw as the medial consonant and those that show a bilabial (*p, b, bw) or are borrowed from UA languages showing bilabials:
913a. *si'kwo- (< *sakkwo-?) 'fly, n': CN šiiko'-tli 'bumblebee'; Ca kuŋ-sexwet 'bumblebee (husband-bee)'; My sé'ebori 'fly'; My kuku-sebo'ori 'bumblebee'; Yq sé'ebo'i 'fly'; Wr se'wá 'fly'; Wr se'ori 'honey, kind of honey bee'; Wr so'óri 'kind of fly bigger than se'wá, possibly same as se'óri'; Tr se'ori 'fly, bee'; Eu sébor 'fly'; Wc šéekïi 'gnat' (Wc ï < *u) also appears to belong. What of Ls kúpṣax-la 'type of bumblebee' (with Ca kuŋ-sexwet) or Wc šíiníkïi 'fly sp'? Eu b corresponds to PUA *kw (Eu basít 'tail') and CN šiiko'- certainly shows medial *kw rather than *p. Cahitan -bo- could feasibly be either, but best fits *kwo > bo. Tr w and Wr w normally reflect PUA *kw in initial position, and -'w- often medially. Here Tr -'o- and Wr -'w- are medial variants of PUA *kw, and not from *p, because Tr and Wr show p/b for *p. So CN, Tr, Wr, Yq, My, and Eu all show *-kw-, being consistent with the kwo-phenomenon medially, while some other UA forms suggest *saipoli (< *sayapoli ?),

913b. *saypori 'fly': Nv saivori 'abeja'; NT sáívuli 'fly'; Op saiwori 'mosca'; Tbr sayvól 'abeja'; Tbr haya-vól 'mosca'; Wc šáipï; Cr šáihru/sa'ihiru 'fly'; CN saayool-in 'fly'. Some of these forms may be borrowed from Tep b or Cahitan -bo- (<*kwo); either would be taken as *p in other UA languages. Nv and NT seem to have borrowed from TrC, perhaps Tbr, since *s > Tep h, not s. CN saayool-in, on the other hand, is identical to Tbr except for the missing bilabial v/p, and CN typically lost *p. In fact, the similarity of Tbr sayvól, Op, NT, and Nv *saivoli / saywoli to CN saayool-in is quite identical in all five remaining segments: s-a-y/i-(v)-o-l/r. Thus, this set b seems suspect for meshing or diffusions of Cah *sïbori into Azt, Tep, and other TrC languages.

Of interest in M88-sï18 and M67-33 *sek/*cek 'bee' are Ls şuká' 'type of wild bee'; Cr cíhka'a 'wasp'; CN šiiko'-tli 'large bee, bumblebee'; Pl šiikuh 'small black bee or wasp'. Wc šïirïkaa 'beewax' agrees with CN and Ls since *u > Ls u, > CN i, > Wc ï, but in *u, not *ï. For now I put the Azt forms with *sïkwo above. [-p- > -ø- in Azt medially] [NUA: Tak; SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]

914. *tapputi / *tïpputi / *tïCpu-ti 'flea': VVH146 *tïupu 'flea'; M67-175 *tepu/*tepuci 'flea'; L.Son298 *tïpu 'pulga'; Fowler83; Dakin 1991; M88-tï6 'flea'; KH/M06-tï6 (AMR *tïpu-ti): TO čiïpš; PYp teepas; NT tapïïši; ST tapïïš; Eu tepú'u / tepú; Yq téput, tepučim (pl.); My tépput; Wr tehpucí; Tr ŕipučí; Tbr tipú-t; Wc teepiï; Cr tepi-, tepi-ci (pl.); CN tekpin-tli; Pl tekpin; HN tekpi(mi)-tl. Where the Azt -k- came from is a good question: it may be from the Azt -ke pl. suffix transposed, or a glottal stop hopped then reinterpreted as -k-, or Dakin's (1991) suggestion *tï-tïpu > *tïtpi > tïkpi to yield Aztecan *tekpi forms. PYp teepas 'flea' suggests a cluster in contrast to PYp teev 'shoe'; PYp teevi 'corn husks'; PYp teevin 'thin rope'. See also 'cricket' whereat is found *tïpos 'cricket' in Eu tepósti; Wc tïïpuuši. These may relate to 'flea', though Cr and Wc both have *tïppu 'flea' above. Wc tïïpuuši is likely an earlier loan, for Wc u corresponds to Eu and PUA *o. [SUA: Tep, Trn, Cah, Tbr, Opn, CrC, Azt]

An array of UA terms with initial *mu... for 'fly', 'bee', and 'mosquito' provide Uto-Aztecanists another puzzle. M88-mu7 'fly' includes M67-180 *mu 'fly'; I.Num *mui(h) 'fly'; BH.Cup *mukwac? 'flea'; HH.Cup *mekwa' 'flea' (in which case Ca vowel is wrong) or *mukwa' (in which case Cp vowel is wrong); B.Tep156 *muuvari 'fly'; CL.Azt65 *maayoo, 232 **muu 'fly'. However, in light of the fact that many of these (if not all) are compounds whose first element may be *muC 'nose', we shall separate them according to what precedes and follows *muC:

915a. *muwi- / *muCpi 'fly': I.Num98 *mui(h) 'fly'; Fowler83; M88-mu7; KH/Mu7: Mn muwíbi; NP muipi; Kw muu-pi-ži; SP mooppiča-(ci); CU múua-vi. Add Ch(L) muupici 'fly'. Jane Hill (p.c.) notes also Mn mucíp*i* 'flea' (metathesis?). [NUA: WNum, SNum]

915b. *ani-muwi 'fly': TSh anipi, animmuih, muipia; Sh animui, ana-mui, anka-mui, enki-mui; Cm animui. For Num *'ani, see ant. The prefixing of *ani- is consistently in and only in CNum. [NUA: CNum]

- **916.** *pa'a-muwa 'mosquito' (long- nose?): TO waamug 'mosquito' (cf. TO čukmug 'gnat'); Nv vamuga; PYp vaamugi; NT vaamúgai; ST vaamu. It would be good to keep in mind that (except for initial *pa'a-) these Tep forms are much like Num *muwi above and Kw muhuvaa-vi 'mosquito' and the first and third morphemes of CU pa'a-tokwa-mövöt'ö-ci 'long-(purple)-nose, i.e., mosquito', since the 'long-nose' syllables *pa'a-mu/mo are similar to the first two syllables of Tep *paa-muga. Wc haamíiva 'nigua, flea' is also noteworthy, since Wc h < *p and a slightly forwarded ï > i. [SUA: Tep, CrC]
- **917.** *muhu-(pa) 'fly': B.Tep156 *muuvari 'fly'; Fowler83: TO muuwal; LP muuvil; PYp muuvili; NT nuuváli; ST muuvaly. Add PYp mumuva 'bee, n'. Fowler (1983) cites Kw muhuvaa-vi 'mosquito'; Ch muhuwa-vï 'mosquito' or Ch(L) muhua-vi. We ought also to include Wc 'ïcimïpéé 'sp. of bee', which matches Tepiman *mupa 'fly' in the segments *-mupV. The intervocalic -v- of *mupa > *muva may have shifted to less friction and more glide quality in some of the forms. Jane Hill (p.c.) notes Ca muhúli-l³ 'mosquito' only with different suffix to *muhu-. Tr maparí / naparí / aparí 'tábano [horsefly]' and Wc vaarái 'fly, bee' more likely belong at 'bee' which see. [NUA: Tak, SNum; SUA: Tep, CrC]
- **918.** *mumu 'bee': M67-31 *mumu/*meme 'bee'; L.Son156 *mumu 'abejas, panal'; Fowler83; M88-mul1 'bee'; KH/M06-mul1: Kw muukucize 'hornet'; NP pimumui 'humming noise (as bees)'; Hp momo; Hp momospala 'honey'; Op mumugo; Eu mumúgo; Eu mumúhuo; Wr momohá 'honey (comb)'; Tr umugá 'panal de avíspas negras'; Yq múumu; My muúmum 'abeja chiquita'; My mumu bá'awa 'honey'; CN mimiawa-l 'bee/wasp's nest'; Pl mimiyaawa-t 'wasp's nest'; and Fowler includes a probable Tb toomoogal 'bumblebee'. To these we can add Nv mumuva 'abejas de panales', Wc miimii 'kind of wasp', whose vowel agrees with *mumu (*u > Wc i), as do the Hp (*u > Hp o) and Azt vowels (*u > Azt. i); and PYp mumur 'bee' belongs.

 [NUA: Num, Hp, Tb; SUA: Tep, Trn, Cah, Opn, CrC, Azt]
- **919.** *mutaN 'bee': SNum *-mutaN- with two prefixes (si'i-, piya-): SP si'imuutaN-, si'immoorampi 'bumblebee'; CU piá-muu-raa"-ppi 'honey-bee (lit: sweet-fly-?)'; WMU piyáá-muura-pi 'bumblebee, n'. PYp mumur 'bee' with -r may merit contemplation. [NUA: SNum]
- 920. *(mo/wi)-po(ŋa) 'mosquito': Fowler83: NP wipona'a / mopona'a 'mosquito'; NP(B) mopoŋi / wopoŋi / wipoŋi 'mosquito'; NP wopoŋa (Yerington); TSh wiwidi 'mosquito'; Sh mopo'o; Cm muhpoo' 'mosquito'; SP woponi 'mosquito'. [NUA: Num]
- **921.** *ku'a 'worm(y)': M88-ku32; Munro.Cup46 *ku'áá-l/ku'á-l 'fly, maggot, louse'; KH/M06-ku32: Cp kú'a-l 'fly, bedbug'; Ca kú'a-l 'louse, flea of people'; Ca kú'a 'become wormy'; Ls ku'áal/kwa'áal 'fly, maggot'; Gb ko'ár 'gusano' (vowel is wrong); Sr ku'aa-c 'worm, maggot'; Ktn ku'a-č 'worm, bug'. [NUA: Tak]
- **922.** *mu-ku'a 'fly'; *mu-ku'aa- 'flea': BH.Cup *mukwac 'flea'; HH.Cup *məkwá 'flea' (in which case Ca vowel is wrong) or *mukwá (in which case Cp vowel is wrong); M88-mu7; KH.NUA; KH/M06-mu7: Cp mekwáš 'flea'(vowel is wrong); Ca múkaš 'flea, louse'; Ls mukwá'či-š 'flea'; Ls kwa'áá-l 'fly'; Cp kú'a-l 'fly'. Munro suggests that the Cupan forms for 'flea' are a compound of *mu-ku'aa, which seems reasonable, recommended by the two Ls forms and the two Cp forms. [NUA: Tak]
- **923.** *waho 'mosquito/zancudo': L.Son345 *wo 'zancudo'; M88-wa1; KH/M06-wa1: Wr wahó; Tr wahó; My wóo'o. I agree with Miller's initial vowel in a reconstruction near *waho, with assimilations—*waho > *woho/wo'o—and/or vowel loss. We should also include Yq wóo'o; Eu wohó 'mosquito'; Eu(L) wowok 'mosquito'. What of Ktn hawawa-č 'mosquito(es)'. [SUA: Trn, Cah, Opn]
- **924.** *suLi / *suti 'mosquito, gnat': Cp súyily 'gnat' (Cp suye 'sting, vt'); Tr ičísuri / učósuri 'mosquito'. [L/y?] [NUA: Tak; SUA: Trn]
- **925.** *sapí 'mosquito': Eu sabít 'gnat, mosquito'; Tbr sahí 'mosquito'. Both Eu and Tbr have other words that align with *sïkwori/saypoli. [SUA: Trn Opn]
- NB, regardless the confusions elsewhere, the words for fly show a rather nice division among the Numic branches: WNum *mu(w)i-pi; CNum *ani"-mui; SNum *muupi-(ci).

FLY; VOLAR

with *honi. [NUA: Tak, Hp]

926a. *hiCni 'fly, n': Sapir; M67-183 *hini; KH.NUA; M88-hi5 'fly'; KH/M06-hi5: Sr hiiñ'k / hiiñi'k 'fly'; Ktn hi'nïk 'float'; Cp híni-š 'young bird'; Ca hín 'fly, jump, kick, bark'; Tr i'ní 'volar'. Perhaps Tbr ha-nyá 'volar'. Miller includes Tr i'ní both here and below; Tbr ha-nyá could feasibly fit either one, and it is possible that the two share a morpheme. Sapir first linked Sr hinyi-k and Cr eni-te, but also joined these with Tep nïini and SP nonci (< *nonni-ci), which latter union may be a stretch, though a fossilized reduplication allows a remote possibility, for Tep at least. The inclusion of Cr merits investigation, though I could not find the Cr form in my sources. Sr, Cp, Ca, and Tr may be related in a verb form (perhaps *i'ni) akin to *'ana 'wing'; in fact, if the glottal stop derives from a former velar (as seems to happen often enough), then *hi-kni would nicely explain the velar nasal in Cp and Ca, as well as the -'n- cluster in Tr. A potential complication is an overlap of forms that takes the reconstruction a different direction in b. [-'ni- > -ŋ-] [NUA: Tak; SUA: Trn, Tbr?]

926b. *honi 'run fast, fly': Hp höni 'swift, fast, fast runner, fast-running ability, speed'; Ca hin- 'fly, jump, kick, bark'; Ca hin-iči 'flee, run away'. PUA *o > Hp ö and Ca/Cp i, so all four segments of all forms agree perfectly

927. *ni'i 'fly, jump': VVH90 *ni'i 'to fly'; M67-184 *ne 'fly'; L.Son172 *ni; M88-ni5 'fly, jump'; KH/M06-ni5: TO niini / nyi'i 'fly, jump, pl.'; Op ne/ni-; Wr ni'i; Tr i'ní; My né'e; but Eu mé'e / mehe? Add Yq né'e/ní'i; PYp neene. [SUA: Tep, Trn, Opn, Cah]

928a. *yasa 'fly': M67-182 *ya 'fly, v'; M88-ya18 'fly, v'; KH/M06-ya18: SP yaaša 'fly off, pl' (vs. SP nonci 'fly, sg' and *yïci/*yoci Miller notes); CU yaasi 'flock, fly in a flock' (vs. CU yïčí 'fly' below). **928b.** *yaCa 'fly': M67-182 *ya 'fly, v': TO da'a; PYp da'a; NT dadáïyi, dáígigi; ST daičgda, daya; ST daidya 'fast flier'; Cr wa-ta-ra'a-raa 'it flew off'. Hill adds TO da'a to the SNum *yasa forms, which is a reasonable possibility, as *yasa > Tep yaha normally, but h > ' is the next step. While TO da'a and dai of the other Tepiman languages could possibly tie to *ya'a/ya'i 'run, go', both Miller and Hill separate them, which I do also pending provision for improved probabilities. [NUA: SNum; SUA: Tep]

929 was combined with 930 below to be 930a.

930a. *yitti (sg), yotti (pl) 'fly, jump': I.Num292 *yo(h)ci/*yo(h)ti/*yi(h)ti/*yi(h)ci 'fly, v'; M88-yi12 'fly, v'; KH/M06-yi12: Mn yoci; NP yoci; TSh yici, pl: yoti"; Sh yici, pl: yoti" 'get up, fly'; Cm yici 'fly, sg.'; Kw yozi, pl: yori 'jump, fly'; CU yiči 'fly'; CU yiči-vöri 'fly around' (pöri 'move, go, walk, pl'); My yorériam 'insectos que vuelan'. Some these may pair with non-geminated alternates (*yutti vs. *yuti) or dialectal variants diffused: TSh yici 'jump' and TSh yotikkwan 'jump, get up, fly up, take off'; Kw yozi 'dance' and Kw yori 'jump, fly'. Perhaps Mn yidiki 'jump from fright'. [NUA: Num]

930b. *yu... 'bounce, trot': M88-yu1 'bounce'; KH/M06-yu1: Cp yutyúte 'to trot'; Ca yú'i 'trot'; Ls yúhi 'trot'; TO juDwua 'bounce, land on one's feet'; Wr yu'ri 'caer solo'; but My yú'a 'empujar'? Perhaps Mn yïdïki 'jump from fright'. The initial *yu for all reflexes has me agreeing with Miller and Hill that they are likely related, but in each term showing a different medial result (except My and Ca -'-), either an intimidating cluster reducing in a bewildering variety or other morphemes make a reconstruction beyond initial CV hazardous. These may tie to *yVtti above. [NUA: Num, Tak; SUA: Trn, Cah, Tep]

931. *patani 'fly, v': CL.Azt64 *pataanV 'fly, v': M88-pa47; KH/M06-pa47: CN patlaani; HN patlaani; Pl pataani. Add Ca pélaan 'spread open (wings, fan, etc), since intervocalic *-t->-l- in Ca, but Ca may also belong and is listed at *pïtïwa'open', to which the Azt forms may partially belong also, if differing final morphemes are involved. [SUA: Azt; NUA: Tak]

FOAM

932. *ko 'foam, suds': M67- 185 *ko 'foam'; M88-ko11 'foam'; KH/M06-ko11: Sr qöhä' 'foam'; Hp qöötö 'foam, lather, suds'. [NUA: Tak, Hp]

Fog: see cloud

FOLD, WRINKLE; PLEGAR, DOBLAR, ARRUGARSE

933. *coLo(N) 'wrinkle' is moved to 1228 'hungry, dry, wither'

934. *c/suwpuLi 'wrinkle': PYp huhgpuli 'wrinkles, n' and NT sóósopïlika 'arrugado, tableado' have much in common through four syllables, as also Pl iiš-šuhšupil-nah 'with swollen eyes, wrinkled face'. PYp and Pl agree, while NT may be a loan. [SUA: Tep, Azt]

935. *natipa (> *nacpa > Tep *naspa) 'fold': ST naspa 'fold, bend'; Eu nátpa 'doblar'; Nv nasa 'plegar una cosa'. [*t > c > Tep s] [SUA: Tep, Opn]

NB, for *(po)Lo'ma 'bend, fold' see at circle.

NB, for *nom... 'fold, bend' see at circle.

NB, for *caha 'thin, wrinkled' see at thin.

Follow: see hunt and search

Food: see eat

FOOT, LEG, THIGH, CALF, HOOF, KNEE, KNEEL; see also hip and buttocks PIE, PIERNA, MUSLO, PANTORRILLA, PEZUÑA, RODILLA, RÓTULA, ARRODILLARSE

936. *kïsa / *kïsica > Tep *kïhisa 'foot, leg'; *kïsa 'step on': M67-189 *ke/*keke 'foot'; I.Num73 *kïhkï 'foot'; L.Son85 *kïsa 'pisar'; B.Tep131 *kïisa 'he stepped on'; M88-kï4 'foot'; KH/M06-kï4: Mn kïkï 'foot'; NP ggïggï 'whole foot'; Hp kïkï 'foot, track'; Gb kóre 'pisar'; TO kïišp / kïisk 'step on' (kïi < kïhi); TO kïhi 'action with feet'; LP kïiš; NT kïiša; ST kïis; Eu késa 'pisar'; Op ke / kes 'pisar'; Tr re'-kesá 'pisar'; Pl ikši 'foot'; Pl taksa 'to kick'. What of Tb 'ïŋgï-l 'foot', or CN ikši-tl 'foot', or perhaps Tb 'igin 'swing foot up'; Tr ŕeke(ta) 'step'? [c/s, h in TO, Gb r] [NUA: Num, Hp; SUA: Tep, Trn, Opn, Azt]

937. *taLa 'foot'; Sapir; VVH28 *tala 'foot'; B.Tep217 *tara 'foot'; M67-187 *ta/*to 'foot'; I.Num202 *tah'instrumental prefix, (with the) foot'; L.Son276 *tara 'pie'; M88-ta12 'foot'; KH/M06-ip4 'with the foot':

Mn ta" 'foot'; NP ta" 'foot'; Sh ta"- 'with the feet'; Kw ta- 'with the foot'; SP ta"- 'with the foot'; First syllable of
Sr tamukpi' 'heel'; Hp tana 'hoof, foot'; TO tad; LP tar; PYp tar; Nv tarha 'pie'; NT tára; Eu tarát 'pie, rastro';
Wr talá 'planta del pie'; Tr rará 'planta del pie, pie, pata, huella'; CN tlaloaa 'run, flee'. Do we also consider
Cp táyi 'thigh'; Wc téuri 'thigh'; and Cr tihči 'thigh'? The following verbs may or may not be of help in
determining a possible second or final consonant: NP mayu'i 'to warm hands up'; NP taddu'i 'warm foot up';
NP tu'i ddu'i 'try to warm up'. [NUA: Tak, Num, Hp; SUA: Tep, Trn, Opn, Azt]

938a. *naNpa / *naCp > *nappa 'foot': M67-188 *napa 'foot'; KH.NUA; I.Num107 *nampe 'foot, lower leg'; M88-na19 'foot'; KH/M06-na19: TSh nampe; Sh nampai; Cm naape; Kw nabi-vi; Ch nampá; SP nampa 'foot'; WMU nappá-n 'my foot'; CU napá 'foot'; CU napá-n 'my foot'. Add Hp naap 'on foot'.

938b. *napo 'foot': KH.NUA; KH/M06-na19: Sr navüüţ, poss'ed: -näävü' 'foot, feet, ankle, footprint'; Ktn navokaha-c 'shoe, sandal'; Gb -név 'foot, leg', pl: nénev. Ktn kaha'-c 'front flap, apron' would suggest the Ktn compound may mean 'foot-cover' or such.

938c. *nanapuni / *natapuni 'footprint': NP nanabunni 'tracks'; TSh nampuninna 'tracks'; TSh nampe 'foot, footprint'; Cm nanapunipï 'footprint'; Cm napï 'foot, footprint, trail'; Cm narapunipï 'footprint'. Might these tie to *na(N)pa 'foot' with an additional morpheme? Might the one Cm form hint at what underlies them all: *natapV > *naLapu > *nanapV > *nampV? [*-Np- > *-pp- (in eastern SNum) > -p-/-v- (Sr, Ktn, Gb)] [NUA: Num, Tak, Hp]

939. *kapsi 'thigh': Sapir; VVH41 *kasi 'leg, thigh'; B.Tep92 *kahi 'thigh'; M67-435 *kasi thigh; L.Son75 *kasi 'muslo'; CL.Azt67 *ïkši 'foot'; CL.Azt250 **kasi 'leg, thigh'; Kaufman 1981 *kapsii 'thigh'; M88-ka7; Manaster-Ramer 1993 *kapsi; KH/M06- ka7 *kapsi 'leg': Tb hapši-l 'thigh, upper leg'; Ls qáási-l; Hp qàasi/qahsi 'thigh, hind quarter'; TO kahio 'leg'; LP kai/kahi; Nv kaio 'pierna'; PYp kahir; NT káhi; ST kai; Wr kasí; Tr gasí/kasí; but My káyyim 'buttocks'? CN kees 'thigh, leg' fits better than CN ikši 'foot', though both may belong as variants. What of CN kešil-li 'groin'? After Kaufman 1981, Manaster-Ramer (1993) discusses this set, also reconstructing *kapsi given the cluster in Tb -ps- here and in apsV 'arrive', both with the same cluster -ps-, as well as signs of a cluster in Hp and elsewhere. [*-ps- > -s- in most] [NUA: Hp, Tb, Tak; SUA: Tep, Trn, Azt]

- **940.** *pïN/nuN/huN-kap- 'thigh': SP pïŋqavï-vi 'upper leg, thigh'; TSh nuŋkwappï / huŋkwappï 'leg'; CU pïká-vï 'thigh, lap'; CU pïká-vï-n 'my thigh, lap'; NP huggabbï 'thigh'; WMU pïgávï-(vi) 'thigh, upper leg'; CU püká-vü. It is possible, if not probable, that these are prefixes to the same *kapsi morpheme above. [medial cluster] [NUA: Num]
- 941. *toŋa 'knee': Sapir; VVH30 *toŋo 'knee'; M67-245; I.Num108 *taŋa 'knee'; B.Tep227 *toona 'knee, lower leg'; L.Son311 *tono 'rodilla'; M88-to7; KH/M06-to7: I like Sapir's (*toŋa) and Bascom's (*toona) reconstructions, whose vowels agree. I would guess that s.th. velar is involved in a cluster, as an explanation for the velar nasal at times. In spite of the unruly vowelings, few Uto-Aztecanists would suggest that these initial t and medial n/ŋ words are not related; and since they probably are cognate, I lean toward Sapir's suggestion that both *tana/taŋa and *tono/toŋo assimilated their vowels, albeit in opposite directions, from s.th. that may have contained both vowels, like *toŋa; however, let's consider them in those respective groups.
- 941a. *tana/taŋa 'knee': Mn tanabódo / tanobódo / tonobódo; TSh taŋappïh; Sh tanka-ppïh; Sh tanka-mmattooh 'kneel, crawl on knees, v'; Cm tana; Kw tana-vï; Ch taŋá; SP taŋa; CU táa-vi. 941b. *tono/toŋo 'knee': Tb toŋoo-l; TO toon; PYp toni; NT toóna; ST toon; Eu tonót; Tbr tonó-r; Yq tóno; My tónno; Wr tonó 'pie, pata'; Wr tonocíribo 'pierna'; Tr ronó 'pie, pierna, pata trasera'; Cr tunú 'knee'.

Semantically, we have *tono 'foot' in Tr, Wr, but 'knee' elsewhere: Tr fono 'foot'; Wr tono 'foot'. Though some have put Tr and Wr with *tala, it seems best to separate these from *tala for three reasons: (1) a difference of o vs. a; (2) a difference of l vs. n and the n's appear in SUA languages, which are supposed to have l's corresponding to NUA n's; (3) Tr has both *tara and *tono; thus, these Tr and Wr forms (*tono) belong with *tono 'knee', though they do not mean 'knee' in Tr and Wr.

The Mn forms (tanabódo/tanobódo) somewhat display the UA voweling variants: *taŋapot > *toŋo(po) > *tono. An unaccented final vowel may become the UA schwa variants—i, ï—as in PYp toni. Karttunen suggests CN tlankwaa(i)-tl 'knee' appears to be a compound of tlani 'below' and kwaa(i)-tl 'head' which may be the case, but if not that compound, then *taNkwa has much in common with *taŋo/*toŋo. [SUA o-o vs. Num a-a or a-a-o] [NUA: Num, Tb; SUA: Tep, Trn, Cah, Opn, CrC]

- **942.** *tamo 'knee': KH.NUA; M88-ta53; KH/M06-ta53: Hp tamö('at) 'knee', tamöc- (combining form); Sr tamööç 'knee', -tamöö' (poss'd form); Ca támi-l 'knee'; Cp támi 'knee'. Because Ca and Cp i < *o and Hp and Sr \ddot{o} < *o, all four of these agree in the first four segments as *tamo. Add Ktn tamoc 'knee'; and is -c in the Hp combining form a fossilized absolutive suffix, as it would be in Sr and Ktn? What are we to think of Sh -mattooh 'kneel, crawl on knees, v'? [NUA: Hp, Tak]
- **943.** *coko 'knee, kneel': L.Son37 *coko 'knee'; M88-co12; KH/M06-co12: Tr cokóba-ra; Tbr soko 'kneel'; Tbr mo-sokó-l 'rótula'; Tr čokó 'kneel'; Wr(alto) cohkópo 'knee'; Wr(bajo) copokori (< *cokopori?) 'knee'. While possible, let's not yet include Ktn caka-c 'leg, foot'. [SUA: Trn, Tbr]
- **944.** *huNkaC 'leg': Sapir; M67-257a *huka 'leg'; M88-hu6 'leg'; KH/M06-hu6: Mn húqa 'leg'; NP huga 'whole leg'; Hp hokya 'leg, stalk'; Hp hòokya 'stilt, artificial leg, -legged'; Tb 'ugapiï-l 'leg'; Tb(H) uukappiï-l 'leg'; Cr iïka 'leg'; Pl ihka 'be standing'. TSh hunkappi / nunkwappi 'leg' is listed both here and at *piN/nuN/huN-kap- 'thigh' above. Add Wc 'iïkáa 'leg'; Eu húk-voka 'calf, i.e., leg-belly'; and Nv uksa 'pantorilla'. Might -g- in Tb, not -k- or -h-, be due to an *-Nk- cluster? Note how well Hp hokya and Nv uksa agree with *hukca, since *-c- > -y- in NUA, > -s- in Tep, and Hp o < *u. Do they have a morpheme the others don't? [*u > i CrC] [NUA: Num, Hp, Tb; SUA: Opn, CrC, Azt]
- **945.** *macci / *maCti 'thigh, upper leg': M67-436 *mac 'thigh'; M88-ma17 'thigh'; KH/M06-ma17: My máccam 'muslo'; CN mec-tli 'thigh, leg'; Pl mec- 'leg (in compounds)'; HN mec-tli 'thigh'. We can add Yq máča-m 'leg, thigh'; and if -c- is in a cluster, what of Ca méči 'kneel down, vi'? Or if *-c- >-y-, perhaps NP miyatība 'knee'? Or what about NP micidopïnni 'kneel' or Ls -qáx-may 'knee'? For now we'll count only Azt and Cah. [SUA: Azt, Cah]

- **946a.** *om 'lower leg': M88-'o24 'leg'; KH/M06-'o24: Sh oon/oom-pin 'lower leg'; Cm oomo 'leg, usually whole leg'; Ca -'i 'leg'; Ls 'e-t 'foot, leg'. Some nasals in Tak would be nice, but Ls's absolutive -t does suggest a consonant. Jane Hill (p.c.) astutely observes that this stem appears to be at 'bone' for WNum and SNum, but here means 'leg' for CNum.
- **946b.** *uma 'thigh, upper leg': TO um 'thigh', Nv 'uma 'thigh'. Wr umí 'buttocks, small of the back' and Tr umí 'lower back, buttocks' are at *komi 'back', assumed to have lost the initial C, which they often do, but we shan't discard the possibility that recycled loans could be in play one direction or another. [SUA: Tep; NUA: Num, Tak]
- **947.** *toko 'thigh': TSh tohopi/tohope; Sh toko-pin, tohopai; Cm tohoobe; Kw toho-vï; CU töö'-vï; WMU töő-v 'upper leg, thigh'; Ls tííha 'hip' (Ls e < *o, but Ca/Cp i < *o, if loaned therefrom). [k in Sh, *k > h?] [NUA: Num]
- **948.** **wiCtaC 'calf of leg, lower leg': NP kwiddza (< *kwicca/*kwiNca) 'calf'; TSh wica-ppï 'calf, lower leg'; Cm ta'wiica 'calf'; Kw wižavu-vï 'calf'; Ch(L) wiča 'calf of leg'; SP wica 'calf'; CU wicá-vi 'calf'; WMU hwičá-vi / kučávi / wičá-vi 'calf of leg'. Note an extra syllable in Kw wižavu-vï with *-pu suffix, frequent in Ls. Note w > kw in NP and WMU. [w > kw; *-pu suffix in Kw, like Ls's] [NUA: Num]
- **949.** *yï'u < *kVyu'u 'leg': Kw yu'u-vï 'leg'; Ch yu'u 'leg'; SP yï'u / yu'u 'leg'; WMU yu'úú 'leg'; CU yu'úa-vi 'leg'. Tb kuyuu 'lower leg' may display an original initial syllable *ku lost in SNum. [NUA: SNum, Tb]
- 950. *tosïkii 'hoof': Mn tosïkii 'hoof '; NP tosïggii 'hoof'. [NUA: WNum]
- 951. *Lïpïki 'kneel, v': Ca lépeqi 'to kneel down'; Cp lépeke 'kneel'. [NUA: Tak]
- **952a.** *sipika 'lower leg': Ls şivííqa-t 'lower leg'; Ca sivíqa-t 'lower leg'; Cp sivisívi 'calf of leg'. **952b.** *sapa 'lower leg, calf': Tbr sa-sapá-r 'lower leg'; Yq wok čava'i 'calf of leg'; and maybe Hp saha 'calf of the leg'. In Yq, could clustering with a stop have changed s > c? Could Hp -h- < *-pk- cluster? [cluster cause s > c] [NUA: Tak; but ?SUA: Cah, Tbr?]
- 953. *sa'i 'thigh': Mn sá'i 'thigh'; NP sai 'inside of thigh'. [NUA: WNum]
- 954. *nayka 'thigh': Sr *naic|a' 'hip, upper leg, thigh'; Sr *naikpia' 'pants'; Ktn *nayka-c 'thigh'. [NUA: Tak]
- 955. *tima 'calf of leg': ST təmaič 'calf of leg'; Wc temá 'muscles of the calf of the leg'. Loan? [SUA: Tep, CrC]
- **956.** *kapoc 'calf of leg': CN kooc-tli 'calf of leg' and Tr kabóca-ra 'calf of leg' fit well since from *kapoc, loss of medial *p in Azt (*kaoc) is typical, after which dipthongs hardly endure in Azt (kooc). Identical and highly specific semantics and explainable phonology, suggest that they are cognate. [p > h/ø in Azt, then V assim] [SUA: Trn, Azt]
- 957. *taC-situ 'hoof, i.e., foot-nail': TSh tasitun; Sh ta-sittun; Cm tasiito. [NUA: CNum]
- NB, what of NT batúúli 'calf of leg'; Wc vaatú 'femur, leg bone'; Cr wá'aruri 'calf of leg'? Perhaps loan from Tep. For Tep batu, we should see CrC kwatï, or for CrC watu, we should see Tep gato. NB, for *woki 'foot, track', see track.

FOREHEAD; FRENTE

- **958.** *kopa is 'forehead' (in Tep, Cah), 'face' (in Num); plausible is an original meaning of 'forehead, front of head' with semantic shift to 'face'.
- **958a.** *kopa 'face': I.Num62 *kope 'face'; M88-ko16 'face'; KH/M06-'o16 'face': Mn qóbe 'face'; NP ggoba 'face'; TSh kope 'face'; Sh kopai 'face'; Cm koope 'face'; Kw kovi 'face'; Ch(L) kova 'face'; SP kova-vi 'face'; CU ková-vi 'face'.
- **958b**. Many postpositions derive from 'forehead/face' terms: *kopi(-na) 'before': Mn -qobewéé 'in front of, ahead of'; Mn -qobéna 'in front of, before'; Mn qobe 'face'; NP kobina 'in front of, postp.'; NP wikobina 'in front, adv'. **958c. *kopa 'forehead**': B.Tep113 *kova 'forehead'; M88-ka31; KH/M06-ka31 *kawaC (AMR): TO koa 'forehead, brow, cliff, bank, dropoff'; LP kov 'forehead'; PYp kova 'forehead'; NT kóva; ST kov; Tbr ková-r 'frente'.

958d. *kowa (< *kopa) 'forehead': M67-190 *kowa ; L.Son96 *kowa 'frente'; M88-ka31 'forehead'; KH/M06-ka31; Wr koá 'frente'; Tr kowa-ra 'frente'; Cr kuaaci 'frente'. The Trn reflexes of a medial bilabial are similar to *kap(p)a 'egg'. M88 and CL.Azt 62*kwaay < 308 **kowa all tie Aztecan *kwaay 'head' to Trn *kowa 'forehead', which works phonologically, as the Cr form attests, as CrC and Azt oft lose medial *-p- (*kopa > *ko(w)a > kwa) though other *kawa terms are below at *kawa. For Tr/Wr -w- < *-p-, see tobacco.

958e. *koa / ***kua** 'edge, cliff': TO koa 'forehead, brow, cliff, bank, drop off'; Nv skuabiga 'cliff'; Eu kóa 'orilla'; Eu vákoa 'ribera' (vs. vákora 'lavar, bautizar'; Tr (ŕ)e-kowá-ta 'edge of a descent'; Tr koa/kowa-ra 'forehead'; Wr pakó 'rio' (pa'wi 'water' + edge; vs. Wr pahko-ná/má 'lavar, bautizar'); Wc kïa in Wc kïacá 'slope'; Wc teekïa 'edge of cliff' (Wc ï < *u); and ST kookvan 'at edge of a drop off' with redpl. Wc and Nv show *u and the others may have raised *u > o before a. [NUA: Num; SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]

959a. *kawa / *kawi 'forehead': M88-ka31 'forehead'; KH/M06-ka31: Hp qala; Ls qawi-š; Cp qew. [NUA: Hp, Tak]

959b. *ka'i 'forehead': Sh ka'i; Cm ka'i. [NUA: CNum]

960. *muC-takka 'forehead': Kw mu-taka-vi 'forehead'; SP muttaqqa 'forehead'; WMU mahttáka 'forehead'; CU matak'a-vi 'forehead'. [NUA: SNum]

961. *patï'a 'forehead': Mn padï'áá 'forehead'; TSh patï'a 'forehead'. [NUA: Num]

FORGET; OLVIDAR(SE DE)

962. *suma 'forget': M67-134 *sum/*cum 'disappear'; M88-su4 'disappear'; KH/M06-su4: Mn sumi'a- 'forget'; Kw nasumaa- 'forget'; CU sumúay 'forget'. Consider also Sr umi'|k 'forget'; Ktn amihïk / ami'hïk 'forget, vt'; Cm nasuwacir" 'forget'; Cm nasuwaci 'lose s.th'; Ch tï/na-sumïa 'forget, leave behind'; NP sïmu'wa 'forget'; TSh nasunwaci 'forget'; Sh na-suwaci 'forget'; and perhaps Hp sùūtoki 'forget'; Hp(S) sïhtoki 'forget'. [m/w] [NUA: Num, Tak, Hp]

963. *kopa 'forget': My kop-te/tia 'forget'; Yq kópte 'forget'. What of Wr natakéba-ni 'forget, vt' and Tr we'kaba- 'forget, vt'? Yet Tr we'ka- is synonymous and -ba- may be another morpheme. [SUA: Cah]

NB, for *cu'ma 'be gone, disappear from sight': Cm cu'ma 'use up, finish, vt'; WSh cumah 'run out of, be out of'; and perhaps Sr huumu'k 'be gone from sight, not to understand' (c/s problem?), see 'finish'.

FORK(ED), CORNER, SEPARATE, DIVIDE; HORQUETA, HORCÓN, RAMA, ESQUINA, RINCÓN, SEPARAR(SE), DIVIDIR(SE)

964. *cahaL 'fork(ed)': TO ša'adk/ša'alk '(be) forked, cleft, divided'; PYp sa'ara 'crevice, partly open; PYp sa'arek 'fork, branching'; NT sááraka 'be forked'; Cr ïcari 'horcón'; perhaps -šal- morpheme borrowed from Tep in CN mašal-li 'earwig, s.th. forked'; CN mašal-tik 's.th.divided like a road or crotch of a tree'. I reconstruct *-h- because *h > ' in Tep. [*h > ' in Tep; > ø in Cr?; liq; c/s] [SUA: Tep, CrC]

965. *taka 'fork': Hp nataqa 'branch of a plant, Y-shaped/forked stick'; AYq takalai 'forked'. [NUA: Hp; SUA: Cah]

966. *siNk(y)a 'separate(d)': The following two may be related in a sense of two things separating from each other: CU sigyáa- 'fork, crack, gap', and Hp siinya- 'peel, strip off'. The 2nd consonant is difficult in that velar nasals are yet of unclear origin in UA. [NUA: Hp, Num]

967. *tona 'fork': Kw tono-nï(m)bï 'fork' (tono 'strike, pierce'); Wr o'toná 'forked tree, forked posts used for making a house'. [NUA: Num; SUA: Trn]

NB, for B.Tep213 *taapanai-i 'to split', M88-ta17, see break.

NB, for *poso 'corner in a canyon, cave', see cave.

NB, Ch(L) sohorah 'post with U-shaped fork, notched post' and SP soor' oaa 'armpit' may hold potential.

Fox: see coyote

Four: see under numbers toward the end

Freeze: see cold

FRIEND; AMIGO

968. *hanci 'friend': I.Num29 *(ha(c)inci(h) 'friend'; M88-ha6 'friend'; KH/M06-ha6: NP haicci 'sweetheart'; TSh hainci 'friend'; Sh hainci 'friend'; Cm haic 'friend (of man only)'; Gb -'éhya' 'compañero' (cognate? Miller queries). [NC > CC; V anticipation] [NUA: Num]

969. *nima 'friend, relative': TSh nimaa 'friend, distant relative'; Kw niwaaha 'friend'. [TSh/Kw: m/w] [NUA: Num]

970. *takupi 'friend': SP tïgïvï- 'friend'; WMU tagúvI-n 'my friend'; CU tïgïvï-n 'my friend'. [NUA: SNum]

NB, for *(y)ayuni 'friend' (ST jaduuñ 'amigo'; NT adúúñi 'amigo'), see 'peaceable'.

NB, for *way 'friend, male relative' see 'relative'.

NB, for *pina 'friend, accompany, go/be with' see 'with'.

FROG, TOAD, TADPOLE, POLLIWOG; RANA, SAPO, RENACUAJO

971. *wakatta / *wakaN-ta 'frog': M67-192 *waka 'frog'; I.Num265 *waako(o) 'frog'; BH.Cup *waxa 'frog'; HH.Cup *waxaa 'frog'; Fowler83; M88-wa12 'frog'; KH.NUA; KH/M06-wa12: Mn wazaġá'; Mn(M88) wacqa'(wa) 'frog'; NP(McD) wakasa'a; Sh waako 'frog'; Kw wagata/wogata 'frog'; SP waaġoo-(ci); Tb waagaaiš-t 'little frog'; Cp wáxači-ly 'frog'; Ca wáxačily, pl wáxašly-em 'frog'; Ls waxáw'ki-la 'type of frog'; Ls waxáá-wu-t 'type of frog'; Sr waqät / waka't; Ktn wakata-t. Fowler (1983) cites SP wahata/wagata; Tr 'awaka. Add TSh pawoko/pookoo 'bullfrog'; TSh wakatta 'toad'; Ch wagáta-ci 'frog'; Yq wahté'ele 'toad'; NP wakatta 'toad'; and Tb woohnaa-l 'bullfrog'. Is NP pamogo 'frog' under the influence of TSh pawoko? Most show the 3rd C clustered. Yq, Ch, Cp, Ca, and Tb may suggest (an) extra syllable(s): *wakatta(-L(i)).

*wakattaLi > waktele > wahte'ele (Yq)

*wakattaLi > wakattil > wakacil (Tak)/waka(i)š- (Tb, Ca's pl.)

And Mn appears to have metathesized the 2nd and 3rd C's.

[*-t->-č- in Ca, Cp; Mn metathesis; wa > wo in Kw] [NUA: Num, Tak, Tb; SUA: Cah, Trn]

- 972. *kwa'Lo / *kwa'ro (> kwara / kwaya / kwa'na) 'frog': M67-191 *kwa; L.Son119 *kwaya 'sapo'; Fowler83; M88-kwa6 'frog'; KH/M06-si11: SP paqqwan'a 'frog, toad'; CU páqxa-kwá'na 'frog'; CU páqxá-ci-ci 'horned toad'; CU paqxwani 'frog' (in English section); Gb kwá'ro' 'sapo'; Hp paakwa 'toad'; Eu kohár 'sapo'; CN kweyatl 'frog'. Fowler also lists Ls pakwari-t 'tadpole'; Gb qwarava 'frog'. The words for frog are a difficult collection; in order to facilitate a solution, consider additional possibilities: My boórók, pl: booró'okim 'sapo' (*kwaLo'o > bwoLo'o); Tr barí; TO bábað 'frog'; PYp babadu 'frog'; NT babáádai 'frog, toad'; NT kuaáli 'frog'; Wc kwaašaa 'species of frog' (voiceless C clustered with -r- > -s- as in vulture?). In Gb, My, and PYp are signs of 2nd vowel o. In Gb, My, Eu, Tr are signs of a liquid in the 2nd consonant or cluster, yet we see *kwaya in Tep and CN. Besides a cluster -'r- in Gb, the -'n- in Num agrees. All together these forms may show both *l/r > n in Num and *r > y in Tep and Azt. [L > y in Azt, Tep] [NUA: Num, Tak, Hp, Tb; SUA: Tep, Trn, Opn, Cah, CrC, Azt]
- **973.** *sikwo 'tadpole': L.Son247 *siwori 'renacuajo'; M88-si11; KH/M06-si11: Eu zivór; Tr sibóri; Yq síbo'olim; My síbo'ori 'tadpole'. Add Tb šikol 'lizard'. Cr šïkwá 'frog' and ST subaa'n 'frog' agree in that Cr ï < *u and ST b < *kw, but the ST s is unexpected. Possibly CN te-čičikoo-tl 'type of lizard with blue neck markings' if a c/s inconsistency. Of course, it is also the case that 'if we had some eggs, we could have some ham and eggs, if we had some ham'. [SUA: Tep, Trn, Cah, Opn, CrC; NUA: Tb]
- **974.** *taci/*ta'aci 'frog': Yq bátači 'frog'; My báta'ači 'frog'; Nv vatasi; Cr taačuí 'frog'. Cah and Nv quite agree and may contain initial *pa 'water', which would have Cr agreeing, as well, except for an extra vowel toward the end, from which the others may be reductions. [SUA: Cah, Tep, CrC]
- **975.** *timo 'frog': L.Son291 *timo 'rana': Op temo; Eu temó-t; Wr alto temó; Wr bajo te'emó; Tr ŕemó. We must add Wc teemúú 'frog'. [SUA: Trn, Opn, CrC]

FROM; DE, DESDE

976. *piyu 'from': Hp (àa)piy, (àa)piy'o/(àa)piyoo' (puasal) 'from, away from, onward from'; Sr -piu' as in Sr iipiu' 'from here'; Sr aapiu' 'from there'; Sr haiipiu' 'from somewhere'. We might surmise that the final vowel of the Hp pausal form is original and that the non-pausal form is truncated therefrom, for if added, why o instead of another vowel? Interestingly, the Hp and Sr forms agree for five segments with *piyu' even to final glottal stop. [NUA: Hp, Tak]

977. *-yïL (> Tep *-dïr) 'from': TO -jeD 'from'; NT -dïrï 'from' (Bascom 1982, 320); NT dï 'of (possession)'; ST -dïr 'from'. [SUA: Tep]

978. *mana 'from, on': CU -mána-kwáy 'come from' (defective verb that must have object as prefix, often used as postposition)'; CU -tïh-mána-kway 'from'; Ch -manankw(a) 'because of, from'; Mn hautïmanáqwe 'from which direction'; Mn hautï 'where (direction)'; thus, Mn -manaqwe 'from'; TSh manakwa 'away from'; TSh mannai 'from (being in, on, at), away from'; TSh man 'on, at, against, in (surface of, never inside of)'; Sh(M) mananankwa 'far'; Sh(C) mana"-kkwa 'far'; Sh(C) mana"-kkatïn 'far'; Cm manakwï. [NUA: Num]

NB, for *-nakwV 'from, side' see side.

FRUIT; FRUTA; see also 'berry'

979a. *taka(C) 'fruit': L.Son269 *taka 'fruta'; M88-ta10 'fruit (pit)'; KH/M06-ta10: Eu takát 'fruta'; Op takkai 'echar fruta'; My taaka; Yq taaka; Tbr taka-rá-t; Tr ŕaká 'fructificar, dar fruto or semilla'; Tr ŕaká-ra 'semilla, fruto (esp with seed or grain)'; Wr taká 'hueso de fruta, semillas'; HN tlahka-tl 'fruit'; Pl taakil fruit. Lionnet associates these with Tep *taka 'root', which may well be, in that the pit begins the root and the above mean 'pit' as often as 'fruit'. Add Cr táka'i 'fruit'; Wc tákáari 'round fruit'; Mn tadaġai 'be fruitful'; and Kw tikipiya 'fruit'; in spite of Kw's raised/relaxed schwa-like voweling, it is likely cognate. On the other hand, Hp toko 'fruit, edible part of food' belongs with Mn tuku 'flesh, fruit, berries, nuts' and many others under *tukuwa 'meat'. Ktn tiki-t 'tree sp. smooth like an alder but as big and with a leaf like a plum tree' is dubious unless fruit-bearing. [*a > i; *r > i] 979b. *taka 'root': B.Tep216 *taka 'root'; M88-ta43; KH/M06-ta43: TO tatk(t) 'become rooted, shoot/grow roots'; NT táka 'root', NT takáádī 'its root'; ST tak. This is likely related to TrC *taka 'seed', since seeds do become roots or take root: Wr taka 'fruit pit, seeds of trees and bushes'; Tr ŕaká 'seed, fruit (particularly those having pits)'. [NUA: Num; SUA: Tep, Trn, Cah, Opn, Tbr, CrC]

980. *tu'V 'bear fruit, grow': BH.Cup *tú- 'bear fruit'; M88-tu20 'bear fruit'; KH/M06-tu20: Cp tú'a 'bear fruit'; Cp tú'i-š 'fruitful'; Ca tú 'bear fruit'; Ls túu' 'grow (of plants), stand (of pl. inanimate obj's)'. Let's add Eu tu'u 'darse los frutos, convertirse en, hacerse'. [NUA: Tak; SUA: Opn]

NB, for *'ikwasi 'prickly pear, fruit' see cactus, wherein are found Wr iwasí, Wc 'ikwáši, B.Tep307 *'iibahi 'prickly pear, fruit', etc., and these likely tie to *kwasï/kwasi 'ripe(n)'.
NB, for *noni 'yucca fruit', see yucca.

FULL, SATED, FILL; LLENO, SATISFECHO, LLENAR

981. *muya 'fill, be full, overflow': Ca -muye- 'flow out, fill up (of water, fog, smoke)'; Ls muuya 'be full, vi'; Ls muuyi 'fill, vt'; Cp muya 'billow, rise (of dust, smoke, other fine particles)'. [NUA: Tak]

982. *cuya 'fill': B.Tep208 *suudai 'fill'; M88-cu17; KH/M06-cu17; TO šuuđ 'full of liquid'; NT suúdai 'fill'; NT susúúdadai 'fill it'; NT susúúdadai 'fill it'; NT suudágï 'be full'; NT suudá(gi) 'water'; ST suudai 'fill'; ST suuduya 'full'. Add PYp suudia 'full'; PYp suudagda 'liquid'; PYp suudagi 'water'. The Tep word for 'water' seems derived from 'full/fill': TO šuuđ 'full of liquid'; TO šuuđagi / šuušugi 'water, liquid, pond'; TO šuuđags 'be filled'; TO šuuđađ / šuušuđ 'fill up, vt'. But Eu kait-súre 'vacío, sin grano' and Eu súre 'granado [full of grain/seed]' here or *suLa 'heart'? [SUA: Tep, Opn]

Miller (M88-pu9 'full'; M67-193 *pu 'full') combines the *puy and *pun(i) stems, but let's separate them. The finer sorting is *pusa (found at swell) vs. *puca < *putca(?) (found at pregnant), but the distinction seems to exist because some languages (CN, Tr, Wr) have both:

983. *puya 'full': KH.NUA: Tb puuyut~'uubuui 'be full'; Cp púyi-š 'full after eating, also of moon'; Ca puy 'become full with food'; Ls púya 'full from eating'; Gb púy llenarse'; Sr puutk 'bec full (of contents), vi'; Sr

puutkin 'fill (container) with, vt'; Sr puutu'(q) 'fill (of contents), rise (of water)'. We ought also to include Eu bóde 'full'; Eu bodávi 'full': Eu bod and Tak puy agree fairly well and point to *puy, since *poy should show high front vowels in Tak, and Eu d < *y, though Eu changed *u > o. On the other hand, KH/M06-pu9 includes Tr(H) bučíami 'lleno' and Tr(H) bučíwa 'llenar, vt' which fit a NUA -y- and SUA -c- pattern. [NUA: Tak, Tb; SUA: Opn]

984. *pono < *puna 'full/fill': NP mïha patïpono'a 'full moon'; Kw pono'i 'be full'; CU pönö'i 'be full of'; the pun- portion of these Cahitan terms may relate: My tapuni 'is full'; My tapuna 'is filling, vi'; My tapunia 'is filling, vt'; Yq tápuna 'fill, vt' [NUA: Num; SUA: Cah]

985. *(yu)taki 'fill, store': Ca téxin 'to store (acorns, grains), to fill sack (with food)'; Cp yútaxi-š 'full'. [NUA: Tak]

986. *kopo 'full from eating': TO koowog/đ 'be full from eating'; PYp koovog 'full (of food)'. [SUA: Tep]

987. *wïCtï / *waCta 'full from eating': Mn wïzï'mi 'be sated, be full, be satisfied (from eating)'; NP wïzïmi'hu'u 'Are you full?'; TSh wïcïwitaippï 'full, satiated'; Cr watáhusai 'se llenó (persona)' is likely related to TSh wïcïwitaippï or to *wïcï, since Num -c- is not from PUA *-c-, but usually *-Ct-. [NUA: Num; SUA: CrC]

988. *tippai / *timpai 'full': TSh tippekiataippi 'full'; Sh tippai 'full'; Cm titibeti 'full'; Kw tibee 'to be full'. Kw -b- < *-mp- usually, as *-pp- > Kw -p-. [NUA: Num]

NB, for *tima/i 'fill, close', see 'close'.

NB, for *pucca / puttV 'full, pregnant', see pregnant.

NB, for *posa 'swell, be full from eating' see swell.

Fur: see hair, skin

GARBAGE, REFUSE (HEAP), TRASH (PILE), DISCARD, THROW AWAY; see also lump, pile BASURA, INMUNDICIA, DESECHO, DESECHAR, DESPERDIR

989. *Lima 'throw out onto a refuse heap (which loosely piles higher)': Hp ríma 'throw out'; Ls líma/i 'put on top of, pile loosely'. For AYq rumui 'uneven'; AYq rurumui 'rough ground' (i.e., has bumps, is lumpy), see lump. [Initial *L?] [NUA: Hp, Tak]

990. *sana(k) 'trash': Eu sanákac 'basura'; Yq sánko'a 'garbage'; AYq sankoa 'trash'; Ls şáŋa/i 'pile up, bunch up, v'; CU sïnï-pï 'trash, garbage, refuse'. CU -p- instead of -v- suggests a final consonant; and could Ls ŋ be the cluster reduction suggested by Eu and Yq? [cluster reduction] [NUA: Tak, Num; SUA: Opn, Cah]

991. *taNCa 'trash': TO taanhadagi 'trash'; ST tanaara 'basura'; Cp táŋe 'pile up'. Both TO and Cp suggest a cluster reduction involving a nasal. [N, cluster] [NUA: Tak; SUA: Tep]

GATHER, HARVEST, AUTUMN; JUNTAR, COSECHAR, SEGAR, OTOÑO

992. *cuppa 'gather, close eyes': M67-194 *cupa 'gather'; M88-cu6 'gather'; KH/M06-cu6: Mn coba / copa 'gather, pick up'; Ls čúpa 'be gathered, bundled together'; Ls čupú-'a/i 'close eyes'; Ls čúúpa 'be closed, of eyes'; Cp čúpe 'shut eyes'; Hp covala 'gather, vt'; coval-ti 'assemble, vi'; My cuppa 'finish, harvest, vt'; My hícupa 'harest, vi'; Yq hicupawa 'harvest, v'; and Miller includes NP coppa 'close eyes' in light of Ls, for the two meanings (gather/close eyes) do frequently tie together. Add NP cobbawa 'gather'; NP tïcopa 'pick up'. Miller also lists Cp čívi 'gather, vt' citing it as having the wrong vowel in corresponding to *o instead of *u; however, many of the forms show o, and *u-a > o-a is common in UA. Some languages (Hp, Cp if cognate) lose gemination. [*u-a > o-a] [NUA: Num, Tak, Hp; SUA: Cah]

993. *ci'a 'gather': M88-ci20; KH/M06-ci20: Cp čí'a 'gather'; Ca čí' 'pick, gather from ground; Ls čí'i 'gather things from ground'; Sr ci'a-i 'gather from ground, pick up'. Miller lists Cp čívi 'gather, vt' but it belongs with *cupa; however, these *ci'a forms form a nicely cohesive unit and do suggest *i, though Cp has three separate words: Cp či'a 'gather, vt'; Cp čívi 'gather, vt'; Cp čúpe 'shut eyes, vt' [NUA: Tak]

- **994.** *'ay... 'pick, take pl objs': M88-'a39; KH.NUA; KH/M06-'a39 'take multiple objects': Ca 'áy 'pick from tree'; Ls 'ááy 'have, get pl obj's'; Sr 'ayei 'get, take pl obj's'. [NUA: Tak]
- **995.** *yïpanaC 'autumn': I.Num298 *yïpa 'autumn'; M88-yï11 'autumn'; Stubbs1995-61; KH/M06- yï11: Mn yïba, yïbano 'be autumn'; NP yïbano; TSh yïpani; Sh yïpani; Kw yïvana; SP yïvanna" / yïvwanna"; CU yuvwa-na-tti / yïgwa-na. Note that when -w- develops, then -kw- comes next (CU) in the SNum line of dialects. I have similarly heard Yq native speakers say a slight -gw- for -w-. [*-p-> -kw-] [NUA: Num]
- **996.** *tupu(k) 'pick, gather': CU tuvú-'na-y 'pull out, pluck out'; ST tuvu'ya' 'cosechar, gather things in container'; AYq tovokta 'pick up (sg obj) with hand, vt, harvest, n'. [NUA: Num; SUA: Tep, Cah]
- **997.** *tuka / *tiwika 'gather, pick': NP tiga 'gather seeds'; Kw tigi 'pick'; Mn tiga (also tiwiqa) 'gather (seeds, etc) by beating plant with stick'. With an assimilated vowel and *ku- 'firewood' prefixed, Tb kutug ~ 'ukutuk 'gather firewood' may belong. If AYq toha 'take, carry, and AYq nau toha 'gather, collect, assemble' are also related, we may be dealing with *tuka, for *u > i happens often in Num. [NUA: Num, Tb; SUA: Cah]
- **998.** *tï'wi / *tu'wi 'gather seeds, harvest': Ls tó'wi 'gather (as seeds), harvest' and Mn tïwïqa (also tïga) 'gather (seeds, etc) by beating plant with stick' match well (Ls o < *ï); Eu tui 'cosecha'; Sr cawei 'gather, pick, harvest' is less likely and is listed at *ca'wi 'carry'? [*-'w-] [NUA: Tak, Num; SUA: Opn]
- **999.** *pi'a 'pick, gather': CU píi'a-y 'pick, gather'; CN pi'pii 'pluck, gather s.th. in quantity'. [CN initial p] [NUA: Num; SUA: Azt]
- **1000.** *kappiwa 'degrain grain from ear': TO kaipig 'harvest grain, scrape grain from ears, v' (Saxton and Saxton 1969); ST kaipga 'desgranarlo (planta)'. [SUA: Tep]
- **1001.** *kitta 'harvest, v': Mn kita 'reap'; NP kita 'harvest, v'; maybe ST kia 'harvest, cut'; ST ikia' 'cortar, cosechar (fruta)'. [*-tt- lost in ST?] [NUA: Num; SUA: Tep?]
- **1002.** *taniku 'seedbeater': Kw taniku 'seedbeater made of twined basketry'; TSh tanaihun / tanehun 'seed paddle, seed beater, racket'; Sh tanihkun 'seed beater'. [NUA: Num]
- NB, for *pani 'pick' see at pull: Hp neevena 'pick, harvest wild greens over a wide area'; PYp vainit 'pick fruit'; PYp vainim 'pull off' see pull.
- NB, for *caya'V 'pick, harvest' see at 'carry' where is M88-ca18; KH.NUA: Cp čayú'e 'harvest'; Ls čáayi 'sift, winnow; Sr čaya'kin 'select, pick' but *ca'ay in most non-Tak languages.
- NB, at 'thunder' are Cp táwşenve'e-t 'thunder, autumn' and Ls táwşuŋva 'autumn (found only in BH)' also meaning 'autumn'; the two *tawsVNva terms differ morphologically from other *tawva 'thunder'. NB, for *kïLipi 'shell/shuck corn, v', see at 'scrape'.

Gentle: see peace(ful/able)

Girl: see woman

GIVE; **DAR**; see also 'trade'

Mn	maqa; kiya 'give to'	Нр	maqa 'give to s.o.'	Eu	maká-; nemáka-
NP	makka 'give, feed'	Тb	maĥa	Tbr	maka; mika;
TSh	maka(n)	Sr	maqai	Yq	máka; míka 'regalar'
Sh	maka" 'feed'	Ca	máx 'give money'	My	makka; miika
Cm	maka 'feed, give to eat'	Ls	námxa	Wr	ki'á-ni
Kw	maga 'give, feed'	Cp	maxa; némxe	Tr	ya; ki'(y)a
Ch	magá	TO	maak; maki	Cr	naatatiste 'give me it, round obj'
SP	maġa 'give'	LP	maka		naatapihte ", bendable obj'
WMU	maġá-y 'feed, give food	' PYp	maaka naatahante		naatahante ", standing obj'
CU	maġá-y 'feed'	NT	maákai	Wc	mikwa 'give to eat'
		ST	maak; makia	CN	na-maka 'sell'
				CN maka	a 'take medicine, give s.th. to s.o.'

1003. *makaC (AMR) 'give': Sapir; VVH83 *maka 'give'; B.Tep139 *maakai 'he gives'; M67-196a *maka 'give'; I.Num91 *ma(h)ka 'feed, give'; BH.Cup *max 'give'; KH.NUA; M88-ma12; AMR 1993c *makaC; KH/M06-ma12 *makaC (AMR) 'give (food), feed': a common etymon in all branches of UA. Ktn mak 'give' and Ktn namakat 'generous person' also. I like AMR's reconstruction, as evidence of a final -C exists in CNum. A few geminate the 2nd C, perhaps for intensification rather than proto-structure. The noun classification systems in the Cr verbs, being semantically flavored like Athapaskan, are a unique curiosity in UA, where such are rare. Where did the influence come from? [*k > h in Tb] [NUA: Num, Tak, Hp, Tb; SUA: Tep, Opn, Cah, Tbr, Azt]

1004. *cïriwa 'give attention/gifts to': L.Son36 *cïriwa 'regalar (give gift)'; M88-cï6; KH/M06-cï6: Tbr hili-wá 'dar'?; Tr čiriwé 'obsequiar, regalar'; Wr ceriwéra 'dar gracias'; Wr ceriwé-na 'be sorry for s.o. or sad about s.o. or s.th.' The Tr definition 'obsequiar (pay attention to, treat, give gifts to)' helps tie these together in that when one feels bad/sorry for someone and wants to make them feel better, giving them attention/gifts is not unusual. The initial consonant of Tbr, however, is unusual. [SUA: Trn]

1005. *uttu 'give': TSh uttu 'give, present to'; Sh uttu 'give s.th. to s.o.'; Cm utu-ka-tï 'give s.th., vt' [NUA: CNum]

1006. *himi 'give (perhaps pl. obj's)': NP himmi 'give pl obj's, vt'; WSh himi 'give, pl obj's'; Cm himiitï / himi-ka-tï 'give pl. obj's'; Tr nihimi-ma 'dar, entregar'. [NUA: Num; SUA: Trn]

1007. *ki'ya / *ki'a 'give to s.o.': Mn kiya 'give to s.o.'; NP gia 'give, vt'; NP yaa u gi'a 'offer'; Tr a/ya 'dar, entregar'; Tr ki'a / ki'ya 'dar le'; Tr á-ki- 'buscarle' (Brambila says related); Wr ki'á-ni 'give'. Some forms suggest *ki'-ya is a compound. [NUA: Num; SUA: Trn]

1008. *mi... 'give food': M67-196b; M88-mi1; KH/M06-mi1: Cr raatamihsin 'he is going to feed it to him' (with the allomorphs -mi-, -mikwa-, M88); Wc mikwa 'mantener, dar de comer'; My miika 'dar, regalar'; My miiki 'regalo'. [SUA: CrC, Cah]

Gnat: see fly

GO, WALK, RUN, FAST; IR, CAMINAR, CORRER, RÁPIDO; see also leave, arrive, return Hill (KH/M06) sorted well the overlap in M88-mi6 'go' and M88-mi6 'run, go, walk'; two stems are likely involved, since NUA has both *miya and *mïLa; so here are distinguished *miya and *mïL/*mïn: 1009. *miya 'go': M67-197 *miya/*mi; I.Num101 *mi'a 'go, walk'; KH.NUA; M88-mi6 'go'; KH/M06-mi6 *miyaC (AMR): Cm mia/mi'a; TSh mia/mi'a; Gb mya; Sr mi/miaa; Ktn mi; Tb miyat~iimiy 'go'. To these can be added Mn miya 'go'; NP mia 'go'; Sh mia 'go'; Kw miya 'come, go, walk, pl.'; SP mia 'travel, journey, vi pl'; CU miyá-y 'move away from, be far from'. Add WMU -mi 'while going/moving, do s.th. while going, v'; Kw mi 'move while V-ing'; Kw miya 'go, walk'. [NUA: Num, Tb, Tak]

1010a. *mïLa/i 'run, flow, go, want': B.Tep160 *mïrai 'he runs', *mïri 'to run', *mï 'he ran'; M67-177 *mel 'flow, (run)'; BH *mən 'come'; M88-mï6 'go, run, walk (sg?)'; KH/M06- mï6: Hp mïïna 'flow, run (of liquid)'; Ls món-/muná 'travel, come, walk, go'; Cp menmáx 'will come' (neqa 'is coming'); Ca ménvax 'come' (nék-en an allormorph); TO mïD, mï, mïïl 'arrive (wind, water, runner)'; LP mïli; LP oimïrï; NT mïli; NT aimïrai 'walk around'; NT mïráádami 'runner'; ST mïl'i; Wr -ma, -mi- 'future suf sg'; Tr mé-/ma-; Cr me/me'i. To these we can add Eu merá 'correr uno'; PYp mera/meli 'run'; Nv mïrha 'correr'; Tbr -m(u)- 'desear, futuro' (Lionnet 1978, 34), but parting from Lionnet, ties to Tr/Wr -ma/-mV seem more likely; Cr mï'i 'desiderative morpheme' (Casad 1984, 162) and 'want' and 'run' are often paired semantically in UA, and NP minai 'ooze out'. With *u > ï in Num quite often, the shift or push chain effect of *ï > i in Num should also be considered. Note also Ca méle 'be fond of, care for' and Cp mélen 'very, much, hard, fast'? The 2nd V in this etymon often varies: e.g., in Tr alone are Tr mé-, ma-, but -muri in rarámuri.

1010b. *miLV 'trample, stampede': Sapir ties CN miimiloa 'trample about' and SP miŋkwa 'come out forcibly, stampede' (< *minni-kwa < *mil...), which seems as plausible. [l/r/n; L > ' in CrC] [NUA: Hp, Tak, Num; SUA: Tep, Trn, Opn, Tbr, CrC, Azt]

1011. *sima 'go': VVH69 *simi/*sima to go; B.Tep66 *himïi 'to go', *hii 'he went'; M67-198 *simi / *sime; L.Son241 *simï/sim-i; M88-si3; KH/M06-si3: TO him 'move along, progress, walk'; LP himï; PYp hime; ST himču; Wr simi-ná 'ir, andar'; Tr si-mea, sima-ma, simí 'ir, irse'; Tbr sem- / -seme- / simi- / -sim- 'ir, irse'; My siime 'irse'; Yq sim. To these let's add Cr sin 'durative morpheme' (since final m > n in Cr: *sima > sin. [SUA: Tep, Trn, Cah, Tbr, CrC]

1012a. *nïmi 'walk around, live': Sapir; VVH171 *nïmi 'walk around, live'; M67-263a *nem-i 'live'; I.Num123 *nïmi/*nïhmi 'walk, wander, live'; M88-nï9; KH.NUA; KH/M06-nï9: Mn nïmmïdïwa-t 'come to life, be born'; NP nïmmi 'walk'; TSh nïmi 'one moves'; Sh nïmi 'live'; Cm nïmi 'move about, walk, sg'.; Ca ném 'walk around'; Ca némi 'chase, follow tradition'; Ls nónmi/nóónumi 'follow'; Gb noní 'andar'; Sr nïm/nïmï- 'walk, walk around, walk along'; Sr nïhnïm 'be walking (around)'; Sr nïmiin 'chase'; Ktn nïm 'walk, vi, walk on, vt'; Hp -nïma 'go around doing s.th., circumgressive suffix'; CN nemi 'live'; CN ne'nemi 'wander about'; HN nemi 'walk'; Pl nemi 'be, exist'; and in Jane Hill (2005) are Cp nono- 'walk around' and Cp nemin 'follow' subsequent to Hill and Nolasquez (1973) Cp nenmi 'chase' (like Ca) and Cp nénewe 'walk' with problematic -w-. But Num sometimes does have -w- < *-m-, so note Mn nïwimoo 'go about as a group' and TSh nuwi 'walk around, roam, wander, live (in traditional lifeway)', durative nïmmi. The main reason for wandering was hunting and gathering, the traditional livelihood, so it also came to mean live traditionally. The reduplicated forms often meant 'chase/follow' from nonreduplicated 'walk'. Note Gb noni, whose velar nasal is likely the result of a cluster created by reduplication (as in Cp nénewe, Cp nenmi, or Ls nónmi) then syncope: *-nw-/-nm- > -η-. Miller queries "metathesis?" for Ls món/munáa 'travel, come, walk, go' but more likely with *mïLa. The below may be another form of the same verb: an anologized -a 'transitive' from the -i 'intransitive'. See discussion at *nimi 'person' at 'man'. 1012b. *nïma / *nama / *nawa 'track': Sapir: CN nema 'paso a paso'; SP nanwa 'track, v' Sapir offers this association, which seems as probable as not. If nothing else, add Kw nawa-bï 'track, trail' (but Kw nabi-vi 'foot'); Ch nááwa 'track, n'; CU nawáa-vi 'track, n' with SP nanwa 'track, v'. $[\eta w/w; u > i; -Cm - > -\eta -]$ [NUA: Num, Hp, Tak; SUA: Azt]

1013. *nami 'race': BH.Cup *námi 'to race'; M88-na15 'race'; KH.NUA; KH/M06-na15: Cp námeyulu 'catch up to'; Ca nánami 'to race'; Ls náámi 'run, race'; Sr naami'n 'to race'; Hp nanamïnwa 'be running in a kicking stone race'. The Ls form is also at *nami 'cross', which may recommend a union of the sets na15 and na37, this and the other at 'cross'. Or could this feasibly be *na-mïLa 'run, race each other', with a *na- reciprocal prefix and with Sr and Hp showing the later -n- as well, with reductions? [NUA: Tak, Hp]

1014a. *tinna 'run': Yq ténne 'run, pl'; My ténne 'run, pl'; Cr wátien 'run!'
1014b. *tinna 'follow, chase, hunt': I.Num244 *tina 'pursue': Kw tinaha 'hunt, pl'; Kw tina 'follow';
Ch tiná 'follow'; SP tinna 'pursue'; SP ma-rinna 'pursue'; SP tinnaa 'hunt'; CU tinaay 'hunt'; Hp tiini 'game animal, a kill, prey'. These may tie to *tuna 'herd, chase' at 'hunt' (M88 and KH/M06-ti25).
1014c. *na-tina / *na-ri(na) 'run': Might Ch narina 'run, dash'; SP na-ntinna 'follow a track' with *na- prefix, tie to Wr na'nári 'follow, v' and Eu naré 'run behind something, v'? [NUA: Num, Hp; SUA: Trn, Opn, Cah, CrC]

1015. *nokka/i / *nukka/i 'run, move': Sapir; M67-295 *nok 'move'; I.Num116 *nuhki(n) 'run (off, away), move, flow'; M88-no7 'move'; KH/M06-no7; TSh nukki 'run'; Sh nukki 'run, sg.'; Cm nuhki 'run off, run away'; SP nukkiN 'run, stream, flow'; CU nukkwi 'flow, run'; Wr noga/nogi- 'move'; Tr noká / nokí 'moverse, actuar, andar haciendo'. Sapir ties CN nookiaa 'upset, spill s.th.' and SP nukki 'stream, run' together, and with the varied uses of *noki that he lists, the tie is feasible. [SUA o and NUA u] [NUA: Num; SUA: Trn, Azt]

1016a. *po'o 'run': Sapir; B.Tep279 *voopoi 'run, pl.'; M88-po1; KH/M06-po1: NP popoyuha'hu 'run, pl'; TO woppo'i / woopo'i 'run, pl'; NT vopóóyi 'run, pl'; NT vopóódami 'runners'; NT voí, voogadï (poss'd) 'road'; NT voogïtai 'hacer camino'; Eu vóome / bo'o-me 'run, pl'; Wr -po 'future pl suffix'; Tr pó/-bó 'ir varios'; My boohowa 'is walking'. Sapir ties Tep and SP pooya 'run'; SP y does agree with Tep d (< *y), which may tie these to the forms below, though the medial consonant becomes even more problematic: *', *t, or *y? Add PYp voopo 'run, pl' and Eu vovedaa 'walk'. which appear to derive from Eu vovét / bowét 'road'. This likely relates to *pow / *poC 'road', as in *po'-ta 'road-do', as all in this set might. Similarly, NT shows no g when contracted, but does when suffixed.

- **1016b.** *poto / poyo 'run': Mn potoqagi 'trot'; Kw poro'o-nii 'to walk along'; Ch voro 'go to'; and possibly Sh poyoha; Cm póoya 'trot'; Mn poyoha 'run' (Mn poyo 'road); NP ïnï poyuha 'run fast'; and Ls pókwa/i 'run, vi'. [NUA: Num; SUA: Tep, Trn, Cah, Opn]
- 1017. *ya'i 'run, fast': Sapir; BH.Cup *ya' 'run'; M67-358 *ya 'run'; M88-ya8 'run'; KH.NUA; KH/M06-ya8: Sh yama-sua, yawi-sïn 'fast'; SP yaiN 'hunt'; Cp yá'e 'run, sg'; Ca yá'ik '(good) runner'; Ca ya'i 'wind, air'; Ls yá'-/yá'i 'run, be fast, flow'; Sr ya'i 'run'; Tr yá/yó 'pronto'; Cr ñaa nu-ye'i-ve 'I can really hoof it'. Consider also Eu da'a 'ir'; the Eu form may suggest a tie of all these to Tep *da'a 'fly', though Cr has separate forms—ye'i and ra'a; yet Sapir ties Tepecano daim/a-dim 'run, follow', which is similar to reduplicated PYp da'a, dadima 'fly' with Cr ye'i. In English we say 'flew' for 'ran fast, hurry'. [NUA: Num, Tak; SUA: Trn, CrC]
- **1018.** *yapi 'hurry': Mn yabi'ísu 'hurry!'; NP yabi 'hurry, adv'; NP yapi 'fast'; NP yabisu 'quickly'; Wr yapí 'pronto'; Wr yapíri 'muy pronto'; Wr yapisí 'to hurry'; maybe TSh yawï(sï)'quickly, fast, in a hurry'. Both NP and Wr show *yapi and have been associated with *ya'i. While such a tie may be, these have an extra morpheme that the above lack, even if related: *ya('i)-pi? Note that 3 of 4 show an s-syllable also. [NUA: Num; SUA: Trn]
- **1019.** *oi-mïra / *oiya-mïra 'follow-go': B.Tep318 *'oimïrai 'to walk around'; B. Tep 316; M88-'o7; KH/M06-'o7: TO oimmed / oimïdï 'walk around'; LP 'oimïr(ï), pl: oihopo; NT aimïrai; PYp oi- 'around, round about'; PYp oida 'follow, vt'; Wr oi-ná 'andar'; Tbr on-/ona- 'andar, arrastrarse, nadar'. This is probably a compound. [SUA: Tep, Trn]
- **1020a.** *waya 'go (out/away) fast': Sr wayaq|q 'go/come out, exit fast'; Hp waaya 'move, run, fly away, escape'; Tb waai'it 'fast, quickly'. [NUA: Tak, Tb, Hp]
- **1020b.** wiya / wira(ma) 'walk': AYq werama 'walk'; Eu weré 'venir, hacerse'; Yq weye 'caminar, sg'; Yq wéama 'andar, sg'; My weiye 'va caminando'; My werama 'anda'; possibly Hp wayma 'to be walking along'; and perhaps Tr eyena 'andar, caminar' (but Brambila considers ena the steam)'. We may have two separate sets, or these may also be the result of recycled loans, and knowing the propensity of TrC *r/l > y in NUA, as well as vowels' inclinations to rise and front before l/r/y in UA, I put them together until new data directs differently. The Sr form is also at 'carry' (*wayak) which may tie the two sets together ... or simply cause trouble. [y/r]
- 1021. *pakay(N) / *pakiN 'walk (away), sg': Kw pagi 'walk, sg'; Kw pagi-nii 'walk around'; Ch pagí 'walk, pl'; SP pagiN 'walk'; WMU paġáy'kwe-y / paġáy'-we-y 'walk, sg'; CU paġá-'ni 'walk around', CU paġáy-'way 'walk'. WMU often shows nasalized vowels, which align with SP's underlying nasal. Miller and Ken Hill associate this with *paki 'enter' which is entirely possible, but is it probable? See 'enter' at 'in'. [NUA: SNum]
- **1022.** *yïNka 'enter (sg/pl?)': Sapir; M67-97 *ye 'come (sg)'; M88-yï7; KH/M06-yï7: Mn iga; NP iga; Pn ika"; Sh yïnkah 'move, v.pl.'; WSh yïnka 'travel, wander, live, vi pl'; Cm ikarï; Kw 'ïga; SP ïġa 'enter'; CU yïgáy 'enter, come in'; pl: waġáy; Hp yïŋ- in Hp yïŋ-ya 'enter, vi. p. pl.'; Hp yïŋ-ta 'be entering, vi.i.pl'; Wr yegi-ná/má 'accept an invitation to a festival'; Cr ye'i 'come (sg. subj. pres.)';
- Wc yei 'move, walk'. Sapir ties CN nite-ekawia 'hacer llegar a alguien [cause s.o. to arrive]' and with SP ïġa. Might *ya'i 'run, fast' above at 1017 belong here, or some therefrom? [medial cluster; CNum, Hp -Nk- (as at cold): W/SNum, Azt -k-: CrC glottal stop?] [NUA: Num, Hp; SUA: Trn, CrC, Azt]
- 1023a. *kway / kwa'i / kwa'ay (> *kwi?) 'go (away from speaker?)': Kw kwee 'go'; Ch wa'i, -kwa'i 'go to'; CU kwáay / kwa'ay 'go to'; WMU qwaa-y 'go, go away, vi' (perfect: kwoo'kwa).
 1023b. *kwi 'run, pass by': Yq bwíte 'run'; My bwíte 'está corriendo'; ST bya 'pass by/through'; ST bičdya 'make pass by/through'. [NUA: Num; SUA: Cah, Tep]
- **1024.** *wa'ta 'run': Hp wari(k-) 'run'; Hp war-ta 'run fast, run well'; Cr watïn 'to run' (see 1014a); Tbr wota/wuta-ná- 'to run'; Tb wa'ad~'awa'at 'run away'. 2nd C difficult, making the whole somewhat dubious. [t>r/d] [NUA: Hp, Tb; SUA: CrC, Tbr]
- **1025.** *hat(t)i 'go, run': Ls hatí'a 'go'; Hp harï(k-) 'gallop, be active'. In both this and the above, Tak *-tt- aligns with Hp -r-, but valid? [t vs. r] [NUA: Tak, Hp]

1026. *hVw / *ho 'run': Tb heu'heewït~'eheuheu' 'run'; Tr húma/i- 'correr, huir, pl'; Tr ho-mea 'ir'; Wc húu 'ir, proyectado, pl'. [SUA: Trn, CrC; NUA: Tb]

1027. *cukkwita 'fast': Mn cïkwïdápï / cukwïdápï 'person with much stamina, fast'; NP suggwitï 'going to go quickly'. Morphemes? [c/s] [NUA: WNum]

1028. *soko-miya 'walk': NP sogomia 'walking'; Cm soko-mi'a-rï 'come walking'. [NUA: Num]

1029. *saka 'go, leave': My sakka 'se van'; Yq sáka'a 'iremos, pl'; AYq saka'avo'em 'go away, pl'. [SUA: Cah]

1030. *'atahi 'hurry': Ca tá'atay 'to hurry up'; Cp tá'a 'hurry'; Ls 'éta/i 'to hurry'; Sr tahitahi'k 'hurry up'; Tb 'ala'aš 'hurry up'. Note a preceding vowel in Ls and Tb. [h/'] [NUA: Tak, Tb]

1031. *sot > Tep hot 'swift, hurry': TO hot 'be swift'; PYp hoh 'rapidly, hurry'; ST hotma'ñja' 'apurar, vt'; perhaps Wc yuumee siïtïatï 'apurandose'; Wc mešiïtïa 'apurar'; Wc mešiïva 'a prisa'. [*u-a > o-ø?] [SUA: Tep, CrC]

1032. *sip(p)i 'fast': AYq sepia 'quickly'; Ca héspe-n 'very much, hard, fast'. [NUA: Tak; SUA: Cah]

1033. *i'siwi: Wr isí-na 'andar'; CN i'siwi 'hurry'. [SUA: Trn, Azt]

1034. *nuta / *nuLa 'run, pl': TSh nutaan 'run, pl'; WSh nutaan/nuraan 'run, pl'; Cm nuraakitï 'come running'. [NUA: CNum]

1035a. *nawa / *nawi 'go, come, move (to another place)': Tr nawa-ma 'llegar, venir, nacer'; Tr nawi-ma 'llegarse, acercarsele'; Hp nàala(k-) 'change places, move, change residence' (Hp l < *w); Sh(C) nawa-in Sh nawa-nukkih 'run away' and Sh nawa-to'ih 'escape, get out safely'; Ch nawá'itï 'appear, show up'; Kw naviži 'appear, be showing'; Wr nawá- 'be born'; Perhaps Cp návya'a 'come here!' as *w > v does happen in NUA, in fact, in Kw vs. Ch above. [perhaps *w > v in Cp?]

1035b. *noi 'go, come, visit, return': Yq noite 'ir, venir'; AYq noite 'visit, vt'; My noite 'go (and return)'. Num *no '(while) going': Mn -noo- 'be in motion while X-ing, be X-ing while going'; TSh nooh 'moving continuously, do along or in motion'; WSh nooh 'move about {auxiliary verb)'. [NUA: Num, Hp; SUA: Cah]

NB, for *puLa 'go out, set out' see 'out'

Go out (of a fire): see black and fire go out God: see religious terms and spirit

GOOD; BUENO; see also beautiful, want, peaceful, sweet

1036. *caw / *caN 'good': M67-200 *cam 'good'; I.Num252 *ca(a) 'good'; M88-ca6 'good'; KH/M06-ca6: Mn cau-/cawu-/coo- 'good, genuine'; TSh cao/cawi/cawintin 'good'; Sh caa/caaN 'good'; Cm caa(ti) 'good, fine, well'; Hp caŋaw 'it is for the good that ...'; Cr tyámwa'a 'well, heartily'. Miller also includes (with question marks) Cp á'či'a 'good'; Ca áča'e 'good, fine, well, very'; Cp á'čima-l 'pretty, nice'; and NP pisa 'sweet'. However, the first two are at 1038 *attipna below, the third is listed at 'beautiful'; and the fourth at *pisa 'sweet'. A potential pair of *cawa 'true, consider true/believe' in Mn cáú-tu 'true' (above) and Cr -caawa- of rá'acaawate 'lo obedece, lo cree' is contemplateable. [medial consonant (cluster)?] [NUA: Num, Hp; SUA: CrC]

1037a. *'ayu 'good': Sapir; M67-201 *'ay 'good'; M88-'a17 'good'; KH.NUA; KH/M06-'a17: SP 'ayu/ayï; Gb 'ayó'in 'much', pl: 'ayó'im 'many'; Sr 'a'ai / 'a'ayu 'good'; Wc 'áišïa 'bien'. Those in M88-'a17 form a nice set, all agreeing with *'ayu. Hp a'ni 'very' may belong if with another affix. Note some SNum candidates below: 1037b. *ha'a-yu (> *ha'ï-yu) 'be good': Ch ha'ï-yu 'well, good'; Ch ha'ï-c(i) 'good'; Kw hï'ï- 'be good, well'; Kw hï'ï-yï ta-vi 'good day'. The Ch and Kw forms are certainly related to each other, and possibly to the *'ayu forms above, especially when we note the glottal stops in Tak: e.g., Sr 'a'ayu 'good'. Others in -'a17 (*attip-na below) at least have additional morpheme(s) involved, if they are not a different set. [NUA: Tak, Num]

1038a. *attip-na 'good': CU 'atti 'good'; Cp á'či'a 'good'; Ca áča'e 'good, fine, well, very'. Related to these are Hp -'civa 'accord with', Hp a'civa 'behave as expected, do what one can with one's personal resources and limitations'; Hp àacipna/a'cipna 'do as expected'. Note that Hp a'cipna and Cp á'či'a are identical in five segments (a'ci ... a) except for a consonant cluster in Hp that may reduce to a glottal stop in Cp. Is SP's nasal (below) a reduction of the -pn- cluster with nasal?

1038b. *attï(N): SP 'attïN 'good'; WMU á-ttü- 'good, well'; CU 'á-tï 'good'. [NUA: Tak, Hp, Num]

1039. *kïwa 'good': BTep136 *kïïga(dï) 'good'; L.Son86 *kïwa 'bueno'; M88-kï10 'bueno'; KH/M06-kï10: Od keeg 'good, nice, beautiful'; TO keegaj 'be good, etc.'; LP kïïg; NT kïïga; ST kïï'; Op kia; Eu kewá; Eu kewáe/kewá'e 'sweet'; Yq kía; My kíwwa 'sabroso'; Tbr kimwá, kiwá-r/n 'bueno'; Tbr kemoa 'bien'; Tbr kwemwa. To these, add PYp keega 'good, beautiful' and perhaps Wr kawé 'good, well, fine' with vowel metathesis? [SUA: Tep, Trn, Cah, Opn, Tbr]

1040. *tu'ay 'good': CU tiï'ay 'be good/well'; CU tiï'a-tï 'good'; WMU túú'ay '(it is) good'; Yq tú'i 'bueno, está bueno'; My tu'uri 'está bueno, bien, es bueno'. CU underwent the frequent vowel change *u > ï in Num, but White Mesa Ute has the u vowel. [NUA: Num; SUA: Cah]

NB, perhaps *topi 'good' with unmatching vowels are CN copeek 's.th. sweet'; CN copeeliaa 'sweeten s.th., vt'; CN copeeli(y)a 'become sweet'; and Ls lóóvi 'to be good', Ls pu-lóóv, pl: po-pliv 'good' and/or Nv sapua 'good, pretty' (< *capu), which has matching consonants, but its vowels are different enough to make it questionable. Tb tïwï 'good' and Tb tïwïpil 'pretty' are even less likely, but mong them may be remote possibilities to keep in mind. [Ls pu/vu w/ adj]

NB, for Ls yixélvu-l 'intelligent, alert', see know.

Goose: see duck

GOPHER, GROUNDHOG, PRAIRIE DOG, MOLE; TOPO, TUZA, PERRO DE PRADERAS

1041. *miÿiN / *miCCiN 'gopher': M67-202 *meye 'gopher'; BH.Cup *mihita; I.Num103 *miÿi 'gopher'; Fowler83; KH.NUA; M88-miß 'gopher'; Munro.Cup51 *məəhə-ta 'gopher'; KH/M06-miß: Ls móó-ta; Cp məə-t; Ca mee-t; Ca méht-am 'gophers, pl'; Mn miÿi; Kw miÿi-ci; SP miÿi-; Tb miÿint; Sr miiŋaht; Hp miïyi. Ken Hill adds Ktn miŋaht 'gopher, mole' and Ch miÿi. And NP yiŋŋaciba 'gopher' aligns with Sr and Ktn's 2nd C, and may lack 1st C, but Tb 2nd and 3rd as NP, only missing initial m. Difficult set. [med C: ŋ/y/h] [NUA: Num, Hp, Tb, Tak]

1042a. *tapusa > tïposa > tïposi 'gopher': B.Tep247 *tïvoha-i 'gopher'; L.Son296 *tïposi 'topo'; M88-tï48 'gopher'; Fowler83; KH/M06-tï48: TO jewho/čïwho; LP tïvi; PYp tïvua; NT tïvóóhi; ST tïvua; Eu tïvósi; Op tewosi; Yq tébos; My tébbos; Wr te'pósi; Tr repósi. Wr may suggest another C in a cluster.

1042b. *tapusa > tausa > tusa > tosa 'gopher': Dakin 1982-101: CN tosan 'gopher'; Cr tauhsa 'tuza'. Note that Cr shows the exact result of loss of -p- from *tapusa, which is typical of CrC and Azt languages.

[*u-a > o-a and > o-i] [SUA: Tep, Trn, Opn, Cah, CrC, Azt]

1043. *kita 'groundhog': Mn kidá' 'groundhog'; NP kidï 'groundhog'. [NUA: WNum]

1044. *kiNpa 'prairie dog': NP kiibba 'prairie dog': Sh kiimpai 'prairie dog'. [NC > CC] [NUA:Num]

Gourd: see squash Grab: see carry Grain: see corn

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GRANDFATHER; ABUELO (ff = father's father, followed by mf = mother's father)
Mn
        kïnu'; toġó'
                                       kwa('at) 'ff, mf'
                                                               Eu
                                                                       pa; boc 'ff'; bóc-wa
                               Hp
NP
        gïnu'u; togo'o
                                Tb
                                       akkaa-; aakiš-t
                                                               Tbr
                                                                       zuú 'abuela'
TSh
        kïnu; toko
                                       ka'; kwaari'
                                                                       haboi, apa, náni
                               Sr
                                                               Yq
                                                                       havoi 'ff'; apa 'mf'
Sh
        kïnu; toko
                                       qa'; kwa-l;
                               Ca
                                                               AYq
                                 'grandchild': kwála; gála; súla My
                                                                       áppa
Cm
        kïnu'; toko'
                                       ká': kwá'
                                                               Wr
                                                                       wocí; papá
                               Ls
Kw
        kunu; togo
                               Cp
                                       qa 'ff'; kwa 'mf'
                                                               Tr
                                                                       očí-(kari/pari);
Ch
                                       wosk; woji(gi)
                                                                       apá(l/roči)
                               TO
                                       ba'a; baab
                                                               Cr
                                                                       niyaasúuri 'mi abuelo
SP
        kunnu 'great gf'
                               Nv
                                       ff: boska; bosidi su a.;
                                                               Wc
                                                                       miitári 'mi abuelo';
WMU kunúčin 'ff'; taġőč /
                                       mf: baba; basa; baadi 'su a.'
                                                                       kïcauríša 'w's'
        taġWő-či / töcWő-či 'mf' PYp
                                       vosk; sasungar 'ancestors'
                                                                       teuríšá; teukárí
                               NT
                                               : baába
                                                                       kool-li '&ancestor'
                                                               CN
CU
        künúu-či; togó-či
                               ST
                                       kuulsi 'ff';
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1045. *kuLu / *koLu 'father's father, paternal grandfather': Sapir; B.Tep138a *kiïri 'male, old man'; I.Num75 *kinu(u); M88-ki6 'father's father'; KH/M06-ki6: Mn kinu(?a) 'father's/grandfather's father'; NP ginu'u/kinu'u; TSh kinu; Kw kunu; SP kunnu 'great grandfather'; CU kinúu-ci. Sapir and Miller include CN kool-li 'grandfather, ancestor', which is reasonable, though CN is also listed at *kwoti below. One thing that both Num i' and CN o have in common is being occasional variants of PUA *u. Or Sapir suggests that SP qunu is an assimilation from *kolu, which is possible, and thus for all Num: *kolu > *kunu > kinu; for u > i is common in Num. Add ST kuulsi 'abuelo, ff'. Miller also lists B.Tep138a *kiïri 'male, old man' here—possible, but I list it under 'man'. [NUA: Num; SUA: Tep, Azt]

1046. *toko 'mother's father, maternal grandfather': M67-495 *to 'grandfather'; I.Num218 *toko('o) 'grandfather, grandchild by daughter'; M88-to12; KH/M06-to12: Mn toġó'; NP togo'o; TSh toko; Sh toko; Cm toko'; Kw togo; SP toko; WMU toˁWo-či (Ϛ = voiced pharyngeal fricative); CU togó-či; Cr ne-tu'urú 'my great grandfather'. [k > ' in Cr] [NUA: Num; SUA: CrC]

1047. *kwa'a 'maternal grandfather': VVH127 *kwa'a 'mother's father, daughter's son'; B.Tep1 *baaba 'mother's father'; BH.Cup *kwa 'mother's father'; M67-494 *kwa; KH.NUA; L.Son112 *kwa 'abuelo materno'; M88-kwa9; KH/M06-kwa9: Hp kwa/kwa'a; Sr kwaari'; Ls kwá'; Cp kwa; Ca -kwa', kwa-l; TO ba'a/baab; LP baab, baadi (poss'd); NT baába; Cr ne-yéé-kwa-ri 'my grandmother'. Some forms in L.Son112 *kwa fit *pa, not *kwa, unless they were borrowed from Tep or something, so let them be separate. [NUA: Hp, Tak; SUA: Tep, CrC]

1048. *(p)apa 'maternal grandfather': L.Son112 *kwa 'abuelo materno'; M88-pa20 'grandfather'; KH/M06-pa20: TO waaw 'one's father in a clan of the buzzard moiety'; Eu páwa; My áppa (Lionnet); Wr papá; Tr apá. The two TO terms baab (< *kwaakw) vs. waaw (< *paap) also support the separation of this set from the above. [SUA: Tep, Trn, Opn, Cah]

1049a. *poci / *kwoci 'paternal grandfather': M88-wo2 'paternal grandfather': KH/M06-wo2: TO wosk/woji; Eu vócwa; Wr wocí; Tr očípari. Add PYp voska; NT vošííka 'father's father'. This is problematic in that, if *wo, we should see Tep g; yet Tep and Eu may point to *poci while Wr and Tr should show poci if that were the case, but their forms suggest *woci or *kwoci, and Wc kwïsi 'grandmother, sister of a grandparent' is not far off of that. In fact, the Eu form, written with both b and v, may also better suggest *kw. So the fact that a number of these may suggest *kwoci / *kwoti, let such also be listed in b below:

1049b. *kwoci / *kwoti (> Azt kool-li ?) 'paternal grandfather': Eu boc; Wr wocí; Tr očípari; Yq haboi; AYq havoi 'father's father', note AYq havoi (< *hapotï) 'ff'. Of course, Nv boska and Nv bosidi 'su abuelo' are the same set as the other Tep *vosi/wosi above, but whether initial b (*kw) or v (< *p) is heard or listed, could make one wonder. And if -c- < *-t-, often attested, then CN kool-li 'grandfather, ancestor' (*-t- > CN -l-, also occasionally attested) may belong (and others at 1045?) and definitely agrees with *kw rather than *p or *w. [SUA: Tep, Trn, Opn, Cah, CrC]

GRANDMOTHER; ABUELA

Miller (M88-ka9) combines all initial ka forms. The difference between *ka and Num *kaku may justify separate letters, but Sr forms (Sr -ka'/-kak-, pl: kakim) show that if *ka' / kak derive from a fuller kaki, then they may all be related, for kaki and kaku are not far apart.

1050a. *kak / *ka' 'grandparent': VVH170 *ka_Sku 'father's mother'; M67-496 *ka 'grandmother'; I.Num53 *kaku('u) 'grandmother'; BH.Cup *qa 'paternal grandfather'; KH.NUA; AMR 1993a *kak 'grandrelative'; KH/M06-ka9: Cp qa 'father's mother'; Ca qa' 'paternal grandparent'; Ca kááka 'paternal grandmother'; Ls ká'/qá' 'paternal grandparent'; Sr -ka'/-kak-, pl: kakïm 'paternal grandrelative'; Gb káka 'grandparent'; Hp kya 'father's sister'; TO ka'a / kaak 'paternal grandmother'; Eu káwa; Wr ka'ká 'fm'; and Tr a'ká-čuri. Add NT káásuli 'paternal grandmother'—quite relevant to Tr a'ká-čuri.

1050b. *kaku 'maternal grandmother': TSh kaku; Sh kaku; Cm kaku'; Kw kagu; SP qaġu; WMU kagú-či-n 'my maternal grandmother'; CU kagu-či. [NUA: Tak, Num, Hp; SUA: Tep, Trn, Opn]

1051. *su'u 'maternal grandmother': VVH140 *su'u 'mother's mother'; B.Tep83 *hu'uri; M67-497 *su; L.Son260 *su; KH.NUA; M88-su6 'maternal grandmother'; KH/M06-su6: NP so'o 'great grandparent'; Cp şu; Ca su; Gb súk; Sr čuuri'; Hp so'o 'grandmother'; TO hu'ul; Wr su'sú 'mother's mother'; Tr u'sú(wa) / su'í- / suwí 'abuela materna'; Tbr suu/su 'abuelo'; Cr yaašuhri 'grandfather'; Cr nyi-yaa-šú 'my grandfather'; CN si'-tli 'grandmother or sister of one's grandfather'. Ken Hill adds Ktn -curi' grand-relative'; Gb şuk. Add AYq asu; PYp hu'ul; NT úúli—all mean 'maternal grandmother'. [c/s, *u > CN i] [NUA: Num, Hp, Tak; SUA: Tep, Trn, Tbr, CrC, Azt]

1052. *huCci 'paternal grandmother': M88-hu17; KH/M06-hu17: Mn hucí'; NP huci'i; TSh hucci; Sh hucci; Kw huci; SP wicci 'great grandmother'; CU wəcii-ci; Tb 'ucuu 'grandmother, woman's daughter's child'. [hu > wV; V assim.] [NUA: Num, Tb]

1053. *mu'a 'maternal grandmother': Mn mú'a 'maternal grandmother'; NP mu'a. [NUA: WNum]

1054. *tu 'mother's mother': Ls tú' 'mother's mother'; Ca túútu 'maternal grandmother'. [NUA: Tak]

NB, for *moci 'grandaughter' KH/M06-mo12 , see relative.

Grape: see berry Grasp: see carry

GRASS; HIERBA, YERBA, PASTO, HERBAJE, CÉSPED

M88-pa39, M88-ca16, and M88-sa22 list some of the same words, as UA s-words for 'grass' provide an entangled diachronic challenge. Nevertheless, let's deal with them thusly for the moment:

1055a. *sakat / *sakaC 'willow': Sapir; CL.Azt72 *saka 'grass'; Fowler83; Munro.Cup138 *şaxá-t 'willow'; KH.NUA; M88-sa26; KH/M06-sa26: Cp sáxa-t; Ca sáxa-t 'willow tree'; Ls şaxá-t 'arroyo willow'; Sr haqat; Gb saxát/sakát 'sauz'. Miller lists only Tak forms. Ken Hill and Sapir include CN saka-tl 'grass' with which I agree. Hill also rightly adds WSh saka-ppin 'type of willow'; Ch sagávï 'willow'; Hp tïïsaqa 'grass'; Ktn hakat 'willow'; Tr sakará 'zacate'; Pl sakat 'grass, straw'. Let's also add NP saga-pi 'plant, several kinds of trees in the willow family'; ST va-haak 'caña de zacate'; Tbr haka 'straw'; Ch(L) sagah and Ch(L) sagaavasï'api 'willow sapling used in house construction'. Absolutive -p in NP, -pp in WSh and -t in Tak all suggest a final C: *sakat 'willow'. Numic *sïhï 'willow' may relate in some way, perhaps a recycled early loan or such? For now Miller's separation of *saka and *sïhï is good. The semantic split is interesting: 'willow' in Tak and Num (most of NUA), but 'grass' in Hp and SUA.

1055b. *tï-saka 'grass': Fowler83: Hp tïïsaqa 'grass, hay'; Ch tïsïvi 'grass'; Kw pa-rasii-vï 'meadow, grass'. Hp, with a *tï- prefix reflects *sakat above; SNum (Ch, Kw) may with loss of last syllable. Progressively less certain are Wc kaarïïsa 'especie de zacatón, zacate' and Mn tisobï/cisobï 'brush, plant, growth. Did Kw metathesize its vowels? [NUA: Num, Tak, Hp; SUA: Tep, Trn, Tbr, Azt]

1056. *ca'i 'grass': B.Tep187 *sa'i 'grass'; M88-ca16; Fowler83; KH/M06-ca16: TO ša'i 'grass, brush, waste, trash'; TO waša(')i 'grass'; LP ša'i; PYp sa'i; ST sa'i, sai', sai; Sr čai'-t 'thicket, brush'; Sr ča'-i 'dense, crowded'. Since compiling his dissertation (B.Tep), Bascom has found and lists in his NT dictionary in progress a NT form: NT sáíga 'hay buen pasto'. The semantics of TO ša'i 'grass, brush, waste, trash' might suggest that Cr saïri 'basura' is a loan from Tep. [NUA: Tak; SUA: Tep]

The reconstruction of Tep *vasoi (< UA *pa-coi) is problematic in that only one Tep form (NT) of B.Tep262 *vasoi 'grass' agrees with *pa-coi; the other (TO wa-ša'i) is above with *ca'i, and My basso may be a loan from NT, since *s > Tep h; nevertheless, Miller lists the following: M88-pa39 'grass'; B.Tep262 *vasoi 'grass'; TO waša'i; NT vásoi; My básso 'zacate'. While TO belongs with *ca'i above, the NT and My forms are as likely to be a loan set as an independent cognate set. However, the following of Miller's and others are valid: **1057a.** *(pa)-samaC / *-samhuC 'grass': BH.Cup *samVt 'grass'; M67-204 *(pa-)sa/*(pa-)ca 'grass'; CL.Azt237; Fowler83; M88-sa22; Munro.Cup53; KH.NUA; KH/M06-pa39: CL.Azt237 also discuss the difficulties of these words: Ca sámat 'brush, herb, grass'; Cp sámat 'grass sp.'; Ls şáámu-t 'grass, hay, weeds'; Sr haamt 'grass'; Ktn hamat; Sh sihmu 'bunch grass' matches Ls with i resulting from schwa-like behavior in the first vowel, and perhaps CN icmollini 'sprout again, grow, appear' in the first two syllables, but not count yet. [NUA: Tak, Num] **1057b.** *(pa)-soho 'grass' (< *-samhuC?): Hp söhö 'galleta grass'; Hp(S) pashö; My básso 'zacate'; AYq vaso 'grass'. [NUA: Hp; SUA: Cah]

1058. *(h)usa 'grass': Stubbs2003-44: Tbr osá-t, usá-t 'hierba, zacate'; Cr (h)ïša 'grass, straw'. These two agree well with each other in *(h)usa, since Cr \ddot{i} < *u. [*u-a > o-a] [SUA: Tbr, CrC]

1059. *huk(w)i 'grass sp': M88-hu9: M67-203 *hukwi 'grass'; Fowler83; KH/M06-hu9: TSh hukuppi; Kw hugwi-vï 'speargrass'; SP ukwi-vï; CU 'ugwí-vï; Miller also adds Tb 'uugibïil 'type of grass with strong hard stems which grows in bunches'; and Fowler adds Hp hooki 'needle and thread grass', all of which seem reasonable, especially in light of Num's tendency to carry rounding past a consonant; and if that is the case, then Tb and Hp both fit *huki well. [uCV > uCwV] [NUA: Num, Hp, Tb]

1060. *huLaka 'buckwheat': BH.Cup*huláqala' 'buckwheat'; Fowler83; M88-hu14; KH/M06-hu14: Cp wiláka-l; Ca húlaqa-l; Ls wuláq-la. This set provides an interesting array of initial CV, different than found elsewhere in Cup. [NUA: Tak]

1061. *sonV / *soŋo 'grass, straw, blanket': L.Son257 *sono 'rastrojo'; M88-so9; KH/M03-so9; Jane Hill 2007: Wr sonó 'rastrojo de maíz'; Wr sonógola 'troje'; Tr sonó 'caña'; Eu sonó; Tbr sono-wolít 'pajar'; NP sona 'blanket, covering'; NP sona'a 'lower mattress'; TSh soni 'grass'; TSh pisoni 'loin cloth' (< pi"-soni 'back-grass/cover?'); Sh soni 'mattress'; Sh soni-ppih 'hay, grass, blanket'; Tb šoŋo-t 'little blanket'; Cm soni(pi) 'grass'; Mn sonábï 'hay, straw. Ken and Jane Hill (2007) add Hp sööŋö 'corn cob' and Tbr hona-li-t 'rastrojo'. Note both Tbr sono-wolít 'pajar' and Tbr hona-li-t 'rastrojo' in the same language! Add Ktn hona-t 'sleeping mat'. It is also curious that only two NUA forms show ŋ to all others' n! As usual, much to unravel yet. [NUA: n: SUA: n] [NUA: Tak, Num, Hp, Tb; SUA: Trn, Opn, Cah, Tbr]

1062. Fowler 83 lists Num *wa'i 'ricegrass': Fowler has the forms.

1063. *tupi 'green grass': Sr tuuvit 'green grass'; Ktn tuvi 'grass or shrub sp with edible seeds'; Tb tuubuu-l 'salt grass, growing' vs. Tb tuut 'salt grass, already gathered' and maybe Wr to'iwe 'grass, pasture'. What of PYp tugia 'greens' if -p/v-> w > g in Tep? Cr tu'upi 'grass' may derive from a redupl *tutupi > *tuLupi > tu'upi? [Tb preservative V assim] [NUA: Tak, Tb; SUA: Trn, CrC]

1064. *masi 'plant type': Tb maši-l 'grass, weeds'; Cp maasive-t 'plant used in making sacred bundle'. [NUA: Tb, Tak]

NB, for B.Tep144 *mainai-i 'grass mat', see blanket.

GRASSHOPPER, LOCUST; CICADA, SALTAMONTES, CHAPULIN, LANGOSTA

1065. *wo'oC 'grasshopper': M67-205 *wo'a; Fowler83; Munro.Cup54 *wi'é-t 'grasshopper'; KH.NUA; M88-wo7 'grass-hopper'; KH/M06-wo7: Cp wi'e-t; Ca wi'i-t; Ls wi'é-t; Gb we'é-t; Sr wö'öht, pl: wö'ööm; Wr wohci; Tr o'či; My wó'oči; Yq wóó'oči; Cr víci'i, pl: víci'i-kï 'grasshopper'. Add Ktn wo'oht 'locust'. Cr's first V is different. Wc 'úciika 'chapulin' should probably be included, since the Wc vowel u agrees as opposed to Cr i: CrC u < *o. In fact, Cr's first vowel probably assimilated to the following i. Miller is correct in relating *wo'oci (Wr, Tr, My, Yq, Eu, Cr) and Takic *wo'V-t. [V assim Cr; Gb e < *o] [NUA: Tak; SUA: Trn, Cah, CrC]

1066. *coho / *co'o 'grasshopper': B.Tep203 *soo'oi 'grasshopper'; Fowler83; M88-co19 'grasshopper'; KH/M06-co19: TO šoo'o; LP šoo'o; NT sóói; ST sooi; NP sowatata 'red wing grasshopper' NP wïtata 'grasshopper'). Miller's inclusion of the first syllable of NP sowatata may be okay in light of c/s overlaps in UA, though *co is expected. Ken Hill adds Tbr soo 'chapulin' perhaps a Tep loan. [c/s] [SUA: Tep]

1067. *attaNkaC 'grasshopper': I.Num214 *((n)a(a))teŋkih 'grasshopper'; M88-tï31 'grasshopper'; KH/M06-tï31: TSh aattaŋki(cci); Sh aattainkih; Cm aatakíi'; Kw 'aataka-piži (< *'aattakkaC-pici); SP aaraŋqa'', aaraŋqa-ppici; CU 'áa-rīká-ci, 'aa-taká-ci, 'aa-taká-ci. Note that this set applies to CNum and SNum, while *akïsa below in WNum. Sh(C) aa-ttaŋki (aa''- 'gray, dull') suggests a compound. Add Ch(L) 'aatakapici. I reconstruct the 2nd vowel as *a*: (1) because it appears in six of the seven languages (CU having variants with both vowels), and (2) the two errant vowels can be explained: anticipatory assimilation for the Sh dipthong *ai* (which often goes to ï/e) and an unaccented schwa-like ï in one CU variant. [NUA: CNum, SNum]

1068. *akïsa: Fowler83 *kï'a 'locust': Mn akisá' / akïsá' 'grasshopper'; NP kïa 'locust'. Fowler mentions Sh and SP as also having forms. [NUA: WNum]

1069. *ma... 'cicada': Yq máte 'cicada'; Wr mala-keóci 'kind of arriero grasshopper that sings during harvest season (keóci 'fox'); Hp maahï 'cicada'. [NUA: Hp; SUA: Trn, Cah]

GRAY: GRIS

1070. *kuma > *koma 'gray, dark color': B.Tep108 *koomagi 'gray'; M88-ko33; KH/M06-ko33: TO koomagi; LP koomig /koomag; PYp koomagi 'gray, brown'; NT koomági; ST kooma'. Add Hp qöm- / qöm(a)vi 'dark, black' and NP kummibi 'cloud'. Even if the colors do not match exactly, the sound correspondences match well through four segments, and both gray and brown (Tep) can also be dark (Hp). Willet lists ST kooma 'discolored, dirty'. Note also PYp kuumlik 'dirty'. Both NP and PYp show u, which assimilated to o in the other languages. Cf. Tep *hikomagi 'cloudy'. [*u-a > o-a] [NUA: Hp, Num; SUA: Tep]

1071. *asiN 'gray': Mn esigwïdïgi 'to be gray'; NP ïsi-ggwiddaddï 'grey'; TSh esïn, esïmpitïn 'gray'; Sh aisïn 'gray'; Cm esï 'gray'; CU sí-gerï 'grey'. I reconstruct *asiN, because the presence of the various e/ï/ai initial vowels suggests that the first vowel was a, then anticipatorily assimilated toward the second (asi > aisi > esi > ïsi) or toward the alveolar consonant. [NUA: Num]

1072a. *kwïCci 'gray': Mn kwici/qweci 'gray hair'; Sh kusi 'grey'; Cm kusi 'to gray color of ashes'; Kw gwi-kuca-ki 'to be gray'; Ch kucá-ka 'grey'; CU kucá-qa-rï 'ashen, grey, silvery'; and perhaps NP ïsi-ggwiddaddï (<*kwittattï). Cf. *kwici 'smoke'? And Cf. *kuCca 'ashes'? [NUA: Num] 1072b. *waCci 'gray': NP waci boda'a 'gray-headed already'; Sh waici 'gray (of hair)'. Jane Hill (p.c.) adds Ch wanci-ni 'my gray hair' and Ch kwanaw'wanci 'flicker bird with gray on its back' (from Merriam) and mentions a possible tie with antelope. [NUA: Num]

1073. *mïha 'gray hair': Munro.Cup55 *məhaa-la 'gray hair'; KH/M06-mï12: Ls muxwáá-la; Ca -méh'a (obligatorily possessed); Ca méa 'become gray-haired'; Munro's analysis is convincing: that *h is the original medial consonant, deleted in the verb Ca méa; and as intervocalic x does not delete in Ca, then *h must have been reinterpreted as x in Ls and labialized under the influence of the preceding u. [NUA: Tak]

1074. *papo'o(L) 'gray, dark color': Cp pavepáve'i-š 'grey'; Sr pivöövö'n 'be gray, pale'; CN pa'paal-li 's.th. black, dark'; Ca píwiče 'turn gray (of hair), vi'. Complications may prevent the inclusion of some of these, but the first three agree with *papo'o minus one exception each: Sr ö < *o, so with an internal/medial reduplication, it agrees with *papo'o except for the first V, which became the UA schwa in the unaccented syllable, as is common. Cp i < *o, so its V may have lowered (i > e) in the environment of low a's, and given a two-syllable reduplication, Cp also agrees with *papo'o. CN, with second V assimilated to the first and the glottal stop's anticipatory transposition forward, also agrees with *papo'o. Ca is least agreeable, approximating PUA *powotï. Nevertheless, the first three seem probable. [V > i in unaccented position] [NUA: Tak; SUA: Azt]

Greasewood: see plant

GREEN; VERDE; see also blue

Like many Amerindian language familes, UA also links 'blue' and 'green'; so see 'blue' too. **1075.** *puhiC 'green': I.Num157 *puhi 'green'; M88-pu15; KH/M06-pu15: Mn puhi 'blue, green'; Mn papuhi 'grass'; NP puhi 'blue, green'; TSh puhi/pui 'blue, green'; Sh pui 'green'; Sh pui', pui-ppih 'grass'; Kw puhi-gi 'green'. Is *pisi 'leaf' in (Mn, TSh) related? [NUA: WNum, CNum]

1076. *siyo / *siya 'green': KH/M06-si20 *siyV (AMR): Yq síali 'not ripe'; AYq siasaali 'greenish'; My síali/síari 'green'; Wr sióna-ni 'green, blue'; Tr siyó 'green, blue'; Eu sídei / si'idai 'green'; CN šoo- 'green'; CN sel- 'fresh, green, heat'. Manaster Ramer (1996d) argues well for anticipatory V assimilation in CN šoo- 'green'. Eu suggests the presence of y (*siya) rather than merely a dipthong *sia. Wr sió- and Tr siyó may suggest a possible relationship to CN šiwi 'green, year, turqoise' and the other terms under 'year' as well as. $[CN V_2V_2 < *V_1V_2]$ [SUA: Trn, Cah, Opn, Azt]

1077. *siwi(C) 'green growth': AMR 1996d suggests *siwiC for Hp siwi 'Parryela filifolia (shrub sp.) and CN siwi-tl 'greenery, foliage, herb, leaf, turquoise, year' as a separate set. Might this tie to *sawa 'leaf'? [NUA: Hp; SUA: Azt]

1078. *yora 'green': Wc yúuyúuri 'be green, grow'; Tbr nyoa-ká-r 'blue, green, unripe'; ST momdora' 'light green'. [SUA: Tep, Tbr, CrC]

NB, what of Hp hero(k-) 'become green, blue'; Sr rau'n 'be green, blue'; Sr ra'upu'q 'be greenish blue'? NB, for *tïyawi, see blue, where is M88-tï46 'green, blue'; L.Son305 *tïyo 'verde, azul'; B.Tep249 *tïïdogi 'green, blue'.

NB, for *sa(k)wa, see blue.

GRIND, POUND, CRUSH, GRINDING STONE; see also hit MOLER, MACHACAR, MACHUCAR, QUEBRANTAR, METATE

Miller has several initial *po forms together, but problems presented by Numic medial t and Takic ŋ would suggest either a single syllable (*po) with other morphemes, or a cluster that reduced in radically different directions, or separate stems, but until we know, I separate them. Even among medial -ŋ- forms are *poŋa at 'hit' and *piŋa here. At hit, see *poŋa 'hit, pound, grind': M88-po7; KH.NUA; KH/M06-po7: Cp píŋe 'knock on, knock around'; Ca píŋ 'get ground, pulverized'; Ls péŋa/i 'throw, be thrown'; Sr pööŋ 'pound'; Sr pööŋ 'pound' see 'hit'; Hp pöŋöŋötoay 'be making knocking or rapping sounds'; Hp pöŋö-k-na 'knock on, give a knock or sharp peck'; AYq poona 'knock'; Yq pónne 'machacar'; My póona 'hit, touch'; My popona 'martillar (hit/pound with a hammer)'.

1079. *pot 'pound, grind': M67- 331 *po; I.Num153 *potV 'pound (with a stone)'; M88-po7 'pound'; KH/M06-po7: NP pota 'pound acorns'; TSh potto 'grinding stone'; Sh potton 'grinding stone'; SP tapporu' 'pound with a stone' (probably with instr prefix *ta- 'with a stone' say Sapir). To these we can add Mn poda 'grind with a metate'; Mn podánu 'pestle'; NP podanu 'grinding stone'. [NUA: Num]

1080. *piŋa 'grind': In contrast to *poŋ, several *piŋ forms also exist: Sr piŋai 'crumble, pulverize, grind into powder'; and add Ktn piŋan 'crumble, vi'; Ktn piŋi' 'ground finely'; Hp piiŋi 'get ground fine, break into bits, shatter'; Hp piiŋya 'pulverize, grind finely, crush, shatter, vt'; Hp piŋyanpi 'grindingstone'; Tr píu / piwé 'to grind'

- (?); and perhaps CN pinol-li 'flour, s.th. ground'. Ktn vihŋ-ïk 'break, crumble, vi' may be a non-initial form of the same. [W/η] [NUA: Tak, Hp; SUA: Azt]
- 1081. *tusu 'grind': Sapir; VVH75 *tuusu 'to grind'; M67-206a *tusu/*tusi, 206c *tu; I.Num232 *tusiu 'grind'; L.Son322 *tusu/rus-i; CL.Azt238 *tisi 'grind'; 34 *tis 'corn dough'; 238 PUA **tusu 'grind'; M88-tu7 'grind/moler'; KH/M06-tu7: NP tusu; TSh tusu / tusu"; Kw tusu; Sh tusu; SP tušu; CU tisúi; Tb tusut~'utus; Hp tos-ta; Ca túlus / tús; TO ču'a/čua/čuhi; Eu tusá; Wr tusu-ná; Tr rusu-mea; My tuuse; Wc tisi; Cr ra-'a-ti'iši 'she is grinding corn'; CN tesi 'grind s.th. like cornmeal'; CN teš-tli 'flour'; HN tisi' 'grind'; Pl tisi 'grind'. Add Ktn tuh 'grind, bother'; Cm tusurī 'grind, thresh'; AYq tuuse 'grind, vt'; AYq saktuse 'be grinding, vi'. What of Tr(H) rasa 'machucar'? [s > ' in TO; other Tep forms?] [NUA: Num, Tb, Hp Tak; SUA: Tep, Trn, Cah, Opn, CrC, Azt]
- 1082. *ma'ta / *maCta 'grinding stone, mortar': Sapir; M67-283 *mata 'metate'; BH.Cup *malál; HH.Cup *maláal; B.Tep143 *mahuturai 'metate'; L.Son141 *mata; Munro.Cup72 *maláá-l 'metate'; M88-ma21; KH/M06-ma21 *mataR (AMR); NP mata (< *matta); Kw mara-ci; SP mara-ci; CU mara-ci; Hp mata; Tb mana-l; Ls maláá-l; Ca mála-l; Cp malá-l; TO maččud; LP mahtur; PYp maatur; NT máúturai; ST mattur; Eu metát; Tbr matá-t; Yq máta; My matta; Wr mahtá; Tr ma'tá; Cr mwaatá; Wc maatáá; CN metla-tl. Note the h in Wr and LP, and the glottal stop in Tr and the doubled consonants in TO and other languages, all of which tend to align with Bascom's proposal of another C between m and t, though I would guess a cluster. Also of interest is Ca mataš 'crush, squash, vt' that shows geminated *-tt-, though Ca mála-l does not. In spite of the 2nd vowel changing in Tep, this widespread etymon is found in every branch of UA. [*-t- > -L->-n- in Tb; * -CC-] [NUA: Tak, Num, Hp, Tb; SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]
- **1083.** *tïppa 'mortar (and/or) pestle': B.Tep242 *tïpa 'mano de metate'; M88-tï41; Ken Hill disperses tï41 to KH/M06-tï12 and KH/M06-pa30: TO čïpa 'a hole in bedrock for mashing mesquite bean'; TO čïpo'o 'a mortar hole in a rock for grinding'; LP tïpa; NT tïpai; ST topaa 'mortar'; Ls tóópa-l 'mortar for grinding' which fits well since Ls o < *ï. Possibly Mn tabi 'pound, strike' and Mn *tabaha 'grinding rock', but different Vs and *-p-, not *-pp-. Too remote are Tb paha-l 'rock mortar' and all the forms at *paha. [all p, no w/v] [NUA: Tak; SUA: Tep]
- **1084.** *otapa 'bedrock mortar': BH.Cup *'élapal 'mortar, bedrock'; M88-'o10; KH/M06-'o10: Cp íl^yapa-l; Ls 'élapa-l. [NUA: Tak]
- **1085.** *paha 'mortar': M67-317 *pah 'pestle'; M88-pa30; KH.NUA; KH/M06-pa30: Mn paha 'pounding place, mortar'; NP paha 'mortar'; TSh paha 'mortar'; Kw paha 'mortar'; Tb paha-l 'rock mortar'; Ca páwu-l / páu-l 'pestle'; Sr paahu't 'pestle'. Add Ch(L) paha 'mortar'; Ch(L) pataci 'handstone'. Jane Hill (p.c.) adds Gb pah-ho 'pestle' (Merriam). Ca páa-l, constr: -páh'a, páa-l-ki 'wooden mortar' agrees with Num forms in meaning (mortar) and in the 2nd vowel *a*, while Ca pá(w)ul, Gb, and Sr paahu't have u as the 2nd V. [a/o] [NUA: Num, Tb, Tak]
- **1086.** *tu'a / *tu'i 'flour, s.th. ground up': VVH133 *tu'-i 'flour'; M67-206b *tu'a/*tu'i 'flour'; B.Tep236 tu'i 'flour'; B.Tep 230 *tuisapi 'corn flour'; M88-tu8; KH/M06-tu8: Tb tu'ii-l 'type of flour'; Ca tú'a-t / túla'a-t / túlus'a-t 'flour, ground stuff'; Ca túla 'to pound, grind'; Sr tu'a-i 'pound, grind into flour'; Sr tua't 'flour'; TO ču'i; LP tu'i; NT túi. Ken Hill adds Ch tuhi-vi 'flour'. [NUA: Tb, Tak, Num; SUA: Tep]
- 1087. *tuLa 'pound, grind': Ca túla 'pound, grind'; Tb(M) tulaap(at) 'be ground'; Tb(M) tulaapin(at) 'grind'. These differ beyond initial *tu with different forms here (*tuLa) and above (*tu'V) in both Ca and Tb, yet Seiler and Hioki (1979) see *tu'- and tula as variants of the same stem in Ca; but Tb has different forms as well: Tb tulaap... vs. Tb tu'ii-l 'type of flour'. Favoring Seiler and Hioki, could a fossilized reduplication (*tu'a > *tut'a > tuLa) have them both from the same stem? Until more evidence suggests such, let's separate them. [Liq] [NUA: Tak, Tb]
- **1088.** *yu 'crush': M67-112 *yu 'crush'; M88-yu7 'crush'; KH/M06-yu7: Tb yuudinat~'uyuudin 'crush, vt'; Tb yuudat ~ 'uyuuda 'be crushed'; Cm kï-yu'ne 'chew'; Cm ta-yu'ne 'pound with a pestle'; NP yïha'yu 'chew it'. [NUA: Num, Tb]

1089. *musa/i 'crush': Tr mosi- 'to pulverize'; PYp mohona 'to pulverize, crush'; NT tyímosai 'crack (grain)' (NT/Tep should show h < *s, like PYp does); Hp momsi/momri 'crush, pulverize'. Jane Hill (p.c.) pointed out that Ca -miš- 'chew' matches as well (Ca i < *o). If *o, the Hp V should be $\ddot{o} < *o$, so perhaps *u, and the others succumbed to the common assimilation: *u-a > o-a. [*u-a > o-a] [NUA: Hp, Tak; SUA: Trn, Tep]

1090. *sapi 'pound': Ls şapi 'hit, pound, as with a hammer'; Hp sasvi 'strike, beat on, pound'. [NUA: Tak, Hp]

1091. *capa 'smash, grind': NT vóíšapai 'smash'; NT mamáášapai 'hold down, crush, jail'; ST tuispa' 'moler'; PYp tusab 'grind corn coarsely for beer'; NT sopóóraka 'smashed'. *capV may be the 2nd morpheme in Tep *tuisapi (<*tu'i-capi) 'flour'. [SUA: Tep]

1092. *takki 'mano for metate': M67-274; Munro.Cup132 *tááki-š 'tool'; KH.NUA: Ls tááki-š 'stone for smoothing pottery'; Ca táki-š 'mano'; Tb takii-l 'muller for metate'; Sr taikţ 'mano (for metate)'; perhaps Ca téx 'grind and make flour'. Most languages suggest a geminated *-kk-. [Tb k] [NUA: Tak, Tb]

1093. *pisa 'pound': NT viaáhai 'remoler'; Hp pïsïsï-ta 'be a continuous drumming or pounding sound'. With vowel leveling, these agree. [NUA: Hp; SUA: Tep]

1094. moved to 904g.

1095. *k/ŋamaL 'crush, grind': AYq kam-ta 'crush'; Hp ŋïman- 'grind into flour'; Hp ŋïmni 'flour, finely ground corn or wheat'. Initial η- in Hp or Tak, but k in Num or SUA is also seen in *ŋani / kani 'look for' at 'search' and *ŋü'a / küü 'grasp, catch' at carry. [ŋ/k] [NUA: Hp; SUA: Cah]

1096. ŋïka/i 'grind, scrape, rub against': Gb ŋooxa 'muelalo!'; Gb ŋooxa-t 'cosa molida'; Ls ŋééxa/i 'rub against'; Ls ŋóoxi 'grind on metate'; Ls ŋááxa/i 'scratch, scrape, brush against'. Such vowel versatility in Ls is hopefully only temporarily mystifying. [NUA: Tak]

1097. *maki 'grind': M67-233; M88-ma18; Munro.Cup1 *mááxi-š 'acorn flour'; KH/M06-ma18 'hit/golpear': Ls mááxi 'grind acorns on a metate'; Ls maxi-š 'acorn flour'; Cp máxi-š 'acorn flour'. Similarly ground, perhaps add Tr ma*kí 'membrilio Cimarron, su hoja, muy fina, la muelen seca y hacen pinole'. [SUA: Trn; NUA: Tak]

NB, what of NT tyíkonai 'crack (grain)'; Hp hakonpi 'grinder'; and Hp kooŋya 'pestle'? Yet Hp ö < *o is expected.

NB, see also flat(ten); and for *con, see hit.

NB, where have I seen matches to Tr kísu-ma 'desmenuzar por presión (cosas pequeñas), quebrar granos con las muelas'?

Ground: see earth Groundhog: see gopher

GROW: CRECER

1098. *nakana 'grow': M67-207 *na 'grow'; I.Num108 *nana(h) '(grown) man, grow'; BH.Cup *naxá 'old man'; HH.Cup *naxáa 'old man'; M88-na13; KH/M06-na13 'grow': Mn naa 'grow'; NP na 'grow'; Sh nahna" 'grow, grow up'; Kw nahna 'grow'; SP nanna 'grow'; CU nana-pï 'grown, mature' (< CU naná-y 'grow'; -p- suggests final -C); Cp naxánču've-l 'old man'; Ca náxaluvel 'old man'; Ca náxaluvuk 'bec. old (of man)'; Ls naxááčuu 'bec. an old man'; Ls naxááči-š 'old person'; Cr tí'inahana 'grow'. PUA *nakana allows Takic x and some Numic forms show h before the second n, and the Takic and Cr forms definitely show something like xa/ha as a second syllable. Note Cp naxánču've-l 'old man' and Ca náxaluvel 'old man' are identical except for the consonant (cluster) -nč-and -l-; whenever c and l correspond, it is likely that an original *t underlies the two: *nakana-tu'pe-l. That Cp form is also the only Takic form that shows a 2nd n like the Numic forms; nevertheless, between that Cp form, the Numic forms, and the Cr form, a 3rd -na- syllable is apparent. Cf. Ca qani 'become formed (in womb), grow'. [NUA: Num, Tak; SUA: CrC]

1099. *ya'wi 'grow': M88-ya9 'grow'; M67-208 *ya 'grow'; KH/M06-ya9: Tb 'ayaaw-ït~'a'ayaau; Sr yaaŋk 'grow, grow up'; Wr ya'wi-ná / ya'i-má 'sprout'. [w/η] [NUA: Tb, Tak; SUA: Trn]

1100a. *wïLa/i 'grow': Ca wél 'to grow, rise up high'; Cp wéle 'to grow'; Ls wola/i 'grow (of plants or anim subj)'; and part of Hp wïŋwa 'grow, grow up', if *L > N, perhaps in a cluster. [Hp N and Tak l] [NUA: Tak, Hp] 1100b. *tïwïL 'grow': Cp tewe 'to grow of plants'; TO čïwïl-him 'to grow'. Might this pair tie to *wïL 'grow' with a prefix? TO does have -L-, but normally *w > Tep g. So could it be a loan? Cp and TO a little west and east of the Yuman desert respectively, perhaps closer to each other formerly, make it possible. We might tie it with Cahitan *tïwïl 'green, blue' (at blue) as well, except that there TO has TO čïïđagi (< *tïyawi) like a well-mannered Tep reflex. [NUA: Tak; SUA: Tep]

1101. *yama / *yami 'sprout(ing), grow (thick)': M88-ya23; Munro.Cup47 *yamii-ča 'forest'; KH/M06-ya23: Cp yemí-š 'forest, dense'; Ca yámily 'leaves'; Sr yaamava' 'spring(time)'; Gb yáma-mwár 'March, month of germinating'; Ls yamíi-ča 'forest, thick brush'; Ls yamáqa/i 'be soft, tender, vi, soften, vt'; Hp yama(k-) 'go or come out, emerge, come into view, rise (of sun, moon)'. Let's add Ktn yamava' 'April'. These may tie to Tep *dama (< *yama) 'up'. [NUA: Tak, Hp]

Growl: see shout, bark

GUACAMAYA

1102. *waLo / *'aLo 'guacamaya': L.Son5 *'alo 'guacamaya'; M88-'a32; KH/M06-'a32: TO aaDo / aaDho 'peafowl, pavo cristatus'; Nv arho; Op haro; Eu háro; Tr wará/walá; Wr walá 'tipo de pájaro como juajalote'; Tbr waló; CN alo 'large parrot'. Ken Hill adds Hp kyaaro (loanword with prefix kyaa 'awesome'); Wc áro 'guajolote'. Three UA languages show initial *w not found in the others; we can either reconstruct *'aLo, as Lionnet does, and suggest *' > w in those three languages, which is feasible, especially in light of other excrescent w's in Tr/Wr, or we can reconstruct *walo and suggest that initial *w was lost in those without. [w/'; a/o] [SUA: Tep, Trn, Opn, Tbr, CrC, Azt; NUA: Hp]

Guard: see care, take ... of

HAIL; GRANIZO, GRANIZAR

1103. *tîha 'hail': VVH80 *tîha 'hail'; L.Son286 *tîha 'granizo'; M88-tï1 'hail'; KH/M06-tï1: TO čïa; Nv tï'a; PYp ti'a / to'a; NT tïááyi, tïáávili; Eu tehé-t 'granizo'; Eu tehéwa- 'granizar, v'; Yq teeha-m; My téhha-m; Tr ŕehé, rihísi; Wr tehé; Tbr tehé-t. Miller includes Ls tóóyi 'freeze, v'; Ls tóóyi-t 'frost, ice'; Gb tóyet 'ice'. [SUA: Tep, Trn, Opn, Tbr, Cah; NUA: Tak]

1104. *pa-(N)kom- / *pa-huN-kum 'hail': TSh poonkompin 'hailstones'; Sh(C) pa-hoom-pin 'hailstone'; Cm pahoopi 'hail'; Kw pohoo-bi 'hail; SP pauN 'hail'. [NUA: CNum, WNum]

1105. *hikwaC 'hail': Mn pahikwápe 'hailstorm'; NP higgwabba 'hail'. Both show final consonant. [NUA: WNum]

HAIR, FUR; PELO, CABELLO, PELLEJO; see also head, beard, skin

1106a. *suwi 'body hair': B.Tep70 *hogi 'hide'; M67-211 *suwi 'hair'; M88-su18 'hair'; KH/M06-su18: LP hog 'hide'; NT ógi 'hide'; ST ho' 'fur, leather'; PYp hogi 'hide, skin, leather'; Tb šuuwi-l 'pubic hair'; Hp sowícmi 'facial hair'; NP musui 'beard' (< *mu-suwi 'mouth/face hair'); Ls suuwi-l 'pubic hair, body hair'; Ktn suhi-c 'genital hair'. Add TSh suwii 'pubic hair'. Tep *hogi 'hide' matches NUA *suwi 'hair' consonant-wise, and since half the languages show *u, *u > o is more common in UA than *o > u; so I side with *u, like Miller and Hill. The close but not perfect match in o vs. u may be due to the influence of *-w-. [NUA u; SUA o]

1106b. *suhi: Mn suhi 'body hair' and Ktn suhi-c 'genital hair' show *suhi.

1106c. *soho > *soo 'armpit (hair)' (in SNum): Kw soo-rokwa 'armpit'; Ch(L) sohorah 'post with U-shaped fork, notched post'; SP soor'oaa 'armpit'; WMU kiyæ-söö-vü (lit: armpit hair); aa-söö-vü 'underarm, armpit (lit: arm hair), n'. Note that Ch(L) sohorah, Mn suhi 'body hair', and Ktn suhi-c 'genital hair' all show medial -h-. [NUA: Tak, Tb, Hp, Num; SUA: Tep]

1107a. *comi / *comya 'hair': Sapir; VVH38 *co(ni) 'head hair'; M67-219a *co 'head'; I.Num256 *coV head; L.Son40 *coni 'cabeza'; CL.Azt77 *con 'hair, head'; CL.Azt241 *coni 'hair, head'; M88-co6 'head, hair of the head'; KH/M06-co6: CN comi-tl 'fleece, bristles, mane'; Hp sowi-cmi 'facial hair'; Tb comoo-l 'head hair'. Add Cm co'yaa' 'head of hair, hair'. CN con-tli 'head of hair' and the other *co(ni) forms below also belong. CN comi-, Hp -cmi, and Tb comoo- suggest *comi. Miller includes Tb comoo-l with the *coni forms below, but not the Hp and CN forms; indeed, the *comi forms likely underlie *con(i) below, with *m or *comi representing the original medial C. Note also Cm co'yaa' 'hair', which further argues for *con < *comi / comya: *co'ya is an expectable reduction from *comya with loss of first C in a cluster, and if *comi might more fully be represented as *comya, then a nasal-alveolar cluster (-my-) would nicely explain the cluster being reduced to an alveolar nasal (n). CN's two forms (CN con-tli and CN comi-tl) show alveolar n before an alveolar C and show m when followed by a vowel, the *-my- cluster helping. Might the *coni below be loans from Azt con-? [* -my- > -'y-/-n-]
1107b. *coni 'head, hair': My cóoni 'cabello'; Gb cócon 'face, eyes' (vowel is unexpected, o < *o usually only after *k); Eu zonít; CN con-tli 'head of hair'; Pl cun 'point, head'; HN con-tli 'head, roof'. Probably tied to these are several Num forms (at 'head') with geminating effect in *co"-, suggesting a final underlying consonant: Sh co" 'with the head'; SP čo"- 'head'. [N > "; Gb/NUA n = SUA n] [NUA: Tak, Tb, Hp, Num; SUA: Cah, Opn, Azt]

1108. *kuppa 'hair of head, head': Sapir; VVH9 *kuupa 'head hair'; B.Tep127a *kuupa 'head, hair'; M67-209 *kupa 'hair of the head'; CL.Azt168 *ïkpa 'thread'; CL.Azt 240 **kuupa hair; M88-ku3; KH/M06-ku3 *kupa (AMR): NP kuba 'above, postp'; Hp kòopa 'top of one's head, crown'; NT kuúpa 'head, hair'; ST kuup 'head, hair'; Wr kupá 'cabello, pelo, lana'; Tr gupá / kupá 'cabello'; Wc kiïpá 'pelo, cabellos'; Cr kipwá; CN iikpa-tl 'thread, hemp fiber'; HN 'iikpa-tl cotton thread. Miller includes My kóbba 'head' thus also Yq kóba. UA *kuppa 'head hair' and UA *kopa 'forehead, head' (at forehead) are separate sets since at least TO, NT, ST, Tr, Wr, and Cr have distinct terms for the two (see forehead), though some circular borrowing or one of them being a diffused variant of the other is possible. Ken Hill adds Sr a-kupiaa' 'top, up, above it' and Ktn kupeac 'top of head, summit of a mountain, top end'. Note also Ktn kopo-c 'hair, head'; TO kuwijk 'have a dome or peak' since the vowels match *u (vs. o) and the head is the 'top' or 'height' of a person. Many, if not most, suggest a gemination or cluster (*kuppa) while others (NP) do not necessarily. Mn wóópi / a-qwoopi 'hair of head' may belong with *wo 'hair' below, which see. [Sr a- pref] [NUA: Num, Hp, Tak; SUA: Trn, Cah, CrC, Azt]

1109. *po'wa / *poCwa / *poLCa 'hair, fur, hide, skin': Sapir; VVH7 *po 'body hair, fur'; B.Tep280 *vopo 'body hair'; M67-212b *po; I.Num149 *po'a(a) 'cover, skin, bark'; BH.Cup *pe'; L.Son216 *powa 'pelo, lana'; KH.NUA; M88-po2 'body hair, fur, skin'; KH/M06-po2: TSh po'a-cci 'bark'; Sh po'an 'skin, bark'; Cm po'a 'cover, bark, skin'; Tb poont 'hide, body hair, fur'; Cp pi'i 'down, body hair, non-flight feathers'; Ca pfi-ly, pfh'i 'body hair, fur, down'; Ls pé' 'feathers, fur, body hair'; Gb péhan 'beard, body hair, down'; Sr pöh 'fur, body hair, feathers'; Ktn pohoc 'body hair, feathers, fur'; Hp pöhö 'fur, body hair, body fethers, down, fuzz'; TO wopo 'body hair, fur'; Wr po'á 'lana'; Tr bo'wá / boa / bo'o / bó 'vello, lana'; My bowwa 'lana, pelo'; Tbr womé-t / womó-r / womá-r 'lana, pelo'; Cr hú'u-ša'a 'peach fuzz on body'; Sapir lists Cr ki-poa 'hair'. These may tie to pï'wa, perhaps by dialect diffusion, since Num has both, as do Hp and other languages. The variety in Tb -n-, Num -'-, Gb, Sr, Ktn, Hp -h-, and Wr, My, Tr -'w- suggest a cluster that may contain a liquid (Tb) and/or glottal stop, or other possibilties given the variety of reductions. [NUA: Num, Hp, Tb, Tak; SUA: Tep, Trn, Cah, Tbr, CrC]

1110. *pï'wa / *pïCCï (> *pïhï) 'fur, body hair': M67-212b *po 'hair of the body'; 212e *pe; 212c *po 'cut hair'; I.Num170 *pïhï 'feather, hair, fur, hide, skin'; L.Son207 *pïwa 'piel'; M88-pï11 'fur, hide'; KH/M06-pï11: Mn pïhï 'skin, hide, body hair, fur, down'; NP pïhï 'skin, hide, fur'; TSh pïhï 'skin'; Sh pïisi 'feather'; Cm pïhï-cahkwe'ya 'to skin an animal'; Kw pïhï-(m)bï 'fur, hide'; SP pï(h)ï-vi 'fur, hide'; SP pï(h)ïaa-vi 'hair'; CU pïi-'ah 'hide, skin'; Hp pïïkya 'hide, skin'; pïvïwpi 'eyelashes'; Cp pélki-š 'hide, skin'; Eu vewá-t 'pellejo'; My beewa 'piel, pellejo, corteza, cuero, cáscara'; Cr nya-ïpéé-si 'my cheeks'; Pl eewayu 'skin, peel, hide, bark, shell'; CN eewa-tl 'skin, hide, husk, rind'; Yq béa 'skin (of animal)'; the *-pï'a- in Ch tocí-vï'a-vï 'head-hair'; Kw toci-va'aa-vï 'head-hair'; toci-vïaa-vi 'head-hair'; CU tïcí-vïi-vi 'head-hair'; Cr nabih 'piel, cuero'; and NP -bbï'a 'bark, shell' as well as the other NP term. Another probable cluster with a variety of reductions, though we see perhaps a general pattern of SUA w and NUA h/', not unlike what we see in *po'wa above.

[NUA: Num, Hp; SUA: Cah, Opn, CrC, Azt]

- **1111.** *woC 'hair': M67-210 *wo; I.Num270 *woo(h) 'hair/head'; M88-wo6 'hair of the head'; KH/M06-wo6: Mn woo 'head, hair'; Mn wóópi / a-qwoopi 'hair of head'; NP kwo 'head, hair'; Tb(M) woodzon 'place where hair grows from, crown'; Tb(V) woodol 'the hair center on head, the tip of basket cap'. Mn -p- suggests gemination or a final -C on the 1st morpheme. [w > kw in WNum] [NUA: Num, Tb]
- 1112. *yuLV 'hair, head': M88-yu28; Munro.Cup59 *yúú-la 'hair of the head'; KH.NUA: Sr ayu' 'head, hair'; Cp yu-l 'hair'; -yu 'head, hair (poss'd)'; Ca yúluka-l, -yúluk'a (poss'd) 'head, hair'; Ls yúú-la, -yu' (poss'd) 'head, hair'. Jane Hill (p.c.) adds Cm yupusi'a 'head louse' (cf. *pusi'a 'louse'). Ls -la as absolutive suffix (vs. -l or -t) may well mean a final -L in the stem (Ls -la < *-L-ta), as in CN -li vs. usual -t(l) also showing a vowel after a liquid cluster, or that a liquid cluster encourages the final vowel to remain; otherwise, the word would end with two consonants which hardly happens in UA anywhere. So Ls and Ca may both show medial -L-, whatever the vowel may be afterwards, and Cm -p- (< *-pp-) suggests s.th. clustered with -p- as well. [Ls *-L-ta; Sr a- prefix] [NUA: Tak, Num]
- 1113. *yuwi 'hair, strand': Jane Hill (p.c.): Tb yuuwi-l 'string'; Hp yoowi('at) 'cornsilk, loose strands of fiber on edges of yucca leaves'. [NUA: Hp, Tb]
- 1114. *païki 'hair': Jane Hill (p.c.): SP païġi-vi 'hair'; WMU paaġi / paüġi / paiġi-vi 'hair'; WMU paiġi-n 'my hair'; CU páaġi-vi 'hair, when on the head'; CU páaġi-n 'my hair'. Note that WMU pronunciations have both the SP and CU pronunciations and more—such a prolific dialect. [NUA: SNum]

HALF, MIDDLE; MITAD, MEDIO

- **1115.** *nasipa 'half, middle': Tr nasípa 'half, middle'; Wr nasíba 'half, middle'; Hp naasa-ve(-q) / naasa-va(-qe) 'middle, center, halfway'; TSh nasikaka 'middle, between'. [NUA: Num, Hp; SUA: Trn]
- **1116.** *tipiNa 'middle': TSh tipiina 'middle, center, n; in the middle of'; Sh tipia 'middle'; Cm tipiinaati 'middle'. For the three CNum languages to show -ŋ-, -ø-, and -n- is unusual and may mean a cluster. [NUA: CNum]
- 1117. *nap(p)ay 'half': TSh napakan 'half, equal part, in half, even, equally'; Sh nappai 'half'; Kw na-voyo 'half'; Kw na-vee-tü-ika 'half of it'; SP navaia 'divide'; WMU naváy 'divide (in half)'; CU naváyi 'divide in half'; CU naváy-tï 'half'; Cf. Kw's V's in dove and water. [NUA: CNum, SNum]
- 1118. *ta'a(ko) 'middle, half': CN tla'ko 'middle, center, half'; Eu natáko 'en medio, mitad, medio'. If we have a compound *ta'a- + -ko 'at', then the latter part of Cr hé'ita'a 'centro, medio, mitad' shows the same three segments as CN tla'- (< *-ta'a-); and since *' > Ø in Tep, then the first part of NT táá úkami 'la mitad' may belong as well. [*' > Ø in Tep] [SUA: Tep, Opn, CrC, Azt]
- NB, Yq and My nasuku 'half' should be kept in mind. NB, for Tep *era, see in.

HAND, ARM; MANO, BRAZO

Mn	máya / ma"	Нр	ma; maqtö	Eu	mamát		
	ma- 'with the hand'	mapqölö 'hollow of hand'					
NP	mai	Tb	maa-l	Tbr	sutú-r		
		Sr	ma 'hand, arm, wing'	AYq	mam		
TSh	ma"; mo'o	Ktn	ma-c	Yq	mám(am) (pl)		
Sh	mo'o; ma"-	Ca	ma-l	My	mammam;		
Cm	mo'e	Cp	ma	Wr	seká		
		Ls	má-t	Tr	ma; seká		
Kw	mo'o-vi; ma-	TO	maawua; nowi; đag	Cr	mwáhka'a		
Ch	mo'ó-vï / mo'ó-pï; ma-	Nv	nov	Wc	maamá		
SP	mo'o/ma-/ma"-/man-	PYp	novi	CN	maa(i)-tl		
WMU	mö'ő-vi	NT	nóvi				
CU	mö'ő-vi	ST	nov '&arm'; saakum 'h	andful/fi	stful (of grain)'		

1119. *man > *ma 'hand': Sapir; VVH128; M67-215 *ma/*mo' 'hand'; I.Num90 ma(h), *mo'o 'hand'; BH.Cup *ma; L.Son126 *ma; CL.Azt76 *maa(y); Munro.Cup60 *ma-t; M88-ma13 'hand'; KH.NUA; KH/M06-ip11 'with the hand'; KH/M06-ma13 *maX (AMR): Mn, NP, TSh, Sh, Kw, Ch, SP, CU, Hp, Tb, Sr, Ca, Ls, Cp, TO, Eu, Tbr, Yq, My, Wr, Tr, Cr, Wc, CN. CNum and SNum show ma"-/man- as an instrumental prefix, but *mo'o 'hand' as the main word, which is prevalent in Num but no where else in UA. I reconstruct a probable 2nd consonant *n for these reasons: (1) some languages show *n, such as Eu man-vura- 'tie the hands' (vura 'tie'); SP man- 'with the hand'; SP mančuqqwi-n'na- 'crush with the hand' (< čuqqwi); Gb man 'hand'; and possibly Yq mankabam 'muscles of the arm'; (2) final gemination in Num languages suggests an underlying 2nd consonant, as well as the -t (vs. -l) in Ls ma-t; (3) as Kiowa-Tanoan is in UA's areal loaning sphere, then Kiowa-Tanoan *man 'hand' is noteworthy; (4) some forms hint at a 2nd consonant reducing/affecting clusters when compounded, e.g., Hp map-, the combining form of maa-; the *y in Mn, NP, CN; note NP mayu'i 'to warm hands up'; NP taddu'i 'warm foot up'; NP tu'i ddu'i 'try to warm up'; if *ma- were the stem, we would expect NP ma-tu'i or ma-du'i, not mayu'i 'warm hands up'; but for an underlying cluster (*-nt-), two alveolars, an alveolar proximate (y) as a reduction of the intensified alveolar cluster is plausible; (5) In Cahitan, Yq mam 'hand', mamam 'hands' and My mamma(m) 'hand(s)' may have an underlying nasal harmonized to the 1st and 3rd (plural) bilabial nasals: *mana-m > mama-m; (6) also note the number of UA words under *mani 'five' that show *n more clearly, if derived from 'hand', which seems probable; (7) note forms suggesting *-n-: *man-cu 'squeeze' and *man-cuka 'hold' at 'carry'; (8) AMR (*maX) also sees a 2nd C: (9) at 'crawl' *maN-wapa 'hand-crawl' suggests a nasal. [NUA: Tak, Num, Hp, Tb; SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]

1120. *nohopi > nopi 'hand, arm': B.Tep174 *novi 'hand', *noonóhovi 'hands'; M88-no8; KH/M06-no8: TO nowi 'hand, arm' (pl: noonhoi); PYp novi 'hand', pl nonovi; Nv novi, pl: nonovi; PB nov 'hand'; NT novi 'hand'; ST nov 'hand, arm'. The TO plural and Bascom's reconstruction of the plural and other forms suggest another consonant between n- and -v-. [SUA: Tep]

1121. *mo'o 'hand': all of CNum and SNum. [NUA: CNum, SNum]

1122. *sipwa / *cap(i)wa 'finger': WMU ta-sívwə-n 'my toes'; Mn masïwaki-na 'have fingers'; Cm masïwïhki'; Ch ma-sï; CU ma-sï; CU ma-sï; CU ma-sï; CU ma-sï; CU ma-sï; CU ma-sï; CV masikin /masikun; Sh masïki 'hand-leaf'); NT masááviga / masáágiga 'finger'. WMU and NT show the three consonants c/s, p, and w.

[C harmony in NT; reduction -vw- > v or w in Num] [NUA: Num; SUA: Tep]

1123. *na- 'with/by hand': Sh na- 'with the hand'; Hp(S) naap 'by hand, on foot'. [NUA: Num, Hp]

1124. *toC 'with the hand, instr. prefix': KH/M06-ip3: Mn to- 'with an instrument'; NP to- 'with fist, shoulder, hoof, tractor'; Sh to"- 'with the hand or fist, away from the body (instr. prefix)'. [NUA: Num]

1125. ***piya-mo'o** 'have clumsy hands, drop things': Kw piiya-mo'o 'clumsy, one who keeps dropping things'; WMU piiya-mö'ő-ġwa- 'have butterfingers, habitually drop things'. [NUA: SNum]

NB, for *caC- 'with the hand', see carry.

NB, for NT, Tr, Wr *sïka 'hand', see shoulder.

NB, for NT saakómi 'handful' and ST saakum 'handful' see *cakwa 'grasp' at carry.

HANG; COLGAR, (SUS)PENDER, AHORCAR

1126. *nawi (> Tep *nagi) 'hang': TO naggia 'hang'; PYp nagia 'hang'; PYp nagim 'hang, suspend, vt'; Nv nagia 'colgar'; NT nagíárai 'colgarlo'; NT nagííhï 'colgado'; ST nangia 'hang pl. obj's out of reach'. Cf. nawi 'skirt, apron' at 'clothing' as s.th. that hangs down? [SUA: Tep]

1127. *cuca 'hang': Eu čucá 'hang'; Wr cuhcá-ni 'hang, v'. [SUA: Trn, Opn]

1128. *yuLa 'hang': Ca yúlaa 'to hang'; Ls yóóra 'to swing, hang in the air'; we would expect the Ls vowel to be u also, but *u-a > o-a is frequent. [*u-a > o-a] [SUA: Tak]

1129. *ca'a/i 'hang': Sapir: TO ša'i-č(uð) 'hang, vt' (ša'i 'grass, brush, trash, n.); NT saagíihï colgado'; NT sáigiarai 'colgar, vt'; ST sai'čdya' 'colgar'; Yq kom-ča'arine 'be hanging' (kom 'down'); AYq ča'aka 'be hovering, hanging, leaning, vi'; AYq čaya 'tether it, hang it, vt'; My čaiya 'está colgandolos, vt'; My ča'aka 'está colgado'. [Tep ': TrC '] [SUA: Tep, Cah]

Of the same number, but different letters, with perhaps different prefixes to a stem *ca/wï-kwï(ni): 1130a. *cakwïni: Mn nacakweyuhi 'hang, vi'; NP caggwini 'to hang'; Cm ca'wenitï/cahkwenitï 'hang s.th. up (on nail/hook)'; Cm nacawenitï 'hang (suspended off ground), swing'. [NUA: Num] 1130b. *wï-kwïni Mn wïkweni 'hang up, vt'; TSh wïhweni 'to hang'. [NUA: Num] 1130c. *wïway (perhaps from < *wïL-kwï(ni) / kwa(n)i) 'hang, v' or not?): Ch wïwái 'to hang'; Ch(L) wayuwa-gah 'hangs down'; SP uŋwai 'hang, v'; WMU uuwáay'i / uwáay-y 'hang, vi/vt'; CU uwáay 'hang'; Ca wíway 'to hang'. [NUA: Num, Tak]

- 1131. *paL 'hang': Sr värävi'-k 'be hanging, vi'; Sr väräv-kin 'hang, vt'; Ktn varvark 'hanging, adj'; Ktn varavara'i 'hanging'; CN piloaa 'hang self/s.th./s.o., v.refl/t.'; CN pilwiaa 'hang s.th. up for s.o., vt'; CN pilka 'be hanging (pret. as present)'. An assimilation of V > i/_l/r is common in UA; thus, *paL... seems most probable. [*p > p in Azt?] [NUA: Tak; SUA: Azt]
- 1132. *haCCa 'hang': Hp haaya/hàaya 'hang up (sg obj), put in debt, extend credit to'; Ls háŋa/i 'hang (sg obj/subj), vt/vi'. The 2nd C may be a cluster reduction. Note at *ŋïL/ŋïy 'dizzy, faint' another ŋ/L/y mess. Not agreeing so well is SP uŋwai 'hang, v' but its mention may remotely prove useful. [ŋ/y] [NUA: Hp, Tak]
- 1133. *waLa 'suspended': Hp wilala-ta 'be sagging, hanging, dangling'; Kw warïru'u 'be upside down, hang, vi'; Kw warïru'u-tii 'hang, vt'; Kw warïmï-pï 'door' (what hangs?); and aligning with Hp in 3 of 4 segments is Tr wihamea 'estar colgado, suspendido'; Tr wihawa- 'colgar, suspender'. [NUA: Hp, Num; SUA: Trn]
- 1134. *kwuCCa / *kwuL(V)ta 'hang': Stubbs 1995-22: TO kuukta 'hanging shelf' (2nd k redupl?); Eu purúce / puríce 'hang, be pendulous' (if p < *b); Hp kolca 'shelf'; Tr otorinto 'hanging, suspended' and/or Tr o'há-/go'há-/wihá-mea 'hang, be pendulous'. Since the exuberance of youth, I now see this set as debatable, but parts show promise, and keeping it present to ponder may prove worthwhile should more decisive evidence emerge.

Happen: see arrive

HAPPY, JOY; FELIZ, CONTENTO, ALEGRE, GOZO, ALEGRARSE

1135. *paw 'happy, content': PYp vagmedi 'happy, content'; PYp vagam 'like, vt'; PYp vagmad 'would like, vt'; CN aawiya 'be happy, content'. $[*p > \emptyset \text{ in Azt}]$ [SUA: Tep, Azt]

1136. *haLay 'happy': Hp hàalay 'be happy, content, cheerful, enjoy oneself'; AYq allea 'happy'; My al-leiya 'está contento, está alegre'; My al-leewame 'gozo'; perhaps Tb yilaha-t~'iyilahaša 'be happy' with metathesis. [SUA: Cah; NUA: Hp, Tb]

1137. *tima 'happy': Cr rutémwa'abe 'to be happy'; Wc témáávie 'contento, alegre, feliz'. [SUA: CrC]

NB, for *suwaC 'want, like, be glad', see 'want'.

HARD (not soft), ROUGH; DURO, SÓLIDO, ENDURECER(SE), ÁSPERO

1138. *puta / *puCtu 'hard': KH.NUA; M88-pu22 'hard (to the touch)': Ls purápuriš 'hard (to the touch)'; Sr puču' 'hard, adj'; Sr puču' 'hard, a lot, very, fast, adv'; Ktn putu' 'hard, tough'; Ktn pucuk 'very, hard, firmly, fast'. In light of the medial affricate vs. liquid, this is a good candidate for medial *-Ct-. [* -Ct- > r/c] [NUA: Tak]

1139. *tak(w)awa(?) 'hard': CL.Azt79 *čika(awa)k 'hard, strong'; M88-ta20; M67-216 *takwa 'hard'; KH/M06-ta20: Kw cukkwa'ni 'be stiff, rigid'; SP takkwaia 'to stiffen'; CU cici-ke-ti 'hard, solid, difficult, tough, strict, mean'; CN čikaawak 's.th. strong, robust'; HN čikaawa-k 'hard'; Pl takwaawa-k 'hard, solid'. [palatalisations] [NUA: Num; SUA: Azt]

- **1140.** *kapa 'hard': TO kawk '(be) hard, solid, difficult, strict, callous'; PYp kavak 'hard'; NT kavááka 'es duro, codo para prestar'; ST kabak 'que es resistente, que es durable'. Ca qáw 'hard (of breast)' with -w- instead of -p-, possibly borrowed from Tep? [SUA: Tep; NUA: Tak?]
- **1141.** *kïttaN 'hard': TSh kïttaa(n) / kïttaampi 'hard, tough, strong, very really'; Sh kïttaa 'hard, strong'; Cm kïhtáatï 'strong, tight, hard'. [NUA: CNum]
- **1142.** *ci'i 'hard': Cr cé'ih 'hard'; Wc ce'íi 'hard, firm, fixed'; Eu zei/cei 'hard'; CU cici-kay 'be hard, tough, solid, strict, mean, difficult'. [NUA: Num; SUA: Opn, CrC]
- 1143. *pïwa 'hard': Wr pewá-ni 'to be hard'; Tr pewá-mea 'to harden'; perhaps Eu behí 'hard'. [SUA: Trn, Opn]
- 1144. *kopï 'hard': NP ohobï 'hard'; Cm koobetï 'be hard and brittle'. [*-k->-h-] [NUA: WNum, CNum]
- **1145.** *pacawa 'hard': PYp vasagim 'hard (e.g. like a rock)'; CN te-piicoaa 'harden s.th.' (Kartunnen suggests that te-= 'rock'). Three consonants align, though PYp shows a 2nd vowel that CN does not and CN appears to have assimilated the 1st vowel toward the alveolar consonant, or PYp may have anticipated. [SUA: Tep, Azt]
- 1146. *namaka 'hard': Yq námaka 'hard'; AYq namaka 'hard'; My namaka 'to be hard'. [SUA: Cah]

NB, what of Cp lawaláwa 'hard, tough' and Cr aurá'ura'aka'a 'to harden'?

Hare: see rabbit Harvest: see gather

HAT: SOMBRERO

- **1147. *ponamo** 'hat': B.Tep277 *vonamoi-i 'hat'; KH/M06-po27 'hat': TO wonami; LP vonom; PYp vonoma; NT vonámoi; ST vonaam. Consider Eu vónama('a) 'hat', perhaps a loan from Tep; similarly, Tb pongat 'cover, hat, lid' may contain s.th. like *poN(a), feasibly the first element of the Tep compound, as the latter part of Tep *vona-moi could be from *mo'o 'head'; thus, 'cover-head'. [NUA n: SUA n] [SUA: Tep, Opn; NUA: Tb]
- **1148. *yumu'** 'put on hat': BH.Cup *yumu 'put on hat'; M88-yu13 'hat'; moved to co6 in KH/M06-co6: Cp yúma 'wear on head, put on hat'; Cp yúma'at 'hat'; Ca yúmu' 'put on the head'; Ls yumú-'i- 'put on a hat'; Ls yúm-'pi-š 'basketry cap'. [NUA: Tak]
- **1149.** *mo'o-kaLi 'hat (head-house)': Tbr mo-ka-lí-t; Wr mo'kóri; Tr mokoyo-/mokoho-/mokoo- 'put on hat'; Tr mokoyóra/mokohóra/mokoora 'hat, head-wear'; Tr mo'ó head'; Tr moki 'encimar'; Cr muúku'u-ci 'hat'. [*L > ' in Cr, > y in Tr] [SUA: Trn, Tbr, CrC]
- **1150.** *mo'o-pïri 'hat (head-house)': Yq mó'obe'i; My mó'oberi. Cf. *mo'o 'head' and *pïCtï 'lie down' with a meaning 'house'. [SUA: Cah]
- 1151. *kaCcokoC 'hat': Sh kaicco 'hat'; Ch káicogo 'hat'; CU káa-cogó-pï 'hat'; and perhaps Tb kadzuudza 'cap (for the head)'. NUA *-c- is not from *c, unless clustered or compounded. Since UA does not typically have dipthongs, the form *kaico(ko) probably results from the vowel raising and fronting in anticipation of the alveolar c, a common influence of alveolars in UA. [NUA: Num, Tb]
- **1152.** *cappo / *coppo 'hat': TSh (siï)cappo'o 'hat'; Sh(C) coppo 'hat'; Mn copopó' 'basket cap, the traditional California Indian cap made of basketry'; Mn copopoyaa 'wear a basket cap'. This may be a loanword into UA. [NUA: Num]

Hatch: see bear Hate: see enemy Have: see possess Hawk: see eagle

HEAD; CABEZA

Mn	wóó; co"-; copígi 'brains'	Hp	qötö	Eu	conít; mo 'hair'
NP	dzopigi (< *coppiki)	Hp	kòopa 'crown'	Tbr	taí-r; mo-
	co'wïpaganu	Tb	či'igoo-l 'brain'		moi-ta-rá-n
	'headband'		comoo-l 'head hair'		'de la cabeza'
TSh	pampi	Sr	-şuu'	AYq	kova
	co"- (instr. pref.)		ayu'/-aiyu' 'head, hair'	Yq	kóba
Sh	paampi"	Ca	yúluka-l '&hair'	My	kobba
Cm	paapi/papi	Ls	yúú-la	Wr	mo'ó
Kw	toci-vï	Cp	yu	Tr	mo'ó
Ch	tocí	TO	gï'ijig; mo'o '&hair'	Cr	mu'ú
SP	tocci-vi	Nv	mo'o	Wc	mu'úu
CU	tïcí-vi	PYp	mo'o	CN	kwaai-tl
WMU	č <i>ih</i> ččí-vi	NT	móo; kuúpa '&hair'	CN	con-tekoma-tl
		ST	mo'; kuup '&hair'		'head, skull (hair-pot)'

1153. *mo'o 'head': Sapir; VVH134 *mo'o 'head'; M67-218 *mo'o; B.Tep152 mo'o; L.Son147 *mo'o; M88-mo1; KH/M06-mo1: Ls mée-la 'head of cattail rush'; TO; LP; PYp; NT; ST; Eu; Tbr; Wr; Tr; My mó'oberi 'sombrero (head-house)'; Cr; Wc. Add Yq mo'obe'i 'hat'; and Yq muteka 'pillow' fits a compound of the UA etymons *mo'o 'head' and *tïka 'put, lie', even though Yq itself does not have *mo'o for 'head'. [SUA: Tep, Trn, Opn, Tbr, CrC]

1154. *ku / *ku'o 'with the head, instr. prefix'; KH/M06-ip1: NP ko- 'with face'; Sh ku-; Pl ku- 'head (in compounds)'. Jane Hill (p.c.) adds Tb(H) ko'ohn 'head'. [NUA: Num, Tb; SUA: Azt]

Reflexes for 'head' show the three Numic subbranches nicely:

1155. WNum *coC- / *co"- 'head'; *co(-piki) 'head, brain': M88-co6; KH/M06-co6: Mn copigi 'brain(s)'; NP -dzopigi (< *coppiki) 'head, brain'; NP co'wïpaganu 'headband' and thus co'- 'head'. In the rest of Num are SP čo"- 'head'; TSh co"- 'head' (instrumental prefix); Sh(C) co"- 'with the head, instr prefix'; and Cm co'- is in compounds such as Cm co'nikarï 'put hat on, poke head into s.th.'. The compound *co"-piki seems to have been originally 'brain' or 'head-mucus' in light of *mu-piki 'mucus' and *mu 'nose'. Cm co'yaa' 'head of hair, hair', *co"-, an instrumental prefix 'with the head' in other Num languages, may point to *comi/*comya/*coni (at 'hair') as the origin of this prefix. [NUA: Num]

1156a. CNum *paNpi: I.Num138 *pampi 'head': M88-pa38; KH/M06-pa38: TSh pampi 'head, hair'; Sh pampin 'head, hair'; Cm pappi 'head (including face and hair)'.

1156b. SNum *paNpi'ni / ***paNpi'Cni** 'pot': Kw pabihni 'pot made of pottery'; Ch pámpin'i 'pot'; SP pampinni 'bucket, mud or clay basket with handle'; WMU papp<u>i</u>'ni 'pot, bucket'; CU papi'ni 'big pot, cauldron'. SNum *paNpi'ni 'pot' (Kw, Ch, SP, WMU, CU) ties to Central Numic *pampi 'head'. [NUA: CNum, SNum]

1157. SNum *toCci 'head': Kw toci-vü; Ch tocí; SP tocci-vi; WMU č*ih*ččí-vi 'head'; CU tüčí-vi. As in Kw pikaroci 'bald', the -rusi of Tr po-rusi 'bald' likely belongs here also. Notice *o > ï in CU's unaccented syllable and *o > i with palatalization of *t > č in WMU. SP and WMU actually show the doubled medial consonant, but all suggest underlying gemination; otherwise, we would see the lone *-t- > -r-, or *-c- > -y-. Might WNum *coC- be a palatalization of *toCc > *coC-? [NUA: SNum; SUA: Trn]

NB, for *wo (Mn wóó/qwoo-pi '(head) hair'; Tb woodzon/woodzol 'crown, place where hair grows from'), see hair.

NB, for *kuppa (Hp, NT, ST, Yq, My), see hair.

NB, for *kopa, see forehead.

NB, for *comya > *coni, see hair.

NB, for *yuL in Tak, see hair.

NB, for *katto 'top, head' see top.

HEAL, CURE, MEDICINE; SANAR, CURAR, REMEDIO

Miller has some of the same forms in both M88-hi4 and M88-yo6, as the assortment of forms is difficult; in fact, we may be dealing with related forms, some showing hi- prefixed to a *yowa stem.

1158a. *yowa / *yowLa 'cure': M88-yo6 'cure'; KH/M06-yo6: M67-116 *yo / *yowa / *yoya 'cure'; L.Son362 *yowa 'curar'; TO doa-jid; TO doa 'get well'; LP doa; NT duduáádyidyi, doá-di; ST duañdya, dodya; Wr i'óa 'take medicine'; Wr i'oé 'cure, vt'; Wr i'ói 'medicine'; Tr owí/owé- 'curar, invitar, perseguir'; Tr 'owáami 'medicine'; Wr hí'iyowa 'medicine'. To these we might add AYq yoore 'heal'; PYp do'a 'alive'; PYp do'a-lim 'be born, get well'; PYp do'a-r 'give birth'; PYp do'a-ter 'cure, vt'; and what are we to think of Tb dzowaa-l 'shaman'? Might PYp degevin(ad) 'cure, save, vt' be relevant in its showing the consonants *y-w-p? [SUA: Tep, Trn, Cah] 1158b. *hitowa 'medicine': M88-hi4 'medicine'; KH/M06-hi4; M67 has Trn as likely loans from Tep—Wr i'ói 'remedio'; TO i'ówi 'sweet, tasty'—but they belong above. Tbr hitoá-t 'medicina'; My híttua 'remedio'; Yq hítto 'curar'; Yq híttoa 'medicina'; AYq hittoa 'medicine'. [SUA: Cah, Tbr]

1159. *mayiw 'cure': M88-ma42 'to doctor s.o'; KH.NUA; KH/M06-ma42 'suck': Ca máyew; Ls mayíw; Sr maiñ 'to suck, as Shaman for curing'; Sr maiit 'cure, vt.' [NUA: Tak]

1160a. *puha 'supernatural power, medicine, healing power': M67-281 *pu 'medicine'; I.Num156 *puha 'power, medicine'; BH.Cup *púla 'doctor'; M88-pu10 'supernatural power'; Munro.Cup117 *púúhu-la 'shaman'; KH/M06-pu10: Mn puha 'supernatural power'; NP puha 'supernatural power'; TSh puha 'power'; Sh poha 'supernatural power'; Cm puha 'medicine, spiritual power'; Kw poha-vi/puha-vi 'poison, power'; Kw poha-ga(n)-dï 'evil shaman, witch, modern doctor'; SP pua / poa 'supernatural power'; CU puwa-vï 'medicine power, spiritual power'; Tb tïboohat 'to doctor, work at curing (usually animal)'; Tb tïboohanat 'apply medicine (to a person)'; Cp púu-l 'shaman'; Ca púu-l 'medicine man'; Ca púh-lu 'become a púul, perform first ceremony'; Ls púu-la 'shaman'; Hp powa 'supernatural power'; powaal-ti 'bec. cured'; Hp powa-ta 'cure, purify'; Miller also includes CN pa'-tli 'medicine'; CN ilwilti 'be deserving, worthy of s.th.' Add Wr puhé-na/ma 'cure, take sickness from (person), take load (from animal)'; Ch(L) puhwagantï 'doctor, shaman'; Ch(L) navuhwaganumpï 'medicine'. CU and Hp lost -h- then yielded to the natural excrescent -w- in the *u-a environment. Below is a semantic shift.

1160b. *puha 'poison': Stubbs2003-14: NT ivóíñai 'envenenar'; Kw poha-vi 'poison'; and the -wui- portion of TO hialwui 'poison, n'; and Ktn pahavit 'poison, dream helper' may be a vowel-assimilation (*u-a > a-a) or a loan from neighboring Kw with assimilation. [NUA: Num, Tak, Tb, Hp; SUA: Tep, Azt]

1161. *toŋa 'cure, administer to': BH.Cup *téŋ 'to doctor'; M88-to25 'to doctor'; KH/M06-to25: Cp tíŋele; Ca tíŋ'ay 'cure, doctor s.o.'; Ls téŋal 'to cure, doctor with herbs'; Ls téŋala-š 'medicine'; Ls téŋalka-t 'herb doctor'. Note the glottal stop in Ca, as if another consonant in a cluster is involved. [NUA: Tak]

1162. *sakwa/i 'heal, get better/good again': Tr sa'wí-mea 'aliviar, sanar, curar'; Wr sa'wi-ná/má 'get well, give birth'; Wr sa'wá-ni, sa'wa-má 'cure'; and Tbr -samw- 'curar'; and perhaps Kw matasukwi 'medicine'; NP caggwipï 'healed up'. Perhaps as a loan into Kiowa-Tanoan, cf. also Tewa sa'wo' 'good, beautiful'. [SUA: Trn, Tbr; NUA: Num]

HEAR, LISTEN; OIR, ESCUCHAR

Many words containing *-ka- may be related (in ways yet to be sorted out) and so are doubly listed in M88-ka11 and M88-na1; I divide them thus:

1163. *kaha/i 'hear': VVH126 *kahi/*kaha; M67-221 *ka 'hear'; B.Tep98 *kaï 'hear'; kai 'heard'; CL.Azt83 *kaki, 243 **kahi; M88-ka11; KH/M06-ka11; Tb ha'~'aaha'; Sr qävaač 'ear'; TO kaa, kai; LP kai; PYp kaara; NT kaï; ST kiï; ST kka; ST kaaya 'hear, obey'; ST kaidya 's.th. heard, s.o. who can hear'; My híkkaha; Yq híkka; Tr aké; CN kaki. Note the hi- prefix in the Cah languages and—consonant harmony in CN? [SUA: Tep, Cah; NUA: Tb, Tak]

1164. *kïpu 'hear': Stubbs 2003-34: Eu keivuwa-/keivúve 'escuchar'; Tr gipú 'oir, escuchar'; Wr kepú-na/ma 'oir'. What of Eu kéisive 'oido'? Eu ke 'oir' (perhaps an old preterite of *kïpu). Sr qävaač 'ear' is interesting (if < *kïpa...)? [SUA: Trn, Opn]

NB, for *nakka / *naNka 'hear' see at 'ear' as this is undoubtedly related to *nakka/*naNka 'ear' as many languages have the same word meaning both; in fact, the verb 'hear/listen' may be the original meaning and 'ear' a secondary meaning.

HEART; CORAZÓN

M	In	píyu	Нр	ïnaŋwa	Eu	hibés
N	P	bbiwï	Tb	suuna-l	Tbr	ara-ma-lí-r; ava-ma-lí-r
T	Sh	pihwïn	Sr	huun; Ktn huna-c	Yq	híapsi
\mathbf{S}	h	pihyïn	Ca	sún-il	My	suula; híapsi 'vida'
C	m	pihi(naboo')	Cp	şúun	Wr	sulá
K	W	pïhyï-pï	Ls	şún-la	Tr	surá; bisurá
C	h	piyï	TO	iibđag	Cr	sïéheniu'ukari
S	P	piyï"; piyï-ppi	Nv	hura-di; 'ibdïg	Wc	'iyáari
W	/MU	muġú / muġúa-vi	PYp	ibda	CN	yool-li
C	U	mugúa-vi	NT	úra; iibïdaga		
			ST	hur; 'iibda		

1165. *suna > SUA *suLa 'heart, inner part, seed': Sapir; VVH98 *sula 'heart'; M67-222a *sula 'heart'; B.Tep578 *hura 'heart, integral part'; I.Num184 *su(h)- 'prefix, with the mind, mentally'; BH.Cup *sún 'heart'; L.Son264 *sura 'corazón'; Munro.Cup63 *súúni-la 'heart'; KH.NUA; M88-su13; KH/M06-su13: Hp soona 'edible part of seed'; Hp son 'middle of'; Tb suunal 'heart, inside'; Cp; Ca; Ls; Gb súnar; Sr huun 'heart, inside, center'; Nv hura-di 'heart' (more the soul or spiritual/emotional heart); NT úra; ST hur; Wr; Tr; My; and Cr sïé is noteworthy, as Cr typically loses intervocalic liquids. Ken Hill adds Tbr sura-nyi 'con el corazón'. Let's also add Eu surát 'grano'; Eu sure 'granar'; Eu -súra 'dentro, entre'. Miller also includes several Num forms. I concur with TSh sun- 'with the mind, by feeling or sensing' and the like, but *sua" and *summay are separate sets: one being TSh sua 'think'; Sh sua" 'think'; Cm sua; SP šuai 'be glad' and the other is SP šummai 'have in mind'; CU sumay 'think of, have in mind'. TSh nasunwaci / nasuwaci 'forget' shows that such a suNa/suwa tie is possible; however, those Num forms should be separate for the following reasons: (1) though the Num forms lack only the 2nd consonant (*sua vs. *suna), note that Tb, Hp, and Tak (all the rest of NUA) show the n, yet Num lacks it; (2) Num also exhibits different semantics (see 'think'); (3) though this stem does not appear obviously in Numic 'heart' per se, it seems to be found in a few Numic compounds; it seems especially clear in NP sunammi 'think' and bisa sunammi 'happy' (< good-feel), where bisa means 'good'; note also TSh cao nasuηkwa'ah 'happy' < TSh cao 'good' + TSh nasunkwa'ah 'feel internally (whether emotionally or physically)'. It is found with nasalization in these Num languages, why not the others? Manaster Ramer (1996) suggested the šil- of CN šillaan-tli 'womb, belly' to be cognate and has since (AMR, p.c.) found additional evidence. He notes TO huD 'heart' (Mathiot) in addition to TO huDa 'side, particularly side of midriff' and cites Simeon's (1885) CN definition 'ventre, flanc, côté' similar to TO as well as CN šillan-kwauhti 'avoir mal au côté'. Perhaps typifying a verbal dimension of this may be Ca súnwe'-ma 'sad, poor'; Ca súnikat 'hard time, suffering'; Ca sun-sún'e-ika(t) 'one who is sad, poor'; Ca súnwe 'feel sorry for s.o.'; may suggest a verb 'suffer, be sad'; the differing s vs. s in Cp súun 'heart' and Cp súunvi 'feel sorry for' may mean differing stems or loans from Ca. Be that what it may, this widespread UA etymon is found in all branches of UA. Like Hp soona 'edible part of seed', Hp son 'middle of' in the 'seed' so also Eu surát 'grano, pepita'; Eu súra 'dentro, entre'; CN šiiloo-tl 'tender ear of green maiz before it solidifies' with the common final -a/-o alternation, but this CN term is also listed at 'corn'. Some languages show this "heart" dimension to be "knowing" as much as "feeling": e.g., Ca sun 'í'ive 'without one's heart, crazy' is without knowing rather than discouraged; and Ca sun táwas 'heart-lose, forget' also means 'losing the knowing' more than 'losing feeling'. [*-L->-'- in Cr; final -a/-o alternation]

[NUA: Num, Hp, Tb, Tak; SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]

1166. *'ikwiyawa / *'ikwiLawa 'heart': B.Tep308 *'iibiidaga 'soul, heart': TO; LP; PYp; NT; ST. [SUA: Tep]

1167. *pihwïC / *pihyïC 'heart': I.Num164 *pi(h)wï/*pi(h)yï heart; M88-pi19; KH/m06-pi19: Mn; NP; TSh; Sh; Cm; Kw; Ch; SP. [NUA: Num]

NB, for *hikwis 'live, heart, breathe', see breathe.

HEAVY; PESADO

na'nïkwï	Hp	pïtï;	Eu	bete'e-
nïnïkwi (Thornes, 148)	Tb	pïlïï'ït~'ïpïlïï'	Tbr	
pïtti(tïn)	Sr	pïţï'; Ktn pïčï'	Yq	béte'a 'pesar'
pïttïn	Ca	péle-ma; číki-ma	AYq	vette
pïhtï	Ls	wíma/i	My	bette
pita'a (-t- < *-tt-)	Cp	wíme; či'ínpiš	Wr	pehté-ni
pïtïya (-t- < *-tt-)	TO	weeč	Tr	be'té-re
	Nv	vïtï	Cr	tíhete 'pesa'
	PYp	veete	Wc	hée.té/hee.té
p <i>ïh</i> ttiye	NT	viiti	CN	etiya 'bec. heavy'
pïtíyay (-t- < *-tt-); 'aqxóy	ST	viit/vt	CN	etik 's.th. heavy'
	nïnïkwi (Thornes, 148) pïtti(tïn) pïttïn pïhtï pita'a (-t- < *-tt-) pïtïya (-t- < *-tt-)	nïnïkwi (Thornes, 148) Tb pïtti(tïn) Sr pïttïn Ca pïhtï Ls pita'a (-t- < *-tt-)	nïnïkwi (Thornes, 148) Tb pïlïi'ït~'ïpïlïi' pïtti(tïn) Sr pïţï'; Ktn pïčï' pïttïn Ca péle-ma; číki-ma pïhtï Ls wíma/i pita'a (-t- < *-tt-)	nïnïkwi (Thornes, 148) Tb pïliï'it~'ïpïliï' Tbr pïtti(tïn) Sr pïţï'; Ktn pïčï' Yq pïttïn Ca péle-ma; číki-ma AYq pïhtï Ls wíma/i My pita'a (-t- < *-tt-)

1168. *pïttï/*pïttiya/*pïttV'a '(be) heavy': VVH3 *pïutï 'heavy'; B.Tep294 *vïïtï 'heavy'; KH.NUA; M67-223 *pete 'heavy'; CL.Azt84 *ətiik 'heavy'; M88-pï1 'be heavy'; KH/M06-pï1: TSh; Sh; Cm; Kw; Ch; WM; CU; Hp; Tb; Sr; Ca; TO; LP; PYp; NT; ST; Eu; Yq; AYq; My; Wr; Tr; Cr; Wc; CN. This is one of the few proto stems that has survived through nearly the whole language family, except WNum and half of Takic. All of Num show *-ttwhile Tb and Ca show lenition of *-tt-> *-t-> -l-. WM, CU, and CN all point to *pïttiya, perhaps a fuller form; on the other hand, Sr (but not Sr pïtiït 'heavy thing'), Tb, Kw, Yq, Tr, and Eu all show glottal stop for a third consonant, perhaps *pïttï'a. [y/'; *p > h/ø in Azt/CrC; *-tt- > -l-] [NUA: Num, Tak, Tb, Hp; SUA: Tep, Trn, Cah, Opn, CrC, Azt]

1169. *wima 'heavy': Cp wime 'weigh, vt'; Cp wime-yaxe 'be heavy, vi'; Ls wima 'weigh, be heavy, be difficult, vi, weigh, vt'. [NUA: Tak]

1170. *nïkwï 'heavy': Mn, NP. [NUA: WNum]

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HEEL; TALÓN
PUA *tanapiCko / *tamukpi'-(ko) 'heel':
       tapiqó'
Mn
NP
       ddabbi
TSh
       tappinko'o(cci)
       tappikkon
Sh
Cm
       tapiko'
SP
       tampi"-(ppi)
       tappí- / taví-ppü 'heel, n'; taví-ppü-n / tappí-n 'my heel'
WMU
CU
Tb
       tanapi-t / Tb(H) tannappi-t
       ŕanígora: ŕaníkura
Tr
Eu
       tenúka
Wr
       talatémori
       tamukpi'
Sr
Ktn
       tïmupi-c
Thr
       teoó-r
TO
       čeemi
Nv
       tïma
PYp
       teema
My
       témpe'erim
       pémpe'im
Yq
Hp
Tep
       *tīkavo: UP čīkīwo; NT tīkávo; St tīkvo
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1171a. *tanappiC (Tb) > *tampiC / *tappiC (WNum, SNum) 'heel': M67-224 *tampi 'heel', 225 *tem 'heel'; M88-ta22'heel'; Stubbs2000b-40; KH/M06-ta22: Tb, Mn, NP, SP, WM, CU. [Tb, WNum, SNum]

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1171b. *taNpi(N)ko 'heel': TSh; Sh; Cm. [CNum]
1171c. *taNpiC > tempe'e- 'heel': My, Yq. *taNpiC > *tïmi below is also possible. [Cah]
1171d. *tïma/i 'heel': TO; PYp; Nv. See *taNpiC above.
1171e. *tanappiCko > *taniko 'heel': Eu tenúka and Tr ŕaníku-ra show a 2nd consonant n, and show the vowel shift/transposition. [NUA: Num, Tb; SUA: Tep, Cah, Trn, Opn]
1171f. *tïkapo 'heel': B.Tep240 *tïkavo 'heel': UP čĭkïwo; NT tīkávo; St tïkvo; TO čïkwo 'ankle'.[Tep]
1172a. *tamukpi 'heel': Sr, Ktn
1172b. *tïmo 'heel': Wr; Tbr [NUA: Tak; SUA: Trn, Tbr]
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The two groups above may or may not be related, so let's divide them thus for now. Parts of the sets demonstrate well some phenomena typical of UA: (1) cluster and syllable reductions; (2) vowel-line shift or transposition; and (3) consonant harmony. For example, the Cahitan words for 'heel'—My témpe'erim and Yq pémpe'im—yield a nice example of consonant harmony.

Tepiman *tikavo 'heel' (Bascom) may have metathesized the 2^{nd} and 3^{rd} consonants apparent in Numic *tappiko, as well as some vowels. But Tep's difficulties aside, the first four letters, consisting of Num, Tb, Cahitan *tempe, Tr, and Eu, seem more certainly related and from something like *tanappiCko, which would undoubtedly be a compound. Syncope of the 2^{nd} vowel of s.th. like Tb tanappi-t would create the cluster *np, which cluster appears in SP tampiC and My tempe'erim, after assimilation of the nasal (n > m) to the bilabial (p). In the Numic reflexes (*tappiko Mn, NP, TSh, Sh, Cm), a former cluster (*np) would also explain the existence of the stop p (< *-pp-) instead of the intervocalic spirantized -v-.

Heading the second large group, Sr tamukpi' and Ktn tïmupi-c appear to derive from s.th. much like Sr (*tamukpi'), as Ken Hill pointed out at a UA conference years ago. Ken Hill (p.c.) noted that Sr mukpi' 'nose' suggests *ta-mukpi' 'heel < foot-nose' as the likely source for Sr and Ktn (Ken Hill, p.c.), and Ktn -p- does show underlying gemination or a cluster. Wr and Tbr (*tïmo), similar through four segments and with the fourth being a round vowel, may be truncations of the same. Why TO and PYp, if related, changed the last vowel is available for discussion.

The middle of Hp kik-tön-si 'heel', that is, -tön- may be a vowel leveling and reduction of *tamu...>
*tomo > *tom > *-tön- with assimilation of the nasal to alveolar nasal adjacent to alveolar -s-. Ktn has two words for 'heel': besides the one discussed (timupi-c), Ktn kačua-č 'heel' has enough in common with Hp kiktönsi that they may both derive from the same archaic-compound. As *-kt- > -č- is exactly the kind of source we expect NUA -č- to come from, Hp kiktönsi (< *kVkto...) and Ktn kačua- (< *kVktu...) yield some resemblance, except for the instability of final segments in longer forms, a common weakenss in UA.

Returning to the first or *tanappiC(-ko) grouping, Mn and CNum show an extra syllable (-ko) not apparent in Tb, NP, and SNum; however, that syllable exists in the Tr alternate forms ranigora/ranikura and is hinted at in some others. Tr appears to have reduced the *np cluster to n, instead of -pp- as in Numic, or mp as in My and SP, but Tr does show a final *-ko/ku.

Another matter frequent in UA and exemplified in the first group is what could be called vowel-line shift or a sequence of vowels shifting in position relative to consonants. In Tr fanikura and Eu tenuka, the consonants match (*t-n-k) and the two forms have a similar string of vowels (i/e-u-a) as well, but the vowel sequence has shifted one slot relative to the consonants. Lest one doubt the frequency of this phenomenon in UA, consider other examples below:

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(a) Tr binói self (b) NT kihónali rainbow (c) Tr ŕanikura heel boné " Tr ginorá " Eu tenuka " Wr kenolá "
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It is also not impossible that *tamukpi' (2nd group) is the source of the first group: *tamukpi' > *tamkpi' > tampiC. With loss of 2nd vowel, which is very common in light of 1st and 3rd usually hogging the stress, the resulting cluster of 3 consonants could easily reduce to *-mp- as we see in the first group.

[NUA: Num, Hp, Tb, Tak; SUA: Opn, Trn, Cah, Tep]

Help: see do

HERE, THERE; AQUI, ALLÁ

1173. *aCkwV 'here': KH/M06-'a37: Sr ahkw 'here, to here'; Ktn ahkwïk 'here (or near?)'; Cp axwána 'therein'; Cp axwa'aw 'thereat'. Add Nv abï 'alli'; TO abai 'there close by facing this way'; Eu avide 'alli'; Hp angw (combining form -naqw) 'from there'. [NUA: Tak, Hp; SUA: Tep, Opn]

1174. *wa / *wa'a 'there': KH/M06-wa3: TO ga'a 'over there, up there facing toward'; TO gama(')i 'over there facing away'; Eu awát 'ahí'; Eu áwai 'por ahí'; Wr wa'á 'there'; Tr(H) wamí 'there'; Tr(L) wamína 'there'; Ny gaamu. Some forms have compounded with an initial m- morpheme. Note at 'alli" are Ny garhi, ami, gaamu'. [SUA: Tep, Trn, Opn]

1175. *ama(ni) 'there': AYq ama/aman(i) 'there (near speaker)'; PYp am(a) 'there'; Nv ami 'alli'; Nv imï 'alli'; Wc mána 'there'; Sr ama' (acc. amai; pl. a:m) 'that one, he, she, it'; CN -m 'locative'. The several Num forms resembling *ma.../*man... may belong with loss of the first vowel, as with Wc. [SUA: Tep, Cah, CrC, Azt; NUA: Tak, Num]

Heron: see crane Hiccough: see cough

HIDE; ESCONDER(SE), OCULTAR(SE)

1176. *ici / *i'ici-to 'hide': B.Tep344 *'i'isito 'hide'; M88-i12; KH/M06-i12: Pl iinaya 'hide'; TO ees 'stealth'; TO ču ees-k 'be a thief'; TO ees-to 'hide, v.t.p.'; UP 'ï'ïsto; NT ïïštyo; ST 'ï'ïštyo. Though Miller listed only Tep and Pl in this set, other forms certainly belong with each, whether they belong together or not; most notable are Eu ecí 'hidden, vi' and ecí-to 'hide, vt'; likewise, Hp ïi'ïyi 'steal, v.t.p., sneak off secretly, v.refl.'; the first three segments of Wr icipú-na 'esconderse'; Wr icikóa 'steal'; Tr čičípu 'esconderse' (consonant harmony), though the last 3 languages lack the -to morpheme for their inclusion in this compound. The first part (*i'rici-) of this verbal compound is the same stem as is found under 'steal'; cf. steal. [SUA: Tep, Trn, Opn; NUA: Hp]

1177. *ina 'hide': Pl iinaya 'hide, vt, v.refl.'; CN iinaaya 'hide, vt, v.refl.'. What of Tr čina 'esconderse'? [SUA: Azt]

1178. *nïηï 'hide': Ca néη 'to hide'; Cp néηe 'to hide'. [medial η] [NUA: Tak]

1179. *musi 'hide': Ch áága-musi 'hide, vi'; CU 'áaga-múusi 'hide, vi'; perhaps Sr miïy'/kin 'hide, vt'; and perhaps the -muu- portion of Eu ecmuume 'esconderse, pl'. [NUA: SNum]

1180. *a-ka 'stealthily': Ch áága-musi 'hide, vi'; Ch áága-wacï 'hide, v'; CU 'áaġa-múusi 'hide, vi'; CU 'áaġa-wací 'hide, deny, vt'; CU 'áaġa- 'secretly, stealthily, sneakily, quietly, in hiding, on the sly, adv'; SP aa- 'quietly, gradually'; WMU aaġa- 'quietly, slowly, gently, adv (usually combined)'; WMU aaġa- 'appáġa-y 'whisper, talk softly'. The SP form shows this to be a compound of SNum *aa-ka. [NUA: SNum]

1181. *'api 'hide, lie down': Cr abiíci'i 'escondido'; Wc 'avieta 'hide (claws/teeth)'. This may relate to Num *hapi 'lie down' since hiding often involves lying down or laying s.th. down. [SUA: CrC]

Hide, n: see hair and/or skin High: see up, long

HIP; CADERA; see also buttocks

1182. *hupa / *hupi 'hip': Hp hoovi 'area of the buttocks, thigh'; PYp upir 'hip, base, thigh'; Yq húbaria 'hip'; possibly Tb hooiwi-l 'anus'. The first 3 segments of the first 3 items align perfectly in 3 separate branches of UA no less; Tb could feasibly be a loan from Hp. Nonetheless, I posit a for the 2^{nd} vowel in light of Yq's a and the tendency of all vowels to rise and front in UA preceding frontal consonants. [NUA: Hp; SUA: Tep, Cah]

1183. *kaca-(pawï) 'hip': Tr kačá 'hueso de la cadera'; Wr kahcá 'cadera'; Cp kepáwe 'hip, poss'd'; Wc kwacápaï 'hip'. Tr and Wr are related, and Wc likely represents a compound, with its frequent labialization of so many things. Cp may match Wc, as *-c- > y in NUA, and if e < *ay: *kacapawï > kay(a)pawï > kepáwe. In fact, Cp -p- signifies a cluster, as easily *-yp- < *-cp-, as anything else. Huichol's final ï (<*u) may be left from the w of *kwacapawï. [CrC p-] [NUA: Tak; SUA: Trn, CrC]

1184. *ciyam(u) / *ciyaC 'hip': Mn ciyápï 'hip bone'; NP dzimu 'hip'; TSh ciappï / ciampï 'hips'; Sh ciam-pin/pï 'hip'; Kw čiya-vï 'hip'; Kw čiya-vi-pü 'wild rose'; SP ci'ampi 'wild-rose berry'; WMU či'ámpü 'hip'. Mn -p- and most forms suggest a 3rd C, perhaps m, as in NP. [NUA: Num]

1185. *mos 'buttocks, hips': Ca miš 'hip, thigh'; Wc šee-músi 'ano'; Ca and Wc agree perfectly with *mos, since *o > Ca i and *o > Wc u. While not semantically identical, 'buttocks' does often share a semantic overlap with both. Others not showing s could also be related, due to the questionable diachronic stability of s in UA. What of Tbr moú-r 'thigh, leg above the knee'; Tbr moó-r/maó-r 'cadera, faja, cincha'; Tr muyá(ra)/muara 'buttocks'; Wr muyá 'thigh'; Eu moríka 'thigh'? Eu r and Tr/Wr y may suggest medial r, whether of the same set as Ca and Wc or not. [NUA: Tak; SUA: Tbr, CrC]

NB, for *picco 'buttocks, hips', see buttocks. NB, for *pittuhu 'buttocks, hip', see buttocks. NB, for *tupul 'hip, buttocks', see buttocks.

HIT, FIGHT, BATTLE, WAR; PEGAR, PELEAR, LUCHAR, COMBATIR, GUERRA; see throw **1186a.** *pakkaC (AMR) / *pakki 'hit, kill': Sapir; M67-231 *pa 'hit'; M67-244 *paka/*paki 'kill'; I.Num130 pa'i 'hit'; I.Num145 *pehka / *pahka / *pahca 'kill, beat'; M88-pa26 'hit'; M88-pa27 'kill'; AMR 1993c * *pakkaC; KH.NUA; KH/M06-pa26: Mn toh-pakita 'hit with the fist'; Sh pai 'hit'; Cm pahi 'fall, be born, attack, sg.' (cognate? Miller queries; let's say probable for now); Cp páqe 'hit, slap'; Ca pákin 'tap, clap'; Ls páqa/i 'be pounded, pound' (cognate? Miller queries; yes, definitely); Ls páx 'make fun of'; Sr pagkin 'slap'; Tb pa'gat~'apa'giin 'hit, burst'; Tb(H) paa'kinat 'hit, vt'; Cr váh-sï 'hit (past perf)'. Add perhaps the -pa'i of Mn tabipa'i 'strike repeatedly'. From M88-pa27: Mn paca; NP paca; TSh pakkah; Sh pekka / paikka 'kill'; Cm pehka-; Kw paka 'kill, beat'; Kw na-paka- 'fight'; SP pahka 'kill, beat'; CU paqxay (< *pakkay) 'beat (hard), kill, butcher'; Cp páqe; Cr ra-hé'i-ka 'he is killing him'. Sapir also lists Cr héika 'töten, auslöschen'. As does Ken Hill, I combine M88-pa27 *paka/i 'kill' and M88-pa26 'hit'; forms overlap, common stems seem certain, even if with various other morphemes fused. For example, Sh pai 'hit' and Sh pekka/paikka 'kill' are different and Sh and Cr ra-hé'i-ka (Cr h < *p) may point to *pa'i 'hit' and *pa'i-ka 'kill' or *pahi (<*paki) 'hit' and *pakka 'kill', a gemination signifying a more intensive form of the verb. So undoubtedly, much sorting remains, but until s.o. has time to look at the matter closely, I simply continue the collection with possible additions. What of NP nadapagita'hu 'hit pl obj's'? Or does it tie to Hp táapa-k-na 'knock on, hammer on, pound on (once)'? NP and Hp both show medial *-pp- or *tappa(k). Below seems to be the identical stem, but with different meaning. 1186b. *pakkaC 'hurt': NP nipaga 'hurting'; NP nanipagadopi 'feel pain, be sick, v'; Kw pakagi'i 'sore, pain, ache'; Ch paká-nkï 'hurt'; CU paqxá-ki 'have pain, vi'. [-k- vs. -kk-] [NUA: Num, Tb, Tak; SUA: CrC]

1187. *kwippa 'hit': M88-pa26: NP kwiba 'hit, vt'; Kw kwippa 'hit, beat, whip'. Add CU kwípa 'hit, beat, whip'; CU kupáy 'hit on, beat on (with stick or instrument)'; SP qwippa 'hit, strike, throw, vt'; and Ch(L) kwipa- 'club, beat, v'. Though Miller had NP and Kw with *pakkaC 'hit' above, they seem a separate stem. A velarization of *wïpa 'whip'? Not necessarily probable. Kw, CU, SP, and Ch all show gemination of 2nd C. [NUA: Num]

1188. *co'na / *co'ni 'pound, hit': M67-232 *con 'hit'; L.Son39 *cona/*con-i 'abofetear'; M88-co1 'pound'; KH/M06-co1: TO şoni 'action of the hand or of s.th. held' (though usually of striking, we might list: TO şoni-kon 'strike, hit'; TO şoni-ak 'chop down'; TO şoni-čk-wua 'move s.th. by striking it'; TO şoni-hin 'to hammer'; TO şoni-win 'reduce to small bits by pounding'); Eu zóna/cóni 'moquetear, bofetear'; Wr co'na-ní/co'ni-má 'machacar'; Tr me'-čó-n-a 'machacar, clavar, remachar'; My cónna 'pegar con mano'. Miller also mentions Cr tyí'i-caana 'pick corn'; Cr súh-ca'an-i 'torn' (?, wrong vowel). We should add CN cocona 'strike s.o., beat s.th., play instrument'; and Tr co'ná / co'ni-mea 'punch, hit with hand'; Yq čóčona 'dar trancazos'; AYq čočona 'hit one'. This may tie to Num *to'na 'stab, hit'. [SUA: Tep, Trn, Cah, Azt]

1189. *cakku > *cokko 'pound, hit': M88-co1 'pound': NP coho 'pound, grind'; TSh cokkwe 'pound'; Kw coko (< *cokko) 'pound'; CU wəcokway 'whip, beat, pound'. Add WMU čahqqő-y 'pound, pound meat with a rock'; SP čaqqu 'pound meat with a small rock'; CU čüqxóy 'pound'; Kw did its frequent vowel leveling. I had thought that WMU čöhqqő-y / čohqqói-y / čühqqwéi-y 'pound, vt' were variant forms of the above, but in light of SP čuqqwi / čuġwi 'crush' (vs. SP čaqqu) and TSh cokkwe, do we have two forms *cukkwV and *cakku(i), or exceptional variations of one proto-form? [NUA: Num]

The following verb forms (die, pl subj; kill, pl obj) smack of an ergative flavor and unite a number of forms that seem to mean 'die, sleep, vi' or 'kill, fight, hit, vt' referring to pl subj's/obj's most of the time. *ko'ya or *ko'iya seem viable reconstructions.

1190a. *koy / *ko'(i)ya 'fight': B.Tep102 *kokodai 'he fights'; M88-ko30 'fight'; KH/M06-ko30: UP kokïda; LP kokda; NT kokódai; ST kookda; TO kokďa 'kill, pl obj's.'; and Miller combines B.Tep102 with CN ko'komooniaa 'strike s.th.' Whether the CN term belongs or not, most of the forms in M88-ko8 'die' probably do: 1190b. *ko'iya > *ko'ya; AMR *ko'yi 'die, pl subj; kill, pl obj.': VVH45 *koya 'to kill, pl'; B.Tep106a *kooda 'to kill pl obj's' and B.Tep106b *koi 'he killed pl. obj's'; M67-129a *koi 'die'; I.Num59 *ko'i 'kill, die, sleep'; KH.NUA; L.Son87 *ko 'morirse'; L.Son99 *koya, ko-i 'matar pl obj's'; M88-ko8 'die'; KH/M06-ko8 *ko'yi (AMR): Mn qoi 'kill pl obj's'; NP koi/koi'hu 'kill pl objs'; TSh ko'i 'die, pl subj's'; Sh koi" 'die, pl subj's'; Cm kooi 'die, pl subj's'; Kw ko'i 'kill pl obj's'; SP ko'i 'kill pl obj's, go to sleep, pl subj's; SP ako'i 'sleep, pl.'; CU ko'ay 'slaughter, kill en masse'; Ls qi'éé 'kill pl obj's'; Sr qö'ai 'die, be sick, vi pl'; Hp qöya 'kill pl obj's; TO koo'i 'die, pl'; TO kokđa 'kill, pl obj's' and the others from B.Tep102; LP koi 'he killed pl objs'; NT kooda 'kill pl obj's; ST kooda 'kill pl. obj's'; Eu koda 'kill pl. obj's'; Tr go'í-mea, go'ya-rï (pret.) 'kill pl obj's'; Wr ko'yá-ni, ko'-ma 'kill pl. obj's'; Wc kukúúya 'kill pl. obj's'; Wc kuuyáa 'war, warrior, kill' does belong, since Wc u < *o. Miller also includes similar forms such as TO ko' 'corpses'; Wc kúuye sick'; CN kokoaa 'sick, hurt, v.refl, hurt, vt'. Initial vowels, including Hp ö, Wc u, and all other o's, align well with PUA *o. Ls should show ei, but i-e happens, perhaps metathesis? Medially we are dealing with a cluster, perhaps -'y-. Note the evidence of y in Eu, Wc, Hp, NT, ST, Wr, Tr go'yá/go'í. Without the final vowel (a), y > i is expectable: *ko'ya > ko'y > ko'i. However, the PYp forms may be the most telling: PYp ko'ida 'kill pl obj's'; PYp ko'id 'kill (pret.)'. AMR includes this set in his article "A Northern UA sound law: *-c-> -y-," wherein he reconstructs *ko'yi 'to kill (pl obj', with which I quite agree, though I would adjust the final vowel to a in light of its presence in Hp, Tr, Wr, Wc, and much of Tep. As for overlap with 'sleep', AMR's sound law *-c- > NUA y might merge *koci and *ko'i/*ko'y(a) in NUA, but many SUA languages show that a distinction is warranted: Tr/Wr ko'ya/ko'i 'die, kill' vs. Tr/Wr koci 'sleep' and Tep *koda 'kill' vs. Tep koso 'sleep'. Sr qö'ai (< *ko'ay) and UP kokïda could indicate a 2nd vowel of a—*ko'aya—easily assimilating to i before y or syncopating, both of which we see often. Next is a compound of this stem. [NUA: Tak, Num, Hp; SUA: Tep, Trn, Opn, CrC]

1191. *na-ko'(i)y(a) 'fight, i.e., hit/kill each other': NP nakoi; Hp naaqöy-ta; Eu nákoda / náhoda; Tr nakó-; Wr nakó-; Tb noŋooyï 'wrestle'; Cp náŋiš (Ca i < *o). Note that NP, Hp, Eu, Cp, Tr, Wr and Tb all quite agree with *nakoy (reciprocal *na-, even if fossilized in cases). We might add Kw nonogo'i / nonogwi'i 'fight' and CU nako-ko'ay 'fight'. The Tep languages above show the *koy syllable also, since Tep d < *y. The reciprocal of *ko'ya sets the later segments further from initial position, so they tend to reduce more, thus (na-)koy < *ko'ya is actually remarkable preservation for non-initial syllables in UA. Notice also the nasalization of the velar in Tb and Cp, perhaps from nasalization in the environment from initial *na-. [*ko > qo > qi/qe Cup] [NUA: Num, Tak, Hp, Tb; SUA: Tep, Trn, Opn, CrC, Azt]

1192. *namu / *naN... 'fight': KH.NUA notes Sr naam 'fight' and Cp nánavu, pret: nawvi 'fight'. Ktn namu 'fight' matches Sr. [NUA: Tak]

1193. *toka (< *tuka ?) 'hit': Sh toko/tuka 'hit, push'; Sh(C) -tokoh / -tukuh 'push, punch'; Yq tókta 'abuse'; perhaps Cm toh- in Cm tohpa'itï 'hit with fist, slap, punch'and Cm tohci'arï 'hit with fist' could fit either these or the predominance of Num forms in *to'na above, which is why *to'na (< *tok-na) and *toka may be related. [*u-a > o-a > o-o] [NUA: Num; SUA: Cah]

- 1194. *(na-)pitVNkV 'fight, v': Mn pidïkï 'fight'; Mn nanna-pidïkï 'fight one another'; TSh napitïŋkïn / napitiŋkïn 'fight'; Sh napitinka" 'to fight'; Cm nabitïkïrï 'war, battle'; Tb paandïgït 'fight'. WNum and CNum *na-pitïkï and Tb *patïkï appear related, showing nasalizations in different places.

 [nasal anticipation] [NUA: Num, Tb]
- **1195.** *na-yawi 'fight': Hp naayawi 'fight'; Tb 'aanaayuw-ït~naayuw 'fight'; CN yaaoo-tla 'make war'; CN yaaoo-tl 'enemy'. Hp and Tb have a fossilized *na- prefix that CN does not. [NUA: Hp, Tb; SUA: Azt]
- 1196. *kappica 'clap, slap': NT kapííšai 'manotear, darle guantadas'; ST kapiasa 'clap hands'. [SUA: Tep]
- **1197.** *toppa 'hit': Mn topagida 'hit with a fist, v'; NP topaci'i 'hit with fist'; Cm tohpa'itï 'hit with fist, slap with palm of hand, punch'. All languages show gemination of *-pp-. Cm is also listed at *tuka above. [NUA: Num]
- **1198.** *puk 'hit, bump': Ca -vuk- 'hit s.o. with a stick'; Ca -pux- 'knock, bump, hit'; Cp púxe 'to dash against'. [NUA: Tak]
- **1199.** *ko'osa 'hit': Cr raatakú'uste 'hit it' (Cr u < *o); AYq ko'okosa hoa 'injure, beat, hit, strike'; My kó'okosa'a yáwwa-k 'le golpeó'; My kó'okosa'a yaanake 'le va a golpear'. [SUA: Cah, CrC]
- **1200.** *poŋa 'hit, pound': M88-po7; KH.NUA; KH/M06-po7: Cp píŋe 'knock on, knock around'; Ca píŋ 'get ground, pulverized'; Ls péŋa/i 'throw, be thrown'; Gb perá 'machucar'; Sr pööŋ 'pound'; Ktn poŋ 'hit with the fist'; Hp pöŋöŋöta 'be making knocking or rapping sounds'; Hp pöŋö-k-na 'knock on, give a knock or sharp peck'; AYq poona 'knock'; Yq pónne 'machacar'; My póona 'hit, touch'; and My popona 'martillar (hit/pound with a hammer). See *piŋV forms at grind. Note that all of NUA has medial -ŋ- (except Gb) and all of SUA has -n-. [NUA: Tak, Hp; SUA: Cah]
- **1201.** *mo'ta 'hit, hit against': Wr mo'ta 'tocar, topetear, chocar, de dos cosas [touch, collide, of two things]'; CN mootla 'stone s.o., throw a rock at'. [SUA: Trn, Azt]
- **1202.** *Lawi 'flick (with a finger)': Ca láwin 'flick with a finger (watermelon, head, etc.)'; Cp láwe 'flick with fingers, vt'. [NUA: Tak]
- NB, TrC *pipa 'throw' results from consonant harmony, from *tipa 'throw, hit'.
- NB, for *tapa/tapi 'throw, hit', see throw.
- NB, for *wipa, see whip.
- NB, for Takic *maaxi-š 'acorn flour', see grind.
- NB, for *to'na 'pierce, stab, hit', see at cut.

Hold: see carry

- **HOLE; AGUJERO, ABERTURA, HOYO, CAVIDAD, PERFORACION:** see also dig and cut **1203.** *to'o / *toC 'hole': Mn tó'o 'hole in the ground'; Mn totaagi 'make hole in s.th.'; Mn ataagín 'hole'; NP toopi 'animal hole'; NP kammï ddo 'rabbit hole' (kammï 'rabbit'); NP totawaga 'to make a hole with drill'; Kw to'o 'to be a hole'. The 2nd consonants (-t-, -p-) suggest a cluster. [NUA: Num]
- **1204.** *(hoC)-pakka 'hole': Kw hopa-ki 'to be a hole, hollow'; Ch hopáki-cï/pï 'hole'; CU paká-kï 'hole'; CU wəpága-či 'hole'; SP o-ppakki/o-ppagi 'be a hole.'; and perhaps Sh tïppïki 'dig a hole' and/or Eu tapakdaa 'rajarse' but Eu tapána 'rajar' makes the Eu forms less likely. [ho/wV/o] [NUA: Num]
- **1205.** *takuwa (> takowo) 'concavity, low place where things collect or gravitate to, place where a lot of s.th. is': as in *taa-takuwa 'tooth?-place/collection, sump, stand of (teeth?)': TO taatko 'jaw' and NT taatákugai 'jaw'. Similarly for *maC-takuwa 'palm of hand, hand-concavity' are Eu máckora (*-t-> --c-) 'palma de la mano' and Tbr ma-tako-rá-n / ma-tako-lí-r 'palma de la mano'. Hp mapqölö 'palm of hand' lost first syllable as also Hp qölö 'hole in the ground, pit' and Hp qöl|ö 'expanse of, place where there is a lot of, stand of, patch or cluster of' ((ta)kowo < *takuwa). [SUA: Tep, Tbr, Cah; NUA: Hp]

NB, for *yïwa 'hole, opening' see close.

NB, for *puk 'door, hole' see close

NB, for Ca tékiš, see cave.

NB, for *ho(ta), see dig.

Honey: see sweet

HORN, ANTLER; CUERNO, ASTA

Mn	'áwa	Hp	aala	Eu	húsiwa/húsi'iwa
NP	aa	Tb	'aawa-t	Tbr	hamoá-t
TSh	'awa"; aama(ppï)	Sr	ää'	Yq	'áawa
Sh	aan; oonon	Ca	'áwa-l	My	aáwa-m
Cm	aamuyake'	Ls	'ááw	Wr	awá
Kw	'aa-pï	Cp	áw'a	Tr	awá
Ch	'aapï	Gb	a'á'an	Cr	e'ewá; hawá
SP	a'aa''-ppï	TO	a'ag	Wc	'aawaa
WMU	áá-ppï	PYP	a'ag	CN	kwaa-kwaw(i)-tl 'head-tree'
CU	'áa-pï	NT	aagá-dï	CN	a'wa-tl 'thorn'
	_	ST	aaa		

1206. *awaC / *a'awaC 'horn': Sapir; VVH104 *'awa 'horn'; M67-235 *'awa 'horn'; M88-'a5 'horn'; I.Num6 *awah/awaN; L.Son8 *'awa 'cuerno'; KH.NUA; KH/M06-'a5: Sapir lists Cr awá 'have horns'. This is one of the classic cognate sets, not only because it appears in every UA language (except possibly Eu), but it nicely shows Hp *l* and Tepiman *g* corresponding to *w. Miller lists CN a'wa-tl 'long, slender thorn' (many glottal stops in other forms), but KH/M06 does not. Or what of CN aawa-tl 'oak' (antler-looking branches?) or CN aawa-tl 'caterpillar' (horned insect) as possibly related to UA *'awa 'horn'? Also noteworthy is that most of the Num languages and Tb suggest a final consonant. [*w > Hp 1 / Tep g] [NUA: Tak, Num, Tb, Hp; SUA: Tep, Trn, Cah, Tbr, CrC, Azt]

Horned toad: see lizard

HOT; CALIENTE, HACE CALOR; see also fever, summer, spring, sun

1207. *toŋa 'hot, heat (of) sun/day, shine': VVH155 *toŋa-la 'to shine, sun'; B.Tep224 *toni 'hot'; B.Tep226 *tonori 'sunshine'; M67-238a; L.Son312 *tono/*ton-i 'hervirse'; CL.Azt163 *toonal 'sun', 272 **tona 'shine (sun)'; KH.NUA; M88-to6 'sun, shine, boil'; M88-to21 'hot'; KH/M06-to6 (Ken Hill aptly combines M88-to6 and M88-to21): Cp tíŋe 'be hot'; Ca tíŋma 'warm'; Sr tööŋava' '(in the) summer'; TO toni 'be hot'; TO tonoD 'shine, twinkle'; TO tonoliđ 'shine onto, give light to'; NT tonóli 'sunshine; ST tanooly; ST tanoolyiop 'in the sun'; Wr tono/toni 'hervir'; Tr ronó 'hervir, fermentarse'; Eu tonó 'be hot, boil'; Tbr tonó 'be hot'; CN toonal-li 'warmth of the sun, summertime, day'; Pl tuunal 'sun'; HN toonal 'day'. Ken Hill adds Hp tööŋi 'heat, hot weather, heat of the day'; Ls itéŋvu 'hot spring'. Let's also add Ktn toŋava' 'August, summer' and/or Ktn tuŋava' 'June, July'; Nv tonorho 'for sun to shine'; PYp toin 'hot'; PYp tono 'hot'; NT tóñi 'hot'; ST tyoiñ 'hot'; Pl tutuuni-k 'hot, heat (of sun)'; HN toona' 'to shine (of sun)'. Note vowel opposition between ST tanoly 'day' and CN toonal-li. [Ls -vu] [NUA: Tak, Hp; SUA: Tep, Tbr, Opn, Azt]

1208a. *řtř 'hot' (NUA): M88-ï11 'hot'; M67-236 *ete 'hot'; I.Num26 *řtř(h) '(be) hot'; L.Son26 *'uru 'hacer calor'; KH.NUA; KH/M06-ï11: Mn ïdï'ï; NP ïdřtř (<*ïtřtří); TSh ïtři-; Sh ïtři-; Sh ïtři-; Tb 'iïdři'-ït~'ïidři'; Hp ïtřhři'; Sr ïţï; Gb 'oró'. Hill adds Ch arři 'it's hot' and WSh ïtřin. Note also Ch(L) arřh / arřirh 'it burns! Ouch!' (said only of heat pain); WMU arůü 'hot! Ouch, it's hot!'; Kw 'atüü 'ouch!'; SP atturooci 'hot (of water)'.

1208b. *utu 'hot' (SUA): Eu urúe- 'hacer calor'; Eu urúce- 'tener calor'; Op uru; Tr uurí 'tierra caliente'.

[NUA ï = SUA u] [NUA: Tak, Num, Hp, Tb; SUA: Trn, Opn]

1209. *suka 'to heat, be hot (weather)': M67-237 *suk 'hot'; BH.Cup səx 'to heat'; B.Tep80 *huukada-i 'to heat, warm up'; L.Son262 *suka 'estar caliente'; M88-su11 'hot'; KH/M06-su11: Sr hu'a-i 'burn, vi' (hwi'v 'fut'; hwa'qa' 'immed fut'; huuhu' 'perf'); Sr maahua'n 'burn, vt'; Sr hu'ku'q 'be warm'; Eu sukáe-n 'caliente'; Eu súkra 'calentars'; Eu súkre 'calentarse'; Op sukkara; My súkka 'está caliente'; AYq suka/sukkai 'warm'; Tr sukáre 'calentarse'; Wc šïkáa 'caliente'; Cr šïká 'sun'; Cr wa-šïka 'be hot (weather)'; NT uukádyi; ST huukad; TO huukaji; LP hukd. Add Nv 'ukadida 'calentar, vt'; Nv 'ukagï 'calentarse a la lumbre'. These may well relate to the forms at *soka 'cook, heat water' (KH/M06-so15: Cp síxnine 'cook'; Ls şééxa 'simmer'; etc) considering *suka > *soka, the latter underlying the Cupan forms. [Tak x = TrC k, as in two, etc; *u-a > o-a > Ls e] [SUA: Tep, Trn, Cah, Opn, CrC]

1210. *yu'mi / *yuwmi 'warm': M67-453 *yu 'warm'; I.Num293 *yu'a/*yu'i 'warm'; M88-yu9 'warm'; KH/M06-yu9: Mn yuwi 'be warm, v'; NP yui; Sh yuai warm; Cm yu'a 'warm (of weather)'; SP yuuttui 'warm'; SP yu'mi 'warm (of water)'; yu'ata (of weather); Hp yoni 'be warm'. Hp and SP both suggest that we may be dealing with a medial cluster rather than a single consonant. [cluster] [NUA: Num, Hp]

1211. *kuttutu 'hot': Ch kutúci 'hot'; Ch kutúcaa 'hot'; CU kïtúruuci 'be hot, be feverish'; WMU quhttúruuči 'hot, be hot, have a fever'; Kw kutuu-vü 'charcoal'; Kw kutuunuhi 'make fire with a drill'; SP qwattürooci 'be warm (of inanim obj's)'. Might these SNum terms and TrC *utu be related? (Note Eu urúce-'tener calor' listed above with *utu.) With prefixed *ku(t) 'fire' or s.th. like Mn ku 'with heat', we arrive near *kuttutu, or is *kuttutu a medial reduplication of *kutuci? [NUA: SNum]

1212a. *tu'i; *ta-tu'i (> *taru'i) 'hot': Kw taru'i 'to be hot'; Ch tarú'i 'hot'; CU tarí'i 'be hot weather, be hot place'; NP tu'i ddu'i 'try to warm up' may suggest a compound in the others: *ta-tu'i. The TrC forms below likely share a morpheme.

1212b. *tatta 'hot': My tatta 'hace calor'; Yq táta 'hot'; AYq tatale 'feel hot'; Wr tahtáni 'to be hot'; Tr a'tará- 'to be hot'; Tr ratá-ame 'caliente, cálido'. [NUA: Num; SUA: Trn, Cah]

NB, whether related to anything else or not, an excellent example of consonant harmony are the three Tr variants: Tr rata-góbutu/gógutu/bobutu 'have a fever'.

HOUSE, HOME; CASA, HOGAR

Mn	nóbi	Hp	ki-/kiihï	Eu	kit/kíit; saamikit 'de adobe'
NP	nobi	Tb	hanii-l	Tbr	ki-tá; kalí; kalí-n 'pueblo'
		Ktn	ki-c	Yq	hó'a; kári
TSh	kahni	Sr	kii-č	AYq	ho'ara 'village'
Sh	kahni	Ca	kí-š	My	káari
Cm	kahni	Ls	kíí-ča	Wr	karí
Kw	kahni	Cp	kí-š	Tr ga	nrí; bete-či; gunogori (of logs=gu)
Ch	kaní	TO	kii; B: wa'akii	Cr	či'í
SP	kanni, kaní	Nv	ki	Wc	kíi; kíekári 'pueblo'
		PYp	kii;		kíekáme 'resident'
			oidiaga 'village'		'iisápárii 'jaula del techo'
WMU	kaní	NT	kíí; vááki	CN	kal-li; čaan-tli;
CU	káni	ST	kii; kiam; va'aak/vaaak		ša'kal-li 'thatched house'

1213. *kanni (NUA) / *kaLi (SUA) 'house': Sapir; VVH141 *kali; M67-239 *kali; I.Num53 *kahni; L.Son74 *kari; M88-ka6 'house'; KH/M06-ka6: NP kani (archaic form); TSh; Sh; Cm; Kw; SP; CU; Tb hanii-l; Ca qáankiš 'desert willow (possibly as housing material plant)'; Hp qeni 'place, room, space'; Wr; Tr; My; Yq; CN. To these can be added Tbr kalí-n 'pueblo'. [*n > L in SUA; *k > h in Tb] [NUA: Num, Tb; SUA: Trn, Cah, Tbr, Azt]

1214a. *kiC 'house': Sapir; VVH44 *ki; M67-240 *ki; BH.Cup *kica; B.Tep100 *kii; L.Son80 *ki; M88-ki1 'house'; Munro.Cup64; KH.NUA; KH/M06-ki1: Miller lists the above forms of the Takic, Tepiman, Hopi, and Corachol languages in Wc kíi; Cr čí'i. [*k > c/_i in Cr] [NUA: Hp, Tak; SUA: Tep, Opn, Tbr, Cah, CrC]

- **1214b.** *ki-tu / *ki-ta 'build a house': KH.NUA: Sr kiiču' 'build a house'; Ls kííču; Ca kíču 'dwell'; Hp kiita 'build a house'. [NUA: Tak, Hp; SUA: Opn, Tbr]
- **1215.** *pa'aki 'house': B.Tep265 *va'akii 'house'; M88-pa55 'house'; KH/M06-pa55,65 'rain house': TO wa'aki 'ceremonial house, fort'; NT vááki; ST va'aak. [SUA: Tep]
- 1216. *nopiC < *no'piC / *no'opiC 'house': Mn nobi 'house'; NP nobe 'house'; TSh noppoi-cci 'habitat, home, nest on ground'; Sh nanopi-ppï / nonopi-ppï 'windbreak, lightly made wikiup with rounded top'. Cf. CNum *no'opi 'mountain top' at mountain. I had suspected that WNum *nopi 'house' is from a 'mound-like' term, as pit-houses look like mounds on the landscape, then found the CNum terms that mean 'mountain top'. In SNum is SP novi 'put bark over' and SP novi-ppï 'bark covering, windbreak' that is mound-looking and used as a temporary house when traveling, as well as Kw novi-pï 'windbreak, n'. Note also WMU nööppi 'blankets, bedding, camping place, one's stuff in a pile or place'. And compare Mn nobitu 'build a house' and NP nobidïga 'to camp, v'. So the term is in each branch, but with different meanings. Mn nobi 'house' and Mn nobiha 'pack, bundle up, vt' as well as Mn noo 'carry, pack, haul' and Cm noo- 'hill, knoll, hauling' and others, all suggest a relationship between *nooC 'carry/haul one's stuff' to campsite as in WMU nööppi 'blankets, bedding, camping place, one's stuff in a pile or place' and *nopi 'make windbreak, wikiup, campsite, camp pile of stuff' (temporary house) and *no'o(vi) 'hill' (mound or pile or pithouse). [NUA: WNum, CNum, SNum]

1217. *can 'house': CL.Azt85 *čaan; M88-ca14; KH/M06-ca14: CN čaan-tli; Pl -čan; Po -čan; T čon-tlI; Z -čaan. [SUA: Azt]

NB, *pïCtï / *pïtu 'lie down, be situated at, pl; spend the night, v; house, n' and *pa(i)yüC > *pïC- 'go home' are at 'lie (down)'.

Howl: see shout

HUG, EMBRACE; ABRAZAR, DAR BRAZOS: see also carry (in arms)

1218. *maLkocowa 'hug': CN malkočoaa 'hug, carry'; Tr nakoči 'lazar, abrazar'. CN malkočoaa and Tr nakoči are interesting in that initial m/n variation occurs in Tr (cf. bat, scorpion) and l appears in other CN terms, though lost in other UA languages (cf. root, etc.), and final vowels are often reduced to i (the UA schwa equivalent seeming to be ï and i); given those considerations, the Tr form is tied to the CN form. [for m vs. n, see also scorpion, bat; l vs. ø see root, sinew] [SUA: Trn, Azt]

NB, for Tak *kwalma and Tep/TrC *koom 'hug, carry in arms', see carry.

HUMMINGBIRD; PICAFLOR, CHUPARROSA, COLIBRÍ

1219. *tu'ca / *tuCti 'hummingbird': M88-tu24 'hummingbird'; Munro.Cup165 *túúči-l 'humming-bird'; KH/M06-tu24: Cp túči-ly; Ca túčily; Ls túš-ma-l; Hp tòoca / to'ca. Add the first two syllables of Cr tiïcika'i- 'hummingbird', which agrees perfectly with *tuci (Cr ï < *u), as do the Takic languages; and since Hp o <*u, then Hp also agrees in three segments *tuc, but may suggest a cluster, as does the very existence of NUA -c-, and Hp has a different final vowel. [*-CC-] [NUA: Hp, Tak; SUA: CrC]

- **1220.** *muttanaC 'hummingbird': M88-mu20 'hummingbird'; KH/M06-mu20: TSh muutu(n)anci / muuttuwancih; Sh(M) muttihnaaci, mottuhnaaci 'hummingbird'; Kw muutana-pi-ži < *muuttana-ppi-či; SP mu(h)N (cf. mooa 'to hum'); CU múutata-či (< *muu-ttattaa-ci); Tb muutnapiiči. To those, add WMU muuttatta-či / muuttappa-či / múuttaqqa-či / múúttattaav(w)üči 'hummingbird'. The t's and p's in Num and Tb (instead of r/l and b/v) all suggest consonant clusters. [NUA: Num, Tb]
- **1221.** *sï'moci 'hummingbird': Wr se'móci 'chuparrosa, colibrí'; Tr semučí / simučí 'chuparrosa, colibrí'; NP soŋoi'i 'hummingbird' matches TrC *sï'muci fairly well: *-c- > y/i is apparent; and if the glottal stop plus m (-'m-) signify an underlying cluster (perhaps *-'m-, -km-, or some velar-like C with the bilablial nasal), then the velar nasal of NP soŋoi'i represents well that cluster; and NP's 2nd and 3rd vowels agree fairly well with Tr and Wr, the 1st perhaps assimilating to the 2nd: * ï-o-i > o-o-i. [cluster] [NUA: Num; SUA: Trn]

- **1222.** *sïma-Luku 'hummingbird': My sema-lúuku; AYq semalulukut. Note that *sï'moci and *sïma-Luku share *sï_mV. [SUA: Cah]
- **1223. *piti** 'hummingbird': Mn pisikuutú'; Sr pitiidi' 'hummingbird (may be from Spanish pitirre 'gray kingbird' notes Hill)'; TO wipismal; PYp vipisi; NT pipííši 'hummingbird, wasp'; ST vipiiš; and the latter part of Tb muutnapiiči; and CN wiicil-in agrees in all except the initial consonant, which might be blamed on Tep, but then why would not the second consonant also agree with Tep if borrowed therefrom? Hill queries whether Sr pitiidi' is from Spanish *pitirre* 'gray kingbird'. What of Ktn pituru' 'hummingbird'. Sr or Ktn notwithstanding, in other languages we may have *piti > *pici > pisi (in Tep); the fact that Mn does not show NUA *-y- < *c may also suggest a medial consonant of *t instead of *c, since often Tepiman s < *c < *t. [*t > c > s in Tep; p/w in CN] [NUA: Num, Tb; SUA: Tep, Azt]

HUNGRY, HUNGER; HAMBRE, HAMBRIENTO

- **1224.** *kwisuwimu 'be hungry': B.Tep7 *bihugimu 'be hungry'; M88-kwi16; KH/M06-kwi16: TO bihugim; LP bihigim; NT biúúgimu/giúúgimu; ST biu'/bio. Add PYp bihi; Nv vihugimu; Nv vihugiga 'hambre'. Note consonant harmony in NT. [C harmony in NT] [SUA: Tep]
- **1225.** *hakwi 'hungry': KH.NUA; M88-ha14 'be hungry': Cp hákwiqa 'be hungry'; Ls hákw-la- 'be hungry'; Ls hákw-muwiš 'hungry'; Sr hakwaan 'be/get hungry'; Ktn hakwaču'. Note also Wc háakákwiikate / háakwiikwíkate 'hungry, pl. adj.' with Tak, all showing *hakwi-. [NUA: Tak; SUA: CrC]
- **1226.** *wi'Lopa 'hungry': Wr wi'lóba 'get bent, be hungry between meals'; Wr wi'ló- 'bend, fold, lack strength'; Tr erowá-ma 'tener hambre'; Tr ero-če 'make other(s) hungry'; Tr erówa-ri 'hambre'; Tr eloí 'hambre'. [ï/i; p > w in Tr; Liq] [SUA: Trn]
- **1227.** *tapa 'hunger/hungry': Stubbs2003-6: the -rava in Eu hisúmrava/hisúmava/hisúmawa 'hambre, n'; Yq tebáure / tebáoli 'tener hambre'; AYq tevauri 'hungry, adj'; Ayq tevaure 'be hungry, v'; My téba'ure 'tiene hambre'. If the -rava portion of the Eu form is cognate, then a cluster reduction (-mr- > -m-) is visible, and an unaccented vowel changing from a > e, the UA schwa. Whether the Eu form is cognate or not, the Cah forms certainly are. [unaccented V change; cluster; p/v > w in Eu] [SUA: Cah, Opn]
- 1228a. *coLowa / *coLwa (< *cVLVwa) 'be hungry': Stubbs2003-5: Wr coloá-ni 'be hungry' (Wr co'-cóla-ni 'be hungry, pl'); Hp cöŋö-w(ï), cöŋ- 'hunger' (< *coLwa). Wr coloá- and Hp cöŋö- match fairly well, since Hp ö < *o, and a cluster of *-lw- > -ŋ- in Hp is natural enough. Note also Tr čiriwísa 'tener hambre' (the same 3 consonants are apparent—c, L, w) if we allow for two alveolars causing V's > i in Tr and the labial w causing V's > o in Wr and Hp. This may tie to *coLo 'wither, shrivel' (see at dry). [Liq; V > i in Tr like at *(hi)paca 'sweep']
 1228b. *coLo / *co'Lo 'wither/arrugarse': L.Son 044 *coro/cor-i 'arrugarse'; M88co11 'wrinkle'; KH/M06co11 'wither/arrugarse': Eu corópe- (pret. ~pi, fut. ~ce); Tr čo'ró 'marchitarse [whither, shrivel]'; My čóori/čooli 'arrugado'. Add ST šo'lyik 'encogido'; ST so'lyka' encoger, vt'; Nv sorhona 'arrugar'; pl: sosorhka / sososka; PYp soron 'wrinkle'. What of the -su'u- portion of Cr rasú'uta'ihina 'lo pliega' belong, since * -L- > -'- in Cr, and *o > Cr u? A 3rd C may explain what became the anticipated glottal stop in Tr and ST. CN šoločoaa 'fold, wrinkle' likely belongs, whether a loan (from Tep?) or another c/s dichotomy. [-r- > -'- in Cr]
 [NUA: Hp; SUA: Tep, Trn, Cah, Opn, CrC, Azt]
- **1229.** *ciha 'hungry': Mn cihaya'i 'to be hungry'; NP pazia'hu 'hungry'; TSh cia-tiyai 'starve, be hungry'; TSh cia-ko'i 'starve, be hungry'; Cm cihasuarï 'hunger, have an appetite'; Cm cihasi'apï 'hungry person'. [NUA: Num]
- **1230.** *tiki 'hungry': Kw tigi-ye'e 'be hungry'; Ch tigi-'iva 'lack, hunger, n'; Ch tigi-'i 'need, lack, v'; CU tigií-pi 'hunger'; CU tigií-narú'ay 'be hungry'. [NUA: Num]
- **1231.** *suma 'hungry': Stubbs2003-15: Eu hisúmrava 'hambre, n'; Eu hisúme 'haber hambre'; Eu hisúm-ce 'tener hambre'; ST uama 'die of hunger'. *suma > Tep (h)uma > ST uama anticipating the final vowel. If < *suw(V)ma, this, with a prefix, may tie to *-suwimu above. [Tep anticipates V after next C] [SUA: Tep, Opn]

1232. *sawa 'fast, v': CN sawa 'to fast, abstain'; Tr mosawa-ma 'ayunar [fast], v'. [SUA: Trn, Azt]

HUNT, FOLLOW, CHASE; CAZAR, SEGUIR, PERSEGUIR

1233. *'amu 'hunt': M67-242 *'amu 'hunt'; BH.Cup *'amu 'hunt'; L.Son3 *'amu 'cazar'; M88-'a8 'hunt'; KH/M06-'a8 *amu: Cp ámu 'hunt, v'; Ca 'ámu 'hunt, vi/vt'; Ls 'áámu/'ááma 'hunt small game, v'; Eu amú 'cazar'; Op hamu; Yq 'aamu; My aamu; Tr amí/ama 'buscar'; Wr we'mó; Tbr himwa. Add CN aami 'go hunting', whose i aligns with *u. $[N \ i < *u]$ [NUA: Tak; SUA: Trn, Cah, Opn, Tbr, Azt]

1234. *tippi 'hunt, follow, track': BH.Cup *təpi 'to track'; M88-ti25; KH.NUA; KH/M06-ti25 'hunt, cazar': Cp tepíne 'follow, track'; Ca tépin 'track, vt'; Ca tépin-če 'trip, cause to stumble'; Ls tópi 'to track'; Sr tipiñi'k 'stumble, trip'. Note underlying *-pp- (vs. *-p- > -v-) in all languages. [NUA: Tak]

1235. *tiho / *ti-ho'a 'hunt': I.Num236 *ti(ho) 'go hunting'; M88-ti25; KH/M06-ti25: NP tihoawai 'hunt'; Sh tihoi ≈ tikai" 'hunt'; Cm tihoi 'go hunting'; perhaps Tb tohat~'otoh 'hunt'. NP tihoawai 'hunt' and Cm ho'aiti 'hunt' may suggest a *ti- prefix. [NUA: Num]

1236. *tuna 'herd, chase': Ken Hill (p.c. 2004), KH/M06-tu29: Hp toona-m(ï) 'herd, flock, members of a group, right of assembly'; Sr tuunin(a-) 'chase' (contains causative suffix, Hill notes). These might tie to the Num *tïnna 'hunt, chase' forms. [NUA: Hp, Tak]

1237. *oya 'follow': B.Tep316a *'oida-i 'to follow', 316b *'oi 'he followed'; B.Tep318; M88-'o7; KH/M06-'o7: TO oid; LP oiji; PYp oi; NT oidyi; ST 'oidya. Ken Hill adds Wr oi-ná/má 'andar'; Tbr ona-on- 'andar, arrastrarse, nadir'. [SUA: Tep, Trn]

1238. *caya 'follow': B.Tep186 *saada, prêt: *sai 'to herd cattle': TO šaad 'herd, drive a herd of (animals), chase away (an animal)'; NT saadá; NT saadáigi 'arrear [urge, spur, hurry]'; ST saada. [SUA: Tep]

1239. *yahi 'hunt, v': Ch yáhi 'hunt'; Kw tiiyahe 'hunt'. [NUA: SNum]

NB, for *nimi 'walk around, follow', see go.

NB, for *tinna 'run, chase, hunt', see at go.

NB, Tbr wi-pia 'follow' is likely borrowed from Tep; cf. TO wia / wipi'a 'hunt, stalk'.

NB, might we think on *timo 'search for' and *amu 'hunt' and tiho 'hunt'?

Hurry: see go

Hurt: see pain, sore, hit

HUSBAND; ESPOSO, MARIDO

Mn	kúwa	Нр	kooŋ ^y a	Eu	kúnwa
NP	guma	Τb	kuuŋa	Tbr	son-e-ká-m 'wife-haver'
TSh	kuhma(cci)	Sr	wöčahav	AYq	kuuna
Sh	kuhma/kuha	Ca	wél'isew-ily	My	kuuna
Cm	kumahpï'	Ls	kúúŋ; tó'ma-vu	Wr	kuná
Kw	kuhma	Cp	kúŋ	Tr	kuná(ra)/guná(ra)
Ch	kumá	TO	kun	Cr	kïï´n
SP	kumma	LP	kun	Wc	kïna
WM	piwá	NT	kúna	CN(RJ	(C) siwawa, okič-tli
CU	piwá	ST	kun		

1240. *kuNa / *kumCa / *kuCma 'husband': Sapir; VVH97 *kuŋa 'husband'; B.Tep121a *kuna 'husband'; B.Tep121b *kunadï ' her husband'; B.Tep122 *kunatai 'take a husband'; M67-504a/b *kuna / *kuma 'husband'; I.Num66 *ku(h)ma 'husband, male'; L.Son107 *kuna 'marido'; M88-ku2 'husband'; KH/M06-ku2. In addition to

the above, Hill and Miller rightly have also Ca kúŋlu 'propose to marry (of woman)' and Cp kúŋvuwə-t 'bride, married woman' and such. All Numic languages have a form like *kuma, that generally means both 'husband' and 'male', though in WMU and CU the common form for 'husband' is piwá, yet kumma 'male' exists also; one can see a slight semantic shift as the SNum languages spread eastward:

SP kumma 'male, husband' SP piŋwá 'wife, spouse'

CU kumáa-vi 'male animal, stud, macho' CU piwá 'spouse, husband, wife'

Hp, Tb, and Tak show reflexes with a velar nasal: *kuŋa vs. Num *kumCa. Then all SUA reflexes have *kuna. The fact that nearly all UA languages have a term, but only vary in the type of nasal—bilabial in Num; velar in Hp, Tb, Tak; alveolar in SUA—suggests that we are dealing with a one proto-form, and that the medial consonant represents a cluster involving a nasal. Hp -ŋy-, Mn w vs. m of the rest of Num, and ŋ vs. n all suggest a clustered nasal. The latter syllables of CU maróġumay 'create, v' may be a related verb. [medial nasal] [NUA: Num, Hp, Tb, Tak; SUA: Tep, Trn, Cah, Opn, CrC]

Ice: see cold and snow Immerse: see sink and wash

IN, INSIDE, ENTER; EN, (A)DENTRO, ENTRAR

1241. *paca 'put in/meter/encerrar': B.Tep254 *vaasa 'to put into' and *vai 'he put into'; M88-pa4 'put in, enclose'; KH/M06-pa4: LP vaaša; NT váása; ST vaasa; Wr pahcá; Tr bač-á 'meter, encerrar, encarcelar'; My kibáca 'meter'. Add PYp vaasa 'insert'; and perhaps TO waša 'covered basket' (that one puts things into). What of CU pacá'ay 'be stuck (on)' and CU pacá'ni 'be stuck (to)'? It should have -y-, not -c-, unless a cluster or other explanation arises; besides, the CU semantics is not exact either, though plausible if the phonology matched better. [SUA: Tep, Trn, Cah]

1242a. *pakiC (AMR) 'enter': VVH2 *paski 'to enter'; M67-159 *paki 'enter'; L.Son186 *paki 'entrar'; B.Tep261 *vakai 'he enters', *vaki 'to enter', and *vaa 'he entered'; I.Num136 *paki 'stick, go'; KH.NUA; M88-pa5 'enter'; KH/M06-pa5 *pakiC (AMR): Cp paxí-š 'party, group of lineages who join together for ceremonial purposes'; Ca páx 'enter'; Gb pakó 'entrar'; Sr pakiïnin 'invite'; Hp paki 'enter, initiated, set (sun)'; TO waak / waaki 'enter, sink in'; LP vaki; NT vakí; ST vaki; Nv pakï 'enter, sg'; Eu vaké/baké; Wr pahki; Tr baki-mea; My kibake; AYq kivake; Wc haa; CN aki 'enter, fit in'. Miller also includes the following Num forms, which often involve other prefixes, but most are pausible by a semantic tie between 'enter, sink into' and 'stick (in), be stuck'; the semantic tie with 'go' is less tenable, though not impossible, but I put them at go:

1242b. *pakiC 'stick, go': M88-pa5; I.Num136 *paki 'stick, go'; KH/M06-pa5: Mn cappa'ni 'to stick, get stuck'; NP wïppakitta 'to beat'; Sh cappaki 'be stuck'; Kw čaki 'be stuck'. The SNum *pakay 'walk, go' forms are at go. [*p > CN ø; Gb o < *ĭ] [NUA: Num, Hp, Tak; SUA: Tep, Trn, Cah, Opn, CrC, Azt]

1243. *'ïrapa 'inside': B.Tep336 *'ïrava 'inside'; M88-ï15; KH/M06-ï15: TO eDa 'the insides or interior'; TO eDawi 'in the middle of'; TO eDawek 'intestines, insides'; TO eDawi-ko (Saxton)/ eDavko (Mathiot) 'halfway'; LP 'ïrav; PYp era; PYp erava 'middle'; NT ïráva; ST 'ïrvan. [Liq] [SUA: Tep]

1244a. *cutupa / *cuLupa 'put in, go in': KH.NUA; M88-cu20; KH/M06-cu20: Cp čúlupe-ine 'push in'; Cp čúlupe-yaxe 'go in, sg'; Ls čulúpa/i 'be inside, v.i., put inside, vt'; Sr čurup|q 'enter'. [NUA: Tak] 1244b. *cuLuLu 'go in': Kw cununu-ki- 'to enter'; NP cunua 'enter'; perhaps Cp súlule- 'to go in, push in, pl'. And what of Eu cárawa 'dentro, entre'? The latter maybe's are not counted. [NUA: Num]

1245. *mu / *mo 'enter': L.Son151 *mu, mo-i 'entrar (pl.subj)'; M88-mo6; KH/M06-mo6: Eu múume; Wr mo'i; Tr mo'í. *mo'a 'put in': Wr mo'á-ni / mo'a-má 'encerrar, meter pl objs'; Tr mo'á 'meter, encerrar'. [SUA: Trn, Opn]

1246. *-naka 'in': Mn wa'niga 'put one's arm into'; Ch -naga 'in'; CU -naga 'in, inside'; SP naġa 'put on (clothing)'; SP -'niġi/'nikki 'stick in'; WMU -'núga-y 'put in, stick in'; WMU čü-'núga-y 'čü-'núga-y 'stick it in, plug it in'; WMU pačéy-av ta'núga-y 'put shoes on, put foot in shoe'; WMU taá'i-av ta'núga-y 'put clothes on'. [NUA: Num]

1247. *wak(w)i/uC 'enter, pl': TSh weeki" 'enter, go in, down or under'; Sh waiku" 'to go in, to enter'; Cm wekwiitï 'enter'; CU waqxáy-k 'enter, come in'. [NUA: Num]

1248. *aka-pa 'among, between': Mn -áġa / -'aqa; SP -aġa-va; CU -aġá-va. Missing the first vowel are Sh kapa(n); Sh(GL) gaba. This could tie to *ika 'enter' at 'sunset'. [NUA: Num]

NB, for *ika 'enter' see at 'sunset'.

NB, for *pani / *pana 'pull, lead, bring in', see at 'pull'.

NB, for *pa/*pï 'at, in, on' see at 'at'.

NB, for *kwo 'in', see at 'at': Sapir; CN -k/-ko; My/Yq -bo/po; TO ko; SP -qu- 'when, while, at'?

Infection/infected: see rot Injure/injury: see sore

In-law: see son-in-law, relative Insect: see bug, ant, spider, worm, etc.

Intelligent: see know Intestines: see defecate Invite: see name

Itch: see touch

Jackrabbit: see immediately after rabbit

Jar: see pot Jaw: see mouth Jealous: see angry Juice: see soup or water

JUMP, LEAP, SKIP; SALTAR, BRINCAR; see also fly, run

1249. *puCca/i / *puCta 'jump': Stubbs2003-13: Cp púčaqe/pučáqe 'jump, vi'; Ca pe-púčaq 'jump'; Eu hapóca 'brincar, corcovear'; Tr počí- 'saltar, brincar'; Tr hibóči- 'ir a saltos, v freq'; Tr o'poči 'freq and emph of počí-ma'. Sh pocci 'hop, v' and Sh poppi 'hop, v' suggest a cluster. That or -tt- which would exclude this from AMR's rule *-c-> NUA -y-. Also Cm pohbitī/popitī 'jump, v'. [NUA u vs. SUA o] [NUA: Tak, Num; SUA: Trn, Opn]

1250. wïppuki 'jump': Mn wïbïki 'jump, vi'; Ch wïpúki (< *wïppúki) 'jump'. [*u > ï] [NUA: Num]

1251. *takwani NP na-daggwini-ga 'hop'; CN cikwini 'jump'; and what of TSh yotikkwan 'jump, get up, fly up, take off'? [NUA: Num; SUA: Azt]

1252. *coŋa 'jump': Stubbs2003-27: Ca číŋay 'hop'; Cr ticúna'i 'jump!'; Wc cúniiya 'gotear, saltar'. These match well, since *o > Ca i, and *o > CrC u and NUA η: SUA n. [NUA: Tak; SUA: CrC]

1253. *tuya 'jump': NT tudáákïi 'jump, land, alight'; ST tudak 'jump, pres.'; ST tunnia/tun (pret.); NT toáál / tuáál dadáïjyi / dadáïyi 'jump'. However, PYp tukdai'im 'jump' and Tep *da'a (< *ya'a) 'fly, jump' may suggest the matter is more complex. [SUA: Tep]

NB, for *yutti 'jump, bounce' (M88- yu1), see at 'fly, v' where M88-yu1 is combined with *yïtti (sg), yotti (pl) 'fly, jump' (M88- yï12).

Juniper: see cedar

KICK: PATEAR

1254. *cïŋï 'kick': M88-cï15; KH.NUA; KH/M06- cï15: Cp čéŋe; Ca čéŋen; Sr čiŋkin(a) 'kick, stamp on, v'. Ken Hill adds Ktn čiŋk 'kick, v'. [medial ŋ] [NUA: Tak]

1255. *taŋa / *taN(k)a 'kick': VVH156 *tauna 'to kick'; M88-ta44: Tb 'andan (perf taŋ); SP taŋa; NP taŋa'hu 'sting, kick'. Miller assumes $\eta < nk$, listing NP tanka'hu for NP tana'hu, but since many things reduce to η , that should not be assumed. A palatalization by high vowel (*ta > *cï) could easily unite Num and Tb *tana and Tak *cïnï above. [medial η] [NUA: Num, Tb]

KIDNEY; RIÑON

Mn	mabáhi	Hp	k ^y elevosna	Eu	cikúr
NP	ddakipona	Tb		Tbr	tutusí-r
TSh	takkippono	Sr	pöv	Yq	sikúpur/liam
Sh	takkip(p)oon	Ca	pípiviskun	AYq	sikupuriam
Cm	ta'ki'	Ls	tákalak-may	My	sikipuriam (pl.)
Kw	piši-po'o-bï	Cp	pipivisqa	Wr	cihkipúni
Ch		TO	olopaj	Tr	komá 'kidney, ball'
SP	kani-N	PYp	kuplida	Cr	múhume
WM	pïsá-pöö-vi	LP	nakagibukadi	Wc	muumé
CU	pïsá-pö'ö′-pï	NT		CN(RJC) kw	ritlapan ateu'tli, nekoktentekatl,
		ST	riñonis (< Spanish))	yoyomok-tli wel

1256. *taCkiC- 'kidney': NP, TSh, Sh, Cm, Ls (reduplicated). [NUA: Num, Tak]

1257. *sikuC 'kidney' may have Eu cikúr as its only isolated form. For the -kun (less likely -skun) of Ca pípiviskun, see at *poposoka below. Nonetheless, *sikun does compound as *sikuC-puLiya 'kidney': PYp, Yq, AYq, My, and Wr combine *sikun/ciki and *puliya to yield *sikupuliya, which explains both TrC *sikupulia and PYp kuplida, with syncope of the 2nd u and loss of initial hi- (<*si-) in the latter. TO olopaj might be a metathesis to s.th. near *kulipaD, for which loss of initial k- and vowel leveling occurred in the first: *kulipaD / kolipaD > olopaj (TO). [c/s] [SUA: Tep, Trn, Cah, Opn; NUA: Tak]

1258a. *puL(n)i / *pusna 'kidney': Beginning with Wr -puni as compared to Cah -puli, we either have an unusual l:n behavior in SUA or we might have a cluster of s.th. like *-pulni to yield both -puli and -puni in Cah. Actually, *pulni fits Hp posna with devoicing of l > s, since Hp o < *u.

[Hp final a: i in others; l:n; for *l > Hp s, see also rotten and fall] [NUA: Hp; SUA: Trn, Cah]

1258b. *(po)poposoka 'kidney, liver': KH.NUA: Ca pípiviskun 'kidney'; Cp pípivisqa 'liver and kidney' (Jane Hill, pc); Sr pöv 'kidney'. Add Ktn povo-c and Xoxocotla Nahuatl poposoktli 'liver' (Suárez 1986) and Tetelcingo Nahuatl (Suárez 1986) iipoposok 'liver'. The etymology of Ca pípiviskun is given as probably from pipivis 'vomit' + kun 'bag', but not certain. The match of other *poposo forms may suggest otherwise, but I am not certain. The -s-in Ca may be part of *sikun, or may belong the other direction as in the -posna portion of Hp, though we would expect Hp ö. The astonishing and lengthy alignment between the Nahuatl dialects and the Cupan languages is worth noting. [NUA: Tak; SUA: Azt]

1259. *kaLi 'kidney': SP qaniN-, qanimpi 'kidney'; k^yele- portion of Hp k^yelevosna 'kidney'; Ls tákalak-may 'kidney' perhaps with prefix ta-, but probably not Ktn kanïm 'gall'. [L:n; vowel leveling] [NUA: Num, Hp, Tak]

1260. *pisaC-po'oN 'kidney': Kw piši-po'o-bï; WMU p*ih*sáp'ö-p*i / pih*ssáppö'ö-p*i / p*ösaap'ö 'kidney, n'; CU pïsá-pö'ö-pï. For intervocalic PUA *-p-, Kw normally shows -v-, but -p- < *-Cp- and -b- < *-Np-. All forms show gemination at the end of both morphemes. [NUA: SNum]

1261. *mohomï 'kidney': Cr, Wc. CN(RJC) yoyomok-tli wel 'kidney (testicle-big)' may share a morpheme. [CrC u < *o] [SUA: CrC]

KILL; **MATAR**; see also hit, die

Both M88-mi3 and M88-mi4 overlap with some of the same forms (relating to M67-128, especially M67-128d *mek/*me 'die') and a few *mukki forms, but the *mikka forms belong here at 'kill' while *mukki forms belong at 'die'.

1262. *mïCka / *mïkka (> *mï'a) 'kill': VVH85 *mï'a 'to kill'; L.Son144 *mï'a; BH.Cup *məq 'kill'; B.Tep153 *mua 'he killed'; CL.Azt94 *mïktia; M88-mï3; AMR 1993c *mïkka'; KH.NUA; KH/M06-mï3: Tb mï'gat; Cp meqe; Ca mékan/méqa; Gb moká; Ls móknu / mókna / móqna; Ktn mïk 'kill, hit'; TO mï'a/mï'i/mïa'i 'kill'; Eu méa 'matar a uno'; Wr me'á 'matar sg. obj.'; Tr me'á 'matar a uno'; My mé'a 'matar'; Cr ra-me'e-nyí 'he's going to kill him with a knife' Miller includes Sr mïmï'kin 'hurt sg. obj.' (the causative of Sr mïmï'k 'die, be sick'), but Ken Hill's (KH/M03) association of Sr mÿkän 'kill, hurt, sg.obj.' with the above forms fits better (ÿ =

pharyngealized, some-what retroflex barred i). This stem seems to have derived into two forms: *mi'a and *mikka. B.Tep153 *mua 'he killed' (UP mua; LP mua; NT múa; ST mua) belongs, though TO me'a / mu'a / mea / mua 'kill' shows variation. Note Tb -'g- < *-kk-, as also at *pakka 'hit' and almost at *pikka 'knife'. [*-kk- > -'- SUA] [NUA: Tb, Tak; SUA: Tep, Trn, Cah, Opn, CrC]

NB, for *ko'y/ko'ya, see 'hit'. NB, for *pakka/i, see 'hit'.

Kind: see peace(-ful/-able)

KISS; BESAR; see also suck

1263. *suwa 'kiss': Ch suwáinkï; WMU suwáagű-y / suwáaqquú; CU suwááki. [NUA: SNum]

1264. *ti'n-namukki 'kiss (mouth-meet)': CN teen-naamiki 'kiss s.o.' (teen 'lip/mouth' + naamiki 'meet, find, have confrontation, incur penalty'); CN naamik-tiaa 'get married, come together with s.o. for some purpose'); Pl teennaamiki 'besar, adorar, venerar'. Without the 'mouth' prefix, ST namkia 'kiss (in greeting), meet, greet' better belongs at *namukki 'meet'. [SUA: Azt]

1265. *ti'n-ta 'kiss, mouth-do': TO čintađ 'press lips to, kiss, vt'; AYq nat tetente 'be kissing e.o.'; My nau/nat teénte 'se besaron'. [SUA: Cah, Tep]

NB, for *cuna/cu'mi 'kiss, suck', see suck.

Knee: see at foot

KNIFE, OBSIDIAN, FLINT, METAL, TOOL; CUCHILLO, NAVAJA, OBSIDIANA, PEDERNAL

1266. *pikkaC / *pikkat (AMR) 'knife': M67-246 *pika 'knife'; L.Son196 *pika 'cuchillo'; M88-pi13 'knife'; AMR 1993c *pikkat 'stone'; KH/M06-pi13 *pikkat 'stone': SP pikka 'hard, sore'; Ls piká-t 'stone knife'; Tb piga-t 'stone knife'; Hp pikyay'ŋwa 'axe'; Eu vikát; Wr tehpiká 'cuchillo'; Tr ripiyá/ri-pigá 'cuchillo, navaja'. [Tr, Tb voiced g; Hp ky; *k > ø in Tr] [NUA: Num, Hp, Tb, Tak; SUA: Tep, Trn, Opn]

1267. *wikiC / *wikki(C) 'knife': I.Num278 *wihi(h) 'knife'; M88-wi10 'knife'; KH/M06-wi10: Mn wihi; NP wihi; TSh wihin; Sh wiin 'knife'; Sh wihi 'metal'; Kw wihi-či; SP wii"- / wihi" / wii; CU wií-či. Add WMU wií-t / wií-č 'knife'. Note that Ls wóki-la-š 'knife' (Ls wóki (<*wikki) 'cut, let bleed') is not far from Num *wihi, since both changes—k > h and ï > i—occur in Num. In fact, one form of SP shows the same vowels: ï-i. On the other hand, Ls show gemination while SNum does not. [*-k->-h/ø- in Num] [NUA: Num, Tak]

1268a. *payu / *papayu (redupl?) 'ceremonial staff': M88-pa64; KH/M06-pa64 'ceremonial staff': Cp pávyu-t 'flint-tipped, shell-inlaid ceremonial staff'; Ls pávyu-t 'ceremonial wand'.

1268b. *ka-payu > *kapo 'knife': formerly from M88-ku13; KH/M06-ku13, we here use Ktn and Sr, and add Hp, all of which likely tie to pa64 above: Ktn kavoč; Sr kavööţ, kävi / kävayu (acc.) 'knife'. Add Hp poyo 'knife'. Whether Hp lost a first syllable or Sr prefixed one, Hp poyo and the Sr -vöö/-vayu (acc.) match well. If *-payu is original, then Hp assimilated the first vowel to the second: *...payu > *puyu > Hp poyo. Sr leveled both to ö, s.th. midway between a-u, but in the accusative, Sr preserved the original voweling: *-ayu. After uniting the forms in a ('ceremonial staff') and b ('knife'), I read in Pauketat (2009, 139-42) that some plains tribes, the Aztecs, and other Mesoamericans chipped, from flint, large elaborate ceremonial knives, which were relatively large and meaningful. the Tep forms below may also relate to all the above as well. Flint, obsidian, and sharp rocks used for knives are usually found on rocky hills and cliffs, and though the semantics are not identical, the *papayu above may well explain the seeming dichotomy in the Tep forms of *papa vs. *papo.

1268c. *papa / *papo 'rock, cliff': B.Tep264 *vavoi 'cliff'; M88-pa54; KH/M06-pa54: TO waw 'cliff, bedrock, a rock'; NT vávoi; ST vaapai. Add PYp vava 'hill, mountain, cliff'; PYp vaves 'rocky terrain'; and Nv baba 'roca, peña, peñasco'. See *pa(pa)yu 'ceremonial staff' (M88-pa64) above. [V assim; loss of first syllable] [NUA: Tak, Hp; SUA: Tep]

1269. *tawi 'flint, obsidian': Eu ravít 'flint'; Tr ŕawí 'obsidian'. [SUA: Trn, Opn]

1270. *panomi 'knife, iron, tool': B.Tep257 *vainomi 'iron, tool'; M88-pa51; KH/M06-pa51: TO wainomi 'metal, knife'; LP vaiñum v; PYp vainomi 'knife, metal'; NT vaiñomi 'iron, tool'; ST vaiñum 'iron'. Add SP panna"- 'metal'; Nv wainomi, pl: vap'ainomi 'hierro' and Tr wenomi 'metal, money' though Tep *vainomi is likely the source of Tr wenomi 'metal, money'; Tr should show p. [probably loan and not Tep w < *w; *a > ai/_n] [SUA: Tep; NUA: Num]

1271. *kuma 'tool (for poking/cutting): M67-247 *ku, *kuci 'knife'; M88-ku13; Munro.Cup131 *kuuma-l or *kwaama-l 'tool'; KH/M06-ku13: Ls kúúmal 'poker'; Ca kúmal 'spoon'; Cp kwámal 'eating basket' (cognate? Hill rightly questions); Cr čúún 'machete'. [palatalization of k in Cr, and final -m > -n] [NUA: Tak; SUA: CrC]

NB, at 'sky' is *tikV(pa) / *tīk(V)pa (< *tukuMpa) 'cutting tool: obsidian, knife, flint, metal': Kw paha-rīka-dī 'pounded metal'; Cr tehka 'obsidian'; Tr fikibara 'knife'; CN tekpa-tl 'flint'. Note also Ktn toq-šiva-t 'flint, flint tip of arrow' and Ls tiqé-t 'arrowhead'. Ktn's vowel could suggest original *-u-, with which Kw (*u > ī in Num) does not disagree and perhaps *u > CN i, then *i-a > e-a, if some of the others are Aztecan loans. In fact, at sky, KH.NUA notes the dual meaning in most Tak languages of both 'iron/knife' and 'sky': Cp túkva'aš 'iron, sky'; Ca túkvaš/ túkwiš / túkwiš / túkwiš / túkwiš / túkwaš / túkwaš

[NUA: Num, Tak; SUA: Trn, Cah, CrC, Azt]

NB, for *wi'naC 'flint, arrowhead' see arrowhead.

NB, from Spanish tomin 'weight, coin' are many UA loans: NT tumíñši 'dinero'; Tbr tomín/tominí 'money, silver'; Yq tómi 'money' (p. 281); My tommi 'money'; Cr túmiin 'moneda'; Nv tumusi.

NB, M88-na18 'knife' (Miller notes this set of loans from Spanish navaja): Wr na'wáso 'knife'; Cr náwaa 'knife'; Wc naavaaşa. Are any of Mn naawáku 'shell money'; Cm nahuu' 'knife'; Ch nankwáru'u 'metal, can, container' from that also?

NB, with loss of initial p in Azt, what of NP pisi'ma 'flint' and CN iic-tli 'knife, obsidian'?

Knock: see hit Knot: see tie

KNOW, LEARN; SABER, CONOCER, APRENDER

Manaster-Ramer's discussion in "A Northern UA sound law: *-c->-y-" is useful in that he divides the following forms into three groups deriving from NUA *mata, SUA *mati, and UA *maci (though we might combine the first two—*mata/mati—since CaCa/CaCi stems are common in UA). Those deriving from the medial consonant *t show t or its (later) palatalization c in both NUA and SUA; the earlier palatalization (medial *c), however, shows c in SUA, and expectably *y/i in NUA. The case of the "bat" suggests that SUA does palatalize *ti > ci as easily as does NUA and that two forms of this stem may have existed early in UA: *mati and *maci. Therefore, all of these could ultimately derive from the same PUA stem *mata/mati.

1272a. *mata / mati 'know': Sapir; VVH25 *mati 'know'; M67-249 *ma/*mai/*mati/*maci 'know'; I.Num93 *mayï(h) 'find, become, be, do'; BH.Cup *mí 'be'; L.Son142 *matï, mac-i 'saber'; B.Tep142 *maatï 'he knows', and *mai 'he knew'; CL.Azt *mati 'know', 165 *mačtia 'teach'; M88-ma2 'know'; KH.NUA; AMR1992-15; KH/M06-ma2: Mn pummaaci 'recognize, vt'; Sr maaţ 'hear, listen to'; Hp màataq- 'become visible, come into view, vi'; Hp màatakna 'go to show, display, reveal, vt'; Hp maaciwa 'be named'; Hp maaciw-ta 'be visible' (the central semantics of the last two Hp forms perhaps *maaciw 'be known'); TO maač 'have knowledge of, be aware of, learn, find out'; LP maat; PYp maata; NT máátī 'saber' (vs. NT maáši 'parecer'); ST maat 'saber' (vs. ST maaš 'verse, notarse); ST mačia 'learn, come to know'; Cr ra-mwa'a-ty-é 'he knows him'; Wc máte (perf ma-) 'saber, conocer'; Wc maté 'sentir'; Wc mai 'saber (participio)'; CN mati 'know s.th., vt.' Sapir (1913) suggests that CN mačoo 'nonactive / passive of mati' derives from passive *mati-o, the i palatalizing t before its disappearance or absorption into o. As both Miller and Kenneth Hill note, Sr maaţ 'hear, listen to' as a semantic extension of '(come to) know' also belongs. I assume Tb maancu'(ut) / 'aamaancu' 'be tame' is from Spanish manso.

1272b. *maci / *ma'ci 'appear, be visible, known, light': VVH36 *maci 'to appear, come to light'; M67-261 *maci/*masi 'light'; B.Tep141 *maasi 'appear'; L.Son131 *maci 'haber luz'; M88-ma3; AMR 1992a;

KH/M06-ma3 *ma'ci': TO maasi 'emerge, appear (as newborn or the sun), dawn'; Wr ma'ci 'haber luz; aparecer'; Tr mačí 'visibilidad, luz'; My máaci 'hay luz'; Miller also includes Hp maasi 'gray'. These are thought to relate to *mata/mati 'know' in a semantic spectrum that ranges through 'know, see, find, be seen, visible, light, dawn, gray'.

Manaster-Ramer (1992a) suggests s.th. like *maci (SUA), *mayi/mayï (NUA): TO maaš-cam, maš-čam 'teach'; PYp mastia 'teach'; Eu mástiwa 'enseñar'; My maaci 'verse, lucir, amanecer, enseñar'; My maaci 'know, feel'; My mah-tía 'teach'; Yq máhta 'enseñar'; Tr maci 'see, know'; Wr maci 'know'; Tbr may 'saber'; CN mačiaa 'be known, be apparent'; CN maC-tiaa 'learn, teach'; TO maas 'be like, seem/appear/look like'. Add NT maáši 'appear, see, dawn, look like'; ST maašik 'visible, easy to see'; Wc máásïikï 'clear, visible' perhaps borrowed from Tepiman. Note *s > h in PYp maahad 'appear, arise'.

1272c. Num *ma'ay / *mahi 'find': NP ma'yï; Ch mahí; Kw mehe; SP mai" 'find, discover'; CU maáy 'see, find'; WMU ma'áy-y / maáy-y 'see, find'; past: ma'áy-kye / maáy-kye. WMU past tense (-kye) shows that there is a final -y on the stem; otherwise, the past tense would be -ka. [*-c- > y; *ti > ci > Tep s(i) > PYp h] [NUA: Num, Hp, Tak, Tb; SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]

1273. *pïnï 'learn, become familiar with': L.Son204 *pïnï 'aprender'; M88-pï10; KH/M06- pï10: Op veni 'acostumbrar'; Eu vine 'aquerenciarse'; Tr biní-mea 'aprender, estudiar'; Tr bene- 'know, acquire habit or custom'; Wr peni 'aprender'; Wr pené 'saber hacer una cosa'. With these in M88-pï10, Miller lists the possibility CN pe'pena 'pick, choose, gather, collect'. [voicing in Tr?] [SUA: Trn, Opn]

1274. *suNpa 'know': I.Num186 *sumpa/*sumpi 'know, recognize'; M88-su15 'know, recognize'; KH/M06-su15: NP subbidaggwatu 'know'; TSh sumpanai 'know'; Sh sumpanai 'know s.o.'; Cm supana'i 'know of, know about, know s.o.' [NUA: Num]

1275. *tïwi 'learn': Hp tïwi/tïwi'-ta 'gain practical knowledge, learn, become familiar with, experience'; NT tïïgídyi 'enseñar, entregar'. The two match through four segments *tïwi. In light of occasional '/w alignments, Yq ta'a 'learn, know' might be kept in mind. Might these tie to *tïwa 'see, find'? [SUA: Tep, Cah; NUA: Hp]

1276. *puttuka / *puttuwa (> *puttucukwa) 'know': TSh pusikwa 'know how to'; Kw pucugu 'know how to'; Ch putúcuga 'understand, know, learn'; SP puhcúcukwaN 'know, understand'; WMU pučúčugway 'know'; CU pučúčugway 'know, be familiar with'. The TSh vowels suggest *putikwa, which allows a possible tie with *pitiwa 'believe' (CU tïvïci; Sh tïpi-ci 'really, true'; Hp tïpciwa; Eu vícwace-m; Eu vícwace-m; vicvaterá-; Tbr wicimwá, Wr piciké; Tr biči); after all, believing s.th. and knowing s.th. are often interchangeable, whether a good idea or not. Either we have *putuka / pucuka and the rounding continuing past the velar *pucuka > pucukwa, or we have *pucuwa and later velarization of the labiovelar *w (>kw), then loss of postvelar rounding in Ch. See believe for *tï- prefix. Kw pucugu 'know how to' and SNumic forms above may relate to *pitiwa or *paso/pasiw 'believe'. A voweling like TSh *puciwa could explain assimilations either direction (*u-i > i-i or u-u) and *w > kw (third syllable) in Numic. Note that Ch actually shows -t-, which is what we should reconstruct for the medial -c- in these NUA languages. If the two groups are related, it is all the more reason to reconstruct *pitiwa above; and even if not related, *-t- would be better in light of the following high front vowel and the absence of PUA medial *-c- in NUA. [w/kw/k; NUA medial -c- < *-t-] [NUA: Num]

1277. *tusu' > tïsu 'learn, know, smart': NP tusuyu 'learn'; WMU tühsú'ay-y 'be smart', perfect: tühsú'ay-kye; CU tïsú'-wi 'be smart, clever, knowledgeable'. WMU ka sú'u wa'tüm 'not smart one, n/adj' and WMU kač tüsú'u wa' 'is crazy, not smart, vi' show that tï- is lost in the pre-stressed syllable, which is common enough in WMU (cf WMU sa- 'white' < *tosa). The tóš of Ls tóšŋu- 'to command, order' fits also as Ls o < *ï, which is the same vowel CU and WMU have. [NUA: Num, Tak]

1278. *Loma/Lomi 'good at, capable, learned, knowing, artful, admirable': Hp loma- 'good, pretty, beautiful, nice, fine, fit, aesthetically pleasing (man speaking)'; Tr lomi-mea 'saber muy bién, dominar un conocimiento'; phonologically Hp and Tr match well, and the semantic tie is plausible given the Hp form is male perspective, probably originally speaking of a woman who is pleasing/desirable, i.e., knowing well her work/arts/duties as the ancient culture defined her desirability; the semantic tie is additionally exemplified by the two similar meanings of Tr gamea/kamea '(1) be able, capable; (2) look good to one, like, prefer'. [NUA: Hp; SUA: Trn]

- **1279.** *wata 'remember': Yq wáate 'acordarse'; My au wáate 'se acuerda, lo recuerda'; Eu awátera- 'saber'; Tr néwará- 'recordar, acordarse'. Jane Hill (p.c.) adds a nice NUA reflex: NP wadahi 'know how to'. Note that the equivalent of My's pronominal prefix seems to be fossilized in Eu. Regarding the Yq and My forms, note also Yq wáata 'querer' and Yq nawáata quererlo'. [SUA: Trn, Cah, Opn; NUA: Num]
- **1280.** *yikaL 'knowing, able, intelligent': Ls yixélvu-l 'intelligent, alert'; Eu dedeka- 'know, be (cap)able'; Eu dekan 'have an excellent view or he who has an excellent view'; CN yeek 'well, thoroughly, good, right'. [NUA: Tak; SUA: Opn, Azt]
- **1281.** *(h)una 'know': Yq hú'unea 'saber, conocer'; My hu'uneiya/hu'uneria 'lo sabe, lo conoce, entiende, comprende'. [SUA: Cah]

Lame: see limp Land: see earth

LAUGH (AT), SMILE, JOKE, FUNNY, TICKLE; REIRSE (DE), SONREIRSE, BURLARSE (DE), CÓMICO; COSQUILLEAR

1282. *aCti 'laugh': VVH39 *'aci-a 'laugh at'; BTep303 *'a'asï/i 'laugh at'; M67-251 *'ac 'laugh'; L.Son1 *'aci 'reírse'; M88-'a1 'laugh'; KH/M06-'a1 *aci: Wr a'ci 'estar riendose'; Tr ačí 'reirse'; My aače 'reírse'; AYq aače; Cr ra-'á'ace 'he is laughing at him'; TO a'as; LP 'a'aši; PYp a'asi; NT ááši-/ásyi; ST 'aas/ašia. Miller includes Ca 'ála' 'mock, echo s.o.' and l is the Cupan reflex for inter-vocalic *-t-. Tr ačí has an alternate form Tr kačí that includes an initial k. [*-t-> -l- in Ca, *-t-> -c-> -s- in Tep] [NUA: Tak; SUA: Tep, Trn, Cah, CrC]

- **1283.** *naniC 'laugh': M67-253 *na 'laugh'; M88-na11; KH/M06-na11: NP nanikkoi 'laugh at'; Sh nanikkoi 'laugh, pl.'; Cm na-nih-kkupa/i 'laugh very hard'; Hp naani 'laugh'; Tbr nawi; Cr ny-í'i-na'ana 'I am laughing'; Wc ná. Add NP naanisu ïnaggwi 'joking, v'; Num and Hp match *nani well; but Tbr shows a different medial consonant. [NUA: Num, Hp; SUA: CrC]
- **1284.** *sim 'laugh': M67-252 *sem 'laugh'; M88-si19 'laugh'; KH/M06- si19: Cp šeme; Ca sém; TO hihim; ST h(i)mpa, h(i)mia. Let's add Nv hihimi 'sonreirse'; Ca sém-yaw 'smile'; Ca séŋi 'smile'. Ca séŋi may involve the same stem with a suffix, η being a cluster reduction. [nasal C-cluster] [NUA: Tak; SUA: Tep]
- 1285. *isama > *i'isama (redupl?) 'tease': KH.NUA: Sr i'iihma' 'tease, make fun of'; Ca i'ismatu 'tease, joke with (one in joke relationship: e.g., aunt, niece)'; Cp i'islyu 'tell a lie'; Hp is-màaqa 'one who is suspicious, jealous, cautious'. Kenneth Hill relates the Hp form to the Takic forms and the first syllable of the Hp form to 'coyote'. That is more than feasible and would relate all these to 'coyote' and/or 'steal'. Add Ktn 'ihama' 'tease, joke, vi; josh s.o., vt'. [NUA: Tak, Hp]
- 1286a. *ya... 'laugh': I.Num288 *ya ... 'laugh'; M88-ya12 'to laugh'; KH/M06-ya12: Mn yawi; TSh yahi/yahe; Sh yahnai"; Cm yahneetï 'laugh, v sg'; CU kiya-'ni 'laugh' (cognate? Miller queries; perhaps, see below); Miller includes Tbr nawi here also. Note also Cm na'yïnetï 'laugh, v pl', probably with a na- prefix, the remainder -yïne aligning with Sh yahnai; however, it is doubtful that all are related. Either we have a consonant cluster reducing in various directions, or the set is more limited, perhaps only CNum (TSh, Sh, Cm). [NUA: CNum]
 1286b. *kiya 'laugh, play': Kw kiya 'play, laugh'; Ch kííyaa 'play, v'; Ch kiyá'-ni'i 'laugh'; SP ki(y)a 'play, dance a round dance'; CU kiyá-y 'play'; CU kiyá-'ni; CU kiya-si; WMU kiyé-y / kiyá- / keyá- 'play, vi. Though Miller put one of these with *ya above, let's separate them by letter. Sapir also ties CN ke'keloaa 'tease, mock, ridicule s.o.' and SP kia-ŋkï 'laugh', which is possible enough. Jane Hill (p.c.) notes Gb eyeeyeenmok 'estar riendo' (for -mok, see below at *maka(w). [NUA: SNum, Tak; SUA: Azt]
- **1287.** *kasi 'smile': Ca kaskási 'give a half smile, vi'; CU kïsíi('ni) 'smile'; Mn kïsito'aqa 'make faces'; Ls kaṣíkṣi-š 'squinting'; Ls kaṣíi-li 'to wink'. [NUA: Tak, Num]
- **1288.** *(ka)Lakay 'tickle': KH.NUA: Ca lyákay 'tickle'; Cp lyáqe 'tickle'; Ls čaqálaqi 'tickle'; Sr xalya' 'tickle'. Exactly where the proto-stem begins and ends is hard to say, but few would dispute that these four Tak terms are related. If *-t->-l-, then a redupl like *takataki might be considered. [NUA: Tak]

1289. *maka(hu) 'laugh, tease': Sr mamq 'laugh'; Mn magïhï 'tease'; Ktn makaw 'laugh'. Might -mok of Gb eyeeyeenmok 'estar riendo' align with Ktn macaw? Or Mn, Ktn, and Gb from *makahu? Perhaps also the *maka in Hp is-màaqa 'suspicious one, ie, coyote-?' [NUA: Tak, Num, Hp]

LAZY; PEREZOSO, FLOJO

1290. *oŋa (< *uŋa?) '(feel/be) lazy': M67-254 *'ona 'lazy'; KH.NUA; M88-'o17 'lazy'; KH/M06-'o17: Hp ööna 'not feeling like doing'; Hp naa'öna 'lazy'; Sr 'ööŋa' 'lazy'; Cp íŋi-š, pl. í'iŋčam 'lazy'; Cp íŋiču 'be unmoving'; Cr wá-'ïna-ase 'he feels lazy, dragged out' (Casad says "the short vowel in the Cora form is due to a rule of vowel shortening that operates on vowels that occur between a glottal stop and a following consonant"). Note Hp n vs. Tak ŋ as in 'suck'. Cr ï < *u, and *u > NUA *o is plausible with following a. [n/ŋ] [NUA: Hp, Tak; SUA: CrC]

1291. *paLïwa (< *paLawa) 'lazy': B.Tep185 *parïga; KH/M06-pa70: TO paDma 'be lazy'; TO paDïgï; NT parïga/parïïga. [SUA: Tep]

1292. *nasina / *naCsi- 'lazy': Wr nahsína- 'be lazy'; Tr nasiná- /nasína- 'be lazy, indolent'. [SUA: Trn]

1293. *mawaha 'lazy': Kw mawaha 'be lazy'; Ch mawïa 'be lazy, tire of'. $[h > \emptyset; V > i]$ [NUA: SNum]

LEAF, FOLIAGE; HOJA, FOLLAJE

Mn	písi; qása	Нр	nàapi/nahpi	Eu	sáwa
NP	puuhi-ggwiddaddï naka	Τb	naŋĥabïï-l	Tbr	samoa-r; samwa-t
TSh	pisi(cci)	Sr	qävaac 'ear, leaf'	Yq	sáwa
Sh	sïki	Ca	pála-t; yámily	My	sawa
Cm	puhi(pï)	Ls	pávla-š	Wr	sawá
Kw	naga-vï	Cp	pel'a	Tr	sawá
Ch	nanká-va	TO	haahag	Cr	samwá
SP	maavï-naŋqa-vï	Nv	haahag	Wc	sáaváaríi 'tener hojas'
CU	nïká-'a-vi	PYp	haagar; vihigim	CN	iswa-tl
		NT	áága		a'tlapal-li 'leaf, wing'
		ST	haaha'		tookmaayoo; iswayoo

1294. *sawa 'leaf': VVH64 *sawa 'leaf'; M67-255 *sawa 'leaf'; B.Tep54 *haahaga 'leaves'; L.Son233 *sawa 'hoja'; CL.Azt97 *šVwV 'leaf'; M88-sa1 'leaf'; Stubbs2003-45; KH/M06-sa1 *sawa: NP sawapi 'sage'; TO; Nv; PYp; NT; ST; Eu; Tbr; Yq; My; Wr; Tr; Cr; Wc, CN. As one can see, a form of *sawa appears in every SUA language. Note Cr's similarity to Tbr in *w > mw. [Tbr/Cr *w > mw] [SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]

1295. *pisi 'leaf': Stubbs2003-38: Mn pisi 'leaf'; TSh pisi(cci) 'leaf'; PYp vihigim 'have complete leaves'. [NUA: Num; SUA: Tep]

1296. *puhiC 'green' moved to green, 1075

1297. *naNkapï 'leaf': Kw naga-vï; Ch nanká-va; SP maavï-naŋqa-vï 'leaf' (vs. SP naŋqava 'ear'); CU nïká-'a-vi (vs. CU nïká-vi 'ear'); Tb naŋhabïï-l; Hp nàapi. Since *k > h in Tb, then Tb matches Num. Hp may be a loan from Num, but in either case it lost intervocalic -ŋk-. Are Tb and Hp loans from Num or is Num -vï/va/vi really an absolutive suffix? Either way, Hp nàapi/nahpi shows -p- instead of -v- due to a previous cluster. The SNum, Tb, and Sr forms are related to 'ear': often one word in each language has both meanings (ear, leaf) or the words for 'ear' and 'leaf' are very similar; for example, Tb naŋha-l 'ear(s), leaf'; Tb naŋhabïï-l 'leaves, lots of leaves'. These appear to be derived from 'ear' but are morphologically different (added upon) in most languages, except Sr. Similar to Sr is Ktn kava-c 'leaf'. [NUA: SNum, Hp, Tb, Tak]

1298. *paLa 'leaf': BH.Cup *pala 'leaf'; M88-pa44 'leaf'; KH/M06-pa44: Cp pel'a; Ca pála-t; Ls pávla-š. Perhaps CN a'tlapal-li 'leaf, wing' derived from CN tlapal 'side, direction'. Might Ls pála 'put out sprouts, come into leaf' tie to Hp pïrï(-k) 'get uncovered, open up, unfold' and other words at 'flat'? [liquids, vowels] [NUA: Tak]

LEAVE; SALIR, IRSE, DEJAR, ABANDONAR

1299. *kami 'leave': M88-ka43; KH/M06-ka43: Ca qámi/qámñ 'leave s.o. behind, quit (job), stop'; Ls qamí'i 'leave s.th. alone'. I often wonder about a tie between this and Tr gamea/kamea '(1) be able, capable; (2) look good to one, like, prefer' as in when it looks good, one is finished and leaves. [NUA: Tak]

1300. *pi'a (> *pi'a) 'leave, save': Sapir; B.Tep273 *ví'ia/i 'to stay'; M67-256 *pia 'leave'; I.Num174 *pïya 'leave (behind, over)'; CL.Azt81 *piya 'have, keep'; 248 **piya 'keep, leave'; L.Son192a *pi 'quedarse, faltar'; L.Son192b *pi-a 'dejar'; M88-pi10 'leave/dejar, quedarse'; KH/M06-pi10: NP pinai 'last one, one that is left'; Sh pïa" 'leave'; Cm pïa 'leave, forsake, quit'; Kw piine'e 'leave, vt'; SP piyai-: piya'ŋwi 'be left over'; CU piyaay 'be left, remain behind'; TO wi'i 'stay, remain'; TO wi'ikam 'be one left, a remnant; be an orphan, one left by himself'; Eu vié 'faltar, quedar'; Eu vía / ví'a 'dejar'; Tbr wipia 'seguir'; Yq bé'e 'faltar, guardar'; Yq yeubé'ene 'dejar afuera' (Yq yeu 'para afuera'); AYq ve'e 'be lacking, left over, vi'; AYq ve'a 'save, reserve'; My be'a 'dejar aparte'; Wc pi 'quitar, dejar'. CN, HN, Pl *piya 'have, guard, take care of'. Add WMU piyé-y 'be left over'. Among Tep UP wia; LP vi'i; NT víía; ST vii; ST vidya 'leave left overs'; NT viééyi, víídyi 'dejar'; TO wi'a 'leave s.th. behind', NT and ST show d, as if underlying *y, yet other languages show medial glottal stop. [medial *' / *y] [NUA: Num; SUA: Tep, Cah, Opn, CrC, Azt]

1301. *yawi-(to) 'leave': B.Tep15 *dagito 'to leave alone': UP dagito; LP dak; NT dagityo; ST dogtyo; M88-ya16. Though apparently borrowed from Tep, Tbr dagityo/akiró 'dejar' is worth noting. Consider also My yeewi 'salir', combining form: yeu(im); Yq yawá'abe'ene/yewaabe'ene 'leave a part'; Tb 'iiyaw~ii'iyau 'stop, v'; NP yaggwiŋa'hu 'stop work'. [w > kw in NP] [SUA: Tep, Cah; NUA: Tb, Num]

1302. *kisa 'go out, emerge': CL.Azt98 *kiisa 'leave'; M88-ki8; KH/M06-ki8: CN kiisa 'come out, emerge, conclude, finish'; Pl kiisa 'leave, come/go out, appear'; HN kiisa' 'leave, go out, rise (of sun)'. [SUA: Azt]

1303. *(a)tïwï 'leave': Tr arewe 'dejar, abandonar'; Wr tewé 'stop doing s.th., finish'. [SUA: Trn]

1304. *toha / *towa/i 'leave/dejar': Wr toa 'leave s.th. for s.o.'; or Wr tohá- 'separate (on the road), go different directions'; Yq toha 'llevar, traer, echar, dejar'; AYq sutoha 'abandonar'. Tbr towi/tovi 'quedar'; Tbr towa 'dejar'. [-a/-i transitive/stative in Tbr] [SUA: Trn, Cah, Tbr]

NB, *ŋoy 'go away, go/return home' (Ca ŋii/ŋiy 'go home, go away'; Cp ŋiye 'go away, leave'; Ls ŋée 'leave, go away, go home') is at 'circle', though I wonder if these Tak are a separate set and belong here.
NB, for *pu 'leave, come out' see out.
NB, for *ïka see 'stay'.

LEFT (HAND, SIDE); IZQUIERDO, ZURDO

Mn	činaqwetï	Hp	sïy-ŋakw	Eu	cikópevai / cekópevai
NP	oi-naggwa	Tb	'aašiyan 'left side'	Tbr	ote-wi-ná
TSh	kwii naŋkwa	Sr	ööc	Yq	míko'i 'zurdo'
			ööci'ka' 'left-handed o	ne'	míkotana 'left side'
		Ktn	oci'(ŋa)		ayatana 'left turn'
Sh	kwii	Ca	'íšva	My	míko'ori
Cm	ohini-katï/betutï	Ls	'éčva-š 'left hand'	Wr	o'ená
Kw	kwii	Cp	işvá	Tr	owená
Ch	kwii	TO	oogig	Cr	ne-'uhtah 'my left'
SP	kwii	Nv	oks padurh	Wc	
CU	kwíyu-maná-kwa-tï	PYp	suurid	CN	oopooč-tli;
		NT			oopooč-maai-tl, maapooč
		ST	a'nsap dïr ja'k 'at left s	ide'	'left hand'

1305a. *opoti 'left': CN oopooč-tli; Cr 'uhtah. The Cr u agrees with Azt o and UA *o, and if Cr lost intervocalic p, like it often does, or the voiceless h may be the remnants of -p-, then the two match well, deriving from *opotV. In

fact, these may tie to *oti below with loss of *-p- in a NUA cluster (*opoti > opti > otti > oci) as suggested by the *-c- in Sr and Ls, vs. -l- as we would expect if not a clustered -t-. [Cr loss of intervocalic -p-]

1305b. *oCti-(pa) 'left (hand)': BH.Cup *'ecva 'left (hand)'; HH.Cup; M88-'o18; KH.NUA; KH/M06-'o18: Ca; Cp; Ls; Sr, and Tbr. The Cupan languages show a following -va syllable, while Sr and Tbr only show the oti portion. In fact, the Tbr form may be the link between the Tak forms and Tr and Wr, though Tr, Wr, and Tbr all show a common compound, the latter half of which the Tak languages lack. Add Ktn oci'(na) 'left hand'. Also add the oi- of NP oi-naggwa (perhaps o(y)i < *oci).

1305c. *oCtï-wina 'left': Tbr, Tr, and Wr seem related, and whether from a compound or not, s.th. like *otï-wina > otwïna > *o'wena (Tr, Wr) accounts for the forms. Cm ohini- may belong as well. Though with differing affixes for different compounds, both NUA and SUA show the stem *otti-, ultimately from *opoti probably. [NUA: Tak, Num; SUA: Trn, Tbr, CrC, Azt]

1306a. *kwi 'left (hand)': TSh; Sh; Kw; Ch; SP; CU; WMU kwií(ġ)yet / kwiíġet / kwiíġed / kwiíyəd 'left-handed one'; WMU kwii'manaqu 'on the left side'.

1306b. *ko'i 'left': Yq, My, AYq mikko'otana 'on the left'; AYq ayatana 'left turn'; AYq mikkoi 'left-handed'. [NUA: Num; SUA: Cah]

1307. *(a)siya(N) 'left': Hp sïy-va(qe) 'left, on the left, posp'; Hp sïy-ŋakw 'from the left, posp'; Tb 'aašiyan 'aašiŋan 'left side'. [NUA: Hp, Tb]

Leg: see foot

Lend: see give and trade

Level: see flat Lice: see louse

LICK, LAP UP; LAMER

1308. *iko-sipa 'lick': Mn egosiba; NP igosiba. Perhaps literally 'tongue-shave'; cf. *ïko 'tongue' and *sipa 'shave'. [NUA: WNum]

1309. *kwiLya 'lick': Kw kwiya 'lick, v'; CU kwiyay 'lick, vt'; Cp kwilyema 'lick, v'; and Ca píl^yay 'lick, vt' is curious in that it is identical to the reconstruction suggested by the others except having the other labial stop; but we shall not count it because of the irregularity. [*L > y; kw/p?] [NUA: SNum, Tak]

1310. *tīkwa'a 'lick': AYq te'ebwa 'lick, vt'; My té'ebwa 'está lamiendo'; Eu téba'a- 'lamer'; Nv tīpsīma 'lick fingers' (p probably devoiced from b). Anticipation of ' in Cah. [SUA: Tep, Cah, Opn]

1311. *pini 'lick': TO wiini 'lick with the tongue, vt'; Nv vinuma 'lamer'; PB(EF) winmen 'lamer'; PYp viinim 'lick, vt'; NT viñiúúmai 'lamer'. Sh kwini" 'lick, vt' is quite identical except for having the other labial stop. [*p vs. *kw?] [SUA: Tep]

1312. *paL... 'lick': CL.Azt99 *palowa 'lick'; M88-pa48; KH/M06-pa48: CN paloaa 'sip, taste'; Pl iiš-palua 'to lick'; Po pelu; Tl pahpaloa; Zc pahpalowa. This is one of those curious initial-p words that keeps initial p in Azt. [initial p in Azt][SUA: Azt]

LIE, DECEIVE; MENTIR, ENGAÑAR

1313. *isaN / *isaC-tu / *isama-tu 'lie, v': B.Tep305 *'iahatagi 'lie, v'; I.Num19 *isa 'lie, n., v'; M88-'i1 'tell a lie'; KH/M06-'i1: Mn isapïyee-t 'lie, v'; NP isayai 'tell lies'; TSh 'isampï 'liar'; Sh isan 'lie, v'; Sh isam-pï 'lie, n'; isa-nai" 'tell a lie, v'; Cm isa'ai 'lie, v'; Cp i'islyu 'tell a lie, vi'; Ca 'i'ismatu 'tease, joke with'; Sr 'i'iihma' 'tease, make fun of'; Ls 'éskuni 'tease, make fun of'; UP 'iatogi; LP 'iahtg-; NT yaatági; ST 'iatgi; Eu istu 'mentir'; HN 'istlaka-wia 'lie to s.o.' Add Nv 'i'ato 'mentir' and the first part of Wc 'iiriïviiya 'deceive' aligns with *itu like Eu istu and Cp i'islyu. Miller includes Hp is-maqasi 'suspicion, mistrust' (lit: coyote-fear) as a possibility with a question mark. In fact, Miller's list may all begin with *'is- 'coyote' as the deceiver, but with varying second morphemes. Num *isaN is apparent. Note *isamaCtu in Ca 'i'ismatu, Cp, and Sr 'i'iihma'. Tep may be reduced

from the same—*isamatu > *iasmtu (V anticipation) > 'i'ahto—or from s.th. shorter—*isa(N)tu 'coyote-do/be'— which also fits Cp, Eu, and Wc. The Azt forms below, also likely contain 'coyote' but are a different compound. At 'laugh', *isama 'tease' is another compound. [clusters, reductions] [NUA: Num, Tak, Hp; SUA: Tep, Opn, CrC]

1314. *is-taka 'lie, v': CN istlaka-ti 'lie, v'; CN istlaka 's.th. false'; HN 'istlaka-wia 'lie to s.o.'; Wc 'ítá 'lie, v' (with loss of s). Might this be *is(a)taka 'coyote-man (as deceiver)'. [*-st- > -t- in Wc] [SUA: Azt]

1315. *waCNi / *waNCi 'lie, deceive': Ls winé-ni 'deceive, tell lies'; Ls winé-'i 'be mistaken'; Wr we'itú-na 'tell a lie'; Wr we'itú(ge)-na 'tell a lie to s.o.'; -wa'i in Cr tí'iwa'i 'hecha mentiras' and Cr wá'ita'ame 'hecha mentiras'; though it has a different bilabial, we might note AYq vaita'a 'misinform, deceive, fool'. Ls does the vowel pattern i-e < *a-i in other words, though its medial C is puzzling, possibly from a cluster or another morpheme. [h/'; w/p; Ls i-e < *a-i] [NAU: Tak; SUA: Trn, CrC]

1316. *siku 'tease, deceive': CN šiikoaa 'feel envy, suffer or endure s.th., deceive s.o., vrefl, vt'; CN šiikoaa-piina 'joke, tease s.o., vrefl, vt'; Ls 'éskuni 'tease, make fun of'. [NUA: Tak; SUA: Azt]

NB, *solopiki 'lie': ST šopki 'lying, story-teller' loan from CN šolopi'-ti 'lie, joke' (CN s = Tep h)? However, note the lost l in ST. Elsewhere CN shows an l not in other UA languages (root, sinew).

The widespread and semantically diversified verb *mana / *mani takes essentially two forms: intransitive

LIE DOWN; ACOSTARSE, ECHARSE

*mani 'fall, be lying or spread flat over an area' and transitive *mana 'spill, pour, spread s.th. flat (over an area), cover a surface, etc'. Miller treats the related forms in two places: M88-ma9 'be situated (like liquid or mass obj.)' and M88-ma38 generally meaning 'stumble, roll over, fall over/off/ down', though he lists no semantic heading for the latter group. While the two are undoubtedly cognate, Miller's divisions are useful semantically: 1317a. *mani 'lie, be situated, cover an area (as liquid or mass noun)'; M88-ma9 'be situated (like liquid or mass obj.)'; KH/M06-ma9: NP manni 'become, be'; NP mania 'be' (Langacker 1976, 10); Cm mana'kkoroomi 'cover s.th. over'; SP na-ma'ni 'cover'; Wr maní 'estar'; Tr maní 'be in a container'; My mánne 'be (liquid or gathered objects)'; CN mani 'cover a surface (as water), spread s.th.out flat and smooth (as tortillas)'; HN mana' 'be all over (water)'; Pl mana 'cook (in water)'. Add SP maN 'resting on, at, for (of time)'. 1317b. *mana / *mani 'stumble, roll (over), fall over/off/down': M88-ma38; KH.NUA; KH/M06-ma38: Cp máne 'to roll, fall off, stumble'; Cp manániniyqal 'he fell over'; Ca mána/i 'fall down (rolling), roll, stumble over'; Ls máána/i 'stumble and fall, roll down (a hill) vi, vt'; Sr manamk 'fall down'. Add Hp mïnï(k) 'stumble and fall, fall down'; Hp mïnï-k-na 'knock over', identical semantically though Hp leveled the vowels: *mani > mïnï. 1317c. *mana 'put (flat/lying down)'; *mani 'be put, be, lie': To the above two groups we can add Yq mána'a 'poner'; AYq mana, maná'a 'set, put on flat surface'; AYq manek 'be situated (massive objects or liquids)'; My manna 'pone'; My mánne-k 'está puesto'; Tr (a)mana 'poner, colocar (especially in a container or as an offering laid out)'; Tr mani 'put for s.o.'; Tr amana 'poner (frequentive)'; Eu mane 'haber cosas líquidas en olla, cosas discretas en chiquihuite or cosa redonda'; Eu mana 'asentar o poner ollas, cosas redondas o huecas'; Eu manádau 'ofrenda que ponen el día de los finados'; Eu mani 'be' (Shaul 1991, 82); Cr meé'uhumwana 'put lying down'; Wc mana 'poner, tender, estirar pl obj's'; Wc mane 'puesto, tendido pl. obj's'; CN semmani 'fall, spill, spread out, scatter'; CN manki 's.th. smooth, flat'; CN tlamaniliaa 'set things in order with respect to one another, lay things out for s.o.'; CN tlamanis-tli 'plane, flat surface'; CN mana 'spread s.th. out flat and smooth, vt'; CN mani 'extend over a surface, vi'. With a vowel assimilation, the subtraction of Sr pit(k) 'fill (regarding containers)' and Sr piti'k 'be full, filled' from Sr pitimin 'fill (several containers), vt' leaves -min with a similar meaning. Notice that we do NOT have the NUA η and SUA n in these items. [NUA n and SUA n; V's *a > V] [NUA: Num, Hp, Tak; SUA: Trn, Cah, Opn, CrC, Azt]

1318. *hapi 'lie down': I.Num31 *hapi 'lie down'; M88-ha8 'lie down'; KH/M06-ha8: Mn hapi; NP hapi; TSh hapi; Sh hapi"; Cm hapi; Kw havi; Ch haví; SP avi; WMU aví; CU 'aví. Possibly associable are Eu 'abi 'lie' (Shaul 2003, 29), and Cr abiíci'i 'escondido' and Wc 'avieta 'hide (claws/teeth)' at *'api 'hide'. [NUA: WNum, CNum, SNum; SUA: Opn]

- **1319.** *po'o / *po'i 'be lying down': VVH130 *po'i/*po'o 'be lying down'; M67-260 *po 'lie down'; L.Son208 *po, *po-i 'acostarse'; M88-po3 'be lying down'; KH/M06-po3: NP pukkwa 'be lying down, pl'; Ls pé-t, -pe' (poss'd) 'bed'; TO wo'i 'in a prone position'; Eu voó 'acostarse uno'; Wr po'i 'estar acostado, sg'; Tr bo'i 'estar acostado, sg'; My bó'oka 'acostado'; My boo'-te 'acostarse'. Let's add other Tepiman forms: PYp vo'o/vohopo 'be lying down, sg/pl'; NT vóópoi 'acostarse'; NT vóídyagai 'el acostarse, verbal n'; and ST vooda' 'acostar, vt (anim obj); ST vo' 'estar acostado'; ST vo'ya' 'acoastarse'. Maybe Miller's NP inclusion if compounded? [NUA: Num, Tak; SUA: Tep, Trn, Cah, Opn]
- **1320.** *kwapi > *kwopi 'lie down': Mn qwabitïgï 'lie on ground'; NP kwabi 'lie down, d.'; TSh kopi"/kwapi" 'lie (down), be in prone position, vi, dual'; Sh kopi" 'lie down, d., pl.'; Cm kwabitï; Kw kovi 'lie down, pl'; Ch kwavi 'lie down, pl.'; SP kwapi 'lie down, pl.'; Cp kwív- 'lie down'. Many Num forms show *kwapi (NP, TSh, Cm, Ch, SP) and others show *kopi (TSh, Sh, Kw). These are undoubtedly variants of each other, as the rounding of a V between two labials is natural enough. Interestingly, Cp kwíve corresponds to *kwopï (*o > Cp i), which fits as well as any of the others. With loss of intervocalic -v-, might Ktn kwea'k 'lie down' belong? [*a > o between labials, then o > i in Cp] [NUA: Num, Tak]
- **1321.** *Laya 'lie with legs/feet spread/pointing outward': The specific semantic identity of Hp lèesi-kiw-ta 'lie with feet pointed outward' and Ls láya 'lie with legs spread apart' is quite probable, especially when we consider that Hp e is the one Hp vowel that does not correspond to any PUA vowel, but usually derives from vowel leveling, such as an a-i or i-a series > e-e, as Ls laya (aia) is. [V leveling, initial *L?] [NUA: Tak, Hp]
- **1322a.** *pïCtī / *pïtu 'lie down, be situated at, pl; spend the night, v; house, n': PYp veetu 'lie, be situated, inan. pl'; NT viiti 'be lying down, pl'; Wr pe'ti-pá-ni 'acostarse, pl'; Wr pe'ti / pe'ti-pó 'estar acostados, pl'; Wr pe'a 'jacal, hut'; Tr pere/peri 'set/lay stretched out'; Tr bete-ba-ma 'spend the night'; Tr bete-či / biti-či 'at home'; Tr bete-ra 'house'; Tr beté-re- 'live, inhabit, dwell'; Tr peréame 'inhabitants, residents'; WTr bethe 'live, v' (Burgess 1984, 19); WTr bete-ba-ma 'spend the night'; WTr bete-ra 'house, n'; WTr bití 'estar acostados, vi pl'; WTr bite 'dwell.'; Ca péti 'lie down stretching (of long large obj); Cr hé'e 'be lying down' (if *-t->-l/r->-'-); and perhaps CN peečoaa 'squat, crouch' if CN < *pït-oaa? Ca -t- suggests an underlying cluster *-Ct-, as also the glottals in Wr and WTr. [Azt p-; -tt->-r-]
- 1322b. *pa(i)yüC > *pïC- 'go home': In SP the stem is isolated: SP pa(i)yü 'return'; SP payü-i 'comes back'; SP pa(i)yü-rü 'one who goes home'; SP pappa(i)yü 'all return each to his home'. In SP and the rest of SNum, that stem takes one suffix -ki 'come toward speaker or come home' and -kwa'a 'go home or go away from speaker': WMU peekki / peakki / paá-kki 'come home, come to me, come here'; WMU peekkirh 'one who comes home'; WMU peekkwa' 'go home (the home being elsewhere)'; WMU peé'kwa'a 'go home!'; WMU peekkwa-rh 'one who goes home'; Kw pay-kwee (< *pay"-kkwee) 'return, go back, go home'; Kw pay-ki- (< *pay"-kki) 'return, come back, come home'; Ch payï 'return, v sg'; Ch payükii (< *payükkii) 'come back'; SP payü-kki 'come back'; SP payü-qqw'ai 'go back/home'; CU péi-ki 'return, come back to, come here!'); CU payu-kwa'áy 'come home, come back, return'; CU péi-kwa'áy 'return, come back'; the latter CU term appears not to retain the semantic distinction that WMU and all languages to the west retain: -kki 'return coming (home)' vs. -kwa'ay 'return going (home/away)'. However, all languages show a final consonant by geminating the next -kk-, though in most it is -k-< *-kk- vs. -g- < *-k-. [SUA: Tep, Trn, CrC, Azt; NUA: Tak, Num]
- **1323.** *paykatawi 'lie on back, face up, boca arriba': the first part of Cm pa'rai-habíitï 'lie on one's back' and Kw paygarawi-havi 'lie on one's back' are related, being in the same position in the same phrase; if so, they show well the extraordinary reductions that sometimes take place in UA languages; if Kw is fairly complete, then the changes for Cm appear to be s.th. like *paykarawi->*pa(y)k(a)ra(w)i>pa'rai. [*-t->-r-; reductions] [NUA: Num]

NB, for *tika 'lie/lay/set down stretched out/horizontal', see 'put'.
NB, for *iki 'remain, lie in place': KH.NUA; Sr ik, ikii 'be in a place, lie'; Ktn 'ik 'lie'; Gb okó; Ls óka 'be left, remain'; see 'stay'.

Life/Live: see alive or sit (for dwell/live)

LIFT, RAISE, PICK UP; LEVANTAR, ALZAR; see also up, carry

1324a. *hï'ïpi / *hapa/i 'get up, vi; lift/pick up, vt': Kw hïveezï 'get up, arise, vi'; Kw hïveezï-tii 'pick up, vt'; PYp e'evnia 'lift'. These show medial *-p-, yet might the following with medial *-kw- tie in?
1324b. *hakwa / *hakwi 'lift': Tb(V) he'ewiin(-ït) 'lift it'; Tb(M) he'winat~'ehe'win 'lift, carry in the arms, hold on the lap'; Eu háhba 'lift pl. obj's'; Eu háhbe-me 'levantarse, pl'. [p/kw] [NUA: Num, Tb; SUA: Opn, Tep]

1325. *pa'aka 'be lifted/taken up': CU pa'áaġa-y 'be up, be raised, ascend, go up'; CU pa'áaġa-kïi 'lift (off)'; AYq pa'akta 'lift with a lever, vt'. [NUA: Num; SUA: Cah]

LIGHT (not heavy); LIGERO

1326. *sapa / *sapo 'light (not heavy)': Ls savá-sva-š, şavá-şva-š 'be light on one's feet, lung'; PYp havkam 'light (not heavy); PYp havek (hapek) 'light-footed'; PYp havoka 'agile'; ST havook 'light, weigh little'; TO hauk '(be) lightweight, light, (be) easy'. [NUA: Tak; SUA: Tep]

Light (not dark): see fire and sun

LIGHTNING; RELÁMPAGO, RAYO

1327. *pïLok / *pïrok (< *paLak ?) 'lightning': M67-262 *pe 'lightning'; M88-pï14 'lightning': KH/M06- pï14: My berok-; Yq be'ok-; AYq yuku ve'okte, ve'ove'okte 'vi' (*L > '); NT vïpïdoxudami; ST vpgia/vïpgï. Add Tbr virikí-t 'relámpago'; TO wïpgii; PYp vepda. Besides initial *pï in all forms, the Yq, My, and NT forms show a clear second syllable in *-rok- and Tbr also shows this full word, though the 2nd vowel has assimilated. Thus four languages (Yq, My, NT, Tbr) point to *pïrok. Sr vönäq-q 'flash (of lightning)' and Ch(L) panapï (< *paLaC-pï) 'lightning flash, light' (with liquids nasalized in NUA) also belong. Other SNum forms are cognate and some show the underlying 3rd C: CU panáy 'shine, be bright'; WMU paná-y 'shine, be bright'; WMU paná'töhqqőmpi-kye 'shine, be bright, vi'. With reduction of the 2nd syllable and voicing of the velar stop, the Tepiman forms *pïpgi (lacking 2nd C, but showing 3rd C), as well as PYp vepda (lacking 3rd C), are showing reduced forms of *pïrok / *paLak. The *-palu portion of Ca táwvalu 'to thunder' as well as the -paix of Sh(C) to'ompaix 'thunder' and Sh(M) toompai-piccï 'thunder' likely belong. [liquid] [SUA: Tep, Cah, Tbr; NUA: Tak, Num]

1328. *aNka-kwissaka / *aNka-kwicci'i 'lightning': Mn aqakwiči'i 'lightning, flash (of lightning), v'; also Mn acakwiciqa / acakwiciki 'be shiny, gleaming, be flashing (like lightning)' with a different prefix; Cm ekakwice'e 'lightning flash, n'; SP aŋqa-qqwišarï 'lightning, red-flashing, n'; SP qwišša 'flash, vi'; Kw 'aga-gwiša 'be sheet lightning' (said to be compound of aga 'red' and kwiži 'pile up' suggested, but the latter morpheme is 'flash or lightning, verb in all the other languages); WMU paná-qqwissa-y 'lightning, vi'. WMU has a different first morpheme, but the same second morpheme and also means lightning. CU paná-qosáy 'lightning, vi'. Because Tb w < *kw, then Tb(V) wašakwašaag 'it is lightning, v'; Tb(M) wasakwasa'gat~ wasakwasaak 'flash (of light, lightning, fire)' also belongs. So this exists in each branch of Num and Tb. Perhaps also Ktn kwačea' 'start or stoke fire' and/or Ktn kwačkwačik 'have blisters or be red all over'. Tb, SP, WMU, and CU all show the 2nd V as a, Tb has both such, but with many first i vowels, let there be one of each in the reconstruction. It may be that a geminated *-ss-> -cc-, as *-tt- does not usually lenite so far as s, and as many languages show s as c. For the *aNka portion of the compound, see 'red'. [NUA: Num, Tb, Tak]

1329. *tikaL / *tikat 'flash (of lightning)': KH.NUA; Sr tikalk, tikaltikal(k) 'flash (of lightning), sparkle'; Ca tikal 'flash (of lightning), sparkle, twinkle'. [NUA: Tak]

1330. *taLamu / *tatamu 'lightning, v': Wr talámu 'lightning to strike'; Tr ŕaramú 'fulminar el rayo, caer rayos'. [SUA: Trn]

1331. *kwatta/i 'red': M88-kwa16; KH/M06-kwa16: Cp kwáti 'be red'; Cp kwatilwáti'i-š 'red'; Ls qwayá-qwya-š 'red'; Ls qwáta/i 'shine, vi; polish, vt'; Gb kwahó|xa' 'red'. Ken Hill notes this may be a Yuman loanword, which may underlie the difficulties beginning with the 2nd syllable. Similar considerations are Ls kwááta 'be shiny'; Ktn kwarïk / kwa'rïk 'melt, shine (of sun)' (glottal anticipated in 2nd form, absorbed/gone in 1st). Note these vs. Ktn kwanana'i 'shiny'. [NUA: Tak]

NB, for *takwi 'ball lightning, supernatural being', see *tïku at 'man'.

LIKE, AS, SAME, SO, SIMILAR, EQUAL, LOOK LIKE; COMO, SEMEJANTE, ASÍ, SIMILAR, IGUAL

The following appear that they could be various combinational results of *pV- 'that' + *Vni/*Vna 'like', the first two including *pV, the last two without *pV.

1332a. *pïna 'like': Eu ven 'como'; Yq bénak 'pues así'; Yq bénasi 'como, postp'; My bénasi 'como'; My ále'ebenna 'se parece, igual'; Sr pïnä 'like him/her/it' (Sr -ïïn 'like'; Sr pana(a)'(a) 'like that'; pa|t 'that').

1332b. *pani 'like': Hp pan/pani'/pan'i 'like that, in that way' (pa-n-'i 'that-way-pausal); CU paní 'like, postp'; NP ïpa maáši 'same, look like'; NT ïpan 'same'; consider also ST panaas 'parece que' or ST pu'ñi 'igual a'; perhaps Wc (h)áine 'así dice'.

1293c. *Vna'a 'like': Sr -ïïn 'like' (Sr pïnä 'like him/her/it'; Sr pana(a)'(a) 'like that'; pa|t 'that'); Hp yan 'like this'; Hp an-ta 'be like'; Yq 'uná'a 'así es'; Yq 'iníen/'iníleni 'así'; Yq húnen 'así'; My húne'eli / húnel / húnen 'así'. Perhaps the pï-na- of Kw pï-na-niya 'like this (relative-?-like)'.

1332d. *-ni 'like': Ch -ni 'like'; CU -ni 'like, postp'; Mn ni-tu 'like, postp'; Kw pïna-niya 'like this'; Kw -niya 'like' of Kw pï-na-niya 'like this (Relative-?-like)'. [NUA: Num, Tak, Hp; SUA: Cah, Tep]

1333. *tu'i-(wa) 'be/seem like': TO ču'ig 'be like, be similar to, be (in a specified place)'; PYp tu'i 'do, be like'; NT túíga 'is like, appear/seem that'; perhaps Ls lóó'i 'imitate, mock, v' if *t->l-. [initial t>1?] [SUA: Tep; NUA: Tak]

1334. *mana 'imitate, do like': NP managa 'copied, did like'; Mn manaqa 'try to, attempt to'. With glottal stop, Mn ma'aní-tu 'the same' and Mn ma'aní-su 'like, same, adv' may not belong.[NUA: WNum]

1335. *wa'a/i 'like': TSh wa'e/wa'i 'same as, just like, in the same manner of'; Hp -ewa|y (ewayo pausal) 'like, seeming, resembling some standard'. Wr wa'aci 'así [thus]' enjoys difficulties in that Wr wa'a 'there' provides a semantic hurdle. [NUA: Num, Hp]

Like (love, enjoy): see want

LIMP, (BE) LAME; COJEAR, COJO, RENQUEAR, RENCO

1336. *wopi 'limp': NT govííkyi 'limp, hobble'; ST ovia'kia' 'limp, hobble'; TO goikham 'limp'; Nv govihimu 'ir cojeando'. [loss of initial g (<*w) in ST; loss of v/w < *p in TO] [SUA: Tep]

1337. *piC-tu 'lame, limp': Tr bito- 'dislocate(d)'; Cm pitu-wetï 'limp (of human or hind leg of animal); PYp veetka 'limp'; Cr pwátuu 'está cojo'. However, compare Cm pitu-wetï and Cm matu-wetï 'limp (human or animal on front leg)' and Cm tatu-wetï 'limp (person only)'; and -tu-wetï is their commonality, the first CV-appearing to mean ma- 'hand', perhaps ta- 'leg', etc. But if s.th. near *piC-tu is a reconstructable sequence of morphemes, then PYp lost 2nd V u, and Cr shows a different 1st V, but Tr, Cm, and PYp all agree in most segments, and Cr and Tr showing *o instead of *u. The reduplicated pio- syllable of Eu piopiokédio 'cojear'; Eu piopiioké váko 'andar cojeando' (vako 'andar') may belong. Does NP to'yo 'limp, v' contain the isolated *-tu without prefixed morphemes? Though not all is secure, there are cognate kernels that are likely linkable. [no *p > h in Cr] [NUA: Num; SUA: Tep, Trn, CrC]

1338. *wina > *wina 'limp, be lame': Cm wihnai mi'arī 'walk lamely, limp'; Ls wóna 'limp, be lame'. In light of an identity of three of four segments (*wVna) and a common UA vowel change of *i-a > \ddot{i} -a (then Ls o < * \ddot{i}), a tie between the Cm and Ls items seems probable. [*i-a > \ddot{i} -a] [NUA: Num, Tak]

1339. *cï(C)ka / *caka 'lame, limp': Cp čéşkiye 'be lame'; Ls čóka 'limp, be lame, crippled'; Yq čákala wéye 'lean-walk'; Cr ha'ipú wa-čé'ehka 'está cojo'. The first vowel of *cïka matches all languages except Yq; and Cp and Cr *cïska may be due to redupl. [clusters] [NUA: Tak; SUA: Cah, CrC]

1340a. *Luhu(N) 'lame, limp': Ca lúúmiš 'crippled, paralyzed'; Sr luumiš 'lame one' (borrowed from Ca, notes Hill); Op rho'omoi 'cripple' (Shaul 2007); Hp rohona 'one-legged'.

1340b. *Lo'i 'lame, limp': Yq ló'i 'lame'; Yq ró'iró'ikti weáma 'anda cojeando'; My ro'i/lo'i 'lame'. Does Ktn yu'u' 'lame' belong at all? [initial *L] [NUA: Tak, Hp; SUA: Opn, Cah]

NB, for Eu piopiioké 'andar cojeando' see at 'rot'.

LINE, ROW; LÍNEA, RAYA, FILA

- **1341.** *koppa 'make lines/strips/stripes': M88-ko35; KH.NUA; KH/M06-ko35: Cp qípe 'be striped'; Ca qípi-n 'mark lines, lay s.th. like string'; Ls qépa/i 'split into small strips, peel twigs for basketry'; Sr qiipkin 'make a stripe' (both Kenneth Hill and Miller suggest the Sr form is a Cupan loan). [*k > q/_o in Cupan] [NUA: Tak]
- 1342. *cakaLi > Tep *sakali 'be in a line': PYp sakali 'row, line, n'; PYp sakil 'lined up' (PYp sakalim 'go to the side, vi'; perf: sakali); ST sakaly 'in a line'. [SUA: Tep]
- 1343. *witta/i > *wiLV 'mark a line, be (in) a line': KH.NUA: Sr wilyï'k 'be marked with a line, be a line' (Hill wonders if from Ca); Sr wily|kin 'make a line on, mark with a line'; Ca wílya-na 'mark with a line, draw stripes'; Cp wílye 'paint a straight line'; Ca wíli 'be marked with a line'; Ca wílyi 'be lined up'. Add AYq witti 'straight'; AYq witte 'draw lines'. [NUA: Tak; SUA: Cah]

LION (MOUNTAIN), COUGAR, PUMA, BOBCAT, WILDCAT, LYNX; LEÓN, PUMA, JAGUAR, GATO MONTES, TIGRE, LINCE, ONZA

- **1344.** *yïpa 'wildcat': B.Tep28 *dïdïvari 'tiger'; M88-yï15; Fowler83; KH/M03- yï15: NT dïdïvïli; ST dïdval^y; ST(W) dï'nvaly. Miller includes My yóoko 'tigre'; however, it only has an initial y- in common with the Tep forms. Fowler includes Tr tuberi/tuweri and Cr hïripuh, perhaps loans from Tep languages. [SUA: Tep]
- 1345a. *tukkuC 'wildcat': M67-460 *tuku 'wildcat'; I.Num226 *tuhku(h) 'wildcat'; BH.Cup *tukut 'wildcat'; M88-tu5; Munro.Cup137 *túúku-t 'wildcat'; KH.NUA; KH/M06-tu5: NP tuhu'u; TSh tukkupicci; Sh tukku-picci 'bobcat'; Kw tuku-ci; SP tuhku"; CU múusa-túku; Hp tokoci; Tb tuuk-t / tuguuku-t 'mountain lion'; Cp túku-t; Ca túku-t; Sr tuku-t; Ktn tuku-t; Gb tukút 'wildcat'; Gb tukúrut 'león'. Add WMU t*uh*qqú-ppü-č*i* 'bobcat, wildcat'.
- 1345b. *tukku-wï 'mountain lion (< bobcat-big)' (and other compounds of *tukku): Tb(V) tuuguukwï-t; Tb(M) tuguukut 'mountain lion'; Ca túkwet; Ls túk-wu-t; TSh tukkummïinci; Kw tukuu-mïi-ci.
 1345c. *tuhu(wï): NP tuhu'u 'bobcat'; Hp toho / tohow / tohow / tohoo 'mountain lion' (Hill rightly wonders if it is a loan with Num lenition: *-k-> -h-. [*k > h in deer, black] [NUA: Num, Hp, Tak, Tb]
- **1346**. *tunu-wï 'bobcat': Mn tonoowí' 'bobcat'; NP tuunïgwicidï 'cougar'. Jane Hill (p.c.) identifies this as a Yokuts loan. [NUA: WNum]
- **1347.** *tu'ci (< *tukkuti ?) 'wildcat': L.Son319 *tuci tigre; M88-tu22; KH/M06-tu22: Op tuci; Eu tucí; Tr ru'čí. These could be related to the NUA forms above (*tukku-), for two reasons: (1) Tr ru'či shows a glottal stop that may align with k lost in a cluster (*tukkuci > tukci > tu'ci), and (2) medial *-c- in NUA is usually from -t- or a cluster, so *tukuti fits Hp tokoci and is nearly identical to the Tak forms here listed, and a similar proto-form would explain -c- in NUA. [SUA: Trn, Opn]
- **1348.** *tïpo 'wildcat': Tbr topó-l; Cr hïripuh; Wc tibe/tiïvé; CN ciin-tepol-tik 'bobcat, butt-penis-one'; CN tepol-li 'penis' and tepol-tik 's.th. docked, stumpy, rabón'; these have enough in common to suggest perhaps something similar to *tïpo. Whether CN tepol- originally meant 'penis' or 'short, docked tail' is debatable, since UA kwasi also shares both meanings: 'tail' and 'penis'. Might Eu poróc 'wildcat' be a metathesis? [SUA: CrC, Azt, Tbr]
- **1349a.** *tipaso 'mountain lion': Wr tehsébori 'small lion' and Tr repasori 'gato montés'. Note the metathesis. This pair (a and b) may be *-paso with differing prefixes *ti- and *wi-.
- **1349b.** *wïpso (< *wïpaso) 'bobcat': TO gewho; Nv gu'o/gï'o 'gato montés'. Note loss of *p in a cluster in Nv, though TO shows *-p-. It is feasible that this is a fossilized Tep prefix with *-pso, reduced from *-pVso or *-tpso with V's and C's lost in reductions. [SUA: Tep]

- **1350.** *mawiya 'mtn lion': B.Tep149 *mavidi/a 'puma'; M67-291 *ma 'mountain lion'; L.Son143 *mawiya 'león'; M88-ma26 'lynx'; KH/M06-ma26: Tr mawiyá 'puma, león americano'; Wr mawiá 'bobcat'; Cr mwáhye / mwáhaye 'onza'; TO mawiđ, pl. maipið 'lion, puma, cougar'; LP maviji; PYp mavidi; NT mavíídyi; ST maviidy. Add Tbr mawí-t 'león'. This appears as *mawiya in TrC and CrC, though we can add Eu maviot/mavirot (Shaul 1991, 73, 93) (r < d < *y). Other instances of Tep w = TrC w exist, or was this borrowed into Tep before the sound change *y > d, but after the sound change *w > g, since the *w remained and merged with *p (> Tep v/w). [*w = Tep p] [SUA: Tep, Trn, Opn, Tbr, CrC]
- **1351.** *osiLo 'large cat': CN ooseeloo-tl 'bobcat'; Yq 'óusei 'león'; AYq ousei 'mountain lion'. From whence did Mn wiheesíti 'mountain lion' come? [liquid] [SUA: Cah, Azt]
- 1352. *waLi / *wari 'mountain lion, predatory animal': M67-110b *wa coyote; L.Son346 *wo'i 'coyote'; M88-wa7; Stubbs 2000b-32,35; KH/M03-wa7; KH/M03-wo11: Wr wori 'mountain lion'; Tbr wawi / wowi / vavo 'mountain lion'; Cr waábe'e 'coyote' (pl: waábe'e-te 'coyotes'); Op gori 'coyote'; Eu voi/boi/woi 'coyote'; Wr wo'i 'coyote'; Yq wó'i / go'i 'coyote'; My wó'i 'coyote'; Tbr wawi-nal, vavo-nal 'wolf'; Tbr woi / goi 'coyote'; PYp kolisi 'mountain lion' (note Op gori, thus devoicing of g > k in PYp). Cr may be a loan from Tbr wawi 'lion' or underwent the same kind of consonant harmony, with the 2nd w > v > b). I consider TrC *wo'i 'coyote' to be related to Wr *wori 'lion', in that often r > ' in Cahitan especially. Wr wo'i is likely a loan from Cah, so of Wr wo'i 'coyote' and Wr wori 'cougar', the first is a loan. I also consider Miller's initial vowel *a* to be correct (as in Tbr and Cr), and that o is due to the rounding influence of adjacent w; note vestiges of the Tep sound change *wo'i > go'i in Op and Tbr words for 'coyote'; and could Sr wanaţ 'wolf or cougar' be a nasalization of the liquid (or is it with *kwana 'coyote'). Or what of Sr wahi' 'coyote'? [C harmony; original V in Cr, Tbr, Sr; *L > '; Cr-Tbr contact? like leaf] [SUA: Tep, Trn, Opn, Tbr, Cah, CrC]
- 1353. *kap 'bobcat': Wc kapuvi 'bobcat' and PYp kaper 'wildcat' share the first three segments. [SUA: Tep, CrC]
- **1354.** *musa 'cat': KH/M06-mu24: Hp moosa; CN mis-tli; CN mistoon-tli 'gatillo, leoncillo'. As Ken Hill points out, besides Hp and CN, which fit the sound correspondences, many loans are from Azt: TO miistol; Eu misto; Tr miisi; Wc mico. If from Spanish, how did Hp in NUA and Azt in SUA get their expected sound correspondences of *u > Hp o and *u > CN i? Jane Hill (p.c.) adds TSh tukkumiïnci 'mountain lion'. [NUA: Hp; SUA: Azt, loans in Trn, Opn, Tep]
- NB, Tr rekamuči 'cat-like quadruped' and rekačari 'type of bobcat' both contain the stem *tika 'lie down', there is an occasional semantic connection in UA between 'lie down' verbs and large cats.

 NB, for *waCNi > *wani 'gray fox', see at coyote.

LIP: LABIO

1355. *sapaLa (< *sapata) 'lip': Wr asapéla; CN šiipal-li; CN teen-šiipal-li; Eu tén-pira; Tbr tini-purí-t; Yq temberia; My tem-beria; Cr biirúh. Note the Cr and Tbr vowels metathesized. The vowels are difficult, but the three consonants (s-p-L/t-) seem clear. The TrC forms have lost the sibilant in the cluster as a result of compounding with *tīn- 'mouth', which is typical sibilant behavior in UA: *tīn-sVpVla > tīn-spīla > tīnpīla > tīmpīl. The Numic forms probably result from a similar compound—*ten-pai > *tīmpai—such that the final -pai could be related, missing L: TSh tīmpetīŋkampi 'lip'; Sh tīmpai/tīmpe; CU tīpa-wəsí-vi. CN and NUA show the 2nd vowel to be *a*— *(sa)paL(a)—which could well be, since the following liquid tends to raise vowels and could have done so for the TrC forms. What of Sh sapai-pin 'side'? Might Sr ṣīṭ 'mouth, lips' belong with loss of p in a cluster? What of Ktn hīvī 'coast'? Intervocalic liquids usually become glottal stop in Yq, so the fact we have -r- in Yq and Cr means it may have started as original *-t-. [*-CC-] [NUA: Num; SUA: Opn, Cah, Tbr, CrC, Azt]

LITTLE, SMALL, FEW; PEQUEÑO, CHICO, POCO(S)

1356. *aLi 'little': B.Tep300 *'arii 'little one'; M67-387a *'ali, 387b *'ili; M88-'a7; KH.NUA; KH/M06-'a7: TO al 'little'; TO ali 'baby, child'; LP lii; NT áli; ST 'alyii; My iliči / ili'iči; Sr añii'či' 'small one, little one, baby, child'; Ca íñišily 'small one'; Ls 'ááli-may 'woman's brother's child';

Ls 'alú'-ma-l 'small, thin, a baby'. To these can be added Tbr ali- 'pequeño' and AYq ili 'small, little, few'; AYq iliči 'small, little'. [liquid] [NUA: Tak; SUA: Tep, Cah, Tbr]

- **1357.** *paLi 'a little': B.Tep184 *pariapi 'a little bit'; KH/M06-pa69: PB palia; PYp palia; NT palïpi; ST palyïp. [liquid] [SUA: Tep]
- 1358. *tï(m) 'small': VVH117 *tïma 'small'(TO čïm; Wc temá(ikï) 'boy'); M88-tï32; I.Num235 *tï(e)(h) / *tï(ï)(h) 'small'; KH/M06-tï32: Mn tï- in pïtittï 'new/young (object, being)'; NP tïïcci 'small'; TSh tiïcci 'little'; Sh tïaih; Cm tïe; TO čïm; Wc temá(ikï) 'boy', pl: temá(ri). [NUA: Num; SUA: Tep, CrC]
- 1359. *ci / *cin 'little, diminutive suffix, boy, youth': Sapir; KH.NUA; KH/M06-ci24: Sr čičin(t) 'boy'; Sr tïčiñ|t 'young man, youth'; Gb čenúho' pl: čečínoho'am 'small one'; Gb čenúy 'little, chiquito'. Ken Hill tentatively adds Eu -ci 'diminuitive suffix' and CN -ciin 'diminuitive/honorific suffix' with a question mark, but when the first three segments agree, they seem more probable than not. Jane Hill (p.c.) adds Ch ci'auc(i) 'thin'. [NUA: Tak, Num; SUA: Opn, Azt]
- **1360.** *huya 'small': Hp hoya 'small, young'; Tbr huyi, huyi-r 'chico'. [NUA: Hp; SUA: Tbr]
- **1361.** *cupi 'small': Eu čúpi 'chico'; Tr čúpu(ri) 'of small size'; and as likely as not the -jubi- of Tb(V) ku'uujubil 'little'; Tb(M) kuujubil 'little'; Tb(M) kuujubil 'little, little bit'; and perhaps Ktn cipk 'a little'. [SUA: Trn, Opn; NUA: Tb, Tak]
- **1362.** *mi'a 'small': Ch mi'áu-nci 'small'; Ch mi'áu-pïciwï 'small one'; SP mia'-" 'small'; SP mia'-ppï-ci 'small'; CU míi-ci 'little (of mass)'; CU míi-pï-ci 'small, little'; WMU mii'ič 'a little bit'; WMU miiči / mí'püči / míppüči / mii(')püči 'little, small, short (one)'. Jane Hill (p.c.) adds NP miici 'short'. [NUA: SNum, WNum]
- **1363.** *akuti 'little, short': Cp akúlyi 'little'; Cr kïlen 'corto, chico, menor, pequeño'. An original *-L- would bec glottal stop in Cr, so I reconstruct *-t- (> Cp -l-). Other forms lack first V, as in *kuti 'short': Tr kúriri 'cortos, no largos, chicos, en el sentido de cortos'; Ls kité-kti-š 'short, as of clothing; a type of ocean fish' (strange vowel). [Ls vowels] [NUA: Tak; SUA: CrC, Trn]
- **1364.** *aku-si 'little': Cp akúši 'tiny'; Tb 'igišpil 'a little bit, small amount'. [NUA: Tak; Tb]
- **1365. *cako** 'small': Hp cay, pausal acc: càako 'small, little'; CN coko 's.th. very small'. [CN V leveling or 1st to 2nd] [NUA: Hp; SUA: Azt]

NB, for *naCca 'be too little space, crowded, tight, not fit', see at 'crowded'.

Live: see alive or sit (dwell) or go (wander an area)

LIVER; HÍGADO

Mn	nïwï	Нр	niïma	Eu	hemát
NP	nïma	Tb	nïïma-l	Tbr	yamá-t
TSh	nïmï(cci)	Sr	nïmïič	Yq	héemam
Sh	nïmïn; nïwïn	Ca	ném'a; yávayva '&lung	, My	heémam
Cm	niïma	Ls	nóóma	Wr	emá
Kw	nïwï-bi	Cp	néma; pípiviska	Tr	imará; emará
Ch	nïwïmpi	TO	nemaj; nem 'a liver'	Cr	neemwa
SP	nïŋwï-n, nïŋwï-mpi	Nv	nïmadi	Wc	néma
WMU	n <u>úu</u> -ppü-n 'my liver'	PYp	nemar; LP hïm	CN	eel-li
CU	núu-pï-n 'my liver'	NT	nïma(dï)/númai	ST	lumaad

1366. *nïmaC / *nïmaN 'liver': VVH89 *nï_Sma 'liver'; B.Tep178 *nïma, nïmadï (poss'd) 'liver'; M67-265 *nema 'liver'; I.Num124 *nïmïN; L.Son175 *nïma 'hígado'; M88-nï2 'liver'; KH.NUA; KH/M06-nï2. Add Nv nïmadi, Ktn nïma-c, and Toŋva (ne/mo/a)-noom '(my/your/his)-liver'. Note Southern Numic showing w for *m; w turns up in one Sh form and in Mn as well. Instead of *ï, some have u: CU, ST, one form of NT, and perhaps Nv. Cahitan innovated initial h. TSh, Sh, SP, and CU all suggest a final -C, likely the final nasal apparent in Kw, Ch, and SP, and agreeing with Iannucci's reconstruction. Some words remain consistent throughout UA; every language has a reflex of this except Azt branch. [initial n/l/h/y/ø] [NUA: Num, Hp, Tb, Tak; SUA: Tep, Trn, Cah, Opn, Tbr, CrC]

The next two are morphemes for 'liver' among the Nahuatl or Aztecan dialects as listed in Suárez (1986), a wonderful work on Aztecan dialects. Some dialects have one term, some the other, and some display a compound of the two: *yeltapac.

1367. *tapac 'sea shell'; *yïL-tapac 'liver': Suárez 1986: CN *tapač-tli 'sea shell, coral'; Pl tapač 'white sea shell'; hígado [liver] terms from various Nahuatl dialects (Suárez 1986): yeltapactli' (Xalatzala, Guerrero);

eltapač 'hígado' (Santo Domingo de Guzmán); yehtapač (San Felipe Rio Nuevo, Tabasco); yaltapa (María acatepec Ometepec Guerrero); yatapač (Xilocuautla, Puebla);

yatapač (Xilocuautla, Puebla); yeltapašli (Coatepec costales); eltapaš (Reyes de Vallarta, Puebla); [SUA: Azt] yeltapač (Xalpatlahuac Guerrero); noyoltapa (Quetzalapa, Guerrero); yeltapačtli (Atliaca, Guerrero); neštepoč (Zitlala, Guerrero); yeltapačtle (Cuentepec, Morelos); yakapačtli (Cuacuila, Puebla);

1368. *(y)ïL 'liver, organ': Suárez 1986: CN eel-li 'liver, sometimes organs generally or seat of strong emotions'; Pl el- 'inside'; 'liver' terms from Suárez (1986): yehli (Huitziltepec, Zumpango del Rio Guerrero); yehli' (San Agustín Oapan); yele' (Almicingo, Morelos); yeeli' (Atlacholoaya, Morelos); iyal (Hueyapan); yool (Mecayapan); and several others above compounded with *-tapac. [SUA: Azt]

LIZARD; LAGARTO, LAGARTIJA, CAMALEÓN, IGUANA, CACHORRA

1369a. *kwïc 'iguana': CL.Azt90 *kwəc 'iguana'; M88-kwï4 'iguana; KH/M06-kwï4: Wc kecé/kesé 'iguana'; CN kwecpal-in 'iguana'; Pl kuukwecpal 'iguana'. For Wc kecé/kesé 'iguana' see the forms at *kïCti 'lizard'. Some forms point to *kwoca or *kwaca, as well:

1369b. *kwaCca > *kwoCca 'lizard': Stubbs1995-20: Tbr kwacará 'lizard sp'; Hp qöqöci; Wr wocá 'lizard'. Note CN weewecpalin 'iguana' and CN kweekwecpaltin 'lizard, iguana'. Actually *a > \ddot{a} as UA schwa and *a > o adjacent to rounded *kw, may make Tbr's V (a) most probable.

[w / kw in CN, Wc k < *kw?] [SUA: Trn, Tbr, Azt; NUA: Hp]

1370a. *yuL 'lizard, sp.': BH.Cup *yu ... l 'lizard, sp.'; M88-yu15; KH.NUA; KH/M06-yu15: Cp yú'e-l 'a large lizard'; Ca páyul (pá- 'water'); Ls yulú' 'lizard, sp'. Hill also notes Sr yu'aat 'water turtle' with these and the relationship of the whole of them to *yu'a 'wet'.

1370b. *pa-yïL 'lizard': TO wajelho 'whiptail lizard'; ST vadïïr 'lizard'. Both Tep forms show *pa-yïL well, which *yïL stem may or may not be related to Tak *yul above. TO h in a cluster is sometimes simply vowel devoicing, sometimes meaningful. [NUA: Tak; SUA: Tep]

1371. *yaŋVpa 'lizard, sp.': M88-ya25; KH.NUA; KH/M06-ya25: Ca yáŋva' 'black lizard'; Sr yaaŋva' 'kind of lizard'. [medial ŋ] [NUA: Tak]

1372. *caŋa 'lizard, sp.': M67-267 *cana 'lizard'; M88-ca7; KH.NUA; KH/M06-ca7: SP čaŋaa 'lizard, sp.'; Sr čääŋt 'lizard, sp'. Add Ktn caŋa-č 'iguana(?)'. Jane Hill (p.c.) adds Ch caŋa 'sceloporus species of lizard'. [medial η] [NUA: Num, Tak]

1373a. *caLaka 'horned toad': BH.Cup *caláka; HH.Cup *čaláka'; Fowler83; M88-cal1 'horned toad'; KH.NUA; KH/M06-cal1: Ca čálaka(t) 'horned toad'; Cp čaláka; Ls čaláka; Sr čilyaaqu' 'lizard, sp'. Ken Hill adds Ktn ciruku' with a question mark, but I vote yes, due to its great similarity with Sr čilyaaqu'. For them and Jane Hill's addition, let's also create a separate, but related set (below).

1373b. *ciLaku 'lizard sp.': to Ken Hill's Sr čilyaaqu' 'lizard, sp' and Ktn ciruku' 'lizard, cachora (iguana)', Jane Hill (p.c.) adds Gb čiruko 'scaly lizard' (Merriam 60:429). Miller says Sr looks like a loanword, but the subsequent adding of Gb and Ktn, and all 3 forms agreeing in final *-u/o and first vowel i, loan status becomes less likely, though an early loan could be in all 3; nevertheless, Cup *caLaka 'horned toad' and Sr, Ktn, Gb *ciLaku 'lizard types' provide a nice division of slight vowel and semantic variation for the same cognate in the Cupan (southern) vs. northern half of the Tak branch. As well, *caŋa above and *caLaka could possibly be related since a vowel

- syncope leading to a cluster of -lk- could easily produce the n we see in SP and Sr. Though Sr and Ktn have both, if one were a loan, they still could possibly derive from the same source. [medial n; -a/-u] [NUA: Tak]
- **1374.** *makkaCta(Nka)-ci 'horned toad': Fowler83-3:21 and fieldnotes: NP makaca'a 'horned toad'; NP(Fallon) magázaa; Kw makaca-zi 'horned toad'; Ch(L) makačaci 'horned toad'; Sh makkiccankacci 'horned toad'; Sh(W) maccankih; Sh(C) mahaccianka, maccinkipo; Sh(Owyhee) mácangina'a (Fowler's notes); SP pahkaca 'horned toad'; and Hp mácàakwa 'horned toad', but with *-Nk- > qw? Let's add WMU mattáqqa-či 'horned toad', which lost the 2nd syllable from s.th. like Sh: *makkattaNka-ci > ma(k)ttakka-ci. That and ST makaroič 'renacuajo' with r suggest CNum c < *-tt-. Jane Hill (p.c.) adds Tb mahkahsiit (Merriam 60:497). [*-Ct- > -c-] [NUA: Num, Hp, Tb; SUA: Tep]
- **1375.** *moco'o(ko) 'camaleon': Yq močo'okol 'camaleon'; My močo'okol(im) 'camaleon'; AYq motčo'okoli 'horned toad'; and TO mo'očwig 'toad' was possibly borrowed from Cah with a glottal stop hop, since TO should show s for č of TrC/Cah. Note the similarity between Hp mácàakwa and Cahitan *moco'oko, when Hp falling tone usually means a cluster and right where Cah's glottal stop is. The main difference is consistent strings of a different vowel (a-a-a vs. o-o-o), yet both could feasibly be from *mattaCkwa, if the labio-velar's influence slightly rounded them all in Cah. [SUA: Cah; NUA: Hp]
- **1376.** *muku 'lizard sp': Mn mukúta 'lizard sp.'; NP mugusu 'lizard'; NP mugucugadi 'lizard'. [-t-/-c-/-s-] [NUA: WNum]
- **1377.** ***tiko** 'reptile of sorts': Eu tekónoc 'salamander'; Cr teekúh- 'toad'. Cr u < *o, so the two match perfectly through four segments. [SUA: Opn, CrC]
- **1378.** *kïCti 'lizard': Hp kïci, kïcìipï, kïïkïci 'lizard'; Ca kéčiš 'big white lizard'. Wc kecé 'iguana' may better belong here than above with *kwïc. [NUA: Hp, Tak; SUA: CrC]
- **1379. *poko** 'lizard, reptile': Mn pogó'ya 'lizard'; Sh(M) pokoicii 'lizard'; Sh(C) pokoicii / poko-picci / pokwaicii 'lizard'; Tb pokpoogoona-l 'king snake'. [NUA: WNum, CNum, Tb]
- 1380. *pïhor / *pisu 'lizard sp.' (*pisu if from Tep): Eu behór 'cachorra / cacharron que se come'; Yq behó'orim 'type of lizard'. The Yq form might be a loan from Eu, or both could be loans from s.th. Tep, like PYp vihul 'lizard sp.', which also aligns through four segments with Tb pišuuga-t 'red racer snake'; but Tb is also listed at *(pa)-suku 'snake'. [SUA: Tep, Cah, Opn; NUA: Tb]
- 1381. *taka 'type of lizard': Eu takár / takál 'cachorra prieta y parda'; Ca tátaxsily 'little lizard'. [liquid] [NUA: Tak; SUA: Opn]
- **1382.** *wiku 'lizard': My wikúrim 'iguana'; Yq wí'iku 'type of lizard'; Yq wikuím 'cachorra, a reptile'; Wr wikói 'type of lizard or salamander'; Tr wikóguri 'camaleón'. What of Tr bikó 'type of lizard'? [SUA: Trn, Cah]
- 1383. *ti-hoLoki / *ti-kuLuku 'lizard': Tbr hurí/holí 'iguana'; Tr ŕehoroki / ŕohoroki 'type of lizard'; PYp tohoroki 'rachaca, a lizard sp.'; PYp tohorek 'cachoron, a lizard sp'; ST tïrook 'lizard'. Tbr hurí/holí may represent the primary stem since *ti- 'rock' seems prefixed to the Tr and PYp forms; borrowing may be involved in some languages, since Tep h should correspond to Tr s, or Tr h to PYp '/ø, unless softened from *-k-, in which case another decent possibility is Ktn tïkiruku' 'amphibian or reptile species, possibly a type of salamander', possibly a NUA reflex. [SUA: Trn, Tbr, Tep; NUA: Tak]
- **1384.** *cakawata / *cuka'wata 'lizard': TSh cakawatan 'chuckwalla, sauromalus obesus'; Ca čúka'walla 'lizard (big with rough body, good to eat)'. [*-t- > -l- in Ca] [NUA: Tak, Num]

1385. *cakwa 'lizard': Ca čaxwa-l 'a brown lizard'; CN te-čičikoo-tl 'type of lizard with blue neck markings'; Tb šiko-l 'lizard'. Tb š presents a slight problem for it, though s vs. c ambiguities are a common plague in UA. Jane Hill (p.c.) suggests the Ca term's similarity to Yuman creates the possibility of a loan one direction or the other. [c/s] [NUA: Tak; SUA: Azt]

NB, for *suku 'snake, lizard', see snake.

NB, *cikama 'horned toad': Fowler83-3:21 *cikama 'horned lizard': TO čemamagi 'horned toad'; Fowler also lists Tr without its form, and I cannot find it; thus, no number for now.

Loincloth: see at end of clothing

LONG, TALL; LARGO, ALTO

1386. *tipi / *tapu 'long, tall': B.Tep248 *tivi 'long'; M67- 268 *tep/*te 'long'; L.Son294 *tipi 'largo'; M88-ti11 'long'; KH/M06-ti11: TO cew 'tall, long'; UP čiwi; LP tiv; NT tivi; NT tiviidu 'be long, tall'; ST təv/tv; Eu tevéi 'long'; My teebe 'long, tall'; AYq teeve 'tall'; Yq téebe 'long, tall'; Wr tepihkúma / tehpekúma 'long'; Wc téví / téwí 'long'; Cr áh-tyee 'he is tall'. To these we can add Nv tubu/tubutu 'eminente' (u for i); Tbr tepe 'tall, hill' and CN tepee-tl 'hill, mountain, precipice'. Sapir and most since all tie this form to *tipaC 'mountain'; and we might also add Ls tavú-lvu-š 'long' though the vowels of Ls do not match, but may be more original, the others showing a typical leveling pattern for *a* then high V. Jane Hill (p.c.) mentions Ktn tipuck 'thick (like a board)' as a possible cognate, which has the same V. [NUA: Tak, Tb; SUA: Tep, Trn, Cah, Opn, CrC]

In M88-pa35 are perhaps too great a variety of forms: M67-229 *pan 'high'; I.Num129 *pa'a 'high, long, tall'; CL.Azt119 *pan 'on', 261 *-pa(-n(a)) 'on'; Cr án 'on top'; CN -pan 'on'; Hp wiïpa 'long, tall'; Tr paní 'arriba'. It needs to be sorted out whether we are dealing with s.th. near *pa'an or three separate stems—*pa'a, *pani, *wipa. Appearances here may suggest the latter, while some forms under *at* could make one wonder. But for now let's separate *pa'a 'long, tall'; *wipa 'long, tall'; and *pani 'on', putting the first two here and the last at 'at/on':

1387. *pa'a 'long, tall': Sapir; M67-229 *pan 'high'; I.Num129 *pa'a 'high, long, tall'; M88-pa35 'high'; KH/M06-pa35: NP pa'a 'high'; Cm pa'a 'long, high, tall'; Kw pa'a-togo- 'be long, tall; Ch pa'á 'tall'; Ch pa'á-ntoga 'long'; SP pa'á-N/ni 'high'; SP pa'a-toġoN 'long'; CU pa'áy 'be tall'. To those we can add TSh pa'appï-tïn/yun 'tall'; WMU pa'á-ttï 'tall'; WMU pa'á-ttocwó-ti 'long'; CU pa'áti 'tall'; CU pa'á-toġwá-tī 'long'. With semantics 'on' more than 'tall/long' are Mn -ba'a 'on top of' (possibly with *pa'a); Ch va'an(a) 'on top of'; Kw -pa'a/-va'a 'at, on'; Ca pá'akwen 'on top of, on'. With these Num forms, Sapir and Miller associate CN paani, etc, though I have doubts. What seems more probable is that Tep *pa'a-muwa 'mosquito (long-nose)' at 'fly' exhibits this stem in a compound. [NUA: Num; SUA: Tep]

1388. *wïL-pa'a 'tall, long, great-height/length': Hp wïïpa 'tall, long'; Cp weváṣa 'long'; Cp weváṣiš 'tall'. In M67-229, Miller astutely sees the Hp form as a compound of *wïL-pa'a 'big-height/length'; intervocalic -p- in Hp vs. -v- agrees. The -v-in Cp likely means it was sooner perceived as clusterless or non-geminated in Tak. What of Ca wávu-ma 'tall, long'; Ca wavu-k 'get tall, long, vi' whose vowels vary from the Hp-Cp agreement? [Hp -p- < *-Cp-] [NUA: Hp, Tak]

1389. *otï / *utu / *uta 'long, tall': I.Num25 *ïtï 'long, tall'; M88-ï10 'long, tall'; KH/M06- ï10: Mn ïdï-tu 'long, tall, lanky'; Mn ïdï-wïnï 'be tall'; NP otï'yu 'long, tall'. Also NP o'odï'yusu'ma 'tallest'. Jane Hill (p.c.) provides a brilliant addition in Ls 'ééč-i 'high, up, above' whose vowel fits NP and whose -č- must be from *-t- or t clustered. Let's add Tb 'utudu 'tall' and what about Wc 'ata 'long and thin'? In light of the frequency of *u > ï in Num, Tb could easily portray the original vowel, so I certainly count it. Wc is less certain, but a decent possibility. [NUA: WNum, Tb; SUA: CrC]

1390. *yïŋï 'be/pass a long time': M88-yï18; KH.NUA; KH/M06-yï18: Cp yénge 'to last a long time, endure'; Ca yéŋ 'pass a while (of time), stay a while'; Sr yïïŋï'k 'be a long time, be later'. [medial ŋ] [NUA: Tak]

1391. *kapataC 'long, tall': TSh kïpïtappi 'long, tall'; Sh(M) kïpata 'long, tall'; Sh(C) kïpattax 'long, tall'; Sh(C) kïpatta-wïnïh 'stand tall'; Wr kahpíla-ni 'be long'. [NUA: Num; SUA: Trn]

1392. *paca 'long, thin, stretch': CN picaawa 'make s.th. thin, vt'; CN picak-tli 's.th. thin and long'; ST vaissïna' estirar, alargar'. Since Tep s < *c, the CN and ST forms match well except for the first vowel which may have been schwaed in CN. [SUA: Tep, Azt]

Look: see see Look for: see search Loose: see untie

LOSE, MISS, BE LOST; PERDER(SE), PERDIDO

1393. *wa(C)tiN / *waCtiC 'lose, lost': Mn wacikï 'lose, vt'; Mn waci 'be lost, vi'; Mn na'waazi 'hide from, hide, vi/vt'; Mn wazitïgï 'hide, vt'; NP wacigga 'lose s.th., vt'; NP nawaci'hu 'hide, vt'; TSh waci" 'be hidden, concealed, lost'; TSh wacinkïtain 'lose, vt'; TSh wacikkatï 'hide, vi (hide-sit)'; Sh waci" 'be lost, vi'; Sh waci"-miï 'hide, vt'; Cm waci-tïkitï 'hide, vt'; Cm waci-habiitï 'hide, secret oneself'; Cm wacitï, wacikatï 'lose way, (become) lost'; Ch áaga-waci 'hide, v'; CU 'áaġa-wací 'hide, deny, vt'. [NUA: Num]

1394. *mï'nï 'lost': Kw mïï'ni 'lost'; Tr méne/méni 'lose, vt'. [NUA/SUA n:n] [NUA: Num; SUA: Trn]

1395. *wï'ka 'lose': Wr we'ka-ní 'get lost, vi'; Wr we'kapú-na 'lose s.th., vt'; Wr we'katé-na 'lose a bet or s.th., vt'; Tr we'ká- 'perderse, extraviarse, vi'; Tr (w)e'kawa 'perder, extraviar, vt'; Tr we'ka-bú- 'perder, olvidar, vt'; Tr we'kaba 'olvidarse, equivocarse'. [SUA: Trn]

1396. *tawas 'lost, lose': Ca táwas 'get lost, lose, vi/vt'; Ca táatus 'get lost often, distr'; Cp tewáşe 'disappear'; Cp tewáşi 'lose, spend'; Ls tawáşa 'lost'; Eu hitáwida 'perder'. Any possible tie between Ca táatus and Yq tá'aruk 'lo perdió'; My a'a tá'aru-k 'lo perdió'? [NUA: Tak; SUA: Opn]

1397. *poLowa 'lose': CL.Azt102 *polowa 'lose'; KH/M06-po22: CN polwiaa; HN poloa' 'lose, vt'; HN pol-iwi' 'be lost'; Pl pulua 'lose'; Pl puliwi 'get lost, disappear'. [SUA: Azt]

LOUSE, NIT; PIOJO, LIENDRE

1398. *'aCtīm > *'atī(N) 'louse': VVH24*'atī 'louse'; B.Tep304 *'a'atīi 'head lice'; M67-269 *'ate 'louse'; L.Son6 *'atī 'piojo de la cabeza'; CL.Azt103 *atīmV 'louse'; Fowler83; M88-'a10 'louse'; KH.NUA; Stubbs 2000a-5; KH/M06-'a10 *atīn (AMR): Kw aci-vi; Hp atī; Cp ála'a-t 'head louse'; Cp ála'a-š 'lousy'; Ls 'uláá-t; Sr äṭīm 'head lice, pl'; Ktn 'ačīm-č; Gb -ár; TO aa'ač; UP aa'ačī; LP 'a'at; NT áátīi; NT áátī 'have lice, v'; ST 'a'aat; Eu atét; Tbr até-t; Yq 'éte; AYq etem; My éttem; Wr ehté; Tr té; Cr áte/até 'louse/black louse'; Wc 'até; CN atemi-tl; HN 'atimi-tl; Pl atimet; Po atomt. Tak absolutive -t (vs. -l) shows a final -C, and Sr, Ktn, Cah, and CN show final -m or *atīm. Let's not assume -m is a fossilized pl suffix, as AMR also reconstructed a final nasal. Some forms suggest a geminated consonant or cluster, which probably means those that do not, later weakened or lost the gemination. [*t > c in Num; *t > l in Tak] [NUA: Num, Hp, Tak; SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]

1399a. *pusi'a(C) 'louse': I.Num161 *pusi'a/*posi'a 'louse'; Fowler83; M88-pu14 'louse'; KH/M06-pu14: Mn pusi'a; NP poziabbi 'louse, flea'; TSh posia-cci; Sh posia-cci. Fowler also lists Sh puzi'a and NP pozi'a, both showing glottal stops, as does Cm pusi'a / pusi'a 'head louse'. With two languages showing *u, I think *u > o. Miller also lists the SNum forms, which likely lost medial -si-:

1399b. *po'a 'louse': Kw po'o-vi; SP po'a-vi; CU pö'a-vi. Ken Hill adds Ch poo'avi/poo'aavi 'body louse'; add Ch(L) poo'wavi 'louse'. Add WMU pöö'a-vi / pöö'á-vi / pöö'a-vi / pö'æ-vi 'louse, lice, flea' [reduction or syllable loss in SNum] [NUA: Num]

1400a. *sipappitii 'body louse': B.Tep68 *hivapitii 'body louse'; M88-si16; KH/M06-si16: TO hiopč 'body louse, termite'; UP hiopiči; LP hiap; NT ivápiti; ST hiipət; add PYp hiapili/hiapeli. Miller includes NP posiabbi, possibly tying Num above with Tep here. But I prefer Ken Hill's separating these Tep forms from Num as shown above: Num *pusi'a; Tep *sipappitii. However, I consider the Tak pair below to be likely, though both Sr and Ktn often have h for *s, but not always, and for both Sr and Ktn we see the retroflex \$/\$ vs. regular s.

1400b. *ş**ïpatï** 'body louse': Ktn šïvacïcï-c 'body louse' and Sr şïväţ|ţ 'body louse' have three of four syllables parallel to the Tep forms. [a vowel afoul] [SUA: Tep; NUA: Tak]

1401. *sa'wa 'louse': KH.NUA: Ca sá'wal 'head louse'; Cp sá'wet 'nit'; Ls şá'la-t 'body louse'; Sr a-saa'wï 'nit'. With V assimilation toward w and *w > g in Tep, NT sóógïdï 'liendre' is not unlikely. [NUA: Tak; SUA: Tep]

1402. *náwi 'body louse': Ca náwilya-t 'body louse'; Cp náwily'at 'body louse'. While Tb(V) nahaa-l 'louse' and Tb nahaa'ït 'have lice' may be kept in mind as possibilities, beyond initial CV they are problematic. [NUA: Tak]

1403. *wi'aci 'louse': Eu wiáci 'piojo de ropa'; Tr wi'čí 'piojo blanco'. [SUA: Trn, Opn]

1404. *(a)suL 'louse egg(s)': CN asiil-li / a'siil-li 'louse egg'; Wc šïnai 'liendre'. Interestingly both CN ii and Wc ï correspond to *u, though the CN initial vowel and the 2nd C are problematic. [SUA: CrC, Azt]

NB, for *ku'a, see 'fly'

Love: see want

LUMP, BUMP, HUMP; TROZO, PELLA, TERRÓN, CHICHÓN, GIBA

1405. *Limu 'lumpy, bumpy': Sr rimuumu'k 'lumpy'; Ca limu-límu 'be bumpy'; Ls kuma-lúma 'be bumpy'; AYq rumui 'uneven'; AYq rumui 'rough ground' (in other words, lumpy and bumpy); both the bilabial m and the following u could encourage an assimilation of the first vowel i to u. [NUA: Tak; SUA: Cah]

Possibly relevant to the above at 'garbage', compare *rima/*Lima 'throw away, pile up (a refuse heap)': Ls líma/i 'pile loosely'; Hp ríma 'cast out, throw away'. These—*Limu and *Lima—may be related because (1) Sr, Ca, Ls, and Hp all four agree through three segments *lim..., and (2) semantically they all have to do with 'throwing things away, adding to an ever increasing refuse heap/pile' with 'heaps, humps, lumps, bumps, and piles' in common.

1406. *ku'ma 'lumpy, bumpy': Tr ko'mókuri 'grumo [clot, lump], mal batido [poorly stirred]'; Tr ko'mó-tu-hacerse grumos, algo que no se bate muy bien'; Ls kuma-lúma 'be bumpy'. [NUA: Tak; SUA: Trn]

1407. *ciNka-ka- 'rough, bumpy, wrinkled': Kw coko-gi 'be rough, pitted'; SP činqa-ġa- 'be rough'; WMU čükkááġa-y 'rough, bumpy, vi/adj'; CU čiká-ĝa-rü 'rough, wrinkled, bumpy, lumpy'. [NUA: SNum]

1408. *pottoC 'round bulge, hill, bump, spherical': SP potto"- 'round, spherical'; WMU pött<u>o</u>" ni / pötto" ni-či / pahtto" ni-či 'round, lump, hill, n'; Ktn pocokič 'knot'; Ktn poc-k 'tie a knot'. [NUA: Num, Tak]

LUNG(S); PULMON(ES), BOFE(S)

Mn	sóno	Hp	halayna; mïma	Eu	soná-t / coná-t
NP	soŋo/sono	Tb	mošooha-t/mosooha-t	Tbr	wopa ⁿ -s; sorá komwa-lí-t
TSh	somo/soŋwo/soŋo	Ktn	šoŋa-č	Yq	saré'ečia
Sh	sonko/sonno	Ca	yávayva	$A\bar{Y}q$	hemaha'ačim
Cm	soomo	Ls	savá-sva-š	My	sáre'ečiam
Kw	soo-vï	Cp	qíqilye	Wr	so'locá
Ch	soo-vi	TO	hahaw	Tr	sonorá
SP	soo-vi	Nv	abokadaga-di	Cr	šáïñi-mee; ta'atime
WMU	söö-v <i>ü</i>	PYp	hakadaga; pl: havdaga	Wc	šaaka
CU	sö'ö-vï	NT		Pl	puhpus
		ST	havkaL	CN(RJ	C) mimiyawayo-tl

1409. *somCo / *soNCa > *soŋo 'lungs': VVH166 *sosno 'lung'; M67-270 *sono; I.Num182 *soŋo; M88-so7; KH/M06-so7: Mn; NP; TSh; Sh; Cm; Kw; Ch; SP; CU; Ktn; Gb sár; Tbr; Tr, Cr; HN sooneewa' 'to swell up (of vipers)'. Add Ktn šoŋa-č; Eu soná-t / coná-t 'bofes'; and Wr so'locá. Ktn and Eu are a nice NUA and SUA match, identical except for NUA -ŋ- and SUA -n-. Wr so'locá is not only probable but may be instructive for an underlying consonant cluster in PUA; the variations of the second consonant (n, ŋ, ŋw, m, h, ', l, ø) strongly suggest an underlying cluster. The -sooha- portion of Tb probably also belongs, since another velar (k) becomes h in Tb. Miller includes Ls ṣavá-ṣva-š 'light on one's feet, lungs'; remotely possible, but TO and Ls both fit *sapa so perfectly, and the number of steps from *soNCa to *sapa has me preferring to keep them separate for now, as Ken Hill does. The Cr vowels could use some answers too. [NUA: Num, Tak, Tb; SUA: Trn, Opn, Tbr, Azt]

1410. *sapa 'lung(s)': KH/M06-sa30 (not in M88): Ls savá-sva-š 'ļṣavá-ṣva-š 'light on one's feet, lungs'; TO hahaw. Note also the pl of PYp hakadaga, pl: havdaga 'lung(s)' also = *sap.... If a cluster of bilabial -m- + stop caused a bilabial stop (p) and the V assimilated, *sapa could possibly be from *somCa? That is, *som'a / somCa > *sopa > sapa, since it is Ls's unaccented syllable that assimilated (unstressed Vs being more likely to assimilate). Nevertheless, I like Ken Hill's solution: he has TO and Ls definitely together at sa30, but cross lists Ls at so7 with a question mark, which is exactly my present assessment as well: Ls with TO definitely, with some chance of both tying to the more pervasive *soNa, but with some questions not so minor—like how did Ls in NUA and Tep in SUA end up with the same specialized changes, when other languages in either half did not? [*-m²->-p-?] [NUA: Tak; SUA: Tep]

1411. *sap(a)kaL (> *sapkaL > *sakaL) 'lung(s) (< lung-house?)': PYp hakadaga; Wc šaaka; ST havkaL; and perhaps the latter part of Nv abokadaga-di. ST havkaL shows *-p- and suggests that *sapa above is here compounded with something like *kaLa(wa) or *kayawa, with the usual collapsing reductions typical of UA. The last two syllables of *kayawa compared to *yawayawa below should encourage contemplation. Could Tbr wopaN 'pulmón' and Nv abo- involve a vowel metathesis? [SUA: Tep, CrC].

1412. *sata'ati 'lungs': Yq saré'ečia 'bofe, parte del hígado'; My sáre'ečia(m) 'bofes, pulmones'; Cr ta'atime 'pulmones' (missing initial CV?); Gb a-şáar 'bofes [lungs]'. [SUA: Cah, CrC; NUA: Tak]

1413. *yaway(a)wa / *yawayo 'lung': CN mimiyawayo-tl 'lungs'; Ca yávayva 'lung, liver'. [*-w- > -v-] [SUA: Azt; NUA: Tak]

Mad: see angry Maguey: see agave Make: see do

MAN, MALE, PERSON, BOY, PEOPLE; HOMBRE, VARÓN, INDÍGENA, MUCHACHO, GENTE

1414. *takaC / *takaN 'man, person, body': Sapir; VVH145 *taka 'man'; M67-272 *taka 'man'; BH.Cup *tax 'person' (Cp 'atáx'a; Ca táxlis-wet; Ls 'a-táax 'person, self'); BH.Cup *taxawi 'body' (Cp táxwi; Ca táxawily; Ls táaxaw); L.Son270 *taka 'cuerpo' (Op takat; Eu taka; Yq/My taká); CL.Azt105 *tlaaka 'man'; KH.NUA; M88-ta25 'man'; AMR 1993c *taka; KH/M06-ta25: Hp taaqa; Tb tahambi-t/l/š 'old man'; Sr taqtqa(t) 'body, picture'; Ktn taka-t 'person, Indian'; Ktn tahtaka' 'body'; Gb táx; My taká 'cuerpo, alma, veinte'; CN tlaaka-tl 'person'; CN tlaak-tli 'body, torso'. A third C is apparent in Tb, SP, and others. AMR (1993c) notes SP taġap-pïa-pi 'servant'. We should include Cr taáta'a; pl: téteka 'man' and Sh(GL) daga' 'friend (male)' and perhaps the -taka of Ch kaiva-taka 'mountain peak'. This is one of the fairly pervasive stems of UA, though it has different meanings in different branches: 'man' in Hp, Tb, CN; and 'body, person, self' in other branches. However, the presence of w or rounding after the k repeatedly reappears in different branches: the Tak words for body may better reconstruct to *takaw; and Yq and My show *takawa; Eu and other TrC languages show *takwa.

In spite of a *-k-/-kk- question, Num *takkaN 'semen' and *takkaN-pi 'arrow(head)' may belong here, as opposed to the Numic words *taŋwa- 'man' below, which are from *tatwa 'man' like Tb. In numbers Yq and My show sénu taka 'twenty' (one body, the number of all fingers and toes); this stem is also used in CN ma'-tlaak-tli 'ten' as 'hands (of) man'. [NUA: Num, Tak, Tb, Hp; SUA: Cah, CrC, Azt]

1415. *nïmï / *nïmi 'person, Amerindian, (or specifically) Numic person': I.Num122 *nï(h)mï 'person, Indian'; M88-nï10 'person, Indian'; KH/M06-nï10: Mn nïmm(ï), nïïmï'; NP nïmï 'Indian'; TSh nïmï 'person, people, human, Indian'; Sh(M) nïwï 'person, Indian' (vs. Sh(M) nïmi 'move around, roam, make a living by hunting and gathering'); Sh(C) nïmï / nïmi 'Indian' (and Sh(C) nïmi 'live, wander, travel'); Cm nïmï; Kw nïwï; Ch nïwï; SP nïŋwï; WMU nuu-či 'Ute'; CU núu-ci 'Ute, person'. Add Ktn nïmihun 'wife', pl: nïmihunam (< *nïmi-suna 'man's-girl/woman'), as it shows this morpheme in a compound. Also add and note initial nïm'- of Tb(H) nïm'mïï'k|at 'kill a human, murder, vt'. Miller includes Pl nawa 'Indian' which Ken Hill does not, nor would I, as all Aztecan *nawa forms are of a different derivation.

These *nimi forms are the source of the term "Numic," and derive from *nimi 'walk around, live (traditional life, of hunting/gathering)' as a 'living one, person, doer of traditional life'. A change of intervocalic *-m->-w- is consistent throughout SNum and appears in the closer/inner Numic languages of the other branches, but not as consistently. For example, we have Mn niwimoo 'go about as a group' and TSh nuwi 'walk around, roam, wander, live (in traditional lifeway)', (durative nimmi)' in the inner languages, and in Sh niwi 'person, Indian' vs. Sh nimi 'roam, make a living in the traditional fashion of hunting and gathering', but not in Cm nimi and not in NP nimi. See a similar pattern of forms for *nimaC 'liver'. Note also -w- in Sh(M) but -m- in Sh(C) and both in WSh nimi / niwi 'person, Indian, Shoshone'. So while *niwi is a shared innovation throughout SNum, it seems to have had a wave-like spread backwards to some other languages nearer the Southern California NUA homeland. It even affected Cp slightly, a Tak language, besides Mn, TSh, and some Sh dialects. But NP and Cm seem to have been out of reach before the influence happened. So either the SNum were the last to spread very far from the NUA homeland, that is, after WNum and CNum did depart, or the SNum innovation bounced back to affect other "inner-circle" languages after all three branches had spread out. [NUA: Num, Tak, Tb]

Many initial *ti / *ti / *ta words for 'man/boy' (M67-55, 173b,d,e; M88-ti1, M88/KH-ti9, tu10, ci24) have proven problematic for UAnists and have been grouped in a variety of ways. I tentatively group them thus: 1416a. *tawa (redupl'd *tatawa) > *tatwa > *taywa > *tawa / *taN'wa 'man' (as AMR suggests): Sapir; M67-273a *tawa; 273c *tana/*ta; I.Num213 *teŋa 'man'; M88-ta26; AMR 1991d; KH/M06-ta25: Sh tenkwa, tenna; Cm tenahpi; Kw ta'ni-ppici; Ch taw'a-ci; Ch(L) taw'wa-ci; SP taŋ'wa-ci; CU ta'wá-ci; Tb taatwa-l. Miller includes Wr te'marí; Tbr tamwi-rá-n 'cuerpo' (see *tawi 'chest'); Cr táata'a, pl: teteka (see *taka), though I have them elsewhere. However, let's do add TSh tayummii 'taywammii 'man' and WMU ta'wa-či 'man', which has heavily nasalized vowels that other Ute dialects do not have or at least the other Ute sources do not record any nasalization. Manaster-Ramer (1991d, 1993a) proposes *-tw->-kw-, and the Tb form suggests that such is likely the case here. These contrast with TSh takkan 'sperm, semen' and TSh takkampin 'arrowhead, obsidian, flint' and other Num forms listed above with *taka 'man'. These may link to SNum *tuwa '(bear) a son' and see *tïwi 'man' below.

1416b. *tawi > *tiwi 'person': Sapir; M67-273b *tewi 'person'; M88-ti9; KH/M06- ti9: Cr tyévi, pl: taiïte; Wc téví / téwí 'persona'; Wc teïtéri 'gente, indígenas'. Sapir also cites Pima tiwo-t, and the second part of CN okič-tiu' 'older brother' fits with Corachol *tiwi. Miller and Hill may well be correct in joining the *tihoy (below) and tiwi forms, as a simple loss of -h- yields exactly that (*tihoy > tiwi); but a few things like Tr tewe / towí 'boy' vs. Tr ŕehói 'man' may suggest separate sets (Hernandez 2003, 165), and an earlier Kiowa-Tanoan form of Kiowa togul 'young man' may tie to the latter, perhaps as loan source (g > h). Those and the initial *ta in the Cr pl form may suggest a voweling variation of *tawa (> *tawi > *tewi/tiwi), that is, *tawa, the reduplicated stem in Tb and Num *tatwa > Num taNkwa. Hp tiyo 'boy' (pl: tootim) aligns well with CN, Pima, Tr, etc, in *tewe/tiwi > tiw/tiyo. What of Hp ti 'child, offspring'? [NUA: Tb, Num, Hp; SUA: CrC, Azt]

1417. *tihoyi 'man, attractive': Sapir; B.Tep221 *tiodi 'man, attractive'; M67-273d *tiho 'man'; L.Son281 *tihoyi 'hombre'; M88-tï9; KH/M06- tï9: TO cïoj; NT tyiodyi; ST(B) tyiody; ST čio'ñ; Wr tihoé/rihoé; Tr ŕehói, pl: ŕetewi. A possible tie with an earlier Kiowa-Tanoan form of Kiowa togul 'young man', perhaps as loan source (g > h), should not be discounted. [SUA: Tep, Trn]

- **1418a.** *yori 'non-Indian, white person': L.Son361 *yori 'blanco de raza'; M88-yo2 'non-Indian person'; KH/M06-yo2: Wr yori 'Blanco'; My yóori 'persona no indígena'; Op uri 'hombre'; Eu dóri 'hombre'; Tbr yolí-t; Yq yói / yóori; Tr o'rí / oorí / yoorí. Note the minimal pair in My that shows a distinction between r and l in the same environment: My yoori 'raza blanca'; My yooli 'bravo, valeroso'. Add AYq yori / yoi 'Mexican, humanoid chapayeka mask'. Does l > ' intervocalically in Cah or only r?
- **1418b.** *yorïmï 'person, Amerindian': AYq yoleme 'person' (in song language); AYq yoeme 'person, human'; Yq yoéme 'hombre, persona, indio'; My yoreme 'indígena, Mayo' (My a'a yoremia-k 'lo engendró'); Eu dor 'hombre, pl: dodor; Eu dohme/dohme'e 'gente, veinte'; Eu dohmerá-wa 'humanidad'. The Eu forms make one wonder if *yolïmï is a plural form of *yolï/yori. [SUA: Trn, Cah, Opn, Tbr]
- 1419. *otami (< *wVtam?) 'man, person': B.Tep325 *'o'odahami 'person, Indian'; KH/M06-'o29: TO o'odham 'person, tribesman'; NT óódami 'person, people'; ST odam/o'dam 'Tepehuano, indigenous person'. Add TSh otammani / otammana 'old man'. Whether borrowed from Otomi, I daresn't venture a guess, but if we start with s.th. like *otami, then intervocalic voicing (*t > d) would yield the Tep forms and agree with TSh. In Bascom's reconstruction of Tep *'o'odahami 'person, Indian', the extra syllable seems solely based on TO dh, while all others show only d, and even TO shows no vowel between and may simply be a devoicing mechanism of sorts. What of the -wetam in Cp mulu'-wetam 'first people'? Gb woróyt, pl: worórom 'man', and Sr and Ktn are listed below (*wïti) and may be a separate set as M88 and KH/M06 have them. However, note that both here and at 'believe' the loss of intervocalic m in Gb could as easily have Gb here. What of Ch(L) 'ontokwavï 'male cousin'? [NUA: Num; SUA: Tep]
- **1420.** *wïti 'person, man': M88-wï10; KH.NUA; KH/M06-wï10: Sr wïţī'|şţ 'man' pl: wïţī'ham; Sr wïţi'vï'ţ 'old man' pl: wïhwţi'vï'm; Gb woróyt, pl: worórom 'man'. Add Ktn wïčïha-č 'old man'. Jane Hill (p.c.) notes Cp pišweli-š 'grown up, of young man' with Cp wele 'grow' and Cp awelve 'grown up, old' and such may tie to *wïLa/i 'grow' at grow. B.Tep52 gï'ïri 'boy' is at 'big'. [NUA: Tak]
- **1421.** *owi 'male, man': M88-'o5 'male'; L.Son24 *owi 'macho'; KH/M06-'o5: Wr oí; Tr owí; My óo'ow / o'o. Let's add Tbr oñwi 'man'. Tr, Wr *owí 'male' and Tbr oñwi 'man', as well as Yq 'óo'ou, pl: 'o'ówim could possibly tie to *otami above, since intervocalic *t > r is common in UA, and intervocalic r > ' is common in Cah, so Yq 'óo'ou and My óo'ow, with a > o between o and m is feasible, but not certain: *otami > *oromi > o'owi. Tbr oñwi is interesting in that with loss of the intermediate vowel, an -rm- cluster could switch the nasalisation from the bilabial to the alveolar, but keep a bilabial quality in m > w: -rm- > nw. [m > ø/V_V in Gb] [SUA: Trn, Cah, Tbr]
- **1422.** *kïLi 'male, old man': B.Tep221 *kïïrii 'male, old man'; KH/M06-kï6: TO kïli 'mature man, elder, old man, husband'; NT kïïli 'male, old man'; ST kilyi (pl: kïkïïly) 'male, old man'. [SUA: Tep]
- 1423a. *tiku / *tikuwa 'lord, master, father': CL.Azt107 *teekw 'master, father'; Jane Hill 1985; M88-ti10: KH/M06-ta2: My téeko 'patrón'; Tr tékowa / tékutuame 'patrón, amo, jefe, señor'; CN teekw-tli 'lord, member of high nobility'. Note Tr t, not ŕ. KH/M06-ta2 joins M88-ti10 with ta2, combining *takwi 'Takwic, a mythological figure, lightning' and *tiku, which is reasonable, though mixing men and gods can be unsettling for some. I also like Jane Hill's (1985) reconstruction *tiku, and her inclusions of Cr téekwa'aran 'dueño'; Sh tekwa-ni 'chief'; Po no-tekú 'mi padre'; Tl i-tieko 'su dueño'. She aligns Tak *taakwi- 'divinity manifested as ball lightning' with Cr takwa 'Herr, Eigentümer eines Tieres' and Cr takwa-te 'niederer Götter' (-te pl suff) (Preuss 1934), but tentatively separates them from the *tiku forms, as shall we slightly, with different letters, but under the same number. Jane Hill (1985) also addresses the entanglement or overlap of forms, recognizing that matters are not yet entirely clear. [Tr t, not ŕ] [SUA: Trn, Cah, Azt, CrC; NUA: Num]
- **1423b.** *takwi 'ball lightning, supernatural being': Munro.Cup127 *táákwi-š 'mythological being'; KH.NUA: Sr taakwč 'ball lightning, Tahquitz (a supernatural being on Mt. San Jacinto)'; Cp tákwi-š 'a Cahuilla monster who appears as ball lightning'; Ls táakwi-š 'ball lightning, Tahquitz'; Ca táku-š; Cr takwa 'Herr, Eigentümer eines Tieres' and Cr takwa-te 'niederer Götter' (-te = pl suff) (Preuss 1934). While a and b may mesh, I separate both from *tahi 'fire' due to My táhi 'fire' and My téeko 'patrón' among other things, though I may be wrong. [medial -kw- or kui?] [NUA: Tak; SUA: CrC]

1424. *ta(C)ipo('o) 'white man': I.Num201 *ta(C)ipo('o) 'white man'; M88-ta27; KH/M06-ta27: NP taipo'o; Washo dabó'o/dabibo'o; Sh taipo; Cm taipoo'. Iannucci correctly allows for a consonant to separate the dipthong, as PUA hardly had dipthongs, though one could doubt whether this word originated in UA or not; for it seems recent and Washo, a non-UA language, has the most complete form.

Might it be a loan from Spanish diablo [devil]? [NUA: Num]

1425. *kiha 'child, boy': BH.Cup *kiha 'child'; M67-488 *ki 'son'; M88-ki4; Munro.Cup25 *kiháá-t 'child'; KH/M06-ki4: Cp kíima-l, pl: kíkitam 'boy'; Ca kíhma 'son'; Ca kia-t; Ls kiháá-t/kihúú-t 'small, child'; Cp kii-ma-l 'boy' (with diminuitive suffix -ma-l, following loss of h to result in Cp's long vowel, Munro notes). [NUA: Tak]

1426. *nowa 'son': M67-389 *no 'small'; L.Son177 *no 'hijo del padre'; M88-no5; KH/M06-no5: Eu nówat; Wr nolá; Tr no/nowa, pl: hinowa; is Pl iknuupil 'orphan' cognate? Miller queries. [SUA: Trn, Opn]

1427. *appaC-ti 'boy': Kw 'eepi-ži; Ch áipaci; SP aipa"-; WMU ááppa-či 'boy'; CU 'áapa-ci 'boy'. Might this contain *aï- 'young'? [NUA: SNum]

1428. *ti'matí 'young man': Wr te'marí 'boy, young man'; Wr remarí 'man'; Wr re'marí 'friend'; Tr ŕemarí 'boy'; Eu temáci 'mancebo [young man]'. Op ro'omoi 'youth' (Shaul 2007) shows similarities and differences. [SUA: Trn, Opn]

1429. *moha / *moCCa 'doll, image': Sr möh(aač) 'doll, image'; Sr möhmö' 'play dolls'; Ls mé'i-š 'doll'. [NUA: Tak]

1430. *piLcin 'son, boy, child': CL.Azt154 *pilciin 'son, boy, child'; M88-pi24; KH/M06-pi24: CN pilciin-tli; Po b'lcin; T pIlcin-tlI; Z piili; Pl pilcin. This is a compound of Azt *pil 'son' and *cin 'diminuitive'. [SUA: Azt]

NB, Sapir ties Gb koti 'young man' and Ca qiqita-m 'boys' though the terms are not in my sources.

NB, for *tuwi/*tu'i 'boy, son, bear a son' (M88 and KH/M06-tu10) see bear, v.

NB, for *kumCa 'husband, male', see 'husband'.

NB, for *okaci, see woman. CL.Azt *okic- 'male', if earlier 'old man', could relate to *okVc '(old) woman'.

Wc uukii 'man' (Wc u < *o) and CN okič-tiu' 'older brother' lend themselves likewise.

NB, for *-cin 'little, diminuitive suffix, boy, youth', see 'little'.

Many: see all

Manzanita: see plant(s)

MARRY; CASARSE

Most UA verbs 'to marry' derive from man/husband' or 'woman/wife' with this exception.

1431. *na'u / *na'wa-ki / *na'ukï 'marry (of a man)': Cr naïče'e 'está casado (hombre)'; Wc néïke 'casado (hombre)'; Sr na'uu' 'marry, vt'; Ktn na'u' 'marry, vi'; Ktn na'o' 'get married'; Ktn na'waki' 'married, adj'; Ktn na'wak 'marriage'. The fact that CrC ï < *u makes these Tak and CrC forms a good match. Jane Hill (p.c.) points out the possibility of these tying with *nawi 'girl' though these Tak forms have glottal stops that those Tak forms do not, but glottal stops are fragile. [SUA: CrC; NUA: Tak]

NB, for *kuna-ta 'marry, take husband (of woman)', see at husband B.Tep122 *kunatai 'take a husband'.

NB, for B.Tep72 *hoonita 'take a wife', see at woman.

NB, for *na-mikki 'meet, marry' see at meet.

NB, for Tr ni-wima 'marry in religious ceremony', see under 'religious' for *waym 'ceremony'.

MEAT, FLESH; CARNE

1432. *takkuwa 'meat': VVH22 *tu_uku 'meat, flesh'; B.Tep234a *tuukuga 'body, flesh'; M67-279 *tuku 'meat'; I.Num225 *tuhku; L.Son321 *tukuwa 'carne, cuerpo'; M88-tu4 'body, flesh, meat'; KH/M06-tu4 *tukuR (AMR): Mn tuku 'flesh'; NP ddukku 'flesh, meat'; TSh tukkua-cci/pin; Sh tukku"; Cm tuhku; Kw tuku'aa-vï (< *tukku'aa-pï) 'flesh'; Kw tukku-wa 'flesh' (-wa poss'd); SP tukkua-vi; CU tïkúa-vi (<*tikkua-); Cp tuk'a 'skin (poss'd)'; Ca túk'u; Ls tuká 'muscle, lean meat'; Gb túkin 'carne'; Hp toko 'body, edible part of fruit'; TO cuukug 'body, flesh, meat'; UP čuuhugï; NT tuukúga; ST tuuku'; Eu tákua (gen. takáhte, acc. takáhta) 'cuerpo'; Tbr tikuñwá-t/tekoñwá-t; Yq tékua; My tekua. I reconstruct the first vowel as *a* in light of Eu tákua and a variety of other vowels, with most assimilating: *takkuwa > *tukkuwa. A final -wa is clear in Tep, Tbr tikuñwá-t/tekoñwá-t, Cah tekua, and Num tukku(w)a; and since PUA dipthongs are doubtful, their appearance in UA languages is usually due to intervocalic consonant loss or assimilatory influences: in this case *...uwa > ua in some languages. ['/w] [NUA: Num, Hp, Tak; SUA: Tep, Tbr, Opn, Cah]

1433a. *sa'pa / *sa'apa 'meat': L.Son232 *sapa 'carne'; M88-sa3 'meat'; KH/M06-sa3: Eu sába, acc: sáta, gen: sáte; Wr sa'apá/sa'pá; Tr sa'pá/sa-sapá-ra; TO ha'apaga 'flesh behind the upper teeth, alveolar ridge'. Add Ca sáva-l 'bark, skin (of animals)'.

1433b. *sa'pï 'fat': Tr sa'bé-ame 'gordos, carnosos'; Eu sábe 'gordo' (probably possessive -e 'having meat'); the -capï of Hp wimcapï 'omentum, inside lining of stomach fat' with fricative s > affricate c in a cluster with a nasal. This set may be an *-ï/-e possessive form of *sa'pa 'meat', that is, having meat/fat. [c/s] [NUA: Tak; SUA: Tep, Trn, Opn]

1434a. *naka 'mountain sheep': KH/M06-na29: Kw nagi 'bighorn sheep'; Ch nagá 'mountain sheep'; SP naġa-ci 'mountain sheep'; WMU naaġá-či 'bighorn sheep, mountain sheep'; CU nagá-či 'bighorn sheep'. I agree with Ken Hill in this being cognate with Azt *naka 'meat'. 1434b. *naka 'meat': CL.Azt108 *naka 'meat': CN naka-tl; Pl nakat; Po neket; T nakatl; Z nakat. Besides *naka meaning both 'bighorn' and 'meat', so does *pa'a mean both. [NUA: SNum; SUA: Azt]

Medicine: see heal

MEET: JUNTARSE CON

1435. *na-mikki / *na-mikki 'meet, be/come together, marry, pay': CL.Azt106 *naamïktia 'marry'; M88-na35; KH/M06-na35: CN naamiki 'go to meet s.o. or find s.th.'; CN naamik-tiaa 'get married, come together with s.o. for some purpose'; CN naamiktiaa; Po namokti; T nomIktIa; Z naamiktiya; Pl naamiktiya; besides 'marry, v'. Note other semantic dimensions: CN naamiktiaa also means 'come together for some purpose, join two things, even things off' and CN naamiki 'meet, have confrontation, incur a penalty under law'. Thus, Ken Hill astutely adds TO nam|k 'meet, vt'. Note other forms of the same verb: TO nanmik, nanammik. Note also TO namki 'a meeting, n' and TO namkig '(be) expensive, valuable, precious'; TO namkiđ 'pay, repay, compensate'; TO namkiđa|Dag 'payment, price'; PYp namkim 'pay, vt'; ST namkia' 'juntar (caminos or ríos)'; Nv namuku/namïkï 'encontrar a alguno'; Cp nameqe 'meet, vt'; Ca námik 'meet, come across, vt'. Are Tak and Tep possibly loans from Azt? [SUA: Azt, Tep; NUA: Tak]

MELT, THAW; DERRETIRSE, DESHELAR, LIQUIDARSE

1436. *pa-tihwi 'melt' (*pa- 'water', so *-tu is the syllable of focus): Sh pa-tihwi "melt'; Sh paa-tuhi" 'melt'; TSh patuhin 'melt, vi'; Cm parihwiti 'melt' (not Cm kuhpawiki'iti 'melt, vt'); Eu bátu'u- 'melt, vi'; CN aa-tiya 'melt, be smelted', since *u > CN i. But Eu bahútu-da'a 'melt, vi'; Eu bahútuna- 'melt, vt' different stem? Might *-tihwi mean 'become'? That is, 'water-become'. And note NP -tawai in NP kupatawaiggi'hu (< *kuppatta...) 'melt, v'. [NUA: Num; SUA: Opn, Azt]

1437. *kayu / *kayuCpa 'melt, smelt': Ca kéye 'get sores, dissolve, melt, vi'; Ls xayúpa/i 'melt, vi/vt'; Tr a'(y)ebona- 'smelt, cast'. Hp kïiya 'make into a liquid or drink, vt perf'; Hp kïiyi 'water, liquid (in container)'. [V leveling] [NUA: Tak, Hp; SUA: Trn?]

1438. *sa'ay 'melt': Kw, Ch, SP, and WMU all show this stem to be different than *sa'aC 'boil': WMU sa'ái-y / sa'éi-y 'melt, vi/vt'; past: sa'éi-kye (vs. WMU sa'á-y 'boil, cook'; past: sa'á-qa; note differences in past tense); Kw šee 'melt' (vs. Kw sa'a 'boil, cook'); Ch sái- 'melt, dissolve' (vs. Ch sa'á-pi 'gravy'); SP sa'ai 'melt' (vs. SP sa'a- 'boil, make mush'; SP sa'a-ppi 'what is boiled as mush'). See discussion at *sa'aC 'boil'. [NUA: Num]

NB, for *sawi 'melt', see at 'boil' both *sawa 'boil' and *sawi 'melt'.

NB, CN aa-tiya 'melt, be smelted' contains the expected CN form for 'water'—aa- < *paa; however, also note CN paati 'dissolve, melt, vi' and CN paatla 'dissolve, melt s.th., vt' both with initial *p, and note their perfect alignment with Hp paata 'melt, vt'; Hp paati 'melt, vi'; Hp has loans from CN, but CN's initial p would suggest borrowing from Hp to CN.

Mescal: see agave and alcohol

Mesquite: see plant Metal: see knife and sky Metate: see grind Middle: see half

MILK; LECHE

1439. *mu'i 'milk': M67-284 *mu 'milk'; M88-mu8 'milk'; KH/M06-mu8: SP muí-vi 'milk'; SP muí-ni 'my milk'; Wr mu'i- 'to have much milk (of animals)'; Cr ci'iméh (ï expected, *u > Cr ï > e. Add the second syllable of Tr či'-mu- 'have milk'. [NUA: Num; SUA: Trn, CrC]

1440. *kawa 'milk': Eu kawira'a / kavira 'milk'; Yq káuwam 'mama leche'; My káuwam 'leche (en el pecho o ubre)'. [SUA: Cah, Opn]

1441. *pikwa / *pipV 'milk': TO wiibi 'milk' (vs. TO wipih 'breast'); Nv viba (vs. vipi 'breast); PYp vibar 'milk' and PYp viibi 'milk' (vs. PYp vipi 'breast'); NT viibai 'milk' (vs. vipi/pipi 'breast'); ST viib/viim 'milk' (vs. vipii 'breast'). Even if the first syllable is the same and related in 'breast' and 'milk', all Tep languages show separate forms in the second syllables, with a voiced b in milk, but voiceless p in breast, and a second vowel a instead of i in three of five languages (< *-kwa 'eat'?). Interestingly, Sh shows the same vowel distinction, though with different consonants: Sh pici 'breast'; Sh pica 'milk'. [SUA: Tep]

NB, for *pi, see breast.

NB, for *ci'i-(wa), see suck and breast.

Miss: see lose Mist: see steam

MISTLETOE

1442. *cay 'mistletoe': BH.Cup *cáy; Fowler83; M88-ca9; KH/M06-ca9: Cp čáye; Ca čáyal; Ls 'ááča-wu-t 'Christmas berry'; Pl čaayuh 'a chayote-like plant, but thinner and uglier'. [NUA: Tak; SUA: Azt]

MIX, STIR; MEZCLAR, BATIR, MECER

1443. *cukka/i 'crowded, mixed'; I.Num264 *cïhki 'mixed, crowded'; M88-cï5 'crowded, mix(ed)'; KH/M06-cï5: SP cïkki 'be mixed with'; CU cïku'mi 'narrow, constricted'; Cm cïhki-/cïkk- 'crowded'; CN ciciika 'stuff s.th. tight'. Since *u > ï in Num is frequent, and *u > i in CN, the Num and CN agree through *cukk, and final vowels are seldom dependable. [*u > ï in Num] [NUA: Num; SUA: Azt]

1444a. *waLa/i 'stir, do motions while tending to liquid': BH.Cup *wal- 'irrigate, stir'; M88-wa23 'stir'; KH/M06-wa23: Ls wááli 'stir food, beckon with a downward scooping gesture'; Ls waláwali 'irrigate'; Cp wəláwali 'irrigate'; Ca wáluš 'to hoe'; Hp wala 'to wave'; Hp wálakna 'swish it, make (liquid) slosh about'. The Hp terms are a nice and insightful addition on Miller's part. Add NT gyaróópai / gyaráápai / gyoróópai 'batir' (< *walo / wala). [*w = Hp w/_a; liquid]

1444b. *oLi 'stir, throw, move': CL.Azt172 *ooliiniaa 'throw, stir, move'; M88-'o22; KH/M06-'o22: CN oliinia; Pl uuliini; Po uluni; T ulInia; Z ooliiniya. Po shows vowel harmonization. *wa > o may tie these with *waLi above. [NUA: Tak, Hp; SUA: Tep, Azt]

1445a. *kuta/i 'mix': Kw -kuri- 'move in a circular manner'; Kw či-kuri 'poke, stir'; Kw ma-guri 'stir with the hand'; AYq kuuta 'stir, mix, vt'; AYq kuuti 'mixed'; My kuutía 'mezcla'; Eu kurá- 'amasar'.

1445b. *koti 'stir, mix': Hp qöri-k-na 'stir, mix, plow, vt'; Ls qéli 'stir, mix (as food)'. Ls e and Hp ö both correspond to *o. Note that *koti and *kuti differ only in a slight change of round vowel, perhaps an innovation in non-Num NUA, which is easily possible with a previous final vowel -a: *kuta > kota/koti. On the other hand, KH/M06-ko37 has this Hp term with Cp qíin'i; Ca qíyne; Ls qíini 'plow', which could be also. [*-t- > -r-] [NUA: Tak, Hp, Num; SUA: Cah, Opn]

1446. *mona 'mix': Ls meena/i 'be mixed, confused, vi; mix, distract s.o., vt'; Wc múina 'mezclar, batir'. Both Ls e and Wc u correspond to *o. [NUA n: SUA n] [NUA: Tak; SUA: CrC]

1447. *na'Lo / *na-'Lo(wa) 'stir': Tr na'ro-ma 'mezclarse, revolverse'; Tr na'roame 'mezclado, revuelto'; Wr loáni, loa-má 'stir food while cooking'; CN neloaa 'get mixed together, stir up s.th., beat s.th., make a mess of s.th., vt, v.refl'. [SUA: Trn, Azt]

1448a. *kwat 'stir': Sh(M) kwatoi 'stir'; AYq bwaata 'stir, mix together'.

1448b. *(ci)-kwi-(tu) 'stick-stir': Mn ci'wido 'stir'; NP cikwiduiwïnï 'stir'; Sh cikkwi' 'mix, sift';

1448c. *kwiNtu / *kwaNtu 'stir': Sh(C) kwintui" 'mix, stir, vt' (with CNum *tuhiC 'melt'); SP kwan'nu 'stir (mush)'; SP ci-kwan'nu-i 'stir (mush) with a stick'. Wc kwamáá 'mix, stir' has kwaN, perhaps with a different 2nd morpheme and thus a different cluster. [NUA: Num; SUA: Cah, CrC]

1449. *nuCtu 'stir, mix': Wc nïitï 'stir' and Cp núče 'mix, crush, vt'; Wc ï < *u and Cp -č- < -Ct-, so these match reasonably well. In light of these, might several Num forms above (*kwantu) be reductions of s.th. like *kwa-nutu 'food-stir'? [NUA: Tak; SUA: CrC]

1450. *pina / *pina 'mix': NT viináidyi 'mix, vt'; NT viinági 'have mixture'; ST vinda' 'agregar, mezclar, vt (inan obj)'; ST vinta' unirse, juntarse, vi (anim subj)'; ST da'viña' 'mezclar (con agua), vt'; ST da'viñja' 'mezclar (con agua para otra persona), vt'; PYp veena 'friend'. [SUA: Tep]

NB, *ŋï... 'stir': Hp neyŋa-l-a 'mix, vt, p.'; Hp neyŋa (comb: -neyaŋ-) 'in mixed kinds, colors, genders'; Ca ŋéwen 'stir, vt'; Ca ŋélew 'to edge, stir around the edge, v'. These are interesting, but not clear.

MOON: LUNA

Mn	tadamï'a/tadawï'a	Нр	mïiyaw	Eu	miecát/mecát
NP	mïha	Tb	miïyabiš-t	Tbr	macá-t
		Tb	miïya-l 'month'	Yq	méča
TSh	mïa(cci)	Sr	mïaaţ	$\overline{\text{AYq}}$	meeča
		Gb	mwar		
Sh	mïa	Ca	ménily	My	meeča
Cm	mïa	Cp	ménily	Wr	mecá
Kw	mïa-zi	Ls	móy-la	Tr	mecá
Ch	miyárogopici	TO	mašađ	Cr	máškïra'i
SP	mïaC	LP	mašad	Wc	méca;
WMU	máá töġö-či	PYp	masada	CN	meec-tli
CU	mïá-taġó-ci	NT	masáádai		
		ST	masaad/masan		

1451. *mïcaC (perhaps < *mancaL) 'moon': Sapir; VVH158 *mïya 'moon'; B.Tep146 *masadai 'moon'; M67-286 *meca/*mea; I.Num102 *mï'a/*mïha; BH.Cup *mənila(?); L.Son145 *mïca; M88-mï1 'moon'; Munro.Cup73 *məyi-la 'moon'; KH.NUA; KH/M06-mï1. Add Nv masada and Ktn mïa-č. A reflex appears in

every UA language—one of the few pervasive UA words and a good example of Manaster-Ramer's law explained in his article "A Northern UA sound law: *-c- > -y-" as PUA *-c- > -y- in NUA. Note -n- in Ca and Cp. The -d in Tep and Ls -la (absolutive) may suggest a final liquid, or a final -C as also the final gemination in Num: Proto-SNum *mïyaC-tokoC-ci. [NUA: Tb, Hp, Tak, Num; SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]

Morning: see sun Mosquito: see fly

MOTHER; MADRE

Mn	píya	Hp	yï; i-ŋï 'my m.'	Eu	dé; déwa
NP	pia	Tb	'aabuu	Tbr	inyá-r
TSh	pia/pii	Sr	yï'; yïki (acc.), yïkïm (pl.)	Yq	'áewa
		Gb	(ny)ok/(ne)-ók 'my m.'	$\overline{\text{AYq}}$	ae
Sh	pia/pii	Ca	ye	My	aiye
Cm	pia	Cp	ye	Wr	ye'yé
Kw	piya	Ls	yó'	Tr	(y)eyé; nana; čiči
Ch	pí(a)	TO	je'e; komal; đa'al	Cr	náana
SP	pia 'mother'	LP	daad	Wc	máamaa
SP	pia 'big, main'	PYp	daada; de'e		
CU	pía	NT	daáda; dïïdï his m.	CN	naan-tli
		ST	daad; dï'ïïd his m.		

1452a. *yïï / *yïk (AMR) 'mother, big': VVH106 *yïï 'mother'; B.Tep33 dï'idī 'his mother'; M67-486a *ye 'mother'; BH.Cup *yïï 'mother'; M88-yïl 'mother'; KH.NUA; Munro.Cup41 *yə-t 'female'; AMR 1993a *yïk 'mother'; KH/M06-yïl: Cp; Ca; Ls; Sr; Ktn yï'; Hp yï-/-ŋï; yï'at 'his m.'; Hp yï'am 'their m.'; Hp ita-ŋï 'our m.'; Eu; Wr; Tr; My áyye. Herein is another semantic association between 'female, mother' and 'big' noted in Munro.Cup41 *yə-t (PUA *yïC 'mother'): Ls yó-t 'big'; Ca yé-t 'female'; Ls 'a-yó' 'thumb'. [NUA: Hp, Tep; SUA: Trn, Opn, Cah, Tbr]

1452b. *ya... 'mother': B.Tep10 *daada 'mother' (vs. B.Tep33 *dï'ïdï 'his mother'); M88-ya20; KH/M06-ya20: Bascom and Miller both separate this from *yï, and so we shall too, yet one must suspect a possible tie to *yï above, *yï'ï being the poss'ed form and *yaaya less/not so, though PYp shows both forms unpossessed. Could the vowel of the added suffix have encouraged assimilation of the others to it: *da'a-dï > dï'i-di? [SUA: Tep]

1453. *piya / *pi'a 'mother, big': Sapir; I.Num167 *pi(y)a 'mother, female'; M88-pi18; KH/M06-pi18: Iannucci has an identical form in I.Num168 *pi(y)a 'big'. Likewise, Sapir queries whether the two (SP pia 'mother' and SP pia 'main, big') are the same stem. I believe they are and that 'big' is a semantic extension of 'mother', for both *yï'ï above and Num *piya show the same semantic extension: 'mother' > 'mother, big'. For in the animal kingdom (bear, deer, etc.), where the Uto-Aztecans spent much time, one often sees a mother and her young, in which case the mother is the "big" one. Sapir also ties CN pi'-tli 'older sister (of woman), lady's maid' with the above. Possibly! [NUA: Num]

1454. *nana 'mother': Sapir; M67- 487 *nan 'mother'; CL.Azt110 *naan, 312 *nana; M88-na14; KH/M06-na14: ST 'innan 'my m.'; Cr náana; CN naan-tli. To these can be added Tr nana 'mamá'. [SUA: Tep, Trn, CrC, Azt]

MOUNTAIN, HILL; MONTAÑA, SIERRA, CERRO, LOMA, COLINA

1455a. *kawi 'mountain, rock': M67-289a/b *kawi/*kai 'mountain'; I.Num49 *kaipa 'mountain'; BH.Cup *qawíca' 'rock'; KH.NUA; HH.Cup *qawíiča 'rock'; L.Son79 *kawi 'cerro'; M88-ka8 'hill, mountain'; Munro.Cup74; KH/M06-ka8: Cp kawí-š 'rock'; Ca qáwi-š 'rock'; Gb xay 'sierra'; Sr qaiič; Ktn kay-c; Eu kavít/kawí(t)/hawi; Tbr kav 'cerro'; Wr kawí 'cerro'; Tr gawí 'montaña, sierra, tierra, campo'; My káwwi; Cr áh-ka'i 'slope on backside of hill'; Miller includes Pl ahku 'up, above, over, on high'. KH.NUA also notes the reduplicated forms: Sr qaqaiič 'mountains all over the place' and Gb xaxáy of similar meaning. Loss of bilabial in Gb again; cf. believe, man. Add Op kagi (*w > Op g). But TO kawulk 'hill' < *kapul-k is from a different source (TO < *kapul-k vs. *kawi). Note the other liquid reflex in TO kawuD 'closely, short'. [NUA: Tak; SUA: Trn, Cah, Opn, Tbr]

1455b. *kaipa (< *kawi-pa) 'mountain (in)' (I.Num49 *kaipa): NP kaipa; Kw kee-vi; Ch kaiva; SP qaiva; WMU qaava / gaava; CU káa-vi. Kw and CU reinterpreted the final -va as an absolutive suffix, but Ch, SP, and WMU show that it is part of the stem. Now whether we have *-p- or *-w- > -v- is a decent question. The loss of *-w- in several Num languages then led to leveling of the dipthong in Kw: *kawi > *kai > *kee. But I have doubts that this ties to 1455a above. [Tep w < *p] [NUA: Num]

1456. *ton(n)o 'hill': VVH167 *touno 'hill'; M67-230 *ton 'hill'; M88-to14; KH/M06-to14: TO toon-k 'hill'; SP tonnoqqi / tunnuqqi 'a hill rises'; SP tonnoqq(w)i-čï / tunnuqq(w)i 'knoll, swell in the ground'. Let's add Nv tonika 'cerro, loma'. [SUA: Tep; NUA: Num]

1457. *huya / *huLa 'mountain': B.Tep317a *'oidaga (UP,ST) / 'oidigi (LP, NT) 'world, mountain'; M88-'o23 'world, mountain'; KH/M06-'o23: UP 'oidagï; LP oijig; NT oidyigi; ST 'oidya'; TO oidag 'field, farm'. What of Cr hïri 'cerro' and Wc hïrii 'sierra'? Yq húya 'árbol, monte' and My huyya 'árbol, monte' probably belong at 'arrow/tree/wood' where Hill has them, and Tbr huwa 'monte'. Tbr hanyí-t 'cerro' has 3 of 4 segments, since Tbr ny < *y. Putting Tep *'oidaga into PUA segments yields *hoiyawa and makes Cahitan *huya tempting, since Tep ' < *h, especially if the latter segment of the dipthong shows anticipation of the y (*uy/oy > oiy), which is often the case in Tep (and in UA): *huya > *hoya > *hoiya. [*-u-a > o-a; r > y] [SUA: Tep, Tbr, CrC]

1458. *yohawi 'mountain': TO do'ag 'mountain'; PYp do'agi 'mountain'. [SUA: Tep]

1459. *toya 'mountain': I.Num221 *toya 'mountain'; M88-to18 'mountain'; KH/M06-to18: Mn toyábi; TSh toyapi(n); Sh toya-pin; Cm toya; SP toya (found only in song, apparently borrowed from Sh, say Sapir and Miller). What of *toyaN: Ch(L) toyompï 'boulder'; Ch(L) toyongkarïrï 'Boulder Sitting (name of mtn)'; SP toiampï 'gravel, rocks big and small'—with loss of nasalization in WNum and CNum? [NUA: Num]

1460. *muLa 'hill': Ca mu'mú'a-we-t 'hills'; Cp mulamúla 'hill'; Cp humlehúmla'a-š 'hilly'; Cp hemlehémle'e-š 'little hills, hilly'; Tb muwaa-l 'mountain'; Tb muu'iš-t 'hill'; Ktn mua'tat 'hill'. Cp has l aligning with glottal stop in the other languages. What of Ktn monmonkik 'hills'? [*-L->-'- or > n?] [NUA: Tak, Tb]

1461. *no'opi 'mountain top, hill, mound': TSh noopi 'mountain top' (no absolutive suffix, so -pi is part of the stem); Sh(C) no'o-pin 'a hill, a rise, a small round hill' (Crapo); Cm noo- 'hill, knoll', reference to 'hauling' (probably as in 'pile of'). This likely ties to SNum nooC-pV 'campsite, carried/hauled stuff' and to WNum *nopi 'house' because pit houses look like mounds or little hills. [NUA: CNum]

NB, for *ko'ai hilltop, top, see top.

NB, for *capa 'hill, point' see edge.

NB, for *cupa 'hill, pont' see edge.

NB, for *tipi 'hill' (Tbr tepe 'alto, cerro'; CN tepee-tl 'hill') see *tipi 'long, tall' at tall. Sapir ties CN with SP tivippi 'earth' < *tipiC 'earth', etc. Possible, but the latter shows a final C the other lacks and a different final V.

Mountain lion: see lion

Mountain sheep: see bighorn sheep and meat

MOUSE, RAT; RATÓN, RATA

1462. *pa'i 'mouse': M88-pa57 '(field) mouse'; KH.NUA; KH/M06-pa57: Ca pá'iwet; Gb pa'ít; Sr pa'i-š (evidently a Ca loan from unattested *pá'i-š suggests Hill). Add Kw pa'yï-ci 'kangaroo rat'. [NUA: Tak, Num]

1463. *po/pu... 'mouse': B.Tep261 *vosïki 'mouse'; I.Num148 *po/*pu; L.Son210 *poc 'raton'; M88-po16 'mouse'; Fowler83; KH/M06-po16: As Miller and Hill suggest, most of these forms are related, but for organization and discussion purposes, let's divide them thus:

1463a. *po/pu(N/w)V: Mn puweec(i); NP punkacci; Sh ponaih/po'naih. NP pamoto'o 'small grey fieldmouse' and TSh pomo'aicci/ponwo'aicci are also listed at 'squirrel' with CN mooto'-tli. [medial -w/n/m/nw-]
1463b. *pu'iN / *pu'uy / *pu'wiN / *pa'wiN: Kw pu'-miča-gi-ži; SP pu'iča; CU pu'úyca-ci. We must add Ch(L)

pu'winčaci 'mouse' and WMU p<u>a'wi</u>-či (nasalized vowels) and SP puŋ'wi 'make peeping sound (as mouse, rat)' shows the nasalization in WMU p<u>a'wi</u>. The WMU form, with other sporadic initial *pa... forms in Num, may mean

that these all relate to Tak *pa'i (or < *pa'wi) above: that the w caused rounding of *a > o/u in most forms, while the *pa'i forms lost *w and so did not acquire any round vowels. The po/pu dichotomy may also mean they differ due to assimilation, neither being original. SP and CU show -ca- after *pu'i; if that syllable exists in the Hp, Tbr, and Tep forms below, though in contracted form (*po'i-ca > po'ca > poca), then the below may relate also.

1463c. *poca (< *pa'wiN-cV ?) 'mouse': Fowler83: Hp pöösa; Tbr he-wocó-t; TO wošo 'rat'; LP vošīg;

NT vosīīki / vasīīki; ST vasīīk. Is Eu voisék 'rata' a loan from Tep? Manaster-Ramer discusses this set in his article "A Northern UA sound law: *-c- > -y-," where he argues for the possibility of a -nc- cluster in *ponca (AMR 1992) that prevents *-c- > -y- in NUA.. Let's add PYp vosogi 'rat, mouse' and Wc háácu 'rat', which matches ST and NT and a vowel metathesis of *poca, since Wc h < *p and Wc u < *o. The difference between CU pu'úyca-ci and WMU pa'wi-č should remove any doubt about whether the WMU language is quite a different dialect from CU. Consider also Yq pótta 'mole'. [w/'] [NUA: Num, Hp; SUA: Tep, Cah, CrC]

1464. *kawa 'rat': BH.Cup *qawala' 'rat'; M67-340 *ka/kawa 'rat'; I.Num47 *ka(wa); M88-ka13 'rat'; Munro.Cup107 *qaawa-la 'rat'; KH.NUA; KH/M06-ka13 *kawa: Mn qawa; NP kawa 'packrat'; TSh kawan; Sh kaan; Kw kaa-ci 'woodrat'; SP kaa-ci; CU kaac'a-ci 'packrat, gopher'; Hp qaala 'packrat'; Tb haawa-l 'wood rats'; Sr qää-ţ; Gb xar; Ktn ka-č; Ls qáw-la 'woodrat'; Ca qáwal; Cp qáwel. Add Ch(L) kaaci 'rat' and perhaps Cm kahúu' 'mouse'. This is in all branches of NUA, but not in SUA. [loss of intervocalic -w- in SNum, Sh, Gb, Sr, like mtn] [NUA: Num, Hp, Tb, Tak]

1465. *tori 'rata': L.Son314 *tori 'rata'; M88-to8 'mouse/rata'; KH/M06-to8: Eu tori; Wr tori 'rata'; Tr rori 'rata'; My tóori 'rata'; Tbr toli 'rata negra'. [SUA: Trn, Cah, Opn, Tbr]

1466. *yïwi 'rat, mouse': PYp deegi 'rat'; NT diïgi 'rat'; Ls yóóvi-š 'mouse'. Agreeing in *yu 'mouse, chipmunk' are Ca yúu-l y 'little rat, field mouse' and the yó- of Hp yóvölö 'rodent of some kind'; Hp(S) yovölö 'chipmunk', if such a morpheme break were demonstrable, but not yet. [w > v] [SUA: Tep; NUA: Tak]

1467. *(ku)miti 'mouse': Hp homici 'pocket mouse'; CN kimič-in; Kw pu'-miča-gi-ži 'mouse'. What of Tb cïmi-l 'mouse'—possible metathesis? [NUA: Hp, Num; SUA: Azt]

1468. *naika 'mouse': Cr naika 'rata'; Wc naika 'mouse'; and perhaps PYp naidiar 'mouse' and TO nahagio 'mouse, earring'. [SUA: CrC, Tep]

NB, for *tVku/*ciku 'squirrel, mouse' and *sikkuC 'squirrel, mouse', see at squirrel.

NB, the possibility of *so'o 'mouse' in a hypothesized compound of SUA *so'o-pïci 'bat' at 'bat'. Eu *cikursopic* 'bat' also contains *cikur*- 'mouse'; German *fledermaus* 'bat' similarly attests to 'mouse' words in 'bat' lexemes due to the mouse-like appearance of the little flying mammals. Thus, Yq 'asó'ola 'little mouse' is noteworthy with a sequence (-so'o-) identical to the unidentified, but reconstructed *so'o in SUA compounds for 'bat'—*so'o-pïci. NB, more than once we see a semantic tie between 'mouse' and 'squirrel' in UA, which tie is understandable in that both are little rodents that scurry about quickly. Compare CN teko'koyoo-tl 'mouse' and *tïku 'squirrel', as well as *siku/ciku 'mouse' and SNum *sikku 'squirrel'.

MOUTH, CHIN, JAW; BOCA, BARBILLA, MANDÍBULA, QUIJADA, CARRILLERA; see face

Mn	tïpe	Нр	mo'a; moyta 'put in mouth'	Eu	tenít/téeni
	kïsa'a 'have m. open'		mocovi; canwti 'open the mo	uth'	
NP	ddïba; motohobbï 'inside of m'	Tb	too'kon t	Tbr	tiní-r
TSh	tïmpe	Sr	şïţ; täär-a'k 'open m.'	Yq	téeni/téni
Sh	tïmpai '&lips'	Ca	táma-l	My	teeni
	kï" 'w/ the mouth'	Ls	tamá-t		
Cm	tiïpe		luvó-lvu-š 'big-m'ed'	Wr	cu'á
Kw	tïbi-vï	Cp	tám'a	Tr	ŕiní; ču'mí; ŕe'načí
Ch	tïïmp(a)	TO	čini; kam- '&cheek'	Cr	teni
SP	tïmpa-vi	LP	tïiñ PYp teni	Wc	kwašáicítïa; téetaa
WM	tïppwá-vi	NT	tïñi	CN ka	ıma-tl, -kan 'poss'd'
CU	tïpá-vi	ST	t ^y iñ; čiñ; kika 'carry in m.'	tee	en-tli 'm., lip, edge'

1469a. *tï'na > *tï'ni 'mouth': Sapir; VVH19 *tïuni 'mouth'; M67-293 *teni 'mouth'; I.Num242 *tïmpe 'mouth, lips'; B.Tep241 *tïni 'mouth'; L.Son293 *tïni 'boca'; M88-tï5 'mouth'; KH/M06-tï5: TO čini; Eu téeni / tení-t; LP tïiñ; PYp teni; NT tïñi; ST tyiñ/čiñ; Tr fe'načí; My teeni; Yq tééni / téni; Tbr tiní-r; Wc téetaa 'mouth, lip' (cognate? Miller queries); Cr tyéñi; CN teen-tli 'lip, mouth, edge, word'. Wc téetaa is cognate, being nearly identical to the pre- or proto-Aztecan form from which CN teen-tli derives—*teen-ta—missing only n. Note also Tr fe'na-čí, suggesting the possible presence of a glottal stop or other consonant in a cluster. This element appears in compounds of a few other languages as well: Cm parïici 'chin'; TSh patïnci 'chin' and in *tï'ni-po'wa 'facial hair, lit. mouth-hair' at beard.

1469b. *tï'nV-pa > *tï'n-pa > *tïmpa 'mouth (in)': Mn tïpe; NP ddïba; TSh tïmpe; Sh tïpai 'mouth, lips'; Kw tïbivi; SP tïmpa-vi; CU tïpá-vi; Hp tïmp(aq) 'at the brink, top edge of a drop-off, such as cliff, mesa edge'; Hp tïmkye' 'along top edge of cliff'. An additional and definite *-pa suffix distinguishes the Num forms, as nearly all have a final vowel -a, not typical of the *-pi/-pi of absolutive suffixes.

[NUA: Num, Hp; SUA: Tep, Trn, Cah, Tbr, Opn, CrC, Azt]

1470. *'ïcï (AMR) / *'ïca (> 'ïcï > *'ïci) 'chin': M67-88 *'oyi 'chin'; M88-'ï3 'chin/barbilla'; AMR1992-9; KH/M06-ï3 *"icï (AMR) 'chin, jaw': Hp öyi 'chin'; Ls 'óóyi-l; Cp éyeweka; Ca 'éyewak'a; Gb 'óyen 'quijada/jaw bone'; TO ïš 'chin'; TO ïšpo 'beard'; Wr ehcapóa 'beard'. Wr ehca- does not exist alone, Miller notes, but it corresponds to the TO counterpart. Ken Hill rightly adds the íc- of Eu ícva 'beard' which has *-pa like Num. Let's also add PYp hesa 'chin'. Can anyone explain Hp's weird vowel—possibly borrowed from Ls? [Hp ö; Gb o; Ls o] [NUA: Tak, Hp; SUA: Tep, Trn, Opn]

1471. *aCtaN 'jaw, upper cheek': I.Num3 *a(h)ta 'jaw, upper cheek'; M88-'a19; KH/M06-'a19: Mn 'atapi; NP atabui; TSh ahta-pi/pi; Sh ahta-vi; Cm ahra/arapi; Kw 'ata-vi (< *'atta-); SP attaġivi 'upper cheek'. WMU ááttawa'ao 'jaw'; and Tb(V) 'alhan-t 'jawbone' are likely and suggest a final nasal. But Ktn 'ïa-c 'jaw', probably not. [*-CC-] [NUA: Num, Tb]

1472. *ca'Lo 'chin, jaw': Tr ča'ró 'chin'; Wr caló 'chin, jaw'; CN teen-čal-li 'chin'; CN kama-čal-li 'jaw'; Yq čao 'barba'; My čaro hímsim 'bigote'; My čaro wá'asa'ari 'quijada'; Hp cànw-ti 'open the mouth'. [r/l > ' > \varnothing] [SUA: Trn, Cah, Azt; NUA: Hp]

NB, for TO taatko 'jaw'; NT taatákugai 'jaw' < *takuwa 'hole, place where things are found or gravitate to' and *taa-takuwa 'tooth-place/collection sump', see 'hole' and 'palm'.

NB, for *tama 'mouth, tooth' (Ca táma-l; Cp tám'a; Ls tamá-t; Nv tamaka 'quijadas' has another morpheme), see tooth.

NB, for *kaCma 'cheek, mouth, put in mouth' see face.

NB, for Tr ču'mí, see *cu'mi 'sip, taste' at 'eat'.

Move: see either 'shake' or 'go'

Mud: see earth Much: see all

MUCUS, SNOT, PHLEGM, A COLD (be sick with ...); MOCO, FLEMA, CATARRO/RESFRIO

1473. *mu-piki 'mucus (nose-mucus)': NP mubigi; Kw mu-viki-vi; CU ma/mi-piyki-vi; 'mucous' (but SP muvi' 'nose'); Cp muv'i; Ca muvi-ly; Ls múvi-laqa. This occurs in Num mostly; note also Num *co"-piki 'brains', i.e., something like 'head-mucus or soft/gooey matter'. Not flattering to the human species, but both mucus and brains have similar textures, though hopefully one is more useful than the other. [NUA: Num, Tak]

1474a. *co'ma 'mucus, have a cold': M67-219b *com 'snot'; M88-co4 'snot'; KH/M06-co4: TO šomaig 'catch a cold'; TO şoşa 'nasal discharge'; Eu zóma 'moco de narices'; Wr co'má 'moco'; Tr co'má / -cum 'moco'; My cóómi-m; Cr cu'umé 'snot'. Add NT sósoi 'catarro, moco'; ST somaigi 'have a cold'; Yq čom watte 'to blow the nose'; Yq čoomim 'mocos'; AYq čoomim 'phlegm'. Is TO šoša a reduplication of *soma in which the medial cluster reduced, losing the bilabial nasal: *şoşma > şoşa; likewise for NT sósoi; thus, Tep *somaigi 'have a cold' and Tep sosa (< *sosma) 'mucus'? [cluster reduction]

1474b. *co'm-piL 'have a cold (mucus appendage/falls)': L.Son41 *cop 'moco, catarro': northern Eu cóbá-t; Wr cohpé; Tr cohpé. CN compiil-li 'a cold, n' and CN compiiliwi 'have a cold, v' are likely fuller forms of the reductions in TrC: Wr copé 'cold (sickness)'; Tr co'pe 'catarro'. The CN, Wr, and Tr terms, of course, seem related to *co'ma above, compounded with an extra syllable -pil. [N > ø as 1st C in cluster] [SUA: Tep, Trn, Cah, Opn, Azt]

1475. *mït... 'snot': KH.NUA: Sr mïriič 'snot'; Gb móta'. [Gb o < *ï] [NUA: Tak]

1476. *yokaC-pï 'mucus': Mn yoʻgabi 'nasal mucus, snot'; Sh yoka-ppï; Cm yokapï, sohkap (Rejón). [NUA: Num]

1477. *sipi 'mucus': there appears to be a stem *sip(i) in Hp yaqaspi and TSh mupisippï, compounded with forms for nose *yaka and *mupi respectively. [NUA: Hp, Num]

1478. *mapa-ya'i '(have) a cold': Kw mavaya-kwee 'catch a cold, v'; Ch mavá 'cold (illness), n'; WMU wowá'ey / wawá'ai / wavái'ye / (u)wé'e / æ'ei 'have a cold, vi'; CU wavïá-vï 'cold'; CU wavïá-vi 'phlegm, mucous'; CU wavïá-'ay 'have a cold or sore-throat'. SNum *-ya'i 'suffer from, die' is likely the 2nd element of the compound. [NUA: SNum]

1479. *kwa- 'congested': Hp kwaa-yaqa 'congested nose'; Hp kwaayaq-moki 'catch a cold'; Wc kwáise 'congestionado'; subtracting Hp yaqa 'nose' from the Hp compounds leaves the same *kwa- element in both Hp and Wc. [NUA: Hp; SUA: CrC]

Mud: see earth Muscle: see tendon

MUSHROOM; SETA, HONGO

1480. *pakuwa 'mushroom, fungus': Mn paagú' 'type of pink mushroom'; PYp vikoga 'mushroom(s)'; Wr wehkoári 'fungus'; Tr wikubékuri 'large white edible mushroom'; Tr wekogí 'mushroom'; Tr wehorí 'type of edible mushroom'; Tr čohowékuwi 'large white edible mushroom'; the phonological variety in Tr is typical (-weku-, wiku-, béku, weko, weho-) and suggests some borrowing between Tep and Tr/Wr. The Mn, PYp, and one Tr form (-beku-) suggest initial *p, whose reflexes in Tep (v/w) are the source of some loans in Tr/Wr. The first vowel is likely *a* on the strength of the Mn form, which *a* easily assimilates or centralizes to ï/e/i in unaccented syllables. [p/w] [NUA: Num; SUA: Tep, Trn]

1481. *top(p)o 'mushroom sp.': Mn tóópo 'mountain mushroom'; Cp tívily 'mushroom sp'; Ca tíwily 'small mushroom'. Ca and Cp i < *o. Mn suggests a geminated medial *-CC-. [*-pp-/-v-/-w-] [NUA: Num, Tak]

1482. *hitto'oC / *witto'oC 'mushroom': TSh wiitto'e-cci 'mushroom'; TSh hiitto'i; Kw hiito'o-pi 'mushroom'. [NUA: Num]

1483. *sika/*saka 'mushroom sp.': Mn seexayú' 'white oak mushroom'; Cp séqepiš 'mushroom'; Ca sáqapiš 'mushroom'. [NUA: Tak, Num]

1484. *yu'La 'mushroom sp.': Ca yúlal 'mushroom'; Wr o'lací 'murshroom'; was NT yoóra 'el hongo' borrowed? CN šoolee-tl 'mushroom' is not yet countable, though CN š < y happens in usually other environments. [NUA: Tak; SUA: Trn]

NB, Cr yekwáh 'edible mushroom' and ST yakua 'mushroom, big, yellow and red'. ST is probably borrowed from Cr, since *kw > Cr kw, but > b in Tep languages.

Music: see sing

Nail (finger-/toe-): see claw

NAKED, BARE, BALD, STRIP, PEEL OFF, TAKE OFF; see also scrape, smooth, flat, slippery DESNUDO, PELADO, CALVO, DESPOJAR, DESCORTEZAR, QUITARSE

1485. *pï... 'naked': M67-299 *pe 'naked'; M88-pï2 'naked'; KH.NUA; KH/M06-pï2: Tb pïïwayït ~'ïpïïwaai 'be naked'; Sr pïïn 'naked'; Ktn pïna; HN pepes-tik 'naked'. Hill includes Cp péexwen 'nothing but' as a possibility. Only initia CV have they in common. [NUA: Tb, Tak; SUA: Azt]

1486. *puha 'remove, take off/away': M88-pul 'remove, take off, take away'; KH/M06-pul: TO wuahawua 'remove, take off; tear down'; Wr puha/puhi 'quitar'; Tr buhá 'quitar'. Miller includes My úwa 'lo quitó' though it is unusual for My to lose initial *p. [SUA: Trn, Cah, Tep]

1487. *nuyu '(become) bald': L.Son179 *nuyu/nu-i 'caerse el cabello'; M88-nu1; KH/M06-nu1: Op nud; Eu nudu; Yq nuúhe. For TSh appiŋkoyo'i 'be bald-headed' from s.th. like *aCpik-noyo'i, in which a velar-nasal cluster (-kn-) then anticipated the nasal to be before the velar -ŋk-, natural enough: *aCpik-nuyu'i > appiŋkoyo'i. But not counted yet. [nasal and velar cluster; *u > o] [SUA: Opn, Cah]

1488. *mani(C) 'naked': TSh wimmani- 'naked'; Sh mani" 'naked'. [NUA: CNum]

NB, for *yapa 'smooth, naked', see 'smooth'.

NB, for *pata 'flat, naked, smooth', see 'flat'.

NB, for *to'a, cf. NP wi/ca-to'a 'peel off with knife/fingers'; CN to'toma 'undress'; Wr i'tó- 'take/llevar'; see *to 'carry'.

NB, for *asi'a/'asi'a 'bark, skin, peel'; Kw 'asi-vo'o 'peel, v'; Cp áş'ava 'naked', see 'shell'.

NB, for *oLa/i 'shell, degrain (ears of grain), v', see at 'corn'.

NB, for *kïLipi 'shell/shuck corn, v.', see at 'scrape'.

NAME, CALL, INVITE; NOMBRE, NOMBRAR, LLAMAR, CONVIDAR

1489. *ti̇(N)wa / *tïnwa (AMR) 'name': Sapir; VVH20 *tï_nwa 'to name'; M67-300a *tew 'name'; L.Son302 tïwa; Munro.Cup78; KH.NUA; M88-tï15 'name'; KH/M06-tï15: Hp tïŋwa (comb: tïŋwan) 'name, refer to, vt'; Tb(V) 'indïŋwa-l 'name'; Tb(M) 'indiʿŋwa'anat 'give a name to'; Cp téw'a 'name (n. poss'd)'; Ca téwal; Ls túŋ-la; Sr tïwan(č) 'name, n'; Ktn tïw; TO čïigig 'name, reputation'; TO cïick 'name, vt'; TO čïig '(1) find, (2) call by name'; Eu tewát; Tbr temwa-ra; Yq tea; My tééwam; Wr tewá; Tr ŕewá; Wc tééváá; Cr an-tyawaa 'he is named X'. Munro suggests that an intermediate ŋw may explain the change of *o > u in Ls. Note ŋ associated with w in Hp and Tb. Add PYp teegi 'name' and ST tïtgï' 'llamar, nombrar, vt'. [as salt, girl *siwa > Ls suŋ, medial *w/ŋ] [NUA: Hp, Tb, Tak; SUA: Tep, Tbr, Opn, Trn, Cah, CrC, Azt]

1490. *nihya / *niC(C)a 'call': I.Num117 *ni(C)a / *nih- 'call, name, v'; M88-ni2 'call, name, v'; KH/M06-ni2: Mn niyat; NP nania; Sh niha/nihya; Sh tïpinia give a name; Cm niha 'name, be called, v'; Kw niyaa-vi 'name, n'; SP nia 'call by name'; CU niaa 'name'. Add TSh niha / niya 'name'; Ch nia-vi 'name'; WMU nia / niyé 'name, n'; WMU níyææ-n 'my name'; and perhaps Tr neho / nehówi / o'wi 'invite' most like Sh and Cm. I like Iannucci's reconstruction *ni(C)a, because the medial consonant is unclear and the variety again suggests that we may be dealing with a cluster. [NUA: Num]

1491. *paya 'call': Sapir; B.Tep255 *vaidai 'to call'; B.Tep255b *vai 'he called' (both Tep forms occur in all four languages); M88-pa24 'call, summon'; M67-74 *pai 'call'; KH/M06-pa24: Mn pee-t; NP pai; Kw pee; SP pai; CU paay; TO waid; Wr paé-; Tr bayé/páe; Wc (h)áine 'dice'. Probably not Eu bowá- 'convidar, brindar'. [*y > Tep d, *p > h/ø in Wc] [NUA: Num; SUA: Tep, Trn, CrC]

1492. *aya 'call': M67-75 *ay 'call'; M88-'a15; KH/M06-'a15 *ay (AMR): Tb aay(at) 'call, count, v'; Ls ayá' 'messenger who announces people making a formal visit'; Hp aya-ta 'call, hire, ask to do'; Hp aya, pl: a'yat 'helper, employee, hireling, person who helps in return for food' (cognate? Hill queries); I say yes, since in other UA sets, the vocabulary suggests invitations (a call) for work help (in exchange for whatever); Hp aya-ta 'hire, direct, tell or ask (to do s.th.), vt'; TO aaða 'palate' (cognate? Hill queries; could be). [NUA: Hp, Tb, Tak]

1493. *kwawa/i 'invite, call': Stubbs 1995-11: Cp kwawe 'call, invite'; Tr o'wi 'invite'; Wr oi 'invite to work' (perhaps borrowed from Tr; otherwise, woi); Eu bowá 'invite'; perhaps Sr koohan 'call, invite' and the baa- of TO baamud 'plead, invite' (lack of TO g < *w is frequent enough). [kwV > ku] [NUA: Tak; SUA: Tep, Trn, Opn]

1494. *inV 'invite': Wc 'ínie 'invite'; Cr naa-tá'inee 'me invitó/convidó'. [SUA: CrC]

NAVEL; OMBLIGO

Mn	póji / pózi	Нр	sipna	Eu	sikát/siikát
NP	sibudu / cibudu	Tb	šiiduluš-t 'umbilicus'	Tbr	sikú-r
TSh	siiku(cci)	Sr	şuur	Yq	síiku
Sh	siku	Ca	-'ul	My	siiku
Cm	siiku	Ls	tíidi	Wr	sikú
Kw	šigu-vï	Cp	mex	Tr	sikú-či; sikura
Ch		TO	hik	Cr	sipu
SP	sikuN	Nv	'ikudi	Wc	šïï.temúuci;
WMU	siġú-ppi / suġú-ppi	PYp	hikor	Wc	cikïri 'simbolo usado en la
CU	sigú-pï	NT			fiesta del tambor'
		ST		CN	šiik-tli

1495. *sikuN / *sikWuL 'navel': VVH68 *si_sku 'navel'; KH.NUA; I.Num191 *siku(n); L.Son240 *siku 'ombligo'; CL.Azt113 *šiik, 257 **siku; M88-si2; M67-301 *sik; KH/M06-si2: TSh, Sh, Cm, SP, CU, TO, PYp, Tbr, Yq, My, Tr, Wr, CN. Is Tb šiidulust cognate? Miller queries. *si... 'intestines' compounded with else is a frequent suggestion—and possible. On the other hand, we may be dealing with *sikwu or *siku and *sipu (cf. Labial Labyrinth, IJAL 61:394-420). Note bilabials in NP, Cr, Hp, and Tewa sipu, not to mention the Hp combining form Hp sivon-, which vowel agrees with *u. Note also Eu sibúra 'belt' and Eu b < *kw. CN šiik-tli 'navel' is cognate, and CN sikwil-li (< *sikwul) 'waist' may be also in some way. Kw šigu-vï 'navel' and Kw šiku-pï 'rib' in light of CN omi-sikwil-li 'rib (bone-waist)' are noteworthy. While McMahon & McMahon list Cr sipuci 'ombligo', Miller lists it differently and creates set po9 below. [kw/p] [NUA: Num; SUA: Trn, Cah, Opn, Tbr, CrC, Azt, Tep]

1496. *sipo/pu... 'navel': M67-302 *poci; M88-po9; KH/M06-po9: Mn poci; NP sibudu; Cr síi-pu'u-ci. NP (Yerington) has both NP si 'umbilical cord' and NP sibudu 'navel'. My sources have Cr(McMahon) sipuci. The new NP dictionary has NP(B) cibudu 'navel'. Conventional wisdom often suggests the first syllable to be *si'i 'intestines' compounded with *po/pu—maybe; on the other hand, it may not be a compound: NP cibudu / sibudu; Hp sivon- (combining form); Cr sipuci (2nd V should be ï). Note Tewa sipu. Does Hp sípàapuni 'hatchway from whence the Hopis believe they emerged to the Fourth World' tie in? Is sipapu a rather pan-Puebloan term? [NUA: Num, Hp; SUA: CrC]

1497. *toLo / *toto 'navel': Ktn toro-c 'navel' and Ls -tíídi 'navel' (only poss'd); Ls(E) Ls tííđi-š 'navel'. Ktn and Ls are a reasonable pair, as *o > Ls e and occasionally i, usually in a pattern like *CoCo > Ls CeCi, then perhaps > *CiCi. [NUA: Tak]

NEAR, BY, CLOSE, APPROACH; CERCA, ACERCARSE

1498. *mi'a 'near': B.Tep151 *mia 'near'; M88-mi5; KH/M06-mi5: TO mia; LP mia; PYp mia; NT miá/miaánai; ST mian. Add Cp ámi'en 'close, near by' and Tb mi'ipil 'close, near'. Jane Hill (p.c.) adds Tb(H) mii'ppi-l 'close' and another branch in Cm miituci / miihci 'near, soon, shortly'. As *' > ø in Tep, the glottal stops in Cp and Tb have them fitting fairly well with vowel assimilation. Cm with -t- instead of -r- also suggests a cluster, s.th. like *mi' / *miC / *mi'V. [SUA: Tep; NUA: Tak, Tb, Num]

1499. *hïLa/i 'near': AYq heela 'close, near, nearly'; Yq hééla 'cerca, hace poco'; My au hé'ela 'cerca de él'; Cr béheli'i 'cerca'; and perhaps the initial syllable of Wc heepáïicita 'near, adjacent' (likely *-Lp- > -p-; otherwise, *-p- > Ø). [SUA: Cah, CrC]

1500. *caka '(at the) side, near': Eu cákre 'de lado'; Tr čakena 'a un lado, por un lado, de lado'; TO šakal 'side by side'; PYp sakalim 'go to the side'; Kw čagici 'nearness'; Ch cagíp(a) 'near'; WMU čaġá-čií-v(a) '(be) near, close, nearby'; CU caġá-cívi 'near, next to'; CU caġá-núkwi 'fairly near to'. [NUA: Num; SUA: Tep, Trn, Opn]

NECK, NAPE, THROAT, ESOPHAGUS, NECKLACE, BEADS;

CUELLO, PESCUEZO, NUCA, GARGANTA, ESÓFAGO; nl = necklace; nn = nape of the neck								
Mn	kúta; qakiyánu 'nl'	Hp	kwahpi	Eu	kutát; póicika 'nn'			
NP	gguta; ka'wocobba 'nn'; kakia	'nl' Tb	kulaa-	Tbr	kwaí-r; mó-a-r			
TSh	kutan; katacci 'nn'	Sr	ŋÿhÿţ 'throat, neck, voice'	Υq	kútana; bí'am 'nn'			
Sh	toyom-pï; kuta(x)	Ca	kuspi-l / qíl ^y 'i ?	My k	uta'anawa; bi'a 'nn'			
Cm	toyo(pï)	Ls	qelá-t / qilá-t	Wr	kuhtamó			
Kw	kura-vi	Cp	qil ^y 'a 'nn'	Tr gus	éara/kusera; gutá(ra)			
	kagi 'nl.'		páva '&throat'		gutemara 'nn'			
Ch	kura;	TO	baiuka; baiukt;	Cr	kïhpí; kátu'uri 'nn'			
	káagi 'nl'		kus(ï)wo; kusho 'nn'					
SP	qura-vi	LP	kúšiv	Wc	katúuci			
WMU	qurá	PYp	kusiv / kusuvar 'neck'					
CU	kurá-vi	NT	kušívu	CN	keč-tli; kooko'tlan			
		ST	kúšvu					

1501. *kuta 'neck': Sapir; VVH154 *kusta 'neck'; M67-303a/b *kuta/*ku; I.Num67 *ku(h)ta; BH.Cup *qel 'nape'; L.Son111 *kuta; B.Tep123 *kusivu; CL.Azt258**kuta; CL.Azt115 *kəc; M88-ku9; KH/M06-ku9 (*kucV AMR) and at least Tak of KH/M06-ko29: Besides Mn, Np, TSh, Sh, Kw, SP, CU, Tb, Cp, Ca, Ls, Gb, Hp, Eu, Tr, and CN above, Miller also includes My kúta' náwwa 'cuello' (to which we should add Yq); Cr kúh-ta'a-n 'behind, at back of his neck'; and Hp kwahpi; however, Hp would relate only if medial *t was lost—*kuta > kua > kwa which may be unlikely. So Hp is at *kwa'i 'throat'. Tak anticipatorily assimilated (lowered) the round vowel toward a (*kuta > *qola), so the Tak forms derive from *qola (< *kuta). CN kooko'-tli 'throat, windpipe' and CN kooko'-tlan 'neck, throat' also show that vowel, as opposed to CN keč-tli. In fact, Miller and Sapir tie CN kečtli with the above, though an explanation for the vowel is not attached. Ca kúspi-ly 'throat' (vs. Ca qíl''i) likely belongs below. Tr guséara/kusera may be a loan from Tep or from *kusV 'call, make characteristic noise, flute' which is often confused with this stem. Sapir links Cr kihpíh 'buche, cuello, pescuezo' and Ca kúspi-ly 'throat', which match each other perfectly, and are listed at *kuspi below, as derivatives of *kusV 'call out, make characteristic noise'. The fact that My kusía 'throat, larynx' and Yq kusia 'flute' are phonologically identical, but with a meaning in each semantic set ties together 'make characteristic sound, flute, and throat' as all contain *kusV. Yet because *-c->-s-/_C in Ca, then the kus- of Ca kúspi-l 'throat' could possibly be < *kuci. On the other hand, BH.Cup has Ca qíl^y'i, but KH/M06-ko29 lists it as a Cp alternative, while neither Seiler & Hioki nor KH/M06 show such a Ca form. Tep's longer stem, different medial consonant, and association with 'carry on the back (of neck)' suggest the separate stem below. [*-t->-l- Tb, Cup, CN; o/a: a/o CrC] [NUA: Num, Tb, Tak; SUA: Trn, Opn, Cah, Azt]

1502. *kutipu > *kucipu > Tep *kusivu 'neck': TO, LP, PYp, NT, ST. The Tep forms collectively point to PUA *kucipo / kucipu. While TO kus-ta 'tendon in the neck' has another morpheme, TO kuswo 'neck' and TO kušo 'back of the neck' are very similar, yet different. Cf. *kucupu 'carry on back'. [SUA: Tep]

1503. *kus(pi) 'throat, craw, flute': Sapir: Sapir ties Cr kihpíh 'buche, cuello, pescuezo' and Ca kúspi-ly 'throat', which are a perfect match, even if a suffix is involved; of course, these derive from *kusV 'call out, make characteristic noise' as also My kusia 'laringe, garganta'; Wc wá'ikïsa'a 'garganta' (wá'i 'fish'). The facts that Tr guséra 'flute, larynx' means both and that My kusía 'throat, larynx' and Yq kusia 'flute' are identical (all < *kusira), and with a meaning in each semantic camp certifies the relationship of the 'make characteristic sound, flute, and throat' terms—the semantic range of *kusV. Note the *kus... forms of Tr kusera, guséara, gusera vs. Tr guta- in terms for 'neck'. [SUA: CrC, Trn, Cah; NUA: Tak]

- **1504.** *kat... 'back of head, nape of neck': M67-220 *kat 'head'; M88-ka14 'head'; KH/M06-ka14: NP ka'wocobba 'back of neck'; Kw ka-raka (< *ka-takka) 'back of head' (Kw *takka 'flat area'); SP qaraqqa-(vi) 'occiput'; Cr kátu'u-ri 'nape of neck'. Miller comments that this set is probably mythical. Wc katúúci belongs if Cr does. The Num forms form a valid set, especially Kw and SP, which are nearly identical, lengthy, probable compounds, and probably Ls with a semantic shift to the other side of the neck. [NUA: Num, Tak; SUA: CrC]
- **1505.** *koLoka 'beads, necklace': M67-28 *koka 'beads'; Langacker 1970; L.Son95 *koroka 'collar'; KH.NUA; M88-ko9 'beads, necklace'; KH/M06-ko9: Sh kotokki 'necklace'; Cp qínexa 'put on necklace, vi'; Cp qínxa-t 'strings of shell beads, necklace'; Ca qénxa(t) 's.th. around neck, beads'; Ls qénxa-t 'necklace, beads'; Gb xúnso'ar 'beads worn as necklace'; Sr qöönqa-t 'necklace, collar'; Ktn konakat 'necklace, belt'; Wr koloká 'sogilla'; Tr go-ro-gá 'collar'; My kóokam 'collar'; CN kooska-tl 'jewel, ornament, necklace'; Pl kuuska-t 'necklace'. Miller also lists Mn qakki 'beads'; Kw kaki 'necklace, collar'; CU kaaka 'necklace', all of which I place below with *kaki 'necklace'. The Takic, TrC, and CN forms all suggest a liquid as 2nd consonant, more like Lionnet's reconstruction *koroka. For devoicing of r > s in CN, see Elusive Liquids. Most intriguing is that Tak shows a nasal for the liquid, as expected in NUA, and Tak shows the third consonant *k and the first vowel, all very nicely. While its relatedness is still possible in some way, Sh t, probably an assumed t from an actual r, does not match the *l/n of the rest of UA. [L > s in cluster with a voiceless C] [NUA: Tak; SUA: Trn, Cah, Azt]
- **1506.** *kaki / *kakki 'necklace': KH/M06-ko9: Kw kagi; Ch káági; SP qaġi; WMU qaġáy / qaax 'necklace'; CU káaġa; Mn qakiyánu 'necklace'; Mn qakki-bi 'beads'. After the first syllable, Ktn vakahkik 'type of bead the rich had' is also highly similar. [NUA: Num, Tak]
- 1507. *toyo(N) 'neck': Sh toyom-pï 'neck'; Cm toyo(pi) 'neck'. [NUA: Num]
- **1508.** *papi 'larynx, throat, voice': M88-pa62; KH.NUA; KH/M06-pa62: Ca páve 'throat, voice'; Ls pávkuni-š 'larynx, Adam's apple'; Sr päävčan 'narrate, tell (story)'. [NUA: Tak]
- **1509.** *paNkway 'throat': Sapir: Kw pakwii throat'; SP paŋwi throat'; WMU pawí-vi 'throat' (with nasalized vowels matching SP's nasal); CU pawí-vi 'throat, inside of throat'; CU paġóy-vi 'throat'; Ca paxwáyva'a-l 'inside of throat'. [kw vs. ŋw/w] [NUA: Tak, SNum]
- **1510.** *kwa'i... 'throat': TO ba'itk 'throat'; PYp baivkor 'necklace'; TO baiuka 'leash, necklace'; Nv vaiuka 'gargantilla'; Nv vaita 'pescuezo, garganta'; NT báíkaroi 'la garganta'; Tbr kwaí-r 'neck'; Tbr koa-yí-r 'throat'; Hp kwahpi 'neck'. [NUA: Hp; SUA: Tep, Tbr]
- **1511.** *toLo(ka) 'throat, voice' / *toL (AMR) 'throat, voice' (AMR/KHill): KH/M06-to29 *toL (AMR): TO toDk 'snore, groan, growl'; Tr roróka /rorógara 'trachea'; CN toloaa 'swallow'; Hp töna('at) '(his) throat, voice, larynx'. Let's add NT toróókai 'gruñir, bramar' and Wr tológala 'throat, windpipe'; some forms may be reduplications of *toka; see at shout. Add also CN toska-k 'throat'; CN toski-tl 'throat, voice' with devoicing. [*l > s/_C -voice] [SUA: Tep, Trn, Azt; NUA: Hp]
- 1512. *ηοho 'neck': Sr ηÿhÿ-ţ 'throat, neck, voice'; Ktn ηoho-c 'neck'; the vowels perplex. [NUA: Tak]
- **1513.** *co(C)i 'beads': SP čoiN 'beads'; WMU číi / jíi 'beads, n'; CU číi-vü 'beads'. The eastern languages evidently assimilated the first vowel to the second. [NUA: SNum]
- **1514.** *noto 'throat': Mn nódo 'throat'; NP nnodo 'throat'. [NUA: WNum]
- **1515.** *kuwi 'throat': TSh kuwi(cci) 'throat, front of neck'; Sh kuicci 'throat'; Cm kuici 'throat'; PYp kuikvor 'throat'; ST kui 'larynx, trachea'; Wc kïipí 'garganta, buche'. [*w = Tep w?; cf. lion, eat] [NUA: CNum; SUA: Tep, CrC]

1516. *iyoN 'back of neck, nape of neck': WMU $iy\underline{o}/iy\underline{o}/iyo$ m-pi 'back of neck, nape of neck, n'; CU 'iyo-vi (WMU has a nasal vowel and/or consonant not found in CU). This noun is also incorporated into a verb: *iyon-na-put arm around s.o. (originally around neck, later to hug or arm around in any manner)': WMU i(y)on'a-qa-y, i(y)on-naqa, iint'a-qa-y, iin-qa 'put arm around, hug s.o.'; SP iyonna- 'carry in one's arms'; CU 'iyonani'i 'hug, vt'. The last 3 sets divide the 3 Num branches. [NUA: SNum]

Needle: see awl

Nephew: see relative, uncle

NEST; NIDO

1517. *koc(C)a / *kocca 'nest': B.Tep111 *kosa 'nest'; KH/M06-ko41: TO koš; LP koš; PYp kosa; NT kósa; ST kos. Ktn koca' 'nest (of rat or bee)' fits perfectly if medial *-cc- or *-Cc-/-cC-, but not *-c-, as medial *-c- y- in NUA. [SUA: Tep; NUA: Tak]

1518a. *tosa 'nest': Eu hitósa; Yq tóósa; My toosa; Tbr tuesá-r.

1518b. *ta'so 'nest': Wr ta'só; Tr ŕasó.

1518c. *tapa'so 'nest': CN tapa'sol-li 'bird's nest'; CN pa'sol-li 'briarpatch'; CN tapasol-loa 'to tangle s.th.' Words for 'nest' occur with some consistency in SUA, while NUA languages show little of diachronic substance, in having no sets or recently derived compounds or no word at all. In SUA, a reflex of *koca or Tep *kosa is found in every Tep language, while words found in CN and most TrC languages show enough in common for a possible relationship among them, explanations pending. Eu and Cah show *tosa, while Tr and Wr show *ta(')so, both being similar except for a V metathesis. Tbr and CN may provide keys in that CN actually shows a bilabial and Tbr shows a round vowel among non-round vowels that may suggest a former bilabial in cluster with other consonants, like Spanish déuda 'debt'. If originally *tapa'so, then a sequence like the following is natural enough, but hardly certain, of course:

*tapa'so > *tap'so > *taw'so > *ta'so (Wr, Tr) > *tosa (Eu, Yq, My) [SUA: Trn, Opn, Cah, Tbr, Azt]

NET, WEB; RED, TELARAÑA; see also 'bag' and 'spider'

1519. *ikkaC / *iCkaC 'carrying net': BH.Cup *'íkat 'carrying net': M88-'i3 'net'; Munro.Cup79 'ííka-t 'carrying net'; KH/M06-'i3: Cp íkat 'carrying net'; Ca 'íka-t 'carrying net'; Ls 'ííka-t 'carrying net'. [NUA: Tak]

1520. *waLi 'basket': L.Son326 *wari 'cesto (basket)'; M88-wa6 'basket, rabbit net'; KH/M03-wa6: Op wari; Eu warít; Tbr mwalí-t; Yq wáari; My waari; Wr warí; Tr warí. Miller combines these with *wa'na '(rabbit) net' (see below). That may be, but the glottal stop in *wa'na is lacking in SUA *waLi, not to mention the quite consistent 2nd V difference: -a vs. -i —and different meanings. So I separate them until additional data direct differently. [n:l:r liq] [SUA: Trn, Cah, Opn, Tbr]

1521. *wa'na 'rabbit net': M67-304 *wana 'net'; M88-wa6 'basket, rabbit net'; I.Num269 *wana(h) 'net, cloth'; KH/M06-wa6: Mn wa'nááqa 'net'; NP wana 'net'; TSh wa nna 'net'; Sh wana 'rabbit net'; Kw wana-vï 'web, net'; SP wanna 'milkweed net for catching rabbits'; Tb waanal 'rabbit net'; Ca wánal 'ropelike thing'; Ls wáána-l 'net for catching fish or rabbits'; Gb wánar 'big rabbit net'. Miller also includes reflexes of TrC *wari 'basket' with these, which could be, but I presently prefer keeping them separate for reasons explained above. If one language listed the word as meaning both 'net, basket' or if one semantic dimension could be found in the other half of UA, I would be more amenable to their union, but as it is, all the NUA terms mean only 'net' and the TrC terms all mean 'basket'. NP, Mn and SP suggest a possible consonant cluster for this stem in NUA, while SUA terms do not. [*-CC-] [NUA: Num, Tb, Tak]

1522. *wis 'web, string': I.Num280 *wisu(n) 'string'; KH/M06-wi6 'string': Mn wissi; NP wiha; TSh wisipin; Sh wisun (acc. ~a); Hp wishövi 'spider web'; Hp wiisila 'string out, extend, stretch out on a surface'. Ken Hill adds Ch wisiavi 'feather' with a question mark (but good addition, I say), and Tbr vivisa-t 'látigo [whip, cord]'. As KH/M06-wi6 has them together, these might be related to others listed at 'rope' (*wik-tV > wicV) by a c/s split frequent enough in UA, but that -c- likely comes from a *-kt- cluster, and I haven't seen *-kt- > -s- in UA yet, though that does not mean it has not happened. So the forms with *-s- are separated for now. Add Tr wesurá 'kind

of fishing net'. Hp wis- and Tr wesurá are probably cognate. Tr wesurá even vocalically aligns well with Num *wisu(n). For Hp hövi, see *hupa 'spider' as Hp wis-hövi is likely a compound 'string/web (of)-spider'. Other *wi- 'web' forms (< *wis-?) may belong with a group at 'rope' listed here: Eu wi-toroka 'telaraña'; My turus wii'i 'spider web'; My turus 'spider'; My turus witeri 'spider web'; Yq wite'i 'trap for animals'; AYq witosa 'web < thread-white'; AYq huvae toosa 'spider white = web'. [NUA: Hp, Num; SUA: Trn, Cah, Opn, Tbr]

NB, for *kwisa 'carrying net' and *kus 'bag', see *kwis / *kwisa 'carry' at 'carry'.

NB, for *hïw, see trap.

NB, for Eu, Tbr, and Tr *to'oka 'web', see spider.

NB, for Hp nat'a 'tumpline, headstrap for carrying a burden on the back', see at 'weave'.

NEW, YOUNG: NUEVO, JOVEN

1523. *pïtuC / *pïtuwa 'new': M67-305 *pe 'new'; I.Num173 *pïtï(h) 'new, recently'; L.Son203 *pimï 'nuevo'; B.Tep289 *vïtudī 'new'; CL.Azt13 *peewa 'begin', 259 **pï'i new; M88-pï3 'new'; KH/M06-pï3: Mn pïdī (< *pïtï) 'just, early'; Mn pïdītīp(ï) (< *pïtītīpī) 'new, young'; NP pïdī 'start'; Hp pïïhī 'new'; TO wečij; LP vïtdī; LP vïtuta/vïtīta 'new thing'; PYp vet-daga 'new, adj'; PYp vetuda 'new, adj'; NT utúdī/utúúdai; Tbr he-me-sá-t 'nuevo' (cognate? Miller queries); Cr héhkwa / háhkwa; CN peewa 'begin'; Pl peewa; Po pew-. Do Cah (My bemela; Yq beméla) yield only initial CV? Jane Hill (p.c.) also notes Tb mappitta-l 'new, new one'. Num, Tb, and Tep show t as a 2nd consonant, followed by -u- (*u > Num ï often enough). The Azt branch shows no -t-, but Azt -w- and -u of the other branches may align, with t lost in the cluster: *pïtwa > *pïwa/*pïtu. [Azt p-] [NUA: Num, Hp, Tb; SUA: Tep, Cah, CrC]

1524. *aï-ka > *ĭkï 'new, fresh, young': M88-ï19 (one item); KH/M06-ï19: Kw 'ïïvi 'be new'. Let's add SP aï-'new'; Ch aï-ga-'new, young'; SP aï-'new'; WMU aa-ġa-y 'be new, young, vi'; CU áa-ĝa-rī 'new, young, n/adj'; TSh ïkï 'new, fresh'; Sh ïkï 'new, young'; Cm ïkï 'young'; Cm ïkïnanakatï 'young, youthful'; Ch áï-ga 'new, young'; Ch áivac(i) 'young boy'; CU 'áa-ġa-rī 'new, young'. Some terms may suggest that Num *aipaci 'boy' is a compound. At 'today' the first morpheme is in *aï-pi 'now, today'. [NUA: SNum, CNum]

1525. *pašweL 'young man': Ca pašwél-iš and Cp pišwéliš 'young man'. [unstressed V > i] [NUA: Tak]

1526. *hukwa 'recent, new': My hú'ubwa 'ahorita, hace poquito [recently]'; AYq hubwa heela 'recently'; AYq hubwa hiva 'just recently'; Eu hubári 'nuevo'; Eu hubárva 'ahorita, no hace nada.'; Cr héhkua 'nuevo, primero'; Cr héhkua may belong here also. [SUA: Cah, Opn, CrC]

1527. *amay 'new, young': Sr amait 'new one'; Sr amai' 'now, today'; Ktn 'amayt 'new'; Ls 'amáy-om 'young people'. [NUA: Tak]

1528. *sïLi 'tender, young': CL.Azt91 *səli-' immature'; M88-sï15: CN selik 's.th. fresh, green'; HN seli-k 'soft, fresh'; Pl selek 'tender, young, immature'. [SUA: Azt]

1529. *paCC... 'new, young': Cp páni-š 'new'; Ca pá'uš 'young'. [NUA: Tak]

Niece: see relative, aunt, girl

NIGHT, DARK; NOCHE, OSCURO; see also 'sunset' and 'black' where many 'night' terms are 1530. *mihi / *-mi(y); there seems to be a *-mi syllable of sorts, usually affixed, except it may be standing alone in Hp mihi(k) 'become night, get dark'; Ls túúku-mi-t 'night'; Ca túkmiyat 'night'; Tbr aka-y-mí-n 'la tarde'; and possibly Cp túkmut 'night'; Cp túkmuči 'at night'. [NUA: Tak, Hp]

1531. *sum 'get dark': Tb šumuuma 'it is darkening'; Cr sú'umuara'a 'be black'; perhaps Yq héohomtéo 'el oscurecer, la tarde, queriéndose meter el sol'. Cr u < *o, so perhaps *suma > soma became *o >u in Cr. [NUA: Tb; SUA: CrC]

1532a. *yo'waL 'night': CL.Azt116 *yowa(l) 'night'; M88-yo8; KH/M03-yo8: CN yowal-li 'night, n'; CN yowa 'become night'; Pl yuwaki 'overcast, dark'; Po owel; T yowall; Z yowal. Possibly tied to *yuCpa at 'black' with *-p-> \@? These may relate to *yu'pa 'fire go, get dark' at 'black'.

1532b. *ta-yo'wa 'be night, dark': CL.Aztl1 *tlayowa 'be night, be dark'; M88-ta37; KH/M03-ta37: CN tlayo'wa 'get dark, v'; CN tlayoa; Pl tayuwa 'at night, night'; Po tayue; T tlayowa; Z tayowa. [SUA: Azt]

NB, for *tukV 'fire go out, dark, night, black', see 'black'.

NB, for *yuppa/i 'fire go out, dark, night, black', see 'black'.

NB, for Tep *huLu 'afternoon' see at 'sunset'.

NO, NOT; NO

Mn	qádu'/qadu'ú-tu		Hp	qa; qa'e	Eu	ka
NP	kai; gi haga 'nobo	dy'	Tb	hayi 'nothing'	Tbr	ka; ka-i; ka-té
	gi 'don't' (neg. in	ıp.)	Gb	qaay (Munro, p.c.)		
TSh	ke		Sr	qai	Yq	kaa
Sh	ke		Ca	kílye 'not'; kí'i 'no'	My	ka
Cm	kee		Ls	qáy	Wr	ka'í
Kw	yuw-aa-tï; kedu		Cp	qáy	Tr	ke
Ch(L)	kaču		TO	pi; pi'a	Cr	ka; kai
SP	ka; kaču		Nv	pima; koi 'aún no'	Wc	ka; 'aací 'nada';
			PYp	hii; im; kova		maave 'no haber, ausente';
						'íma 'negar, no permitir'
WM	ka; kač		NT	čo; kááki	CN	ka
CU	ka; kač S	T čap	p; nihš; 1	ničču 'nothing'; čam; č	akui 'not	yet'; kuttu 'porque si no'

1533. *ka / *kay 'no, not': Sapir; VVH136 *ka 'no, not'; M67-306 *ka, *kai; I.Num57 *ke 'no, not'; KH.NUA; M88-ka1 'no'; KH/M06-ka1: Most UA languages show a form of *ka(y) or *ke (< *kay), but rarely in Tep branch. [*k > h in Tb] [NUA: Num, Hp, Tb, Tak; SUA: Trn, Cah, Opn, Tbr, CrC, Azt, Tep]

1534. *kaN-tu: Mn qadu'ú-tu; SP kaču; WMU kač; CU kač; Kw kedu. Kw suggests a nasal cluster *-Nt- > -d- (because *-tt- > Kw -t- and *-t- > -r-), but what is -tu? [NUA: Num]

1535. *pi 'no': TO pi; pi'a; Nv pima ''; PB check. [SUA: Tep]

1536. *im 'no': PYp im 'not, no'; Wc 'ima 'negar, no permitir'. [SUA: Tep, CrC]

1537. *ma 'no': NT mai 'negative' (Bascom 1982, 278); Wc maave 'no haber, ausente'; CN ma 'no' (in imperatives, optatives; RJC). [SUA: Tep, CrC, Azt]

1538. *naw 'no': Sr nau 'no'; Ktn naw 'no'. [NUA: Tak]

NB, where have I seen cognates for ST čam?

NOISE, (MAKE) SOUND; (HACER) RUIDO

1539a. *kusu 'make sound (characteristic of the animal): VVH122 *kusu 'to sound (of animal)'; L.Son110 *kusu 'gritar, cantar'; M88-ku1, ku19, ku26; KH/M03-ku1: Ken Hill rightly combines ku1 'characteristic noise' and ku19 'flute' and ku26: Cp kúşe 'make characteristic noise'; Cp kúşnine 'play an instr'; Ca kúspi-ly 'throat'; Ca kustémi 'choke with s.th. stuck in throat'; Gb kúsa 'quejar'; TO kuhu 'make sound, neigh, crow, caw, blow (instrument)'; Eu kúsa; TO kuhi 'the sound of neighing, crowing, blow (horn), n'; Wr kusu 'sing (birds), bellow (cows), etc'; Wr kuicá; Tr kusú/gusú; My kúuse; Tbr kosú / kusi / kusu; CN kikik(i) 'whistle, hiss'. The general meaning is 'make characteristic noise of whatever animal'. This stem is prevalent in Tak, Tep, and TrC.
1539b. *kus 'flute': M88-ku19: M67-179 *kus 'flute'; KH/M06-ku1: TO kuhu 'play flute'; Tr guséra / kuséra / guséara 'larvnx, flute': Ya kusia 'flauta': Ya kuuse 'tocar instrumento': My kusia 'laringe, garganta':

guséara 'larynx, flute'; Yq kusia 'flauta'; Yq kuuse 'tocar instrumento'; My kusia 'laringe, garganta'; NP kocokkwoino (McDonald); NP kosokwa'i 'whistle'; Cr kï'išï 'chirp (bird), rattle (snake)'. See derivation of *kuspi 'throat' at neck. [SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt; NUA: Tak, Num]

1540. *tupi '(make) noise': Kw tuuvigi-(dï) 'make a noise' v.(n.); Ca túv 'big noise'. [NUA: Num, Tak]

1541. *pu(N)'wi 'for animals to make their characteristic noise': Sapir: Sapir lists Cr hiwe (i usually for ï, thus, hïwe) 'nach einem schreien, brüllen' and SP puŋ'wi 'make a peeping noise (like a rat)'. Because Cr h < *p and ï is next to u, Sapir's is a decent pairing of Cr and SP. [NUA: Num; SUA: CrC]

1542. *kata-ka 'rattle, clatter, crackle': Ch karáġa- 'rattle'; SP qara-ġa- 'make a crackling sound'; WMU qaqáraġa-y 'make noise, rattle, clatter'. [NUA:SNum]

NB, for *kuspi 'throat', see at neck.

NORTH; NORTE

1543. *kwiN 'north': M67-307a *kwin, *kwi 'north'; I.Num85 *kwi 'north, cold'; KH.NUA; M88-kwi7 'north'; KH/M06-kwi7: Mn kwiwi 'to the north'; NP kwinaha(na) 'northwind'; Sh kwinahai 'north'; TSh kwinahennankwah 'north'; TSh kwinaweppï; Cm kwine'-nakkwi 'north'; Ls kwiimik 'eastward'; Gb komi 'east'; Sr kwiimk 'north'; Sr akwiinamo' 'east wind'; Ktn kwimika 'north'; Hp kwininya(q) 'in or to the northwest'; Hp(S) kwiniwi 'toward the north'. Add Tb wiinany' 'north'. This is more of a collection for study than a cognate set. They have *kwiN in common, but differ significantly otherwise. [NUA: Num, Tb, Hp, Tak]

1544. *timinimin 'north, west': BH.Cup *təmám 'north'; HH.Cup *təmáám 'north'; KH.NUA; M88-ti37 'north'; KH/M06-ti37: Sr timinim 'west'; Cp temám 'north'; Cp temám-ka 'to the north'; Ca témam-ka 'north-ward'; Ca temámkawičam 'Serranos'; Ls tumáá-m-ik 'northward'. Sr timinim 'west' and especially Sr timinimnu'ţ 'one(s) from the west' suggest a reduplicated -mini- portion, such that reduced clusters of nasals -mn- > -m- better explains two m's in the Cup forms over Sr creating new consonants out of thin air. [Ls u; Ca/Cp e] [NUA: Tak]

1545. *pahic 'north': PYp pa'ičum 'north, forehead, ahead'; Eu bahic 'éve del norte'; Eu bahícvai 'para el norte'; Eu batén 'norte'; Tr bahičáwari/bawečáwari/bahačáwari 'candelilla, viento suave y helado de fin del invierno'. [SUA: Tep, Trn, Opn]

NOSE, SNOUT, BEAK; NARIZ, HOCICO, PICO DE AVE

Mn	múbi	Hp	yaqa; mocovi 'snout'	Eu	dakát
NP	mmubi	Tb	mupi-t;	Tbr	níki-so-r;
			šing- 'blow nose'	Tbr	huku-lí-r 'beak'
TSh	mupin	Sr	mukpi'	Yq	yéka;
Sh	mu-pin; muicun	Ca	mu-l; lámsa 'nostril'	My	yekka
Cm	mu(hbi)	Ls	múúvi-l	Wr	yahká
Kw	mu-vi-to'o-bï	Cp	-mu	Tr	a'ká
			petánaxwiš 'nostrils'	Tr	ču'á 'beak, snout'
Ch	muvi	TO	đaak	Cr	cú'uri
SP	muvi"-ppi;	LP(B)	daak	Wc	cúuri '&snout'
	muvwi"-ppi	PYp	daaka; ko'idim 'beak'		yée.karáu 'beak'
WMU	mövőt'ö-pi	NT	daáka	CN	yaka-tl 'nose, point, tip'
CU	mövőt'ö-pï	ST	daak		tewic-tli 'beak < stone-thorn'

1546a. *yakaC / *ya'ka 'nose': Sapir; VVH110 yaska 'nose, end'; M88-ya3 'nose'; M67-308 *yaka 'nose'; B.Tep11 *daaka 'nose'; L.Son350 *yaka 'nariz'; CL.Azt117 *yaka 'nose'; KH/M06-ya3 *yakaR (AMR): Hp yaqa, comb. yaqas; TO; LP; PYp; NT; ST; Eu; Yq; My; Wr; Tr; CN; in addition to those listed above, Miller notes other cognates of varying semantics: Mn yoqa 'nasal mucus'; SP yaġaa 'edge, end'; Tb yahaawit / yahaawil 'summit, point'. SP and Tb semantically align with CN. Sapir lists Tr yaxka and Ca yeka, though I can find neither in my sources. A fairly clear NUA-SUA distinction for 'nose' emerges in NUA *mu-pi and SUA *yaka (except Hp yaqa with SUA), though, as Miller shows, other reflexes of *yaka in NUA have related meanings other than 'nose' (e.g., SP yaġaa 'edge, end'). Since Tbr typically shows a palatalized nasal ñ/ny for y, then Tbr níki-so-r 'nose' belongs with both vowels assimilated toward y/i: *yaka > nyaka > nyka > niki. The final -s in Hp's combining form and in Tbr are noteworthy, like AMR's reconstruction with a final -C: *yakaR. The other semantic group is below in b: 1546b. *yaka 'summit, point, ridge, side': Kw yïga/yagaa 'side'; CU yaġáa-vï 'side, also side of the body'; SP yaġaa 'edge, end'; Tb yahaawit / yahaawit 'summit, point'; CN yaka-tl 'nose, point, tip'. This is in all 11 branches. [NUA: Num, Hp, Tb, Tak; SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]

M88-mu12, mu13, mu14 overlap considerably, though the sorting below might be a neglegible improvement. **1547a.** *mukpiC 'nose': VVH15 *muspi 'nose, point'; M67-162b *mupi 'nose'; I.Num100 *mupi-h/N; BH.Cup *mu(v); M88-mu13 'nose'; KH.NUA; KH/M06-mu13: Mn; NP; TSh; Sh; Cm; Kw; SP; CU; Tb; Cp; Ca; Ls; Gb mópin; Sr mukpi' 'nose (< face-breast?)'; cf. Sr tamukpi' heel (< foot-nose). Ken Hill adds Ktn mukpic 'nose'. Sr and Ktn show medial *-kp-, yet Num shows no such signs of a cluster, though Tb -p- vs. -b- also suggests a cluster; and SP, Tb, Sr suggest a final or third consonant. Cf. Hp mòope(q) 'in front' below, which also suggests a medial cluster.

1547b. *muC 'nose, snout, face': M88-mu12 'face'; M67-162a *mu 'face'; I.Num100 *mu- (pref) 'nose, mouth, face'; AMR1993a *mut 'nose, front': Mn mu 'nose, snout, mouth'; NP mu- 'face' (pref); Sh mu- 'with nose or front' (instr pref); SP mu- 'nose'; Hp mo'a/mo'o 'mouth' (cognate? Miller queries). In M88-mu12 and -mu13, Miller astutely distinguishes 'nose' and 'face' though the one is based on the other. Miller also queries whether Hp mo'a/mo'o 'mouth' is cognate. Perhaps it is, since in animals the semantic range of 'nose, snout, face' makes sense more than for people; for deer, bear, and most animals, the mouth and nose are all part of the same forward protrusion, whereas in people the nose is a protrusion, but the mouth is quite independent of that protrusion, the face generally also.

1547c. *muL / *muLuka 'first': BH.Cup *mul 'first, before'; M88-mu12 'face'; M88-mu14 'before, first'. Ken Hill correctly combines M88-mu12 and mu14 in KH/M03-mu12: NP mui 'first'; Cp múluk 'first'; Ca múluk 'first'; Ls 'amú-(la) 'first, previously'; Hp mòoti 'first, before'; Hp mòope(q) 'in front'; Hp moŋaqw 'from a point in front'; Hp moŋwi 'leader, head, chief'. Hp ŋ may suggest that the original morpheme included the three consonants in Cp and Ca, since Hp ŋ is a nice reflex of an -lk- cluster, after loss of the intervening vowel, then showing a velar nasal for the nasalization of the liquid (*l > N) plus a velar in a resulting cluster: *muluka > *mulka > *muŋa. Ktn namumuk 'first'; Ktn pamukit / pamukpit 'first, ahead'; and Ktn lamumuk 'first' show three separate prefixes (na-, pa-, la-) to -mu(mu)k, similar to 2 of the 3 in the Tr forms for bumblebee: Tr napári, ŕapára, wapára. [syncope to cluster; Hp -p- < *-CC-] [NUA: Num, Hp, Tak, Tb]

1548. *co' / *cu' 'snout': Cr çu'uri 'nose; Wc çuuri 'nose, snout'; and perhaps Tr ču'á 'beak, snout' and NT úsu 'hocico, pico'. Whether loans or cognates is hard to say, because the Tr and CrC vowels do not agree, since Corachol u < *o. [SUA: CrC, Trn, Tep]

Now: see today

NUMB; ENTUMIRSE, ENTUMECERSE, ENTUMECIDO; see also 'cold'

1549. *tipa/i 'numb': Ca tétvis 'to become numb'; Wr cocotéba-ni 'limb, to fall asleep'. A Ca reduplication would have *tev(is) match the sequence in Wr. [NUA: Tak; SUA: Trn]

1550. *sik-powa 'numb': CN sepoowa 'be numb (of body part, from cold or lack of circulation)'; CN sesepoka 'get numb, have goose bumps'; perhaps Eu zopóre 'encogerse', though it is listed below at *co'po as well. The 1st element of the CN terms is suggested to be CN sek-tli 'snow, ice'. Eu -p- (and not -v-) suggests a cluster in Eu as well. Might Yq si'ibwia 'entumida/o' and AYq si'ibwia 'numb' be reduced loans from Azt? And what of Nv sivapagi 'entumirse'? [-kp- cluster] [SUA: Azt, Opn, Cah]

1551. *sik-mukki 'numb < ice/cold-dead': Hp simokiw|ta (with accent on 1st V) 'be getting numb'; Hp(H) siimokiwta 'be numb'; NP ta/ma-sisini 'foot/hand goes to sleep'; Cm sisi'niti 'numb, feel numb, asleep'; WMU si'<u>uú</u> 'be numb'. The first morpheme could well be that of CN sek-tli 'ice/cold'. Though Hp lost the velar stop, it preserved the vowel pattern best. NP, Cm, and WMU are reductions showing residual features of both consonants, in which the velar + nasal cluster -km- went the following directions: *-km- > η (NP); -'n- (Cm); and '<u>u</u> (WMU), for all show signs of a velar (velar nasal or glottal stop) and a nasal or a nasal V in the case of WMU. The vowels or whole second syllable contracted severely. [cluster reduction -km- > η , m, -'n-] [NUA: Num, Tak, Hp]

1552. *co'pa 'numb': L.Son 43 *copo 'entumecerse'; M88-co20; KH/M06-co20: Eu copóre 'encogerse'; Tr čo'póta- / čo'póta-

NB, for *samV 'wet, numb', see 'wet'.

Nurse: see suck, breast Nut: see pinion/pinenut

OAK, ACORN; ENCINO, ROBLE, BELLOTA

1553. *pawa 'oak': M88-pa56; Munro.Cup82 *pááwi-š 'oak sp'; KH.NUA; KH/M06-pa56: Cp páwi-š 'blue oak'; Ca páwi-š 'scrub oak'; Ls páawi-š 'scrub oak'; Sr ipaa-ţ 'an oak sp'. CN aawa-tl 'oak' matches well, since *p > ø in CN. Most other UA languages show initial *p; therefore, a few other forms which lack initial *p may be northward diffusions of CN aawa-tl rather than cognates with it: Tbr amwá-t 'encino roble'; Wr awé 'kind of oak'. [*p > Azt ø; Tbr-Azt] [NUA: Tak; SUA: Azt]

1554. *toha 'oak': M67-309 *tua 'oak tree'; L.Son307 *toha 'encino'; Fowler83; M88-to1 'oak'; KH/M06-kwi9: TO toa 'oak tree'; Eu tohá; Wr tohá; Tr ŕoha(sa); Cr tuáh. Add PYp tua 'live oak'; NT tuééyi 'encino'; NT tuáápïli 'oak sp.'; ST tua 'encino'. Note Wr and Tr *tohi 'acorn' and *toha 'oak tree'. But initial CV- of Gb tómsar 'kind of oak'; Gb tómsavit 'un roblar'. [SUA: Tep, Trn, Opn, CrC]

1555. *iyaL / *ïyaL 'poison oak': M88-'i4; BH.Cup *'iyála 'poison oak'; HH.Cup *'iyáala 'poison oak'; Munro.Cup101 *'əyaa-la 'poison oak'; Fowler83; KH/M06-'i4: Ca 'íya-l; Cp 'əyá-l (Hill and Hill note Cp's unexpected V); Ls 'iyáa-la; HN 'iya-tl 'tobacco'. Munro mentions a possible tie between this set and *ïya 'sore', which could easily be. Jane Hill (p.c.) adds Ktn 'ïyči-č 'poison oak' and Gb oaa-r. Ls -la suffix may mean s.th. like a final liquid in the stem. [NUA: Tak; SUA: Azt]

1556a. *kwi(N) 'acorn, oak': M67-1 *kwi/*kwini acorn; BH.Cup *kwinila(?) oak sp; Munro.Cup81 *kwiíyi-la 'oak sp.'; Fowler83; M88-kwi9; KH.NUA; KH/M06-kwi9: SP kwiya- vü 'scrub oak'; WMU kwiya-vï 'oakbrush'; CU kwia-ppï oak tree; Tb wa'ant 'type of oak tree and its acorn' (wrong vowel, but perhaps a-a < *i-a); Cp kwinily 'Black Oak and its acorn'; Ca kwiñi-l; Ls kwií-la; Gb kwar 'bellota' (vowel is wrong); Sr kwiih-t; Hp kwinyi oak (brush); Hp kwinyi-tïva 'acorn'. Tb winjiyaa-l 'acorn' should be included for consideration. 'Moon' also shows a medial n/y dichotomy in Tak; however, Tb may suggest that both originally existed, perhaps later became clustered, then only one or the other dropped out in that clustering process. Miller includes several forms in both M88-kwi9 and M88-wi9 which we separate by letter. If they are both related, then an explanation is in order as to why so many reflexes dropped the k of *kw: *kw > w or *w > kw? Note Ktn kwïyač 'acorn sp'. And the fact that Tak languages and SNum languages have terms in both *kwinV and *wi'aN is available for explanation—anyone?

1556b. *wi'a(N) / *wiya(N) 'acorn, oak': M88-wi9 'acorn, oak'; I.Num281 *wiya(h) 'acorn'; BH.Cup *wi'a 'oak, sp. '*wiw 'acorn mush (but see below)'; HH.Cup *wi'a 'oak, sp.'; KH.NUA; KH/M06-wi9: Mn wiya'' 'acorn' (generic term); NP wia; Kw wi'a-(m)bi/wiya-(m)bi; TSh wiampippï; Kw wi'a-(m)bi; Tb wiiwat 'to leach acorns'; Cp wi'a-t 'live oak'; Ls wi'á-t 'oak, sp.'; Ca wi'at 'canyon or maul oak'; Sr wi'aht. Miller also queries whether SP and CU *kwiya 'oak' are related. [NUA: Num, Tak, Tb, Hp]

1557. *wiw '(make) acorn mush': BH.Cup *wiw 'to make/cook acorn mush'; KH.NUA; M88-wi17; Munro.Cup2 *wiiwi-š 'acorn mush'; KH/M06-wil7: Ca wiw; Ls wiw; Gb wiy 'atole de bellota'; Sr wiič 'acorn mush'. Tb wiiwat 'to leach acorns' better fits here than above, though the two could feasibly be tied. [Gb loses -w-][NUA: Tak]

1558. *paCtik 'leach acorns': BH.Cup *pácik 'to leach acorns'; M88-pa43; KH/M06-pa43: Cp páčik 'leach acorn flour'; Ca páči 'leach acorns'; Ls pášku 'leach acorn flour'; Ls pášku-š 'leached acorn flour'. KH.NUA offers the possibility that Sr pačiuvta' 'Upper Cienega' may have something to do with the above Cupan forms. [NUA: Tak]

1559. *maki 'acorn flour': Munro.Cupl *mááxi-š 'acorn flour': Ls mááxi-š; Cp máxi-š. Cm makicar 'mash, squash, hand grind' may also belong. [NUA: Tak, Num]

1560. *sipi 'oak sp': Tb šiibii-l 'acorn'; Kw šiviidï-bï 'water oak, valley oak, roble'; Ktn šev(t) 'oak sp'. Jane Hill (p.c.) adds Gb save-l. Cr siu'uh 'encino' and Tr fohisowa 'chaparro, encina chaparra' changing *-p- > -w- (*sip > *siw) cannot be presumed, but are not impossible. [NUA: Tb, Num, Tak]

1561. *kaLi / *kaLa 'acorn': PYp ka'ali 'acorn'; NT káli 'encino roble'; ST tua kai 'oak-seed'; Tr garabosi 'acorn'. [SUA: Tep, Trn]

- **1562.** *kusi 'oak': AYq kusi ouwo 'oak tree'; Wr kusi 'brush, thicket; kind of oak' [SUA: Trn, Cah]
- **1563.** *muCtV 'oak sp': Kw mucita-bï 'California scrub oak'; Sr mohčaţ 'oak species, its acorns: a long, thin kind of acorn'. [NUA: Num, Tak]
- **1564.** *tïpa 'white oak': NT tïpáára tueéyi 'encino blanco'; Cp tévesily 'white oak'. [NUA: Tak; SUA: Tep]
- **1565.** *yumu 'acorn': Tb yuumuk-t 'acorn sp'; Tb yuumuugu-l 'acorn tree'; Tb yu'um 'type of oak tree'; Mn yïmïná 'acorn drink'. Possibly a loan, given their geographic proximity. [NUA: Tb, Num]

Ocean: see water Oil: see fat

OLD, WEAR OUT; VIEJO, GASTAR, DECAER

1566. *yo'o / *yu'u 'old': Yq yó'o 'old, grow up, grow old'; Yq yo'otui 'old people'; Yq 'ó'ola 'viejito/a'; My (y)ó'ola, ó'ora 'old'; My yó'otu 'is growing'; My yó'owe 'is grown, is big'; My yúúya 'old (of things)'; AYq yo'ora/yo'owam 'elders, ancestors'; AYq yo'otu 'mature, adj, grow old or tall, vi'; AYq yo'otui 'old person, elder'. Tb yo'ol~'oyo'ola 'be bald' may also belong. [SUA: Cah; NUA: Tb]

1567. *yuLa 'wear out': Sr yolal-k 'wear out, become ragged'; Cp yulayúla'a-š 'ragged'. Consider also Tb 'uulaw-(it) 'is getting old'. The differing Tb reflexes here and above, and the differing medial consonants suggest a separation of these from the above. [NUA: Tb, Tak]

1568. *yoci(-tu) '(become) old': Wr ocíru-na/océru-na 'become old'; Wr ocírume 'old man'; Tr očeru- 'grow, develop, become old'; Eu docí 'old' (Eu d < *y); Eu docítu'u-n 'become old'; Eu docíwari 'very old'; Eu docísuari 'age' (Shaul 2008/9). Tr and Wr are somewhat prone to lose initial consonants, so *yoci is a decent reconstruction. Is this tied to *yo'o above? [SUA: Trn, Opn]

1569. *cukuC 'old': Mn ugú' 'old man'; TSh cuku-cci, cukuppï-cci 'old man'; Sh cuku 'old man'; Cm cukuhpï (obj) 'old object, elderly male'; Cm sukuupï 'old man'. What of Hp cakwa-k-iw-ta 'be worn out, vi sg'? [NUA: Num]

1570. *mu'ata 'old': Mn muu'áci 'old ones'; AYq mooye 'get old'; AYq moera 'old, worn out, used items, inan'; Yq moéla 'worn out'; PYp momi 'ancient'. [SUA: Cah, Tep; NUA: Num]

1571. *ma'aC 'old (woman)': Kw ma'apï-zi 'old woman'; Ch maapïci 'old lady'; CU wíi-mamá-pï-ci 'old lady'; perhaps the -mai of TO kelimai 'old person' (subtract TO keli 'an uncle senior to one's father'); PYp keli-mder 'old, adj, old man, n' (subtract PYp keli 'male, man, paternal uncle, to age, vi'). At 'woman' is the reduplication (WMU mama-či 'woman' and CU mama-ci 'woman') of what originally meant 'old woman' and other compounds of this morpheme. [NUA: Num]

1572. *tu'a- 'become': Langacker (1977, 45) reconstructs *tu 'become'; KH.NUA; *tu-pu (Jane Hill, p.c.): Ca níšluvuk 'become old (of woman)' and Ca náxaluvuk 'become old (of man)' both show -luvuk 'become old'; Cp naxánču've-l 'old man' (*nakan 'old man'); Cp nišlyuve-l 'old woman'; Cp níču, past: nišwi 'grow old (of woman)'; Ls néču 'become old (of woman); Ls néš-la 'old woman' (for the first morpheme *nos > Ca/Cp *nis, see 'woman'); Ch tu'a 'become, turn'. Jane Hill's reconstruction of *tu-pu, the first morpheme (*tu) of which she reports (p.c.) as an inchoative in Cp, possibly interpretable as s.th. like 'become', and some forms only have the *tu portion. Note also Sr niihtavÿtu' 'grow old (of woman)'; Sr niihtavÿt 'old woman'; Sr nÿÿht 'woman', and WSh -tuah 'become, turn into, engender' (Crum and Dayley 1993, 126-7); Sh -tua- 'become' (Langacker 1977, 45). Maybe not Cp lyúvini-š 'withered'. [NUA: Tak, Num]

1573. *upiha 'long ago, long time(r), old': Sr uviht 'long ago, it used to be'; Ktn 'uvea 'before, already'; Ktn 'u'uvea 'a long time ago, for a long time'; Ktn uvihat 'old (man or woman)'. [NUA: Tak]

NB, for *nakan 'old' see grow.

NB, for Tr wegáca '(grow/be) old (of women)' see 'woman'.

NB, for *wïL 'big, old', see 'big'.

On: see at 'at'.

ONION, WILD

1574. *kiNka 'onion': I.Num76 *kiŋka/*kika 'onion'; Fowler83; M88-ki7 'onion'; KH/M06-ki7: WSh kinka: NP kikka 'wild garlic'; Sh kinka 'onion'; Cm kiikka 'onion'. Fowler also lists Ch; SP; CU. [NUA: Num]

1575. *mu'a 'onion' (Fowler states probably Allium pleianthum): Fowler83: NP, Sh, SP. [NUA: Num]

ONLY; SOLO, SOLAMENTE

1576. *saN 'only': Sapir: SP -šampa (< *san + V + pa) 'only, except'; Ch samp(a) 'only'; CN san 'only, but'. Sapir unites the SP and CN forms; and whether related or not, the SP and Ch terms certainly are. [NUA: SNum; SUA: Azt]

OPEN; ABRIR, ABIERTO

1577. *tapowa 'open': CL.Azt122 *tapowa open; M88-ta40 'open'; KH/M06-ta40: My étapo 'abrir'; CN tlapoaa 'open s.th.'; Pl tapuwa; HN tlapoa; HN tlapowi 'be open'; Tr(H) irápa 'abrir'. What of CU tapáġay 'open, rip open'; Mn ca-po'a 'with fingers-expose'; and TSh tïpïa 'undo, release'? Since *u > ï is frequent in Numic, perhaps *tapowa > tapua > tapïa > tïpïa in TSh. [SUA: Trn, Azt; NUA: Num]

1578. *pïtïwa 'open, uncover': Stubbs2003-29: Tb peleew~'epeleeu 'open it up'; Hp pïrï-k-na 'unfold, open up, unwrap, vt'; Eu périna 'abrir (la mano or un libro)'; CN petlaawa 'disrobe, undress, uncover, polish s.th.'; what about Pl peelua 'abrir, vt'; Pl ta-pelua 'abrir, vt'. Ca pélaan 'spread open (wings, fan, not on ground)' is also listed with Azt *patlaani 'fly, vi' at 'fly, v'. [NUA: Tb, Hp; SUA: Opn, Azt]

1579. *kappaL 'open': Kw kapa'iyugwi 'to open up'; Ca kápal 'get/make hole/opening'; Cp kápele 'to open'; Ca kavi 'to be open'. Might this tie to *kapaL 'flat'? [*-pp- vs. -p- in Ca] [NUA: Num, Tak]

1580. *kwatta 'open': Ls hiqwáta 'be an opening'; Ca če-kwála'an 'open (eyes or mouth)'; Ca kwétel 'stick out, perk up, vi, pry open, vt'. [NUA: Tak]

1581. *paka 'open': CU paqá-tií 'open, break open'; CU paqá-kï; Sh kïsappax 'yawn'; TSh kïsapaaha 'open up, come open'; Mn waqaa 'be open, spaced widely'. (For *kïsa 'yawn/ open mouth', see yawn.) [NUA: Num]

NB, *'aki 'open' (Ca 'áqi 'to open'; Sh ake" 'to open up') is at 'eat'. [NUA: Tak, Num]

Other: see different and one.

OUT(SIDE), (A)FUERA (DE)

1582. ***pisa** 'out, go out': M67-199 *pis 'go out'; M88-pi11 'go out'; KH/M06-pi11: Tb pišat~'ipiš 'go/come out, be born'; Ls pisá-t 'outdoors, outside'; Ls pisá-ηa 'go outdoors, urinate'; Ls pisa-y 'go outdoors'. [NUA: Tb, Tak]

1583. *pu / *puta / *puta / *puta / *puta / *go/come out': B.Tep287 *vuusanai 'come out'; L.Son218 *puca = *puwa 'salir'; M88-pu7 and pu17; KH/M06-pu7 and pu17: Tr buwa/buya 'salir, pl.'; Wr puyá 'salir, pl. subj.'; Sr puraq|q 'go out, come out, exit; urinate'; Ktn purahkïk 'come out'; Ls pulúča/i- 'start, set out, go away, be reckoned, vi; pick out, procure, reckon, calculate, vt'; Cp púlič- 'go out'; Ca púlayiš 'that which has been hatched'; TO wuušani 'emerge, exit, appear'; Eu vúcke 'salir'; Eu hi-puwa 'asomarse'; Op buca. Miller lists the forms in L.Son218 *puca/puwa 'salir' in M88-pu17; however, since L.Son218 and both M88-pu7 and pu17 contain most of the same forms, they should be combined, though doing so does not mean they are all from a single proto-form, but a collection to be studied. Perhaps *-t- > -c-/-L-. The Tep forms *puc and the Tak forms *puluc may be another case of a lost liquid absorbed into a cluster, then disappearing. Or the variance after first syllables may be different morphemes or compounds. Consider also Mn pudi'i 'get out, exit, leave'. [medial C problems] [NUA: Tak, Num; SUA: Tep, Trn, Opn]

- **1584.** *tita 'outside': Ch tiïrava-nt 'outside, outdoors'; CU tiïra-va-(ci) 'outside of, out of'; CU tiïra-ruxwa 'out of'; WMU túúra-vaa-t / túúravan / túútavat 'out, outside, adv'. [NUA: SNum]
- **1585.** *yihi(pa) 'outside': Kw yïhï-vi 'outside'; Ch yïhïva-nt 'outside, outdoors'; Sr yïïvanu' 'outside'. Note that at 'earth' is *yawa 'flat land, outside', but Tb yahawaa-l 'red earth' would hardly suggest a tie between those and these. [NUA: Num, Tak]
- **1586.** *pa'ku 'out': Yq pá'aku(ni) 'afuera'; AYq pa'akun(i) 'outside'; My pá'aku 'afuera'; Cr pwa'akïéh 'afuera'; Wc vaka 'take out'. [SUA: Cah, CrC]
- **1587a.** *huna 'out(side)': NP hunaggwa 'outside'; Sh hunankwa 'outside'; Cm hunakï 'outside'; Tb 'oonooban 'the outside'.
- **1587b.** *hup(p)ina 'out': Mn hupináqwe 'outside'; ST hupna' 'take out, extract, vt'. [NUA: Num, Tb; SUA: Tep]

NB, for Azt *kiisa 'go out, emerge, leave' see at 'leave'.

OWE: DEBER

1588. *wikaL 'owe': M88wi3; KH/M06-wi3 'owe / deber': TO wiklaDag 'debt'; Eu vikiryáve; Wr wiga-; Tr(H) wiká / wiké; My wikirííya; Wc wíkie; CN wiikiliaa 'take, carry s.th. for s.o.; owe s.th. to s.o., vt'; Pl wiikili|a. All show initial *w except TO (*p?), perhaps a loan, yet note the lengthy agreement between Eu and TO— *pikiLVyawV—and 4 of the 5 consonants in Azt *wiikiLi(y)a. [SUA: Tep, Trn, Cah, Opn, CrC, Azt]

OWL; BUHO, LECHUZA, TECOLOTE, MOCHUELO

- **1589.** *kuku 'ground/burrowing owl': M88-ku35; Stubbs1995-21 *kwuku; KH/M06-ku35: Ca kuku-l 'ground owl'; Munro.Cup87 *kuku-l/*kukuu-l 'owl'; Ls kukúu-l 'burrowing owl'; Gb kukúy' 'burrowing owl'; Ktn kukuku-č 'owl sp'; Hp koko 'burrowing owl, little owl'. Consider also Tr okowí / okó-turi 'small type of owl'; Tr o*ko 'type of owl'; TO kuukvul 'elf owl'; TO kokoho 'burrowing owl'. Since Tr sometimes shows o < *u, Tr o is the expected reflex for the *kwo/kwu phenomenon. Yet whether Tr lost initial k from *kuku or the set reflects *kwuku, the Tr and TO forms match the Hp and Tak forms fairly well. [NUA: Hp, Tak; SUA: Tep, Trn]
- **1590.** *muhuC 'owl': M67-312 *muhu 'owl'; I.Num97 *mu(hu(h)) 'owl'; BH.Cup *muhuta 'owl'; L.Son153 *muhu 'buho'; Fowler83; M88-mu10 'owl'; Munro.Cup86 *múúhu-ta > *múú-ta 'owl'; KH.NUA; KH/M06-mu10: Mn muhu 'Pacific horned owl'; NP muhu 'owl'; TSh muumpi-(cci) 'horned owl'; Sh mom-picci; Kw muhu-ci; Ch muhúmpïci; SP moo"-(ppïci) 'hooting owl'; CU múu-pï-ci; Tb muuhun-t, muhumbiš-t; Cp múú-t; Ca múú-t; Ls múú-ta 'horned owl'; Gb múhut; Sr muum-t; Ktn muŋ-t 'great horned owl'; Hp moŋwï; Eu muhút; Op muh; Yq múú'u; My múú'u; Tbr mu-tá; HN kwa-mohmoh-tli' 'night owl' (kwa=forest dwelling, wild). Add Tr mo'tapa 'owl sp' as Tr tápani 'owl sp' provides a convenient morpheme break for Tr mo'-tapa. HN and Sr muum-t may suggest an old reduplication. Tak -t absolutive and especially Ls -ta suggest a final consonant. [NUA: Num, Hp, Tb, Tak; SUA: Trn, Cah, Opn, Tbr, Azt]
- 1591. *tuku 'owl': VVH105 *tukur(i) 'owl'; B.Tep233 *tukurai owl; M67-313 *tuku 'owl'; CL.Azt123 *tekoloo 'owl'; 264 **tikul/tukul 'owl'; Fowler83; M88-tu15 'owl'; KH/M06-tu15: NP tuhu'u 'burrowing owl'; Tb tukluluh 'screech owl'; Hp tokori 'screech owl'; TO čukud; LP tukur; PYp tukor; NT tukúúrai; ST tukuur; Cr tukurúú 'owl'; Cr túkupwa'an 'tecolote'; CN tekoloo-tl; My tekwé 'zopilote'; Pl tekuluu-t. Note CN tololo' 'owl' and Tb tukluluh. Mayan *tuhkur(u) (Campbell 1988) must also be noted. [*-k->-h- in NP like black] [NUA: Hp, Tb, Num; SUA: Tep, Cah, CrC, Azt]
- **1592.** *sï'īka 'owl': Stubbs2003-28: CN šašaka 'owl'; Kw sïïkaatī 'barn owl'; Tb še'egapiš-t 'barn owl'. The Kw and Tb forms are certainly related, and I would guess that CN šašaka is also. If so, then either CN assimilated the first vowel (*ï-a > a-a), or a once unaccented a > ï in NUA. Could an original high vowel (ï or i) explain the palatalized š in CN? [NUA: Num, Tb; SUA: Azt]
- **1593. *cikwa'a** 'barn owl': CN čiikwa'-tli 'lechuza/barn owl'; Cr siíwa'a 'barn owl'. [Cr consonants kw/w/p] [SUA: CrC, Azt]

1594. *tukyapa 'type of owl': Ls túkyapa-l 'screech owl'; Tr ŕučábari/ŕučáwari 'owl sp'. Natural enough is *-ky->-č-, but whether verifiable? [NUA: Tak; SUA: Trn]

1595. *poko 'burrowing owl': Cm pohkóo' 'burrowing owl'; TSh sipokko'o 'screech owl'; Tb pogoh 'burrowing owl'; perhaps Mn woqoyaana 'owl sp'. For Mn w < *p possibly, see also Mn at *paka 'open' and others. [NUA: Num, Tb]

PADDLE

1596. *ipa 'wooden paddle': Munro.Cup88 *'ííval 'wooden paddle'; KH/M06-'i14: Cp ívə-l; Ls ííva-l. [NUA: Tak]

PAIN, HURT; DOLER, DOLOR, DAÑAR; see also 'sick'

1597. *koLi (*koLkoLi > *ko'okoLi) 'hurt, be sick, chili pepper': M67-129c *ko/*koko 'hurt'; L.Son92 *koko 'be sick'; L.Son93 *kokori 'chile'; B.Tep117 *ko'oko 'be sick, hurt'; Fowler83; M88-ko7; KH/M06-ko7 'hurt, (be) pepper hot': Cp qilyíqa-t 'hot, spicy, strong'; Cp qilyíqtu'ni 'hurt, sting, vt'; Ca qélya 'feel sore, v'; Ca qélyak 'peppery, pungent, creating a burning sensation'; TO s-ko'ok 'be painful'; TO ko'okol 'chile pepper (plant and fruit)'; TO ko'okoD 'hurt, give pain to, vt'; NT kóóko 'be sick'; NT kóókoli 'chile'; ST -ka'ook 'be sick'; ST ko'okoly 'chile'; Eu kókoe-n 'doler'; Eu kókocem 'estar enfermo'; Wr ko'kó- 'estar chileoso'; Wr ko'koré-'dolerse'; Wr ko'kóri 'chile'; Tr ko 'pica (chile)'; Tr ko-rí 'chile'; Tr o'-ko-rí 'dolor'; My kó'okori 'chile'; My kó'oko 'enchiloso'; My kó'okore 'enfermo'; Tbr kokó-l 'chile'; Tbr ko/kokó 'dolor'; Wc kookóri 'chile'; CN kokoy(a) 'be sick'; koko-k 'be spicy'; Pl kukuk 'strong, hot, spicy, painful'; Pl kuukua 'to hurt, ache, pain'. Note Eu lost r. Note simple *koLV in Cupan; thus, I consider *ko'okoLi a reduplication of *koLi, lik *wï'ïwïLu 'big' is a reduplication of *wïLu. Of course, superlatives for 'big' and 'pain' (I hurt!) are always in high demand conversationally, so fossilized reduplications of such words early in UA prehistory should not be surprising. Besides liquids in both NUA and SUA, note also *-L->-y- in CN. [liquids in NUA/SUA; L>y in CN] [NUA: Tak; SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]

1598. *mana(ya) 'hurt': NP manaya 'warning s.o. that s.th. might hurt them, v'; NP tamanayai'hu 'wounded'; NP namaniya'hu 'hurt self really bad, injure'; Cm maniicikwa' 'pain, ache, n'; Cm manii'maiti 'tire of s.th.'; Cm maniisukaari 'excite, give sensation (cause good or bad feeling in body or spirit)'. [NUA: Num]

1599. *wimma 'suffer, tire, fall short of': Ls wima 'be heavy, be difficult, vi'; TSh wimme 'suffer, feel pain'; TSh wimme(ŋkin) 'make suffer'; WSh wemmei 'fail, be unable to do, vt'; WSh wemmiha 'get tired, be tired, run short of, lack, vi'; Sh wimmiha" 'be less, be tired'; Sh wimmihantin 'nine' (lit: one less)'. Does NP wimma 'touch with the body' in NP niimmaba wimma 'have any kind of sickness' belong? [-mm-] [NUA: Num, Tak]

1600. *wan-tV 'hurt, sick': My waante 'doler(se)'; Yq wante 'correr, tener dolor'; Yq(J) waante 'dolor'; AYq wante 'hurt (body part)'; AYq wantia 'sickness, pain, n'. [SUA: Cah]

NB, for *paka 'hurt, hit' see 'hit'. NB, for *kïsa 'injure, bad' see 'sore'.

Paint: see draw

PALM OF THE HAND; PALMA DE LA MANO

Miller includes all initial *ma- words in M88-ma14 'palm'. Undoubtedly, they are compounds involving *ma(n)- 'hand', but beyond that, the forms vary. So let's separate the compounds according to morphemes following initial *ma-:

1601. *maC-pana 'palm (perhaps 'hand-surface'): M88-ma14; KH/M06-ma14 *map 'palm of the hand': TSh mappana; Sh mappana; Cm mapaana; perhaps CU ma-páya-vi (CU payá 'side, wall, surface'). Add SP mahpaiyaa-vu-vi 'palm'. Having -p- rather than -v- in SNum means a geminating feature on *maC (*maC-paya > *mappaya). However, SNum shows a different 3rd consonant than CNum, though both morphemes mean roughly 'surface'. [CC] [NUA: Num]

1602. *maC-pïta 'palm (of hand)': Mn mapéda/mapééda; NP mmapida; AYq mam vetaria; My mam béta'ari(a) 'palma/hueco de la mano'; Yq béta'i 'palma de la mano'. Considering *pita 'mat, bed', might this compound derive from 'hand-bed/lying down place'? [*-CC-] [NUA: WNum; SUA: Cah]

1603. *maC-taskaL 'palm' (< hand-tortilla, ie, hand-flat; see Pl): B.Tep148 *mataka 'palm of the hand'; M67-314 *ma-taka 'palm of the hand'; M88-ma14 'palm'; KH/M06-ma14 *map (after AMR): TO matk; UP matiki; LP matk; PYp maktar; NT matáka/ matáákai; Tr mataga-(ra); Pl maataškal 'palm of the hand' (lit: hand-tortilla). Add Ls táák 'palm of the hand' (contrasts with Ls tááx 'self'). [PYp velar anticipation; *-CC-; *-t->-c- in Eu] [SUA: Tep, Azt; Trn; NUA: Tak]

1604. *maC-tako(wo) (< *takuwa) 'palm': Eu máckora 'palma de la mano'; Tbr ma-tako-rá-n / ma-tako-lí-r 'palma de la mano'. Wr matála 'palm of the hand' could belong either here or above. Hp mapqölö may tie to this *-tako- morpheme, having lost the first syllable in a reduction. Eu and Tbr, like Hp, show a round vowel *tako and/or the labial consonant w after k, as if *takowo. Hp -p- could be excrescent from any stop with consonant harmony help from bilabial m-. This may be a compound of 'hand' and *takuwa 'concavity, lower place where things collect' (see 1205 at hole). [SUA: Opn, Tbr; NUA: Hp]

PALM TREE; PALMA, PALMERA (date palm)

1605. *mahawa / *ma(C)wa 'palm tree': BH.Cup *máxwal? 'palm tree'; Fowler83; Munro.Cup89 *mááxwa-l 'fan palm'; M88-ma28; KH.NUA; KHM/06-ma28: Cp máawa-l; Ca máwu-l / máu-l; Ls mááxwa-l / mááxu-l; Sr mamahu-ţ / mamahw-ţ 'California fan palm'; Gb máhar 'grass, zacate, rama'; TO maahagam 'fan palm tree'; and Hill lists Ch mamau'umtampï and Ch mahavï 'tree/plant' with question mark. Add Nv maagama 'palma'. Munro lists *maahawa-l as another possible proto-form (besides *mááxwa-l), and both of her reconstructions are about as well as can be done for this challenging assortment. Because *w > Tep g, *mahawa serves the Tep forms, and *w seems apparent in both Tak and Tep, yet more is happening. A severe reduction of two or three medial consonants may underlie the complications. Note kw vs. w in Ls vs. Cp/Ca again. [mVCCV; medial w/xw/h] [NUA: Tak; SUA: Tep]

1606. *taku 'palm tree': Fowler83; L.Son271 *taku 'palma'; M88-ta11; KH/M06-ta11: Eu takú-t; Wr tahkú 'palmilla'; Tr ŕakú; My takko; Tbr takó-t; Wc taakïï. To these can be added Cr takï 'palma' and Yq táko 'palma'. [o/u] [SUA: Trn, Cah, Tbr, CrC]

1607. *sawVya (> saywa in Tbr) 'palm sp': Tbr say-mwa-t 'palma real' and Tbr san-wat 'palma real'; these are likely variants of the same word, suggesting a medial cluster, and not two morphemes, as Lionnet lists. Wr saó 'palma, palma real'; Tr sawéara 'palma de matachín' or Tr (s)owá 'variedad de palma'; NT oí 'la palma' (*s > ø in NT); CN sooyaa-tl 'palm tree'. What of the so- in CN sootool-in 'palm tree' or Tbr so-ko 'date-palm'? [SUA: Trn, Tbr, Azt, Tep]

1608. *caupali 'palm sp': PYp sahvali 'palm tree'; NT sáúvali 'palmilla'; ST soovoly 'palma'. [SUA: Tep]

1609. *tu'ya 'type of palm tree': Wr tu'ya 'palmilla'; Tr ru'ya 'kind of palm tree'. [SUA: Trn]

Paper: see draw Parrot: see bird Pay: see trade

PEACE(-FUL, -ABLE), QUIET, AGREE, KIND;

PAZ, SILENCIO(SO), ESTAR DE ACUERDO, AMABLE

1610. *yan-(ta/ti) 'be calm, quiet': Yq yànti 'peace, quiet'; Yq yanti(a) 'firme, quieto'; Yq yantela 'paciente, tranquilo'; AYq yanti 'quiet, peaceful'; AYq yanti maači 'be well behaved, quiet, still'; My yanti hiapsiwame 'paz'; Hp yan-ta '(1) be this way, be like this; (5) be still, quiet, not fussy, accepting of a situation'; probably the latter part of CN iiwiyaan 'peacefully, calmly, moderately, little at a time'. [NUA/SUA-n/n] [NUA: Hp; SUA: Cah, Azt]

- **1611**. *natu 'agree, make peace': Tr natu 'ponerse de acuerdo'; Wc nïtïa 'calmar'. Wc ï < *u, so 3 of the first 4 segments agree, differing in the first vowel, perhaps due to leveling or assimilation in Wc: *natu > *nutu > Wc nïtï. [V assim] [SUA: Trn, CrC]
- **1612**. *yoLi 'quiet, slow': B.Tep21 *dodori 'quiet'; CL.Azt152 *yooliik 'slow'; M88-yo7 and yo9; KH/M06-yo7 and yo9: TO đođolim 'calmly, in a self-controlled manner'; UP dodolimï; NT dodóóli 'quiet, serious'; ST doolyim 'quiet'; CN yoolik 'tranquilly, gently, measuredly'; HN iyooli-k 'slowly'; Pl yuuli-k 'slow, soft'. [Liq] [SUA: Tep, Azt]
- **1613**. *cim / *camV 'quiet': Cm cïmïkikatï 'calm spirit, quiet spirit, peaceful spirit'; Tb čehma 'be quiet'; Ca čémi 'to be quiet'; Cp čémye 'to be quiet'; and TO šaamunim 'quiet'. [V leveling] [NUA: Tb, Tak, Num; SUA: Tep]
- **1614.** *saNpa / *suNpa 'quiet': Stubbs2003-23: Ch sumpáva-(ni) / sampáva 'slowly, quietly'; CU sïpáy 'be empty, quiet, lonely'; CU sïpá-'uní 'bec empty, quiet, lonely'; WMU súhppáhgaani / súhppá'gaani / súhppágaani '(be) quiet, vi'; Sr hao'pa' 'slow' (Sr h < *s); Eu sabue 'despacio'; perhaps Nv i'ama 'despacio'. Consider Nv sibabagi 'despacio' as if borrowed from s.th. like the Num forms. [V curiosities; m/w; *-NC- > -CC-; N/'] [NUA: Num, Tak; SUA: Opn, Tep?]
- **1615.** *yun 'kind, gentle': Sh yuun 'gentle, tame'; NT adúúñi 'kind, friend'; ST jaduuñ 'amigo'. NT and ST suggest *(y)ayuni 'friend' while Sh matches since NT d < *y, though each progressively has another segment that the others do not have. [NUA: Num; SUA: Tep]
- 1616. *huCpi 'peaceable': Hp hopi 'behaving, peaceable, polite' and at down are Ca 'upi 'dive, vi' and Ktn 'op-ïk 'dive, sink, vi' both agreeing with medial cluster (*-pp-/*-Cp-). The semantics may seem a stretch, yet 'sink, subside, be peaceable' seem feasible; English 'calm down', 'settle down' vs. 'heat up', 'rise up' (for rebel). Nv huputuda 'pacificar a una persona enojada'; Nv hupitudida 'pacificar para otro' as well as Nv hupida hupituda may be from *sïppï 'cold' as Nv hupi 'hacer fresco'. No more likely (in 'making a place safe/peaceable with incense/smoke') are Eu úpiso 'sahumar [fumigate with odorous smoke]'and Wr upáni 'smell, incense smoke', which also show geminated *-pp-, and tie to *hup(p)a 'skunk' at least. Also not likely are Num/Tb *upita 'slow' (at 'slow'), for lack of geminated *-pp-, though the semantics are okay—quiet/slow, i.e., peaceably—if gemination were lost. [NUA: Tak, Hp]
- **1617.** *kwakwV 'thank, v': Stubbs1995-23: Hp(S) kwakwha 'thank you (man speaking)'; Wr wo'kóba- 'give thanks (in prayer)'. [NUA: Hp; SUA: Trn]

NB, in addition to 'one', *sim in Tep *him yields a semantic range of 'one, unity, gather, agreement, kindness', in other words 'being one, united, or in the same place' in various ways: TO hema, hemako 'one'; TO hemajim 'gently, kindly, sympathetically, humanely'; TO hemajimakam 'kind'; TO hemapad / hemapai 'gather, collect'; Nv hamadukama 'pacífico'; PYp hemat, hemako 'one'; PYp hempa 'agree'; Hp siï-mi 'put together in the same place, jointly, all together'; Hp siï-n '(1) in the same way or manner, similarly, alike, equal, resembling one another; (2) of the same mind, united, in agreement, in harmony'; Wc šeevíi 'complete, unified, agreed'.

Peel: see shell

PENIS: PENE

1618. *pisa 'penis': Sapir; VVH73 *pisa 'penis'; L.Son201; M88-pi2 'penis'; *pisa 'pene'; KHM/06-pi2: Hp pis'glans penis (combining form)'; TO wiha; LP via; PYp viaha; Wr pisá; Tr bisá/wisá; Tbr wisá-t. Add the *-pisa- of
Ls péévisa-š 'body hair', which likely originally meant 'pubic hair' or 'hair of penis', because Ls pé' 'feathers, fur,
body hair' exists as well, and so Ls péévisa-š 'body hair' is undoubtedly a compound, and what remains does fit
*pisa both phonologically and is in the semantic area. Also *pisa 'urinate' (Ls pisá-ŋa-, Ca pis) is probably the
same stem as *pisa 'go/come out' since identical stems mean both 'go out' and 'urinate' and it was customary to
'go out' (outside) to urinate before indoor plumbing. And their tie to *pisa 'penis' is probable as well. I'm afraid to

wonder if *pisa 'sweet' and *pisa 'want, beautiful' at 'want' are related, but they may be also, especially when one of the reflexes is NP bisa subbida 'love between man and wife, v'. [NUA: Hp, Tak; SUA: Tep, Trn, Tbr]

1619. *wi'aC 'penis': M67-315 *we 'penis'; I.Num284 *wi'ah/*wi'aN 'penis'; Munro.Cup90 *wəə'i-la; M88-wi'8 'penis'; KHM/06-wi'8: NP wi'a; TSh wi'a"-ppi; Sh wi'an; Kw wa'a-pi; SP wi'a"-pi; CU wa'á-pi; Cp wé'e-l; Ca wé'i; Ls wó'-la. TSh and SP gemination, and Kw and CU -p- (vs. -v-) all suggest a final consonant. [V assim] [NUA: Num, Tak]

1620. *hun / *huC 'penis: M67-316; M88-hu8; KH/M06-hu8: Yq hú'i 'pene'; Cr kaíín^yi; Wc hïnárí. The CrC forms have other morphemes. [SUA: CrC]

Pet: see animal, domestic Peyote: see alcohol

Pick (up/off/out): see gather, pull, and carry

Pierce: see cut and edge

PIG-LIKE ANIMALS; CERDO, PUERCO, JABALÍ, MARRANO

1621. *koyi / *kowi 'marrano, peccary': L.Son97 *kowi 'marrano'; Fowler83 'peccary'; M88-ko20 'marrano; KHM/06-ko20 'pig': Wr koí; My kóowi; Yq kówi; AYq koowi; Tbr koví/kowí; CN koyame-tl 'pig, peccary'; TO kooji 'pig, javelina, peccary'. TO kooji is said to be from Mexican Spanish coche, as the NUA forms below may be also, since NUA -c- from *c should be non-existent. [SUA: Trn, Cah, Tbr, Tep, Azt]

1622. *toci(k/c)oLi 'pig': ST toškoly 'puerco, cerdo, marrano'; NT taišoli; Cr tuisu 'marrano'; Wc tuišu 'puerco, marrano'. The CrC forms may be loans from Tep. [SUA: Tep, CrC]

1623. *po(')to / *poCto 'pig': NP mucipodo 'pig'; Sh mupin-poton 'pig lit: nose-(digging) stick'; Cm po'ro' 'pig, hog, swine'. [-CC-] [NUA: Num]

NB, from CN picoo-tl 'pig' to Hp picooti 'pig' to Navajo bisoodi 'pig' is the loan lineage. NB, from Spanish cochina 'sow': Mn qóci; NP kauzi'i; TSh koicci'; Kw kïčina; Ch kúuci'i; CU kucíini; Sr kóóči'; Cp kóoči; Tr kú'sígoi 'wild pig'. [o/u > Num ï Kw]

Pigeon: see dove

PILE; MONTON, AMONTONAR; see also 'lump' and 'garbage'

1624. *wïkka 'pile': NP wïkatïga 'pile up'; TSh wïkkatï 'pile, vi'; TSh wïkkatïηkïn 'pile up, vt'. [NUA: Num]

1625. *kwita/i 'pile, v': NP kwïda'niggïti 'pile up, v'; NP kuna kwïda'niggïti 'make small piles of anything'; Kw kwiži 'pile up, v'; Kw kwiži-nii 'gather (of thunder clouds)'. The final –a/i dichotomy could assimilate the first vowel either way: *i-a > ï-a or *ï-i > i-i. [V assim; *t > c] [NUA: Num]

PINE (TREE), PINION, EVERGREEN, NUT; PINO, OCOTE, PIÑON, NUEZ

1626a. *wokoN 'pine': Sapir; VVH142 *wosko 'pine'; M67-320a *woko/*hoko 'pine tree'; I.Num275 *woŋko(N) 'pine tree, fir, spruce'; BH.Cup *wexét 'pine'; HH.Cup *wexé- 'pine'; L.Son349 *woko 'pino'; CL.Azt126 *oko < 265 **woko 'pine'; Fowler83; M88-wo4 'pine tree'; AMR 1993c *wokon; KH/M06-wo4 *wokon: Mn woqobi; Mn wohwopiï (Fowler83); NP woggopi; TSh woŋkopi; Sh wonko-pin; Sh-TSh woŋwobe (Fowler83); Kw woho-dibi 'bull pine'; SP oġoN-/aġoN-, oġo-mpï 'fir tree'; CU 'aġó-pï 'ponderosa pine'; Tb wooŋhal 'pine sp'; Tb wohombit 'little pine tree'; Tb wohomboo-l 'bull pine'; Hp löqö(coki); Cp wexít'i-t; Ca wéxet; Ls wixé'tu-t 'pine sp., Pinus coulteri'; Eu vokó-t/wokó-t; Eu gokót 'pine' (Pennington1981); Tbr nyokó-t; Yq oko; Yq(J) wóko; My wokko; Wr wohkó/ohkó; Tr okó 'pino, clase de pino'; Cr hukú; Wc huku; CN oko-tl 'pine tree, torch made of pine'. Add Ktn wokoh-t 'pine sp'. AMR astutely notes also Ls pa-wxi-t, wixé-t 'canoe'. This set is curious: the expected reflex of *woko in Tep (*goko) does not appear, but is as Bascom notes *hukui. However, Op gok 'pino' (Shaul) and Eu gokót do show g < *w; but Eu also has Eu vokót 'pino'. Tep *hukui, not the expected *goko (< UA *woko), yet the Tep forms' looking like Cr hukú make loaning likely in Cr. The usual Tak correspondences are *o > Ls e, Ca i, Cp i, but here Ls i, Ca e, Cp e; see HH.Cup.

1626b. B.Tep77 *hukui 'pine tree'; F83; TO huk; LP huk; PYp huko 'fir'; NT úkui; ST huk. Note Tep and CrC *huku? The Tep has both the h and the vowel u of CrC. [Wr wo, Tr o; Tak vowels; N anticipated in CNum] [NUA: Num, Tb, Hp, Tak; SUA: Trn, Cah, Opn, Tbr, CrC, Azt, Tep]

1627a. *yuyi 'evergreen sp.': BH.Cup *yúyila 'spruce'; M88-yu16; Fowler83; Munro.Cup29 *yúúyi-la 'conifer sp.'; KH.NUA; KH/M06-yu16: Cp yúyi-ly 'fir'; Ca yúyi-ly 'California juniper'; Ls yúy-la 'spruce tree'; Sr yuhaaţ 'pine'. The Cupan forms could agree with *yuwiL like the Num forms below.

1627b. *yuwiN (> *yuviN) 'ponderosa pine': KHM/06-yu16: Kw yïvi-bï 'ponderosa or yellow pine'; Ch yuvimpï 'pine sp.'; CU yïvï-pï 'pine tree'. I agree with M88 and KH/M06 that Tak *yuy and SNum *yuvi are related, perhaps both deriving from s.th. like *yuwiN, for *w would be quite hidden in the environments of Tak, and if so, then w > v happens enough in Num to make this as likely as not. [w > v; Kw ï < u] [NUA: Tak, Num]

1628. *masi / *masa- 'fern': M88-ma43; Munro.Cup42 *mááşi-la 'fern sp'; KH/M06-ma22: Ls máş-la; Cp máşi-ly; Ca mási-ly. Might Tbr mwasa-ró-k 'ocotillo, palo hediondo' relate (possibly initial w-)? These may relate to *masa 'wing/feather' as Hill combined M88-ma43 with ma22; note also Gb amáşarot 'uno que tiene alas' with the Tbr form. [NUA: Tak; SUA: Tbr]

1629. *sawapi 'fir tree': Hp salavi 'Douglas fir' and Mn saqwa'ábï 'fir'; we do get medial kw < *w sometimes in Num and Mn especially, and if that were the case here, then the two quite agree with *sawa(pV). [*w > kw] [NUA: Hp, Num]

PINION TREE/NUT, PINENUT; PIÑON

1630. *tipi'at / *tipaC / *tipat 'pinion nut, conifer sp.': BH.Cup *tevat 'conifer sp.'; M67-319 *tepa 'pine nut'; HH.Cup təvat 'conifer sp.'; I.Num245 *tipah 'pine nut'; Fowler 83; KH.NUA; M88-ti29 'pine nut'; M88-ti30 'conifer sp.'; AMR1993a *tipat; KH/M06-ti29 *tipat (AMR): Munro.Cup29 *təvá-t / təvé-t / təvá-t 'conifer sp.': Ls tóóva-t / tuvá-t 'pinyon'; Cp təvə-t; Ca téva-t 'pinyon'. Gb tová'at piñon; Mn tibá'; NP tiba ddabbui; NP tipape 'pinenut tree'; TSh tipa" 'pine nut'; Sh tipa/tipa"; Kw tiva-ci; Kw tiva-pi 'single-leaf pinyon'; SP tiva-ci 'pine nut'; CU tiviá-ci 'nut, kernel'; Hp tiva 'pinion nut'; Hp tive'e 'pinion pine'; Tb tiba-t; Sr tivat 'pinion'; Ktn tiva-t; Kw tipa-ppi 'single-leaf pinyon'. Miller also lists HN tepeewa' 'to broadcast seeds'; HN tepeewa' 'to fall (seeds, leaves, etc.)'. Note glottal stop in the same place for Mn tibá'; Gb tová'at; Hp tive'e; and HN tepeewa' ('>w). The final gemination in NUA aligning with that glottal stop and the CU voweling all lead to the first reconstruction, though many settle on something similar to the latter two. The final segment (-e'e) of Hp looks like the possessive suffix in SUA (-e) found in CN and Tr; in other words, a pinion tree is s.th. 'having pine nuts'. [*i > Ls o/u; Gb V] [NUA: Num, Hp, Tb, Tak; SUA: Azt]

Pipe: see suck

PITCH, RESIN; BETÚN, BREA, RESINA, COPAL, TREMENTINA

1631. *hucakwa / *husapa 'pitch': B.Tep328 *'usaba-i 'pitch'; KH/M06-'u11: TO ušabi; NT usába; ST 'usaab. Add PYp usava 'pitch, sap' and Nv usabagadi 'resina'. Whether *-kw- or intervocalically voiced *-p- is hard to say; PYp would lean toward *-p-. [SUA: Tep]

1632. *copï / *co'-pï < *co'i-pï 'pitch, torch': L.Son42 *cop 'ocote'; M88-co13 'torch'; KH/M06-co13: Wr cohpí 'ocote/torch' (cf. Wr co'í 'trementina, pine pitch, resin'); Tr čopé/-čobé-/čopi 'ocote'. Add Tbr copé-t 'trementina'. Note also CN capopo'-tli 'type of tar, asphalt, used for incense and cleaning teeth—another instance of SUA vowel metathesis. [a-o = o-a] [SUA: Trn, Tbr, Azt]

1633. *co'i 'pitch': My čoo'i 'brea'; Wr co'i 'trementina'; Tr čo'ré 'resina'; perhaps AYq ču'ukum 'gum, tree, resin, pitch'. [SUA: Trn, Cah]

1634. *saLaC / *sanawap 'pitch, gum': Sapir; VVH147 *sala 'pitch'; M67-322 *sala 'pitch'; I.Num178 *sanah 'pitch, gum, sap, sticky'; BH.Cup *sánat 'gum'; Munro.Cup57 *şáána-t 'gum'; M88-sa11; KH.NUA; KH/M06-

sa11: Washo šála' 'pitch'; Mn sanápi (< *sanaC-); NP sanapi; TSh sanappin; Sh sana"-pin 'pitch, sap'; Sh sanakkoo" 'chewing gum, rubber'; Sh sanawappin 'pine tree'; Cm sana 'sticky'; Cm sanahkena 'sap'; Kw sana-pi; Ch sana-pi; SP sanna"-(ppi); CU saná-pi; Tb šaano-t; Ls ṣáánu-t; Ca sáán-a-t 'gum'; Cp saana-t 'pitch, gum'; Sr haana-t 'tar'; Ktn hana-t 'tar'; Hp saana 'pitch, gum of tree'; CN saaloaa 'to glue, make s.th. stick to s.th. else'; CN saaliwi 'stick to s.th.'; Pl saaluaa 'to stick, glue'; sasaalik 'sticky'. Most of NUA suggest a final C. Note Sh -wa-, Tb -o-, and Ls -u- as a possibly reduced syllable, not uncommon for 3rd syllables in UA. [Sr h < *s; NUA n; SUA L, Liq] [NUA: Num, Hp, Tb, Tak; SUA: Azt]

PLANT, SOW, PLOW, CULTIVATE;

PLANTAR, SEMBRAR, CULTIVAR, ARAR, BARBECHAR

1635. *'ïca 'to plant': VVH119 *'ï_s(ca) 'to plant'; B.Tep339a *'ïsai 'he plants'; B.Tep339b*'ïsi 'to plant'; B.Tep339c *'ïi 'he planted'; B. Tep 338; B. Tep 340; B. Tep 341; B. Tep 343; M88-ïl 'to plant'; M67-323 *'e/'ei 'plant, v'; L.Son10 *ïca 'sembrar'; AMR92-6 *ïca 'to plant'; KH/M06-ïl *ica 'plant, v': TSh ïa; Kw 'ï'a; SP ïa; CU 'ïay 'trap, plant, sow, cultivate, farm'; Hp ïïya; TO eš(a); PYp esa; NT ísai; ST 'ïs; Eu ecá; Yq 'éeča; My eeča; Wr eca; Tr iči-mea, eča (pres.); Wc 'e-. Miller includes CN e-tl 'bean' and Pl ee-t 'bean' and Tbr sa 'sembrar' as possibilities; the last with loss of the initial vowel may be borrowed from Tep. Yet all the other TrC forms and Tep forms reflect *ïca so clearly. SUA *ïca, Hp ïïya, and Num *ï'a make this set a prime example of *-c-> NUA -y-(Manaster-Ramer 1992), also suggesting cultivation among the Proto-Uto-Aztecans as Jane Hill (2007) suggests. [NUA: Num, Hp; SUA: Tep, Trn, Cah Opn, CrC]

1636. *wasa 'plant, cultivate': M88-wa14 'to plant'; M67-325 *was 'to plant'; KH/M06-wa14: Tr wasá 'cultivated land'; Cr ra-wás-tye-'e 'he is planting it'. Let's add Eu wasá-t 'cultivated land' and Ca wés 'to plant'. Cp wáče 'to stick in, plant' may belong if -c- < *-st- or some such cluster. Jane Hill (p.c.) adds Tb wašš|at 'dig'. [SUA: Opn, CrC; NUA: Tak, Tb]

1637. *koyni 'plow, v': M88-ko37 'to plow'; KH/M06-ko37: Cp qíin'i; Ca qíyne; Ls qíini. To Miller's Tak trio, Hill adds Hp qöri 'stir, mix, plow, search the mind, think hard' which is also listed at mix (*koti 'mix') in this work. The y apparent in Ca perhaps encouraged the assimilation in Ls; an *-iy- sequence would not likely survive long, but readily go to *-ii-, so the very existence of y in Ca may suggest even that sequence is relatively recent. [*ko > qo > qi in Cup] [NUA: Tak, Hp]

1638. *mo'i 'cultivate, plow': Yq mo'ite 'plow, cultivate'; My mo'ite 'está barbechando'; AYq moita plow, vt'; AYq moite 'be plowing'; ST moikda' 'plow', moikai (pret.). [SUA: Cah, Tep]

1639. *mawa 'break ground or clean ground': Stubbs2003-37: Hp maalama 'break new ground, clean a field'; Eu máwa 'plow'. Because *w > l/_a in Hp, these match well. It is not impossible that these tie to *mo'i above, though the fact that TrC/Eu mawa diverges from a TrC (Cah) and Tep unity has me keeping them separate, pending improved plausibility. [NUA: Hp, SUA: Opn]

1640. *yoLi / *yoti 'plow, v': Tb yoolin 'plow, v'; Sr yöör 'plow, vt'. [NUA liq] [NUA: Tb, Tak]

1641. *waka 'split, break ground': Dakin 1982-108: Tr wa'ká- 'henderse, abrirse en ángulo'; Azt *waka-li-waa 'acanalar'. [SUA: Trn, Azt]

1642. *pasa 'cultivated field': Hp paasa 'field, cultivated field'; Ch(L) pasa 'field'; Ch pasá 'field, pasture'. [NUA: Hp, Num]

NB, for *wika and B.Tep42 *giikai-i 'plow, dibble stick', see digging stick. NB, for *tuka, see 1918 at seed and see *tuka 'night' at black.

PLANT(S), VEGETATION, BUSH, WEEDS, SAGEBRUSH, PLANT SPP.; PLANTA(S), HIERBA, MATA, ARBUSTO; see also cactus, flower, grass, reed, tree, pine, willow, cottonwood, etc.

For Catherine Fowler's 1983 work with many plant sets, she has extensive field notes and other sources with terms backing her reconstructions, though for some, she does not list the specific terms. I obtained some by bothering her often enough for the specifics, which she invariably produced, such that I am satisfied that she has the data to back up the rest, so for any remaining sets lacking specifics relative to her 1983 work, you can bother her, if you wish; but I'm trying to quit being a nuisance—honest!

1643. *(h)ipawi 'greens': B.Tep309 *'iivagi 'greens'; M88-'i6; KH/M06-'i6: TO 'iiwági 'edible greens'; LP 'iivag; PYp iivag; NT ivági; ST 'iiva'. [SUA: Tep]

- **1644.** *huLupa: M88-hu21; KH/M06-hu21 'California sagebrush, artemesia': Ca húulve-l; Ls húlvu-l. Ken Hill adds Gb horúvar and Hp hovaqpi 'sand sage'; Hp hovaqapcoki 'sand sage bush' with a question mark by the Hp term. [loss of l in Hp; a/u] [NUA: Tak; Hp]
- **1645.** *kasi 'sagebrush': BH.Cup *qasil 'sagebrush'; HH.Cup *qaaşeel 'sagebrush'; M88-ka23 'sagebrush'; Munro.Cup114; KH.NUA; KH/M06-ka23: Cp qaşi-ly 'sage'; Ca qás'i-ly 'white sage, Salvia apiana'; Ls qáási-l 'white sage, Salvia apiana'; Sr qääqwţ 'sagebrush'. Munro explains how this set is problematic for a reconstruction in Proto-Cupan, though for our simplified reconstruction format that excludes vowel length, stress, etc, the segments are fairly clearly *kasi. [NUA: Tak]
- **1646.** *pasa / *pasi 'chia': Fowler83; M88-pa41 'chia, sp. of mint plant'; Munro.Cup23 *pááṣa-l 'chia'; KH.NUA; KH/M06-pa41: Cp páṣa-l; Ca páṣa-l; Ls páaṣa-l / páaṣi-l; Gb pasíy; Sr paahina-ţ; Tb paašii-l 'chia seeds'. Fowler also lists TSh pasi. Add also Ktn pahina-č / pahinaï-t 'chia (lime leaf sage; Salvia Columaria)'. Jane Hill (p.c.) adds SP paašsi 'seeds of a certain plant'. [NUA: Tak, Tb, Num]
- **1647.** *kuhuLpaL 'chia, edible leafy plant': Fowler83: For 'chia', Fowler83 lists TO ku'uvaht and Tr kuhubi; Saxton and Brambila respectively list TO ku'ulpalk 'the purslane or pursley plant' and Tr kuhúbari 'una planta: las hojas tiernas se cuecen y se comen'. [medial *h > ' in Tepiman] [SUA:Tep, Trn]
- **1648.** *sipaC 'sagebrush, rabbitbrush': Fowler 83; M88-si18 'rabbit bush'; KH/M06-si18; Jane Hill 2007: Sh sipa"-pin; Kw šiva-pï (< *sipaC-pï 'sagebrush, rabbitbrush'; Hp sivàapi; Tb siba-pul (Fowler); Tb(M) šiba-t 'brush, plant'; Tb(H) šiipappï-l 'rabbitbrush, chrysothamnus sp'. Ken Hill rightly wonders if Hp is a Num loan, and TO hiwijul 'wild rhubarb, canaigre' is added with a question mark. Jane Hill adds TSh sippumpi 'rabbitbrush. Miller has all the forms together under M88-si18; however, Sh, Kw, and Hp agree with *sipa, while NP and CU show *siku / *sVku, which here are separate and following. [NUA: Num, Hp, Tb]
- **1649.** *sakkuC 'sagebrush, rabbitbrush': NP sigupi; CU saku-pï (<*sakkuC-pï). Both suggest a final -C, and CU derives from a geminated medial -CC-. [NUA: Num]
- **1650.** *saŋwa / *saNwa 'sagebrush': Fowler83 *saŋwa 'sagebrush, Artemesia tridentata': NP sawabi; SP *saŋwa-vi; CU sawá-vi; Mn. [NUA: Num]
- **1651.** *waCti / *waCci 'Artemisia dracunculus': M88-wa18 'Artemisia dracunculus, a plant'; Munro.Cup92 *wááči-š 'Artemisia dracunculus'; KH/M06-wa18: Cp wáči-š; Ls wááči-š. [NUA: Tak]
- 1652. *háηa 'arrowweed': Munro.Cup7 *hááηa-la 'arrowweed'; KH/M06-ha18: Ls háη-la; Ca háηa-l. [NUA: Tak]
- **1653.** *wikwaC 'plant sp.': Munro.Cup93 *wiíkwa-t 'Artemisia tridentata(?)'; KH/M06-wi19: Ls wiíka-t; Cp wíku-t 'juniper'; Ca wikwa-t. All having -t (vs. -l) suggest final -C. [a/u] [NUA: Tak]
- **1654.** *pïkaC 'plant sp.': Munro.Cup94 *pəəka-t 'food plant sp.'; KH/M06-pï18: Ls póóka-t 'type of greens'; Cp pəkə-t 'food plant'; Ca péka-t 'pigweed, Amaranthus imbriatus'. [NUA: Tak]

- **1655.** *koC 'Chenopodium sp.(?)': Munro.Cup95 *qét 'Chenopodium sp.(?)'; M88-ko39; KH/M06-ko39: Ls qé-t 'pigweed, Chenopodium album'; Cp qí-t 'wild spinach'; Ca ki-t 'Chenopodium fremontii'. This set exemplifies *o motivating *k > q before *o > Cup e. The absolutive *-t in Cup (vs. -l) suggests a final C. [NUA: Tak]
- **1656.** *kiwaC 'deerweed': Munro.Cup33 *kííwa-t 'deerweed'; KH/M06-ki11 'deerweed': Ls kííwa-t; Ca kíwa-t; Munro notes that Cp kíwa-t-pa 'Los Tules' (place name) appears to show the same stem. [NUA: Tak]
- **1657.** *asi 'plant sp.': Munro.Cup99 *'áši-la; KH/M06-'a41; Ls 'ás-la 'Viola pedunculata'; Ca 'ási-ly 'pepper grass, Descuraina pinnata'. [NUA: Tak]
- **1658.** *ya... 'greasewood': M88-ya28; KH.NUA; KH/M06-ya28: Sr yääţ 'greasewood'; Gb yar 'una clase de rama'. [NUA: Tak]
- **1659.** *'u'uC 'greasewood': Munro.Cup56 *'u'úú-t 'greasewood'; KH/M06-'u10: Ls 'u'úú-t; Ca 'ú'u-t. [NUA: Tak]
- **1660a.** *oC- / *oppiN 'mesquite bean/tree': Munro.Cup71 *'éé-la 'mesquite'; M88-'o25; KH.NUA; KH/M06-'o25: Sr öö-ţ; Ca i-l^y; Ls ée-la. Ken Hill adds TSh ohpin 'mesquite bean'; ohpimpï 'mesquite tree'; SP oviN 'wood'; Ch opi (< *-pp-) 'mesquite beans'; Ch opimpï 'm. tree'; Ch opigivi 'm. bread'; opiagapi 'lit. m. weeping; the black juice that comes from m. bark, used by Mohaves in washing their hair'. Add the SUA forms below, though with SUA *u vs. NUA *o (?).
- **1660b.** *(hu)'uppa 'mesquite': Eu úparo 'mezquite' and Yq hu'upa 'mezquite'. [NUA: Tak, Num; SUA: Opn, Cah]
- **1661.** *maha 'plant': Kw maha-vï 'uncultivated vegetation, weed, brush chaparral'; Ch mahávï 'tree, plant'; WMU maá-vï 'vegetation, grass, weeds, plant, bush'; CU maá-vi 'bush, brush, vegetation, plants'; CU ma'á-vi 'weeds, field'. Jane Hill (p.c.) astutely adds TSh pohmaa-ppï 'grass, hay, mat, mattress' (with a prefix) and Gb mamaahu 'grass'. She also notes the possibility of a tie with *masi 'grass' if that is a compound. [NUA: SNum, CNum, Tak].
- **1662.** *aca / *asa Fowler83: Proto-Num *aca 'mustard (pesourania spp.)'; Hp aasa 'wild mustard plant'; Ca as-il. [NUA: Num, Hp, Tak]
- **1663.** *nakwVC 'sumac, Rhus spp.': BH.Cup *nakwət 'sumac'; KH.NUA; Fowler83; M88-na28; KH/M06-na28: Sr nahku'|t 'sumac, Rhus spp.'; Ca nákwe-t / náqwe-t 'sugar bush, sumac'; Cp nákwi-t 'sugar bush, Rhus ovata'; Ls náqwu-t 'laurel sumac, Rhus laurina'. [a/u] [NUA: Tak]
- **1664.** *su'upa 'mustard': Fowler83 at 'mustard' lists TO hu'uvat; Tr suavoli. [V transposition or -a/o] [SUA: Tep, Trn]
- 1665. *koa 'lycium': Fowler83 under 'lycium' lists *koa...: TO, LP, Tr, Cr. [SUA: Tep, Trn, CrC]
- **1666.** *piti 'lycium': Fowler83 under 'lycium' lists Proto-Num *piti; Tb pi'is-t; Ls 'ïïci-s. [NUA: Num, Tb, Tak]
- **1667.** *tuttuN 'ephedra': Fowler 83 *tutu; TSh tuttumpi 'Indian tea, joint fir, ephedra'; Kw tutupi-vï "Mormon tea'; Fowler lists Proto-Num *tutu; Tb u'tuudul; Ca tútut 'Mormon tea, miner's tea'; Hp ösvi/öösap- (combining form) 'Mormon tea'. While the Hp form varies enough to be questionable, its identical meaning and the consonant *p (like Num) make it worth keeping in mind, at least, in case an explanation later emerges. All the other reflexes form a very nice set. This might tie to a reduplication of *tuL 'reed' or *tutu 'stand' due to the plant's standing reed-like form. [NUA: Num, Tb, Tak]

- **1668.** *huna 'cliffrose, bitterbrush': Fowler83: Proto-Num *hina 'cliffrose, bitterbrush'; Munro.Cup98 *həəni-la 'plant sp., a bush'; KH/M06-hï10: TSh hïnnapi 'cliffrose'; Kw hïna-vï 'antelope brush, desert bitter brush'; Hp hïnvi 'cliffrose'; Ca héni-ly 'ribbonwood'; Ls hún-la 'type of bush'. Ls vowel is wrong, Ken Hill notes; but in light of frequent *u > ï in Num, especially before a, Ls may have the original vowel. [NUA: Num, Hp, Tak]
- **1669.** *tuna 'mountain mahogany': Fowler83 *tuna 'mountain mohagany, Cercocarpus spp': TSh tïnapi 'mountain mahogany'; Mn; NP; Sh; Kw; SP; CU. Fowler has forms. [NUA: Num]
- **1670.** *wata 'seepweed': Fowler83 'seepweed': Num *wata; NP(B) wada 'seepweed'; Hp laaci (not in my sources); Fowler has forms. [NUA: Num, Hp]
- **1671. *tono** 'greasewood': Fowler83 'greasewood': Num ***tono** Fowler has forms.
- **1672.** Fowler83 'mentzelia': Num *ku'a, *kuma, Tb kuul. Fowler has forms.
- **1673.** *siko 'sego lily': Fowler83 'sego lily'; Jane Hill 2007: Tb šikooništ; Mn and Np sigo (Fowler 1972:191); TSh sikoo; Owyhee Sh siigo (Fowler 1972:77); Cm siiko/sikoo' 'wild hyacinth'; SP sigo'o (Fowler 1972:94). Jane Hill (2007) notes this may be a loan from Kiowa-Tanoan or vice versa, e.g., Tewa sægobe 'white-flowered plant with edible tubors'. For similar vowel correspondences in Navaho loans from Tewa, note Tewa bææh 'deer' and Navaho biih 'deer'; Tewa ašææh 'salt' and Navaho ášiih 'salt'. [NUA: Num, Tb]
- **1674.** *coko 'garden sorrel' Fowler83 'oxalis, garden sorrel': Tr cokobari; NT sokoyle. [SUA: Trn, Tep]
- **1675.** *upaL 'acacia': Fowler83: TO uupaD 'cat's claw bush of the legume family, acadia greggii'; LP o-opat; NT uparai; Wc 'ïpa. [SUA: Tep, CrC]
- 1676. *ki'a... 'amaranthus': Fowler83: LP kiak; NT giagi; Wc ge'uza. [SUA: Tep, CrC]
- **1677.** Fowler 83 *waha 'giant rye': Mn; NP; Sh; CU. Fowler has forms. [NUA: Num]
- **1678.** Fowler 83 *mono 'dropseed, Sporobolus spp.': Mn; NP; Sh; SP. Fowler has forms. [NUA: Num]
- **1679.** Fowler83 *toca 'Indian balsam, Lomatium dissectum var. multifidum': NP; Sh; SP. Fowler has forms. [NUA: Num]
- **1680.** Fowler83 *tu'u 'broom rape, Orobanche fasiculatta': NP(B) tuuhu 'Rydberg's broomrape'; NP(B) pihatuhu 'broomrape (Orobanche corymboasa)'; Kw tu'u-vï 'Pholisma arenarium, edible root parasite'; Fowler also lists Sh and SP as having forms. [NUA: Num]
- **1681.** Fowler 83 *kanï 'shadescale, Atriplex confertifolia': NP; Sh; SP. Fowler has forms. [NUA: Num]
- **1682**. *kïLa/o / *kïta 'manzanita': BH *kéLVL; Fowler83; M88-kï11; Munro.Cup68 *kəələ-l 'manzanita'; KH/M06- kï11: Cp kéle-l; Ca kéle-l; Ls kóolu-l. Jane Hill (p.c.) brings to bear Ktn kïča-č 'manzanita' which may suggest medial *-t- (> -l-/-c-) or possibly from 'wash' as Anderton (355) notes. [NUA: Tak]
- 1683. *timaya 'manzanita': Fowler83 Proto-Num *timaya 'manzanita'; Tb tuumayuut (Fowler). [NUA: Num, Tb]
- **1684.** *toma 'tomato': CL.Azt175 *toma 'tomato'; Fowler83: CN toma-tl; Pl tumat; Po tomet; T tomatl; Z tomat. [SUA: Azt]
- **1685.** *wiwa 'amaranth, pigweed': KH/M06-wi15: Hp wiiwa 'amaranth (pig weed)'; CN waaw-tli 'amaranth'. CN's vowel is wrong, Hill notes; but given CN's propensity for assimilating 1st V to 2nd, this may be but another example: *wiwa > *wawa > waw. [NUA: Hp; SUA: Azt]

1686. *maniC 'toloache': M88-ma34; KH/M06-ma34: Cp máni-t; Gb máni-t; Sr maani-ţ 'jimson weed, toloache'. [NUA: Tak]

1687. *mutuna 'sage sp. or greasewood': Ch(L) murunavï 'sage species'; SP morúna-vï 'greasewood'. [NUA: SNum]

1688a. *sï'ïvi (Jane Hill) or possibly *sïhïva / *sïhï- 'squaw bush, sumac, Rhus Trilobata (used for weaving baskets)': Jane Hill (p.c.): Ch(L) sïhïvï 'anything woven'; SP sïi-vï 'squawbush stems used for basketry'; Hp sïivi 'sumac, Rhus aromatica'; Ls şóóva-l 'squaw bush, Rhus Trilobata'; Ktn hï-č 'vine, with red berries, for making baskets'. Let's add WMU süű-vü / süű-vi / süű-vwi / suú-vwi 'sumac bush, squaw-berry bush, skunkberry bush (for weaving baskets), n'. If it were not for the Tak forms, one might think that Hp is a loan from Num, and Num assumes the final *-pï to be an absolutive suffix. However, this term's existence in at least two Tak languages of southern California makes the Num loan scenario a huge stretch, especially with Ls şóóva-l also having -v- and followed by a completely unorthodox vowel for a Num absolutive suffix. These might tie to WNum and CNum *sïhï-pi 'willow' at 'willow' as both are used for weaving; then again they might not. Ktn has both Ktn hï-č and Ktn šï-šïv-yïk 'Willow Springs'; Ktn h < *s, but Ktn š did not go to h. So whether we have separate PUA terms or recycled loans is hard to say at this point. Regardless, this multi-branch set with specific semantics was a great find by Jane Hill. [NUA: Tak, Hp, SNum]

1688b. *sïta (Jane Hill) 'sumac, Rhus trilobata': Jane Hill (p.c.): Ca séle-t 'sumac (basket-weed), Rhus trilobata'; Gb soraa-r / sorah 'Rhus trilobata' (Hartman); Ktn hï-č 'vine, with red berries, for making baskets' may better belong here than above. [NUA: Tak]

NB, for *yaNpa 'wild carrot, wild edible root', see root. NB, for *kana 'bitterroot, Lewisia Redivivi', see root. NB, for *cay 'mistletoe', see mistletoe.

Planting stick: see digging stick

Plate: see pot

PLAY, GAMBLE, BET; JUGAR, APOSTAR

1689. *t**ïpi** 'play': B.Tep245 *tītīvi 'play'; M88-tī44; KH/M06-tī44: TO čičwi 'to play a game with obj' (vowel is wrong); NT tītīvi; ST tītvi. In addition to the Tepiman languages noted by Bascom and Miller, the following correspond well: Mn tībiiha 'to play'; NP tībimoa 'play'; Tb tīpiim 'play hand game'; Tb tīība~'īīdīība 'gamble'; Sr tīīpīi'n 'play a gambling game'. In Cp típl^ye 'to play the tip game', Cp assimilated the V (*ī-i > i-i) like TO did. [SUA: Tep; NUA: Num, Tb, Tak]

1690. *kopa/i 'win/lose in a game': L.Son98 *kowi 'perder en el juego'; L.Son98 is *kow-a 'ganar en el juego'; M88-ko19; KH/M06-ko19: Eu kové 'perder en el juego'; Eu kóva 'win in a game'; Eu nekóva 'ganar'; Tr we'-káwi 'perderse'; My kóobe/kobáwa 'perder'; Tbr kowa 'ganar'; AYq koova 'win'; My koóba-k 'le gano'; Yq kobá 'ganar'; My koóba 'ganar'; Nv gu-guba 'ganar'. Tr and Nv both suggest a possible prefix: *wï'-kopa. [*-p->-w-/-ø-] [SUA: Trn, Cah, Tbr, Opn, Tep]

1691. *takopi 'gamble': M88-ta47; KH.NUA; KH/M06-ta47: Ca táxpi 'to gamble'; Sr taqwpi' 'to gamble'. Might this be *ta-kopi with a prefix to the same stem as above? [NUA: Tak]

1692. *tï'ï 'play': Wr te'é-na 'jugar'; Tr ŕe'e-/te'e- 'play' (ŕe'ekobo- future). [SUA: Trn]

1693. *kuLi 'play': Tb kuul~'uuguul' 'play, vi'; Cp kuli'at 'sandpiper, also a game'. [Liq] [NUA: Tb, Tak]

1694. *nuhiC 'play': TSh nui" 'play, gamble'; Sh nui" 'to play'; Cm nohiti "play (make fun of)'; Cm nohi' 'toy'. [h/ø] [NUA: Num]

1695. *tisi / *tisi 'play': Cp tesíwe 'to play'; Ca málisew 'to play'. [*-t->-L-] [NUA: Tak]

NB, for *kiya 'play, laugh' see 'laugh'.

NB, for *yawa/i 'touch, play, wipe, clean' see touch.

Point: see edge

POISON; VENENO

1696. *pahatu / *pahtu 'poison': Yq páhti 'veneno, n'; Tr páte 'veneno, n'; ST pačmada 'envenenarlo, vt'; CN pa'-tli 'medicine, potion'; Tb paaluu-l 'roots for fish poison'; NT paátai 'poison, n'; NT paatúmadai 'poison, vt'; at least the first two syllables of Ktn pahavi-t 'poison, dream helper'. The first four languages might jump us to a conclusion of *pati; however, any final -V > -i is common in UA, and Yq and Tr's final high front vowels may be influenced by CN pa'-tli, if not loans therefrom. So Tb paaluu and NT paatú point to *patu, the more likely original vowel. [SUA: Trn, Cah, Tep, Azt; NUA: Tak, Tb]

1697. *yaLipá 'poison': Stubbs 2003-26: Mn (y)enipá' 'poison, n'; Mn enipa'a 'poison, v'; Wr yeloá 'poison, n'; Wr yeloé-na 'poison, vt'; PYp dirav 'poison for fish'. PYp fits well, because Tep d < *y and v < *p. As for vowels, PYp shows the same metathesis in 'bat': i-a > *a-i. And TrC often shows intervocalic -p- > -w- late in a word. [Liq; V metathesis in PYp] [NUA: Num; SUA: Trn, Tep]

NB, for *puha 'poison' see at 'heal'.

NB, consider Hp kyaala 'venom' and the hial-portion of TO hialwui 'poison, n'.

NB, for 'poison oak', see 'oak'.

Poor: see sad

PORCUPINE; PUERCO ESPIN

1698. *mi... 'porcupine': M67-329 *me 'porcupine'; Fowler83; M88-mi7 'porcupine'; KH/M06-mi7: Mn mihi; NP mihi; Hp miinyaw(i). [cluster, h/η] [NUA: Num, Hp]

1699. *yïCN... 'porcupine': I.Num296 *yïhnïN 'porcupine'; M88-yï10 'porcupine'; KH/M06-yï10: TSh yïhïn / yïhmï; Sh yïhnïn; SP yïŋïN-, yïŋï-mpïci; CU yïï-pï-ci (< *yïïppïci); Ch yïŋï; WSh yïhnïn. Both 'porcupine' sets show velar nasals aligning with h in Western or Central Numic. [h-ŋ] [NUA: Num]

POSSESS, OWN, ACQUIRE; TENER, POSEER, ADQUIRIR

1700. *- ï / *-e 'possesor, having, one who has (possessive suffix added to possessed nouns)': CN -e; Tr -e, Wr -e, Tbr -e. From *poka 'stomach' we see Eu bok-é 'pregnant, lit: having stomach'; from *topa 'stomach', Wr tohpá-e 'pregnant' (Wr tohpa 'stomach'); Cr -e 'at location of' (Casad 1984, 158). Jason Haugen (2006 and p.c.) informed me of Yq -e (Dedrick and Casad 1999, 187) and NT -ï (Bascom 1982; Haugen 2006b). A decent NUA candidate is the Hp pair: Hp tïva 'pinion nut'; Hp tïve'e 'pinion pine'. The nut has final -a, but the tree having the pine nuts has -e'e. [SUA: Tep, Trn, Tbr, Cah, CrC, Azt; NUA: Hp]

1701. *-ka 'possessor': Sapir; Langacker1977, 44; Haugen 2006c: TO -ka 'have'; SP -kai 'have'; Yq -ka 'being, having' (Dedrick and Casad 1999, 74-75); WMU -ġa- 'having, possessing'. Haugen adds Sh kantin 'have'; NP -ka'yu 'have or be characterized by'; Tb kaŋ 'have'. [SUA: Tep, Cah; NUA: Num, Tb]

1702a. *puL 'possess': Ls pulúča/i 'procure'; My hípure 'tiene'; Yq hípue 'tener'; AYq hippue 'own, possess, have'.

1702b. *pa'i 'have': Haugen (2006c) as *pV lists the above and Cm -pai 'have'; Sh -pai 'have'; TSh pa'in/pa'en 'have (inalienable)'; and perhaps SP -piN 'possessed noun absolutive' and instrumentals. [SUA: Cah; NUA: Tak, Num]

1703. *-wa 'possessed suffix': KH/M06-ns3: Ca -w'a; Cp -w; Ls -w; CN -w/-wi/-wa:- (-kone:-w 'child'; -o'-wi 'road'; -kone:-wa:-n 'children'); Pl -w (-o:mi-w 'bone (poss.)'). Add Ch(L) wïn'napi 'flint'; Ch(L) huu wïn'na-wa 'arrow's flint'; Eu -wa; Op -wa (Shaul 1990, 565; Shaul 2003, 26). [SUA: Azt, Opn; NUA: Tak, Num]

POT, JAR, EARTHENWARE, BOWL, DISH, PLATE, CUP; COMAL, JARRO, JÍCARA, CAJETE, OLLA, ESCUDILLA, TAZA

1704. *sa'a... 'clay pot': B.Tep59 *ha'ai 'clay pot'; M67-330 *sa 'pot'; NP saa 'cook'; M88-sa7; KH/M06-sa7: CU sa'á-'napï; TO bið ha'a 'earthenware'; UP ha'a; LP ha'a; PYp ha'a; NT ááyi / áyi / ái; ST ha'aa; Cr sá'ari. Miller rightly includes the NP verb *sa'a 'cook' as a number of languages show cognates for *sa'a 'cook', and the CU form with its instrumental suffix -'napï also suggests 'cooking-instrument' for pot, as well as WMU, which has WMU sa'ána-ppü 'pot, pan (for boiling), n' and WMU sa'áppappünt / sa'áppapp<u>ü</u>'ni 'pot' and WMU sa'á-ppi 'soup' from WMU sa'á-y 'boil, cook (mush), dye, vt' (perfect: sa'á-qa). ST bidyaa 'pot of clay not yet fired' and ST biñ haaa 'pot of clay' are probably patterned like TO bið ha'a 'earthenware' as a compound of *kwiya-sa'a (> Tep bid-ha'a) 'earthen-cooker'. [Num ' = Tep '] [SUA: Tep, CrC; NUA: Num]

1705a. *kapaC 'pot': BH *kavá'mal 'pot'; HH *kavá'mal 'pot'; M88-ka21 'pot'; KH/M06-ka21: Cp kavá'mal 'pot'; Ca káva'mal 'olla, water jar, cup, pot'; Ls kaváá'a-l 'clay pot'. Miller queries whether Tb kaadzul is cognate, but we shan't count it yet. [NUA: Tak]

1705b. *(ca)kaput 'pot': Hp caqapta (combining forms caqap-, caqavut-, etc.) 'pottery bowl, earthenware dish or bowl' is likely related to Ca káputma-l 'cup', and both possibly to the Tak *kapa'-ma-l forms above. [a/u] [NUA: Tak, Hp]

1706. *pasa(ta) 'pot': Stubbs2003-17: Sr pahaat 'pot, bottle, olla, jug, water container'; CN a'paas-tli 'earthen bowl, tub'; Ls péšli-š 'pottery vessel, dish, vessel of any kind'. Because *s > Sr h, these point to s.th. near *pas. Ls likely assimilated or raised and fronted the first vowel. Is Ls a loan from CN? [NUA: Tak; SUA: Azt]

1707. *pitoL 'jar': CN a'pilool-li 'pitcher'; Tr bitori (pl. perori) 'trasto, cajete, jicara de barro'; Wr pehtori 'cajete para comer' and perhaps Yq pičel 'jarra'. [SUA: Trn, Cah, Azt]

1708. *soko 'pot': Wr sigorí 'olla'; Tr sekorí 'olla'; Wc šukúuri 'jícara'; CN šok-tli 'pot'; and NT áásokoli 'cajete' is probably borrowed since we would expect *s > h in Tep, or it may be related to CN coocokol-li 'large pitcher'. Cf. *soko 'squash'. Jane Hill also notes the needed addition Kw sogo-ci 'basket'. [SUA: Trn, CrC, Azt]

1709. *sikaL 'gourd vessel': CL.Azt71 *šiïka(l)-(?) 'gourd vessel'; M88sï17; KH/M06-sï17: CN šiikal-li; HN šiikal-li; Pl šiikal 'large gourd, gourd bowl'. [SUA: Azt]

1710. *tikori 'dish': Eu tékori 'plato, carrete'; Tbr teka-lí-t 'olla'; teko-lí-t 'olla'. [SUA: Opn, Tbr]

1711. *(p)apo: TSh appo'o(cci) 'cup, bowl, dishes'; Cm paboko aawo 'pot'. Jane Hill (p.c.) also notes the needed additions of Mn apo 'coiled cooking basket, most valued'; TSh appo'o-ci 'cup, bowl, dishes, Big Dipper'; Ls(E) apmal 'small basket'. [p/'] [NUA: Num, Tak]

1712. *cita 'dish': Mn cída 'dish, plate'; NP sïï cida 'dish, cup or basket shape'; TSh citanka 'dishes'. [NUA: Num]

1713. *wiC-tuhuwa 'pot, bucket, drum': I.Num279 *wihtua 'bucket, pot'; M88-will 'bucket, pot'; KH/M06-will: Mn wituwa; NP witua 'bucket (Yer), drum (McD)'; TSh wittua; Sh wittuhua; Cm wihtua. Is Tr túara 'olla, cubo, jicara' related? Perhaps so, with a wVC- prefix in Num. Cp wétilya'aš 'drum' varies the vowels only slightly, but shows the gemination: *wittu > wetto > weti, vowels lowered, then Cp i < *o. [wiC- pref; reduction] [NUA: Num, Tak; SUA: Trn]

1714. *wakoLi 'pot': Hp wikoro 'bottle, jug or vase with a narrow neck'; Yq wáko'i 'comal'; Wr wa'kári 'potsherd'. These three forms have much in common, since UA liquids go to glottal stop in Yq, and sometimes remain liquids in Hp (Shaul 1985). In the first vowel, two of three show a, and in the 2nd vowel two of three show o, though Hp o and Yq o do not match exactly either. [-r->-'-; Liq in NUA/SUA] [NUA: Hp; SUA: Trn, Cah]

1715. *soto'i 'jar': Yq sóto'i 'olla'; Yq soto-te 'hacer ollas'; My sóto'ori(m) 'olla(s)'; AYq soto'i 'olla, pot'; AYq soto'o-te 'make pots'. [SUA: Cah]

1716. *tisonaC 'earthenware of some sort': Cm tisoona 'pan, plate' and Ca tésnat 'clay for pottery or painting, pot, olla' as loans from Spanish tazón seem less likely since they both have -a after -n- and Ca may even suggest another C after that. [NUA: Num, Tak]

1717. *a(k)wo (> agwo) 'cup, vessel': Sh awï 'cup'; Sh(C) awï 'cup'; Cm aawo / awo 'cup'; WMU 'awö-či / 'a'wï-či / awőő-či / aġwőő-či / aaġwő-či 'cup, bowl, dish, container' (yes, I have heard/recorded all such WMU pronunciations); CU aġó-či 'dish, any kitchen utensil used to hold food or liquid'. Perhaps SNum intervocalic *-w->-gw- on the east end of SNum, as in *yïpana 'autumn' at 'gather', or is there an underlying velar? Might Mn awónno 'boat' tie in? [*-w->-gw-] [NUA: Num]

NB, SNum *paNpï'ni / *paNpïCni 'pot' (Kw pabïhnï 'pot made of pottery'; Ch pámpïn'i 'pot'; SP pampïnni 'bucket, mud or clay basket with handle'; WMU papï'ni 'pot, bucket'; CU papï'ni 'big pot, cauldron') ties to Central Numic *pampi 'head', which see at head.

NB, for CL.Azt 127 *koomV 'pitcher, jug, pot': CN koomi-tl, etcetera, see at 'back'.

NB, *saLo 'pot': NP saano 'pot'; Yq saalo 'jarro'. Why not L >' in Yq? Are these loans from Spanish jarro like Mayan *šalu (Campbell 1988, 354)? [n/l]

POTATO, SWEET POTATO; PAPA, CAMOTE

1718. *kamo'-ta 'sweet potato': M67-428 'sweet potato'; M88-ka33 'sweet potato'; KH/M06-ka33: Cr kámwah; CN kamo'-tli; Pl kamuh 'sweet manioc'. Add ST kamav 'camote', perhaps '> w > v, though TO kamoođi is a loan from Spanish and ultimately CN, as Eu kamoti may be also. ['/w; w>v] [SUA: CrC, Azt]

1719. *taLowi 'edible root sp': Tr ŕerowi 'potato'; Wr teloé 'potato'; Tbr teró-t; Ca tályki 'Indian potato'; Cr tá'upu'u 'potato'. Because *L > -'- in Cr and *o > u in Cr, then *taLo > Cr ta'u fits perfectly. [d/l; L > ' in Cr] [SUA: Trn, Tbr; NUA: Tak]

NB, in TSh pappasi 'potato(s)', a loan from Spanish, and in many Spanish loans, such as vaca (> vakasi), we see an extra **i** added on to the Spanish plural, perhaps because most UA languages end words with vowels, not consonants.

Pour: see throw

PRAY: ORAR

1720. *mama 'pray': Wr mamacína 'pray'; ST mamtuda 'pray, v'; ST mamtu'n 'prayer, n'. [SUA: Trn, Tep].

PREGNANT; PREÑADA, EMBARAZADA; see also swell, egg, and stomach

1721. *no'a 'fetus'; *no'a-ka 'fetus-have, pregnant': BH.Cup *nét 'pregnant woman'; Munro.Cup102 *né-t; M88-no4 'pregnant'; KH.NUA; KH/M06-no4: Kw no'o-ka-(n)dï; SP noo'rua; CU nö'ö-ġway 'be pregnant'; CU nö'ö-r'ay 'become pregnant'; Tb honoodat~'ohonoot 'be pregnant'; Cp ní-t; Ca níí-t; Ls né-t; Sr nööqt; Hp nö'yilti 'become pregnant'. To these can be added Ch(L) no'ovi 'fetus'; TSh no'api; Sh no'a-ppin/ppï/pïkka; Cm no'apï 'pregnant woman'; NT nonoááka/nonóáha 'be pregnant'. Most point to *no'a; many forms show the first three segments including medial glottal stop. Ch(L) seems key: without -ka, Ch(L) no'o-vi 'fetus'; yet Sr, NT, and Kw suggest a sequence of *no'a-ka with *-ka 'having', that is, 'having egg/fetus' or pregnant. [CC, med C] [NUA: Num, Tb, Tak, Hp; SUA: Tep]

1722. *putta > *potta 'pregnant, full': some from M67-429 *posa/*poca 'swell'; L.Son214 *posa 'hartarse'; M88-po14 'swell'; KH/M06-po14 (see others at *posa 'swell'): Tr bocá 'be pregnant'; CN ooctli 'someone pregnant'; CN ooc-tiaa 'to become pregnant'. Consider also HN 'oc-tli' 'pregnant animal'; Pl ucti-tuk 'pregnant'; SP pucca 'be filled'; Ch póoca 'inflate'; and Sr pöö'č-k 'swell, bloat'; also CN poca 'throw up earth, burrow' if borrowed; Eu púcika 'rebosar de lleno'. NUA -c- does not fit *posa 'swell', but more likely -t- or clustered -Ct-. Note Wr poci 'estar lleno, satisfecho' (vs. Wr posa- 'estar lleno, satisfecho'); Tr(L) póča/búča 'ser lleno, hincharse, enturbiarse un color'; Tr(L) bočíwi 'llenarse' (vs. Tr posá/bosá, bosawí (irreg pres) 'full from eating'); Sr puutk 'bec full (of contents), vi'; Sr puutkin 'fill (container) with, vt'; Sr puutu'(q) 'fill (of contents), rise (of water)'; likewise, Ktn putik 'get full'; Ktn putk 'full, adj'. In contrast to CN posaawa 'inflate, vt'; CN posaawi 'swell';

Cr huša 'be satisfied' (all at swell), are CN ooc-tli 'pregnant'; CN poca 'throw up earth, burrow'; HN 'oc-tli' 'pregnant animal'; Pl ucti-tuk 'pregnant'; SP pucca 'be filled'; Ch(L) pučakaiyu 'being full'; Ch póoca 'inflate'; Sr pööč-k 'swell, bloat'. These seem to be from s.th. involving a *-t-like medial C or cluster for NUA to show -c-. [SUA: Trn, Opn, Azt; NUA: Num, Tak]

NB, many UA words for 'pregnant' derive from words for 'stomach': for example, see *poka 'stomach' and *topa 'stomach'.

Prick: see pierce

Prickly-pear cactus: see cactus

PULL, DRAG; HALAR, ARRASTRAR; see also stretch and pull out

1723. *waka(na) 'drag, scrape': Hp(S) hewa-k-na 'hooked, dragged, pulled, scraped, vt'; Yq wákanáma 'arrastrando'; Hp hèewi 'scrape out, scrape clean, vt' (hèe-wi 'redupl-scrape'). If hèe- is the redupl as Hill notes, then the stem is -wi-. As for Hp(S), note the near identity of Hp(S) and Yq in *wak(a)na, especially if he- is reduplicated [Hp -k-na] [NUA; Hp; SUA: Cah]

1724. *piyok 'pull, drag': Sh(C) piyokko 'pull, drag, tow, vt'; Sh(M) piyokkah 'drag, vt'; Ch piyóga 'pull'; SP pio-ġa-; CU piyó-ġway 'pull'; WMU piyőġwa-y / piiőġwa-y / piyáġoó / piyáġwa'wey / piyáġo'wey / piyáġo'we-y / piyáġwa'we-y / piyóġo'wa-y 'pull, drag, pull out, vt'. A tie with Eu viká 'estirar' and Eu vikmerá 'arrastrar corriendo' is possible with loss of 2nd vowel, though Eu is also listed at 'rope' (*wik '(sping) rope'). [Hp -k-na] [NUA: Num; SUA: Opn]

1725. *kawa/i 'drag, pull': Ls xááwa/i 'be dragged, swept, vi; drag, sweep, vt'; Cp xúwe 'pull'. [Vw > uw, initial x] [NUA: Tak]

1726. *ca'no 'pull': Mn ca'noo 'pull up or out'; NP canohoyïkwi 'pull'; TSh connopa 'pull out or up; tear down or out, extirpate'; Cm canoorï 'pull, pluck'; Cm canuarï 'move by hand, pull on something'. [-CC-, 1stC > Ø] [NUA: Num]

1727. *tappi 'pull, drag': Kw tapičinï 'drag'; Sh(C) tîppi 'pull'. Are the following also related or are we dealing with prefixes?: *ca-pi- or *capi: Mn capidïna 'drag'; NP capiwoya 'to drag with hand'; NP cipi/cibi 'pluck out'; Cm cahpi'erï 'jerk down, pull down'. [CC] [NUA: Num]

1728. *(piC)-sutu'a '(behind)-pull, drag': Stubbs2003-16: Mn casutu'i 'pull out'; TSh soto" 'pull, vi'; TSh pi-soto" 'pull, drag, vt'; Sh -pisuta 'drag behind, instr, vt'. The Mn form contains *ca- '(do) with the hand'; the CNum forms show the prefix *pi"- 'back/behind'. I reconstruct *sutu'i on the basis that two of the three show a third consonant, one of them a glottal stop, the other nearly anything. As for vowels, all show back rounded vowels initially: Mn u < *o is not likely; but TSh o < *u is likely if the final vowel is a, as we often see such an assimilatory influence at work in UA *u-a > o-o. For Sh -suta, perhaps *sutu'a > *suta'a > *su'ta > suta. [-a/i, u > o/a] [NUA: Num]

1729. *pani 'pull, drag': TO wani- 'a pulling or influencing action' (TO w < *p); TO wanimun 'pull pieces or strands from, vt'; TO waničk 'pull on, influence, vt'; PYp vancim 'cut, break off'; PYp vavinim 'pull, vt'; PYp vainim 'pull off, break off, vt'; PYp vancikim 'pull, vt'; PYp vainit 'pick fruit'; ST vañiis pret. of vaissïna' 'estirar, alargar'; Tr bani-mea 'arrastrar [drag]'; Tr banisu-ma 'jalar [pull]'; Wr pansú-na 'pull'; Wr pansú-ro-na 'pull along (as horse by rope, child by the hand)'; Wc hana 'drag, pull, stretch' (Wc h < *p); Wc hání 'pulled'. Tr's alternate form Tr baná-če 'quedarse obstaculizado, cerrarsele a uno el paso [be blocked, one's progress impeded]' matches Hp pana 'put into, bring into', both of which include examples of corralling animals'. Though semantically feasible, probably not Hp neevena 'pick, harvest wild greens over a wide area'. [*p > Wc h, c/s] [SUA: Tep, Trn, CrC]

1730. *wokin 'drag': Tb wiīgiin~'iïwiīgin 'drag it'; Hp lölökinta 'drag, pull behind'; if *w > v, then Sr vööhkin 'pull, drag'. These 3 seem related, even if Tb has a different first V, and Sr a slightly different virst C. The fact that four of the five segments agree in any 2 of the 3 with identical semantics is compelling: *wVkin. [*w > v in Sr?; *o > ï in Tb?] [NUA: Tb, Hp, Tak]

1731. *(wi)Laŋa 'pull, drag': Dakin 1982-310: CN wilaana 'drag'; Hp laŋa-k 'be pulled taut, stretch out in a line, vi'; Xal wilaa-na; Mec wilaa-n-ti-á 'ir jalando'; Te belo-na. [NUA: Hp; SUA: Azt]

PULL OUT, PULL UP, UPROOT; ARRANCAR, DESARRAIGAR, EXTIRPAR

1732. *pu'na 'pull out, uproot': L.Son212 *pona 'arrancar'; M88-po5 'weed, uproot'; KH/M06-po5: TO wooni 'pick, harvest, uproot'; LP bona 'arrancar hierbas'; Eu pópna (< *pona) 'pull roots/hair'; Wr po'na 'arrancar (de hierbas, matas, fruta)'; Tr bo'ná/bo'ní 'arrancar, sacar a fuerzas'; My pónna 'arrancar'; Wc huuná 'arrancar una cosa inmóvil'; CN kopiina 'pull s.th. out, for s.th. to pull itself loose, remove from a mold, copy'; Pl kupiina 'pull out, tear out, tear off'. To these can be added NT voopónai 'arrancar'; NT voóñii 'arrancar'; ST takvuna 'uproot, pull out'; ST voopñia 'pull out (weeds, hair)'; AYq popóna 'pull up, uproot'. All fit *po'na except the Aztecan forms and ST, which suggest *-pu'na, and in light of *u-a > o-a often, PUA *u seems a better choice. The alignment of CU tuvú-'na-y 'pull out, pluck out'; and AYq tovokta 'pick up (sg. obj.) with hand, vt, harvest, n' may suggest combined morphemes: *pu-kna? Ktn puk 'take off' may be worth noting.

[-'n-, CC, -a/i, *u-a > o-a] [SUA: Tep, Trn, Opn, Cah, CrC, Azt]

1733. M88-hu15 'pull out'; BH.Cup *hu-? 'pull out'; KH/M06-hu15 (Ca, Cp, Ls in 1733a):
1733a. *hu... (possibly *huya-) 'pull' : Ca húqin; Ls huyáqi 'pull out several objects'; Cp húwe 'to pull out'; the -hoyïk- portion of NP canohoyïkkwi 'pull'; for NP cano-, see Mn ca'noo at *ca'no 'pull' above.
1733b. *huti 'pull out': Ca če-húlin 'pull out'; Yq hútte 'weed, clean'. [*-t-> -l- in Tak, *u-a>o-a, red]
[NUA: Tak, Num; SUA: Cah]

1734. *hupa 'pull out': Stubbs2003-12: Kw hovo 'pull out (hair, grass, seeds), v'; Ch hová 'pull out, v'; Nv 'upana 'arrancar'; Ls xoova 'drag (as skirt), hang (on ground)'. Only one of four forms shows u, yet the tendency of *u-a > o-a probably explains the other three, especially Ls which otherwise should have e. [*u-a > o-a, initial x/h] [NUA: Num, Tak; SUA: Tep]

1735. *kVyi 'uproot': Ls káyi 'uproot'; Cp qéye 'to pull out'; Ca qúyen 'pull out (tree)'. The vowels are awry, but the consonants and semantics are identical. [V leveling] [NUA: Tak]

1736. *tup(p)a / *topa 'pull, push, move by applying force': Sapir: SP tuppa/tuva 'pull out, emerge'; CN topeewa 'push, shove s.o. or s.th., vt, press forward, v.refl'. [*u-a > o-a] [NUA: Num; SUA: Azt]

Pus: see rot

PUSH; EMPUJAR, EMPELLAR

1737. *nuta/*nuLa 'push': BH.Cup *nu 'to push'; M88-nu4: KH/M06-nu4; Tb nuulat~'uunuul 'push'; Tb nuula'ït~uunuula' 'push repeatedly'; Cp núle; Ca nú'uqan; Ls núli. [NUA: Tak, Tb]

1738. *nu'i / *nu'yV 'push': TO nu'i 'pushing or forcing action'; TO nu'ičk 'push on'; Hp no'i-k-na 'nudge or push'; NT núítyukasai / núítyuasai 'push'; Mn mano'yu'i 'push with the hand' (ma 'hand'); NP tonoyui 'push'; the Numic forms (Mn, NP) show *no'i rather than *nu'i, perhaps a lowering of the vowel (*u > o) due to surrounding lower vowels. [k > ø in NT, L > ', NUA L:SUA ', o/u Hp] [NUA: Hp, Num; SUA: Tep]

1739. *(ta)taco 'push': CN totočoaa 'to push, shove someone or something to the front'; Tr na'tačo 'push each other'; Cr raatátahči 'lo empuja'; perhaps Yq táhta 'bump'. [V assim in Azt] [SUA: Trn, Cah, CrC, Azt]

1740. *nama 'urge, wave (s.th.), herd; arrear': Eu náma- 'arrear'; Yq naáma 'arrear (vacas)'; My naama 'sobar'. [SUA: Cah, Opn]

1741. *takipV 'push': KH/M06-ta9: Wr tahkipúna 'empujar muchas veces'; Tr(L) raki- 'empujar'; Tr(Ht) rakibú 'empujar'; My táktia 'tocar, picar'; SP tïŋwipa 'push in with the hand'. [nasal in SP] [SUA: Trn, Cah; NUA: Num]

NB, for B.Tep *voisikai 'to sweep, press down', see sweep.

NB, for *ton, see hit.

NB, many forms meaning 'push' are derived from 'hit' and such other verbs.

PUT; PONER, COLOCAR

1742. *ya(N)ca 'put, set down': VVH40 *yaca 'to set it down'; B.Tep14 *daasai 'he sets down' and *daasa 'to set down'; M88-ya2 'place sg. obj. in sitting position'; KH/M06-ya2: TO daaš; LP daaša; NT daása; ST daasa; Wr yahca 'ponerlo sentado'; Tr acá, acába 'poner o asentar una cosa'; My yécca 'ponerlo sentado'; Tbr neca/nesa 'sentarse, estar sentado, asentar, poner'; Tb yandzït~'ayanc 'sit down, set (of sun)'; CN ye 'estar'; Pl mu-estuk, mu-ectuk 'be seated' (defective vi). Add Wc yáaca 'put, make stand'; Yq yéča 'levantar, poner, sentar'; and AYq yeča 'poner una cosa, colgar, amarrar'. Raising a > e between two palatals is natural enough. Did *-Nc- spare Tb from *-c- > -y-? [initial C > ø in Tr] [NUA: Tb; SUA: Tep, Trn, Cah, Tbr, CrC]

1743a. *tap 'put': BH.Cup *tav 'put'; CL.Azt130 *tlaalia 'put, place'; M88-ta34 'put'; KH.NUA; KH/M06-ta34 *tapic (AMR): Cp tava 'put down'; Ls taváni 'put, place sg obj'; Ls tavá'a 'sit down, pl. subj.'; Ca táv 'put sg. obj. in place, put in order, vt'; Gb tavó 'poner'; Sr tav(ïi) 'put sg. obj.'; Hp tavi 'put it down, take (clothing) off'. Miller also includes Tbr towi/tovi 'quedar, flotar'; My táawa 'quedarse'; CN tlaaliaa 'put, place'; I count only CN, as it can lose medial -p- from *tap. Azt loses p's handily, in a cluster or not; so let's keep them, but under a different letter (b) below.

1743b. *taLi 'put': CN tlaalia; Pl taaliya; Po tali; T tlolla; Z taaliya. Perhaps loss of medial -p- in Azt. [*-p- > ø in Azt] [NUA: Tak, Hp; SUA: Azt]

1744. *tīka/i or *tīkaC 'put lying down, stretched/spread flat': Sapir; VVH18 *tīska 'to put, lay flat object down'; I.Num239 *tīkV put; CL.Azt100 *teeka 'lie down'; M88-tī7 'place sg. obj.,v. t.'; M88-tī33 has nearly all the same forms, and so KH/M06-tī7 soundly combines M88's two sets: Mn tīki-t 'place, put, v'; NP tīkī/tīgī 'put'; Cm tīki 'put s.th. away'; TSh tīki" 'put'; SP tīgaa 'measure, imitate, practice'; TO cīīkid 'place, put, lay, lay away or set aside for s.o., offer as a sacrifice'; Eu teká 'poner'; Wr teká/tegi 'poner acostado'; Tr reká/rik-/-tegá 'poner sg. obj. tendida, acostada, horizontal'; My teeka 'acostarlo'; CN teeka 'stretch oneself out, lie down, settle, stretch s.th. out, spread s.th. on flat surface'. Sapir ties SP tīgaa 'measure, imitate, practice' to CN teeka, which tie is likely, since a typical way to measure is to stretch out s.th., and the segments of the two are identical. Add PYp teek 'to put, place'; Cr raa-takīīnte 'lo estira'. What of SP tuukwa 'stretch, vt'? A final -n in Cr and a final -C in Num make a 3rd C possible, though languages without it applied the -a/-i active/stative feature to the final vowel. [-a/i] [NUA: Num; SUA: Tep, Trn, Cah, Opn, CrC, Azt]

1745. *mociwa 'place pl obj's seated': M88-mo2 'be seated pl'; KH/M06-mo2 'be seated': Wr moci-wi/pó 'poner sentados (pl obj)'; Wr mocipá-ni 'sentarse, pl sbj'; Wr mociwá-ni 'sentarse, pl sbj'; Tr močiwa 'objeto con que o en que depositar, colocar (como asentadas)'; Tr močíwi 'sentados, pl'; To Miller's pair, add Tbr muci/mucu 'sentarse'. [SUA: Trn, Tbr]

1746a. *tu'a (> to'a/i) 'pour, place (pl.obj.)': M88-to2 'place pl obj's'; KH/M06-to2: NP tuuna; TO to'a / to'i 'to put, pour obj'; Wr to'á-ni/to'a-má 'poner acostados'; My to'a 'echar liquido, semillas, etc. en recipiente'; Wc túa 'acarrear, colocar'. To these could be added Eu toá 'echar'; AYq to'a 'pour pl obj's'; Tr ŕo'a 'put lying down'; PYp to'a 'throw, cast'; Sh(C) -tua 'pour'; Sh tuu 'pour liquid'; Mn paduu 'pour out with a dipper'; ST tu'aa' 'empty, pour' pret: tua; Tr ŕu'ri 'derramarse, veterse'; Wc kïci-tïa 'echar granos'; NP citudda 'pour'. [SUA: Tep, Trn, Opn, Cah, CrC; NUA: Num]

1746b. *to'asa 'throw': Wc túaša 'tirar'; Cr tiú'utu'asah 'throw rock'; CN tlaasa 'throw s.o. down'. [SUA: CrC, Azt]

1747. *pana 'put in': Ken Hill (p.c. 2004), KH/M06-pa71: Hp pana 'put into, let enter, bring into'; Sr paa^rvan 'wet, add water to, thin (e.g. soup) by adding water'. Ken Hill noticed this nice pair as Sr paa^r-van clearly appears to be a compound meaning 'water-put in', that is, 'put in water'. [NUA: Hp, Tak]

1748. *hoya 'put': Lionnet 1978: My hoiya 'put (pl objs)'; Tbr hoa 'put'. [SUA: Cah, Tbr]

NB, for *paca and B.Tep *vaasa 'put into', see 'in'.

NB, for *win 'stand, be/put in place', see 'stand'.

NB, for 'put on (clothing)', see dress, clothing, enter, and/or wrap.

OUAIL; **CODORNIZ**

1749a. *kaka 'quail': I.Num48 *ka(a)hka(a) 'quail'; BH *qaxal? 'quail'; HH *qaxáal 'quail'; Munro.Cup104 *kaxáá-l; M88-ka15 'quail'; KH.NUA; Manaster Ramer 1991; KH/M06-ka15: Mn qahï 'grouse'; Sh kahan 'grouse'; SP ka(h)aN-/ka(h)a-mpïci 'ruffed grouse'; CU yúaa-qaqXaarï-ci 'quail'; Cp qaxá-l 'valley quail'; Ca qáxa-l 'quail'; Ls qaxáá-l 'valley quail'; Gb kakár 'quail'; Sr qaqaata' 'quail'; Ktn kaka-č/kakaï-t 'quail'. 1749b. *takkaka / *kakkata 'valley quail': TSh takkakakacci/kakkaatacci 'valley quail'; Tb takaah 'valley quail'; this could possibly be a loan since Tb and TSh are geographically proximate; and in light of the second alternate form in TSh, SP qaqqaraC 'quail'; and Sr kakaata', all reflecting *kakkataC. These are probably related to *kaka above. Consider also TO kakaiču 'quail' (< *kakkatu). Might *kakka be a consonant harmony of *takka? [CC; k > h; C harmony?] [NUA: Num, Tak; SUA: Tep]

1750. *cokowa 'quail or dove-like bird': Tbr cokoa-rá 'quail'; Tr čohówa-ri 'dove'. [k > h] [SUA: Trn, Tbr]

1751a. *salwi > *solwi 'quail': Cora sa'u and Huichol ši'au 'cordoniz [quail]' are significant, because in *Uto-Aztecan Comparative Vocabulary* is a section showing the UA liquid(s) (L) going to glottal stop in Cora: 2.9.5 Medial *-L- > -'- in Cora. So Cora sa'u < *salwi with L to glottal stop, and -w- caused rounding of -a- > -o- in other forms, like CN sool-in 'quail'; Mn sowi' 'pigeon'. CN kept -l- and Mn kept -w-. TO hohhi 'the mourning dove' and Tr soho 'paloma torcaz' show initial *so, and TO -hh- usually means an enigmatic cluster. Ca séyewe-t 'baby quail' and Cp siiyewe 'baby quail' may be related since Ca/Cp i < *o, if l > y. The following Tr and PYp forms are quite similar to the CN, except for some *ti- prefix: PYp tesoli / te'soli / tesori 'quail'; Tr fe'čorí 'cordoniz'. Note also Ca teseqáxa-l 'kind of quail' (Ca qaxal 'quail'), the first two syllables of which nearly agree with *tiso.

1751b. *(ti')soLi' > *ticoLi 'quail': [l > y; *-'s- > -c-] [NUA: Num, Tak; SUA: Tep, Trn, CrC, Azt]

1752. *supa'awi 'quail': Yq subá'i 'codorniz'; AYq suva'u / suva'i 'quail'; My suubau 'codorniz', pl: suba'awim; the vai- of NT vaivóli corresponds with *pa'i (PUA *p > v; *' > ø in Tep) as in Yq and AYq *supa'i minus initial *su, but here, Yq and My show differences after *(su)pa..., while Yq and NT agree in *pa'i. [no initial su in Tep] [SUA: Cah, Tep]

1753. *ku'yu 'quail': Cm kuyúusi' 'quail'; Cm tïrïe ku'yuuci 'quail'; Eu kúi 'codorniz'. [CC] [NUA: Num; SUA: Opn]

Quarrel: see shout, angry, say

Quiet: see peace

Quiver: most UA forms are compounds meaning arrow-bag, arrow-house, etc.

RABBIT, COTTONTAIL; CONEJO

Mn	tééwa	Hp	taavo; pl taatavo-t		tábu; tábu'u
	tábo'/tábu'	Tb	taapunt/ tahpunt;	Tbr	owilá
	tosaqamï 'mtn r.'		wihnibïï-l 'rabbit-skin blanket'		
NP	tabu'u	Gb	tóvit 'smaller sp. of cottontail'		
TSh	tapun/tapu-cci	Sr	taavoht; tiühaqt	Yq	táabu
Sh	tapun	Ca	távut	My	taabu; pl. taábum
Cm	tabú'kina'	Cp	tísixa-t	Wr	toí; pa'loísi
Kw	tavu-ci	Ls	tóóşiq-t/tóóşixi-t	Tr	ŕowi/ŕuwé
		Ls	tóóvit 'brush rabbit'		
Ch	tavu-ci	TO	toobi / cuuwi	Cr	táciu'u(ri) (pl)
SP	tavu-ci/tavu-mpïci	Nv	tobi	Wc	táciu
		PYp	tuuva 'cottontail'		
CU	tavï-ci	NT	too'm	CN	tooč-tli
		ST	toom		o'mi-tl 'r. down/pelt'

1754a. *tapuC / *taput 'cottontail rabbit': M67-334a *tapu 'cottontail rabbit'; I.Num210 *tapuN / *tapu'u 'cottontail, rabbit'; M88-ta30 'cottontail rabbit'; L.Son275 *tapu 'conejo'; Fowler 1983; KH.NUA; KH/M06-ta30: Mn; NP; TSh; Sh; Cm; Kw; SP; CU (*u > i); Hp (*u > o); Tb; Sr (*u > o); Ca; Op tawu; Eu; Yq; My. 16 languages match perfectly the four segments *tapu, rare in UA linguistics. Yet a few others (Gb, Ls, TO, LP, Wr, Tr) agree with *topi, treated below. Note that CU displays another example of Numic changing *u > i. Fowler (1983) lists a Piman form taapi 'Lepus Arizonas'.

1754b. *taput(i) > *tapoc(i) > CN tooc-, and *tapoc(i) > *tapoi > CrC *taciu 'rabbit': Sapir: Wc táciu; Cr táciu'u; CN tooč-tli. For CN tooč-tli, anticipatory rounding and loss of *-p- (and CN o = CrC u). Or is it *taci'o > taco > toco > tooč-? [PYp metathesis; *-p- > -w- in Tr, Wr, Tbr; *-p- > ø in CrC, Azt] [NUA: Num, Hp, Tb, Tak; SUA: Cah, Opn, CrC, Azt]

1755. *topi 'cottontail rabbit': VVH56 *tokwi rabbit; M67-333 *to 'rabbit'; L.Son318 *towi conejo; M88-to4 'cottontail rabbit'; KH/M06-to4: TO; Wr; Tr; Tbr; Miller includes CN tooč-tli. Add Gb; Nv; PYp; ST. Ls tóóvit has wrong V, a loan? Gb, Ls, and PYp tuuva may show *tupa > *topa > *topi, but since *kw is reflected as w in Tr/Wr and as b in Tep, then Wr, Tr, TO, LP, and ST all agree with *tokwV, though we may simply have intervocalic voicing of *p > b in Tep. TO curiously has both TO toobi 'rabbit' and TO cuuwi (< *tupi) 'jackrabbit'. [kw/p; o/u, -p->b in Tep] [NUA: Tak; SUA: Tep, Trn, Tbr]

1756. *tosakammu > *tisakamu 'cottontail rabbit, lit: white jackrabbit': Sapir; M88-ti53; KH.NUA; KH/M06-ti53: Cp tísixa-t; Ls tóoṣaxi-t/ tóoṣiqa-t/ tóoṣixi-t; Sr tiïhaq-t; Gb tosóxo-t 'conejo'. The consistent consonants suggest that these Tak forms consitute a Takic set; however, the vowels are challenging. Mn tosaqami 'mountain rabbit' is probably related, and may be key to revealing the compound of *tosa 'white' and *kammu 'jackrabbit'. After all, truncation of final syllables is common in UA, especially of long words, and this four-syllable original reducing to three in all but one language is typical. [Gb V, v>i/t, red; Tak vowels.] [NUA: Tak, Num]

NB, Miller includes Tbr owilá with *topi, which is reasonable, though Tbr does not exhibit a tendency to lose initial t- elsewhere. Since Tbr does exhibit mw < *m, one might wonder whether Tbr owi-lá and CN o'mi-tl 'rabbit down, pelt' are connected.

JACKRABBIT, HARE; LIEBRE

Mn	qámo	Нр	soowi	Eu	barós; bwaros; paaros
NP	kammï	Tb	suu'it/ šuu'it	Tbr	
TSh	kammu-cci	Sr	hoii't; Ktn hwi't	Yq	páaros
Sh	kammu	Ca	sú'iš	My	paaros; pl. paró'osim
Cm		Ls	şu'í-š	Wr	pa'loísi
Kw	kamï	Cp	sú'iš/sú'ic	Tr	ba'loísi; ŕuwé
Ch(L)	kamï	TO	čuuwi	Cr	
SP	kammï-	PYp	paaris; puasir		
WM	kammu-či	NT		Wc	
CU	kamu-ci	ST		CN	si'-tli

1757. *kaNmu 'jackrabbit': I.Num51 *kahmï 'jackrabbit'; Kaufman1981 *kanmï; Fowler83 *kammï; M88-ka16 'jackrabbit'; KH/M06-ka16: Mn; NP; TSh; Sh; Kw; Ch; SP; WM; CU. This is found in all of Num, but no where else in UA, except in the compound *tosa-kammu above. I like Kaufman's reconstruction *kanmï. Might this tie to SUA *kaNma 'put in mouth, taste' and mean 'the nibbler'? [u > ï in Num] [NUA: Num]

1758a. *par'osi / *paLo'osi 'jackrabbit': M67-336 *pa 'jackrabbit'; BH.Cup *páxwut? 'young jackrabbit'; L.Son189 *parosi 'liebre'; M88-pa6 'jaderabbit'; KH/M06-pa6 *pa'rosi 'jackrabbit': Op paros; Eu; Yq; My; Wr. Tr. The PYp term may be a loan. I like the -r- in Ken Hill's reconstruction, for when we can demonstrate two liquids in PUA (as I think may be), I would choose r over l, as well. But on the strength of the My pl paró'os-im and the tendency of UA to anticipate glottal stops, I prefer reconstructing the glottal after the liquid, and then consider that it was anticipated or moved forward in the other forms. I agree with Miller and Hill that the Tak forms below are likely related, though we yet have no UA precedent for explaining *-'r-/*-r'->-k-, except that *-r'-, in its approximation to *tw, may suggest *tw > kw, as AMR (1993a) suggests, and '> w does occur in UA. [SUA: Trn, Cah, Opn]

1758b. *pakwV 'jackrabbit, hare': Ls pááxu-t / pááxe-wu-t 'young jackrabbit'; Cp páwxə-t; Ca páxwu-t. [NUA: Tak]

1759. *su'i / *suwi 'jackrabbit': M67-335 *sui ; BH.Cup *su'ic; HH.Cup *su'iš; Munro.Cup66 *su'i-š; M88-su10 'jack-rabbit'; AMR1993a *suu'it; KH/M06-su10: Tb; Cp; Ca; Ls; Gb su'ít; Sr; Ktn; Hp; CN. ['/w] [NUA: Hp, Tb, Tak; SUA: Azt]

1760. *wákkat 'rabbit stick, throwing stick': M88-wa27; Munro.Cup106 *waaka-t 'rabbit stick'; KH/M06-wa27: Ca wákat; Cp wákat; Ls wáakat; Gb wákat. [NUA: Tak]

RACCOON; MAPACHE

1761. *(pa-)'aya / *pa-haya 'raccoon': BH.Cup *ayámal; HH.Cup *'ayáamal; Fowler83; M88-'a28 'raccoon'; KH/M06-'a28: Cp ayámal; Ca 'áyamaly; Ls pá'ya-ma-l; Sr 'aya-qaiič 'lit: raccoon mountain'; Kw paahayaa-ci. A prefixed *pa- is in Kw and Ls pá'ya-ma-l; cf. the pa- in Gb pa-hunar 'badger'. [NUA: Num, Tak]

1762. *papok 'raccoon, badger': Nv vavoka 'tejón [badger]'; ST vavook 'raccoon'. The two forms are undoubtedly related, yet with one vote for each direction semantically, I shan't guess which it means. If anyone can bring more cognates to decide the matter, the invitation is extended. [SUA: Tep]

RAIN; LLOVER

1763. *yuku 'rain': VVH109 *yuku 'to rain'; M67-337 *yuk 'rain'; B.Tep27 *duuki 'rain'; B.Tep25 *duudu 'it rained'; L.Son363 *yuku/yuk-i 'llover'; llover, v.: M88-yu2 'llover'; M88-yu3 'lluvia'; KH/M06-yu3 *yuki 'rain, n': Hp yooyoki 'be raining'; TO juuk; Eu dúku-; Wr yu'ku-ná, yu'ki-má; Tr u'ku/u'ki-; Tr yuku-mea; My yúkke 'lluvia, n'; TO juuki; Eu duki; Wr yu'kí; My yúkku; NT duúki 'rain, n'. From Willet's latest update: ST duuk 'agua, lluvia'; ST duudu' 'llover, vi'; ST juukda' 'que llueve mucho'. I like Ken Hill's division/sorting of this complex array of terms and his reconstructions in KH/M06-yu2 *yuya 'rain, v' vs. KH/M06-yu3 *yuki 'rain, n'. The two may be tied, but if so, the latter is at least a different compound, as Ken Hill separates them, perhaps

involving another morpheme *-kV: e.g., Hp yooyanwï 'rain, rainstorm' vs. Hp yoo-yoki 'rain, v'. See *yuya / *yawi 'snow, rain' at 'snow'. [NUA: Hp; SUA: Tep, Trn, Cah]

1764a. *(w)umaC / *(w)imaC 'rain': M67-338 *(w)ema 'rain'; I.Num23 *i(h)ma 'rain'; M88-i9 'rain, v' and M88-wi16 'rain, v'; KH/M06-i9: TSh ima" / immaa / inwa"; Sh ima/ima"; WSh ima"; Cm imaari 'vi'; Cm imapi 'n'; Kw 'uwa; SP unwa; WMU uwa"; CU 'uwáy; NP pauma 'raining'; NP powma 'raining'. Ken Hill adds Ch iwári 'rain'. We might also add the -'oma of Tr na'oma 'borrarse, esfumarse, opacarse el ambiente, nublarse'; Tr(H) na'oma 'tapar, borrar'. I agree with Miller, that these two sets (a and b) are probably related; and Miller's 1967 reconstruction *(w)imaC, slightly adjusted, serves the two sets fairly well actually. A 3rd C is apparent in CNum and in WMU compounds, and the velar nasal apparent in the forms below is a common result of an *-mC-cluster after vowel loss. The 2nd and 3rd consonants remained separate in Num, but clustered in Tak and the cluster reductions in Tak could send the vowels in a variety of directions.

1764b. *wïN / *woNC / *wVN... 'rain, be cloudy': Sapir; M67-338 *(w)ema 'rain'; M88-wi16 'to rain'; KH.NUA; KH/M06-wi16: Cp wéwe; Ca wéwen / wéwn; Ca wéwn-iš 'rain, clouds'; Sr wöö'ŋ 'rain, vi, rain on, vt'; Cr meviiye 'it is raining'; Cr víítye 'the Rains (rain gods)' (Casad reconstructs Proto-Corachol as *víiye < *wiiyï; similarly, McMahon & McMahon list Cr biite 'lluvia(s)'); Wc wíwíye 'lloviznar, vt'; and Hill has a question mark by Gb wakó. Miller notes after each Tak form that the vowel is wrong, apparently siding with the Cr vowel in his listing this set under initial *wi... However, Cp and Ca agree with *wï..., Sr with *wo, Gb disagrees with both, while Ktn woŋ 'rain, vi' and Ktn woŋ-a-t / wo'ŋ-ut / wahŋ-a-t 'rain, cloud, n' agree well with Sr wöö'ŋ-t 'rain, n' and Sr wööŋ-tu' 'cloud up, look like rain', both with *wo, though some of Ktn's vowel patterns look like Gb's. Sapir suggests *wïwa (with a question mark) and ties together the CrC, Tak, and Num forms above (*uwa < *wïwa), though the CrC inclusion seems questionable to me. In fact, might Sr's V be the result of a reduplication like Cupan's: *wïwin > *wïwn > *wooŋ > *wööŋ, the -wn- cluster causing both the rounding of the vowel and -ŋ-< -wn-. This is a difficult set, if all forms are even related. Besides a difficult first vowel, a consonant cluster reduced in a variety of directions: w, n, ŋ, m, k, y, though nasals and bilabials are prevalent. The Hp, Tr, and Tbr forms of c below (*uma) also belong and may clarify b and a.

1764c. *uma 'be cloudy': Hp oomaw 'cloud'; Tbr homé-k 'be cloudy'; and the -'oma of Tr na'oma 'borrarse, esfumarse, opacarse el ambiente, nublarse'; Tr(H) na'oma 'tapar, borrar' [become cloudy, erased]. A reconstruction of the first vowel as *u instead of *o is preferred because we would expect Hp \ddot{o} < *o, and Tr sometimes shows o where u is expected anyway, and even if that were not the case, a vowel assimilation or lowering *uma > *oma, a common phenomenon in UA, could also explain the Tr and Tbr forms. In fact, they all match SNum *uma well, and the vowel \ddot{i} , common in many of the other forms above, may be an unaccented schwalike result. Such would have this stem in five branches. [med *-m(C)-> $\eta/w/\eta w$; Gb V, Sr \ddot{o} ; *u-a > *o-a] [NUA: Tak, Num, Hp; SUA: Trn, Tbr]

1765. *horo 'rain, fall': L.Son62 *horo 'llover'; M88-ho7 'llover'; KH/M06-ho7: Tbr horo; Op hára; Eu hóro 'fall'. [Liq] [SUA: Tbr, Opn]

1766. *cikwa (< *tikwa ?) 'rain, v': Stubbs 2003-9: TO siibani 'drizzle, sprinkle' and Hp cekwekwe-ta 'be raining big drops as at the outset of heavy shower' (cekwe- 'soak') suggest *cikwa; the consonants agree, and since Hp e is the lone vowel that does not correspond to a particular PUA vowel, a leveling of i-a > e-e is exactly the kind of phenomenon that often produces Hp e. Jane Hill (p.c.) notes a nice addition in Mn tiïkwa 'rain, vi' and Mn tiïkwá-pe 'rain, n', which assimilates one vowel, somewhat like Hp, but may well show the original initial consonant, as we often see *t > c before high vowels. Tr sikuríwa 'rain hard' does not correspond to *c, but in light of the frequent *c/s dichotomy, it should be kept in mind as a possibility. [med kw; V leveling; Hp e] [NUA: Hp, Num; SUA: Tep]

1767. *pata 'patter, spatter, splatter': Sapir: SP paara-ka 'make a pattering sound (as rain)'; CN petlaani 'to be poured/spilled (of liquid) and scatter, glisten, reflect'. Of course, onomatopoeia is possible here. [t > r] [NUA: Num; SUA: Azt]

NB, for *sami 'wet, drizzle, numb', see 'wet'.
NB, for *tommo 'cloud, rain, winter' see 'cloud' and 'winter'.

RAINBOW; ARCO IRIS

1768. *kosamaLo 'rainbow': B.Tep99a *kihónari, 99b *ki'óharai; M88-ki7 'rainbow'; Stubbs2000b-44; KH/M06-ki7: Pl kusamaalu(h). Miller (M88) lists only Pl and the Tepiman words in Bascom (1965, i.e. B.Tep); however, the 'rainbow' words in nearly every other SUA language also appear related to the Tep forms, at least in part. Some SUA reflexes show reduction (or loss) of entire syllables, probably by the process of vowel syncope causing consonant clusters, which do not hold up well in SUA and usually simplify to a single consonant, then a subsequent vowel syncope and cluster simplification again, etc. Each cycle eliminates a syllable. Consider the following words for 'rainbow':

```
Tr
       konimí/gonimí
Tr
       ginorá
Wr
       kenolá
Eu
       bainóra/vainóra
Tbr
           oráwi
NT
       kiihónali
TO
       gihonalï
TO
       kiohoD
LP(B) kiuhur
LP(EF) kiáhur
Nv
       kiorha
ST
       ki'oor
Yq
       kurúes; AYq kurues
My
       kurués
Cr
       kú'usa'a
CN
       koosamaaloo-tl
Ρl
       kusamaalu-(t)
```

We begin with s.th. near CN *kosamaLo > kosomaLo > kisonaLV > NT/TO *kihonaLV, for Tep often changes m > n. Borrowing from neighboring UA languages seems apparent. For example, both Tr and TO each have two words for 'rainbow'. TO gihonalï is nearly identical to NT kihónali, and the other TO form (TO kiohod) is similar to LP kiuhur. Tr ginorá and Wr kenolá are similar, and exhibit the interesting phenomenon of vowel-line transposition. Regarding TO and NT *kihonali as compared to Wr and Tr *kinola, the latter has lost one syllable or second consonant (h) early in the word, but has kept the first three vowels perfectly intact (-i-o-a-), simply shifting them one place toward the front of the word:

```
*kihonali (TO, NT)
*kinola (Wr, Tr)
```

The phenomenon of vowel-line transposition happens often in SUA.

Eu bainóra may have pa- 'water' prefixed to *hinora/kinola or s.th.similar to Tr/Wr *kinola, which shows the vulnerability of *-k- between vowels.

```
While Tr/Wr lost the -hV- syllable of *kihonalV, three Tep languages lost -n-, but kept -r/L: *kihonaLV > *kihoL, or like LP(EF) kiáhur (< *kinasuL) suggests, a complete metathesis of syllables in *kihonaLV > *kinahoL > *kihoL > *kihoL / *ki'oL (ST ki'oor; TO kiohol; LP kiuhur)
```

The first three segments of Tbr orawi agree with the -ola/ora portion of Eu, Tr, Wr. Cr shares *kosa with Aztecan, but with extra glottal stops: *ku'usa'a. Substantial reductions all about!

*kosamaLo 'rainbow' remained relatively intact in Azt, but reduced remarkably in the rest of SUA:

```
*kosamaLo > *kohonaLo > *kuLu (in Cah *kurues)
```

```
> *kihonaLi (NT, TO) > *kih(n)oL / *ki'oL (rest of Tep) 
> *kinoLa (Tr, Wr)
```

[SUA: Tep, Trn, Cah, Opn, CrC, Azt]

1769. *-sïnaka 'rainbow': Cp peşénex'a 'rainbow'; Ls 'asóónax 'rainbow'; Ca píyaxat 'rainbow'; Ktn 'ašïnina'; Ca and Cp are usually more similar than these two. Ls and Ktn have an 'a- previx, while Cp and Ca have a pV-prefix, though from the second syllable, Cp, Ls, Ktn agree fairly well, while Ca is possible, perhaps Ca -y- <-sn-cluster? Might these tie to latter part of *ko-samaLo? [cluster reduction in Ca?] [NUA: Tak]

1770. *tapiko... 'rainbow': Mn tabigoitápï 'rainbow' and Tb(V) tayiboo'in 'the rainbow' may involve metathesis; the first 3 vowels are identical and *p is the 2nd vs. 3rd consonant following initial *ta-. [C shift] [NUA: Tb, Num]

1771. *pa-to-kowa 'rainbow, lit: water-snake': Ch(L) paroogwaawïnïrï 'water purple standing, rainbow'; Ch(L) paroogwaagarï 'water purple, colors of rainbow or darkness of approaching storm'; Ch(L) paroogwaciwï'ikyaiyu 'water purple is streaked, rainbow streaked across the sky'; CU pa-roġóa-vi 'rainbow, water-snake' (toġóa-vi 'rattlesnake'); WMU aróġwa / oróa 'rainbow . Sapir also elicited SP pa-róxoa-vi 'water-snake' but did not elicite 'rainbow'. [NUA: SNum]

NB, for Ca píyaxa-t 'rainbow, worm with two horns', see 'worm'.

Rat: see mouse Rattle: see shake Rattlesnake: see snake Raven: see crow

RAW; CRUDO

1772. *yo'i 'raw': B.Tep22 *do'iga 'raw'; L.Son360 *yo'i 'crudo'; M88-yo1 'raw'; KH/M06-yo1: TO đo'i; UP do'igï; LP do'i; PYp do'i; NT dóí; ST do'ii'/dyoii; Eu dohí; Op doi; Wr yo'í; Tr o'í. [SUA: Tep, Trn, Opn]

1773. *sawaN > *sawiC 'raw': M67-342 *saw 'raw'; KH.NUA;I.Num175 *sa(a)N 'raw'; BH.Cup *sawit? 'raw'; Munro.Cup109 *sawi 'raw'; M88-sa13 'raw'; KH/M06-sa13: Sh saam-piiccih; Kw saa 'be raw'; SP saaN 'raw, unripe'; CU saay 'be raw, uncooked'; Cp sáwi-t 'sour'; Ca sáw-et; Ls şawó-t; Sr şaït 's.th. raw'; Ktn šaï'; My sá'awa 'herida, llaga'; CN sawa-tl 'pox, rash'; Pl saawa-t 'pimple, boil'. To these we can add Mn sawetúsu 'uncooked'. The NUA forms (Num, Tak) suggest *i as the second vowel, for even Ls o shows the proper reflex for *i; the SUA forms point to *sawa and slightly different (though feasible) semantics in 'sore' or 'raw-looking wound'; yet English 'rub oneself raw' means develop a 'sore' or 'wound'. In fact, *i often derives from a lazy *a, since i does sometimes serve as the UA schwa, being only one notch higher than our English schwa, high central rather than mid-central. Tbr sawa-ká-r 'red' may be related, since raw meat is red, as are sores rubbed raw. Sh and SP suggest a final nasal and the absolutive -t of Tak also suggests a final -C. [possible *a > i; w > ø; N in SP, Sh] [NUA: Num, Tak; SUA: Cah, Azt]

RED; ROJO; see also lightning

1774. *aNkaC 'red': I.Num9 *aŋka/eŋka 'red'; M88-'a24 'red'; KH/M06-'a24: TSh aŋka-pi; Sh ainka/enka; Cm ekapi; Kw 'aga-ki- (<*a(N)ka-kki-); SP aŋka("); WMU aqqá-ġa-rï; CU 'aká-ga-rï (< *akka-ka-tï). Miller also queries whether Ca sélnek-iš 'red' is related. Add Mn aqabanagi 'be red, v' (probably from 'red-shine'); Ch anká-ga 'be red, vi'; note the *a > ai > e pattern in Central Num. [-NC->-CC-] [NUA: Num]

1775. *pïwi 'red': B.Tep290 *vïgi 'red'; M88-pï13 'red'; KH/M06-pï13: TO wegi; LP vïg; NT vïgi; ST vïi'; ST vgiom 'rosa'. [*w > g in Tep] [SUA: Tep]

1776. *sita / *sita 'red': Sapir; VVH32 *sïta 'ochre, red'; M67-343 *set 'red'; L.Son251 *sïta 'rojo'; M88-sï3 'be red'; KH.NUA; KH/M06-sï3: Ca séleklu 'bec. red'; Ca sélnek-iš 'red'; Sr şïrii'k 'bec. red'; Sr şïriir'n 'be red, vi st'; TO hït-magi; TO hït 'red or white earth, red ochre'; Wr sehtá- 'be red'; Tr sitá-ka-me 'red'; Tr serána- 'be/bec red, pl'; Tr seráname 'red, pl'; Tr sitána- 'be/bec red'; Wc şeetá. To those, add Eu setát 'almagre, tierra colorada'; AYq sata 'red dirt'. In light of AYq siktavut 'redracer snake', let's hope *sita is not from *sikta (< *siki-ta 'red-become/do), though Wr sehtá resembles such a cluster. But if such is the case, then Cah *siki 'red (AYq siki(li); My síkili/síkiri; Yq síki'i) must be considered as well. [*t > 1 in Tak; *-CC-: -ln- > -l-; liquid; *i-a > a-a] [NUA: Tak; SUA: Tep, Trn, Cah, Opn, CrC]

REED, CANE; CARRIZO, CAÑA

1778. *pakaN 'reed, phragmites': Sapir; VVH8 *pa_Ska 'reed'; M67-344 *paka 'reed'; I.Num135 *pakaN 'arrow, cane'; L.Son185 *paka 'carrizo'; CL.Azt133 *aaka 'reed'; Fowler 1983; M88-pa18 'cane, arrow'; Munro.Cup97 *pááxa-l; KH.NUA; KH/M06-pa18: Mn paqa 'arrow'; TSh pakan 'arrow'; Sh pakan 'arrow'; Cm paak/paka 'arrow'; Kw paga-bï 'carrizo grass, common reed'; SP paġaN-, paġampi 'cane'; Tb pahaabīl / paha'bīl 'sugar cane plant'; Cp páxa-l 'arrowreed'; Ca páxal 'common reed, phragmites communis'; Ls páx-ma-l 'type of greens'; Gb páxo-t 'knife, pito de hueso'; Sr paaqa-t; Ktn paka-č; Hp paaqavi 'reed, phragmites australis'; TO waapka 'bamboo, cane, reed'; PYp va'agar 'any kind of cane or reed'; PYp vapaka 'reed'; ST vaapak; Wr paká 'carrizo'; Tr paká; Yq báka; My baákam; Tbr waká-t, wakó-t 'carrizo, flecha'; Cr haká; Wc háka 'a grass for arrows'; CN aaka-tl. This stem is found in every branch, almost every language; semantically it appears to have originally meant 'reed' (apparently used for arrows), then 'arrow' in the Numic languages. [*p > h in CrC; Tb h < -k/ŋk-; bilabial > ø/_C; a/o] [NUA: Num, Hp, Tb, Tak; SUA: Tep, Trn, Cah, Tbr, CrC, Azt]

1779. *siyi 'reed, juncus sp.': BH.Cup *səyila 'reed'; Fowler83; Munro.Cup110 *şəəyi-la 'reed/rush sp.'; KH.NUA; M88-si14 'reed'; KH/M06-si12: Cp séyi-ly 'Juncus sp., a grass used in basket making'; Ca séily 'Juncus sp.'; Ls şóy-la 'type of rush'; Gb swar 'junco'; Sr hiïţ 'type of basket weed'. Miller also lists CN sooyaa-tl 'palm tree' with an accompanying question mark, because its V does not agree. With a different vowel and different meaning, let's not include it unless new data dictates differently. I separate these from *sihi 'willow'. Though a tie is possible, they differ after initial CV. [NUA: Tak]

1780. *sa'iN / *sa'iC 'tule, reed': Jane Hill (p.c.): TSh sai-ppï 'tule, Scirpus sp'; Ch(L) saimpivï 'tule'; Kw see-vi-bï 'tule, bulrush, Scirpus validus'; Cp si'í-š 'tule, Scirpus sp'; Tb ši'iibï-l 'the tule'; Gb si'i (Merriam). These could tie to *sïyi above if *sïyi < *sayi, though another obstacle is that some Tak languages have differing forms in each set, though circular loans is not impossible either. I reconstruct the nasal possibility (*sa'iN) because Ch shows a nasal and Kw b suggests it, since Kw -v- < *-p- and Kw -p- < *-pp-; and TSh shows a final C. Nice set Jane! [NUA: Num, Tak, Tb]

1781. *wapi 'foxtail': BH *wávic 'foxtail'; M88-wa20; Munro.Cup48 *wáávi-š 'foxtail (plant)'; KH/M06-wa20: Ls wáávi-š; Cp wávi-š; Ca wáávi-š. [NUA: Tak]

1782. *naka 'cane': Munro.Cup20 *nááxa-t 'cane'; KH06-na39: Ls nááxu-t; Cp náxa-t; Ca náxa-t. [-a/u] [NUA: Tak]

1783. *to'i < *toLi 'water plant sp., cattail': Munro.Cup96 *téé'i-š 'water plant'; KH06-to28: Ls téé'i-š 'cattail rush'; Cp tí'i-š 'marsh plant'; SP to'oi-vï 'bulrush'. Add Tb too'i-l 'tule root'; Tb too'ibïï-l 'tule'; Ktn toi-c 'tule sp, wide cattail with black ear on top'; Sh(M) toippïh 'cattail'; Kw to'i-vï 'cattail'; Mn towibï 'cattail'; Mn padowibï 'cattail'; NT ááli tootóikami 'el carrizo'; ST tootkom 'carrizo (de tallo duro)'; PYp tookam 'bundle of reeds' (Shaul notes Spanish *ototilla* 'carrizales'). These all point to *to'i, though Sh has a final gemination not apparent in the others. These likely tie to CN tool-in 'sedge grass, reeds, juncia', from which English tule is borrowed through Spanish. [L > '] [NUA: Num, Tb, Tak; SUA: Tep, Azt]

1784. *wipuhu > NUA *wiivuhu 'plant whose seeds float in cotton-like tufts' (Kenneth Hill, p.c., forwarded this set, definition, and the NUA reconstruction): Hp wipho 'cattail' (combining form wivòo-); Gb wívor [wíívo-r] 'milkweed'. What unites these words semantically is that their seeds have a cottony coma, a tuft of fine hairs that allows the seeds to disperse by floating through the air (KCH). [NUA: Tak]

1785. *owa / *oha 'caña verde': Dakin 1982-63: Tr owé 'maguey de hebra'; Wc úha 'caña'; CN owa-tl 'stalk of corn, cane, green stalk'; Pl uuwa-t 'cane'. Cm owóora 'tree trunk' at *wo'ota 'stalk' may tempt a tie therewith, but let's not, though not beyond possibility. [SUA: Trn, CrC, Azt]

- **1786.** *oma 'reed': Eu omá 'caña'; Wr omá 'sugar cane, the large variety that grows at lower elevations, from which panocha and mescal are made'. [SUA: Trn, Opn]
- **RELATIVE(S)**; **PARIENTE(S)**; see also brother, sister, aunt, uncle, (grand)mother, (grand)father **1787.** *nuk 'cross cousin': M88-nu5 'cross cousin'; KH.NUA; KH/M06-nu5: Cp nukma; Ca ñuk'u; Ls yúkṣum; Sr noko'. [*nu > Ca ñu > Ls yu; *-CC-] [NUA: Tak]
- **1788. *sayuni** 'relative': B.Tep57 *haduni 'relative'; M88-sa24; KH/M06-sa24: TO hajuni 'relative'; UP hajuniï; LP hadini; NT (h)adúni; ST haduni. [SUA: Tep]
- Miller unites *was... and *way..., but the 2nd C and the semantics are different enough to separate them: **1789.** *wasï 'parent-in-law': M67-506 *was 'affinal relative'; L.Son328 *wasï 'suegro'; L.Son328bis *wasi 'suegra'; M88-wa15 'affinal relative'; KH/M06-wa15: Eu wásewa 'suegro (father-in-law)'; Wr wasí 'mother-in-law'; Tr wasí 'mother-in-law'; Op wase 'suegro'; CN weswas-tli 'woman's sister-in-law'. Ktn kwašï 'parent-in-law' fits semantically and phonologically except kw instead of w. [SUA: Trn, Opn, Azt; NUA: Tak]
- **1790.** *way 'friend, term of address between men': M88-wa15 'affinal relative'; KH.NUA: Ls way 'a form of address used between men'; Sr waa' 'friend, term of address'; Gb way 'friend, cousin, brother, but not son, uncle, etc.'; My wawáim 'relatives'. [NUA: Tak; SUA: Cah]
- **1791.** *kusana 'sibling-in-law': KH.NUA; M88-ku31; KH/M03-ku31: Sr kuuhan 'cross sibling-in-law, WiSi, WiF/Co, HuBr, HuM/Co, MaBrWi, Ma/CoWi, WoSiHu, Wo/CoHu'; Ktn -kuhana (pl -m) 'sister-in-law'; Gb kúsna' 'brother-in-law'. [NUA: Tak]
- 1792. *Na (> ŋya/ña?) 'relative, kinsman': KH.NUA: Sr ña, ñaa, pl: ñaam 'relative, relation, kinsman'; Hp ŋyam 'clan members'. [NUA: Tak, Hp]
- **1793.** *moci (AMR) 'granddaughter': KH/M06-mo12 *moci (AMR): Hp mööyi 'grandchild'; TO moos 'woman's daughter's child'. [*c > NUA/Hp -y-, > Tep -s-, and *o > Hp ö] [NUA: Hp; SUA: Tep]
- **1794.** *mosi 'in-law': Ls mééspana 'brother-in-law, man's sister-in-law'; Ca -mísi-k 'mother-in-law, daughter-in-law'. Might Ktn mišana 'son-in-law' tie in as a loan? [NUA: Tak]
- NB, for *tipko / *tipku 'relative, perhaps sisterly relationship', see sister.
- NB, for niece and nephew, see aunt and uncle; for son and daughter, see man and woman; separate entries exist for basic family relationships, such as father, mother, brother, sister, as well as grand-mother/father.

RELIGIOUS TERMS, DEITY, SUPERNATURAL, CEREMONY; see also spirit

- 1795. *waym / *wami (> wimi) 'religious ceremony': BH.Cup *wámkic 'ceremonial enclosure'; M88-wa19; KH/M06-wa19: Cp wámki-š; Ca wámkiš; Ls wámku-šu 'brush lean-to'. With regard to Tak *wam-(ki), ki is likely 'house'. Consider also Hp wiimi/wim- 'religious rite, ritual, ceremony, religious practices open only to initiates'. [NUA: Tak, Hp]
- **1796.** *way 'marry in religious ceremony': Ca -wáy / -wáway 'take a wife, marry, propose marriage, v'; the -wi- of Tr niwi-ma 'to marry in religious ceremony' if ni- is an assimilated na- reflexive prefix. [NUA: Tak; SUA: Trn]
- **1797.** *pahapi(C) 'supernaturally powerful being': KH.NUA: Sr päähavit 'supernaturally powerful being'; Gb páhavet. [NUA: Tak]
- 1798. *tï'a 'have a vision or supernatural power': M67-424; M88-tï40 'supernatural'; KH.NUA; KH/M06-tï40: Sr tï'ain 'be bewitched, have a supernatural vision'; Ca té'ayawa 'power'; Hp tīī'aw-ta 'have a vision, have a mystical experience of seeing s.th. extrasensory in nature or of de ja vu'. Miller includes Ls tówi 'see supernaturally'; yet Ls shows medial w, while Sr, Ca, and Hp agree exactly in the first four segments *tī'a. Ls also agrees with Ca and Cp below, distinct from the Ca form above, though a tie between the two sets is possible. [NUA: Hp, Tak]

1799. *tiwi 'deity, spirit, seer of supernatural means': Munro.Cup34 *təəwi-š 'deity/spirit'; KH/M06-tï40: Ls tóówi-š 'spirit, ghost, devil'; Ls tóówi 'see by second sight, be clairvoyant'; Cp təwi-š 'a deity'; Ca tétiwi-š 'dreamer' a reduplicated form of expected Ca téwi-š, notes Munro; Sr tïiit 'devil, evil spirit'. [NUA: Tak]

1800. *tiyo 'deity': Campbell 1985; M88-tï40; KH/M06-tï40: CN teoo/tioo-tl 'god'; Pl tiyuu- 'holy, saint, God (in compounds)'. [SUA: Azt]

1801. *mukkaC 'mythological figure': Munro.Cup76 *muká-t 'mukat, mythological figure'; (not in M88) KH/M06-mu27: Cp múka-t; Ca múka-t; Ls muká-t 'big, large'. [NUA: Tak]

1802. *napi 'magic, extraordinary power': Munro.Cup67 *náávi-š 'magic'; KH/M06-na40: Ls náávi-š 'charm'; Ca náavi-š 'poison'; Cp návyeni 'give an omen' ("Could the y be a reflection of absolutive -š?" asks Munro). [intervocalic *-p-> -v- in Tak] [NUA: Tak]

1803. *ya'u / *ya'wï 'leader, deity': Yq ya'ut 'jefe'; Yq yá'ura 'gobierno, ley, autoridad'; AYq ya'ut 'chief, leader'; AYq ya'učim 'leaders, big beads in rosary'; AYq ya'učiwa 'leader, God'; My yá'ut 'autoridad, jefe, magistrado'; Cr taya'u 'God'; Cp yawe 'god' after subtracting temá-l / temat- 'earth' from temáyawe-t 'earth-god'; Kw yaahwe'era 'a supernatural being usually thought of as in bird form'. Though the vowels are reversed from Cp yawe, note also Cp yewáywe 'pray'. [NUA: Tak, Num; SUA: Cah, CrC]

1804. *so'yoko 'monster, frightful being of some sort': Jane Hill (p.c.): TO ho'ok 'witch, monster'; Hp so'yoko (comb: so'yok-) 'a kachina who admonishes bad children, often referred to as the Ogre kachina'. [loss of *-y- in TO] [NUA: Hp; SUA: Tep]

NB, for *tikowa 'lord, master, father', see at man. NB, for *takwi 'mythological being, lightning', see at 'man'.

Remain: see stay Remember: see think

RETURN, GO/COME/TURN BACK; REGRESAR, VOLVER(SE); see also go, circle, leave **1805.** *kwayi-(pa) 'turn back': CN kwepa 'turn, turn back, vi'; Wc kwaiva 'a la vuelta'. CN and Wc may encourage one to reconstruct *kwaipa; however, since I doubt that PUA had dipthongs, but did have consonant clusters, I prefer *kwaypa. PYp bidi 'return' (b < *kw, d < *y) may support the same. [SUA: Tep, CrC, Azt]

1806. *ko'i 'return': TSh ko'eh 'return, come back, go back'; TSh kohih 'return, come back, go back'; Cm ko'itï 'return, come back'; compare SNum *kwa'ay 'go (away from speaker)' at 'go'. And this could tie to *kway above. [NUA: CNum]

1807. *to'i 'return, turn around/over': Wr to'i- 'return, go and return the same way'; Wr to'i-na/ca- 'turn s.th. over'; Tr fo'i 'devolverse, regresarse'. [SUA: Trn]

NB, for *noLa 'go/turn back', see at 'circle'.

NB, for *noy 'leave, go away, go home', see at 'circle'.

NB, for payïC- 'return, come home, stay the night', see 'lie down'.

NB, for Num *koni < *koLi, see circle.

NB, for *mana/mini 'turn, return, turn back', see 'circle'.

RIB; COSTILLA

1808. *amattaN 'rib': I.Num4 *ama(h)(taN) 'ribs'; M88-'a20 'rib'; KH/M06-'a20: Mn awatápï (<*awattappï); NP amïtaba (< *amïttapa); Sh ama 'waist, rib cage'; Sh amattam-ppï 'ribs'; Kw 'awatï-bï (<*awattï-(m)bï); SP aŋwattaN, aŋwattam-pï 'rib'; CU 'awáta-pï; Wr oma-tére 'axila / arm pit'. Ken Hill adds Sr -a'mö'; Ktn amu-c; and Cp amsisva-l (Cp -ámi 'waist, poss'd). [*-CC-; w/m/ηw] [NUA: Num, Tak; SUA: Trn?]

1809a. *caLwa 'rib': M67-345 *ca 'ribs'; M88-ca2 'ribs'; KH.NUA; KH/M06-ca2: Ca čáwa-'al 'rib', pl čáwa-'am; Ca -cáw'a 'rib (poss'ed); Ca čá'aw-ika 'sideways, to the side'; Gb -čáx / čáš 'back'; Sr -ča' 'ribs' (poss'ed); **1809b.** *ca'aC: Tb ca'apï-l; Cr i-ca'apwa-ri 'ribs'.

1809c. *caŋa: Hp cïŋï 'rib'; Ls čááŋax 'this side'; Miller queries whether Ls čááŋax 'this side' is cognate. Good question, unless -ŋax is a Ls affix/morpheme; but Ca číŋay 'limp, hop' as a lopsided/one-sided gate is likely. **1809d.** *siLaŋ / * saLŋa 'rib': CN šillan-tli 'side'; My sána'arim 'costillas'; Yq sana'im 'costilla'. Perhaps Ls şówlaka-š 'rib'. I somewhat agree with Miller and Hill, that these may all be related, but the variety of second consonants (w, m, ŋ, ', k) may say 'no' or it may indicate a previous cluster or other morphemes. Adjusted Ca morpheme breaks such as Ca čáwa'a-l 'rib', pl čáwa'a-m; Ca čá'aw-ika 'sideways, to the side' may suggest both -'-and -w-, metathesized, clustered, etc, in the other forms. CN šillan-tli 'side' may be related, though AMR makes a good case for its tie to *sun 'heart'. Cahitan *sana may also tie in, since we see ŋ in NUA aligning with SUA n? [nasals, medial clusters] [NUA: Tak, Hp: SUA: Cah, CrC, Azt]

1810. *wa'cika 'rib': Wr wa'cikári 'costilla'; Tr wačigá/wačíka 'costilla'. [*-CC-] [SUA: Trn]

1811. *so'ona-maL 'rib': TO ho'onma 'rib (of the body)'; PYp hona-mar 'rib'; PYp hona 'body'; NT óónomai 'la costilla'. [SUA: Tep]

1812. *sikwVL 'rib': CN misekwil 'one's rib'; CN omi-sikwil-li 'rib' < 'bone-waist'; CN sikwil/sekwil 'waist'; Kw šiku-pï 'rib'; Cp amsísve-l 'rib'. CN and Kw match well. Cp and CN share *Vm-si(p/kw)il with a p/kw dichotomy in the middle, but high front vowels on both sides. The fact that Kw shows absolutive -pï instead of -vï suggests an underlying final consonant; therefore, Kw šiku(C) and CN sikwil have much in common. Ls şowlaka-š 'rib' shares some similarity with some of the above forms. [p/kw] [NUA; Num; SUA: Azt]

RIGHT HAND/SIDE; LA (MANO) DERECHA

1813. *püta 'right arm': M67-346 *pet 'right side'; I.Num172 *pï(h)ta 'arm'; M88-pï7 'right side'; KH/M06-pï7: Mn pïta (< *pïtta) 'arm'; NP bïta (< *pïtta) 'arm'; TSh pïtapï 'arm'; Sh pïta 'arm'; Cm pïïra 'arm'; Kw pïra-vï 'arm'; WMU pïrá 'arm' (also found in compounds meaning right, but not in compounds for left); CU pïrá-vi 'arm'; CU pïra-na-kwa-tï 'the right side'; SP pïra 'arm, right side'; Hp pïtve 'at the right side'; Hp pïtvaqe 'along the right side'. Let's add Cp pilyá 'right (direction)'; Cp pilyáwe 'right hand'; Cp pilyáyka 'to the right'; Ls -pli 'right hand', since intervocalic *t > 1 occurs in Tak, and i is as likely to be the original V as ï is. With an assimilation of the first vowel to the second (*pita > *pata), Yq báta-na 'al lado derecho, la derecha' and My bátatana 'la derecha' may belong also. This appears to have originally meant 'right arm' in light of both semantic dimensions—'arm' and 'right side'—being heavily represented, sometimes both in the same lexeme (e.g., SP). [*-t->-l- in Cupan] [NUA: Num, Tak, Hp; SUA: Cah]

1814. 'right': PYp vuih-pid 'right (direction)' (vui 'toward'); PB(EF) wuihpsid 'derecho'; Nv vuispa '(mano) derecha' (vs. Nv vuispadurhu '(mano) izquierda'); NT siïlíša páádïrï 'derecha'. Whether Tep -d- is from y, intervocalic *t, or *-L-, I have not had time to dig for this edition, but this beginning of data are made available. [SUA: Tep]

NB, Wr pahtoná 'right' and Tr watona 'right (hand), to the right' are interesting in light of the above. NB, Wr ahamína 'right side' and Sr ayïnu'/aiïnu' 'right, right side' are interesting regardless the above.

RIPE(N); MADURO, MADURARSE, SAZONAR

1815. *mo(y) 'ripen': AYq momoi 'ripe, mature'; ST moomta 'ripen' (of potatoes); ST humtmoidyak 'toward end of the month'. [SUA: Tep, Cah]

NB, for *kwasï 'cook, boil, ripen', see cook.

Rise: see stand, climb, sun

RIVER, FLOW; RIO, FLUIR; see also water, canyon

1816. *wani...'river': M67-176 *wa 'flow, run'; BH.Cup *wanic 'river'; HH.Cup *wániš 'river'; KH.NUA; CL.Azt31 *waallaah 'come'; CL.Azt230 *wa 'flow, run'; M88-wa8 'to flow, run'; Munro.Cup111 *waní-š 'river'; KH/M06-wa8: (Ken Hill combines M88-wa9 and wa8): Cp wáñi-š 'flood, river' (unexpected ñ); Cp wánewe-t 'Milky Way (big river)'; Ca wáni-š 'river'; Ca wáne 'flow'; Ls waní-š / wanííča 'river, stream'; Ls waní-ya- 'rise (of river), flood, v'; Gb wanáwnaŋa (placename: un arroyo que corre); Tb wa'adat~'awat 'run away'?; Tr(H) warína 'ser ligero, veloz'. Ken Hill notes also Sr wanït 'river' and Sr wanïtu' 'flow, vi'. Add Ktn wanït / warït 'river, flood' and Ktn wanatu' 'trickle down, vi' and perhaps Ktn wanak 'run, vi'. Is Ca wáŋam 'deep (water, ditch)' cognate? Hill queries. (I tentatively have it at 'down/deep'.) Hill also queries whether Hp waaya, pl: watqa 'run away, flee, escape' is cognate? It may fit SNum *waya below. Does Hp wari 'run' belong here or where I have it at go/run with forms showing t? What of Tb waa'i-t 'river'? Probably not CN waallaa 'come, approach'; CN waal- 'this way'; SP wayaa 'hang, flow out'; CU 'uwáay 'come, arrive (pl suppletive of pici) vi, hang, vt'. [NUA: Tak, Num; SUA: Trn]

Some of the following contain *pa- 'water' as the first element of a compound: **1817. *patta** 'river': M67-349 *pa-tu, *pa-ta 'river'; M88-pa10 'river'; KH/M06-pa10: TSh paatta 'river'; Cr háta'ana 'rio'. [NUA: Num; SUA: CrC]

1818. *pa-tuwa/tiwa/tawi 'river': Wc hátïa (Wc ï < *u); My bátwe 'rio'; Yq bátwe 'rio'; Eu bacíwe'e 'rio'; CN aa-tlawi-tl 'valley, canyon, gully'; CN aa-tooyaa-tl 'river'. The Cah forms in -pa10 seem better here with Eu and CN. [SUA: Cah, Opn, Azt]

1819. *pakowa 'river, current': Tr bakó 'rio'; Tr bakowá 'corriente turbulenta de un rio'; Wr pakó 'rio'; Eu vákoa 'ribera'.[SUA: Trn, Opn]

1820a. *okwaiC 'flow': TSh okwai"; Sh okwai".

1820b. *okai / *okwai 'river': TSh paa okwe-tïn/na 'river'; Sh okai"-pin 'river'; Cm okweetï 'creek, stream, small river'. These may resemble Ktn 'oka' 'sand, sandy area'; Ktn 'a'-oka' 'arroyo, canyon' and the like at 'rock' though Sh has differing forms. [NUA: CNum]

NB, for *aki 'river, canyon' and *yawi 'river, canyon', see canyon.

ROAD, PATH, WAY; CAMINO, SENDA

Mn	póyo	Нр	pöhï	Eu	bowé-t
NP	po	Tb	poh-t/poo-t	Tbr	wo-ta
TSh	po'e/po'i	Sr	pöö ^r q-t	Yq	bóo'o
Sh	po'ai	Ca	pí-t	AYq	voo'o
Cm	pu'e	Ls	pé-t	My	boo'o
Kw	too-vï / tovo-vï	Cp	pí-t	Wr	poé
Ch	po'(o)	TO	voog	Tr	bowé/boyé
SP	poo-	LP	voi	Cr	huyé
WMU	pöö	PYp	voi	Wc	huuyée
CU	pö´ö	NT	voí, voogadï (poss'd)	CN	o'-tli, o'wi (poss'd)
		ST	voi		

1821. *poC / *po'ï / *powï 'road, path, way': Sapir; VVH4 *po 'road, path'; B.Tep274 *voi; M67-350 *po 'road'; I.Num154 *poyo/*po'e/*po'i; BH.Cup *pet 'road'; L.Son217 *powï 'camino'; CL.Azt134 *oh; M88-po4; Munro.Cup112 *pé-t; KH.NUA; KH/M06-po4. A cognate for *poC 'road' is found in all UA languages. Yet the variety of second consonants is intriguing—*', *w, *y—besides absolutive -t in Tak, which shows there is a latter C, whatever it may be. Note q in Sr pöörq-t and Ktn pok-t, as also the g in TO and NT, the latter assumedly matching *w of TrC, as most of TrC has either -'- or -w-. Kw has a *tV- prefix. [medial *w/'/y; *w > g > ø in some Tep, as at *siwa 'sand', *pïwi 'red'] [NUA: Num, Hp, Tb, Tak; SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]

ROADRUNNER; CORRECAMINOS

1822. *puLi / *puCi 'roadrunner': BH.Cup *púwi-? 'roadrunner'; M88-pu18; KH.NUA; KH/M06-pu18: Cp púwiš; Ca púui-š / púi-š, pl. púhč-em; Ls púy(')puy; Sr puuhia'-t; Ktn puhyï-t. Add Eu puríva 'faisan de la tierra'; Tr pú 'faisan, correcaminos'; and PYp pu'i 'roadrunner'. These may be built on *poC 'road', as are 'roadrunner' and 'correcaminos'. [NUA: Tak; SUA: Tep, Trn, Opn]

1823. *taLu 'roadrunner': M67-351 *tal; M88-ta21 'roadrunner'; KH/M06-ta21: TO táDDai; My táaruk; Yq táruk. We must add the tar- of PYp tarpui 'roadrunner' (leg-road); the latter part -pui is the *pu'i / puwi form above. A compound with *taLu / *taLo ('foot/leg' at 937) is the observation of Sapir below, which adds two more branches as having this stem. [SUA: Tep, Cah]

1824. *wiC-taLo 'roadrunner': Sapir: CN witlallo-tl 'a tall bird that flies little but runs very fast' (Simeon); SP wicca 'roadrunner'. The frequency of Num c < *-Ct- adds credence to the tie. Note also the similar vowelings of CN -tlallo and Cah *taru... above, suggesting a prefix *wiC-/wiC- in the CN and SP forms, perhaps *wiL 'big' as in 'long-legs'. [*-Ct- > -cc-; reduction; wVC- prefix, *wiL 'great'?] [NUA: Num; SUA: Azt]

Rob: see steal

ROCK, STONE; PIEDRA, ROCA

Mn	tïpi	Нр	owa; qööŋö	Eu	tet(tetta); evét; sibát; iciá
NP	tïbbi	Tb	tïn-t; tïŋgii-l 'rock ledge'	Tbr	te-tá-t/ te-rá-t
TSh	tïn-/tïmpin	Sr	tïmï-t	Yq	téta
Sh	tïmpin	Ktn	tïmï-t	My	tetta-(m) (pl); siiba
Cm	tïpi (< *tïppi)	Ls	tóo-ta; qawiiča 'mtn'	Wr	tehté
		Ca	qáwi-š		rocky place: e'pé; o'sé
Kw	tï-bi	Cp	kawí-š	Tr	ŕeté; ŕeepó; čagara;
		TO	hođai; waw		ŕemohá/ŕemowá; ra'pé
		Nv	'otta	pesači	i; rikubiri; eeno (for arrowheads)
Ch	tïm-pi 'rock, money'	LP	hod	Cr	teté
SP	ta"-; tïN-; tïmpiN-	PYp	hodai; a'i 'rocky, hard'	Wc	teetée; 'ái peña(zco);
			vaves 'rocky, mtn'		tee.cáríiya 'rock wall'
WMU	tïpwi-či (<* tïppwi-či)	NT	ódai	CN	te-tl; tekal-tia 'stone, v'
CU	tïpïy-či (< * tïppïy-či)	ST	hodai/hoodai 'rock(y)'		

1825. *timi-ta > *tiN-(pV) 'rock': Sapir; VVH169 *tiupa 'mortar'; M67-354b *te 'rock'; 354a *tem; M67-354b *te 'rock'; M67-354a *tem; M67-287 *te-pa/*tepu 'mortar'; I.Num243 *timpi-h/N 'rock, stone'; L.Son283 *ti 'piedra'; CL.Azt162 tə- 'rock, stone', 269 **ti- 'rock, stone'; M88-ti12; KH/M06-ti12: note especially Sr and Ktn *timi-t, which I think best reflect the proto-form. With loss of the 2nd V, the nasal assimilated to the resulting adjacent C of the absolutive suffixes: to alveolar t in some languages (*timit > *timt > * tint), but in Num it became fused with the Numic absolutive suffix *-pi (*timi-pi > timpi / tippi), which then took another absolutive suffix *-ci in WMU and CU: *timit > *tim-pi > *tippii-ci. In addition, Miller lists Wr tehá 'hail'; Cp temá-l 'earth'; Ca téma-l 'earth'; Tb tint 'rock'; Hp tiïma 'ground lime'; Hp timkye 'edge of cliff', some of which seem less certain. Ken Hill adds Gb tomónxa' 'deaf (rock-ear), cf. Eng stone-deaf'. For a Tep reflex, see *tiC-to 'three-rock fire cooking place' below. [*-NC- > -CC-]
[NUA: Num, Tak, Tb, Hp; SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]

1826. *taC- 'with a rock': KH/M06-ip2: Sh ta"- 'with a rock'; TSh ta"-/to"- 'with a hard rock-like instrument'; SP ta"- '(with a) stone, instr prefix'. [NUA: Num]

1827. *tiN-to '(three) rock(s) for supporting pots over fire': M88-tï14 'rock stand for cooking/fogón'; KH/M06-tï14: TO cïtto 'round rock formerly used to place pots on for cooking, cooking tripod'; Wr tehcóna 'fogón de piedras'. To Miller's entries, Ken Hill adds Wc tece- 'poner piedras para hacer un muro'. These do add a Tep cognate—TO *cï- 'rock'—thus giving every branch a cognate of *tïmï-. 'rock'. [SUA: Tep, Trn, CrC]

1828. *tiN-namas '(three) rock(s) for supporting pots over fire': M88-ti14 'rock stand for cooking/fogón'; KH/M06-ti14: CN tenamas-tli 'three stones for supporting pot over fire; by extension, triplets'; Pl tenamas 'hearth stones (rocks in fire to support pots, griddles, usually three)'. [SUA: Azt]

1829. *soya 'rock': B.Tep69 *hodai 'stone'; M88-so12; KH/M06-so12: TO hođai 'stone, gravel, a charm'; NT ódai; ST hodái. Add PYp hodai 'rock, stone'; Nv (h)otta 'piedra'; LP(EF) hod. [SUA: Tep]

1830a. *('/h)oC / *('/h)oka 'rock': Sapir; M67-355a *'o 'rock'; I.Num11 *o(o)h 'pebbles'; M88-'o9; Munro. Cup38 * ééxa-la or hááxa-la 'earth/land/sand'; KH.NUA; KH/M06-'o9: Mn pa-'oo' 'gravel'; NP pa'oppï 'streambed gravel'; Sh om-pin 'talus rocks, scree'; SP o"-, u"- 'round object'; Hp owa 'rock, stone' pl: o'wa (vowel is wrong). Hill adds Ch ompi 'almagre [red ochre]'; TSh ompin 'small water-worn pebbles or gravel'; TSh onkompin 'small water-worn pebbles or gravel'. Many of these suggest an *oN / *om 'syllable'. As Miller and Hill have many *oka forms, which could well be *oN combined with a -ka 'syllable' as the list of forms may imply; yet solely for contemplation, let's separate the preceding *oC- / *oN- from the following (perhaps *oka / *oNka).

1830b. *oka 'sand, earth, rock': Sr 'öö'qt 'sand'; Gb 'óxor 'earth, land, dirt'; Gb 'ohét 'sand'; Ls 'éx-la 'earth, land, dirt'; Ca í'exi-š 'desert' and Cp háxa-l 'sand'; Wr o'sé 'pedregal'. Sapir lists Gb öxa-r 'land' and Fernandeño öxa-r 'land' which also suggest a 2nd vowel of *a* (*oka). Ktn 'oka' 'sand, sandy area'; Ktn 'a'-oka' 'arroyo, canyon'. These may tie to CNum *ok(w)aiC 'flow, river' at river, though Sh om-pin 'talus rocks, scree' and Sh okwai' 'flow'; Sh okai"-pin 'river' show different looks. [NUA: Num, Hp, Tak; SUA: Trn]

1831. *a'i 'jagged rock': Wc 'ái 'peña, peñazco'; PYp a'i 'rocky, hard'; NT áítyi 'flagstone, flat rocks'. [SUA: Tep, CrC]

NB, for Tep *papV 'rock, rocky cliff', see at canyon.

NB, for Tak *kawi, see mountain. Rock and mountain reach into each other's semantic domains quite readily, it seems, since both *kawi and *ti(N)(pi) are often found to mean both.

NB, for*toyaN: Ch(L) toyompï 'boulder'; Ch(L) toyonkarïrï 'Boulder Sitting (name of mtn)'; SP toiampï 'gravel, rocks big and small'? Also at mountain.

Roll: see circle

ROOT; RAIZ

Mn	tïdïna/tïdïnápï	Hp	ŋahï/ ŋa-	Eu	náva/náwa(náhta);
NP	pa-bua; tïhonna 'dig roots'				návee- 'arraigarse'
	tïnna 'antelope root'	Tb	too'i-l 'tule root'	Tbr	namusí-r
TSh	tïnïna(pï); po'opi	Sr	a-ŋaakïw/aŋaakaw	Yq	náwa
Sh	tïtïna; tïntana	Ca	puku 'v'; qáx'a 'seed'	My	naawa
Cm	tïrana	Ls	kwiinamu- 'take root'	Wr	nawá
Kw	tïna-	Cp	wala	Tr	nawá
Ch	tïrïna-vï	TO	tatk	Cr	iín'e
SP		PYp	tatgara	Wc	'iníeri 'root pulled from ground'
WM	píísuru'a, tïnáa-vi	NT	táka, takáádï	CN	nelwa-tl
CU	tïnáa-vi	ST	tak		

1832. *naLwa 'root': VVH151 *ŋa root; M67-356 *na; M88-na6; KH.NUA; L.Son169 *nawa; KH/M06-na6: Eu; Wr; Tr; My; Tbr; Cr náána'a 'root'; CN. There seems little doubt that CN nelwa and Trn/Cah nawa are related, since four segments are practically identical, except that CN shows an extra (l) that the others have lost. I would also separate the *ŋakaw forms (Sr, Ktn, Hp) as listed below. [SUA: Trn, Cah, Opn, Tbr, CrC, Azt]

1833. *timna > *timna 'root': Fowler 83: Mn; NP; TSh; Sh; Cm; Kw; Ch; CU. Do NP tinna 'antelope root' and Num *tinna 'antelope' have the root named after the animal? NP tinna 'antelope' and NP tina 'root' could have one wonder. Fowler 83 ties Hp timna 'edible tuber of the wild or domestic potato plants' (timon- 'combining form) with the Num forms as 'biscuit root', which seems probable. Including the semantic dimension of 'trunk, stump' (as upper end of root system) are TSh titina / tinina 'root, trunk, stem'; TSh tinna'a 'elder, ancestor' (one's roots?);

- SP tïnna-vï 'stump'; perhaps Kw kutunï-vï 'stump'; probably preservative assimilation for the first vowel and UA schwa for the second vowel in Kw: *ku-tïna > ku-tunï-vï. [NUA: Num, Hp, Tak]
- **1834.** *yaNpa 'wild carrot, sweet potato, edible root, Carum gairdneri': M88-ya19; Fowler83 *yampa 'Indian potato'; Jane Hill 2008: NP yabba 'wild carrot'; TSh yampa 'wild carrot'; Sh yampa 'wild carrot'; Tb yamba-l 'wild carrots or radishes'; Mn yaappanna'(a) 'mushroom'. Jane Hill (2008) also notes Mn ya'ap; Kw ya(m)barabï 'Indian carrot, Perideridia pringlei, yampa'; Cm payaapw; and Tewa namphu 'potato'. [*-NC- > -CC-] [NUA: Num, Tb]
- **1835.** *ŋakaw 'root': KH/M06-na6: Sr -ŋaakaw; Ktn -ŋakawi; Hp ŋa'at 'its root'. Ca qáx'a 'seed' may or may not belong, as Ca ŋ appears in other initial-ŋ sets in Tak and Hp. [initial ŋ; k > '?] [NUA: Tak, Hp]
- **1836.** *kana 'bitterroot, Lewisia Redivivi': Fowler83; NP; Sh; SP. Fowler has forms. [NUA: Num]
- **1837.** *inV 'root': We 'inieri 'root pulled from the ground'; Cr iine'e 'guia, raiz, vid'. [SUA: CrC]
- **1838. *puku** / ***pu'a** 'root': Ca puku 'root (of trees), v'; NP pa-bua 'root under water'; TSh po'opi 'root'. [*-k/h-?; k > '?] [NUA: Num, Tak]
- NB, for Tep *taka 'root' (B.Tep216 *taka 'root'; M88-ta43; KH/M06-ta43), see at *taka 'fruit'. NB, the -namu- portion found in both Ls kwíinamu 'take root' and Tbr namusí- 'root' may be of interest in light of Tewa namphu. Where do the Athapaskan loans come from: Navaho nímasii-tsoh 'potato' (root-big?) and Western Apache námasé 'potato' (Perry 1972)?
- ROPE, CORD, STRING, SPIN, MAKE ROPE; MECATE, CUERDA, SOGA, CORDÓN, CABO 1839. *pi'ri-na > *piyi(na) 'spin thread, make rope': B.Tep267 *vidinai/a 'to make thread'; B.Tep268 *vidinakaroi 'spindle'; M88-pi3 'twirl, darse vuelta'; Stubbs 2000a-9; KH/M06- pi3: UP wijinï; NT vidyíñai 'make thread'; ST vidyña; TO wijlin 'twist, spin obj'; Wr pi'rí 'darse vuelta'; Tr bi'rí 'torcerse, enrollarse'; My biirite 'torcer'. TO wiDult 'rock, swing, wave, flutter'; TO wiDwua 'stir, beat'. To these can be added Eu virá- 'torcer'; Eu vírana- 'voltear'; and Wc hiiná 'torcer mecate' (twist/make rope) and Cr ti'ihiihna 'hilar' and AYq vi'ita 'twist, wind around, coil, vt'. As noted in Stubbs (2000a), the presence of *y in PUA *piyi(na), though clear in Tepiman *vidina, would be much less obvious in a PUA segmental sequence of *-iyi-. Due to the near phonological identity of y and i, a PUA *y between two i's would likely be quite invisible, probably reducing to simply i or long ii (*-iyi > ii), as we see in Huichol hiina 'torcer mecate' (twist/make rope). The correspondence of PUA initial *p > h in Huichol matches, which also confirms the relative invisibility of *y adjacent to i in some UA languages. Miller (M88) does not list Huichol hiina in his 1988 collection (where Tep *vidina is found); nevertheless, the sound correspondences and semantics match nicely, and it is an intriguing example of a proto-phoneme, occurring in a rather disguising phonological environment, but appearing clearly in Tepiman. However, some y are from liquids (r/l), and Tr and Wr show this to be one of those, for Wr pi'rí 'darse vuelta'; Tr bi'rí 'torcerse, enrollarse'; and My biirite 'torcer' show that the medial -y-/-D- comes from medial *-'r-/*-'L-. [SUA: Tep, Trn, Opn, Cah, CrC]
- **1840.** *t**ïLopini** 'rope': B.Tep243 *tīrovini 'rope'; M88-tī43; KH/M06- tī43: PB tīrviñ; NT tīró-; ST tīrviñ, pl tīrviñ. Let's add PYp teevin 'thin rope'; PYp terevin/telvini 'rope, fence wire'; PYp tepinid 'roll, twist, wring'. Willett's (2005, 260) underlying ST form of ST *tīroviñ agrees well with the proposed reconstruction. [medial *-L- (< -t-)?] [SUA: Tep]
- **1841.** *(tu')utuN 'rope, strap': Ch urumpï 'rope'; SP uru'aa / uruN 'carrying strap, string'; Kw tu'uru 'rope'. Might these tie to the Tep forms above? Regardless, note the closeness of *utu'a in the one SP form and *-tu'a in the Tak forms in *wik-tu'a below. [medial *-t->-r-] [NUA: SNum]
- **1842.** *paŋwa 'coil or wrap rope (around s.th.), v': Hp wikpaŋwa 'rope, line'; Tb(V) 'ïmbïŋw- ~piŋh 'roll string on thigh, v'; Tb(H) ïmbïŋwanat, pfv pïŋwan; Tb(M) 'ïmbïŋwït ~ 'ïmbïŋw 'tie up, make a bundle, v'. The Hp term's length suggests a compound, and Tb *piŋwa as well as the *wik- syllable below recommend the probable

morpheme break at Hp wik-paŋwa. The differing vowels are inconvenient, though the ï's are lazy a's essentially. Nevertheless, in spite of uncertainties in semantics and the vowel, their relationship seems more probable than not. [NUA: Tb, Hp]

1843. *wika / *wiki (> *wi(k)- combining form) 'string, rope, hemp or fiber plant for making rope': M67-419 *wi 'string'; I.Num280 *wisu(n) 'string'; Fowler83; M88-wi6 'string'; KH.NUA; Munro.Cup43 *wií-ča 'fiber plant'; KH/M06-wi6; Jane Hill 2007: this stem (*wika / *wikia) combines variously as *wik-ta, *wik-tu'a / *wik-tiwa, etc: *wika: NP wiha 'string, fishing line'; Kw wi'ipï (' < k?); KH/M06 also adds Tr wii 'lazar, amarrar (un animal)'; CN iič-tli 'thread made from maguey fiber (with unexplained loss of *w-); and TO gi'aDag 'put a handle on object'. Add -wi of SP paġaŋ'wi 'bow string' and Eu wiká / viká 'estirar [stretch]'. Both TO and Kw have medial -'-, which from *-k- needs explanation, as k > h happens in Num and h > ' in Tep, but both in either is not known. One possibility is *wik-p > wi'p > wi'ip (with *-k- > -'- in a cluster and then an echo vowel separating the cluster, like we see in *wirwir 'big' and *koLkoL 'hurt, sick, die'.

*wikia 'rope': AYq wikia 'string, rope, cord'; Yq wikia 'mecate, piola'; My wikyam 'cordones, correas'; Tr wiia 'rope'.

*wik-tu'a / *wik-tiwa 'make rope': Sr wiiču' 'make string, v'; Sr wiičua't 'string, n'; Ktn wicu' 'twist fibers into string'; Ktn napa-wicu' 'splice a rope (< together + twist)'; Cp wiču 'twist string, rope, a net'; Cp wičiwat 'rope, thread, braiding'; Cp wi-s 'bowstring, willow fiber, willow sp'; Cp wiču'et 'string, rope'; Ca wiču'at 'rope, thread, braiding'; Ca wičiw 'braid, as rope or thread'; Ca wi-s 'bark of a tree providing fiber'; Ls wii-ču 'make string by rolling hemp fibers'; Ls wii-ča 'Indian hemp'; Ls wii-ča-t 'rope, string, twine'; Yq wii'i 'hilo'. TO giššum 'a woven handle for a water jug' and TO giššu|m 'bind up, vt' fit *wiccu well. Except for the final -m, both TO giššum forms fit *wicu of the Tak languages through four segments (Tep s < *c, and Tep g < *w), and they all have to do with making rope. I would also add the TrC forms below, some of which better show the medial -k-. *wik-ta (> wita) 'make rope': Wr witá 'make rope'; M67 lists Wc wita 'thread' and Wc wiita 'spin yarn, v'; deriving from a similar pattern (*wik-ta) is Ls wii-ča 'Indian hemp' though with an absolutive suffix *-ta instead of *-ta 'do/verb'. Add Eu wiká/viká 'e estirar [stretch]'. However, adding another *-ta as absolutive suffix is what yields the below, that is, *wik-ta-ta with first the verbalizing *-ta (clustered with k) then absolutive *-ta: *wik-ta-ta (> *wi-ta-ri) 'rope': Wr witári 'rope'; My witeri 'mecate, soga, piola'; AYq wite'i 'net, snare'; Tbr mitá-t 'string of tendon, hebra de tendon' (< *wik-ta, Tbr often shows m for *w, and usually a liquid for a lone intervocalic -t-) also in Tbr wikoli-t mita-rá-n 'bowstring'.

The Tr and Wr common noun suffix -ri, like CN -tli, both derive from the absolutive suffix *-ta; thus, note intervocalic -t- > -r- in Tr and Wr. Therefore, intervocalic -t- in those languages may point to a reduced consonant cluster, such as *-kt- > -t-, as we see above. It is the same in most NUA languages: a lone intervocalic -t- usually goes to -l- in most Tak languages and to -r- in the Num languages, and intervocalic *-c- > -y-; therefore, intervocalic -c- in NUA is likely a palatalization of a cluster *-tt- /*-Ct-. So the -k- apparent in a few TrC languages is likely what underlies the other languages in which the -k- is not so apparent, though possibly apparent in NP wiha, which often shows -h- < *-k-.

While Yq wikia 'rope' matches Tr wiia 'rope' (having lost -k-), Tr wiia 'rope' and Tr wii- 'lazar, atar' suggest an underlying verb, something like *wiki. Note Yq wike 'arrastrar, jalar, sobar/haul, drag' and Hp wiki- 'string up for hand carrying by the string' which if it does not touch the ground, is being hauled, and if it does touch the ground, is dragged, after being roped or tied as Tr wii- 'lazar, atar' suggests in connection with Tr wiia 'rope' which is cognate with all these 'rope' and 'make rope' terms. That may also explain the wik- morpheme in Hp wik-paŋwa above.

A verb apparently underlies these rope words:

*wiki 'string or fasten with rope for transporting or leading, v': Yq wike 'haul, drag'; Yq wiki /wikri 'estirado [taut]' (as in 'keep pulling the cord tight'); Hp wiki 'string up for hand carrying by string'; Tr wii- 'lazar, atar'; NP wihi kaazi 'train' (kaazi 'car(s)'), i.e., a string/line of cars being pulled along; Eu vikat / béwika- 'estirar'.

The above may tie to *wika 'take, lead out' (399). KH/M06-wi6 and Jane Hill (p.c.) both recommend uniting these with the Num *wisu forms (and they could well be right) as *wisu might be a softening from *wicu (< **wik-tu'a), but since Tak -c- forms seem (to me) to be from -kt- clusters, while Num s < *-kt- seems less likely (but possible), so I have them and other *wis forms at *wisi / *wisu 'net, web'. [C cluster] [NUA: Num, Tak, Hp; SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]

1844. *tisa 'rope': SP tišša-vi 'rope'; CU tisá-vi 'vine, rope'; CU sávi 'rope'; WMU sávi 'rope'. [NUA: SNum]

1845. *tikapu 'rope, thread': Mn tigápo 'rope'; NP tigapu 'rope'; perhaps CN iikpa-tl 'thread, hemp fiber'. This is also at 1108. [NUA: WNum]

1846. *timuC- 'rope': TSh timohun / timuhun 'rope, cord'; Sh timukkun 'rope'. [*-k->-h-] [NUA: CNum]

NB, for *tama [CNum], see tie.

NB, for *puLa/puLi/pura (TO, PYp, Wr, Tr), see tie.

NB, for *maLaka 'spindle' see awl.

ROT, PUS, INFECTION; PUDRIRSE, PUS, MATERIA, INFECCIÓN; see also stink, sore, pain **1847a.** *pisika '(become) rotten, infected': BH *pisa? 'to rot'; L.Son197 *pika 'podrirse'; M88-pi7 'be rotten, estar podrido'; Stubbs2000b-50; KH.NUA; KH/M06-pi7 and KH/M06-pi30: besides many of the forms below, Miller astutely adds TO wi'ikam 'remnant, survivor'; Tr bi'ká 'podrirse'. Consider also terms for 'pus/infection' in addition to 'rot'. Three consonants appear to be involved, with possible reconstructions being *pisika / pisaka / pisoka > *piska. Note the cluster -sk- in Sr, Ktn, and Tb, but -s- in most of Takic and in Central Numic, but -kk- in SNum and -k- in TrC, and -h- in WNum.

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PUA *piska/*pisVka 'pus, infection, rot(ten), spoil(ed)'
Mn
                'rot';
                        pihika 'be infected'
        pihi
NP
        pihi
                 'rot'
                'rot';
                        pisippï 'pus'
TSh
        pisi"
        pisi-ppï 'rotten'
Sh
Cm
        pisi(ppi) 'pus, infection'
Kw
        piki
                'rot'; piki-pï 'pus'
        piki
                'rot' (< *pikki)
Ch
SP
        pikki 'semi-liquid mass'; SP pikkya 'sore, hard'
WMU
        pihkkí-y 'rot, spoil, be/get infected, vi'
CU
        piki
                'be rotten' (< *pikki)
Hр
        peekye 'pus, pus-filled infection; vi: get infected, rot, decay'
Tb
        piškiš-(ït) 'have pus'
Sr
        pişqa' 'rot'
Ktn
        piska'
                'rotten'
Ca
        písa
                'spoil, rot'
Cp
        pisá'e
                 'rot, go sour'
        pisa'(a) 'rot'
Ls
Eu
        viikát 'pus, sore'
Yq
        bikáa 'rotten'
AYq
        viika 'infected'
                'pus'; bikára 'rotten'
        biká
My
Wr
        piga-ní 'rotten';
                                pigapá-ni 'rot'
Tr
        biká / bi'ká (Tr(L)) 'pus, rotten'; biká-mea 'rot'
Cr
        pe'ečíra'a 'está hueco, podrido'
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Cearly *pi is the first syllable. Beyond that, several languages show *s and several show *k; however, some show both s and k (Sr, Tb, perhaps Mn), and others show hints of both. For example, the glottal stop in some Takic languages (Cp, Ls) aligns with k. In addition, the word-final gemination in the Central Numic languages (TSh, Sh, Cm) suggests an underlying third consonant, and k is a good guess, judging by the other forms (perhaps pisi-ppï < *pisik-pï). Therefore, *s is clear and *k a definite possibility in Central Numic. The Hp form is extremely interesting in that the palatalization of the k (ky) is a natural for a possible underlying sk cluster, with a near palatal plus velar reducing to a palatalized velar (sk > k^y). What's more, Hp vowel leveling of i-a or a-i combinations to e-e is apparent elsewhere: Hp kele-vosna 'kidney'; SP kani 'kidney' and Hp cekwe at *cikwa 'rain'. Hopi e is alone among Hopi's six vowels in not aligning clearly with PUA's five vowels; thus, vowel leveling of i-a and a-i combinations is often the source of Hp e. Ken Hill (p.c.) also mentions reductions of ai

dipthongs as a possible source of e, which too is a form of vowel leveling. So of the 20 languages represented, 10 show **s**, 13 show **k**, 2 or 3 show both, and 7 display phonological hints of such a cluster (Hp, TSh, Sh, Cm, Mn, Cp, Ls). Thus, it is another example of the eventual loss of a syllable in many of the languages, though the languages are fairly split as to which syllable is lost—second or third, but never first. A reconstruction such as *pisoka could also include Wr and Tr *piso, though Wr and Tr *pika 'rot' also exist. Curiously, Quechua pusqu-y 'rot' has the same three consonants.

1847b. *piso 'pus, infection'; Tr bisó/wisó 'supurar, infectar un grano o herida'; Wr pehsoní 'pus'.

1847c. *pikka 'sore': Mn piha'ayee 'become itchy, become rash-like'; Kw pakagi'i-dï 'sore, pain, ache, be sore'; SP pakka 'sore, pain'; SP pikka 'sore, hard'; CU pikyá-vi 'poke-mark, sore'. Eu biikát 'llaga, materia' and others above are likely reductions: *piska > pikka, i.e., *-sk- > WNum -h-, SNum -kk-.

Eu piopiioké 'andar cojeando' < *pisokV(?) is curious in that it and *pisokV 'rot' have 'not as should be, not good any more' in common. [-CC-] [NUA: Num, Tak, Tb, Hp; SUA: Trn, Cah, Opn, CrC]

1848. *yïpaLi 'rotten': B.Tep31 *dïvariga 'rotten'; M88-yï13; KH/M06-yï13: TO jewa; UP jïwaligï; PB dïvilgï; NT(B) dïváliga 'rotten'; NT dïvááli/duvááli 'pudrido'; NT dïváárïi 'pudrir, vi'; ST dyïvaalyi'. Add PYp devlim/dever 'rot, vi'; PYp develik 'rotten, adj'. [liquid] [SUA: Tep]

1849. *muya > moya 'rot, stink': Tr muya- 'podrirse' Yq móoye 'rot (of wood)'; My moera 'podrido'; Cr mwí'ira 'pus'; AYq moyok 'rotting'; Sr muurq 'stink, be smelly'; Eu muttusu 'podrirse'. [r/y?] [SUA: Trn, Opn, Cah, CrC; NUA: Tak]

1850. *ayakwi 'pus': Cp áyexwi-š / áyaxwi-š 'pus'; Ls 'iyáxwi-š 'pus'. [unstressed V > i/i] [NUA: Tak]

1851. *pakwa 'pus, rot': Tr bawana/wawana 'erupcion purulenta, sarna'; Ls 'apáákwaya 'rotten wood, punk'. *kw > w in Tr aligns. Consonant harmony in Tr wawana. [NUA: Tak; SUA: Trn]

1852. *soLa 'rot, go to waste, throw away': Tr sorá-ta 'podrirse'; Eu nasór-tu'u 'echarse a perder'; Eu nasór-ta'a 'echar a perder'; Eu nanásora 'componer'; My nasontu 'descomponerse'; AYq nasonte 'harm, ruin, spoil, break down, vt'; AYq nasonti 'ruined, blotched, vi'; AYq nasontu 'wear down, break down, vi'; Yq nasonta 'descomponer, vt'; Yq nasonte/nasontu 'descomponerse, vi'. [L > n in SUA] [SUA: Trn, Opn, Cah]

NB, for *(si)puyu 'rotten, worm(y)'(Cp sivúyu'iš 'rotten, decayed, adj'; Cp sívuye 'worm, maggot'); CN popoyoo-tl 'rottenness, decay, n', see worm.

Rough: see hard, lump(y), touch, or scrape

Round: see circle Rub: see touch Rug: see blanket

RULE, BE LEADER, CHIEF, COMMAND, SEND; LÍDER, JEFE, MANDAR, ENVIAR

1853. *tïsa 'order, v': B.Tep237b *tïhani 'to order'; 237a *tïhanai 'he orders'; M88-tï18; KH/M06- tï18: TO čehani 'order, v'; UP čïhañi; LP tiahiñi; NT tïáñi; ST tyiñi. In Bascom's NT dictionary: NT tïááñi 'command'; NT tïáánïdami 'boss'. Miller also offers NP tïïŋï 'tell to' but I have it with *tïni/*tïNV at 'say'. [SUA: Tep]

1854. *hula / *hura 'send': L.Son69 *hura 'enviar'; M88-hu13; KH/M06-hu13: Op ura; Eu húra; Wr uhúla-ni; Tr húra. [medial liquid] [SUA: Trn, Opn]

1855. *nïC / *nïk(pa) (< *nia-ka-tV?) 'chief': BH.Cup *néta (*nəta) 'chief'; Munro.Cup24 *nəə-ta 'chief'; M88-nï14; KH/M06-nï14: Cp nét/nət 'chief of lineage, captain'; Ca nét 'chief of clan, moderator of a fiesta'; Ls nóó-ta 'ceremonial leader, chief'; Gb not/nóta 'capitán'. Add Ktn nïhpa(č) / nïqpa 'chief' and Ktn canïqpač puyu 'God: chief of us all' and Ktn caŋïhpa-y 'our chief, God'. Ktn often shows latter segments lost in other forms (cf. antelope, rock) and note that absolutive -t (vs. -l) of other Tak forms does suggest a final consonant and Ktn shows that to be *-k-, if not *-kpa. Also note the initial ŋ in the last Ktn form when resulting from a cluster: *cam-

nïqpa > canïhpa-. With vowel leveling, SP niaaviN 'chief' (< SP niaa 'call') and Kw niyaa-ġa-dï 'chief, braggart' (< niyaa-vi 'name') may tie to Tak. In fact, the -ġ- in Kw may reflect the -k/q- in Tak. [Gb V] [NUA: Tak, Num]

1856. *yukami 'official': B.Tep26 *duukami 'official'; M88-yu19; KH/M06-yu19: TO juukam 'Mexican'; NT duukámi; ST duukam. [SUA: Tep]

1857. *win 'send': KH.NUA: Sr wiaan 'send, vt'; Cp wiwine 'send on an errand, vt'; Ls wiwi 'send s.o., as on an errand'. [NUA: Tak]

1858. *sawi 'command': Yq sáwe 'mandar'; Yq nésawe 'mandar, gobernar'; Tbr i-sawi-rá 'mandar'. [SUA: Cah, Tbr]

1859. *ti... 'command(er)': Mn tïwï 'order, tell to, aux v'; Tb timiwa-l 'chief'. [m/w] [NUA: Num, Tb]

1860. *moNki / *muŋi 'chief': Sapir: Hp moŋwi 'chief'; SP moi- 'lead, act as chief, v' (< *moŋi says Sapir, and thus nasalizes following C as if moi-N). With SP's nasal vowels and a nasalizing effect on following consonants and the labialization of the Hp medial consonant as a continuation of the preceding round vowel, they seem a fair pair. [medial -ŋ-] [NUA: Num, Hp]

1861. *pohina 'chief': Mn pohenábï 'chief'; NP poinabi 'chief'. [*i > e/ a] [NUA: WNum]

Run: see go Sack: see bag

SAD; TRISTE

1862. *ukuya'a > *okoya 'sad': CN tla-ookoya 'be sad'; Yq híoko 'sufrir, lastimarse'; Hp ookwa'y-ta 'be sad, downcast, depressed'; and perhaps Ls 'uyá'a 'feel bad, be sad' whether s.th. like *ok-uya'a or first of word lost. Might Ls's glottal stop explain the Hp glottal stop as anticipated. Ls and Hp agree in initial *u, from which SUA may have assimilated *u > o/_a. [NUA: Hp, Tak; SUA: Cah, Azt]

1863. *o'mana 'sad, suffering': CN a'mana 'be unsettled, upset, disturbed' (RJC); Tr o'moná / o'móna-ma 'be afflicted, saddened'; Tr o'móna-ri 'sadness, affliction'; in Sr the -uŋani- portion of Sr ahauŋanik 'sad, miserable'; Sr hahauŋan 'be poor, pathetic, miserable'; Sr hauŋani-ĕ 'poor one, orphan'; Ktn haoŋa 'poor'. Words as long as the Sr forms are likely compounds, so -oŋani- is as likely a segment of that compound as any other. We seem to be dealing with a cluster, which appears as -'m- in CN and Tr; in addition, the Tr and CN forms agree in the cosonants -'m-n-, but disagree in the vowels: a-a-a vs. o-o-a, while the Sr and Ktn vowels -o-a-i are between the two, CN and Tr each assimilate a vowel, in opposite directions. The Tak velar nasal also allows a cluster. What of NP sïda i managuma 'made me feel badly'? With loss of 1st vowel and change of 2nd V, what of Ls ŋíína / ŋiná-'a 'fast, not eat' and Ls ŋiná 'be bad, spoiled; (of heart) sad, sorry'? [*-'m->-ŋ-; V assim] [NUA: Tak; SUA: Trn, Azt]

1864. *sitoka / *siLoka 'be sad, suffer': My siróka 'está triste'; My sirókwame 'tristeza'; Yq sioka 'sufrir, estar triste'; AYq sioka 'be lonely, vi'; AYq sioktua 'hurt, make sad, vt'. [SUA: Cah]

Sagebrush: see plant Saliva: see spit

SALT; SAL

SHL1, SHL							
Mn	omábi; omaa- 'salt, vt'	Hp ö	ona; önaskïyi (s. solution)	onát, ónta (acc)			
NP	oŋabi	Tb	uŋaal	Tbr	oná-t		
TSh	onwapi(cci)/omapi-	Sr	čuka't	Yq	'óna; AYq čo'oka 'salty'		
Sh	oŋa-/onka-/ona-pin	Ca	'íŋ-il	My	oona		
Cm	ona-/onaabi/ona'aitï	Cp	yewá-l; v. íŋeyu	Wr	woná		
		Ls	'éŋ-la	Tr	oná / koná / noná		
Kw	'owa-vi	Gb	'oŋó-r		yakáwi- 'v. salt/season s.th'		
Ch	aso-na; asómpï	TO	on	Cr	unáh		
SP	oa	PYp	ona; ta'akil 'salty'	Wc	'únaa; 'ucíivi 'salty'		

WM	'ööá-vi	NT	ónai		kwíe.túušáari 'earth with salt'
CU	'öá-vi	ST	'on; vasdak 'lack salt'	CN	ista-tl; poyek 'salted'

1865. *omCa / *oNCa > oŋa 'salt': Sapir; VVH63 *'osŋa 'salt'; M67-359 *'ona; B.Tep320a 'onai 'salt'; 320b 'onaga 'possessed salt'; I.Num16 *oŋa; L.Son16 *'ona; M88-'o27 and M88-wo5; Munro.Cup115 *'ééŋ-la 'salt'; KH/M06-'o27: Reflexes exist in all branches except Azt, though the medial consonants (n, η, m, ø) are difficult. In contrast to Miller's 1967 reconstruction *'ona, Miller's later (1988) positing initial *wo for this lexeme may have been due to his work in Wr, which is the only language showing initial *w, or it could signify an initial C of intense rounding, as Wr elsewhere intensifies initial *o > wo (Stubbs 1995). In M88-'o27 he lists separately the Takic forms and Hp that show 2nd C η; however, I think most would agree that all these terms are related. The real difficulty is the medial consonant. We have m in Mn and TSh; velar nasals in Num, Tb, Hp, Tak, ie, most of NUA; but we also have w in Kw and ηw in TSh and n in SUA. I doubt a single C could underlie that variety and would guess that we are dealing with a cluster that involves a nasal and a labial. Mn and TSh (the nearer homeland languages of WNum and CNum respectively) show m; SNum lost the nasal, showing either *w or ø; but only one NUA language shows n, the geographically most distant, i.e., Cm. The many m, η, and ηw suggest a cluster. White Mesa Ute speakers distinguish 'ööá-vi 'salt' and 'öáá-vi 'back' only by vowel length. [medial *n, η, ηw, w, m; *o > Tb u] [NUA: Num, Hp, Tb, Tak; SUA: Tep, Trn, Cah, Opn, Tbr, CrC]

1866. *yakawa 'apply salt': the -dak of ST vasdak 'lacking salt, adj'; Tr yakáwi- 'salt/season s.th., v'; and perhaps CN poyek 's.th. salted'; CN(RJC) poyeya 'become salty'; CN(RJC) poyeltik 'salty'. Perhaps Cp yewá-l 'salt' if it lost medial -k-. [SUA: Tep, Trn, Azt?]

NB, for Sr čuka't, Ktn cukwa' 'bitter, sour, salty', AYq co'oka 'salty', see at 'bitter'.

NB, Hp sïhï 'salty' has enough in common with Navajo áš<u>ii</u>h 'salt' and Tewa '<u>áhsæ</u>h 'salty' to possibly be part of an areal loan. Navajo borrowed áš<u>ii</u>h from Tewa. Ch(L) 'asi 'salt' is reportedly from Mohave 'ath'i, though close to both Navaho and Tewa. Are they all from Mojave? Ch asompï has final nasalization and only lacks a credible second vowel to keep the other three of the first four segments from being tied to Navajo and Tewa in some kind of areal loan.

NB, for *tosa (Wc *tusa and CN ista-), see white.

NB, for *sïta, see bitter.

SAND; ARENA, PLAYA (beach)

Mn NP	pasiyápï pasiwabï; otïba 'fine sand'	Нр	tīīwa; ciwavi; nöŋa; civohkya; naaki	Eu	sa/sáta
TSh	pasiŋwampin/pasiŋompin	Tb	šiihpi-t	Tbr	sihá-t
Sh(C)	pasiampin	Sr	ööqţ	Yq	sée'e
Cm	pasiwaapi	Ca	ŋáči-š	My	see'e
Kw	sihwa-(m)bï, sihombï	Ls	'éxva-l	Wr	seté
Ch	otávï	Cp	háxa-l	Tr	saté
Ch(L)	siwampï; otavi 'fine sand'	TO	o'od; o'ohia	Cr	seh;
SP	patï(ya); ahta/atta	Nv	hia		sáa-ta'a 'sandy ground'
	šiu-N 'gravel'	PYp	o'oi	Wc	šie.káari
WMU	tá-vï, siw <u>á</u> -pï	NT	óórai		
CU	siwá-pï	ST	o'ya	CN	šaal-li

Many have noted the array of initial-s forms for 'sand': Sapir; M67-361 *sa 'sand'; M67-362 *se 'sand'; I.Num194 *(pa)siwa(h) 'sand, gravel'; L.Son226 *sa/*sï arena; M88-sa9 and sï4 and KH/M06-si21 *siHa where H = a glide (AMR), sï4, and sa9 basically sort them according to first vowel. I think the glide is w or something like it, as Iannucci has it. After loss of -w-, then excrescent y is natural in an environment of *sia (*siwa > *sia > siya). Whatever the C was, it seemed to disappear in SUA, where the vowels also assimilated (*siwa/siHa > *saa) or leveled (*siwa/*siHa > *see) much of the time. For the purpose of further contemplation, it may be useful to divide them according to first V. Num basically has *siwaN:

1867a. *siwaN 'sand': Mn, NP, TSh; Sh; Cm; Kw; SP siuN- 'gravel'; CU; TO -hia 'sand dune' (AMR 1996d); SP šīŋwam-pï 'sandy gravel' (AMR 1996d). Ken Hill adds WSh pasiwompin and Ch siwampi 'coarse sand';

Ch siwampï 'gravel'; Ch siwa'aavï 'sandstone'. Add Nv hia and Tb sïwaa-l 'ground, dirt, the earth, age' with an assimilation of *i-a > ï-a. The first syllable of Tb šiihpi-t may belong. Hp ciwavi 'gravel, coarse sand' may be a loan or may belong if c/s problem, for the other 3 of the first 4 segments are identical. If so, all branches of NUA except Takic are represented. Medial w was lost in Mn, Sh, TO, and nearly so in Tbr, though h may signify the loss of some C. We see ŋw in TSh. Add the latter part of B.Tep326b *'oo'ia 'sand', a compound of *hora and *siwa. [*w > Ø in TO; c/s]

1867b. *si'i (< *si'a/siwa) 'sand': Yq, My, Wr, Cr séh; Tb sïwaal. [for *i-a > Cah e-e, see *pita at fire] **1867c.** *sa(ta) 'sand': Dakin 1982-81: Cr sáá-ta'a 'sandy ground'; Eu sa/sáta, CN šaal-li. AMR (1996d) notes that the frequent assimilation of vowels in Azt (*siCa > saa) explains these as related to *siCa (here *siwa). Ken Hill adds Cr šarí 'mud'. Is it a loan from Azt? [t > L > ' in Cah; vowel leveling; nasal; *w > ø in Tep] [NUA: Num, Hp, Tb; SUA: Tep, Cah, Trn, Tbr, Opn, CrC, Azt]

1868. *(h)oLa (Tep) / *otta (Num)'sand': Sapir; B.Tep326a *'oo'orai 'sand'. With Tep *orai, note the possibility of Ch otá-vï herein as well and WMU tá-vï 'sand', which lost the first syllable, as it occasionally does. In fact, Sapir ties Tep and SP atta 'sand', assimilating from *otta, which *otta is what we find in Ch. Sapir cites SP taŋa 'knee' < *toŋa as a parallel example of that vowel change. Note also B.Tep326b *'oo'ia 'sand', a compound of *hora and *siwa. [V change] [SUA: Tep; NUA: Num]

NB, for *oka 'sand, gravel, rock, land' see at rock.

Sandal: see shoe Sap: see pitch Save: see store

SAY, SPEAK, TELL, TALK; DECIR, HABLAR

1869. *ni'ok 'speak': M88-na4 and M88-ni1; L.Son173 *nio 'hablar'; B.Tep170 *niokai-i 'to talk', *nio 'he talked', and B.Tep171 *ni'oka-i 'word'; KH/M06-ni1: TO neok(i) 'talk'; UP ñïokï; LP nook; NT ñioókai 'habla'; NT ñióóki 'palabra, voz, mensaje, idioma, cosa'; ST ñioki; Tbr nyoka; Tr ne'ó-; Tr ne'oge/ne'oke/ne'ogí 'word, language'; Yq nóoka 'hablar'; Yq nóki 'palabra'; My nóoka; Wc niuka; Cr niuka-ri 'word, language'; Cr nyúukari 'talk'. Ken Hill adds Hp nï'ok-ti 'become benevolent, compassionate'. Let's also add Eu neóke- 'mandar [command]'; Op niwa-t 'word' (Shaul 2007). That ends the clear cognates. Miller includes Eu néhra-; NP nanikkwikia 'answer'; and Sh niikwi 'say, tell'. However, they do not agree with *ni'ok, but merely start with n-, possibly the *na- prefix with different stems. I would group Wr and CN together as below. [dipthongs > V; ' > ø in Tep; NUA u : SUA o] [SUA: Tep, Trn, Cah, Opn, Tbr, CrC]

1870. *na-wisa / *na-oca (> nooca) 'speak': Wr naósa 'speak'; Tr nawesa- 'speak in public'; CN nooca 'call, summon, talk to s.o.' [c/s; wV > o in CN] [SUA: Trn, Azt]

1871. *sawa 'whisper, v': M88-sa29 and M88-ha16; KH.NUA; KH/M06-sa29: Cp şáwe 'whisper, v'; Ca sáwa 'whisper'; Ls şáawa 'wheeze, v'; Ls şawá-şawa 'gossip in whispers, v'; Ls şawáay 'whisper'; Sr hawahawahk 'whisper'. [NUA: Tak]

1872. *hawa 'talk, v': M88-ha16; KH/M06-ha16: Ca -háwaway- 'talk'; Cp háwin- 'sing, v'. [NUA: Tak]

1873a. *awa / *aw (AMR) 'tell': VVH124 *'awï 'tell'; BTep301 *'a'aga/i 'to tell'; L.Son7 *'awa 'decir'; M88-'a16 'say'; KH/M06-'a16 *aw (AMR): TO aag(a); TO aagid; UP 'aagï; LP 'aagi; NT áága; ST 'a'aga; Eu áwa; Tbr amwá/omwá; Tb aawiinat~aawiin 'tell to'; My hiáwa 'decir'; Hp aa'awna, aawin-/awin- 'tell, inform, relate, announce'; Sr aav 'tell a true story'; Eu á|wan 'decir, pedir' (cognate? Hill queries; I say yes). Many *'awa forms meaning 'scold' may tie with *'awa 'tell': Yq híi'awa 'criticar, insultar'; Tr na'áwa 'enemistarse, enojarse unos con otros'; Tr na'áwa-ti- 'airarse unos con otros'; CN a'wa 'scold, quarrel with, irritate s.o., vt'; Pl ahwa 'scold, bark at, yelp at'; Mn hawa 'scold, v'; and what of Kw ha'a 'bark, v'; Kw ha'a-kwee 'argue, bawl out'? Jane Hill (p.c.) notes that SP ai-/ai"- 'say' may have only lost -w-. [*w > v in Sr] [NUA: Hp, Tb; SUA: Tep, Opn, Tbr, Trn, Cah, Azt] 1873b. *a'aL 'tell': BH.Cup *'á'al 'tell a story'; M88-'a16 'say'; KH.NUA; KH/M06-'a16 *aw: Cp 'á'alxi 'tell a true story'; Ca 'á'alxi 'tell a true story'; Ls 'áá'alvi / 'áá'alvu 'tell a story'. Add Tb(M) 'ala'wat ~ 'alaau 'talk, v'; Tb(V) 'alaaw~'a'aalau 'talk'. Hp yï'a'a-ta 'be speaking, talking (about)' is a reduplication of yï'a, though the Tak forms appear to be reduplications also, so Hp is an outside possibility only if it includes a fossilized yï- prefix. An

explanation is needed to reconcile a and b. Their union is possible, so I shan't yet undo what others have joined, though Tb has two separate words, each a nice match for one of the two groups. [NUA: Tak, Tb]

1874. *ka'iti 'say': B.Tep94 *kaiti 'to say'; M88-ka28; KH/M06-ka28: TO kaij(eliđ); UP kaičï; LP kaič; NT káítyukai; ST ka'ity. [SUA: Tep]

1875. *ki / *ki 'say': M88-ki10 'say'; KH/M06-ki10: Sr ki-i 'say'; Hp ki-ta 'say'. [NUA: Tak, Hp]

1876a. *tikwi 'say': M67-434 *te 'to tell'; I.Num234 *ti(i)(h)kwi(i) 'say, tell'; M88-ti17: Mn tiïkwi 'tell, vt'; NP tiïkwi(hi) 'tell'; TSh titiinwa" 'teach'. Consider also Sh(C) taikwa" / tekwa" 'talk'; Cm tekwari 'speak, talk to'. Miller here includes many forms also found in M88-kwi12, as well as B.Tep244 found below. I think it best to separate the forms *tiyai, *(ti/yi/ni-)kwi, and *tini for now. Therefore, in addition to *tikwi, consider: **1876b.** *(yi/ni)kwi 'say': I.Num82 *kwi(i) 'say'; M88-kwi12; Sh yekwi" 'say s.th., sg subj'; Sh niikwi 'say, tell, vt'; Cm yikkwi 'say, vi'; Cm niikkwi 'say to s.o.' Miller (in M88-kwi12) has some of the same forms as with *tikwi, etc. We may be dealing with prefixes (ti-, yi, ni-). [yV- prefix] [NUA: Num]

Outside of some clear but limited groups, much sorting remains for these initial *ti... lexemes having to do with speaking; *ti may, after all, be a fossilized prefix in some cases.

1877a. *tïya 'say to': B.Tep244a *tïtïdai 'to say to'; B.Tep244b *tïi 'he said to'; M88-tï17; KH/M06- tï17: UP čïčiï; LP čïdai; NT tïtïdai; ST titda; TO če'i 'be said'; Sh tïahwi" 'ask, tell on or about s.o. or s.th.'; Cm tïa/rïa 'it is said'; Sr tiï^t(ha) 'tell, v'; My tía 'cuotativo'. Add Ca tétiyax 'tell'; PYp teeda 'say'; PYp te'e 'say'. [SUA: Tep, Cah; NUA: Num, Tak]

1877b. *tini / *tiNV: M88-ti17; KH/M06- ti17: TSh tininwa 'teach'; Kw tiniya 'tell'; SP tinnia 'tell'; Tb tingiinat 'ask for'; Hp tinla'y-ta 'ask for, hope, desire'; Pl teeneewa 'speak against, criticize'. We can add more SNum forms, such as WMU tinníya-y / tinníye-y 'tell (of story-teller)'; Kw tiniya; Ch tinía; and CU tiníyæy. NP tinji 'tell to' may better belong here than with M88-ti18 (at 'rule'). Should we add Sr täänön 'speak to, say (something) to'? [NUA: Num, Hp, Tb; SUA: Azt]

1877c. *ticu 'counsel': Eu tečuba 'aconsejar'; Wr tehcó 'consejo'. [SUA: Opn, Trn]

1877d. *ti... 'tell': Hp titiqay 'be learning'; Hp titiqayna 'be teaching'; CU tipati-niyay 'gossip, tell rumors about'; Cp tútuči 'tell' (cognate? Miller queries; I'd say below with *tu'i). This last group is something of a catch all of M88 forms that fit not well elsewhere nor with each other. All need more work: only initial *ti in common, which could be a prefix.

1878a. *tïwa / *ta(hV)wa 'say, advise': My tééwa 'dicen, cuotativo'; Yq téuwa 'decir, hablar'; AYq tauhia 'say to'; AYq tehwa 'inform, show, tell, explain'; Pl ilwia 'say, tell' (also at *tu'i below).
1878b. *(i')tawa 'tell': CN i'tawa 'tell'; CN i'toaa 'speak up'; CN tla'toaa 'speak'; Mn itawa 'tell, inform, instruct'; NP yatua 'talk'; NT áá táágai 'platicar'. [SUA: Cah, Tep, Azt; NUA: Num]

1879. *aNpaka-y 'talk': Kw 'abigi 'talk'; Kw nipaka 'talk to'; Ch ampága- 'talk/speak'; SP ampa-ġa-; WMU appáġa-y 'speak, talk'; CU 'apáĝay 'talk, speak'; Tb pahkaanï~pahkaan 'speak'; Tb(H) pahkannit, pfv appahkann 'to speak, speak Tubatulabal'. [*-NC- > -CC-; Kw anticipates V assim][NUA: SNum, Tb]

1880. *umay / *amay 'say': Kw mee 'say'; Ch mai 'say'; SP mai / mwai / umai / ïmai 'say'; WMU may / umway 'tell, say' (past: may-kye); CU may-ka 'say, tell, order'. WMU past tense suffix -kye (vs. -qa) shows that there is a final -y in the stem. Tbr amwá/omwá is listed above where it does fit well with *awa, since *w > mw in Tbr often, though it (or they) has (have) much in common with these SNum forms as well. [NUA: SNum; SUA: Tbr]

1881. *...Lapa 'speak': Hp lavayi 'speech, talk, discussion'; Hp lavay-ta 'be talking about, relating, telling about'; Sr vïrav(k) 'speak, talk'; Sr vïraavïra'n 'talk, speak'. While it is possible that these are not related, a tie seems on the probable side of possible. Whether Hp lost an initial CV or s.th. else happened, the identical semantics and a three-segment sequence *Lap merit mulling. [NUA: Hp, Tak]

1882. *tu'i 'say, ask': M88-tu1; AMR; KH/M06-tu1 and tu26 *tuHi (AMR): TO cu'ick 'ask (a question) of'; Wr tui- 'tell, accuse'; Tr rú/tú- 'decir'; Tr(H) ru 'avisar, testificar; Tr(H) ruye 'avisar, aconsejar, informar';

CN ilwia 'take counsel with self; make a complaint' (< *tuwi); Pl ilwia 'say, tell'. Add Cp tútuči 'tell' and PB tua 'quotative' (Estrada Hernandez 2003, 184). [SUA: Tep, Trn, Azt; NUA: Tak]

1883. *ya... 'say': M67-363 *ya say; BH.Cup *ya 'say' (Cp ya-; Ca yá-; Ls ya-); M88-ya7 'say'; KH/M06-ya7: Cp yax; Ca yáx 'to be so, to say'; Ls yá(x) 'say, tell'; Hp yaw 'quotative particle'; Cr yee 'it is said (quotative)'; Miller queries whether Wc hai is cognate. I like AMR's (1993c) union of Num *yaka 'cry' at cry with the Cupan forms, and beyond those, matches are uncertain. So no branch bracket.

NB, for *aya 'invite, call' see name.

NB, for B.Tep *vaidai 'call' and *vai 'he called' see name.

NB, for B.Tep *paru 'to speak evil of', see 'bad'.

Scare(d): see fear

Scold: see shout and angry

SCORPION: ALACRÁN

1884. *nakacïLa 'scorpion': B.Tep166 *nakasïrai-i 'scorpion'; Fowler83; M88-na32; KH/M06-na32: TO nakšïl; UP nakšïl; LP nakšil; PYp nakseli; NT nakásïrai; ST naksïr/naksr. Jane Hill notes that the first two syllables of NP nagubaca 'scorpion' could feasibly relate to these first syllables; in fact, given the frequent disappearance of medial *-p- in Tep and *c > Tep s, all 4 syllables of NP nagubaca tying to Tep *nakasV may be worth keeping in mind. [SUA: Tep; NUA: WNum]

1885. *maCcïL 'scropion': Fowler 83; M88-ma4 'scorpion'; KH/M06-ma4: Ca mánisaly 'little scorpion'; Wr mahcirí; My máacil. Add Tr mačiri and Yq máačil. But Tr ma'i-k-úa-n-i 'scropion'? If the different initial nasal (m vs. n) could be explained, then the above two sets may be cognate, since Tep s < *c and with the loss of k in a cluster:

*makacil(a)i > *nakasirai (Tep)

> *makcïli > mahcili (Wr, Tr) > maacil (Yq, My)

What about Ca? Note the -hc- cluster in Wr possibly from an original -kC- cluster. AMR includes this set in his article "A Northern UA sound law: *-c- > -y-," wherein he lists Ca mani-sa, Wr maci-ri, and My maaci-l as a possible set. [CC, c/s?, c/n, reduction] [SUA: Cah, Trn]

1886. *suyi 'scorpion, sting': M88-su19 'sting, v'; BH.Cup *súyi 'sting'; Munro.Cup116 *şúúyi-la 'scorpion'; KH/M06-su19: Cp súye 'sting, v'; Cp suyve 'stinger'; Cp súyi-ly 'gnat, biting insect'; Ca súyi-ly 'scorpion'; Ls súy-la 'scorpion'; Ls súyi 'itch, v'; Hp soya(k) 'get bewitched'; Ls suypi-š 'stinger'. [NUA: Tak, Hp]

1887. *saka 'scorpion': L.Son228 *saka 'escorpion'; M88-sa16; KH/M06-sa16: Op sakkara; Eu sákra; Yq sákkau; My sáka'awi-m; Wr sahkála. The siaa' of SP siaam'moġo-ci 'scorpion' may belong, but not yet securely enough to count it. [*-CC-, liquid] [SUA: Trn, Opn, Cah]

1888. *-paCta- / *-pacca- 'scorpion': NP nagubaca 'scorpion'; TSh wïwïmpaca 'scorpion'; the -pïc- of Hp pïckòo-mok-ta-qa 'scorpion (rabbit stick-bundle-dur-redpl)' is less likely as Hill has pïc-kòo- 'wide-wood'. [NUA: Num]

1889. *koLo 'scorpion': CL.Azt139 *koolooo 'scorpion'; Fowler *kooloo 'scorpion'; M88-ko28; KH/M06-ko28: CN kooloo-tl; Pl kuulut; Po kulut; To kulutl; Za koloocin 'insect sp'. [SUA: Azt]

1890. *wVm 'scorpion': TSh wïwïmpaca 'scorpion'; Ch waampakwici 'scorpion' [NUA: Num]

1891. *taska 'scorpion': Cr taska-(te) 'scorpion(s)'; Wc tee-rïká 'scorpion'. [*L > s?] [SUA: CrC]

SCRAPE, SHAVE; RASPAR, AFEITAR(SE), ESQUILAR

1892. both *sipa and *sippa 'scrape, shave': VVH70 *si_spa 'to shave, scrape'; M67-364 *sipa 'scrape'; I.Num192 *sipe / *sipa 'scrape, shave, whittle'; L.Son244 *sipa/sip-i; M88-si5 'scrape'; KH.NUA; KH/M06-si5: Mn siba; NP sipa 'scrape'; Sh sipe 'scrape'; Cm sipe 'shave off, scrape off'; Kw šivi 'whittle, peel, shave, scrape off hair from'; SP siva 'to whittle'; CU wəsívay 'whittle, peel, shave';

Hp sìipan-ta 'peel it'; Hp sispa 'scrape it, shave it'; Tb šiip~'išib-'isïbiinat 'shave, whittle'; Cp síve 'shave/peel off'; Cp sípate 'strip off, as bark'; Ca sív 'shave'; Ca -če-sípi 'scrape, peel off'; Ls síva/i 'be peeled, scraped, vi;

peel, scrape, shave, vt'; Sr şiiv 'shave'; Ktn šiv 'plane, carve, scrape'; TO hiw 'rub'; TO hiwkon(a) 'shave, scrape'; Wr siba 'raspar'; Tr sipá / si'pá /sipí 'raspar, rebanar'; Cr ra-'an-tyí-sii-či-'iri-'i 'he cut it off of him'; CN šipewa 'to flay, skin, peel s.th.'; Pl šiipeewa 'peel, remove skin, bark, shell'. We can add PYp hiv- 'scrape'; ST hiiva 'raspar, escarbar'; NT ivííšumai 'brush, scrape, take off'; Eu siswa/sisba 'to brush'; Nv hiva 'raspar'; Nv hivi 'cosa raspada'. We find a wə- prefix in CU wəsívay and TSh wïsipeh 'scrape, peel off, whittle'. Some languages definitely show geminated *-pp- (Hp, CN, Pl) while others show *-p- (SP, Kw, CU), and others show both (Cp, Ca). Also note Sr şiikw(a) 'skin, peel, vt' vs. Sr şiiv(a) 'shave'; and Ls şívi 'shave' vs. Ls şíwi 'to peel fruit, to skin the hides from animals'. [p/kw?] [NUA: Num, Hp, Tb, Tak; SUA: Tep, Trn, Opn, CrC, Azt]

1893. *kïLipi 'shell or shuck corn, v': B.Tep133 *kïrivi 'to shell corn'; M88-kï14; KH/M03-kï14: TO kïliwi; LP kïkv-; NT kïlivi; NT kïliívai 'desgranarlo, vt'; ST kïlyiiv. Add Wc kïrïpu 'concha (shell)'. [l/r; liquids] [SUA: Tep, CrC]

1894. *(pi)-suma 'scrape, smooth, skin (an animal), v': Stubbs2003-39: ST humaa 'scrape, v'; CN šiima 'smooth, shave, vt'. For *pi-suma: Tr pésu-/bisú-; AYq vesuma 'skin, peel'; NT viúúmai 'quitar el cuero'; ST vioma 'prepare an animal for cooking'; Nv buhuma 'skin (an animal), v'. The initial *pi- portions are likely 'hair, hide, skin, n'. Jane Hill (p.c.) additionally notes Ktn šīm 'scratch' with a slight vowel change *u > ï, as often happens in Num, so perhaps here as well. [SUA: Tep, Trn, Cah, Azt; NUA: Ktn]

1895. *(wiC)-tono'oki 'scrape, pull out': Stubbs2003-2: TSh -tono'oki(n) 'scrape, vi'; TSh (wit)tono'oki(n) 'scrape, vt'; Ch win'ógi 'shave (body), rake, v'; Sh(C) wi-noih 'scrape, v'; Sh(C) -noih 'yank, pull out, vt'; Sh(M) -noih 'pull out'. [reductions] [NUA: Num]

1896. *kwuhV 'scrape off, degrain (corn)': Stubbs 1995-8: My búh-tuk 'se espigó'; My búh-te 'está espigando'; Yq buh-t 'espigar'; Tr ohó 'desgranar (remove grain from ears)'; CN kwi'kwi 'chip off (wood or stone), clean up a surface, take s.th. away, get ready, be prepared'. [SUA: Cah, Trn, Azt]

NB, for *sipa 'point': Munro.Cup *şííva-t 'point', see 'edge'. NB, for *oLa/i or *wo'La 'shell, degrain (ears of grain)', see at 'corn'.

Scratch: see touch, cut, scrape, dig

Scream: see shout

SEARCH, LOOK FOR; BUSCAR; see also see and hunt

1897. *wa'wa / *wi'wa 'look for': B.Tep35a *gaagai-a 'to look for'; not in M88; TO gaag; UP gaagï; LP gaag; PYp gaaga; NT gáágai; ST gaaga. I do not find this in M88; but to Tep let's add Cr wáwawau! 'búscalo'; Cr paráwauni 'búscalo'; and Mn wawiya 'chase, go after'; and probably Sr wii'wïn 'want, like'.
[NUA: Num, Tak; SUA: Tep, CrC]

1898. *haL / *hatiwa 'look for': BH.Cup *hál 'look for'; M88-ha12; KH/M06-ha12: Cp hále 'look for, search'; Ca hál; Ls háál 'look for, seek'; Miller also includes Hp heeva 'look for'; My háloste 'touch, feel'. Whether Hp belongs or not, Yq haríwa/haríu 'buscar' and My haríu/haría 'busca' likely belong. Thus, Tak and Cah point to *haLiwa. Lest one doubt Tak's ability to lose so many final segments, compare *makah(a)wi 'dove' for which Tak yields *makï. This may contain ha- prefixed to *tïwa 'find, see'; compare the ha- prefix in Tbr ha-tetemo 'hunt' vs. Tbr temo 'find'; but whether from *ha-tïwa or not, both Yq and My have apocopated variants: hariwa > hariu. And the final vowel in Cp hále suggests that Tak only apocopated one more segment: *hari(u) > *halï. [reduction; l/r] [NUA: Tak; SUA: Tbr, Cah]

1899. *pusaka 'search': Ch puságai 'look for'; CU pïságay 'search, look for'; SP šagai 'seek, look for' in SNum, and possibly Mn puhai 'look for, search for' and TSh puhai 'look for, search for' as reductions of *pusakai > puhai. [*u > i; s or sk > h in WNum and CNum] [NUA: Num]

1900. *putta 'search': Mn putaa 'search for, look for (unsuccessfully)'; NP putama 'follow'. [NUA: Num]

- **1901a. *rim** 'look at': Yq rem-te 'look at, watch'; My reem-te 'lift the eyes'; if Cah -r- < -t- after a previous/lost prefix or some other explanation, then it may tie in with the below:
- **1901b.** *tim 'look for': CN teemoaa 'look for'; Ls tóma 'go on a bear-hunting party'. Because Tbr mw < *w, Tbr ha-tetemo 'hunt' and Tbr temo 'find, see' are often thought from < *tïwa 'find', but the preceding terms make one wonder if the matter is more involved than that. Or is CN teemoaa a residue from close ties to Tbr, as we see elsewhere? [Azt/Tbr] [NUA: Tak; SUA: Tbr, Cah, Azt]
- **1902.** *wakka(-y) 'search for': CU wəqXáy 'look for, seek'; Sh waikki/wakki 'look for, search for'; Cm wehkinitï; Kw wuki 'look for'. [w rounds adjacent Vs] [NUA: Num]
- 1903. *ŋani / kani 'look for': Sr ŋaan 'look for'; Ktn ŋan / / ŋa'n 'look for, miss, vt'; SP kanii' 'seek'. Besides this set, *k/ŋamaL 'crush, grind' at 'grind' and *ŋüha / kühü 'grasp, catch' at 'carry' have Hp or Tak ŋ corresponding to k of other UA languages. [NUA: Tak, Num]
- SEE, FIND, LOOK, APPEAR; VER, HALLAR, MIRAR, APARECER; see search just above 1904. *tïwa 'find, see': Sapir; VVH21 *tïwa 'find'; B.Tep250 *tïïgai-i 'to find, see'; M67-365 *te 'see'; BH.Cup *təw 'see, find'; L.Son301 *tïwa/*tïw-i 'hallar'; CL.Azt140 *ïhta 'see, find'; M88-tï2 'find, see'; KH.NUA; KH/M06- tï2: Hp tïwa 'find, perceive'; Hp tïwi 'know-how, skill'; Tb tïwat~'ïïtïw 'look for, find, guess'; Cp tewa 'see, vt'; Ca téew 'find, discover'; Ls tów 'see, look at'; Ls tóówi 'see by second sight, be clairvoyant'; TO ceeg(ið) 'find, discover, learn, hear'; UP cïïgï; LP tïïg; PYp teega 'find, see, vt'; PYp teegida 'show, vt'; NT tïïgai; ST tïgi; Eu téwa; Wr tewa; Tr fewa/tewa; My téwwa 'hallar'; Yq tea; Tbr tema/temo 'ver, hallar'; Cr tyauu; CN itwa 'see, vt' from which the more common CN itta 'see, v.t., v.refl.' is derived (Karttunen). What do we think of Tbr hatetemo 'hunt' and Tbr temo 'find' (probably < *tïwa 'find'?), though we can hardly not list it at *tïmo 'search for' also. Ls tííwi 'see, look at' is interesting in contrast to Ls tów 'see, look at' and Ls tóówi 'see by second sight, be clairvoyant'. In light of the 2nd and 3rd consonants agreeing better with *tüpiN 'ask, seek', I put Sr tiïvïŋ 'find' at ask. Note here and in 'name' (Yq tea) Yq's loss of intervocalic w. [w > ø in Yq] [NUA: Hp, Tb, Tak; SUA: Tep, Cah, Opn, Trn, Tbr, CrC, Azt]
- **1905.** *nï(L) / *nïL'i 'see': B.Tep177 *nïida 'to look'; M67-366 *ne 'see'; L.Son174 *nï 'ver'; M88-nï1 'see s.th.'; KH/M06-nï1: TO nea, ne'a 'look, see'; TO neiđ 'see, discover, visualize, realize, perceive'; TO neiđa 'seeing, s.th. seen, sight'; UP ñïidï; LP nïij; NT nïidyá; ST nïidya; Wr ne'né 'verlo'; Tr né' 'mirar'; Tbr nyeré, nyera 'mirar'; Hp nïpcawi 'one who stares out of curiosity'; Hp(Albert, Shaul) nïkcawi / nïpcawi 'stare at, be easily attracted'; Cr ha-tá-nyee 'he is awake'; Pl neesi 'appear, look like'. Ls nóóli 'see, look, read, visit s.o.' is crucial to the medial consonant, as L > s in Azt adjacent to voiceless C. Others to be considered include Tr newá 'visible'; Tr ne'ná 'admire'; SP nayava/naya'pa 'seem, look like'; Tr e'né- 'see, look'; Tr e'náwa- 'be admired'; and CN neesi 'appear, reveal oneself, become visible'. In his NT dictionary in progress, Bascom lists NT ñeéyi 'see, vi'; NT ñídyi 'see, vt'. Tr newá- 'present, perceptible, realized (used with other verbs rather than alone)' is noteworthy. [l/r > y/d/s; w > v in Num like sun] [SUA: Tep, Trn, Tbr, CrC, Azt]
- **1906.** *nii 'look!': Tr né! 'look!'; TO nee 'look!' While associating this with *niL above may be tempting, both languages have separate forms. [SUA: Tep, Trn]
- **1907.** *pica (< *pita) 'see': L.Son193 *pica 'ver'; M88-pi21; KH/M06-pi21: Op vica; Eu vicá-; Yq bíca; My bícca. Add Hp pipca 'perceive, notice' and Tr beči / peči 'ver [see]'. Dakin (1982) and Miller also list CN itta/ihta, itwa, in light of loss of initial *p > ø, which is possible, for CN and Hp -c- both agree with *-t-, though CN itwa < *tïwa and itta < *piCta are also possible. Add Kw naviži (< *na-pici) 'appear, be showing' i.e. 'be seen' with passive *na- prefix. [NUA: Hp, Num; SUA: Cah, Trn, Opn]
- **1908.** *hiwi 'look, observe': Tr iwe/iye 'espiar, observar, acechar'; Tr nahiwe 'espiar, pl'; Yq híhiwe 'stare'; Yq híwe 'appear'; Sr hihi 'see, have in sight, look at'; Sr hi 'see'. [SUA: Trn, Cah; NUA: Tak]

- **1909.** *natka 'find': Eu nátka 'find'; Yq nánke 'find'; My nánke 'lo encuentra'. The UA velar does seem to have a certain, periodic nasalizing power, especially in addition to UA's propensity for consonant harmony. The change of *natka > *nanke in Cah may be another example. [C harmony] [SUA: Opn, Cah]
- **1910.** *huLa 'come up, look in/over': M88-hu19; KH.NUA; KH/M-hu19: Sr huur-q 'come up (as sun), come up over'; Sr huur-kin 'peek over, look in'; Ca húlaqan 'peek at s.o., lifting/sticking one's head out, v'; Ls húla 'sprout through the ground, poke through the surface, v'. Hill adds Ktn hurïk 'look forth, peep out, v'. With a question mark, Hill also offers the possibility of Hp hölö(k-) 'rise flatly, v' (comb. -wlö thus perhaps < *holö < **hulo). What of Tb huuda 'sun is up' or Tb hooyibï'ït~oohooy 'watch over, vt'?

 Note also PYp hoohod 'look'; ST hoohoiñ 'look at it'. [r/d; [*t > 1?; hu/wV] [NUA: Tak, Hp, Tb; SUA: Tep]
- 1911. *(i)soko 'look': Hp(S) soh 'look here!' and Wr isógo 'look!' [NUA: Hp; SUA: Trn]
- **1912.** *ta'uta 'find': TSh utaa 'find'; TSh ta'ota 'find'; Sh ta'uta 'find'; Cm urarï 'find'; Cm to'urarï 'meet someone, find something being looked for'. [*-t->-c-, *uta>uci; *hu>wV?] [NUA: CNum]
- **1913.** *-yu 'look at': Hp yori(-k) 'look, take a look, v.i., vt'; Cp á'ayu'e 'watch'; Sr yïhyï' 'look, look at, v.i., vt'; My huyú! 'míralo! he aquí!' While explanations remain elusive, a relationship among some or all of these seems more likely than not. [NUA: Tak, Hp; SUA: Cah]
- 1914a. *mi' 'look!': Hp me 'you see, listen, behold, hark, look'; Tr me'ne 'see, look, observe'.

 1914b. *mahay / *ma'ay(C) 'see, find': Kw mehe 'find, see, notice'; Ch mahí 'find'; SP mai' 'find, discover'; WMU ma'ái-y / maái- / maáy 'see, find'; CU maáy 'see, have found, find'; Ktn mayk / mayhk 'look forth or peep, as through a crack'; perhaps first part of NP muhabïpïnui 'peek at'. [NUA: Hp, Num, Tak; SUA: Trn]
- 1915. *hwaci 'look, peek at': Kw huzi'a 'look, peek' and NP wazipunni 'peek at'? [NUA: Num]

NB, for *puni 'turn, look, see' see at 'circle'.

SEED, PIT; SEMILLA, CUESCO, HUESO DE FRUTA

1916. *paCci / *pa'ci 'seed': M67- 103 *paci 'corn'; L.Son181 *paci 'semilla'; CL.Azt141 *aač 'seed (corn)', 313 *paci 'seed (corn)'; M88-pa3 'seed'; KH/M06-pa3; Jane Hill 2001, 2007 *pa'ci: Eu suváci (acc: subáta) 'seed'; Op baci; Tbr waci-rá-n; My báči-a; Yq bací-a; Wr pahcí; Tr bací-ra; Wc hasí; Cr hací; CN ač-tli 'seed'; CN ayo'wač-tli 'squash seed'. Found in TrC, Corachol, and CN; ie, SUA except Tep. Note CN ač-tli 'seed' has the expected sound correspondence Ø < *p, while wač-tli 'seed' has the expected Tep correspondence; one could surmise that it was borrowed from a Tep language, though no cognate is in Tep; however, Tbr has a similar form. CN piic-tli 'pit, stone of a fruit' agrees with *puc (see below), yet shows p. Lionnet lists two sets—L.Son 181 *paci 'semilla' and L.Son182 *paci 'elote'—perhaps connected, but with different forms in some languages: L.Son182 *paci 'elote'; Yq báci; My bátci; Wr ihpací; Tr pací. Jane Hill (2007) adds Hp paacama 'hominy' and Tb pacaah ~ apacaah 'shell it, vt'; Tb pacaahil 'shelled pine nuts' and due to underlying clusters *-Cc- or *-'c-, NUA -c- aligns. [*p > p vs. Ø in CN; Tbr-CN similarities] [SUA: Cah, Trn, Opn, Tbr, CrC, Azt; NUA: Hp, Tb]

- 1917. *puCci 'seed, pit': M88-pu23; KH/M06-pu23: UA *pusi 'eye' and UA *puci 'seed' are often put together, because in some languages the word is the same for both (such as Ls puš-la); on the other hand, several other languages have different (but similar) words. I presently go with Miller and Hill in differentiating them as they do: pu4 'eye' and pu23 'seed', though several forms are cross-listed. Those with different forms than for 'eye' include: CN piic-tli 'pit, stone of a fruit' (vs. CN iiš-tli 'face, surface, eye'); Ca púči-ly 'seed' (vs. puš 'eye, face'); Cp púči-ly 'seed'; Sr a-puuč; Gb púcen fruit, seed'; Ktn -puc. [NUA: Tak; SUA: Azt]
- **1918.** *ici-tukai 'seed': from B.Tep341 *'ïsitukai 'seed as wheat'; NT ïšt^yukai; ST 'ïšt^yuk; LP ïščïk. UA *tuka 'bury, plant' ties to *tuka 'night' as 'sun goes down below earth' and 'seed goes below earth'. [SUA: Tep]
- **1919.** *kai-tukai 'seed': B.Tep95 *kaitukai 'seed'; M88-ka27: NT káít^yukai; ST kait^yuk; UP kaičï. This compound has a common element with the above compound, *-tukai, perhaps cognate with CN tooka 'bury, sow'; Pl tuuka

'bury, plant'; and Tr o*kí 'very small seed'. Or might the Tr ŕo'- in Tr ŕo'mo-rí 'grano tierno' and Tr ŕo'mó-'granar en vaina, formarse los granitos de las semillas que se dan en vaina, como el frijol' also tie to *tuka? [SUA: Tep, Trn?, Azt]

1920. *tari / *taLi 'seed': Tr tarí 'semilla, grano para sembrar'; Wr ihtári 'semillas para sembrar'. [Wr ih-] [SUA: Trn]

1921. *paha(i) 'seed': Sh(C) pahai / pahe /pehe 'seed'; Sh paihai 'seed, pit'; TSh pehe(cci) 'seed, pit'; Cm pehe 'seed'. [NUA: CNum]

NB, for *suna 'seed', see heart.

NB, the various Tepiman forms (B.Tep341 *'ïsitukai 'seed as wheat'; B.Tep95 *kaitukai 'seed', and B.Tep93 *kaidï 'its seed') have in common tukai in two of the three Tep terms for 'seed'. For *ïsi (< *ïci), see plant. NB, for *taka 'seed' (Tr ŕaká(ra); Wr taka), see root, as it is likely the same stem as *taka 'root' since the seed is the beginning of and thus the root.

Sell: see trade Send: see rule

Separate: see fork or different

Set (of sun): see sunset, night, and black Seven: see under the numbers toward the end

Sew: see weave Sex: see copulate

SHADE, SHADOW; SOMBRA, UMBROSO

M88-hï1 'shade'; M67-367 *heka 'shade'; I.Num44 *hïpa/*hïka 'be cool'; L.Son58 *hïka 'sombra'; B.Tep346 *'ïïkagï 'shade, shady'; KH/M06-hï1 *hïïka (AMR) 'shade': The fact that SUA has all medial -k- while Num has nearly all medial -p- initially had me doubting their union; however, the fact that Sh has *hïpa, *hïki, and *hïka convinced me that Miller may be correct in uniting the two sets, whether separate suffixes (*hVC-ka (having shade) vs.hVC-pa (in shade) or s.th. else. The ST forms also show both -p- and -k-. For lack of an obvious reconciliation of medial *-k- and *-p-, let us consider *hïka and *hïpa by separate letter at least:

1922. *hikka(wa) 'shade': Cm hikki 'shade, brush arbor'; Cm hika-h 'cool off, v'; WSh hiki 'shade, shadow'; Hp hikya 'cool down, vi'; TO iik 'get in the shade'; TO iika 'bec. shaded'; TO iikeg/iiheg 'shade, n'; TO iikag 'shade, shadow'; LP 'iikig; NT iikági; ST 'iika'; Nv 'ikada 'sombra'; Eu hekát 'sombra'; Eu hekawa 'sombra'; Wr ehka 'haber sombra'; My hékka 'sombra'; CN e'kawyoo-tl /e'kau'yoo-tl 'shadow, shade'; CN ekawiil-li 'shadow, shade'; CN e'kawi 'to shade'; Pl yeekah-yu 'shadow, shade, n'. Consider also AYq hekka 'shade, n'; PYp eekega 'shade, shadow'; Tr ká/kára/kábora 'shade'; ST ipgidya' 'dar sombra' and ST iikaya' haber sombra'. [k/p] [SUA: Tep, Cah, Trn Opn, Azt; NUA: Hp, Num]

1922b. *hapa / *hippa 'shade': Mn habaa/hapaa-t 'to shade'; Mn haba/hapa 'shade house'; Mn habána 'in the shade'; NP hapa 'shade'; Sh hipa, hiki, hika 'shade'; Kw hava 'shade'; SP ava-vi 'shade' (cognate? Miller queries; yes, it is only missing initial h-, a very vulnerable whisper diachronically; CU 'aváa 'shadow'. Add WMU aváa 'shade, shadow, n'; Ch(L) hava-vi 'shade'; TSh hippa 'shade, shade house' and TSh hippaiya(nna) 'shadow'. [NUA: Num]

1923. *kis / *kiCsi 'shade': Hp kihsi/kìisi 'shade, field hut, s.th. that makes shade'; Ca kís-iš 'shade'; Cp kísi-š 'shade'; Cp kísi-š 'shade'. Probably not the -kayc of Ktn tïkwakayc 'shade house, where people live in summer'. [NUA: Tak, Hp]

1924. *taski 'shade': Ls táşki 'cast a shadow, vi'; SP tïkkiaa 'shaded'. [-CC-] [NUA: Num, Tak]

SHAKE, SWING, MOVE; SACUDIR, ESTREMECER(SE), MOVER(SE)

1925. *hïya 'rock, shake, swing': M88-hï9; KH.NUA; KH/M06-hï9: Gb hoyó'o 'manéalo [shake it]'; Sr hïïyï' 'shake s.th.'; Ktn hïyïk 'swing, v'; Ls hóóya/i 'rock (as rocking chair)vi, blow (of wind), vt'. [Gb, Sr, Tak V's] [NUA: Tak]

- **1926.** *huyu 'move': M67-296: Hp hoyo(k-) 'move, change position, grow (taller)'; Tb 'ooyoogat ~ 'ooyook 'he is moving'. Sr hunu'|kin 'move, move around, change residence' has very similar meanings, but a strange medial C (y/n > *L?). Tb could have assimilated V's: *u-a > o-a. [vowels; *L >y/n?] [NUA: Hp, Tb, Tak?]
- **1927.** *kayaw 'swing': M88-ka40; KH.NUA; KH/M06-ka40: Ca káyaw 'to swing'; Sr qayawk 'to swing'; Ls qáya/i 'fall, blow down (as a tree)'. [NUA: Tak]
- 1928a. *wiwi-puku 'tremble': Sapir; B.Tep40 *gigivukui 'to tremble'; M88-wi12; KH/M06-wi12: TO gigiwuk; Nv gigibuku; PYp gigvia 'tremble, shake, shiver, vi'; NT gigívukui; ST gi'ivuk; Sapir ties Tep and CN wiwio-ka 'shake from cold'. CN wiwiyoka / wiwiyokowa 'tremble, shake, shiver' corresponds to *wiwi-puku well enough, since Tep *gigivukui roughly corresponds to UA *wiwipuku, and if CN lost p intervocalically, as it often does, or if this is a compound of an element that lost initial p in CN, then Tep *gigivuku and CN *wiwi-ok(ow)a correspond well, CN -y- likely excrescent following i. In fact, NT gigíívukui 'temblar, vi' and NT gigíígidyi 'sacudir, vt' would suggest such a morpheme break. With that potential morpheme break, consider: 1928b. *wiwiLa 'shake, swing': Hp wiiwila 'shake, swing, wave around' and Tbr wimwirá 'temblar' are also likely, both showing a 3rd consonant liquid, not unlike the one NT form.
 [liquid; CN saayoolin 'fly, n' < *saipoli similarly lost medial -p-] [NUA: Hp; SUA: Tep, Tbr, Azt]
- **1929a.** *cïL 'shake': CL.Azt143 *cəlowa 'shake'; M88-cï9; KH/M06- cï9: CN cecelwiaa 'shake out, beat s.th. for s.o.'; CN ceceloaa; Pl cehcelua, etc. To those might we add Tr lowé/rowé 'moverlo, agitarlo, batirlo' (Tr rowá 'agitar') with loss of first syllable? [SUA: Azt, Trn]
- 1929b. *cïLïLï / *siLaLa 'shake, rattle': Mn sïnïnïgi 'quiver'; NP sïnïnïggiwïnï 'scared and shaking'; TSh sïnnïnnïki 'shake, shiver'; Cm sïï-cïnitï 'have chills, tremble with cold, vi'; Kw sïnïn'a 'shake, shiver'; CU sïnïgay 'shake, shiver, tremble, be nervous'; Hp silala- 'clack, jingle, rattle'; Tb cïnïnïi" ~ 'ïcïnïnïi" 'shake in fright'; Ca čéleley 'shake (of body)'; Ktn šariri' 'trembling'. Though most of these have the 2nd syllable reduplicated, CN cecelwiaa 'shake out, beat for s.o.' and CN ceceloaa 'shake, save s.th., vt' reduplicated the first. 1929c. *ciLi 'jingle, make rattling sound (when moved, shaken)': CL.Azt156 *čiliinV 'to sound, ring'; M88-ci12; KH/M06-ci12: CN čilni; Pl ciliini; Hp silala-ta 'to be jingling or clinking'. Add Ca čilčil 'to sound (of a rattle)'; and maybe CN čil-li 'chili' as a plant that rattles in the breeze when ripe.[c/s] [NUA: Num, Hp, Tb, Tak; SUA: Azt]
- 1930. *cawiLa 'shake': Hp cacwina 'shake dust out'; Cp čáwele-ine 'shake, be shaken'. [NUA: Hp, Tak]
- **1931a.** *yoki 'shake': Yq yók-te 'sacudir (un árbol, etc.)'; Eu dóhira 'sacudir'. The -yok(ow)a portion of CN wiwiyoka / wiwiyokowa 'tremble, shake, shiver' can hardly be both here and at *wiwi-pukV above. Jane Hill (p.c.) notes also Ca yuki 'get scared, be afraid'. [SUA: Cah, Opn; NUA: Tak]
- **1931b.** *sayuki / *cayu-k- 'shake, fear': Sh sayuki 'shake, vt' and/or Hp cayo-k-na 'beat on firewood to break away burned portion'; Hp cayo-(k) 'pop out of the pod with an audible sound'; Hp cayo-min-ta 'be beating on in order to break pods open'. These may or may not have another morpheme prefixed; thus, the tie to *yoki / *yuki is tenuous at best. And if ca- is a prefix 'by hand', then the Hp form might better tie into the below. [NUA: Num, Hp]
- **1932a. *yowa** 'shake': Yq yóa 'temblar, sacudir'; My yoowa 'temblar'; Wc yúa 'shake, move, vi.'; Wc yúi-tïa 'hacer moverse'. Yq and My *yo(w)a 'shake'.
- **1932b.** *yuyi / *yuwi 'shake, be weak, dizzy': M88-yu25; KH.NUA; KH/M06-yu25; Ca yúyi 'quiver (legs, e.g., as when climbing down a steep slope)' i.e., from weakness; Sr yuuyk 'be/get dizzy'. Add SP yoi-ġa-N 'flutter, shake rapidly'. What of Kw yuyuwe'i 'faint, v' as redupl of Kw yuwe'e 'be not, absent'? These may relate to *yowa/i above, and perhaps to *-yu/yo(k) further above. [NUA: Tak, Num; SUA: Cah, CrC]
- **1933. *sowa** (< *sawa?) 'shake': Tbr sowá-t 'raspa'; CN wiwišoaa 'shake or rock s.o. or s.th.'; Tr sawe 'sacudir'; Wr sawé 'sacudir'; perhaps Ls şóra/i 'tremble, shake, vi, shake s.th., vt'. Ls generally shows e < *o, but if the o assimilated from *sawa, then that would not apply. [Vs] [SUA: Tbr, Trn, Azt; NUA: Tak]
- **1934. *numika** 'shake': Eu nomíkdaa 'shake, stir'; TSh nïmïkan 'move, quake, tremble, shake'. [NUA: Num; SUA: Opn]
- 1935. *mïyï 'shake, wriggle': KH.NUA: Sr mïyï'(kin) 'cause to shimmer'; Cp méye 'squirm, wriggle'.

- 1936. *ŋaya 'move or shake side to side': Hp ŋayaya-ta 'be swaying, rocking from side to side'; Hp ŋayayàykï 'start shaking or swaying from side to side, sway from side to side repeatedly'; Ca ŋáya 'shake head saying 'no'; Cp ŋáye 'shake head'; Ls ŋáya/i 'be winnowed with a rotary motion, vi, winnow, vt'. They all involve side-to-side motion, Ls adding circular to the side-to-side motion. [NUA: Tak, Hp]
- **1937.** *ŋina / *ŋina 'shake (earth), rumble and vibrate': Ca ŋéneney / ŋénen / ŋénen 'make a noise with vibration (thunder, car, etc.)'; Cp ŋéne 'run (pl subj), vi'. When several deer or elk run (Cp), the earth vibrates and a rumbling noise is made, which semantically fits Ca, and possibly Ls ŋíini 'be an earthquake'; the first vowel is not entirely consistent, but occasional i/e alternations occur in Cup. On the other hand, Ls ŋóóna 'moan, hum (of bees)' and the other two do align with *ŋïnV. Ls ŋóra/i 'run (pl subj) fits Cp ŋéne 'run (pl subj), vi' in both vowel and semantics, but has a different second consonant. Could borrowing and rotary diffusions in the Tak areas be involved? CNum (TSh nutaan 'run, pl'; WSh nutaan/nuraan 'run, pl'; Cm nuraakitï 'come running') fits semantically, but is dependent on η > n and u/ī interchangeability. [NUA: Tak]
- 1938. *kwata' / *kwaLak / *kwarak- 'shake (of earth), be noisy' (the semantic combination suggests lightning): Sr kwaara'q 'shake, vi'; Sr kwaara'q 'make noise, be noisy, vi' (Ken Hill separates the two preceding verbs as 1 and 2, though identical phonologically); Ls kwaráti 'croak (of frogs)'; Ktn kuru'rïk 'boom, thunder, rumble, roar, crash, vi'; and TO bebeđki 'thunder, rumbling'. The TO consonants likely align, as the glottal stops in other forms may derive from a velar stop in a cluster. AYq bwalwotta 'make tremble'. [liquids] [NUA: Tak; SUA: Tep, Cah]
- 1939. *to'ni 'shake off': Stubbs2003-2: SP ton'ni / ton'noi 'shake off'; SP wï-tton'ni / ton'noi 'shake out'; SP na-ŋwï-tton'ni 'shake oneself'; NP nïïtïnoi 'shake water off (of dog)'; WMU qwhttö'ni / hwittö'ni 'shake, vt'; Kw tü'ni 'sift, winnow, shake, strain'; Kw wü-tü'ni 'shake out (wï- 'with instrument)'; Kw na-wütü'ni 'shake oneself, shake off'. NP nïïtïnoi 'shake water off (of dog)' is an assimilation or leveling of what the SNum languages show as *na-wï-to'ni. [NUA: WNum, SNum]
- **1940.** *camu 'shake, rustle, make noise': TO šaamug/šaamuđ 'shake, vt, make a noise, vi'; TO šaamuni 'make a sound, rustle'; PYp saaman ''rustle, shake, vi'; NT saamúídyakaroi 'la sonaja'. [SUA: Tep]
- **1941. *yata** 'shake': Ls yarára/yalása 'shake like jelly, v'; Kw yaarïrï'ï 'shake, tremble'; Kw yaadaga 'shiver'. [t/l] [NUA: Num, Tak]
- **1942. *capa** 'shake': PYp sav 'shake off'; Nv saba 'sacudir'; Nv sabi 'cosa sacudida'; Tr(H) asapa 'sacudir'; the Tr reflex may be borrowed from Tep since we would expect Tr c for Tep s. [-a/i vt/stative] [SUA: Tep, Trn]
- **1943.** *tuLipa / *tVLV 'shake': Wc titiriva 'estar temblando'; Hp tiriri 'be shivering, trembling, shaking'; Eu turiré nomíkdaa 'shake, stir'; Cr rubibéh 'tiembla'; AYq ra'ati 'sound of s.th. brittle, clanging'; AYq rii'itia 'jingling, vi'. [L > ' in AYq; C harmony in Cr; liquids in NUA and SUA] [SUA: Cah, Opn, CrC; NUA: Hp]
- **1944.** *pantu 'shake, bounce': SP pantu 'shake, v'; Ch(L) pantunkwagaigyah 'bouncing up and down'; Ch(L) pantunkwagaivya / pantuk'kwagaivyah 'will go along bouncing up and down'. Could this be the source of SUA *pantu' 'badger', as it jiggles a bit while bobbling along? [NUA: SNum]
- 1945. *ŋïLïL / *ŋïrïr 'move, move over': Sr ŋïrïr|q 'move, move over'; Ktn ŋïrïhr-ïk 'edge down over (difficult concept to generalize)'. As the Ktn term differs from Ktn ŋilil-k 'catch up with, overtake, vt' at 'circle', this set is separated from *ŋVLiL at 'circle', though a relationship is not impossible. [NUA: Tak]

NB, note the consonant harmony in Tr čákora / čákara / čárora 'temblando, estremeciendo'. NB, for Tak *ŋïL see dizzy.

Shaman: see heal.

(A)SHAME(D), SHY, EMBARRASSED; AVERGONZARSE, TÍMIDO

1946. *hamana 'shy': BH *hamV 'be ashamed'; M88-hall 'be ashamed'; KH/M06-hall: Cp hamáne 'be ashamed'; Cp hamáni- l^y 'shame'; Cp hamáni-s 'embarrassed'; Ca háman 'get stage fright, avoid s.o. being ashamed'; Ls hamoo-ya 'be ashamed, shy'; Ls hamó-humu-s 'shameful'; Hp hamana 'shy'. All cognates agree with a 2^{nd} vowel of a, except Ls. Did Ls change a > i due to stress patterns before the change i > 0? [NUA: Tak, Hp]

1947a. WNum *nasukwai 'shame': Mn nasukwai-kï 'shame, vt'; Mn nasukwai-pï 'genitalia'; NP nasuggwaidï 'shamed someone'.

1947b. CNum *nasuwai / nasu'ai 'shame': TSh nasuwai(n) 'shame'; Cm nasu'aitï 'ashamed'. [medial *-kw-/-'w-] [NUA: Num]

1948. *ca'i (a)shame(d)': TO sai eD 'bec ashamed'; TO sai eDa 'shamefully'; Nv saiïrha 'avergonzarse'. [SUA: Tep]

1949. *tiwa 'shy, embarrassed': Yq tíiwe 'tener vergüenza'; Yq tíura 'vergüenza'; AYq tiwe'era 'shy'; AYq tuisi embarrassing'; AYq tittiwe 'embarrass easily'; My tiiwe 'tiene vergüenza'; My au tiutúa 'se avergüenza'; Eu tivé 'tener vergüenza'; Tr fiwerá 'apenarse, avergonzarse'; Cr tí'itebi'ira 'avergonzarse'; Cr rutébi'irah 'está timido'. Jane Hill (p.c.) provides us a wonderful addition in Ktn ciu' 'be ashamed, vi, be ashamed of, vt', as the propensity of palatalizing *ti > ci makes it quite probable, and adds a NUA branch to the set. [V metath in Cr?, w > b in Cr; *w > v in Eu] [SUA: Cah, Trn, Opn, CrC; NUA: Tak]

1950. *tukkwi '(a)shame(d)': Kw tukwi-ye'e 'to be ashamed, bashful'; SP tukkwi 'shame'; WMU č*uh*kkwi'ye-y 'be shy, bashful'; CU tukwiy-'ay 'be bashful, shy, modest, vi'. [NUA: SNum]

1951. *pinawa 'ashamed': CL.Azt4 *pinaawa 'ashamed'; KH/M06-pi23: CN piinaawa; Pl iišpiinaawa. [SUA: Azt]

Sharp: see edge Shave: see scrape

Shawl: see blanket, cloth(ing) Sheep, mountain: see bighorn

Shell: see skin

SHIELD; ADARGA, ESCUDO, ADARGARSE

1952. *(V)nami 'shield': Eu 'inámira 'adarga'; Eu 'ináma 'adargarse'; Nv m'hunamida 'adargarse'. [SUA: Tep, Opn]

NB, for *kapaL 'shield' (TO kawaD 'war shield'; Nv kava'arha; Nv kavar'ha 'make a shield'), see 'flat'. NB, *tïw of Hp tïwvota 'shield for combat' (tïw-vota 'enemy-coiled plaque') and CN tewewel-li 'shield' are a consideration, to which Jane Hill (p.c.) adds Ch tïvo 'macana' (Merriam Ch noun list).

Shine: see sun, lightning, or fire Shirt: see cloth, clothing

SHOE, SANDAL: ZAPATO, HUARACHE, CACLE

1953. *tuti (> *tuci (Hp), > cuci > Tep sus V) 'sandals': B.Tep209 *suusaka 'sandal'; M88-cu18; KH/M06-cu18: TO šuušk; LP šuušak; NT súúsaka; ST suusak. Add Nv suska 'zapatos' and Eu cuci-de-m 'ponerse (zapatos)' (Lionnet 1986, 79). *tuti > Hp tooci 'shoe, moccasin' (Hp o < *u; NUA -c- < -t-, not *-c-); and Eu cuci- is the intermediate form, palatalizing both *t > c before high Vs; in time for *c > Tep s: *cuci > Tep susi. Tep Vs often anticipate/assimilate to the next V, in this case to the following -ka, so *tuti > *cuci > *susi-ka > susa-ka. What of Sh tattoo 'put on shoes'? [Tep s < c < t] [SUA: Tep, Opn; NUA: Hp]

1954. *kaka 'sandal': Sapir; M67-372 *kaka 'shoes'; L.Son70 *kaka 'huaraches'; M88-ka4 'sandal, shoe'; KH/M06-ka4: Tbr kaka-yí-t; Wr kaká; Tr aká; Wc kaakái; Wc kakahi (Sapir); Cr ka'aké; CN kak-tli. [SUA: Trn, Tbr, CrC, Azt]

1955. *wa(C)ci(kaC) 'shoe': BH.Cup *wá...at 'shoe'; M88-wa22; KH.NUA; KH/M06-wa22: Cp -waq'a 'shoe (poss'd)'; Ca wáqa-t 'shoes'; Ls wáčxa-t 'shoe'; Sr waqaa-t; Tb wacat~'awac 'walk'; Tb waacišt walking aid (cane,

shoe, etc.); Tb wahcipiï-1 'moccasin'; Tb(M) wacibiš-t 'big shoe'; Tb(M) wacibiï-l 'good walker'. Most of the Tak languages (Sr, Ca, Cp) show s.th. near *waka, but Ls has an extra consonant in Ls wáčxa-t. Curiously the Tb words show the consonant c/č, but no velar (k/q) afterwards, so that tie is not certain, but likely, if an original cluster existed, as Tb -hc- and Ls -cx suggest. [-CC-] [NUA: Tak, Tb]

1956. *wok 'shoe': My wok 'put on shoes, v'; Tb wongo-l 'shoe'. Might this tie to *wok 'foot, footprint' at 'track'? [This and 'pine' and 'domestic animal' all 3 have Tb η with SUA k. [NUA: Tb; SUA: Cah]

1957. *paNca 'shoe': TSh pancan 'shoe, moccasin'; Kw paca-vï 'shoe'; Ch pacácivü 'moccasin'; SP pačča 'moccasin'; WMU pač 'shoe, sandal, n'; WMU pahccá-n 'my shoe'; CU páca 'shoe'. [*-NC->-CC-] [NUA: Num]

1958. *moko 'footwear': Mn móqo 'shoe'; Mn moqoya 'wear shoes'; NP sogo-moko 'moccasin'. [NUA: Num]

1959. *tapa(C)ta 'footwear': Mn tapáca '(soft) shoe'; PYp teev 'handmade shoes'; Eu 'óbat 'zapato' is lacking too much for inclusion. [Most NUA intervocalic -c- < *-Ct-] [NUA: Num; SUA: Tep, Opn?]

1960. *pïtî 'footwear': Yq béra'a boočam 'huaraches'; Tr péreara 'sole of shoe'. [SUA: Cah, Trn]

1961. *poca 'zapatos': Yq bóočam 'zapatos'; My boóčam 'zapatos, calzado'; AYq voočam 'shoes'. [SUA: Cah]

Shoot: see throw Shore: see edge

SHORT; CORTO

1962. *kapu 'short': B.Tep97 *kavurika 'short'; M88-ka29 'short'; KH.NUA; KH/M06-ka29: Ls kapá-kpa-ma-l 'short, low'; Gb kamúho' 'cortito, muy chapo'; Sr qapörčka' 'short one'; Sr qapörčkin 'shorten'; Sr qapöči'k 'be short'; TO skawuD 'closely, short'; TO kawuDk 'short-legged'; NT kavúlika 'short'; ST kavuul^yik 'short'. [liquid in Tep] [NUA: Tak; SUA: Tep]

1963a. *toppo / *topi 'short': M67-374 *tup 'short'; I.Num217 *tohpV 'short'; M88-tu18; KH/M06-tu18: Mn toppo-; TSh toppocci(cci); Kw tove'e-pii-či; SP tovi, toppi 'short'. Let's add Ch toví-ci 'short'. [NUA: Num] **1963b.** *tappu 'short': Mn tapocici'ini-tu 'very short in height or length'; Tb tabuu'upil 'short'; and what of Ls lapá-lpa-š 'stunted, stubby'?

1963c. *tippV 'short': PYp tepelika 'flat, short, level'; Nv tipirhika 'corta'; Ca tépi 'be short (clothes)'; CN tepitoon 's.th. small'; CN tepicin 's.th. small'. Diminuitives like CN cin may render some of these as 'height-small'. [NUA: Num, Tb, Tak; SUA: Tep, Azt]

1964. *capu 'short': Hp caava 'short, adj.'; Hp caavo 'at/for a short distance, adv, for a short interval of time'; TO šopol 'short'; TO šopolim 'for a short time'. In contrast to Hp and TO šopol, others like TO čaabo 'short-legged' and Sr čaapu' 'short' may be borrowed from Mexican Spanish chapo (KH.NUA). But in light of the two Hp forms and TO's expected sound correspondeces with a vowel assimilation, those at least look older than the European presence in America. An online dictionary says chapo is colloquial Mexican—borrowed from UA? [NUA: Hp; SUA: Tep]

1965. *muCto / *muCti 'short': Ca múti 'be short'; Cp múteqe 'to make short'; perhaps AYq molonko 'short, of person'. [-Ct->-t->-l- in AYq, because -l->-'- in Cah; *-CC-?] [NUA: Tak; SUA: Cah]

NB, for *(a)ku(t/L)i 'small, short', see little.

SHOULDER: HOMBRO, ESCÁPULA

1966. *kotapa / *kotapo 'shoulder': B.Tep112 *kotava/o 'shoulder'; M88-ko29 'shoulder'; KH/M06-ko29: TO kotwa / kotïwa; LP kotov; PYp kotev 'shoulder blade'; NT kotáva/kotááva 'hombro'; NT kotbo 'hombro'; ST kotvo. Not without their difficulties, other words raise interesting possibilities. If the initial 'a- could be isolated, the -kol- of CN a'kol-li 'shoulder' is noteworthy. As for Tepiman *kotava/o 'shoulder', note that the latter portion

- of Tr na-'tapu 'push with the shoulder' is quite identical to the Tep forms (*kotapo and 'tapu) if we consider that a reduction of the first syllable caused k > ' in a cluster (*na-kotapu > *na-ktapu > na'tapu), for na- as the reflexive prefix (exert self, shoulder oneself to s.th.) is a likely morpheme break. Likewise, Mn téébï 'shoulder' may be related if first syllable was lost. SP antiŋwiaavu 'shoulder' might align with Mn if nasalization before both consonants (-nt- and -Nb- > -ŋw-) were explainable. M88 includes Tak *qola (Cp qily'a 'nape of neck'; Ls qelá-t 'neck') both here at ko29 'shoulder' and at ku9 *kuta 'neck'. While either may be possible, perhaps the presence or lack of a 3rd syllable -pV may divide them. So I put Tak *koLa at neck. [reductions; Azt l] [NUA: Num; SUA: Tep, Trn, Azt]
- 1967a. *sïka 'shoulder, arm, armpit': M67-7 *seka 'arm'; M67-375 *seka 'shoulder'; L.Son249 *sïka 'brazo, mano'; M88-sïl 'armpit'; KH.NUA; KH/M06- sïl 'armpit': Hp sïkyakci / sikyakci / sökya 'shoulder'; Cp şék'a 'shoulder (poss'd n.)'; Ca sék'a 'shoulder (poss'd)'; Ca sek-ŋa 'on the shoulder'; Ls sóóka 'shoulder'; Gb sok(in) 'shoulder'; Sr şiïka' 'shoulder, upper arm'; Ktn šïka-c 'shoulder blade'; TO hïk 'armpit'; Tbr saká-r/ haká-r 'sobaco, agalla de pez'; Yq séeka 'armpit'; My séeka-m 'armpit'; Wr seká 'mano, brazo'; Tr seká 'mano, brazo'; Cr 'ískwa'a-ri 'armpit'/ 'ïskwe'i-ri 'armpit'; CN siyaka-tl / siaka-tl 'armpit'. Add Tb šiki-t 'upper arm, arm'; PYp he'ekado 'armpit'; NT ïkáádī 'arm, hand'.
- 1967b. *sïkuN / *sïkuN (Num) 'shoulder': Mn sikkuppï 'shoulder blade'; Sh sikkumpï 'shoulder blade'. TSh sikkum-pï 'shoulder blade'; Kw sïgu-pi 'shoulder meat (of an animal)'; WMU skumpï 'shoulder'; CU sïku-pï 'scapula bone'. So we have Num *sikkuN-pï 'shoulder'; Tak *sïk(')a 'shoulder'; Hp; Tb; Tep *hïka 'arm, armpit'; TrC *sïka 'armpit' in Cah, 'arm, hand' in Tr/Wr; Cr 'armpit' and CN si(y)aka-tl 'armpit'—a reflex in every branch and in most languages. What of -cikora in Eu macíkora 'shoulder blade'? Note also the clear nasal in WM, TSh, and Sh. [CN iya; Gb o] [NUA: Num, Hp, Tb, Tak; SUA: Tep, Tbr, Cah, Trn, Opn, CrC, Azt]
- **1968.** *co'a(C) 'shoulder': Cm co'apï 'shoulder'; Sh coa-ppïh 'shoulder'; TSh cooppïh 'shoulder'; Kw coo-vï 'shoulder'; SP coavï 'shoulder'; CU cöö-vï 'shoulder'; CU cöö-vï-n 'my shoulder'. Though Miller includes NP soapï in M88-sï1 above, it appears to belong here. [NUA: Num]
- **1969.** *mato 'shoulder, n; carry on the shoulder (or in hand), v': Eu matót 'shoulder'; Eu mató'o, matói (preterit), matóste (future) 'carry on the shoulder'; Nv matoriga 'carry in the hand or on the shoulders'; Wr mahto-cí 'the flat part of the shoulder (always with locative -ci)'; Tr mato-či 'shoulder'; Tr matógara / matóara 'shoulder, shoulder strap/pad'; Wr mahtoká 'shoulder, the corner of'; NT mootóigi 'carry in the arms or on the shoulder'; momóótoi 'hold in the arms'; Tr mutu-ma 'have, take, carry in the hand or in the arms'. NT and Tr are a vowel assimilation of the above: *mato > moto. And what about Tr morú 'carry, arrive with a load'? [SUA: Tep, Trn, Opn; NUA: Tak]
- NB, for *mama 'bear, carry on shoulders, govern' (CL.Azt25 *maama 'carry'), see 'carry'.
- SHOUT, YELL, SCOLD, GROWL; GRITAR, REÑIR, REGAÑAR; see also cry, bark, angry 1970. *sina(ka) 'shout': B.Tep63a *hiinakai 'he shouts'; 63b *hiinaki 'to shout'; 63c *hihina 'he shouted'; L.Son242 *sina 'gritar'; M88-si4 'shout, yell'; KH/M06- si4: TO hiink, hiinad 'yell to'; LP hiiñk / hinakï; NT iiñáki/iiñakai; ST hiiñki(a), hiiñak (pres.) 'shout'; Wr siná; Tr siná. Add PYp hihinia 'shout'. Might these tie to *sinawa 'coyote' at coyote? [SUA: Tep, Trn]
- 1971. *caNi 'shout': L.Son27 *cani gritar'; M88-ca12; KH/M06-ca12: Op cane; Eu cána; Wr ca-ní, ce-má 'decir'; Tr caní 'decir'. Wr ca-ní may cast doubt on the -nV syllable being part of the proto-stem, though the nasal in Ls čányi 'scold, talk back to s.o.' and SUA n in Op, Eu, Tr lean otherwise. Some of the TrC forms align with Tb and *cayaw below. [SUA: Opn, Trn; NUA: Tak]
- **1972.** *cayaw 'shout': Tb caayaau; My čaaye / cáyye 'gritar'; Yq čáe/čái, Tbr cai-/ca- 'gritar'. What of Hp(S) caalawï 'announce, call out' as some y from liquids? [*L > y?] [SUA: Cah, Tbr; NUA: Tb, Hp?]
- **1973.** *ca'ci 'shout': CL.Azt144 *cahci 'shout, bark, v': KH/M06-ta41: CN ca'ci 'shout, proclaim, bray, crow, etc.'; Pl cahci. Hill queries whether Hp tayati 'laugh, v sg' is cognate. Good question! [SUA: Azt]
- **1974.** *kwuy / *kwoy 'growl, scold': Stubbs 1995-7: Eu búde/nevúde/nepúde 'growl, bark'; My buuye 'snarl, growl, bark, scold'; Hp qö'öqöya 'scold, vt'; Hp(S) qöyqöya 'he's scolding'; Tr oyo 'become angry'; TO koDog

'rumble, gurgle'; and perhaps kwi of CN kwikwinaka 'make a low sound in the throat; for a dog, to growl; for a person, to hum' (CN i < *u). Most medial consonants show *-y- except CN and TO, whose D usually corresponds to PUA *-L- vs. TO đ < *y. [bil; u/o] [NUA: Hp; SUA: Tep, Trn, Cah, Opn]

1975a. *wa'aN-ki 'shout': NP wa'agi 'shout'; Ch wa'áni 'shout'; SP wa'áni 'shout';

1975b. *wa'a(N)ti-ki 'whoop': SP wa'a-ci-ki 'whoop' with which CU wïcígay 'holler, shout, whoop' and WMU wa'áčigí / wa'áčigú-y / wa'áčiyí / wa'á-čiyé 'shout, yell, vi' are cognate. [NUA: Num]

1976. *huki 'scold': Ls húúhuki 'scold, grumble at'; Cp húúki 'attack, challenge, scold, accuse'. [NUA: Tak]

1977. *tokowa 'crow, (animals) to make their respective noise': Whorf1937b: Hp töq- 'shout, cry out, scream, yell, chirp, make a characteristic call'; CN tookaai-tl 'name'; CN tookaa-yoo-tiaa 'name, vt, call s.o. by name'. Add My reko-te 'crow, cackle'; Tr tókowa- 'cackle, crow'; At neck (throat, voice) *toL, KH/M06-to29 lists TO toDk 'snore, groan, growl'; Tr roróka /rorógara 'trachea'; CN toloaa 'swallow'; and Hp töna('at) '(his) throat, voice, larynx'; might some be old/reworked reduplications of *toka > *totoka > toLoka? [NUA:Hp; SUA: Trn, Cah, Azt]

NB, for Cah *bwana 'cry, howl' and Tep *banai 'coyote', see coyote.

NB, for *wohi 'shout' (Mn wohi 'holler, yell'; NP wohipïnni 'shout'), a semantic extension of *wohi 'bark', see bark.

Shrimp: see crab and shell

Shrink: see dry

Sibling: see brother or sister

SICK, ILL; ENFERMO

1978. *tïwoya / *tï'oy / *tï'mo 'sick(ness)': M88-tï21: KH/M06- tï2: NP tïoiyai 'sickness in body'; Sh tïwoi 'sickness, disease'; Sh(M) tïmmai 'be sick'; Hp tïïya 'sickness'. We can add Cm tï'oi-pï 'long illness, invalid'; Cm tï'oi-katī 'be ill for a long time'; Sh(C) tī'ïmmai/ tïmmai 'be sick'. Cm tï'oi, NP tïoiyai and Sh tïwoi are certainly cognate, and Hp is likely, only losing a round vowel (tī_ya) in difference from the Num forms. Forms with medial -m- likely involve other morphemes. Yet agreeing in the first three segments with Sh tïmmai is CN teemooš-tli 'sickness'; and what of Sr tomaahan 'be very sick' with the same consonants? ['/w] [NUA: Num, Hp]

1979a. *kaCma > *kamma 'hurt': Mn ca-qama 'hurt (physically)'; Mn qama 'be sick, hurt'; TSh kammah 'be sick, sore; ache, hurt' (vs. TSh kamman 'taste'); TSh kammanna 'verbal noun of kammah; thus, TSh tama kammanna 'toothache'; Sh(C) kamma- 'be in pain, ache, be sick'; Sh kammah 'ache, dull pain'. What of Nv tuakama 'is pierced'? Note two (nearly?) identical terms Sh timmai 'sick' and Sh timmai 'taste (food)' have both meanings, as also Sh kamma is both 'sick' and 'taste', perhaps in a sense of 'experience' or 'partake of'

1979b. *na-kaCmi > *na-kammi 'sick': Ch nagámi 'sick'; SP nakammi 'be sick'; CU naġámi 'sickness, illness'. This is likely tied to *kama '(be in) pain' with the na- prefix. [NUA: SNum]

NB, for *mukki 'sick, smitten, die' see 'die'. NB, for *ko'o, see 'pain'.

whether sweet (taste) or bitter (illness). [NUA: WNum, CNum]

SIDE; LADO

1980a. *(mana)-ŋakwa 'side': M67-376 *nakw 'side'; I.Num110 *naŋkwVh 'direction,side'; I.Num89 *ma(a)na(a)nkwa(h) 'far'; M88-na16 'side'; KH/M06-na16: Mn qwena'a 'far (from)'; NP nakkwai 'beside'; Sh maanankwah 'far'; Cm na-nakwi 'far'; SP naŋkwa" 'direction'; Cp -ŋa 'at, in'; Ca ŋa 'location'; Gb ŋa 'locative suffix'; Hp -ŋaqw '(away) from, inside of'; Ca máŋax 'on/by the side of, near'; CN naawak 'near to, adjacent to'; Pl nakastan 'beside, along side of'. The Azt forms are less secure. Other forms are listable, but questions remain (as with many postpositional kinds of words).

1980b. *-ŋako / *-ŋakwV 'from': Ca -ŋa-x 'from' (Seiler 1977, 201-2); Ls -ŋax 'from, because'; Cp -ŋax 'from, because'; Hp -ŋaqw, -ŋaqö (pausal) 'from, away from, inside of'. [initial η] [NUA: Tak, Hp, Num]

1981. *sap / *sïp 'side': Sr a-hiïvia 'side, edge, shore; by, beside'; Eu sépuvai 'de un lado'; TO hiwču 'groin, side of the body'; Sh sapai-pin 'side'. TO fits well since TO h < *s and w < *p. [V variety] [NUA: Tak, Num; SUA: Opn, Tep]

NB, for *yaka 'side, ridge' see at *yaka 'nose'. NB, for *caka '(at) side, near', see 'near'.

Silent: see peace Sinew: see tendon

SING, SONG, MUSIC, DRUM; CANTAR, CANTO, MÚSICA, TAMBOR

1982. *kwika 'sing': M67-379 *kwika; L.Son123 *kwika 'cantar'; CL.Azt147/315 *kwiika; M88-kwi3 'sing'; KH/M06-kwi3: Eu bíke 'sing, v'; Eu bikát 'song, n'; Tbr kwik 'sing, v'; Wr wigatá 'sing, v'; Wr wiká 'song, n'; Tr wikará 'sing, v'; My bwiika; Yq bwíka; AYq bwiika; Wc kwika; Cr čuííka-ri 'song, n'; CN kwiika 'sing'; Pl takwiika 'sing'. This is in most SUA languages, but hardly found in NUA, except perhaps the -'wexe of Cp pína'wexe 'sing enemy songs'. [SUA: Trn, Opn, Tbr, Cah, CrC, Azt]

1983. *ni"i 'sing': M88-ni"4 song: B.Tep180 *ni"ii 'to sing, dance', and *ni"i 'song'; M67-378 *na 'sing'; L.Son 170 *nawahi 'cantar'; Miller has B.Tep180 at both M88-na22 and M88-ni"4 'song'; KH/M06- ni"4: TO ne'e 'sing'; PYp ne'em 'sing', nei (perfect); NT nii / niidyagai 'song'; NT niiyi 'sing'; ST nii"; Cr tyí 'i-nye'e 'he's dancing'. [SUA: Tep, CrC]

1984. *nawa 'sing': M67-378; L.Son170 *nawahi 'cantar'; M88-na22; KH/M06-na22: Tbr nyay-ta; Tr nawahí; Tr enáwa 'cantar'; NT anái. Only Tr shows a 2nd -wa syllable, but neither Tbr nor NT. [V's] [SUA: Tep, Tbr, Trn, CrC]

1985. *hupiya 'sing, song': I.Num38 *hupi(y)a 'sing, song'; M88-hu12 'song'; KH/M06-hu12: Mn hubiyadu 'sing, play instrument, make music'; NP hubia 'sing'; TSh hupia 'song'; Sh hupia 'song'; Kw huviya-vi 'song'; SP uvia/uvi' 'song'; SP uvi-ttu 'sing a song, song-make, v'; CU 'uvwi-ya-vï 'song'. Note the -y- acts as underlying consonant causing gemination in SP, but not when followed by a vowel. [NUA: Num]

1986. *pona / *po'na / *poCna 'play music, play drum': M67-142 *pon 'to drum, v'; M88-po18 'play music'; M88-po12 'play drum'; KH/M06-po12,18: Miller has CN teponas-tli 'drum' in two sets and he compares the two sets (M88-po12 'play drum'; M88-po18 play music) as possibly related, which they seem to be; So we combine the forms of both sets: My póona 'play instrument'; Yq poóna; Tbr hi-pona; CN teponas-tli 'log drum'; Pl tepuunawas 'native drum, made from hollowed log'; SP pon'noa 'drum, v'. Add CU papū'ni 'drum' and Wc tépu 'drum'. The glottal stop in SNum languages suggests s.th. clustered with medial -n-. [cluster; nasals] [NUA: Num; SUA: Cah, Tbr, CrC, Azt]

1987. *ca 'sing, song': M88-ca17; KH.NUA; Ls čáatu-š 'magical song sung by sorcerers'; Gb ce'é'iy 'song'; Gb ce'é 'sing'; ce'én'ar 'singer'; Sr čaač 'song'; Sr čaam 'song'; Sr čaaţu' 'to sing'; Ktn caču' 'sing ceremonially (in healing)'. [NUA: Tak]

1988. *hawa 'sing, talk, whisper': M88-ha16; KH/M06-ha16: Cp háwine 'sing'; Ca háwaway 'talk'. While the two sets might be recycled loans, Sr hawahawahk 'whisper' rightly belongs at *sawa 'whisper' at 'say' where Ken Hill has it. [NUA: Tak]

1989. *ka 'sing': Kw kaa 'sing'; SP kaa 'sing'; WMU káa-y 'sing'; CU káay 'sing'. [NUA: SNum]

1990. *wïwï 'drum': Pl weeweh / weewee-t 'little drum'; CN wewe-tl. [SUA: Azt]

1991. *tuwu 'drum, music at festival': Nv tugurha 'drum, n&v'; Wr tugurí / tugúri / tuwúri 'festival, songs and singing of the festival'; Tr tutugúri / futubúri 'dance the tutuguri, v'. Wr tuwúri shows the expected correspondence with Tep(Nv) g, and the alternate Tr forms suggest both a bilabial and again g under Tep influence.

Also agreeing for three segments is Kw tuwahani 'celebrate a festival, v' and Kw tuwahani-pï 'festival, n'. It is not necessarily probable, but possible that Num *wittuhuwa 'pot, drum' at 'pot' may share this morpheme. [SUA: Tep, Trn; NUA: Num]

1992. *kupahi 'drum': My kúbahe; Yq kubahi; AYq kuvahe. And Yq kukupa 'eco'? [SUA: Cah]

NB, for *yu' 'play musical instrument', see 'cry'. NB, for *wittu... 'drum', see 'pot'.

SINK, SUBMERGE, DIP, SOAK; HUNDIR, SUMIR, SUMERGIR, EMPAPAR

1993. *cuppa 'sink, submerge': Mn cupa 'sink into'; NP copa (< *coppa) 'sink, v'; NP patacopa (< *pattacoppa) 'sink (island or boat), v'; Ca čúpi 'dip in water, vi'; Ca čúpi-n 'dip, soak, dye, vt'; Ca čúpaq 'stick in (mud, body)'; and perhaps the -šp in TO hia-šp 'bury, submerge' (TO hia 'sand dune'). [u/o] [NUA: Num, Tak; SUA: Tep]

1994. *sum 'sink': AYq suume 'sink, vi'; Eu sumé 'evaporate, shrink, sink'; PYp huumu 'go down, sink in'. [SUA: Tep, Opn, Cah]

1995. *(ho-)top 'sink': L.Son23 *oto 'atascarse'; M88-'o21; KH/M06-'o21: Eu hotóe- 'haber lodo, atascar'; Op oto-wa; Tr tobu 'encajar, hundir'; Tr toba 'hundirse en el lodo'. Let's add Yq rópte 'sumirse en el agua'; My rópte 'se sumergió'; AYq ropte 'sink, submerge, drown'. We might ask: if *t > c preceding a high vowel, is *cuppa above related? [SUA: Trn, Cah, Opn]

1996a. *yuppi > Tep *dupi(n) 'sink': TO juupin 'soak in, sink'; Nv dupinu 'hundirse en el agua'; NT dupiíkyi 'hide, go in/under'; ST dupñia 'stuck in mud'.

1996b. *yu'pa/i (TrC) 'bend down, go down, move in up and down motion': Yq yúpala 'agachando'; Tr o'pi 'bajar, perder altura'; Tr o'pira 'balancearse de arriba abajo'; Tr o'pina 'bajar, inclinar, doblegar'. Tr loses initial consonants readily and Tr o does sometimes correspond to *u, and a final V alternation of -a/i is common in UA. This TrC *yu'pa 'go down' and Tep dupi (< *yuppi) could quite feasibly tie to Tak *yu'pa 'get dark, black, fire go out' at 'black' in the sun's 'going down'. [SUA: Cah, Trn, Tep]

1997. *muta / *muCta 'sink, vi': Hp moro-(k-) 'get dipped, briefly immersed'; Ls mota 'sink in mud'; Hp o < *u, and for Ls, *muCta > Ls mota. Usually *-t- > Ls -l-, but here Ls -t- and Hp -r-. So what kind of cluster would yield Ls t and Hp r? [t/L] [NUA: Hp, Tak]

1998. *yuCti 'dip, soak': Ls yúči 'dip in water, soak, vt'; Cp yúče 'soak, dye, put into water, leach'. A single intervocalic *-t- normally yields -l- in Cupan, so -c- may be from a cluster. [NUA -c-] [NUA: Tak]

1999. *i(C)tak / *iCcaki 'dip up (liquid)': M88-'i11; KH.NUA; KH/M06-'i11: Sr ičaai 'dip, dip up (liquid)'; Ls ičáki 'dip up (a liquid), v'. Ken Hill adds Ktn ic 'ladle, v' and TO iis(id) 'get a containerful of obj for s.o., v'. We are likely dealing with a medial cluster (or possibly -t-), since NUA is shy of medial *-c-. Though an initial V could easily disappear when taking on a prefix, we shall separate these for now from *pa-caka/i (possibly < **pa-icaka/i) at wash. [*-t- > -c- > Tep -s-] [NUA: Tak; SUA: Tep]

SISTER; HERMANA

2000. *ko(')ti / *ko'ci (AMR) 'older sister': M67-492a *ko, 492b *koci/*kuci 'older sister'; BH.Cup*qe ... s 'sister, elder'; KH.NUA; L.Son89 *koci 'hermana mayor'; M88-ko13 'older sister'; KH.NUA; AMR 1993a *ko'-ci; KH/M06-ko13 *ko'ci (AMR): Tb kuudzin 'next older sister'; Hp qööqa; Cp qísma; Ca qis-ka; Ls qee'is; Gb óxo'; Sr -qöö'r (pl: -qööham); Ktn koha-č (poss: -kor, pl: koham); Eu kócwa; Wr ko'cí; Tr go'čí; My ákoro; Tbr kocí; Wc kurí; Cr ne-kuu-cí'i. What do we do with Ls kúúli-may 'nephew, niece, i.e., older sister's child'? Manaster-Ramer includes this set in his article "A Northern UA sound law: *-c->-y-." His inclusion of the glottal stop in this reconstruction is important—*ko'-ci—which prevented the *-c- lenition that he establishes. Langacker (1970) uses this set in "The Vowels of Proto-Uto-Aztecan" to demonstrate that the change from *k > q preceded the change of *o to high front vowels in the Cupan languages. Note also that many Tak languages show -s- (Cp, Ca, Ktn, Sr pl) as an early development from whatever the medial cluster was, and -cC->-šC- is common in Cup. The -r-/-l- in Sr, My, and Wc may suggest original *-t- or -'t- rather than -'c-. [2nd C; *o > Tb u] [NUA: Hp, Tb, Tak; SUA: Trn, Tbr, Cah, Opn, CrC]

2001a. *pini 'younger sister': L.Son198 *pini 'hermana menor'; M88-pi27 'younger sister'; KH/M06-pi27: NP bbinagi 'younger person than speaker'; TSh pinna 'youngest sibling'; SP pinna 'last, youngest'; Eu bínwa/vinwa; Op viniwa; Wr piní; Tr biní; Eu vínwa; Miller also lists three Tak forms found below and has some forms double listed in M88-pi5 and M88-pi27, namely, Mn and the Azt forms CN pi'-tli 'older sister' and HN pih 'elder sister'; while the relationship is possible, let's list those lacking medial n together (Tak and Azt forms) under a different letter (c), but same number.

2001b. *pini 'younger sister': M67-491 *pe 'younger brother'; I.Num171 *pihni('i) 'younger sister'; M88-pi5 'younger sibling'; Mn pini'/pinni'(a); NP pini'i 'little sister'.

2001c. *pi' / *piC 'sister': Sapir; KH.NUA; M88-pi27; KH/M06-pi27: Ls píít 'younger sister'; Gb pí'ic; Sr piit 'younger sister'; CN pi'-tli 'older sister'; HN pih 'elder sister'. [NUA: Num, Tak; SUA: Opn, Trn, Azt]

2002. *wakati 'younger sister': M67-493 *wa 'younger sister'; M88-wa21 'younger sister'; KH/M06-wa21: NP wannka'a 'younger brother'; Tr wayé / wa'í 'younger sister (of a man)'; My waáyi; Yq wai; Cr ne-'iwaa-ra'a 'my relative/younger sister'. In M67-493, Wc 'iwá 'cousin' is also included. I would add Ca -wáxal^y 'younger sister' and Cp -wáxal^yi 'younger sister' (Tak *wakaLi), as closer to the proto-type. Because Ca and Cp are possessed kin terms, the final l^yi is not an absolutive suffix, which ending actually fits well with TrC. In light of NP's velar, and the liquids and y's in the other languages, a reduction from a proto-type more like the Cupan forms may explain all:

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*wakati > wakal<sup>y</sup>i (Ca, Cp)
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- > *wakl^yi > *wa'yi/wayi (My, AYq, Tr)
- > *walka > *wanka... (NP)

[NUA: Num, Tak; SUA: Trn, Cah, CrC]

2003. *nam(m)i(C) 'younger sister': TSh nammi(cci); Sh nammi; Cm nami'; Kw nami'i; SP nami-(n)ci 'younger sister'; CU namí-ci. [NUA: CNum and SNum]

2004. *tipko / *tipku 'relative, perhaps sisterly relationship': Stubbs2003-3: Wr tepó 'sister-in-law'; Op tepó 'aunt, mother's older sister'; Hp *tipko 'younger sibling or person in one's clan or phratry of the same generation'; Hp(S) *tipko'at 'younger sibling or parallel cousin'. Hp o < *u and occasionally Tr/Wr o is also from *u, so those two might agree with *tipku, though the two TrC languages would suggest *o, for which we would expect Hp ö; nevertheless, the three are likely related, and if not, at least the two TrC forms are. It is notable that a cluster is apparent in Hp, which cluster the TrC languages reduced. [cluster] [NUA: Hp; SUA: Opn, Trn]

NB, for Numic *pa'ti 'older sister', see *pa'ti 'brother, older'. NB, for Tepiman *siisi 'older sibling', see 'brother, older'.

SIT, DWELL, RESIDE; SENTARSE, RESIDIR, HABITAR, MORAR

2005a. *yasa / *yasi 'sit': VVH76 *yansa 'to sit'; M67-380 *ya/*yas 'sit'; L.Son351 *yasa/*yas-i 'sentarse'; B.Tep17 *daha 'be seated'; M88-ya1; AMR *yansi; KH/M06-ya1: Tb yandzït~'ayanc; Hp yeese 'sit, reside, v.i.imp/pf. pl'; Hp yeesiwa 'reside, be in place, vi imp. pl'; TO đaha 'be sitting, be, be present, reside'; TO đahi 'sit'; Op dasa 'sit, sg.'; Wr yasa/yasi 'estar sentado'; Tr yasá / asá / así 'sentarse, estar sentado'; My yeesa; Tbr nesa/neca 'sentarse'; Wc yáá 'sentarse'; Cr na-'a-vé'e-yeihša 'I'm going to get on (the horse)'. Add Eu dasé 'sentarse'; Wc yááše 'empezar a estar sentado'; Tr ayása 'dwell, inhabit temporarily'. Note *-ns- > -nc- in Tb. 2005b. *yasipa 'sit': in connection with this word, note how many languages have a form pointing to a third syllable with *pa or *yasipa and *yasipu: Hp(V) yésiva '(they're) sitting down, camping, pl'; TO(M) dahiva 'sit, camp'; Tr asiba 'sentarse' (asi-ba 'sit-incoative'); Wr yasipá 'sentarse' (vs. yasa- / yasi-); interesting is ST daivu with an entirely different vowel. Cf. TO(M) dahivup 'sit/alight repeatedly, vi repet; pl: daD(h)aivup' and TO(M) dahivuim 'wish to sit down; pl: daDhaivuim'. The *-pa morpheme is often ascribed to a fossilized inchoative suffix, but not all such languages have it (though it could be fossilized then lost), but more problematic is how many show -pu, not -pa. [*-ns- > -nc-] [NUA: Hp, Tb; SUA: Tep, Trn, Opn, Tbr, Cah, CrC]

2006. *katī / *kattī 'sit': Sapir; VVH42 *ka_stī; M67-381a *kate; 381b *ka; BH.Cup qá 'be'; L.Son76 *katī 'sentarse'; M88-ka3 'sit'; KH.NUA; KH/M06-ka3: Mn qatī; NP katī (< *kattī) 'sit, sg'; TSh katī; Sh katī"; Kw karī 'sit, stay, live, be alive'; SP karī; CU karí; Tb halīt~'aahal 'sit, live'; Cp qa' 'be there, there it is'; Ca qál 'be, exist

(of animates)'; Ls qál 'live, be'; Gb xá/xaró 'estar'; Sr qat/qaţï 'be, stay, dwell, live, remain, be alive, have to, be possible'; TO kaač 'lie lifeless, exist over an area'; Op katte; Op karu 'impf verb suffix: was verb-ing'; Eu kací; Wr kahtí 'estar sentado, sg.'; My káttek 'estar sentado'; Yq káatek; Tbr katé 'estar, estar sentado, vivir, estar en'; Wc kaatéi 'estar sentado, vivir'; Sapir includes Cr ka 'be, sit'; Pima kacï 'lay'; and CN kaa (pret: ka', katki, pl. kate') 'be'. Scratch Miller's inclusion of CN kaawa 'leave, abandon, relinquish' (CL.Azt160 kaawa 'stay, leave'), but we can add Cm kahtï 'sit, live' and Ch karï 'sit, sg'. [*t > 1 in Tb, Tak, not Sr, > r in Num; Gb o] [NUA: Num, Hp, Tb, Tak; SUA: Tep, Trn, Opn, Cah, Tbr, CrC, Azt]

2007a. *ho... 'sit, pl': L.Son61 *ho/*ho-i 'sentarse, pl'; M88-ho6 'sentarse'; KH/M06-ho6: Op hoi; Eu hói 'estar'; Yq hó-te-k 'se sentó'; Yq hoyé'em 'sientense!'; My hoó-te; My hóoye 'sentarse, pl'; Wr oheé-na 'vivir'; Tr hó 'vivir'. Note also Yq ho'a 'house'; Yq ho'ak 'tener casa, vivir'; AYq hoa 'place them, put pl obj's'; My hoiya 'poner'.

2007b. *howa 'sit, live': My howa 'habitación'; Ca híw 'sit upright, stay, live'; Ca i < *o; therefore, both fit *howa. [NUA: Tak; SUA: Opn, Cah, Trn]

2008. *moci 'put/be seated, pl. obj' is moved to 1745 at 'put'

2009. *yukkwi 'sit, pl': I.Num297 *yïkwi/*yïhkwi (dur.) sit, pl.; M88-yï8; KH/M06- yï8: Mn yïkwi 'sit, pl. subj, vi'; NP yïikwi 'sit, pl'; TSh yïkwi 'sit, pl'; Sh yïkwi' 'sit, pl'; Cm yïkwi 'sit down, pl'; Kw yugwi 'live, sit, stay, pl'; SP yukwi 'sit, pl'; Ch yïwí 'sit, pl'; CU yukwi 'be sitting, sit'. SNum shows u, while CNum and WNum show ï; one could go with the majority, except that the vowel change *u > ï is so common in Num, that *yukkwi is a better choice. [*-kkw-> -w- in Ch] [NUA: Num]

2010. *'uLini 'dwell': TO ulinig 'be dwelling or abiding'; PYp ulinim 'hold, inhabit, camp'. $[1 > \emptyset]$ [SUA: Tep]

2011. *cu' 'squat': KH.NUA: Sr ču'k 'squat down, vi'; Cp čú'yaxwe 'is sitting Indian style'. [NUA: Tak]

2012. *ŋaki 'be or put sitting up, be stuck': Sr ŋäqï'|k 'be perched, sitting up high on s.th.'; Cp ŋáqe 'be sitting, vi'; Cp ŋáqe, -ine 'carry on the head, vt'; Ca ŋáqi 'get stuck'; Ca ŋáqi-n- 'put (securing by fastening), tack, vt'; Ktn ŋak-ïk 'choke, stop up, vi'; Ktn ŋak / ŋaqk 'choke, stop up, vt'. A semantic split for this verb shows 'get stuck' in Ca and Ktn, while Sr and Cp show 'sitting up', even though Ca and Cp are close languages, and Sr and Ktn usually closer to each other than any others. [NUA: Tak]

NB, for *pïCtï 'lie down, spend the night, house/home' see at 'lie'.

Six: see under the numbers toward the end

SKIN, HIDE, PEEL, RIND, SHELL, BARK (of tree); PIEL, PELLEJO, CUERO, CÁSCARA, CONCHA

2013a. *kwici / *kwi'(i)ci 'skin, hide': L.Son122: *kwici 'piel'; M88-kwi15; KH/M06-kwi15: Wr wi'ci 'piel, cuero'; Tbr kwici 'piel'; Tbr kuci-t 'piel'. Just as Tbr shows two forms, one with *kwV > ku reduction, so might Wr wohci 'leather' and wi'ci exhibit a similar variation. What of Sr qöč 'skin, hide' and others at 'shell'? [SUA: Trn, Tbr]

2013b. *kwïtas 'skin, leather': CL.Azt149 *kwətaš 'skin, leather'; M88-kwï5 'skin, leather'; Stubbs 1995-18; KH/M06- kwï5: CN kwetlaš-tli 'leather, cured hide, skin'; Pl kwetaš-ti 'leather'; HN kwetlaš-tli' 'leather'. Miller compares kwi15 above and kwï5 here, which is reasonable, since *i-a/i > ï-a is frequent enough; in the latter, he includes Hp kweewa 'belt' and queries whether it is cognate. Cf. also SP tïŋkwica'a 'rabbitskin'. But only the Aztecan languages are secure here. [SUA: Trn, Azt]

2014. *cakwa... / *ca-kwata ? 'skin (an animal), v': Mn cakwata/caqweta 'remove (clothes), skin (animal), vt'; Mn caqwa 'to skin (something, by pulling)'; NP cakwoidï 'to skin an animal'; TSh cakkwayah 'take off, loosen, skin (an animal)' sg/dual (pl: TSh cakkwayuppai); Sh kwïtïah 'be abraded (of skin or bark)'; Cm pïhï cahkwe'yarï 'skin an animal'; Kw cakwe'ena 'skin (animal), vt'. Could this relate to Azt kwïtas 'skin, leather' above? [NUA: Num]

- **2015.** *koyo 'shell': L.Son100 *koyo 'concha'; M88-ko21 'concha' and ko10; KH/M03-ko10: Eu kodó(k) 'concha'; Op kodosi 'ostia'; Yq koóyo; Wr ko'oyó 'caracol'; My koyóole 'cinto de campanitas'; Pl kuyul 'coyol palm tree'; Tb kooyoo-t 'turtle'. Jane Hill (p.c.) adds TSh koyoto-cci / kwiyoto-cci 'mussel, clam, seashell' and also notes Chumash q'oy 'olivella'. Miller has here NP kota 'crayfish' and NP kotyottï 'white shell necklace'. While sharing morphemes is possible, the NP forms might better belong with *koCtV below. [SUA: Opn, Cah, Trn, Azt; NUA: Num]
- 2016. *koCta 'bark, shell, money': M67- 21 *ko 'bark of tree'; L.Son90 *koci 'camarón'; M88-ko6, ko10, ko21; Munro.Cup118 *qééči-la 'shell'; KH.NUA; KH/M03-ko6, ko10: Ls qéš-la 'seashell'; Ls qéš-la ka-š 'skull'; Gb (a)-xóxoc '(su) cáscara'; Cp qíči-ly 'money, silver'; Ca qíč-ily 'money' (pl: qišlyam); Sr -qöč 'hide, bark'; Sr qöčaaviam 'money'; Cr kúcape'e (Cr u < *o) 'cáscara'. Cr kuhca'ana 'type of tree with useful bark'; Cr ra-ká-kuhca'an 'he is skinning it'. Ken Hill adds Ktn koco 'shell (of turtle), peel, skin'. The following three languages devoted this cognate to 'shrimp (shell)': *koti 'shrimp': L.Son90 *koci 'camarón'; Wr kohcí 'camarón, canqui'; Tbr koci-kal 'camarón'; and My kóči kapá'ora = baa kóočim 'camarón'. NUA medial *-c- probably derives from medial *-t- or a cluster, thus making NP kota 'crayfish'; NP kotyottï 'white shell necklace' perhaps more likely here than at *koyo above, though the 2nd NP form may fit either. The *koyo and *koCta/i forms have often been combined, which is possible, since some, like the NP forms, could feasibly fit either; but a different medial C and different 2nd V seem reason enough to separate them. On the other hand, My koyóole (above) and NP kotyottï, short of a missing -t- in My, offer substantial resemblance, and shells being a trade item may mean that many of these are loan possibilities, as well. Nv koska 'concha de nácar [mother of pearl, nacre]' may belong (Nv s <*c; cf. Tbr koci-kal 'camarón') or is it a loan from CN kooska-tl 'jewel, ornament, necklace'? [NUA: Tak, Num; SUA: Tep, Tbr, Cah, Trn, Tbr, CrC]
- **2017.** *po'owa 'shell': TSh po'owa(cci) v 'shell, seashell'; Mn pówa' 'olivella shell'; Sh po'an / poan / pohon 'skin, bark, thick'; TSh po'a(n/cci) 'outer protective covering, skin, bark, feathers, shell'. [NUA: Num]
- **2018.** *taCca / *ta'ci 'bark, shell': Ca táča-l 'bark of a tree'; Ls tááci 'bark, shell (as of turtle, nuts)'; perhaps also related are Cp táče 'hatch' in the sense of 'shelling oneself' and Ca táča 'lie down on back' since 'back' and 'bark' show semantic ties elsewhere (B.Tep105a *komi 'back, bark of tree'). Tr ŕa'čí 'concha'. What of CN tapač-tli 'sea shell, cora' or CN teeksis-tli 'shell' (< taksis?)? If either, then the Tak and Tr forms would be reductions of a longer reconstruction. [reduction; *-c- in NUA < -CC-?] [SUA: Trn, Azt; NUA: Tak]
- 2019a. *asi'a 'bark, n' (SNum): Kw 'asi'a; Ch 'asi'a; CU sí'aa-vi. [loss of initial vowel in CU] 2019b. *si'a 'hull, shell, peel, v': BH.Tak *si'a 'hull, v'; M88-si6; KH/M03-si6 'to shell, hull, v': Cp si'ay 'to hull acorns'; Ca si'ay- 'to peel (fruit, bark of a tree, etc.), vt'; Ls şíi'awiš 'shelled acorns'; NP tasi'wa 'to crack pinenuts'. [NUA: Num, Tak]
- **2020.** *caLa/i 'bark, shell': Cp čála-l 'bark'; Cp čále 'husk, shell, vt.'; Ca čáli 'to hatch (eggs as a bunch)'; Ls čáála/i 'break off pieces from a surface, as bark from a tree, flakes from a rock, vt; lose shingles in a windstorm (of a house)'. It is possible that these relate to *taca 'bark, shell' (above); if a *ta- prefix were identifiable, the medial -c- in the *taca forms would not be enigmatic, because it would originally have been initial. It also appears that parallel to the noun form *cala 'bark, shell' is a verb *cali 'shell, hatch'. Cf. *ciLa 'hatch, be born' at 'bear (offspring), v'. [NUA: Tak]
- 2021. *sawpV 'shell': Ca sáva-l 'construct, bark, skin, shell'; Ls sáwvi-š 'univalve seashell'. [NUA: Tak]
- **2022.** *'ï**Li...** > **Tep** *'ï**Lida** 'skin': TO eliđag 'skin of a person or animal, bark of a tree'; TO elkona 'the process of skinning, a skin, a pelt'; Nv ïridaka 'skin, bark'; NT ïlíádï 'cáscara'; NT ïïlípai 'limpiar, pelar, skin an animal, v'. [SUA: Tep]
- **2023.** *takasaC 'tanned skin, leather': Tb takaša-t 'tanned skin'; Mn tigá-pï 'leather'; and Ca láqači-l^y 'hide'. [i vs. a, Ca initial l] [NUA: Tb, Num, Tak]

2024. *sowi 'tan skin, v': M88-so1 'to tan skin'; KH/M06-so1: Wr soiwé 'sebar'; Tr sowi/sowé 'enmantecarse, engrasarse'. Miller and Hill do well to suggest that these may tie to UA *suwi 'hair', Tepiman *hogi 'hair', etc. [SUA: Trn]

2025. *sikwa 'skin (an animal), v': KH.NUA: Hp siskwa 'skin, remove the skin, vt'; Hp sìikwan / sihkwan-ta 'be skinning'; Sr şiikw 'skin, peel, vt'; and perhaps Ls şíwi 'peel fruit, skin hide from animal'; Tb šiigin 'skin it'. Ken Hill compares Hp sikwi 'meat, flesh' and Hp siskwa 'to skin'. Note Sr şiikw(a) 'skin, peel, vt' vs. Sr şiiv(a) 'shave'; and Ls şívi 'peel, scrape, shave' vs. Ls şíwi 'peel fruit, skin hides from animals'. So this *sikwa is a separate stem from *sipa 'shave'. [NUA: Hp, Tak, Tb]

2026. *(pï)-hu (> *pï'u ?) 'skin (an animal), v': Yq hútta 'desollar animal, v'; Yq pe'útta 'destazar, quitar el cuero de un animal'; My péute 'está desollando'; My a'a peutía 'le está sacando la piel'; and maybe Eu beúhpuva 'desollar'. [SUA: Cah, Opn]

2027. *tipihi 'hide, skin': I.Num249 *tipihi 'hide, skin'; M88- ti26; KH/M06-ti26: NP tipihi; Cm tihbi; Sh tipihi; SP tiviivi 'skin (owned), hide'. This is often deemed a compound of 'deer-hair' (*ti-pihi). [NUA: Num]

NB, for *suwi and B.Tep *hogi 'hide', see hair.

NB, for *pi'wa 'hair, hide' (My beewa 'bark, shell'; NP tïba bbï'a 'pinenut shell', etc), see hair.

NB, for *oLa 'shell corn' see at naked.

NB, for Azt *tapač-tli 'sea shell, coral' and used in compounds for 'liver', see at 'liver'.

Skinny: see thin

SKUNK: ZORRILLO

~	,				
Mn	pohíta	Нр	pööca; koliciiya-w(ï)	Eu	hupát
NP	punkidda	Tb	ponihw	Tbr	opá-t
TSh	ponniacci	Sr	pöönivïţ	Yq	húpa
Sh	poniacci	Ca	tékwel	My	huppa
Cm	pisuníi'; pohni'aci	Ls	pááluku-t; túkmis-ma-l	Wr	te'kací; u'lá
Kw	pohniya	Cp	tékwel	Tr	paka; pasuči;
Ch	ponía	TO	uupio		upá; siyači
SP	ponnia	Nv	huppa	Cr	iïpih; pl: iïpite
CU	pöní-yï	PYp	uupa; huna'adagi	Wc	'iïpáa
		NT	úúpai	CN	epa-tl
		ST	'uup		_

2028. *huppa 'stink, skunk': B.Tep331 *'uuvai 'to smell'; B.Tep329 'uupai 'skunk'; M67-391 *hu/*hupa 'smell'; Fowler 83; L.Son66 *hupa 'oler (mal)'; M88-hu1 'smell, be smelly'; KH.NUA; KH/M06-hu1: Ca húv 'smell, v'; Hp hovala 'waste, squandor'; Hp hovalaŋw 'scent, odor'; Hp hovaqtï 'smell, have an odor, vi'; Od uuw '(be) odorous, smelly'; Od uupio 'skunk'; LP huppa 'skunk'; PYp uupa 'skunk'; NT úúpai 'skunk'; NT úúvai 'stink, vi'; ST 'uup 'skunk'; Eu hupát 'skunk'; Eu huhba 'oler'; Wr ubaré-na 'oler'; Wr upáni 'olor'; Wr u'lá skunk; Tr húre 'stink'; Tr hu-bá 'stink, irreg present; My húhu'ubwa 'oler'; My huuba 'da olor'; My húppa 'skunk'; Tbr opá-t 'zorrillo'; Wc 'iïpá 'oler'; Wc 'iïpáa 'skunk'; Cr iïpi/hïpíí 'skunk'; and Pl ihya 'smell'. Add Yq húpa 'skunk'; CN epa-tl 'skunk'; and Nv huppa 'zorrillo'. I wonder if the Hp forms are cognate? [CN epa < *ipa < **upa] [NUA: Hp, Tak; SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]

2029. *hu(N)ku(m) 'smell': KH/M06-hu1: NP hunkï 'odor of skunk'; Sr hukum 'to smell'; Ktn hokum 'smell s.th.' Miller and Hill have these also at hu1 and query whether these are cognate with the above. The initial *huC morpheme certainly would be, but with a differing morpheme attached. As Num ï < *u is often the case, these three may all show the same *-ku(m) morpheme, with NP anticipating the nasalization. [NUA: Tak, Num]

2030. *po(C)ni 'skunk' (< *potoni?): M67-382 *poni 'skunk'; I.Num152 *poni(a) 'skunk'; Fowler 83; M88-po13 'skunk'; KH.NUA; KH/M06-po13: Mn; NP; TSh; Sh; Cm; Kw; SP ponnia 'skunk'; SP ponni / ponaa 'to stoop and project one's buttocks'; CU; Tb; Sr pöönivïţ; Ktn poniva-č; CN potooni 'to stink' (cognate? Miller queries). Miller's inclusion of the CN form merits consideration, since vowel syncope followed by cluster reductions are common in UA. Might CN potooni help explain Hp pööca, since NUA medial -c- does not correspond to PUA *c, but usually t. [NUA: Num, Tb, Tak]

2031. ***tik...** Ca tékwe-l 'skunk'; Cp tékwe-l 'skunk'; perhaps Ls túkmis-ma-l 'a small species of skunk' and Wr te'kaci 'skunk'. [NUA: Tak; SUA: Trn]

SKY; CIELO

Mn		Нр	tokpela	Eu	tewíka / tevíka
NP	kumiba (pidaggwabaati) Tb	tuguumba-l	Tbr	tamwa-kalí-t / tamokalít
TSh	tukumpana(pin)	Sr	tukuhpţ	Yq	téeka
Sh	tukum-pin; tukumpana	Ca	túkva-š / túkwi-š / túki-š	My	téeka/ téweka
Cm	tomo(ba'atï)	Cp	túkva'a-š	Wr	teweká
Kw	tugu-bayaa-vi-dï;	Ls	nááxuyni-t; túúpa-š	Tr	ŕe'paní (& up);
	tugu-na-paya=aka	TO	daam kaačim 'over-lie l	ifeless'	se'pótare 'starry sky'
Ch	tugúmpa	PYp	tevagi	Cr	tahapuá
SP	tukuN	Nv	damakatuma	Wc	múuyúavi
WMU	tuk <u>u</u> (m)paya	LP	tïvïg/tïvgï/tïvg (B.Tep)		
	tuġúppaya	NT	tïváági		
CU	tugú-payá	ST	tïvaa'; hiš dyaam	CN	ilwi-ka-tl

In short, UA terms for sky seem to be thus: NUA *tukuN(-pa); for SUA, *tukuN-pa > SUA *tVkpa after V syncopation; some *tïkopa survive without V syncopation. SUA *tawa-kaLi 'sun-house' in Opn, Cah, Tbr, Wr, but in Azt *ilwi-ka, as well.

2032a. *tukuN-pa 'sky, up, above': Sapir; M67-383 *tuku 'sky'; I.Num229 *tukuN 'sky'; M88-tu16 'sky'; KH.NUA; KH/M06-tu16: Sr tukuhp|t 'sky' (dat: Sr tukuhpakya' 'up, above'; abl: Sr tukuhpanu' 'from above'); Cp túkuči 'high'; Gb tokúpar; Ls túúpaš 'sky'; Hp tokpela 'sky'; Tb tuguumbaal; Mn túgupaa 'above'; NP; TSh; Sh; Kw; Ch; SP; CU; Tb; Cp; Ca; Ls; Sr; Hp. Sapir also lists Gb tuku-pa-r 'sky'. Note Ls túúpa-š loss of -ku- syllable, but *p remaining a stop due to a -kp- cluster: *tukupa > *tukpa > *tuupa. Add PYp tuuk 'uphill' and Ktn tukuhpa-č 'sky'. For the dual semantic in many languages of both 'iron/knife' and 'sky', see last letter below.

2032b. *tikV(pa) / *tik(V)pa (< *tukuCpa) 'cutting tool: obsidian, knife, flint, metal': Kw paha-rīka-dī 'pounded metal'; Cr tehka 'obsidian'; Tr fikibara 'knife'; CN tekpa-tl 'flint'. Note also Ktn toq-šiva-t 'flint, flint tip of arrow' and Ls tiqé-t 'arrowhead'. Ktn's vowel could suggest original *-u-, with which Kw (*u > ï in Num) does not disagree and perhaps *u > CN i, then *i-a > e-a, if some of the others are Aztecan loans. This ties here with 'sky'. KH.NUA notes the dual meanings in most Tak languages of both 'iron/knife' and 'sky': Cp túkva'aš 'iron, sky'; Ca túkvaš/ túkwiš / túkwiš / túkwiš / túkwaš / túkwa

2032c. *tikpa-wa 'up, above, sky, on': B.Tep246 *tivagi 'sky, cloud': Tr fe'paí; Tr fe'paní 'sky, up'; Eu téva(n) / téwa '(por) arriba'; Cr tahapuá 'sky'; and Tep *tivagi (< *tipawi) likely belongs here too, from *tikpa-wa, and note Hp tokpela (with Hp l < *w), but this is not tied to TrC *tawa-kaLi below. [k > h in Cr; -kp- > -'p-] a, b, or c in [NUA: Num, Tb, Hp, Tak; SUA: Tep, Trn, Cah, Opn, CrC, Azt]

2032d. *tikopa: CL.Azt131 *təhko 'raise, ascend'; M88-tï45; KH/M06- tï45: ST tī'kov 'alto, arriba'; CN tle'koo 'ascend'; HN tle'ko 'climb, ascend'; Pl tehku.

2032e. *ta'i(ku) 'above, upriver': PYp teik 'upriver, above'; Wc téikï 'allá arriba' (Wc ï < *u). These first two look much like *tïko above, though the next look more like *ta'i: TO ta'i 'back, up, to the north' and Nv tai 'cuesta arriba' vs. Nv tïtïdï 'subir'. Differing PYp forms (PYp teik 'upriver, above' vs. PYp tuuk 'uphill') may suggest

separation from *tuku or a recycled loan. Wc téikï 'allá arriba' and Wc ti- 'up' (below) show a distinction; see latter at 'up'.

2033. *tawa-kaLi (> tïwï-ka) 'sky, sun-house': M67-384 *te sky; BH.Cup *tu ... ac 'sky'; L.Son303 *tïwïka 'cielo'; M88-tï3 sky; KH/M06-tï3: note Tbr *tawa-kalí-t; CN ilwi-ka-tl; TrC *tïwïka < *tVwV-kaLi 'sun-house or sky'; Eu; Wr teweká 'sky, world'; Tr rewe-gá-či 'cielo'; My; Cr hú-tye 'in the sky'; HN 'elwika-tl. [SUA: Trn, Cah, Opn, Tbr, Azt]

SLEEP; DORMIR

Mn	ïwi	Hp	pïïwi/pïwva; pl: tookya	Eu	kocó
NP	ï'wi; ïwika 'go to s'; tuaiga;		hérok 'go to sleep, snore'	Tbr	kos,
	mocogapïnni 'doze, nap'	Tb	culuum; tahkin	fu	ture: koserák
TSh	ïppïih;pl: okko'ih	Sr	kuuman	Yq	kó(t)če
Sh	ïppïih, pl: ïkkoih; sïsïmih	Ca	kúp	My	koče/ kot-
Cm	ïhpïitï; pui-(in compounds)	Ls	kúp	Wr	koci-ná
Kw	'ïpii; 'okko'i	Cp	kúpe	Tr goo	ći-mea/okoči (fre)
Ch	ïpïi; pl: ïkói	TO	kooš(ig)	Cr	kucú
SP	ahpïi; pl: ahko'i	Nv	koso; taiko voho	Wc	kuucúu/kuucí;
WMU	pwíi, pwíi'!	PYp	koosim	húupu	'sleep habitually'
CU	pïí	NT	koóso	CN	koči
		ST	koos/košia; kooščuda 'put to s'		

2034a. *ïppïwi / *ïCpïCi / *pïwi 'sleep': Sapir; M67-385 *pei 'sleep'; I.Num24 *ïhpï'i 'sleep'; M88-pï6; KH/M06-pï6: TSh, Sh, Cm, Kw, Ch, SP, CU, Hp. Hp pïïwi and Numic *(ïh)pïi are quite identical. Sapir also ties Cr hipi 'sich niederlegen zum schlafen' (often i for ï, thus perhaps Cr hipi) with Num, as both exhibit *-pp-, though I cannot find that Cr form in my sources. But the other CrC language has Wc húpu 'dormir habitualmente' which likely belongs as well, though the vowels do not match perfectly (normally, Wc u < *o, and Wc ï < *u). However, considering Kw 'uupuha-ga-dï 'sleeper, sleepyhead', which shows geminated *-pp- like Cr and all the Num languages, they also all have round vowels in common, if we consider that Num ï is often from *u, i.e., all have u or ï. [w/'] [NUA: CNum, SNum, Hp; SUA: CrC]

2034b. *ï'wi 'sleep': Mn; NP. Some forms in *(i')pi'i above contain an extra initial syllable that ends with a geminating feature (''), perhaps a consonant (cluster) that doubles the -pp-; could WNum *i'wi be cognate (perhaps i'pii or i'Cpii) with -'w- being a different result of that possible cluster? [*-pp- > -'- in WNum] [NUA: WNum]

2035. *koci 'sleep': Sapir; VVH34 *ko_Sci/*ko_Sco to sleep; B.Tep107b *kookosi 'to sleep'; 110a *kooso 'he sleeps', *koi 'he sleept', 109 *koosigai 'sleep', and 119 *ko'osimu 'be sleepy'; M67-129b *koci; L.Son91 *koco/*koc-i; M88-ko2; KH/M06-ko2 *kociC: TSh okko'ih 'sleep, pl'; Sh; Kw; CU; Tb; Nv; NT; ST; Eu; Tbr; Wr; Tr; Yq; My; Cr; Wc; CN. As Sapir ties TO koi and SP ko'oi 'go to sleep, pl' the SUA *koci forms may be another stem. Miller lists some of the above Numic forms *(o)-ko'i meaning both 'sleep' and 'die' with the SUA forms *koci, and that is possible, as Manaster-Ramer also includes this set in his article "A Northern UA sound law: *-c->-y-," and we do see glottal stop rather than y at times in Num, as in *pusi 'eye' > Num pu'i. On the other hand, the fact that we have so many SUA *koci forms distinguished from SUA *ko'ya points to separate stems. [*-c->-y-/-'-] [NUA: Num; SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]

2036. *kum 'sleep': KH/M06-ku15: Sr kuuman 'sleep, go to sleep'; Ktn kum 'sleep'.

Slim: see thin

SLIP(PERY), SLIDE, SLICK; RESBALARSE, DESLIZARSE

In M88-si10, Miller has a collection of initial *si... terms which may be related, but better divided thus: **2037a.** *siko(h/')i 'slide, slip': I.Num190 *siko(o) 'slide'; M88-si10 'to slide'; KH/M06-si10: Mn siqo 'slide, vt'; Mn siqogohi 'slide, vi'; NP sikoi; Sh sikuhi" / sikoo 'slide, vi'; Kw šigo'i.

2037b. *taC-sikohi 'foot-slip': Mn tasiqohi 'slip, vi'; TSh taccikohi 'slip on one's feet'. Add WMU tahssiikwa 'slip, vi'. The cluster of *-Cs- produced another instance of the c/s dichotomy in Mn tasiqohi and TSh taccikohi.

2037c. *siro / *siLo 'slide, slip'; Hp sirokna 'slide it'; SP si'yu 'slide'; SP šiu' 'slip'; CU siyú-kway 'slide'; Tb šida'yat~'išiday' 'to slide, slip'; Tb šido'dot~'išidoot 'to slither'. Miller includes Pl šiipinawai 'to slide, slip' but for Azt, CN šoloaa 'slip, v.t., v.refl.' is a better candidate, showing the medial liquid with possible assimilation of the first vowel to the second: *silo... > solo... In fact, CN š rather than s may suggest the same in light of CN's other V assimilations in sand, etc. We might also add Ktn sirihr(-)ïk 'play slide, play slide down a hill on a hide' or Ktn (haru')haru'y 'slip' and Tr sisíro- 'patines, deslizaderas' or Tr saráame 'resbaloso'; Cr watasíri'ïpeka 'se resbala' (whose middle portion corresponds to *-siru'u-). This morpheme may be in *sïLpV (Hp sïrpa 'slip suddenly'; TO heelwua 'slide'; TO heelwuisk 'slide'; Pl šiipinawai 'to slide, slip') at smooth.

2037d. *si'ta: Tr sitá 'deslizante, que se desliza, que resbala'; Wr si'tá 'be smooth, slippery' (fut: si'taré-ma); Tb šida'yat~'išiday' 'to slide, slip'; Ktn šītk 'bald'.

2037e. *cita' / *ci'ta 'slip(pery)': AYq čitahko 'slippery, smooth'; My číta(h)ko 'smooth, slippery'.

2037f. *cito 'slide, slip': Eu čitóvake 'deslizarse'; My čítohte 'se resbala'; Eu citóke 'smooth'; Eu citó-da'a 'slip'; Yq čitóhte 'slide'; AYq čitohte 'slip'; TSh (tac)cituhi 'slip'. Note the variant 2nd V a/o in Cah forms. [s/c, t/l] [NUA: Num, Tb, Hp, Tak; SUA: Tep, Trn, Cah, Opn, CrC, Azt]

2038. *(ta)yuL 'slide, be smooth, slippery': M88-ta48; KH.NUA; KH/M06-ta48: Cp táyu'ule 'to slide out like a snake'; Ca táyul 'become smooth, slippery'; Ca tátyal 'iron, vt'; Sr tayuli' 'slippery'; Sr tayal(kin) 'smooth, iron, vt'; Sr tayulk 'slide, vi'. With these, consider Cp yúlule 'slide slowly, v'. Cp yúlule may suggest a *ta- prefix? Two vowelings exist: *(ta)yul and *(ta)yal. [NUA: Tak]

2039. *kaLu 'slide': Eu karú-da'a 'resbalar'; Ca xáyuš / xáyuqi 'slide down, v' and probably Wc harúanari 'liso'. [r > y; k > h?] [NUA: Tak; SUA: Opn, CrC]

2040. *pïti > *pïci 'slip, slide': Cr wapïti'i 'esta resbaloso'; Cr antípïci 'se resbala'; CN peckoaa 'slip, slide, vrefl, vt'; CN peckawi 'slip, slide'; Ca píl^yi 'slip, roll in'; Tb(V) pïšïka-~' ïpïšïka 'slip'; Tb(M) pïšïikat ~ 'ïpïšïik 'slip, v'. Cf. *patta/patti 'flat, bare'. [SUA: CrC, Azt; NUA: Tak, Tb]

Slope: see canyon

SLOW(LY); DESPACIO, LENTO, LENTAMENTE

2041. *taCti / *taCci 'slow(ly)': Mn widaacicí 'slowly'; TSh tataacci(cci) 'a little bit, slowly'; Kw 'ataasiniay 'slightly, slowly'. [c/s, redupl] [NUA: Num]

2042a. *upita 'slow': NP obida 'slow'; Sh(M) upitaan 'slow(ly)'; Sh(C) upittaan 'slow'; Sh(C) upitta! 'wait!'; Tb(M) 'ïiibil; Tb(V) 'ïiibil 'slow(ly)'.

2042b. *pit / *piL 'subside, slowly, softly': Hp pevel-ti 'abate, subside, diminish in intensity'; Ca pélyan 'slowly, softly'; and perhaps Tb(M) 'iiibil 'slow(ly)'; Tb(V) 'iiibil 'slow(ly)'? [NUA: Num, Tb, Tak]

2043. *a / *a-ka 'quietly, slowly, stealthily, secretly': Kw 'aa / 'aaga 'quietly, stealthily, secretly'; Ch 'aa 'quietly, still'; Ch 'aaga 'stealthily, secretly'; SP aa- 'quietly, gradually' (no initial glottal); WMU aaġa- 'quietly, slowly, gently, adv (usually combined)'; CU 'aa- 'gradually, calmly, softly'; CU 'áaĝa 'secretly, stealthily'. [NUA: Num]

NB, *sarip 'slowly': CU sariv 'slowly'; WMU sariv 'slowly'.

Small: see little Smart: see know Smear: see touch

SMELL, STINK, ODOR; OLER, OLER MAL, HEDER, OLOR, HEDOR; see also skunk

2044a. *hu'a (> *huha) 'stink, break wind': Sapir; L.Son65 *huha/*huh-i 'heder'; CL.Azt161 *ihyaak; CL.Azt210 **hu'a 'break wind'; KH.NUA; M88-hu2 'to fart, break wind'; KH/M06-hu2: Kw huu; Kw huuppï 'fart, n'; SP uu; CU 'uu'i; Tb 'uumat~'uum; Cp hú'; Ca hú'-il 'anything that smells'; Gb hohó (vowel is wrong); Sr huu'; TO uiwi; Eu húha 'heder, emporcar el aire'; Wr uhá-ni, uhí-ma; Tr uhá / uhí / uhú; My húuha; CN (i)'yaaya 'to stink'; Pl ihyal 'fart'. Sapir ties the TO form above with SP, and thus unites Num and Tep. Note also NP hunkï 'odor of skunk' and Sr hukum 'to smell' which are at 'skunk' also, with *hupa 'stink, skunk'.

2044b. *u'u 'break wind': Sapir; M88-'u3 'fart'; I.Num17 *u(')u; KH/M06 astutely combines 'u3 and hu2:

Kw huu-; CU 'uu'i; CN i'iiyootiaa (CN i < *u); Mn pittusu'i-t 'fart noiselessly'. One can see considerable similarity and overlap between M88-'u3 and M88-hu2 in these various initial *hu/*u reflexes. [initial h/'] [NUA: Num, Tb, Tak; SUA: Trn, Opn, Cah, Azt]

2045. *pun(uha) 'stink': Mn punuha 'smell, stink, vi'; Ch punúa 'stink, smell'; and Wc pïni 'rot' fits as well. [NUA: Num; SUA: CrC]

2046. *kwana 'smell': I.Num78 *kwana 'smell(y)'; M88-kwa11 'smell(y)'; KH/M06-kwa11: NP kwana 'smell'; TSh kwanna 'odor'; Sh kwana' 'smell, vi'; CU kwanay 'smell, have smell, exude smell'. Add WMU qwanná-y / kwanáy / kwanáa'yük 'have (the) odor (of), smell a certain smell, stink, vi'; past: qwaná-qa. Jane Hill (p.c.) notes My húhu'ubwa 'huélelo' with *hu 'stink' prefixed perhaps or it may tie to *ukwV below. [NUA: Num; SUA: Cah]

2047a. *ïkwi / *ukwi 'smell, vt': I.Num8 *ïkwi 'smell, vt'; M88-'a23 'smell, vt'; KH/M06-'ï20: Mn ekwi 'smell, vt'; NP iggwi/ikkwi 'smell, vt'; Sh ïkwi" 'smell, vt'; Cm ïkwi 'smell s.th.'; Kw ukwi 'smell, vt'; SP ukwi; CU 'ugwi 'smell, vt'. Add Ch ugwi 'sniff'. Iannucci's initial 'ï fits most of the data and is not a bad proposal, though *u is possible, too, since ï < *u is frequent. [NUA: Num]

2047b. *i'nïkwi 'smell': CN i'nekwi 'smell s.th.'; Pl ihnekwi 'smell'. [SUA: Azt]

NB, for *hupa 'skunk' and B.Tep 'uuvai 'smell', see skunk.

Smile: see laugh

SMOKE; HUMO, HUMEAR, AHUMARSE, FUMAR

Mn	v: kuhida; kuhita'i	Hp	kwiicinw; poksö 'smoke hole'	Eu	moráwa; bici
NP	v: pahmo'i; tonui	Tb '	uui'(ït)~'uu'uui'iša 'it is smoking	g'	moró 'humear'
tonui '	smoke come out of house	e, v' Sr	möaa't; v: möö'	Tbr	ku-picí-t
	aggwidi 'smoke a hide,	vt'		Yq	bwičía;
TSh	kukkwii"-ppïh/ppi	Ca	mí'-at	My	bwiiči
Sh	ku-kkwi-ppïh	Ls	kúúmi-t	Wr	moréwa; ye'ni-ná;
Cm	kwipï		húúşi 'smoke tobacco'		molo-ná; moritá-ne
Kw	ko'o-toko; kwihi	Ср	mí'at; v: húše	Tr	mo*rí-ma/mo*ro-mea; pewa / ibewa;
					kumu- 'smoke meat, vt'
Ch	kwihí-p; v: ko'á-tïka	TO	kuubs; v: jeejena; kummun	Cr	kïïcí
SP	kwii"	Nv	kupudaga; v: kupsa	Wc	kïcí; yená 'fumar'
WMU	kwií-ke-(rï) (< *kwii"-k	e-tï) PY ₁	p kuubisi; vt: kuuba;		kwáuní(ya) 'foggy'
	wíikarï	smok	ke tobacco: deenim; si'a '&suck	hubsia	
CU	kwíi-vi; sïqXá-pï	NT ST	kuubúši; dïïnïi 'to smoke' kuubïš/kuubš; dïï'nnia'; present: dïïn 'fumar'	CN	i'potok-tli '&mist'; pook-tli; vi: poočeewa; vi: (tla)poočuiaa

2048. *yï'na 'smoke tobacco, smoke by sucking': Sapir; B.Tep34 *dïïnïi-i 'to smoke'; M67-394 *yena 'smoke tobacco'; L.Son357 *yïna 'fumar'; M88-yï3 'smoke tobacco'; KH/M06- yï3: Yq yena 'to smoke cigar, etc'; My yena; TO jïïni; UP dïïñï; LP dïïñ; NT dïïñyi; ST dïïn; Wr ye'ni; Cr ra-yáahna 'he is smoking'; Wc yená 'fumar'. To these, add Eu déina 'chupar tabaco' and Sapir's inclusion of Simeon's entry: CN ye-tl 'humo odorífero, perfume, tabaco, planta medicinal ...'; Nv dïnnï / dïdïna 'chupar piciete'. [SUA: Tep, Cah, Opn, Trn, CrC, Azt]

2049a. *kwitta/i / *kuhita 'smoke': Sapir; VVH35 *kwi_Sci 'smoke'; M67-392abc *kwi/*kuhi, *kwici, *kuci 'smoke'; I.Num83 *kwiih/*kuhih 'smoke'; L.Son121 *kwici 'humo'; M88-kwi10 'smoke'; KH/M06-kwi10: Mn ku"-kuhi" 'smoke'; Mn kuhida 'smoke out, vt'; Mn kuhita'i 'be smokey, vi'; NP kwitta; TSh kukkwi 'smoke, v'; TSh kukkwippï 'smoke, n'; Sh (kuk)kwiippïh 'smoke'; Kw kwihi 'be smoky'; SP kwii"; CU kwii-vi; Hp kwiici(ŋw); My bwicia 'está humeando'; My bwiiči 'hizo humo'. Add Yq bwičia 'smoke, n'; Eu bici 'smoke, n'; Cr kïici 'smoke, dust'; Wc kïci 'smoke'. The Corachol forms are cognate since CrC *kïci <*kwici.

Manaster-Ramer (1992b) astutely proposes that *kwici 'smoke' (<**kwit-) may involve an original t, on the Hopi evidence: Hp kwiit-an-ta 'purify with (juniper) smoke, fumigate'; Hp kwiit- 'smoke, n' (combining form of Hp kwiicinw 'smoke, n') in contrast to *kwici for most other UA languages; supporting that is also the NP evidence: NP kwitta 'smoke' and NP kwidaba 'smolder' and the Mn forms. So both NP and Hp lend credence to Manaster-Ramer's suggestion that we may be dealing with medial *t instead of *c. In light of final a/i vowel alternation in many UA verbs, the Hp and NP forms (*kwita) and some of the Tep forms below (*ku-bisa/i) are noteworthy. **2049b.** *ku-kwita/i > *ku-kwici 'smoke, dust': B.Tep125 *kuubusi 'smoke, dust'; TO kuub(s); UP kuubsi; LP kuubiš; Nv kupsa 'humear'; PYp kuubisi 'smoke, n'; PYp kuuba smoke, vt'; NT kuubúši; ST kuubiš. Miller lists B.Tep125 in both M88-kwi10 and M88-ku17. Might Tep formerly be *kuubisi, the middle vowel assimilating to the first (i > u), thus, the latter Tep element (-bisi) fitting Hp kwiici and Cahitan bwici, and all others pointing to UA *kwici 'smoke'? Furthermore, only NT shows the vowel u, all other Tep forms show different vowels, usually a more forward high vowel, either i, i, PYp a, or no vowel. The first element of the compound *ku"-bisi is probably *kut 'fire'. Manaster-Ramer includes forms of these two sets in his article "A Northern UA sound law: *-c->-y-," wherein he states that all NUA forms lost PUA *-c- and that the Hp c is from a later palatalization of another consonant t. Cf. also Tb tuguubiš-n 'his dirt'; Tb tuguubiš-(ït) 'it is dirty'. Could CN poočeewa 'get smoky, smoke s.th.' be a loan from TrC or Tep? [*t > c >Tep s; phonology] [NUA: Num, Hp, Tb; SUA: Tep, Cah, Opn, CrC]

2050. *moLa/i 'smoke, v': BH.Cup *mi; M67-393 'smoke, n'; L.Son149 moro, mor-i 'humear'; M88-mi2 'smoke' and M88-mo8; KH.NUA; KH/M06-mo8: Cp mí'at; Ca mí'-at; Ls méyi 'make medicinal steam or smoke by putting herbs on heat'; Sr möör' 'be smoky'; Sr möraa't 'smoke, n'; Eu moró- 'humear'; Wr molo / mori 'hacer humo'; Wr morewa 'humo'; Tr morí/murí 'humo'. Ken Hill adds Ktn muahkïk 'be smoky, v'; Ktn muaht / mwat 'smoke, haze'; Cr rakïsmwáát^ye'e 'he is making it give off smoke'. Add CN molooni 'waft, rise and drift in air currents'; Pl muluuni 'fly or blow away'; Eu moráwa 'humo'. M88 offers Pl mimilaka 'for the fire to burn'; Pl mumuluca 'to smoke (as a fire trying to burn)' as well. [NUA: Tak; SUA: Trn, Opn, CrC, Azt]

2051. *husi 'smoke tobacco, v': Ls húúsi 'smoke tobacco, v'; Cp húše 'smoke tobacco'. [NUA: Tak]

2052. *kummu(C) 'smoke (meat)': TO kummun 'smoke (meat), vt'; Tr kumu 'smoke (meat), vt'; ST kumu'ra' 'fumigar (con humo), vt'; Nv kumurha 'hacer humo para incensar'; Ls kúúmi-t 'smoke, n'; Ls kumí-kmi-š 'smokey-colored'. [SUA: Tep, Trn; NUA: Tak]

SMOOTH; LISO, TERSO, PLANO; see also 'slip(pery)' and 'flat'

2053. *sïCpV / *sï(L)paC 'smooth': Sh sïïppa" 'become smooth'; Cm sïï(h)petï 'level, even, flattened'; CU sïpá'ni 'be flat'; Hp sïphinpï 'soft, tender, pliable, smooth'; if the unknown C was a liquid, absorbed in Num, then the following show *sïLpV: Hp sïrpa 'slip suddenly'; TO heelwua 'slide'; TO heelwuisk 'slide'; perhaps Pl šiipinawai 'to slide, slip'. Or PYp hepelik 'flat, adj; lowlands, n'. [NUA: Num, Hp; SUA: Tep]

2054. *yapa 'smooth': B.Tep13 *daapaka 'smooth'; M88-ya15 'smooth'; KH/M06-ya15: TO đaapk 'be smooth, slippery, naked, bare'; UP daapiki; LP daapak; NT daapáka; ST dyaapak. Add PYp daapa 'smooth, slip' and Nv sidapka 'liso'. Miller includes CN yamaaniaa 'to soften'; CN yamaanki 's.th. soft, delicate'; Pl yamaani-k 'soft, bland, mushy', but beyond Azt initial *ya..., an m:p correspondence is not yet established; Ca yáwan 'make smooth, vt' is as likely, since p:w dichotomies are more frequent than p:m. [SUA: Tep]

2055. *pahay 'smooth': CU paáy 'be smooth' (vs. CU páay 'call, invite'); TO wa'ađ-k 'be naked, be smooth'; SP païN 'smooth'. A decent match since TO w < *p, TO ' < *h, and TO d < *y, yet see also *paCVnka 'below'. [NUA: Num; SUA: Tep]

2056a. *piCka / *piNka 'smooth, bald': Kw pika 'smooth'; Kw pika-roci 'bald-headed' (toci 'head'); Ch pikága 'smooth'; TSh appiŋkoyo'i 'be bald-headed'. For *roci/rusi 'head' in Kw and Tr, see *toci/tusi 'head'. For the latter part of TSh appiŋoyo'i, see *nuyu at naked. Nv tïviki 'muy liso, como bruñido' may fit here or may be a dialect variant of LP(EF) dapek 'liso' and all the other Tep forms of Tep *dapak (<*yapak) 'smooth, naked'. Could Nv sivopigi' moho 'bald' represent an intervocalic voicing of *-pik-? Or could a prefix *ya- in Tep and a vowel change unite the Num and Tep stems (pika/paka)?

2056b. *paNka / *paCVNka 'smooth': other SNum forms share much with the above, but different vowelings: SP paüN-ŋqa- 'be smooth'; WMU paáqqa-y / paáŋqa-y / paága-y 'be slippery, smooth and shiny (like marble)'; CU paáqay 'be smooth, slippery'. These may tie to *pahay above with a -ka suffix. [NUA: Num; SUA: Trn]

NB, for *cita/*si'ta (My, AYq, Wr), see 'slip(pery). NB, for Ca táyul, and Sr tayuli' slippery, etc., see slip(pery)

SNAIL: CARACOL

2057. *waLaka 'snail': CN wilaka 'caracol de monte'; Tr warákoara 'caracol'; Ls muvílaqa 'snail'; Wr alágaloci 'snail'; Wr nalágeloci 'snail'; Tr narákuri 'snail'. These are another example of NUA liquids (Ls) corresponding to SUA liquids, though Ls and Wr engage prefixes that eliminated initial w-. These also present another example of vowel transposition relative to consonant positions:

Wr alagaloci

Tr narakuri

[V transposition; SUA L = NUA L] [NUA: Tak; SUA: Trn, Azt]

NB, Cr si'ïpu'u-(te) (pl) 'caracol(es)' of SUA and Ktn hu'-č 'star, landsnail' of NUA seem built on *si'po 'star' or *si'po < *sipo'o/*sipu'u(?). Ktn has both meanings and the Cr fits well several SUA words for 'star', though Cr sú'ura'abe-(te) (-pl) 'star' is a different word. So Cr sï'ïpu'u 'snail' may be a loan from another UA language, though it fits star, as a cognate, better than Cr's own word for star does.

SNAKE, RATTLESNAKE; CULEBRA, SERPIENTE, VÍBORA; see also lizard

2058. *koNwa / *koLwa 'snake'; *tï-koNwa 'rattlesnake, rock-snake': Sapir; M67-395 *ko/*kowa 'snake'; I.Num 219 *toko(h)wa check'snake, rattler'; L.Son88 *ko 'serpiente'; B.Tep116 *ko'oi 'snake'; Kaufman 1981 *konwa; Fowler83; M88-ko12 'snake, rattlesnake'; KH/M06-ko12: many forms appear to contain the prefixes *pa- 'water' and/or *tï (> *to) 'rock', as Sapir and Miller have suggested: Mn toqoqqwa 'snake'; Mn patagówa 'watersnake'; Mn togóga 'rattlesnake'; NP togoggwa 'rattlesnake'; TSh koko 'gopher snake'; TSh pa-suku/tokowa 'water snake'; Sh tokoa 'snake, rattlesnake'; Sh kokon 'bull snake, blow snake'; Sh pasinkokon 'water snake'; Kw tokowa 'rattlesnake'; Kw koko 'gopher snake'; SP tonoa-vi 'rattlesnake'; CU togoa-vi; TO ko'oi/ko'owi 'rattlesnake'; Nv ko'o; PYp ko'o; NT kói/kóyi; ST ko'; Eu vakoc 'culebra'; Yq báakot; My baákot; Wr kuhuá 'snake sp.'; Tbr koó-t; Wc kúú; Cr ku'uku'u-se 'snakes'; Cr kuku (Sapir); CN kooaa-tl 'snake, serpent, worm, twin'; Pl kuuwa-t 'snake'. I agree with Munro's (1973) inclusion of Ls gigen-la 'ring snake' (with reduplication), to which we can add Cp qeqeni-ly 'king snake' (Ls loan?) and Munro (1973) shows *w as one source for Ls η and for other Tak languages as well. Joe Campbell (1976) marshals evidence for underlying η or *koηwa, to which SP toηoa- with nasal aniticipation is consistent, and which Kaufman (1981) reconstructs with a nasal *konwa. Yet Tep shows no sign of g (< *w), only glottal stops and w, much like the *L > ' in a cluster, then separated as in *wïLwïLu > *wï'ïwïLu 'big' and *koLkoLi > *ko'okoLi 'sick'. So a cluster *-Lw- > -Nw-, a liquid nasalized in NUA, and *-Lw->-'w- (> ko'owi) glottalized then separted in Tep may be the case. Is Tep -ogo or -Vgo- frequent medially? $[*w > kw \text{ in WNum}, > \eta \text{ in Tak, but } *w > ' \text{ or } w \text{ in Tep; } w/kw, N/w, Tep o'o(wi), '/w]$ [NUA: Num, Tak; SUA: Tep, Tbr, Trn, Cah, Opn, CrC, Azt]

2059. *sayawi < *saya-wa 'rattlesnake': L.Son235 *saya 'víbora de cascabel'; M88-sa19 'rattlesnake'; KH/M06-sa19: Wr sa'yawé; Tr sayáwi; Op sada-ko; Tbr koót hanyá-kam (lit. 'snake-rattle-haver'); NP sawiwiwïnï / sawiggwiwïnï 'to rattle (of rattlesnake)'. Luis Barragan adds PYc hadag 'rattlesnake'. Add Wc šáyé 'rattlesnake' and Eu saducit 'rattlesnake'. And Eu sadu... fits Wr/Tr *sayawi with syncope then w > u: *sayawi > *sayw > *sayu (Eu d < *y). Yq saa'ákame 'víbora sorda' may belong, if liquid > y. In light of Tbr hanyá-t 'sonaja [rattle]', these may all derive from *saya-wa 'rattle-haver/possessor' from the *-wa 'possessive suffix. [l/r > y] [NUA: Num; SUA: Tep, Trn, Cah, Tbr, Opn, CrC]

2060. *sïwï 'rattlesnake'; M88-sï13: BH.Cup *səwət 'rattlesnake'; Fowler83; Munro.Cup108; KH.NUA; KH/M06-sï13: Cp séwet; Ca séwet; Ls şóowut; Gb şoowot 'black diamond rattlesnake'; Sr hïï^rŋt 'rattlesnake'; Ktn hïŋ-t. But Tb sïmïnt 'snake'? Hp cïï'a 'rattlesnake' cognate? Miller queries. If -aya- > -í-, these may tie to *sayawa above. [*w > m? or η, Tak V's] [NUA: Tak]

Miller includes L.Son243 *sino 'culebra' and Wr sinói, Tr si-nó-wi-i/si-n-i 'serpiente' in the *sïwï set above. But I separate the *samïnï vs. *sinawi forms below.

2061. *samini 'snake': while M88-si13 includes these above, enough is different from the others for a set, and Sr, Tb, and Nv make a decent trio: perhaps *samini 'snake': Tb šimin-t 'snake'; Nv samunu 'to rattle' (u often = i); Sr hiint 'rattlesnake'; Ktn hin-t 'rattlesnake'. In spite of c/s disagreement (fairly common in UA), the length of the Tb and Nv alignment is hard to ignore. [c/s] [NUA: Tb; SUA: Tep]

2062. *sinawi 'snake': L.Son243 *sino 'culebra'; Tbr sinawe 'reptile'; Tbr hi-sinawe-ra-t 'gila monster'; Wr sinói 'snake'; Wr wetésinoi 'kind of small snake'; Tr sinowi 'snake'; Tr fisínoa 'a black poisonous serpent'; maybe Cm kwasinaboo' 'snake' and the -sin- in Sh pasin-nuyua 'water snake' (western dialect)' (cf. Sh nuyua 'crawl (as snake)') and Sh pasin-kokon 'water snake'. If *pi- is a prefix, then Nv vinoi would belong since *s > Tep h would leave h hardly durable: *vihnoi > vinoi. Ktn šunišuni' 'snake motion, like a snake, adv' may belong, or maybe not. [SUA: Trn, Tbr Tep; NUA: Num]

2063. *taNoLowa 'snake sp': Tr renórowa 'víbora chirrionera'; ST tanooly ošia 'coralillo (víbora)'. If the ST term is a compound employing ST tanooly 'day', then is the Tr term a loan? [SUA: Tep, Trn]

2064. *paka('/w)a 'red racer snake, ceremonial clown': BH.Cup *paxá' 'racer snake'; M88-pa45; KH.NUA; KH/M06-pa45: Cp pexá'a 'red racer snake'; Ca paxá' 'ceremonial cook or clown'; Ls paxá' 'red racer snake'; Gb paxá' 'payaso, polices en la religion'; Sr paxaa' 'ceremonial cook or clown'. Add to these TO jewakag/jewekag 'king snake'. [k > x; w/'; unstressed V rise in Cp] [NUA: Tak; SUA: Tep]

2065. *siktaput 'red?-snake' (cf. sïta 'red'): Eu setávuc 'culebra azotadora [whip snake]'; AYq siktavut 'red racer'; and probably Ktn tapo-č 'corral snake' though loss of an initial syllable or lack of the prefixed morpheme is its lot. We would expect Tep h < *s, so Nv sitkara 'rattlesnake' may be a loan from TrC. [SUA: Opn, Cah; NUA: Tak]

2066. *tahu 'snake sp.': KH.NUA: Sr taahuţ 'red racer snake'; Gb tahor/taxor 'snake sp, perhaps gopher snake'. To Hill's pair we can add Hp taaho 'striped whipsnake'; Ktn tahu-č 'snake sp. (gopher snake?)'; and maybe Tb tuha-t 'water snake' with vowel metathesis. [NUA: Hp, Tak, Tb]

2067. *nïkwiw 'large legendary snake': TO niïbig 'lengendary monstrous snake'; PYp neebeg 'large mythical snake'. [SUA: Tep]

2068. *pama 'snake': TO wamaD 'any non-poisonous snake'; Tr bamagásuri 'víbora venenosa'. [SUA: Tep, Trn]

2069a. *suku 'snake sp.': TSh pa-suku 'water snake'; Mn pasúgu 'water snake'; Tb pišuugat 'red racer snake'; Yq sikkuča'a(ra) 'coralillo'; AYq sikkuča'a 'coral snake'.

2069b. *siki 'lizard': Ch sïgïpici 'lizard'; WMU süģú'nagwi-či / süg<u>ú</u>'nagöi-či / süg<u>ú</u>'nawü-či / süg<u>ú</u>'nawü-či / süg<u>ú</u>'nawü-či / lizard, n'; CU sïgï-naġóy-či 'lizard'; and Kw čigïpi-ži 'lizard' (*s > c). a vs. b are divided semantically (snake vs. lizard) as *u > ï in Num often. [NUA: Num, Tb; SUA: Cah]

2070. *tannaCki 'sidewinder, rattlesnake sp.': Kw tanaki-bïzi 'sidewinder'; Ch(L) tannakaici 'side winder, snake species'; SP tannaqqi 'rattlesnake' (myth word for toġoa-vi). Ch(L) tends to vowel preservation across a consonant, so final -i (vs. -ai) is reconstructed. [NUA: SNum]

NB, for *nuyu'a 'snake, crawl like a snake', see at crawl.

SNEEZE; ESTORNUDAR

Mn	hakwïsa'i	Нр	ahsi / àasi; nïha	Eu	hačíswa
NP	akwisa'i; sidï'hu	Τb	('a)hatišah	Tbr	
TSh	ukkwisai	Sr	ha'tisk	AYq	ha'ačihte
Sh	akkwihsi"	Ca	há'tis	My	he'ečihte
Cm	aakwïsitï; ca'akusitï	Ls	hatíís(a)	Wr	a'túsa-ni
Kw	ha'wiši	Cp	atíse	Tr	atíso(wa); atisi
Ch	haw'isi	TO	bisčk	Cr	he'eciupua
SP	a'ŋwïši	Nv	vistku	Wc	

WMU	w <u>i'í</u> si <u>u</u> , w <u>i'í</u> si <u>o</u>	PYp	bisca		
CU		NT	bíštïïkyi	CN	eukšoaa; i'kwišoaa;
		ST	biščkia		iukšoaa

2071a. *ha't(w)isa (> *ha'(N)kwisa) 'sneeze, vi': M67-396 *hatis 'sneeze'; L.Son54 *hatisa 'estornudar'; KH.NUA; M88-ha5 'to sneeze'; KH/M06-ha5: Tb ha'dišt 'sneeze, n. (cognate? Miller queries; definitely, yes); Cp; Ca; Ls; Sr; Eu; Tbr. Ken Hill adds Tr, Wr, Gb hačeú'ax 'he is sneezing'. Miller includes Pl ahkweečiwi 'sneeze', for -'t- or other clusters of -Ct- > -kw- as AMR (1991d, 1993a) showed for *tw > kw. For UA *s > My h as initial C in a cluster, cf. sneeze and sit. Cr he'eciupua belongs as well (cf. Gb hačeú'ax). The Num forms at M88-ha5 show medial -kw-, agreeing with Tep and CN; see b. [*-'t- > -c-]

2071b. *ha'kwisa'i 'sneeze': Mn; NP; TSh; Sh; Cm; Kw; Ch; SP; CN i'kwišoaa. WMU w<u>i'ísiu</u>, w<u>i'ísio</u> lost the first syllable and shows a nasal like SP does.

2071c. *kwic... 'sneeze' in Tep. [NUA: Tak, Num, Tb, Hp; SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]

SNORE; RONCAR

Mn		Нр	heroroykï; hérok	Eu	tóroka
NP	ïsododoi	Тb	šoloon; piišin	Tbr	
TSh	osotoŋwa	Sr	tööčo'	Yq	hóroró'otia
Sh	ïsotoppai	Ca	tálal	$\overline{\text{AYq}}$	ho'otia
	hono-nomoi '&growl'			My	hooró'oti koče
Cm	ïsorokiitï	Ls	xaráá-ya	Wr	
Kw	'osoroni	Cp	náx'etu	Tr	roró-/ŕoronó/ŕorosó
Ch		TO	toDk	Cr	kï'ïsï; muraihpua
SP	ossoroŋwi	Nv	torhoka	Wc	
WM	söörii	PYp	sorkia		
CU		NT	soróókai '&snort (animals)'	CN(R.	IC) ikotoka
		ST	sorkia/sarok (prs)		

2072a. *ïsotoN-(kV) 'snore': NP; Sh; Cm; Tb. Curiously, sneeze and snore remain so pervasively intact.
2072b. *osotoN(i) 'snore': TSh; Kw; SP; Tb could belong with either since it is missing the first vowel, which is the only difference between a/b. Perhaps *osoton < *ïsoton. [NUA: Num, Tb; SUA: Tep]
2072c. Tep *sorok 'snore' (<? *corok): PYp; ST; NT.

2073a. *(i)hotok / *horok 'snore': Hp; Yq; AYq; My; CN. Could this be a diffusion from Tep *sorok? Subgroups b and c may be from *totok. [liquids]

2073b. *torok 'snore': TO; Nv; Eu; Tr. [NUA: Hp; SUA: Tep, Cah, Opn, Trn, Azt]

2073c. *totV 'snore': Sr tööcu'; Ktn toča'. As NUA -c- < -t- usually, then *toto may explain some.

Snot: see mucus

SNOW; **NIEVE**, **NEVAR**

Mn	nïbábi; v: nïbaa	Нр	nïva; v: nïva-yoyoki	Eu	sutéhri; v: sutéwa
NP	nïbabi; v: tïïggwawïnï	Tb	nïbaal; v: nïba'-(ït)	Tbr	kewá-t; v: kewá
TSh	tahapi; taha'ïma"	Sr	yuat; v: yui; yuatu'	AYq	sapam; v: sapa weče
Sh	takka/takka"-pin;	Ca	v: yúy	My	sáppam
	v: takka-wii (wii=toss away)	Cp	yúye		
Cm	tahka-(bi); tahka-ïmarï (s'fall)	Ls	v: yúy(u)	Wr	kepá; v: keba-ní
Kw	nïva-vi; v: nïva-'uwa	TO	gew	Tr	gepá/kepá-(mea) n-(v)
Ch	nïïvaavi; v: nïvá-'ïwa	Nv	kïba; v: kuba guksu	Cr	seeri
SP	nïva	PYp	keva; hismil 'sleet'	Wc	'ïïví '&ice'
WM	nuvwá-vi, nuwá-vi, nuġwá-vi	NT	kïvai	CN	sek-tli; v: pišawi;
CU	nïvïá-vi	ST kïv'i	ice'; havook kïv 'snow, li	ght-ice'	sepayawi-tl

2074. *kïpa 'snow, ice': B.Tep135 *kïvai 'ice, snow' (LP gïwï); M67-400 *kepa 'snow'; L.Son83 *kïpa 'nieve'; M88-kï1 'snow'; KH/M06-kï1: TO; LP; Nv; PYp; NT; ST; Tbr; Wr; Tr. Voiced g in TO, Tr, and ST gïvka' 'freeze (animate subj) vs. k in ST kïvaiña' 'freeze (plants)' and others. [SUA: Tep, Trn, Tbr]

2075. *nïpa 'snow': VVH160 *nï_Spa 'snow'; M67-398 *nepa; I.Num126 *nïpa; M88-nï11; KH/M06-nï11: Reflexes are found in WNum, SNum, (but not CNum), Hp, Tb. [NUA: Num, Tb, Hp]

2076. *yuya (perhaps < *yawya) 'snow, v/n': Sapir; BH.Cup *yuy 'to snow'; M67-399 *yu 'snow'; M88-yu5; Munro.Cup120 *yúúya-t 'snow'; KH.NUA; KH/M06-yu2 *yuya (KCH) 'rain, v': verb forms 'snow, v': Cp yúye-; Ca yúy-; Ls yúy(u)-; Sr yui 'snow, vi'; Gb yúyyok 'está nevando'; Ktn yu 'snow, vi'; Ktn yuy 'está nevando'. Note final -a in noun forms: Sr yuat 'snow, ice, n'; Ktn yua-t; Cp ayúy'a; Ca yúyat; Ls yúúyi-t; Gb ywat/yowát; Hp yooyaŋwï 'rain, rainstorm'. 'Cold': Cp yúy 'cold'; Ca yučiwi 'cold'. Add NT duúdu 'it rained' and CN -yawi in CN kiyawi 'rain, v' and CN sepayawi 'snow, v', likely cognate with Tak *yuy (< *yuwi < *yawi/*yawya). Add Sapir's inclusion of Wc 'ïīví 'nieve, hielo', for Wc ï < *u, Wc v < *w, and i are apparent, though missing initial y. I like Ken Hill's division/sorting of this complex array of terms in KH/M06-yu2 *yuya 'rain, v' vs. KH/M06-yu3 *yuki 'rain, n' at 'rain'. [Wc v < *w] [NUA: Tak, Hp; SUA: Tep, CrC, Azt]

2077. *takka 'snow': Sh, Cm, TSh. [CNum]

2078. *sïk 'snow': CN, Cr, and many possible compounds of *sïk can be found at 'cold'. Others consider this a morpheme of *sïCpï and such—possible, but not necessarily probable, in my opinion. [loss of -k- in cluster in Cr] [SUA: CrC, Azt]

Soak: see wash and sink

SOFT; BLANDO, FOFO, ESPONJOSO

2079. *kwaL 'soft': M67-401 *kwa 'soft'; M88-kwa8 'soft'; KH/M06-kwa8: Eu barínari 'blando, lo que fue ablandado por otro'; My bwalko 'blando'; first two syllables of Cr kwa'ačíra'a 'está suave, blando, tierno, débil' (*L > ' in Cr). Miller also includes NP kwasïbbï 'buckskin'; Wr & Tr wasá 'plowed land'; and Pl kwec-tik 'finely ground, powdery'; however, some have only initial *kwa in common. I prefer presently limiting this set to Cr, My, and Eu, with the addition of Yq bwal 'soft'; Yq sí'ibwal 'very soft'; and AYq bwalko 'soft, smooth'. Cr fits well since *-L- > Cr -'-. ['/L] [SUA: Cah, Opn, CrC]

2080. *mohi(ka) 'soft': TO moik '(be) soft, tender, flexible, pliable'; TO moihun 'soften, plow'; Nv simoika 'cosa blanda'; PYp moika / mohika 'soft'; NT moíka 'blando'; ST (ču)moik 'blando'. PYp h and TO h may suggest *h > ' > \phi , even though *mo'ika necessitates only one change instead of two. [SUA: Tep]

2081. *hipi 'soft': Ca héveve 'soft'; Cp hévele 'be soft'. [NUA: Tak]

2082. *yoncoC 'soft': NP yoddsoka 'soft'; TSh yoccokkwa"-ppïh 'soft, flexible, pliable, crumbly, incohesive'; Sh(C) yonco" 'soft, spongy, smooth'; Sh(M) yocca 'soft, spongy'. [*-nc->-cc-] [NUA: Num]

2083. *yuLi 'soft': Sh yuni 'soft, spongy'; Wc yiïre 'blando o flexible, como cartílago'. [l/n] [NUA: Num; SUA: CrC]

2084. *payu / *paLyu 'soft, gentle': CU payú-gwa-rï 'soft, lax, kind, gentle, yielding'; Cm payï'yïkatï 'softened'; maybe Ca pélyen 'slowly, softly (as in sobbing), adv' with vowels leveled. [L; *u> ï; V leveling] [NUA: Num, Tak]

Son: see man, bear

SON-IN-LAW: YERNO

2085. *mo'ona(C) / *monna / *moCna 'son-in-law, male in-law': Sapir; M67-505 *mona / mo'na / mo' 'affinal relative'; I.Num94 *mona / *muna 'son-in-law'; L.Son148 *monï 'yerno'; M88-mo3; KH/M06-mo3: Sh monappï; Kw mono; SP munna/mona-ci; Hp mö'önanw 'male in-law'; Eu mónwa; Wr mo'né; Tr mo'né-ra; My mó'one;

Yq mó'one; Tbr moa-saká-r; Wc muune; Cr mú'u 'affinal relative'; Cr -mu'un 'yerno'; CN moon-tli 'son-in-law'. Sapir also lists Cr muna-ra. Add AYq mo'one 'son-in-law' and Ca míŋkiw'a 'son-in-law', since Ca i < *o. With glottal stops in six languages (Hp, My, Yq, Wr, Tr, Cr), the reconstruction should reflect it, though it could reflect the geminated *-nn- that Sapir (1914, 474) proposes (*monna > *mo'ona), saying that only geminated *-nn- remains in SP, while *-n- disappears. In either case, it is curious that 'son-in-law' is more pervasive throughout UA than other vocabulary. [NUA n : SUA n] [NUA: Num, Hp, Tak; SUA: Tbr, Trn, Cah, Opn, CrC, Azt]

2086. *kwa' 'son-in-law': Sr kwa' 'man's son-in-law'; Ls kwá'-pana 'man's father-in-law or son-in-law'. Ls kwa' 'maternal grandfather' might have us thinking this to be the same PUA stem as *kwa 'maternal grandfather', though Sr kwaar|i' 'maternal grandmother' shows a different stem in Sr. [NUA: Tak]

SORE, WOUND(ED), BLISTER; LLAGA, HERIR/-DO; AMPOLLA; see also rot, cut, pain. **2087.** *sawa / *sa'awa 'sore': AYq sa'awa 'sore'; My sa'awa 'wound, sore'; CN sawa-tl 'pox, rash, pimple, sore'; perhaps Hp(S) sïwati 'cancor sore'. [a'a/i] [SUA: Cah, Azt; NUA: Hp?]

2088. *sipo 'sore, pain': TO hihw(đag) 'sore'; Nv hiboidaga 'llaga'; CN šipipi 'pimple, wart'; AYq siivo '1. harm, damage, vt; 2. curse, hex'; Yq siibok 'daño'; Wr sipé-na 'harm'. Due to different vowels, I think less likely Hp sïvàati 'get thrush, white patches on back of tongue, throat, or palate'; Hp(S) sïvaq-ti 'tongue sores'; but Hp(S) sïwaq-ti 'cancor sore' (2nd Mesa) and Hp(S) sïwati, yet they give us much to contemplate, in clusters (àa-ti / aq-ti) and for *p/v > Hp w, see sit. [SUA: Tep, Cah, Trn, Azt]

2089. *'ïca(C) '(have) wound/sore': L.Son9 *'ïca 'llaga'; M88-ï2 'wound'; AMR1992b; KH/M06-ï2 *ïcaC (AMR): Wr ehcá 'llaga'; Tr čá-ka, čá-na-ri 'sore, n'; Mn ïya-ye 'have sores'; NP ïadui'hu 'wound s.o.'; Sh ïa 'sore, wound'; Kw 'ïa 'wound, hurt, v'; SP ïa-vï 'wounded'; CU 'ïa-vi 'wound, n'; Hp ïya 'sore, scab'; Tbr acá-t 'llaga, sífilis'. We might add TSh 'ïa- (in compounds); Cm ï'a' 'wound, sore, n'. This is another good example of medial *-c- > NUA -y- in showing SUA *ïca and NUA ïya/ïa (Num, Hp *ïya). Manaster-Ramer includes this set in his article "A NUA sound law: *-c- > -y-," wherein he lists SP, Sh, Hp, and Wr. [*-c- > -y-] [NUA: Num, Hp; SUA: Trn, Tbr]

2090. *kïsa 'harm(ed), bad': M88-kï16; KH/M06-kï16: Cp kéše/ kəş- 'to injure, hurt'; Sr kï^rşaa' 'bad'; Sr kï^rşaa' ik / kişaa't 'badly'. [NUA: Tak]

2091. *takowa, perhaps < *takawa 'injure(d), damage(d), ruin': Tbr takoá-t 'dañado'; CN tlakooa / tlakoa 'dañar'; CN tlaatlakoo-tl 'boil'; CN tlakoton 'boil, sore, pustule'; CN i'tlakawi 'go wrong, be ruined or corrupted, injure oneself, spoil; CN i'tlakoaa 'damage s.th., be corrupted, spoiled, damaged, vt/refl'. [Tbr-Azt tie] [SUA: Tbr, Azt]

2092. *muLaw 'wound': PYp muurag 'wound, n'; NT muurágidyi/mumúúragidyi 'herirlo'; TO mummaDag 'a wounded animal, a wound'. Jane Hill (p.c.) notes Mn munabí'wa 'pimples' which agrees through four segments. [SUA: Tep; NUA: Num]

2093. *puLa / *puhuLa 'blister, boil': Tbr wó-pora-li-t 'pockmark'; Tb pohola 'get blisters'; TO wuDDag 'a bandage, a sore or wound'; PYp haapuli / hapolca 'blister, boil'; but ?Cp pi'í-š 'sore' (Cp i < *o after *puLa > poLa). [NUA L: SUA L] [NUA: Tb; SUA: Tep, Tbr]

2094. *ci'(i)wa 'hurt': Tr če'ewáači 'en agonia, agonizar'; Wr ci'wá- 'have a wound, sting, smart'; Wr ci'wárume 'wound, n'. [*i-a > e-a] [SUA: Trn]

NB, for *pi(si)ka 'sore, rot', see rot. NB, for *mukki 'sore' see at 'die'.

Sound: see noise and cry

SOUP, STEW, GRUEL; SOPA, CALDO, GACHA(S), PINOLE, ATOLE, POSOLE

2095. *paLawa 'juice, soup, stew': M88-pa11 soup/caldo; KH/M06-pa11: Cp páwvi-ly (páw=get water); Hp paala 'juice, soup'; Eu varáwa 'caldo'; Wr pa'wíla 'caldo'; Tr ba'wi-rá 'hacer caldo'; My bá'wa 'caldo'. Ken Hill adds TSh paawa 'juice'. Add My bá'awa 'jugo, caldo, sopa'; AYq va'awa 'juice, soup, etc'; Yq bá'awa 'caldo' (*L > 'in Cah); TO waDag '(be) wet'; TO waDagi 'juice'; NT varáágadï 'soup'; ST vaar ga'n 'caldo, jugo [soup, juice]';

PYp vargar 'soup, liquid, juice'; PYp varag 'wet'; Nv barhakaddi 'caldo' (devoicing g > k); Cr há'ara'a 'caldo, suero de queso, lágrima'. But ?Ca hépal-wén'a 'soup' and Tbr wa/va/ba-ta-rá-n 'sopa'? (Tbr wa/va/ba-ta 'agua'). Most suggest 3 syllables: *paLawa > Tep waraga. [NUA: Tak, Hp, Num; SUA: Tep, Trn, Cah, Opn, Tbr, CrC]

2096. *hupa(wa) 'soup, stew': KH/M06-hu24: NP hubba; TSh hupapin. Add Mn hubáwa; Sh hupa; Cm saa huuba; Kw huva-vi; Ch huvá-vï; SP upa; WMU uvá-vü 'soup, broth, stew, n'; CU 'uvwá-vi. A reflex is in every Num language. [NUA: Num]

2097. *atoL 'corn-flour drink, atole': CL.Azt7 *atool- 'atole'; M88-'a29; KH/M06-'a29: CN aatool-li; Pl atuul; Po etul; T atoll; Z aatool; TO atol 'gravy' (loanword? Hill rightly queries). [SUA: Azt]

2098. *kwaCtaC 'gruel, pasty food': Dakin 1982-27: Sh(M) kwatta 'make gruel'; Sh(M) kwaccappeh 'gruel, porridge'; WSh kwaccaappeh/koccaappeh 'pudding, gravy'; Cr kwaihci 'masa'; CN kwečaawa 'get moist, damp'; CN kweečoaa 'grind fine'; CN kweeč-tik 's.th. ground fine'; Pl kweč-tik 'finely ground, powdery'. [NUA: Num; SUA: CrC, Azt]

2099. *(wa)tona 'atole': Eu tónihri 'atole'; Tbr ton-iwa-lí-t 'atole'; Wr watónari 'atole'; Tr watónari 'atole'. Is there an explanation to tie these with CN aa-tool-li 'drink made from cornstarch'? [SUA: Opn, Tbr, Trn]

2100. *ku'uLi 'gruel, thick mix/mush': TO ku'ul 'gruel'; Eu kurít 'dough'; Tr ge'orí 'atole espeso, orchata'. [SUA: Tep, Opn,Trn]

2101. iwa-Li 'atole': Wr ióri 'atole de maíz'; Tr (y)o*ri 'atole espeso, como gelatina'; and the middle part of Tbr ton-iwa-lí-t 'atole'. [SUA: Tbr, Trn]

Sour: see bitter

SOUTH; SUR

2102. *kitam 'south': BH.Cup *kicam 'south'; HH.Cup *kiičam 'south'; M88-ki6 'south'; KH/M06-ki6: Ktn kítamik 'toward the east'; Cp kičám; Ca kíčam-ka 'southward'; Ls kíča-mi-k, kíča-nu, 'southward'; Gb kitáme(k) 'south'. [*-t->-c-] [NUA: Tak]

2103. *pitta 'south': Mn pita 'south, to the south'; NP pitadï 'south'; TSh pittappu 'south'; TSh pittannai 'from the south'; Sh(C) pitta-nankwa" 'south'. [NUA: WNum, CNum]

2104. *taCtika 'south': Tr(S) ri'réke 'sur'; Tr(S) ri'ré 'abajo'; Tr(Br) fi'ríka 'por abajo'; Cr táhtīkī'e 'sur'; Hp tatkya(q) 'in the southeast, southeast of'. Though some vowels need explaining, the consonant pattern t-Ct-k in all three widely dispersed branches makes the tie more probable than not. [NUA: Hp; SUA: Trn, CrC]

Speak: see say

SPIDER; **ARAÑA**; see also 'web' at 'net'.

2105. *toka / *to'oka / *totoka 'spider': M88-tu6 'spider/araña'; Fowler83; L.Son308 *toka 'araña'; KH/M06-tu6 and to27: Eu tóka; Eu wítoroka 'telaraña'; Tr ro'ká 'araña, telaraña'; Tbr tok-wá-t 'araña'; CN toka-tl; Pl tuka-t; TO tokiðhuD 'spider'; Cr tu'uká; Wc tuukáá 'araña'. Most of the vowels point to *tok rather than *tuk. Besides TO, Eu, Tbr, Tr, also Pl, Cr tu'uka and Wc tuukáá reflect *o (CrC u < *o). Add Ktn tukuku / tokoko 'tarantuala' which does nothing to clarify which vowel, but likely belongs. Cr also shows a glottal stop along with Tr and Wr tu'lusi: *to'oka. Eu wítoroka may be a reduplication (*totoka > toroka); in fact, many may be from *totoka > *toroka, in which r > ' could occur, as is common in Cahitan; otherwise, *toka or *to'oka. [SUA: Tep, Opn, Trn, Tbr, CrC, Azt; NUA: Tak]

2106. *tu'Lusi 'spider': in M88-tu6, Miller includes Wr tu'lúsi 'araña o tipo de araña'; My túurus, pl: turús-im 'araña'. Even if these share a morpheme with the above, they are a different compound. Add Tr turusí 'una araña venenosa'. Might these also be from a redupl'n *tustusi > *tu'Lusi? [SUA: Cah, Trn]

2107. *kukkaC / *kukya 'blackwidow spider': Fowler83; M88-ku33; KH.NUA; KH/M06-ku33 *kukkaC (AMR): Cp kúka-t 'blackwidow spider'; Sr kuka-ţ 'spider'; Ktn kuka-č 'spider'; Ls kúyxiŋi-š 'blackwidow spider' (cognate? Miller queries); Hp kookyaŋw 'spider'. This interesting set reveals a -y-cluster as *-yk- or *-ky- in both Ls and Hp, both of which also show -ŋ-. Hp shows the same vowel (-a-) after the cluster that the other 3 Tak languages show, which is probably original, and the Ls -y- may be an anticipation of the two -i-vowels after the cluster: thus, *kukya(ŋ). [NUA: Hp, Tak]

2108. *hupahi 'spider': Yq húbahe 'a little spider'; AYq čukui huvahe 'blackwidow'; AYq huvae toosa 'spiderweb'; Hp -hövi in Hp wishövi 'cobweb' (wis- 'string out'); Hp shows *o instead of *u, probably due to *u-a > o-a, and all else may match: *hupahi > *hupahi (Cah) > *hopai > *hopi > hövi (Hp). Note that with a vowel metathesis, Mn hapopó' / hopopó' 'spider' may belong with *hopa/*hupa? But not counted yet.

[NUA *o, SUA *u, *u-a > o-a in NUA] [NUA: Hp; SUA: Cah]

2109. *hukkwaN 'spider': Fowler83: Kw hukwa-(m)bi 'spider'; SP uqqwaN-mpi 'big black spider'; perhaps CU mukwá-pi 'spider'. Let's add Ch(L) hukwampi 'black widow spider' and WMU qwaapp*ih* / qwep / kwa(m)p*i* 'spider, brown spider'. Note Kw -b with nasal, but -v- intervocalically and -p- when geminated. [p/kw with above?; Kw -b- < -Np-] [NUA: SNum]

The next three sets may have s.th. like *-sok- in common, but are compounded with other morphemes: **2110.** *(w)osoko 'tarantula': Nv ohoku 'tarantula'; ST ho'korai' 'spider'; Tbr woso-kól 'tarantula'. [SUA: Tep, Tbr]

2111. *mari-suka 'tarantula': My márisooka; Yq máisooka; AYq maisooka. Ktn hukaht 'water spider' could belong here or at *hukwaC. $[r > ' > \emptyset]$ [SUA: Cah; NUA: Tak]

2112. *tokoso 'spider': Tr ŕokosó-rowa 'blackwidow'; Ch hokóso 'a-vi 'spider'. [SUA: Trn; NUA: Num]

Spill: see fall and throw Spin: see circle and rope

Spine: see back

SPIRIT, GHOST, SOUL; ESPÍRITU, ALMA, FANTASMA, ÁNIMA; see also religious terms. 2113. *tīL-mukki 'place where spirits of the dead live': BH.Cup *təlmik 'hell'; M88-tï22; KH/M06- tï22: Cp télmeki-š 'land of spirits, underworld, hell'; Ca télmeki-š 'place where dead people live'; Ca télyave-l 'spirit of the dead'; Ls tólmu-l 'land of the dead, hell'. Add Ktn tïyt 'spirit, ghost, person that has died'. *mukki 'die/dead' is compounded with the expected V in Ls, but assimilated Vs (in Ca and Cp) due to lack of stress. [NUA: Tak]

2114. *co'aC 'spirit': Mn co'á-pï 'ghost'; NP ca'abï 'evil spirit'; TSh coapicci 'ghost, spirit, devil, whirlwind'; Sh co'a-ppiccih 'ghost'; Sh co'a-ppïh 'spirit of dead'. [NUA: WNum, CNum]

2115. *muku'a(C) (< *mukki'a?) 'spirit': KH/M06-mu25: NP mugwa 'spirit'; TSh mukua" / mukuattïn 'mind, soul, spirit'; TSh mukuatu 'think, v'; Sh mukua 'spirit, mind, essence'; SP moġoa 'soul, spirit'; Ch mugua 'mind'. Add AYq muukia 'spirit, apparition'. Ken Hill rightly separates these from *mukki 'die/dead' as that has gemination, while these do not, though one can't help but wonder about lenition and a potential tie. [NUA: Num; SUA: Cah]

2116. *ïnïC-pï-(ci) 'spirit': Kw 'ïnï-pi 'spirit, ghost'; Kw 'ï-'ïnï-pi 'word used to refer to deceased person to avoid his actual name'; Ch ïnïp(i) 'ghost, spirit'; SP ïnïppi-ci (< ïnï'-pi-ci) 'evil spirit'; WMU ünüppwi-či 'spirit, crazy person'; CU 'ïnï-pi-ci 'ghost, demented person, maniac'; CU 'ïnï-sáaqa-ci 'ghost'. From Kw ïnï-pi 'spirit, ghost, deceased person' is added an extra absolutive suffix to yield Kw ïnï-pi-či 'moth'. [NUA: Num]

2117. *arewa 'spirit': Tr arewá 'alma'; Wr arewá 'spirit, soul'. [SUA: Trn]

NB, for Tep *'iibïdaga 'soul, heart', see heart.

SPIT, SPITTLE, SALIVA; ESCUPIR, ESPUTAR, EXPECTORAR, SALIVA

2118. *tusaC / *tusiC 'spit, v': M67-405 *tu 'spit, v'; I.Num232 *tusi 'spit'; M88-tu13 'spit, v'; KH/M06-tu13: Mn tuhi; NP tuhi; TSh tusi"; Sh tusi"; Cm tusi; Tb tuhat~'utuh 'to spit'; Tb tuhi-l 'spit, n'; Hp töha 'spit, v' (vowel is wrong, Miller notes); Hp töha(k-) 'spit, vi/vt'. Puzzling is an apparent innovation of *s > h in WNum, Tb and Hp. Only Hp shows *o, which may be lowered from *u by following a, as in *hupa 'spider' above.

[*s > h in WNum, Hp, Tb] [NUA: Num, Hp, Tb]

NB, while Miller's uniting *kïci and *huci/hïci forms in M88-hï7 'spit, n' and I.Num42 *hïhci/*kïhci 'spit, n' may be possible, Ken Hill and I question their union, so let's separate them for now, since *u > "i is common in Num, but the other direction is not; and half of the initial h forms show u, not "i, while none of the *kïci forms show u. In addition, the k vs. h distinction usually aligns with the "i vs. u distinction in these lexemes, suggesting separate forms:

2119. *kaCtiC (> *kïciC) 'spit': M88-hï7; KH/M06-hï7: Ch kïcíyon(a) 'spit, v'; SP kïcci 'saliva'; CU kïcía-vi 'saliva'; CU kïcí'nay 'spit, vt'; CU kïcí-pï 'spittle, saliva'. Add WMU qühčcí-vi 'spit, spittle, saliva, n'; WMU qühčcí-yí'ne-y / qühčiine-y 'be spitting'. Consider also Tr kačí/akači 'escupir'; Wr a'ká 'saliva'; Wr a'kacuba 'spit, v'. [NUA: SNum; SUA: Trn]

2120. *huCtiC Mn huciduu 'slobber, v'; NP hiïci 'spittle'; TSh huccippïh 'spit, saliva'; Sh hiccih-ppïh 'saliva'. [NUA: WNum, CNum]

2121. *ciCta / *ciCti-paLawa 'spit, v': VVH114 *ci; B.Tep192 *sisiva 'to spit'; B.Tep193 *sisivaragai 'saliva'; M67-406 *cic/*cit; CL.Azt137 *čïhčV < 270 **cu'a; Dakin1982-3; M88-ci5 'spit'; KH/M06-ci5: Kw čičii' i 'spit, v'; Kw čičiya 'saliva'; TO siswua 'to spit'; UP sisïwa; LP šišiv; NT šišíívai 'escupir'; NT šišíívaragai 'saliva'; ST šišvo; PYp sisvor 'saliva'; My cícci 'saliva'; My čitwatte 'está escupiendo'; Yq čit-watte 'escupier'; Yq čiči 'saliva'; Cr tá-cicaara 'he is spitting'; CN či'ča 'spit, v'; CN či'čal-li 'spittle, saliva'. [no -p- in Cr] [SUA: Tep, Cah, CrC, Azt; NUA: Num]

2122a. *cukV 'spit, v': Ca čú'an; Ls čúxi; Cp čúxe; Ktn tohvïk / toqovïk / tohəvək 'spit on/up, vt'. Of the three Ktn forms, the 2nd shows 2nd C as *-k-, which lenited to -h- in the others. So is the Ls / Cp *-k- (> -x-) from the first *-k- or the second? In the set below, Sr cöv-kin may suggest the 2nd, which would mean a great reduction of three syllables to one in Ls / Cp *cuxi, which happens.

2122b. *to(k/h)opVki 'spit, vi': Ktn tohvïk / toqovïk / tohəvək 'spit on/up, vt'; Ktn tohvk-i-vï-č 'spittle, n'; Sr cöv-kin 'spit, v'. The -cuba of Wr a'kacuba 'spit, v' perhaps. [Ls i: Cp e: Ca a; o/u; t > c?; -vï noun suffix in Ktn?] [NUA: Tak; SUA: Trn]

2123. *muLa- / *muta- / *muCCa-kV 'spit': Ls mulá-qi 'spit out'; Cp múlake 'spit out'; perhaps NP mu'yoga 'spit'. [*-CC-; -'L- > -'y-?] [NUA: Tak, Num]

Split: see break Spoil: see rot

SPOT(TED), DOT; PUNTO, MANCHA, PINTO/PINTA

2124. *taka 'spotted': KH.NUA: Sr takalu'ka'n 'spotted, vi st'; Ca tákal 'get patched up, be spotted'. To this pair we might add Cp táqa 'spotted'; Cp taqeláqe 'be spotted all over'; Ls tuku-rúúka 'to have small spots (like a fawn)'; NP ddaki 'be spotted'; NP tutakidï 'dark spots' (tu-= dark), and SP ïrïġi 'be spotted'. Sr, Ls, and Cp taqeláqe could be a reduplication of *taka (> *takaLVkV). Two (Sr, Ls) show *takaLuka (though the first two vowels assimilated to the third in Ls), while the others show *-takV- as 2nd element in a compound. The long accented vowel of Ls likely encouraged the first two to assimilate. [a > u/_uu in Ls] [NUA: Tak, Num]

2125. *napuC 'spotted': Cm naboo-, naboorï 'marked, striped, spotted'; SP navoo'vi (< *napuu'pi Miller lists) 'spotted'; Wc -naïye of Wc cíí-naïye 'pinto' belongs, since *p > h or zero and CrC ï < *u: thus, napu > naï. Compare CrC at adobe. [*-p- > ø in CrC] [NUA: Num; SUA: CrC]

Spread: see stretch, flat

SPRING; **PRIMAVERA**

Ν	⁄In	taawáno	Нр	tamöŋvaqw	Eu	kuvésrawa; tásar
N	ΙP	tamano	Tb		Tbr	
T	Sh	tahma	Sr	yaamava'	Yq	
S	h	tahma(ni)	Ca	táspa'	My	
C	Cm	tahma	Ls	táşpa; páaxam 'be s'	Wr	kué
K	W	tahmana	Cp	táșpa	Tr	
C	Ch .	yïván 'spring&autumn'	TO		Cr	
C	Ch(L)	tamana	Nv	tutoni-ka	Wc	
S	P	tamma-na	PYp	hihimbag; hiosga; huuh	kama; vı	ıhersotkam
V	VMU	tammán 's. & summer'	NT		CN	šopan(tla) (RJC)
C	CU	tamá-na/ri-tï	ST	šiabak 'planting season,	June'	

In M88-ta6, Miller includes a variety of initial *ta... lexemes: M88-ta6 'spring': BH.Cup *taşpa 'springtime'; I.Num203 *ta(h)ma 'spring'; KH/M06-ta6: Mn; NP; Sh; K; SP; CU tama-ti'i-tti springtime; Cp; Ca; Ls; Hp tamöŋ-. However, beyond initial *ta-, differences make their relatedness less than certain. Consider these groups:

2126. *tammaNo 'spring': Mn; NP; TSh; Sh; Cm; Kw; Ch(L); SP; CU; Hp. [*m > w in Mn] [NUA: Numic, Hp]

2127a. *taspa 'spring': Ls; Ca; Cp. Might CN šoopan 'green time of the year, verano' or Num *tasapa 'dry' (as winter mountain moisture does dry up with spring) be relevant?

2127b. *tasa 'spring': Eu tásar; AYq tasaria 'summer'. [NUA: Tak; SUA: Opn, Cah]

NB, for *kuwesa (Eu, Wr), see summer. Note the similarity of Wr kué; the first part of Eu kuvés-rawa with Tr kuwé 'summer, n'; Tr kuwésa 'be summer, v'; and Cr ta'uwaste 'summer'.
NB, for *yama 'come up, spring forth, spring', see 'up'.

Sprout: see grow

SOUASH, GOURD, PUMPKIN; CALABAZA, GUAJE, JÍCARA

2128. *(h)ima 'squash': B.Tep311 *'imai 'squash'; M88-'i8; KH/M06-'i8: LP 'im; NT íímai; ST 'imai. Add PYp ima 'squash'. [SUA: Tep]

- **2129.** *noki 'gourd': BH.Cup *néxic 'gourd'; Fowler83; Langacker 1970; M88-no12; Munro.Cup52 *nééxi-š 'gourd/squash'; KH/M06-no12: Cp níxi-š 'wild gourds, soap plant'; Ca néxi-š 'wild squash'; Ls néexi-š 'wild gourd'; Ls néx-wu-t 'kind of gourd, gourd rattle'. Add Ktn nonokic 'calabazilla, plant sp, groundvine with melon used for soap'. [*o > e/ x in Ca Langacker 1970] [NUA: Tak]
- **2130.** *pako 'gourd for water': B.Tep258 *vakoi 'gourd for carrying water'; M88-pa52; KH/M06-pa52: TO wako 'water container, gourd, canteen'; NT vákoi; ST vakoon; LP vak. [SUA: Tep]
- **2131.** *pa-taŋa 'squash, pumpkin, lit. water-bag': Stubbs 2003:4; KH/M03-pa66 'squash' (not in M88): Ch paráŋar(a) 'pumpkin'; SP paráŋwataN 'pumpkin'; and Hp patŋa 'squash, pumpkin'. See taŋa 'bag' at 'bag'. [NUA: SNum, Hp]

- **2132.** *wicikoLi 'dried squash': Wr wicikori 'dried squash'; PYp viskoli 'dried squash'; all segments agree except the initial consonant; so this may be a loan or may have been mutually influenced in some way. [SUA: Tep, Trn]
- 2133. *soci 'squash': Cr sucí 'calabaza'; Wc šúci 'calabaza'. [SUA: CrC]
- **2134.** *kama 'squash sp': Eu kamá 'calabaza sehualca'; Yq káma 'bule, guaje'; My kammam 'calabaza'; Wr kamá 'kind of squash'; Tr ga*má 'calabaza amarilla'; perhaps Mn kumabedá' 'summer squash, scallop or pattypan squash', if *a > u anticipating the bilabial in an unstressed syllable. [SUA: Opn, Cah, Trn]
- 2135. *kuyawi 'gourd': Tr guyowi 'guaje'; Wr kuyawi 'planta de bule'. [SUA: Trn]
- **2136. *pisaLï** 'gourd': Eu visár 'calabaza'; Yq bísa'e 'bule, guaje'; AYq visa'e 'gourd'. [-r->-'- Cah] [SUA: Opn, Cah]
- **2137.** *soko 'squash': Stubbs2003-30: Tr siko-báči 'calabaza blanca or pintada'; Wc šukúuri 'jícara ceremonial'; Eu sosók 'calabaza sahualca, calabaza redonda'; maybe Kw soganaa-vï 'wild gourd' with V assimilation. [SUA: Opn, Trn, CrC; NUA: Num]
- **2138.** *papo 'squash sp': Eu vavóra 'cierta calabaza'; Tbr wipó-t, vipó-t 'calabaza'; Wr paborí 'mora, morus microphylla'. [SUA: Trn, Tbr, Opn]
- **2139.** *kaLi(si) 'squash sp': Tr arisí / garisí / karisí 'calabacilla, calabaza de coyote'; Wc káisa 'sonaja' with loss of liquid, Tr and Wc align well, since *L > ' (then > ø in the Wc form). [SUA: Trn, CrC]
- **2140.** *sawaLa 'gourd': Tr sáwara 'maraca, sonaja'; Wc kïšáuri 'jicara'. Metathesis would admit CU wəsáraa-ganá-pï 'gourd'. And note that CU and Kw at *soko both contain *-kana. Wc has an extra initial ki-. Is this tied to *sawaLo 'cactus'? [*-t- or NUA r : SUA r?] [NUA: Num; SUA: Trn, CrC]
- 2141. *ayaw < *aLawV ? 'squash, gourd': CL.Azt159 *ayoh 'squash'; M88-'a2 'squash, pumpkin'; KH/M06-'a2: Ls yáá'aya-t 'turtleshell rattle'; Sr 'aayt 'rattle'; Hp aaya, pl: aa'aya 'hand rattle (made of gourd)'; Wr aláwe 'calabaza'; CN ayo'-tli 'squash, pumpkin'. Ken Hill and AMR (Ontology) add TO haal 'squash, pumpkin' and My aayaw, pl aya'aw-im 'calabaza harota'. Yes! Add Tbr haya 'calabaza' (Tbr haya-we-t 'turtle'); Yq ayá'awi 'calabaza sazona'; and PYp ara 'small squash'. Op arii 'squash' (Shaul 2007) might belong. Wr, TO, and PYp all suggest an original liquid underlies y. [l/y] [NUA: Hp, Tak; SUA: Tep, Opn, Cah, Tbr, Trn, Azt]
- NB, TO šapijk and Hp saviki are similar to considerable length, yet the initial consonant does not correspond (*s > Tep h), which may suggest this is a loan.
- NB, what of Wr koláci 'immature squash, bowl-like hollow in a rock wall' and Tbr hoa-lí-t 'bule, kind of squash used for carrying water'?

NB, for CL.Azt71 *šiïka(l) 'gourd vessel' see pot.

NB, Ca qáxalkut 'buffalo gourd'; Nv sarkarhkaari 'calabaza'; Tbr halípá-t 'jueja, jícara' may contain possibility, though the latter looks enough like a potential Spanish loan from calabaza, that we may have nothing here.

Squat: see sit and stoop

Squeeze: see carry (for most handle verbs)

SQUIRREL, CHIPMUNK; ARDILLA,

2142. *koŋi 'squirrel': BH *qéṇic 'squirrel'; Fowler83; M88-ko22 'squirrel'; KH.NUA; Munro.Cup122 *qééṇi-š 'ground squirrel'; KH/M06-ko22: Cp qíṇiš; Ca qíṇiš; Ls qééṇiš; Gb xoṇít; Sr qöönt; Ktn koṇit 'groundsquirrel'; Hp koona 'type of tree squirrel' (cognate? Hill queries, and both Miller and Hill note vowel is wrong). Every Tak language shows ŋ for the medial consonant, though Hp has n, but so does Hp coocona 'kiss' among *cuṇa 'suck, kiss'; a handful of Hp -n- with Tak -η- exist. [NUA η vs. Hp n here, suck, and others] [NUA: Hp, Tak]

- 2143a. *tīku 'ground squirrel, mouse'; B.Tep251 *tīikuri 'ground squirrel'; M88-tï47 'ground squirrel'; L.Son290 *tīkuri raton; Fowler83; KH/M06-tï47: Hp tīkya 'prairie dog'; LP tīikil 'ground squirrel' (B.Tep); Nv tukuri / tīkīri 'ardilla'; NT tuukúli; ST tīīkuly; My tékkut, pl: tekuc-im 'squirrel'; Tbr tikul 'ground squirrel'. Miller includes Tr čikú-ri 'ratón' and queries whether CN tečaloo-tl 'squirrel' is cognate; the latter probably is not, but shares much with CN čačaloo-tl 'squirrel'. However, teko'- of CN teko'koyoo-tl 'mouse' is likely cognate. Fowler includes Tr tekamuči 'Sciurus sp.' and SP tīkuci 'squirrel'. Consider also Sh tikkunci 'bushy-tailed squirrel'; PYp teekili 'rock squirrel'. Could *ciku/siku be part of a compound in reduced form: *tī-siku > *tīsku > *tīku. The fact that both sets (Tep/TrC tīkuri and TrC/Num siku) have reflexes meaning both squirrel and mouse, speaks for the semantic overlap of those terms in UA, for they are similarly small fast furballs darting about. Tep *tīkuri and TrC *cikuri may be a palatalization of *-t- > -c- following a high V, as in c below. [Tr c vs. r < *t; *tV- pref in CN] [NUA: Num, Hp; SUA: Tep, Trn Tbr, Azt]
- **2143b.** *ciku 'mouse': Eu zikúr/cikúr; Yq číkul; My číkkul; Tr čikuri; Wr ci'kurí. Are these a palatalization of the above or could they tie to *cuku 'bend over' (as a squirrel's posture is hunchbacked when on hind legs) or both? [SUA: Opn, Cah, Trn]
- **2144a.** *sikka(-wV) 'chipmunk': BH.Cup *sVká 'chipmunk'; HH.Cup sVkáawət 'chipmunk'; M88-si²20; KH.NUA; KH/M06-si²20; Jane Hill 2007-46: Cp sekáwet; Ca síkawet 'tree squirrel'; Ls şukáa-wu-t 'tree squirrel'; Sr hikaawt 'chipmunk'; Ktn hikaï-t 'flying squirrel'. Miller includes Hp sakïna 'brown squirrel' with a question mark. Matching fairly well, however, is Tb 'ïšï'iga-l 'blue squirrel'. The non-descript V in HH.Cup's reconstruction is a good choice for an unaccented V becoming the schwa-like possibilities, but in Ca í is accented and is found in two of four, so let it be our best guess. Jane Hill (2007) notes Rio Grande Tewa sá'wé 'squirrel'. [Tak V's; i-a > Ls u-a] [NUA: Tak, Tb, Hp]
- **2144b.** *sikkuC 'squirrel': Ch sikú-ci 'squirrel'; SP sikku"-, sikkuN-, sikku"-cci 'squirrel'; WMU aqqá-skuči 'squirrel' is a fairly nice preservation of PNum *aNka-sikkuC-ci (< red-squirrel). [NUA: Num]
- **2145.** *tapa... 'chipmunk': M67-89 *tapa 'chipmunk'; Fowler83; M88-ta23 'chipmunk'; KH/M06-ta23: NP tabba; TSh tapa'ai; Sh tapanaih 'kangaroo rat'; Kw tava'aci; Ch tavá'a-ci; SP tava'a-ci; Tb tapaaya-l. Add CU aġó-taváy'a-ci 'flying squirrel' and Ls tapáš-ma-l 'mouse'. [': y] [NUA: Num, Tb, Tak]
- **2146.** *ci'mo 'squirrel': Tbr cimó-l 'ardilla colorada'; Tbr ci-cimó-ko 'clase de ardilla de las casas'; Wr cimorí 'kind of squirrel'; Tr či'morí 'flying squirrel'; Wc cíímúaka/simuaka 'ardilla'. Since Wc u < *o, TrC and Wc match well through two syllables. Is Tb cïmi-l 'mouse' related? Perhaps more probable than not. [SUA: Tbr, Trn, CrC; NUA: Tb]
- **2147.** *moto'o 'squirrel, mouse': CN mooto'- tli 'squirrel'; NP pamoto'o 'mouse'; TSh pomo'aicci / poŋwo'aicci 'mouse'. Squirrel seems to tie with both 'mouse' (both are small fast furballs darting about) and 'stoop' (semblance of squirrel's posture). Cf. *mutu'u 'stoop, bend over' and *cuku 'stoop' and *ciku 'squirrel'. [NUA: Num; SUA: Azt]
- **2148a.** *ciCpawi 'squirrel': Wr cihpawí 'squirrel'; Tr čipawí 'ardilla'. [SUA: Trn] **2148b.** *cippi: Fowler83-4:24 (and fieldnotes) *cipi 'ground squirrel': NP ciipísa; Ch sïppiya; Sh(Owyhee) ciipï; Sh cippi 'prairie dog'. [NUA: Num]
- **2149.** *iCkwa / *iNkwa 'ground squirrel': Fowler83: NP iggwï 'squirrel'; TSh eŋwï 'squirrel'; Cm ekwakïïpi' 'ground squirrel'; Mn ékwï 'ground squirrel'; Kw 'ewu-ci 'ground squirrel'. [NUA: Num]
- **2150.** *wo'ta 'squirrel, chipmunk': Fowler83 *wo'i 'ground squirrel': Mn wóda' 'chipmunk'; TSh wo'aicci 'chipmunk'; Sh wo'aih 'chipmunk'; Kw woočï-zi 'small squirrel with a long tail'; Tbr he-wocó-t 'mouse'. Jane Hill (p.c.) adds SP o'i-ci-ci 'very small, yellowish, white-striped chipmunk'. Note WNum -tV'- and CNum -'- both here and at *moto'o above. [*-tV'-> '/ø] [NUA: Num; SUA: Tbr]
- **2151.** *kwokoci'squirrel': NT bobóókoši 'ardilla'; ST bomkoš 'techalote'. What of Kw wogo-tava'a-ci 'squirrel'? NT and ST are cognate, whether Kw is or not. [kwo/bo syllable in NT/ST] [SUA: Tep]

- 2152. *kaca'i 'squirrel': Cr káhca'i 'squirrel'; ST kaasai' 'squirrel'. [SUA: Tep, CrC]
- 2153. *kïNpa 'ground squirrel': Fowler83-3:52 and her fieldnotes: NP kïïpa; Sh kïïpa; SP kïmpaaci. [NUA: Num]
- **2154.** *yuŋa / *yuŋya 'squirrel, gopher': Fowler83-3:56 lists WNum *yïŋazi 'ground squirrel': NP yïŋŋaciba 'gopher'; Hp yoŋyaya 'chipmunk, whitetail entelope squirrel'. [*u > ï] [NUA: Num, Hp]

Stab: see cut

STALK, STEM, TRUNK; TALLO, TRONCO, TRONCÓN

2155. *con 'base, trunk': M88-co2 'base, trunk'; KH/M06-co2: TO šon 'base or foundation'; Wc kïïcúnú 'troncón'; CN kwaw-con-te-tl 'trunk or stump of a tree, piece of timber or a beam'; Pl cun 'point, top' or Pl cin 'base, buttocks'. Add ST son 'stump'; Cr ta'acu'u 'tronco'. Miller includes Wr cohkí and those like it, perhaps related, if a compound, but for now let's divide these into *con (above) and *cohki (below). [SUA: Trn, Tep, CrC, Azt]

2156. *co(k/')i / *cuC-ki 'trunk, base, stem, stalk': M67-66; M88-co9; KH/M06-co9: Tr čokí 'extremidad inferior, tallo'; Tr ču'kí / čo'kí / ču'rí 'tallo'; Tr čo'ki-su 'a shoot'; Wr cohkí 'stem, trunk'; Hp coki 'upright plant, tree, bush'. Ken Hill adds Wc cutïa 'base, fundamento'. [2nd C?] [SUA: Trn, CrC; NUA: Hp]

2157. *wo'ota 'trunk, stalk': TSh wo'ota 'trunk'; Sh woota 'waist, tree trunk'; Cm owóora 'tree trunk'; Ca wál'a 'trunk' with a V assimilation? Ca has the expected -l- for intervocalic -t-. Is Yq súnota 'corn stalk' < *sunu 'corn' + *wo'ota 'stalk'? Cah does such reductions. [NUA: CNum, Tak; SUA: Cah]

NB, for *owa 'stalk', see at reed.

NB, for *tinna 'trunk, stump, root' see at root.

NB, for *cuppa 'point, buttocks', see at edge.

STAND, ARISE; ESTAR/PONERSE DE PIE; cf. stop

2158. *wïLï / *wïnï 'stand': VVH161 *wïlï 'to stand'; M67-411 *wene; I.Num287 *wïnï/*wïnnï 'stand (durative)'; M88-wï6 'to be standing'; KH.NUA; L.Son343 *wïrï/*wïr-i 'pararse'; KH/M06-wï6: Mn wïnï; NP wïnï; TSh wïnï; Sh wïnï; Cm wïnï; Kw wïnï 'stand, stop, sg'; SP wïnï; CU wïní 'be standing'; CU wïnï-wi 'get up, stand up'; Tb 'ïwïnït ~ 'ïï'ïiwïn 'stand up'; Tb wïnït 'be located, exist'; Hp wïnï 'be standing, sg'; Ca wéwen 'stand up, be standing, stop, stand still'; Ca wén 'put in place/order'; Cp wé' 'there it is'; Ls wón 'be at a place'; Gb wó 'there is/are'; Sr wïn/wïnïi 'be in a place, lie (mass/pl)'; Sr čöno'-wïn resultative of čöno'-k 'stand up, stop, sg'; Eu wéhra 'parar'; Wr werí; Tr wiri-mea; Tr wer; My wéyyek; My wéyye 'caminar'; AYq weyek 'be standing, sg'. Add Tbr weré/welo 'estar, estar en pie'. A widespread stem, found in all branches of NUA and in TrC. [l:n] [NUA: Num, Hp, Tb, Tak; SUA: Opn, Cah, Tbr, Trn]

2159. *wïwïLu-ka > Tep gï(g/r)uka 'stand, pl': B.Tep48 *guguka 'to stand, pl'; M88-wu1; KH/M06-wu1: TO gegok 'be standing, pl'; UP gïgukï (B.Tep); PYp gerok 'be standing, upright, pl subj anim'; NT gúúka; ST guguuk 'standing, pl'. The PYp form suggests that this is a pluralizing reduplication of *wïLï above, i.e., *wïwïLu with final -u instead of ï, like the one Tbr form of Tb wele/welo; thus, *wïwïLu > wïwru-ka > Tep *gïgruka > *gïguk / guguk. Note the two forms of Tbr weré/welo, the latter matching the pl stem, the former matching *wïLï above for sg. [SUA: Tbr, Tep]

2160. *kïk / *kika 'stand': B.Tep132 *kïkiva-i 'to stand up'; B.Tep137 *kïika 'be standing'; M67-412 *ke 'stand'; M88-kï3 'stand'; KH/M06-kï3: UP kïkiwua; LP kïkvo; NT kïkíva; NT kïika 'stand, stop'; ST kïkvo; ST kïik; TO keek; My kíkte; Cr áh-če 'he stood up'; Cr áh-če-si 'stand up!'; Pl ihka; CN(RJC) i 'ka-k 'it stands, it is'; HN 'ihka-tok; Pl ihkatuk. Azt often does CVCV > VCCV, so *kVkV > ikkV > i'ka is plausible. Add AYq kikte 'stand up, stop, vi sg'; Nv kï'ka 'ponerse de pie'. Jane Hill (p.c.) brings to bear Ktn kïčik / kïčk 'stand up', which with loss of č- in a cluster would fit these SUA forms. Though Anderton notes its similarity to Ktn kwïčik 'stand up' in the set below, the two separate Ktn forms are listed, one fitting each set, and we would expect b/bw in Tep/Cah if they were the same set. Does Cr really belong? [SUA: Tep, Cah, Azt; NUA: Tak]

2161. *kwïtaC / *kwïtï-kki 'rise, get up, cure': M67-347 *kwet 'rise, get up'; BH.Cup *kwa 'wake'; KH.NUA; M88-kwï3 'rise, get up'; AMR 2000; KH/M06-kwï3: SP kwïrï-kki 'get up'; CU kïrïkkï 'get up'; Cp kwéle 'cure, vt; get up, vi'; Ls kwota/i 'get up, recover, vi; cure, lift something up, vt'; Ca kwé'eqe 'get up'; Sr kwïtk 'get up'; Ktn kwïcïk 'stand up, get up'. Add WMU qürûkki / kürûkkai 'get up, arise, wake up' and Ch(L) kwïtïkiyïkwïtïkiy 'rise up, rise up'. AMR (2000) links Tb 'ool-(ït) 'get up, fly' with these. [NUA: Num, Tak, Tb]

2162. *(a)hakwi 'stand': L.Son51 *hakwi/hakw-i 'pararse'; M88-ha1 'be standing, pl'; KH/M06-ha1: Eu hábe 'pararse'; Wr ahawí, aha-pó 'be standing, pl'; Wr ahawá-ni 'put pl obj's standing'; Wr aapá-ni 'parase, pl'; Tr hawí 'estar erguidos o vivir, pl'; My ha'abwe/haa'bwe, pl; Tbr akwi-tu. [medial *kw] [SUA: Opn, Trn, Cah, Tbr]

2163. *kono 'stand, pl': Mn qono 'stand in a group'; NP konno'o 'stand, pl'. [NUA: WNum]

2164. *wami 'stand, pl': NP wammi 'stand'; Kw wowi 'stand, stop'; Ch wawámi 'stand'; Ch(L) wawaŋkïga-gah 'standing up serrated like teeth of a saw, but tall, like mountain peaks'; WMU wáawi / wawi / waowi 'stand, pl, a group of people are standing'; SP waŋwi 'stand, pl'. [m > ŋw] [NUA: Num]

2165. *topo'i 'stand, pl': Sh topoi 'stand'; Cm tobo'ikatï 'stand'. [NUA: CNum]

2166. *tuC / *tutu 'stand': Tb tulu'ula 'stand up from sitting'; Ls túú' 'stand' pl. inanim.; ST tuut 'be standing, subj pl inam'; ST tuttu' 'stand, vt (inan pl obj's)'; Nv tutu 'be standing, inam subj'; PYp tuutu 'be standing, erect (pl inan subj)'; TO čuuč 'stand, pl'. The *tuC- of Ls wixé'tu-t 'pine sp., Pinus coulteri' probably belongs as well. [NUA: Tb, Tak; SUA: Tep]

2167. *pam 'get/go up': ST vamgia 'get up'; NT vañigïi 'levantarse'; Mn pamádï 'uphill'. It seems I have seen s.th. like *pam... 'up, high' elsewhere in UA. [SUA: Tep; NUA: Num]

NB, for *yoci, see fly.

NB, have I not seen a cognate for Ktn cono'k 'standing up'?

STAR, CONSTELLATION; ESTRELLA, LUCERO

billing construction, Estimately, Eccelic										
Mn	tazinópï	Нр	soohï	Eu	síbora/sí'ibor					
NP	paatïsuba	Tb šu	u-l; yeu'wišn 'morning s	s' Tbr	sóo; so-ko-rá-t					
TSh	taciumpi	Sr	huu'-ţ	Yq	čóki					
Sh(C)	taci'ïm-pin	Ca	sú'we-t	My	čokki					
Cm	tacinuupi	Ls	șú'-la	Wr	so'póri					
Kw	puucii-vï	Cp	sú'u-l	Tr	se'porí/so'porí/so'parí					
Ch	púuci-v(ï)	TO	hu'u	Cr	sú'ura'abe-(te) (-pl)					
SP	puuci-	Nv	siavugi 'e's mayores'	Wc	cíi.maníiši					
	kaŋa- 'morning star'		huhuga 'e's menores'		'las pléyades'					
			uhapa 'todas las e's'		• •					
WMU	púúči-vï	PYp	si'avag; so'opoli							
CU	púucii-vi	NT	šiáávogai	CN	siitlal-in					
		ST	či'iï'; suusak naakim 'e	evening s	star'					

2168. *tacinuN-pi 'star': I.Num212 *taci 'star'; M88-ta32; KH/M06-ta32: Mn; TSh; Sh(M) tacï'im-pin. The glottal stop in Sh suggests the possibility of a lost consonant, and the Cm and Mn forms both show n where the glottal stop is in Sh, all of which may point to *tacinuN-pi for CNum and WNum. Its length suggests a compound, and Sh(M) taci 'shining' may be relevant to the first morpheme. ['/w; u > i in Sh] [NUA: Num]

2169a. *si'po 'star' (< *sipo'o/*sipu'u?): Eu, Tr, Wr. PYp so'opoli likely a loan < Tr/Wr so'pori. [Trn] **2169b.** *-puwa in *ci'apuwa or *supuwa 'star': PYp, Nv, NT. For *ci'a in *ci'apuwa, see *ci'a below.

2169c. *pu'-ci / *puCti 'star': Kw; Ch; SP; WMU; CU. With loss of initial *si-, SNum *pu'- likely ties with these as well. [NUA: SNum]

2169d. *su'u / *suwa 'star': Sapir; VVH71 *su 'star'; M67-413 *su/*cu; BH.Cup *sú 'star'; Munro.Cup123 *şúú'u-la; L.Son254 *so/sopori; M88-su9; KH.NUA; AMR *su'u; KH/M06-su9: Hp, Tb, Ca, Cp, Ls, Sr, TO, Tbr, Cr, CN. Because *p > Ø and *u > i in CN, then CN sii- could fit either *su'u or *si'pu. Sapir includes Ktn hu'u-ty or hu'-č 'star, landsnail' (Anderton 1988), which certainly belongs with the other Takic forms. Miller's and Hill's inclusion of Gb sosyót 'stars' certainly belongs as well; Miller's inclusion of NP paattïsupa has much in common with Tr so'parí. Miller notes that the vowel of the TrC forms *o disagrees with the other forms; interestingly NUA and Tep show *u, while SUA shows *o, with the possible exception of CN i (< *u). I agree with Sapir, Miller, and AMR who include CN, and Sapir lists Wc sulawi/jorawe, similar to the Cr form above. While most reflexes show a medial glottal stop, Nv huhuga suggests w, perhaps *sipu'a > *sup/vuwa > Tep huhuga. Also worth noting is that Eu si'ibora and Tr se'porí show fronted vowels instead of back round vowels. As a side note, Cr sï'ipu'u-(te) (pl) 'caracol(es)' of SUA and Ktn hu'-č 'star, landsnail' of NUA seem built on *si'po 'star' or *si'po < *sipo'o / *sipu'u. Ktn has both meanings and the Cr form fits in well with SUA words for star, though Cr sú'ura'abe-(te) (-pl) 'star' is a different word. Thus, the Cr word for snail may be a loan from another UA language, though it fits star, as a comparative cognate, better than Cr's own word for star does.

[clusters, '/w, p in cluster, V's] [NUA: Hp, Tb, Tak, Num; SUA: Tep, Opn, Tbr, Trn, CrC, Azt]

[clusters, /w, p in cluster, v s] [IVOA. Tip, To, Tak, Ivain, SOA. Tep, Opii, Toi, Tin, Cic, Azt]

2170. *coki 'star': Yq, My. [Cah only] From M88-su9, I separate Cah, as its inclusion is problematic. [SUA: Cah]

2171. *ciha 'star': Tep *si'a (LP, PYp, NT) in *ci'apuwa and Wc cíi-, and possibly others, may well tie to 2235 *cihaLi 'sunrise, morning', that is, something shining, as stars also do. Like Sapir, I see the first syllable of CN siitlal-in to be with *su'u / *suwa above. [SUA: Tep, CrC]

2172. *soniya- 'a constellation': Ch(L) soniya-wï 'nests, the Pleiades (mythology)'; SP sonnia/soonia-ŋwï 'seven stars of the Great Bear'; CU söniyawi 'the Seven Sisters constellation'; TSh soontïn 'Pleiades constellation' (TSh soontïn. comb: soon-/so'on- 'much, many, a lot'). [NUA: Num]

Start: see before and new

STAY, REMAIN, BE LEFT OVER; QUEDAR(SE), DEJARSE

2173. *pa'i 'be left over': Tb pai'iy 'be left over'; Hp pee-lawï 'leave over'. [Hp e < ai/a'i] [NUA: Hp, Tb]

2174. *pina'i 'be left, leave': Kw piine'e- 'leave, vt'; Kw piine'e-dï 'the remainder'; NP pina'i 'what is left over'. [V leveling in Kw] [NUA: Num]

2175. *tawa 'remain, wait': Yq táawa / tawa 'quedar(se)'; My taáwa-k 'se quedó'; Ayq taawa 'stay, remain, vi, leave behind unintentionally, vt'; Mn tatawa 'wait'; and maybe Tbr towi/tovi 'quedar, flotar'. What of Cr wataúrïcee 'se queda (persona)' but many watau- stems exist in Cr? [NUA: Num; SUA: Tbr, Cah]

2176. *tihipa 'stay': Wr tehíba-ni 'quedar, quedarse'; Tr ŕipi/tibi 'quedar, quedarse varias cosas o personas'. [SUA: Trn]

2177. *ïka / *ïkï 'remain, be in a place, let lie': M88-ï17; KH.NUA; KH/M06-ï17: Sr 'ïkï|i 'be in a place, lie'; Ls 'óka/i 'leave, let remain, vt; be left, vi'; Gb 'okó 'lie down'; Cp ékeme 'give'; Ca 'ékamax 'give s.o. (food/drink)'. Add Ktn 'ïk 'lie'. Cp and Ca may be reduced from *'ïkV-maka 'let lie-give, give/set in place'. [NUA: Tak]

NB, for B.Tep273 *vi'ia 'to stay'; M88-pi10; L.Son192 *pi, etc., see leave.

STEAL, ROB; ROBAR, HURTAR, PILLAR

Mn	noqaġa/noqoġa	Hp	ïïyiŋ-ta (accuse of)	Eu	écba'a-n
NP	wazi-cakatï	Tb	'iïy-(ït)	Tbr	icikwa
TSh	innïntïkkah	Sr	ïy(ïi)/ïh'ïi	Yq	'étbwa
Sh	tïtïkka-x/h	Ca	'éyetu	My	ekbwa
Cm	tïrïhkarï; sikusarï	Ls	'uyóo-tu-	Wr	icikóa-ni

Kw	'ïiya-ni-	Cp	itú'e	Tr	čigó-; čiwá-; wi-mea				
		TO	ees; B: 'iïsidï		huu-ma; ye-/e-				
Ch	ïyïŋi	LP	'ÏÏŠ	Cr	ti'i / ra-nawa'a				
SP	ïyïŋka-	PYp	eesi	Wc	nava; naváaya;				
WMU	íígai / <u>íi</u> kko	NT 'iïš	i; 'ïīšid ^y ai		tináváyame 'ladrón'				
WMU	WMU íígoočaa 'he just stole (s.th.) ST 'ïïš; 'ïïšid ^y ; šdya 'rob s.o. of s.th.'								
CU	'iyïyi	šiñ 'the	eft, robbery'	CN	ičteki; naamoyaa				
	'thief': švi; škum								

2178a. *'ïci 'steal': B.Tep *'ïïsidai 'to steal', and *'ïïsi 'he stole'; M67-414a *'?eye (NUA); VVH120 *'ï; L.Son11 *ïci-kwa; M88-ï6 'steal'; KH.NUA; KH/M06-ï6; Munro.Cup129 *'əyə-t 'thief' {Ls 'uyó-t; Cp 'əyə-t; Ca 'əyə-t]; Kw; SP; CU; Tb; Cp; Ca; Ls; Sr; Hp; TO; LP; NT; ST; Tbr; Wr; Tr; My; Ktn 'ïyïw; and ič- of CN ičteki. To Miller's list, we can add Ch; PYp; Eu; Yq. Another good example of *-c- > NUA -y-, which AMR includes in "A Northern UA sound law: *-c- > -y-", listing SP ïyï-ŋka; Tb ïïyV; Ls uyo-t 'thief'; Ca eyet 'robber'; Sr ïyï-i; Hp ïï'ïyi; TO ïïs 'stealth'; and Wr ici-koani.

2178b. *ïci-kwa (< *ïtikwa ?) 'steal': Another syllable is consistently added in TrC *'ïcikwa (Eu, Tbr, Yq, My, Tr, Wr). Tb tambïï' ~ 'andambïï' 'lie' intrigues, but may not apply to *'ïtikwa. What of the ič- of CN ičteki? Even Eu écba'a and Tr čigó/čiwá align well with *ïcikwa. WMU íígai 'steal' and íígoočaa 'he just stole (s.th.)'? [*t > k in My] [NUA: SNum, Hp, Tb, Tak; SUA: Tep, Cah, Tbr, Opn, Trn, Azt]

2179. *tīkka 'steal': TSh innīntīkka 'steal, rob, v'; Sh(M) tītīkka 'steal, v'; Cm tīrīhkarī 'steal, v'; NP tīhaganni 'accuse of and the latter part of CN ičteki (< * tītīki?) 'steal, vt'. [-k->-h- in WNum] [NUA: Num; SUA: Azt]

2180. *nawa 'rob': Cr tí'i-nawa'a 'roba'; Cr ra-náwa'a 'lo roba'; Wc nava 'robar'; Wc naváaya 'robar habitualmente'; Wc tináváyame 'ladrón'; and perhaps the first part of CN naamoyaa 'rob'. [SUA: CrC]

Steam: see cloud Stem: see stalk Steep: see canyon Stew: see soup Stick: see tree

STICK, ADHERE, BE STICKY; PEGAR(SE), PEGAJOSO; see also pitch, mud, and pierce at cut **2181.** *cupa 'adhere': Eu sačúpa 'pegar, vt'; Eu sačúpe 'vi'; Tr čo'rí 'cosa viscosa, pegajosa'; Tr čo'ré 'resina, trementina, resina de pino'; Tr o'čópa- 'adherirse, sg'; Tr na'čopa 'adherirse, pegarse, conglutinarse, pl'; Tr čučupa 'pegarse, adherirse (freq pl)'; Wr na'čupáre 'stick to, vt'. Could *cupa be related to *cap(a) below, with the first vowel assimilated to the 2nd: *cupa > *capa? [SUA: Trn, Opn]

2182. *cukoa / *cukwa 'adhere': since CN i < *u, then CN and CU point to s.th. near *cukoa or *cukwa: CN cikoaa 'stick, fasten one thing to another, take hold of s.th.'; CU cugwí 'adhere to, stick to'; CU cugwáy 'meet (with), join, assemble'. [NUA: Num; SUA: Azt]

2183. *cappa 'adhere': Mn cappa'ni 'stick, get stuck'; NP cabi 'stick together, vi'; Sh cappaki 'be stuck'; Cp čapála 'mend, stick together, vt'; and ST *-sap- in ST bispa' 'apretar, fajar (cincha)' (pres: pi'nsap); ST biisap 'estar apretado (cincha), estar fajado'; ST čubispara. Mn form is also listed in I.Num136 at 'in'. [NUA: Num; SUA: Tep]

2184. *pacca'a/i 'stick, hang, adhere, fasten to': Kw pace'e 'stick, adhere'; SP pačča'i/ pačča'a 'hang, be fastened'; WMU pahččá'a 'adhere, stick to'; CU pačá'ay 'stick to'. [NUA: SNum]

NB, for *paki 'stick, be stuck': I.Num136 *paki 'stick, go'; M88-pa5: Mn cappa'ni 'to stick, get stuck'; NP wïppakitta 'to beat'; Kw čaki 'be stuck'; SP paki-N 'go, walk'; CU pakay-'way 'walk', see 'enter' at 'in'. Is ca- a prefix in some, or do some forms point to *cap (Mn, NP, Cp, ST) as in *cappa above?

Sticker: see thorn

STING; PICAR, PUNZAR; see also pierce and/or bite

2185. *upcu (> *upcu > Tep uwsu > usu) 'stinger': LP usu-di 'a stinger'; ST upsuga'n 'su aguijón [its stinger]'; TO uuš 'stinger of an insect, arrowhead'. For Tep *upsu, loss of v/p after u and in a cluster would be very natural, so natural we can be surprised that it survived in ST upsu, though it did not in Nv usu 'el aguijón'. [SUA: Tep]

2186. *tana 'sting': Mn tana 'sting'; NP tana'hu 'sting'; perhaps TSh tonkwaan 'sting'. [n vs. n] [NUA: Num]

2187. *piCkwi 'stinger': Kw pikwi 'stinger of a bee'; NP piggwidï 'stinger'; and perhaps the first part of Sh pihtu'u 'stung by a bee'. [NUA: Num]

NB, for *suyi 'scorpion, sting' see scorpion. NB, for Cm tonarï 'stab, pierce, sting', see at 'cut'.

Stink: see smell Stir: see mix

STOMACH, BELLY, WAIST; ESTÓMAGO, PANZA, CINTURA; see also navel, belt, pregnant **2188.** *poka 'stomach': VVH149 *poka 'stomach'; M67-418 *poka 'stomach'; M88-po10 'stomach'; B.Tep278 *vooka 'stomach'; KH/M06-po10: TO wook; LP vook; NT voóka(i); ST vook; Cr huká; Wc ne-huáá 'my stomach'. Add PYp vookar 'stomach'; PYp vook 'pregnant'; and Eu vokíma 'stomach'. [SUA: Tep, Opn, CrC]

Miller unites the two under M88-sa12, *sap 'stomach' and *sa'a 'guts' (at defecate), but Tb, among other things, suggests that the two may be separate:

2189. *sappu (perhaps < *sa'(a)-pi) / *saCpu- 'stomach': M67-416 *sap 'stomach'; *sa 'defecate'; I.Num177 *sahpi' istomach'; M88-sa12 'stomach'; KH/M06-sa12: NP saappi; TSh sappih; Sh sa-ppi; Cm sappi; Kw sapi-vi' 'stomach, tripe'; Ch sap(i); SP sahpi-vi; CU sapi-vi' istomach, intestines, innards, tripe'; Tb(V) sapu-l 'belly'; Tb(V) sapus-t 'belly'; Tb(H) šappušt; Tb(M) sapuubišt 'big belly' (vs. Tb(M) sa'at ~ 'aasa' 'defecate'; Tb(V) saa-l 'feces'); Cr šapíh 'vagina'; Wc şai-mïari 'estómago'. The 2nd V in the Tb forms seems most likely to be original. Consider also Tr sapé 'gordo'. Note SNum *sappi-pi, which means a fossilized absolutive suffix on *sa'-(pi), then a 2nd one later; or as Cr šapíh and Tr sapé 'gordo' are far from Num, then *sap, *sa'a, and *sa'apa 'meat' may be separate stems. For *sa'a 'defecate' and *sa'i 'guts, intestines' (BH.Cup *sá'i 'guts'; M88-sa12 stomach), see defecate. [NUA: Num, Tb; SUA: CrC, Trn]

2190. *topa 'belly, stomach': M67-417 *to 'stomach'; L.Son306 *to 'panza'; M88-to9 'belly/panza'; KH/M06-to9: Wr tohpá; Tr ŕopá; My toppa; My tópa'ara 'panzó'; Eu toa. As Miller noted, Eu toa (<*towa/tova <*topa) probably belongs with loss of intervocalic bilabial. The Tak forms (found below) suggest *to'i rather than the relatively otherwise cohesive *topa. So I separate them (listed below). [-p- > ø in Eu] [SUA: Opn, Cah, Trn]

2191. *to'i 'bone, belly': CL.Azt92 *-ihti-k 'in, inside' (mentioned by CL as possibly cognate)'; M88-to9 'belly/panza'; Munro.Cup11 *téé'i-la; KH/M06-to9: Ls téé'-la 'belly'; Cp tí'i-ly 'bone'; Ca té'-i-ly 'bone' and Ca tí'ily 'belly, stomach, waist'; Ls téé'-la 'belly'; Sr tö'|t. Munro suggests that there may be two sets involved because of the semantics and not entirely consistent vowel correspondences, since the e in Ca 'bone' should correspond to Ls o and Cp ə. Sr tö'|t 'belly, stomach' suggests *o, with which the first vowels of the Cupan languages agree also. Jane Hill (p.c.) notes Yokuts toţ (Newman, 218), allowing the possibility of borrowing. CN i'te-/i'ti-tl 'belly'; CN -i'tek 'within, inside, postp'; Pl ihti 'belly, abdomen'. Campbell, Langacker, Miller, and Hill all list the Azt forms, but with some question; as glottal stops are highly anticipated, I find *to'i > Azt i'ti probable. [NUA: Tak; SUA: Azt]

2192. *kohi 'stomach': Mn qóhi 'stomach'; NP kohi 'stomach'; and Cm kohi 'waist area, abdomen'. [NUA: Num]

2193. *pun 'stomache, belly': KH/M06-pu24: WSh punu 'navel'; TSh puno; Sh piponci 'stomach'; Hp pono 'stomach, belly, waist area'. [NUA: Num, Hp]

- **2194.** *yoLi 'stomach': Stubbs2003-47: CN yooliiš-tli 'stomach'; CN yooltitlan 'stomach'; Tbr nyolí-r 'stomach'. Another instance of a close Tbr-Azt association. [*y > Tbr ñ; Tbr-Azt] [SUA: Tbr, Azt]
- **2195.** *kica 'waist': Stubbs2003-36: Eu kecáka 'cintura [waist]'; PYp kesar 'womb'. Semantically, the pair are close enough; and phonologically, they match perfectly through four segments. [SUA: Tep, Opn]
- **2196.** *sakoy / *sakwi(C) 'belly': Ch sagwí-vï 'guts'; SP saġwiaa 'stomach, belly'; CU saĝóy-vi 'belly'; WMU saġwí'aa / sacwí'aa / sowé'aa 'belly'; WMU sacwí'aa-n 'my belly'; Sh(C) sakwi"-pin / sïkwi"-pin 'stomach'. [NUA: CNum, SNum]

NB, for *ama/ami 'rib, waist' (Sh ama 'waist, rib cage'; Cp -ámi 'waist, poss'd'), see rib.

NB, in case other terms may emerge to support any of the following: NP biko 'waist'; what of the initial pit- of Hp(S) pitmoki 'stomach, smoking bag'; Hp(H) pipmoki 'first stomach of a ruminant'; or CN picaau'-kan 'waist, lit. thin-place'; TSh piccoko 'waist, waist to knees' (at buttocks).

Stone: see rock

STOOP, BEND OVER, LEAN OVER; AGACHARSE, INCLINARSE; see also circle

2197. *cuku 'stoop, bend over': L.Son46 *cuku 'agacharse'; M88-cu13; KH/M06-cu13: Op cuk; Eu cú-cuku; cuko; Wr cuhkú; Tr cukú/čogó 'be on all fours, stooped, bent over'. [SUA: Opn, Trn]

- **2198.** *pona/i 'stoop, bend over': SP poni/ponaa- 'stoop, project buttocks up'; Kw howaa-noponi-mii 'be stooped, bent over'. Might this verb underlie Ch(L) poniya 'skunk' and the forms there? [NUA: Num]
- **2199.** *mutu'u 'stoop': Kw moro'o- 'stoop down'; My mú'ula 'stoop'; Sr muur|q 'stink, be smelly'; Sr muururu'n 'be smelly, vi, stative'. Because SP poni/ponaa- 'stoop, project buttocks up' and Kw howaa-noponimii 'be stooped, bent over' appear to link stems for 'skunk' and 'stink', a similar semantic tie could well have Sr muur- related to Kw and My terms for 'stoop'. [NUA: Num, Tak; SUA: Cah]
- **2200.** *Luka 'stoop': Ca lúku 'bend the body forward'; Cp áwluke 'set (of sun), v'; Ls lóóqa 'stoop'; *u-a > o-a may explain Ls o, and Cp has a prefix; otherwise, good. What of Ca láki 'flatten, stoop down (body parts)'? [NUA: Tak]
- **2201.** *tum / *rum 'stoop': NP tumia 'stoop and look'; NP tuumuwima 'stoop over and peek'; NP tomohabïpïnni 'stoop and look'; Sr ruum|q 'put head down'. Note in the three NP terms that *u-u-a > o-o-a in the one term with a following low V a. [*u-a > o-a] [NUA: Num, Tak]
- **2202.** *po'o-ta / *poLo- 'bend over, stoop over': AYq po'ola 'stooped over'; Cr áh pú'utawí'isï 'se inclina'; with *o > Cr u, the pair are a good match. Perhaps AYq po'okte 'bend, stoop, double over'. Because in both Cah and Cr we see *-L- > -'-, then *poLo is possible too. [SUA: Cah, CrC]

NB, for *yu'pa/i 'bend down, go down', see at sink.

NB, for *wiya 'bend down/over' see at 'fall'.

NB, Ca kwéy'eqi 'stoop down, vi' and My beyúk 'se agachó' may relate, but unless My b < *bw/*kw, the two cannot be counted.

STOP, OUIT; PARARSE, CESAR; see also finish

2203. *wi(C)ta 'stop': Ls witá'a/i 'stand, stop'; Ls wiíta 'stand (still), be stacked in a pile'; Sr widapkin 'stop doing'. [different *-t-, perhaps cluster] [NUA: Tak]

2204. *saCna 'stop': Tb šahna 'stop'; Cp séne 'stop'. [NUA: Tb, Tak]

NB, for Wr tewé-na 'stop doing'; Tr arewe 'leave s.th., vt'; Eu towa/tovi; see 'leave'. NB, for *'oto 'stop, obstruct': L.Son23 *'oto 'atascarse', M88-'o21, see sink.

STORE, KEEP, SAVE, STORAGE BIN; ALZAR, GUARDAR, ALMACENAR, ATESORAR

2205. *tïyuna 'keep': Mn tïyuna 'store'; NP notïïna 'keep s.th.'; Ca téyan 'preserve, carry on (custom, rite)'; and NT šiidyúñdyi 'retacar, guardar, llenar mucho'. With *t->*c>Tep *s preceding high vowels, Mn and NT agree well—slight V change in NT, major V change in Ca, *u> ï in NP and a prefix.

[V problem in Ca; *t->*c>Tep *s] [NUA: Num, Tak; SUA: Tep]

NB, for *tip-ki 'hole, storage cave' see 'cave'.
NB, is Tr nitugá 'provision for trip' borrowed from ST gaamu, prs: tugamu 'put in pack/sack'?

STRAIGHT(EN); RECTO, DERECHO, DIRECTO, ENDEREZAR(SE)

2206. *cïLi 'straight': B.Tep210 *sïrini 'straight'; M88-cï11; KH/M06-cï11: TO šelini(m) adv'; UP šïlinï; LP šïliñ; NT šïliñï; ST šïliñ; Wc šéu.ráïye 'derecho, recto'. Miller queries whether Tbr cira-voná 'a la derecha' is cognate. Note TO šel-wua 'practice shooting'; TO šel-wui-dag 'ability to shoot'; TO šel 'permission, a right'; TO šel-him 'go in a straight line, go continually'; TO šelin 'straighten'; TO šelina 'arrow shaft'. Add Cr siuúrara'a 'derecho'; PYp selini 'straight, adj'; PYp selin 'stretch'; Nv sïri 'derecho'; Nv aisïriga 'echar, pl' (Nv aibua 'echar, sg'). [SUA: Tep, Tbr, CrC]

2207. *yïwi 'straighten': Cp yéywe 'straighten'; Ls yóowi 'to aim, as in shooting, to straighten arrows'. [NUA: Tak]

2208. *tuna 'straight': Mn tunaapaa 'straight, adv'; Mn tunaapaatï 'straight (one), adj'; TSh tunaan(tïn) 'straight, too much, excessive'; TSh tokwittunaan 'really straight, straight ahead'; TSh tokwittunaa wïnnï 'zenith, standing striaght'; Sh(M) tunnaan 'straight'; Sh(C) tunaah-(n) 'straigthen, vt; be straight, vi'; Cm tuna/tunaa 'straight'. [NUA: Num]

2209. *muCkuNta 'straight': Kw mukuda 'straight'; Ch mukúnta 'straight'; SP muhkunta 'be straight'. All reflexes show *-kk-. [*-Nt->-d- in Kw] [NUA: SNum]

NB, in regard to CN melaktik 's.th. straight', note in Wares' (1968) Yuman collection *miramiraka 'straight'.

STRETCH, EXTEND, SPREAD; (EX)TENDER, ALARGAR, ESTIRAR; see also pull, straight, flat 2210. *ta'La (< *ta'ta) 'spread, stretch out': M88-ta13 'to extend, stretch, spread out'; KH/M06-ta13: TO taDan, taDannik 'to spread out flat'; Wr ta'lá 'tender, extender'; Tr ra'rá 'extenderse, esparcirse'. Miller includes Eu teká 'poner' and NP mïdda-tappi 'laying on back all stretched out' (tappi=lay). Possibly NP, but Eu better fits *tïka 'stretch out lying down' at 'put', but the TO, Wr, and Tr forms are a nice set, since TO D does correspond to liquids. [SUA: Tep, Opn, Trn]

2211. *sam'aC 'spread, v': Stubbs2003-22: Kw sa'ma 'spread out (e.g., a blanket)'; Kw sa'ma-pï 'blanket, mat'; SP sa'ma / sam'a 'spread out (a blanket)'; SP sa'mappï 'spread out, ptc, cover on which s.th. is laid'; Ch som'á 'spread a blanket'; Ch samápü 'pallet, rug'; WMU sa'má-ppü 'rug, skin, thick blanket, saddle blanket, n'; CU sa'má-pü 'cover, rug, carpet, pad, pellet, floor'. Given the tendency of glottal stop anticipation and having two forms with the glottal stop after -m- (-m'-), probably the cluster *-m'- > -'m- in the other forms. All languages with a noun suffix (Kw and SP) suggest a final -C. [V change in unaccented syllable] [NUA: SNum]

2212. *pïrak 'extend, stretch': My berak-tia 'extend, stretch, vt'; AYq veakta 'unroll, stretch out'; AYq veakte 'be unrolling, vi'. [SUA: Cah]

2213a. *wasa/i 'stretch': M88-wa26; KH.NUA; KH/M06-wa26: Ca wási 'stretch, vi'; Ca wásin 'stretch, vt; Ls wáṣa/i; Sr waaṣk 'stretch, spread apart, vi'; Sr waaṣkin 'stretch, spread apart, vt'. Might these Tak forms tie to Hp wiisila 'string out, extend, stretch out on a surface' and the Num *wisi forms at 'net' with assimilation: *wasi > wisi?

2213b. *waca/i 'straight, stretch': Wr wahci 'true, right, straight ahead'; Wr wahciba-ni 'stretch oneself out';

Wr wahcı́na-ni 'stretch s.th. out, vt'; Tr wača 'desperezarse'; Tr wači 'rectificarse'; Tr a'waci 'desperezarse, estirarse'. [c/s] [NUA: Tak, Hp; SUA: Trn]

2214. *huta/i 'pull, stretch, pin s.o.': Hp hootakna 'stretch, extend, pin s.o. on his/her back with arms outstretched'; Ls hóóti- 'pull, live with a woman out of wedlock'. This pair seems more likely than not. If from *huta/i, then Hp has its expected vowel, and Ls could well have lowered the vowel because of the following low *a*, and then final -a > -i: *huta > hota > hoti. [NUA: Tak, Hp]

NB, for *pata 'spread', see 'flat'

NB, for *mana 'put, spread flat' see 'lie down'

NB, for *tika 'put/be lying down stretched out (Nv, TrC), see put.

NB, do Ls(E) ηáw'la-š 'mattress, mat, bed' and Ls(E) ηáwa/i 'be spread, vi, spread, make a bed, vt' have cognates?

String: see rope

STRONG, BRAVE, ABLE; FUERTE, BRAVO, PODER

2215. *wupuka 'strong, strength': B.Tep49 *guvuka 'strength'; M88-wu2; KH/M06-wu2: TO gïvk 'stiff, strong, hard'; NT guvúka; ST -guvuuk. Add PYp gevek 'be strong, stand upright'; PYp gevkam 'forcefully, adv'; LP(EF) ge'wek 'fuerte'. Would the vowel ï (*gïvïka) better fit the forms, since both e/ï and u appear in Tepiman forms? [SUA: Tep]

2216a. *hu'a / *huwa 'strong, hard': Eu huwarawe 'strong'; Wr u'á 'estar fuerte'; Wr u'aré-na 'sentirse fuerte'; Yq 'útte'a 'ser fuerte'; Eu huwé'e 'fuerte'; Tr wáre 'duro, resistente'; Tr watáre 'fuerte, ser resistente'. The above and below may well be two different sets of morpheme combinations. [SUA: Cah, Opn, Trn]
2216b. *(hi)wiL 'strong, able': CN wel 'able'; Tr hiwérame 'fuerte, vigoroso, resistente'; Tr iwé-game 'fuerte, vigoroso, resistente'. Tr wáre is above also. [SUA: Trn, Azt]

2217. *yuma/i 'able': L.Son364 *yumï / yum-a 'poder'; M88-yu4 'to be able'; KH/M06-yu4: Eu dumá; Wr yumé-ba-ni; Tr umé; My yúuma; My ma'yuuma 'poder hacer'. [Tr loss of initial C] [SUA: Opn, Trn, Cah]

2218. *kwamuki 'brave, unflinching': TO bamuistk 'be unflinching, even-tempered'; PYp bamoki, pl: bakoi 'be brave'. [SUA: Tep]

2219. *sïCï > *sïi 'strong': Kw sïi-ga-dï 'one that is strong, of trees'; SP šïi- 'strong'; SP šüú-ġa-ntü; WMU süú-/süú-ġa/ süú-ġa-ttü 'strong'; CU süú-a-ġa-tü 'strong'; Sh(C) sïttawïtti 'strong, muscular'. [NUA: Num]

2220. *piNka 'persist in, continue, bear with, suffer from': Ch pinká 'keep on, insist on'; SP pinqa 'continually, keep on'; WMU pigá- 'hard, vigorously, intensely'; CU pika- 'persistently, doggedly, continuing in spite of difficulties or opposition, adv'; CU piká- 'energetically, hard, vigorously, fast, adv'; CU piká-rigáy 'persist in, keep on doing'. Note in WMU, *-Nk- > -g-, not -k-, retaining the voicing of the underlying nasal of the cluster. The semantics of SNum 'persist in' changes slightly in CNum to 'bear with, suffer from': Sh(M) pikka 'suffer from, be afflicted with'; Sh(C) pikka 'suffer from'; Cm pihkai 'stop crying, hush'. [NUA: Num]

NB, for *o(ho)pa 'strong, brave, enemy' see 'enemy'.

Stumble: see fall

SUCK, SUCKLE; CHUPAR, MAMAR; see also breast, milk, kiss

2221. *ci'i 'suck(le)': VVH33 *ci('i) 'suck out, v'; B.Tep198 *si'ïi 'he suckles' and *si'i 'to suckle' with forms in all Tepiman languages; M67-421 *ci 'suckle'; M88-ci4; KH/M06-ci4: Eu čía 'mamar' (prêt: Eu ci'î); Eu čítude 'amamantar'; Tr či'i-mea; Wr ci'i-ná; Yq čé'e; My čé'eye; AYq či'itua 'nurse an infant, vt'; Tb čiin 'breast, chest'; PYp si'a 'suck'; NT šíítïudai 'dar de mamar'; NT šíítïoldïi 'wean'; NT šííkaroi 'nipple (of bottle)'; Wc cící 'breast'; CN čiičii 'suckle, nurse'; Tr či'-mu- 'have milk'; Cr ci'iméh 'milk'. [SUA: Tep, Opn, Trn, Cah, CrC, Azt]

2222a. *cu'mi > *cuŋV 'suck, sip, kiss': M67-420 *cun 'suck'; CL.Azt10 *cinaakan 'bat'; M88-cu7; KH.NUA; KH/M06-cu7: Kw čohmi 'suck, v'; Hp còocona 'kiss, suck, suck on pipe'; Hp(S) cohcona 'suck'; Cp čúŋe 'kiss, vt'; Cp čúme 'suck'; Ca čúŋ 'suck'; Ca čúŋ-in 'cause to suck'; Ls čúúŋi 'suck (breast)'; Ls čúŋi 'kiss'; Sr čuuŋ 'suck, vt'; Ktn cuŋ 'suck'; Eu čúca; Wr cu'mi 'suck, sip, slurp food'; Tr cu'mi 'suck, kiss, sip, eat soft things'; Tr ču'mí 'lip, mouth'; My čuune; AYq čuune; CN (paal) čičiina 'soak up, suck in, smoke, vt' and CN ilčiina 'suck up, consume' and HN čičiina/čičiini 'suck'. Ken Hill adds Ktn cuŋ. Also add the last of Nv tup'suma 'suck, v'; NT višúúsumai 'suck'. The Tep forms suggest *čuma or *ču'ma, like Tr, Wr, and Cp. Wc céena 'lick' looks much like the Azt forms. Add the -čomi- of Ch(L) ko'wa-čomi-gyah 'tobacco-chewing-is'; CU sőö'mi 'suck, sip, vt'; and what of the latter two syllables of CN ke'coma 'bite'?

2222b. *cuŋuC 'tobacco pipe': M67-321 *cunu 'pipe'; M88-cu8 'pipe'; KH/M06-cu8 'tobacco pipe': SP čuŋu''; CU cuu-ci 'pipe, sucker (the fish); Hp cooŋo 'tobacco pipe'; Hp coocoŋa 'smoke (tobacco)'. Add WMU čúúči / júúji 'pipe, smoking pipe, n'. Note WMU loses medial nasal, but keeps a nasal vowel uu here at 'suck', at 'liver', and at *nïmi 'go, person'. [NUA: Hp, Tak, Num; SUA: Tep, Cah, Trn, Opn, CrC, Azt]

2223. *moCV 'suck': BH.Cup *mé 'suck'; M88-mo10; KH/M06-mo10: Cp míse; Ca míš 'to chew'; Ls méeči 'chew to extract juice'. [NUA: Tak]

2224. *pi'ni 'suckle, nurse, v': VVH91 *pini 'to suck on it'; M88-pi8 'to suck/chupar'; KH/M06- pi8: VVH91 show TO wiiñ; Wc hiini; Wr pi'ni 'chupar caña'; Tr biní 'chupar, aprender, amansarse'. CN pina 'dampen' may be a loan since the expected correspondences are Wc h, CN ø. Add AYq piine 'suck out'; Nv vinu(pana) 'suck, lick' and NT viñiúúmai 'lick'. [CN p-] [SUA: Tep, Trn, Cah, CrC]

2225. *piCt-cu (< *piCti-cu'mi) 'breast-suck > milk, suck, breast'; M88-pi8; KH.NUA; KH/M06-pi8: CU pičí 'suck (breast)' (vs. CU píi-vi 'breast'); Kw pi'i 'suckle, nurse'; Cp píse 'nurse, suck'; Ca pís 'nurse'; Gb pečú-'mamar'; Sr pi/piiha 'nurse, suckle, vi'; Sr piihan 'nurse, suckle, vt'. To those could be added Mn pici 'suck, v'; NP pici 'suck, v'; Sh(M) pici" 'suck' (vs. pici 'breast'); Ch picï 'suck' (vs. pihí 'breast'); and CN pipicoaa 'suck, gnaw, v'; CN picoaa 'kiss, vt'; CN picool-li 'kiss, n'. These are similar to, but usually not identical to *pici 'breast'. Note the first of NT višúúsumai 'suck'; NT piisiúúmai 'lick'. Note the suggestion of final round vowel in Gb, CN, and Ch, while others do -i, the frequent schwa-like behavior. [*t > *c > Tep s] [NUA: Num, Tak; SUA: Tep, Azt]

NB, for *yi'na 'smoke, suck', and *yunu 'smoke, suck', see 'smoke'. NB, for *mayi 'cure, suck' see 'heal'.

Suffer: see tire(d), sad, pain, sick

SUMMER; VERANO, ESTÍO

Mn	tazawáno	Hp taalö'ö; ïïyis 'early summer' Eu			kuvésrava
NP	taca	Tb		Tbr	
TSh	taca(wani)	Sr	tööŋava'	AYq	tasaria; tataria
Sh	taca(")	Ca	táwpa'	My	tatta 'weather's hot'
Cm	taaca/tacatï	Ls	táwpa-š	Wr	pamí; pamíni
Kw	taza	Cp	táwpa	Tr	kuwé 'n'; kuwésa 'v'
Ch(L)	tača	TO	toniabkam	Cr	ta'uwaste
SP	taca"	Nv	tutondiga	Wc	
			tutoniabagu 'be summe		
WM	táč, tačátï (< *tačá"-tï)	PYp	hiosga-kam	CN	toonal-li
CU	táča	NT	tááko; ST		tlatotooniilloo-tl

2226. *taCcaC < *tattaC / *taCcaC 'summer': VVH27 *tauca 'sun, summer'; M67-423c; I.Num211 *taca(h) 'summer'; B.Tep218 *tasai 'sun, day'; M88-ta4; KH/M06-ta4: this appears in most of the Numic languages semantically as 'summer'; but in the Tep languages (*tasa < UA*taca) as 'sun, day'; and Cr táca 'be transparent, clear (water)' may be cognate. The Numic cognates are in the table above, but the Tep forms at 'sun' (*tasa < *taca) belong here with this set, though they are blocked in the table under sun: TO taš 'day, sun, clock'; Nv tasa 'sun, day'; PYp tasa 'sun, day'; NT tásai 'sun, day'; NT tasiïvodï 'rays of sun'. [NUA: Num; SUA: Tep, CrC]

2227. *tawa-pa 'summer': M67-422 *taupa 'summer'; BH.Cup *tawpa 'summer'; M88-ta5 'summer'; KH/M06-ta5 *taw- (AMR): Cp; Ca; Ls; Hp taala' 'be light, daylight, v'. [NUA: Tak, Hp]

2228. *kuwïs 'summer': Note the exceptional similarity of kuvés in Eu kuvés-rawa 'summer' and Tr kuwésa 'be summer' as well as Tr kuwé 'summer, n'; Cr ta'uwaste 'summer' (-'uwas-te after a prefixed ta-; though Cr ï normally corresponds to *u, maybe the rounding influence of w afterwards retained the back round vowel). What of the -kayc of Ktn tïkwakayc 'shade house, where people live in summer'? Or Ktn 'oši' / 'ošit 'hot, be hot weather' and Ktn 'oši-va'a 'summer'? Hp ïyis 'early summer, planting time' reportedly derives from *ïca 'plant, v'. [SUA: Opn, Trn, CrC; NUA: Tak]

2229. *toniakwa... 'summer': TO toniabkam; Nv tutoniabagu. For *tonaL see 'hot'. [SUA: Tep]

NB, for CN and Tep's derivatives of *toŋVL (Nv tonorho 'for sun to shine, v'; TO tonoD 'shine, twinkle' (TO toni 'be hot'); and CN toonal-li 'warmth of the sun, summertime, day') see at 'hot'.
NB, for Wr pami 'summer', cf. Wr and Tr at *pami 'year'.

Summit: see top

SUN, DAY, DAWN, EAST, MORNING; SOL, DIA, ALBA, AURORA, MADRUGADA, AMANECER, SALIDA DEL SOL, ESTE, ORIENTE

Mn	tadábe	Hp	taawa Eu		távi		
NP	taba	Tb	taal Tb		tá-ta; tasa-lí-t		
TSh	tapai(cci)	Sr	taamiat	Yq	táa'a		
Sh	tapai	Ca	tamit/tamyat	My	taa'a		
Cm	tabe	Ls	timé-t	Wr	tahénari		
Kw	ta-vi	Cp	támit	Tr	ŕa-; ŕáyenari		
Ch	tavá-pïc(i)	TO	taš	Cr	sïkáh		
SP	tava- 'sun, day'	Nv	tasa	Wc	táu; háuri.víiya		
CU	tavá-ci	PYp	tasa		'sun (ceremonial word)'		
		NT	tásai	CN	toonatiu';		
		NT	tonóóli; tonóóraka 'hace sol'		toonal-li 'warmth of sun' ilwi-ka 'sky' (< sun-house)		
		ST	hiččat '&our father'				
			tanoolyiop 'in the sun'				
			tonnia 'be sunny'; duu 'sun be in a place'				

Sapir; B.Tep218 *tasai 'sun, day'; M67-423a *ta 'sun'; BH.Cup *tVmet 'sun, day'; HH.Cup *tamet 'sun, day'; I.Num209 *tape/*ta- (pref.) 'sun, day'; L.Son267 *ta 'sol'; M88-ta3 'sun, day'; AMR 1996d; KH/M06-ta3: here under M88-ta3 Miller lists many initial ta- words—TrC *tawï, Num *tapa, Tak *tami, and *taca, to highlight a few. As these may feasibly have a variety of different affixes or morphemes attached to an initial *ta-, for now let's at least separate them by letter: HH.Cup note that Sr taamiat is probably not cognate, but rather *tamet is related to the Sr verb taami' 'to be light' and that a Sr cognate should be something like *tämöt.

2230a. *tawa / *tawV 'sun, day': Hp taawa 'sun, day'; Wr tawé 'day'; Tr ŕawé 'day'; My taáwa(ri) 'day'; Eu távi/táve/táwi 'día, sol'; CN tlaawiaa 'to light s.th.'; AMR 1996d argues well for CN ilwi-tl < *tawV (ilwi-ka-tl 'sky' <sun-house)'; HN tlaawia' to shine; Pl tatwi to dawn; Pl taawil 'candle, light'; besides Hp taawa 'sun' are Hp taala 'be light'; Hp taavi 'sunshine, sunlight'.

2230b. *ta'a / *ta- '(day)light, sun': Yq taa'a 'sun'; My taa'a 'sol'; Tr ra-, ta-, ra-tá 'daylight, sun, brightness'. At 'sand' also does Num w correspond to Cah glottal stop.

2230c. *tapa 'sun, day': I.Num209 *tape/*ta- (pref.) 'sun, day'; a cognate appears in every Num language, which aligns with Hp taavi 'sunshine, sunlight' but not with Hp taawa and Hp taala.

[*w > v as in pine *yuwi > *yuvi] a and b and c [NUA: Num, Hp; SUA: Opn, Cah, Trn, Tbr, CrC, Azt] **2230d.** *ta-iwa-(Li) 'become day': Tbr ta-imoa-lí-t 'day'; AYq taewali 'daylight'; Cr teíhimwata'a 'east'; AYq taiwo 'east'. Only the first syllable *ta- is cognate here.

- **2230e.** *tamV 'sun, day': BH.Cup *tVmet 'sun, day'; HH.Cup *tamet 'sun, day'; Munro.Cup125 *tamé-t 'sun, day'; KH.NUA: Sr; Ls; Cp; Ca; Gb támit 'sun, day'. Every branch has things beginning with *ta-, but 2230e may be an entirely unrelated stem, and 2230d links with other morphemes. [NUA: Tak]
- 2231. *yu (> Tep *du) 'sun be at a place': TO juu, jujju, juu-k 'sun to be at a certain place, be at a time of day'; PYp duu 'sun reaches a certain point'; PYp duu-k 'in the past, at/past a certain time'; ST duu 'sun be in a certain place'. [SUA: Tep]
- 2232. *kuya 'light, lit': PYp kukud 'flash'; NT kuudági 'luz'; NT kuudági kami 'prendido'. [SUA: Tep]
- 2233. *pacay 'shine': TO wadad-k 'be shiny, bald'; PYp vasad 'shine, vi'. [consonant harmony in TO] [SUA: Tep]
- **2234.** *pahay dawn': M88-pa59 'dawn, bec. daybreak'; KH/M06-pa59: Cp páay; Gb pahí; Sr pahi'k; Sr pahi'kin 'stay up all night'. [NUA: Tak]
- **2235a.** *cihaLi 'sunrise, east, morning': B.Tep197 *si'ari 'east'; L.Son34 *cira 'amanecer'; M88-ci18; M88-cï1; KH/M06-ci18; KH/M06-cï1: TO si'al 'morning, east'; NT šiáli; ST sia'ly; Wr ce'la-ni/ce'ri-ma 'amanecer, despertar'; Tr če'rá / či'rí 'amanecer'. Combine M88-cï1 and M88-ci18 'east' since the change in vowels *i-a > ï-a is common, and the consonants and meanings are all quite identical. We must reconstruct *cihaL to arrive at Tep si'al. [i-a > e-a]
- 2235b. *ta-sï'aN / *ta-sïCaC 'dawn': Ch(L) ta-sïa 'dawn, v'; Ch(L) ta-sïapï / ta-sïantï 'dawn, n'; Ch(L) ta-sïaŋu 'it became morning, day broke'; Kw tasï'ī-zi 'dawn, n'; SP taššïaN 'dawn, v' (Sapir says likely contains ta- 'sun'); WMU tahs<u>ú</u>(ŋ)a-y 'be early dawn before sun comes up'. [SUA: Tep, Trn; NUA: Num]
- 2236. *sipi 'east': Mn sibitï 'east'; Eu sivín/sibín 'east'; Sr şïvïn 'south'. [NUA: Num, Tak; SUA: Opn]
- **2237.** *to'ay 'rise, come up/out': TSh to'eh 'emerge, come up/out, go up out'; Sh to'ai/to'i 'come out, emerge, climb'; Sh(GL) do'e 'emerge, come out, go out'; Cm to'itï 'appear, come out, pl'; SP taŋa-ro'ai 'kneel, vi'. Cm intervocalic -t- rather than r may suggest a final C, for which -y works and explains the Num vowelings. [NUA: Num]
- 2238. *nuL / *naL 'aclarar el día': Eu nurú 'aclarar el día' and Tbr nare 'aclarar el día'. [SUA: Opn, Tbr]

NB, for *taca, see summer.

NB, for *tona, see hot.

SUNFLOWER; GIRASOL, MIRASOL, ACAHUAL

Mn	ákï 'seeds'; akïbï 'plant'	Hp ah	ahqawï; cïqa'qawï(domestic) Eu		akát		
NP	akï; paa'hï	Tb	taalataa-ugibiï-l	Tbr			
TSh	akkï	Sr		AYq	taa'ata vitču		
Sh ak	kïn 'seeds'; hiyom-pï 'pl	ant' Ca	pá'akal	My	bíse'ebeero		
Cm	hi'oopi; ohayaa'	Ls	páa'ka-l	Wr			
Kw	pa-'akata-bï	Cp	pá'aqily	Tr	sewácari		
Ch		TO	hiiwai	Cr	waabéh		
SP		Nv	'iba	Wc	kïšau.cárí;		
WMU kü-ppü, tavá-si'ín(t), ará-si'ín(t) NT haa.veráa 'flor de cosmos'							
CU	kï-pï (< *kï"-pï)	ST		CN	čimalaka-tl		

2239. *'apka(C) / *(pa)-'akka(C) 'sunflower': BH.Tak *pá'aq- 'sunflower'; Fowler83; M88-'a21 'sunflower'; KH.NUA; KH/M06-'a21: Mn ákï 'sunflower seeds'; Mn akïbï 'sunflower plant'; NP akï (< * akkï) 'sunflower'; NP paa'hïï 'sunflower'; TSh akkï 'sunflower'; Sh akkïn 'sunflower seeds'; Kw < *pa-'akkatta-(m)bï 'sunflower'; Hp a'qaw/àaqawï 'sunflower'; Cp pá'aqi-l^y; Ca pá'aka-l; Ls páá'ka-l; Sr pá'aqţ 'plant sp, but not sunflower'; Ktn pa'apkač; Pl ahka-pah 'acapate, or plant leaf used for food'. In addition to Miller's list, let's include the first morpheme of Ch(L) 'aka-sï'ï 'Palmita flower (woman's name)'; Eu akát 'sunflower' which adds the TrC branch to this collection, and CN aakaawal-li 'large dry leaves for lighting ovens' (< *pa-kaawa 'water-leave, abandon'), if the

latter is what Spanish acahual is borrowed from. Miller mentions that Num and Tak could be related only if initial *pa-'water' is a morpheme in Tak, which seems probable, in light of the near identity of the remainder. Both CN and two Num languages (Kw and NP) recommend such, since all of them also contain pa- prefixed to a similar looking stem. Note the similarity of Hp àaqawï and CN aakaawal-li, and also that Ktn pa'apkač may show the underlying cluster *-pk- > -kk-. [Hp-Azt] [NUA: Num, Hp, Tak; SUA: Opn, Azt]

2240a. *sipa (> Tep *hiva) 'sunflower': TO; Nv. [SUA: Tep]

2240b. *sawa 'sunflower': Tr sewácari; Wc kïšaucári. Fowler (1983) ties Tr to TO—possible, though Tr may have borrowed from Tep. For a food item of such antiquity, check areal forms for non-UA sources. [SUA: Trn, CrC]

SUNSET, SET (of SUN); PONERSE (EL SOL); see also black and night

2241a. *yï'a / *yV'aki 'set or enter (of sun), v': Sh(GL) ya'ihwa-; Ch(L) tavapïc ya'ak^aici / tavi yï'a-k^aici 'sun set, sun disappeared, v'; Ch yï'á-ki 'set (of sun), enter, sink, v'; Ch(L) yï'a-kici '(having) disappeared'; Sh(C) tapai yïah / tapai yïah-kwa 'sun sets/goes down'; Sh(C) yïah/yua" 'enter, go in/under'; Sh(C) yïikka 'evening, after sundown'; SP yi'aqqaa 'go in, sg'; SP yi'aġi-cai 'go in, pl'.

2241b. *ya(u)kwi 'set, go in': Kw ta-vi-yuukwi 'sun to set, v'; SP tavá yauqqwi 'sun sets, v'; CU tavá yáakwi 'sundown, n'; CU yáakwi 'sink (into), go into, be buried (in), disappear into'. [Num]

2242. *tapV ika- 'set (of sun), sun-enter': NP tab iga'hu 'sun went down'; Mn iga 'enter, v'; TSh tape ika(kkwa)nna 'sun to set, v'. Note *aka 'among, between' at 'in' may tie to *ika 'enter'. [NUA: Num]

2243a. *huLu- 'set (of sun), v': TO huDun 'set or sink (of sun), v'; Eu urún 'para el poniente'; Eu urícei 'del poniente'; Eu urúkon 'al poniente'; ST hurnip 'poniente, n'; Nv urhunu 'anochecer, v'; NT urúúnïi 'hacer tarde'; NT urúúkïi 'hacer tarde'. Usually Tep h < *s, but not in Eu and sometimes Tep keeps *h, and Eu's stem is more richly productive in its morphological use than is typical of a loan. Many morphemes suffix to *huLu, one of which is the compound below.

2243b. *huLuniko 'afternoon': B.Tep79 *hurunoko/*huruniko 'afternoon'; M88-su20; KH/M06-su20: UP huDuniki; NT urúnoko; ST hurnik; TO huDuni 'descend, set, sink, go down'; TO huDunig 'sunset, west, evening, night'. Add Eu urúkon 'al poniente'. This set may have -ko compounded on *huLu(ni) 'set (of sun)' at 'set (sun)'. Eu normally has s < *s, which leans away from PUA *s for Tep h, though a loan from Tep is possible. But Tep languages occasionally keep *h, and some TrC forms suggest this could be one. [Liquids] [SUA: Tep, Opn]

2244. *kaLaki 'set, of sun, v': CN(RJC) on-kalaki 'set (of sun), v'; Pl kalaki tuunal 'for sun to set, go down'. [SUA: Azt]

2245. *taca puca 'sunset v/n': PYp tasa vusa 'be sunset, v'; Nv tasavusu 'ponerse el sol'. [SUA: Tep]

NB, for *Luka 'stoop, bow, go down (of sun), v' (with Cp áwluke 'set (of sun), v'), see 'stoop'.

Surround: see circle Swallow: see eat and bird

SWEAT; SUDAR, EXUDAR, SUDOR

The following three groups consitute a nice example of the Num sub-branch divisions.

2246. *kuNa 'sweat': Mn kunaa 'perspire'; NP kuna'a 'sweat, v'. Jane Hill (p.c.) adds a very decent possibility in Ls xúla 'sweat, v'. $[n/\eta]$ [NUA: WNum, Tak]

2247. *takusito'i 'sweat': Sh takusitoi 'sweat, v'; Cm takusito'itï / takwïsito'itï 'perspire, sweat'. ['>ø] [NUA: CNum]

2248. *(hu)pakka 'sweat': Kw huva-ka 'sweat, n'; Kw huva-ka-we'e 'sweat, v'; SP paqqaa 'sweat'; WMU pahkkáá-nöröġwa-y 'sweat, vi'; CU paqXáa-vi 'sweat, n'; CU paqXáa-ġarí/cipí 'sweat, v'; CU paqXáa-'iní-kə 'work hard to a sweat, make oneself sweat, vi'. [NUA: SNum]

- **2249.** *pa-suLa 'sweat': TO wahuD / wahul- 'sweat, vi'; TO wahulŏag 'sweat, n.; sweaty, adj.'; Nv vahurhu 'sweat, v'; Nv sivahurhudaga 'sweat, n'; PYp vahagdar 'sweat, n'; NT vaahúraryi 'sweat, vi'; ST voor 'sweaty' (pl ST vapor). Also likely are the latter two syllables of Cr táisï'e 'sweat, vi'; Wc kwaašiiya 'sweat, n', for Cr -sï'e < *suLV, and Wc assimilated the V a bit more toward y. This is another word in which PUA *pa 'water' appears compounded in Tep, though *pa does not appear independently in Tep. [*L > ' in Cr] [SUA: Tep, CrC]
- **2250.** *potoC 'sweat, v': TSh poco' 'drip down, fall in droplets, leak, vi'; TSh poco' in/paco' in 'be wet, perspire, sweat'; Wr taipóci-na 'sweat, v' (tai- 'be hot'; Yq tátahbúhte 'sweat, v'; AYq tatavuhte 'sweat, v'; AYq tatavuhtia 'sweat, n'. Valid if NUA *-c- not from *-c-. [*-c-] [NUA: Num; SUA: Cah, Trn]
- 2251. *ï'wa 'sweat': Ca 'é'wa 'sweat, vi'; Cp é'we 'sweat, vi'. [NUA: Tak]

NB, Hp(S) töŋmoki 'sweat, vi (2nd mesa) and CN iitooniaa 'sweat, v'; CN iitoonal-li 'sweat, n' appear to be derived from *toŋa 'sun-heat'; see at hot.

SWEATHOUSE; SUDADERO

- **2252.** *hacLa (< *hatiLa?) 'sweat onself, v': BH *hácla 'to sweat oneself'; M88-ha13; KH/M06-ha13: Cp hášla'a-š 'sweathouse'; Ca hášla'-il 'sweathouse'; Ls háşla 'sweat onself in a sweathouse'; Ls háşla-š 'sweathouse'. [NUA: Tak]
- **2253.** *musaC 'sweathouse': M67-426 *musa; M88-mu16 'sweat house'; KH/M06-mu16: Mn musa'i-t 'take a sweatbath'; Mn musa'amati 'sweatbath'; TSh muusa 'sweathouse'; Tb muusa-t 'sweathouse'. Could this be an areal loan? All three languages are geographically proximate. Jane Hill (p.c.) later answered my question, saying these are a Yokuts loan. [NUA: Num, Tb]

SWEEP; ESCOBAR, BARRER; see also comb

- **2254.** *poci 'sweep': B.Tep275 *voisikai 'to sweep, press down' at M88-po25; KH/M06-po25; and B.Tep276 *voisikaroi 'broom' at M88-po26; KH/M06-po26: TO wosun(a) 'sweep'; LP(B) voiši 'sweep'; Nv voska 'barrer'; NT vóišikai; ST voššik/voška' 'barrer'. [SUA: Tep]
- **2255.** *copa 'sweep': CL.Azt164 *očpa 'sweep'; 214 *copa 'clean, sweep'; M88-co16; KH/M06-co16: CN očpaana 'sweep'; Pl (u)čpaana 'sweep'. If očpa < *poci-pana, then a morpheme agrees with Tep *poci above and palatalized č is explainable. [SUA: Azt]
- **2256a.** *wak 'sweep, comb': BH.Cup *wáq-? 'sweep'; M88-wa24; KH.NUA; KH/M06-wa24: Ca wáka'an 'sweep, clean, comb, rake'; Ls wáqi 'sweep, brush, comb'; Cp wák 'comb, sweep'; Sr wööq 'sweep, brush, comb' (vowel is wrong Miller notes, so we put it and Ktn in b); Miller includes the possibility of Washo wéege 'sweep'. Add Hp laq-ta 'sweep snow clear' and Ktn wok- 'brush, sweep, v'. **2256b.** *wok 'brush, sweep': Sr wööq; Ktn wok-. [NUA: Tak, Hp]
- 2257. *(hi)paca 'sweep': Eu hipáca 'barrer'; Eu pápca 'barrer'; Wr ihpéci-na 'barrer'; Tr piči 'barrer'; Cr híča'uta 'está barriendo'. This may be tied to *poci above?

 [*a > in Tr like at hungry; hi- > ih- in Wr, p > ø in Cr] [SUA: Opn, Trn, CrC]

NB, for *(hi)cikï 'comb, sweep', see comb.

NB, for *(wi)son, see comb.

NB, TSh wisone and TO wosun(a) both have initial w and the words are quite similar for quite some length—three syllables—yet TO should have g < *w and h < *s, so is a loan possible? I suppose the distance is not that great—southern Nevada/California and southern Arizona.

SWEET, HONEY; DULCE, RICO, MIEL

2258. *hupa / *(h)i(h)opi 'tasty, sweet': B.Tep *'i'ovi 'tasty'; M88-'i10; KH/M06-'i10 'tasty': TO i'owi; PYp io'ovi, pl: iohovi 'sweet, tasty'; NT yóóvi 'sweet, salted'; ST 'i'oov. Consider AYq win-huva 'sweet-smelling'. UA *hupa 'have odor' resembles Tep *-'ovi, for Tep *'i'ovi does look like a compound? [SUA: Tep, Cah]

2259. *pisa(na) / *pisa(L) 'sweet': I.Num163 *pih(C)a 'sugar, sweet'; M88-pi5 'sweet'; KH.NUA; KH/M06-pi5: Mn pannee-wïnï-pï 'sugar pine'; NP pihapi 'sugar'; TSh pihapi 'sugar'; Sh pihnaa 'sugar'; Cm pihnáa' 'sugar'; Kw piha-gama-dï 'candy' (< *-kammaN?); SP pia-(vi) 'sap of tree'; CU piá-ġamá-ti 'sugar'; Cp píske'niš 'sweet, sugar, honey'; Ca písily 'sugar'; Ca písily-ik 'sweet'; Ca písily-nek 'sweet'; Sr piihţ 'sugar, honey, s.th. sweet'; Ktn piha-č 'honey, sugar'. Beyond Miller's list, other UA terms exemplifying the stem are Mn piha' 'sweet, adj'; NP pihagïmaggïti 'sweeten'; TSh pihnaa/pihyaa 'sweet, adj'; Cm pihnákamarï 'sweet'; Cm ïnï bihnaa 'honey'; Kw piha-gama 'be/taste sweet'; Ch piya-gama 'sweet'; Sr piṣaa'i' 'sweet'; Sr piṣaii't 's.th. sweet'; Ktn piša'i' 'sweet'; and perhaps the vïi- of NT vïïñíákami 'sabroso'; NT vïïñíga 'sabroso'. *pihna and *pihya may both derive form *pisna, as well as Cp pis- and other Takic forms showing *pis-. In a cluster, s often goes to h; thus, *pis(a)na may be the underlying form. Yet both *piha and pisa exist in NP, Sr, Kw; and Ca has Ca písily, with ly not behaving like any absolutive suffix. [-sn- cluster] [NUA: Num, Tak; SUA: Tep]

2260. *kaka 'sweet': L.Son71 *kaka 'dulce'; M67-427; M88-ka2; Yq káka; My kákka; Wr kahká; Tr aká(g)ame 'sweet'; Tr aká-re-ma 'be good, tasty'; Cr án-kaká; Wc kaka. Much of M88-ka2 consists of *kamma 'taste' (see at 'taste'). [SUA: Trn, Cah, CrC]

2261. *nakwV 'sumac, honey': BH.Cup *nakwət 'sumac'; M88-na28 'sumac'; KH/M06-na28: Cp nákwi-t 'sugar bush'; Ca nákwe-t 'sumac, sugar bush'; Ls náqwu-t 'laurel sumac'; Sr nahku't 'sumac'; CN neuk-tli (< *nekw-) 'honey'. [NUA: Tak; SUA: Azt]

2262. *mumus-(paLawa) 'honey, lit. bee-juice': AYq mumum; My mumu bá'awa; Wr momohá; Hp momospala. [NUA and SUA liquid] [NUA: Hp; SUA: Cah, Trn]

NB, for Eu kewá'e 'sweet', see good. NB, see also *kama 'taste'—an element in many 'sweet' words.

Sweet potato: see potato

SWELL; HINCHAR(SE), INFLAR(SE), HARTAR(SE)

2263. *posa 'swell': Sapir; M67-429 *posa/*poca 'swell'; L.Son214 *posa 'hartarse'; CL.Azt129 *ooc 'pregnant', 277 **poca 'swell'; M88-po14 'swell'; KH/M06-po14: Hp pöösanw'a 'swelling'; Hp pös'iwta 'be swollen'; Hp pösti 'become swollen'; Wr posa- 'estar lleno, satisfecho'; Wr poci 'estar lleno, satisfecho'; Tr(B) posá/bosá, bosawí (irreg pres) 'full from eating'; Tr(L) póča/búča 'ser lleno, hincharse, enturbiarse un color'; Tr(L) bočíwi 'llenarse'; Cr husa 'gesättigt sein, sich sättigen'; Cr watáhusai 'full from eating'. Let's add Mn puusi 'bloat, vi'. Sapir associates CN posaawa 'inflate, vt'; CN posaawi 'swell'; Cr huša 'be satisfied'; and SP pucca 'be filled'. Add Eu bósve- 'hartarse de comida' and Eu bosáhtude- 'llenar a otro de comida'. Cr, Hp, CN, and TrC forms with -sfit; however, the *poc forms, such as CN ooc-tli 'pregnant'; CN poca 'throw up earth, burrow'; HN 'oc-tli' 'pregnant animal'; Pl ucti-tuk 'pregnant'; SP pučča 'be filled'; Ch póoca 'inflate' and Sr pööč-k 'swell, bloat' seem to be from s.th. involving a *-t-like medial C for NUA in order for SP, Ch, and Sr to show -c-. As for *-t-, note My pot-te-k 'swell (of stomach)' which may suggest this is *-t- or that the medial -c- is from *-t- or possibly from a cluster with *-t-. Some forms may suggest *pus rather than *pos: CN išwi 'satisfy one's appetite for food'; Pl iišwi 'full (of food)'; Cr tyí-hïs-tya-ka'a 'it got filled up'. Actually, CN išwi fits the expected Azt phonology, so Azt *posaawa (note Tr posawa) and Azt posati (note Hp pös-ti) may be borrowed from UA languages to the north. I think we UAnists may be mixing *potV > *poca 'pregnant' at pregnant and *posa 'swell, be full' which may be two different stems, as exemplified by the two CN forms: *ooc- and išwi (and posaawa/i from the north), and the UA speakers themselves may have mixed/meshed the forms semantically and phonologically over time also. Jane Hill (p.c.) adds the possibility Kw poho 'swell, vi'. [*p > p/ ϕ in CN, from north?; Hp-Azt; c/s; s > h] [NUA: Num, Hp, Tak; SUA: Opn, Trn, Cah, CrC, Azt]

2264. *pakan 'swell': M88-pa61; KH.NUA; KH/M06-pa61: Ca páxan 'swell'; Sr paqäna' 'swell (up)'. Jane Hill (p.c.) adds Ktn pakana' 'be swollen'. Miller includes Cp páxwite 'be blistered', but it may better match Num *pakwi below unless an explanation emerges. [NUA: Tak]

2265a. *pakwita 'swell': TSh pakwi" 'swell, vi'; Sh paikwi"/pekwi" 'swell, vi'; Cp páxwite 'be blistered'. **2265b.** *pahwa 'swell': NP pahwa 'swell, vi'; Mn pawa 'swell, vi'; Ch pawá 'swell by sting or disease'.

Note CNum -kw- vs. WNum -(h)w- while in *paNkwi 'fish' is CNum -Nkw- and WNum -kw-, WNum showing more lenition, such that a cluster is needed in WNum to retain -kw-. [kw > (h)w a-i > ai-i > e-I; Cf. pahi-wï below.] [NUA: Num, Tak]

2266. *patto- 'swell': Stubbs2003-24: Cp pátiče (*o > Ca i) 'swell, rise, vi'; Ca pátiš 'swell, bloat, vi'; Ca páti 'get bloated, get round, vi'; CU pïtö-'nay/'ni 'swell up, vi' (note *o > CU ö, and V > ï, the UA schwa in unaccented syllables); Cm paro'ikitï 'rise, swell (as river, creek)'; Cm pohtokitï 'puff up, bloat, swell'; Cm atabaro'itï 'rise, swell (tend to flood, as water in a creek), v'; perhaps Wc hátïka 'hinchar, pl' though Wc hatu... would be expected. All forms show 2nd V *o (except Wc) and 1st V *a, except the CU form and one of the Cm forms, which accord with unaccented vowels being less stable: one became the UA schwa ï and the other assimilated to the 2nd vowel. [V change in unaccented syllable] [NUA: Num, Tak; SUA: CrC]

2267. *paha/i 'swell': Ayq vaha 'swell, vi'; Yq báha 'hincharse'; My báhha-k 'se hinchó'; Tr bahá-ma 'hincharse, inflamarse'; NT vaigúúguligai 'inflammation, swelling'; NT vaigúúguryi 'hinchar'; PYp vaigeg 'swollen'; PYp vaigeglim 'swell, vi'. [SUA: Tep, Cah, Trn]

SWIM; NADAR, FLOTAR; see also bathe, wash

pahabi; nabakiya	Hp	momori	Eu	vákura
pahabi; pamawa'ya	Τb	pai'ič	Tbr	ona- '&pull, walk'
	Sr		to	vi / towi-tú 'float, quedar, dejar'
nokoicoih	Ls	wáaya-	AYq	vahume
pa-hapi"; pa-nua	Ca		My	bahume
pahabitï (water-lie)	Cp	wáye	Wr	ka'ké-na
paa-ge-nukwi-	TO	waččui(mk)	Tr	ganaye; piba
navákï	Nv	vahimu; sibahidagka	Cr	á'ahaube; wahauhsin 'nada!'
	PYp k	omlim; vaahana; vatpim	'&bathe	' Wc hau(ríka)
naváki; 'aví-vörí	NT		CN	aa-neloaa 'water-stir'
	ST	gïšia; čb, bïhi,		aa-wilaana 'water-drag'
		bïïya' 'float, try to swin	n'	aa-kwi 'water-take'
	pahabi; pamawa'ya nokoicoih pa-hapi"; pa-nua pahabitï (water-lie) paa-ge-nukwi- navákï	pahabi; pamawa'ya Sr nokoicoih pa-hapi"; pa-nua pahabitî (water-lie) paa-ge-nukwi- navákï Nv PYp k naváki; 'aví-vörí Tb Ca Cp pay PYp k NT	pahabi; pamawa'ya Tb pai'ič Sr nokoicoih Ls wáaya- pa-hapi"; pa-nua pahabitï (water-lie) Cp wáye paa-ge-nukwi- navákï Nv vahimu; sibahidagka PYp komlim; vaahana; vatpim naváki; 'aví-vörí NT ST gïšia; čb, bïhi,	pahabi; pamawa'ya Tb pai'ič Tbr Sr to nokoicoih Ls wáaya- AYq pa-hapi"; pa-nua Ca My pahabitī (water-lie) Cp wáye Wr paa-ge-nukwi- TO waččui(mk) Tr navákï Nv vahimu; sibahidagka Cr PYp komlim; vaahana; vatpim '&bathe naváki; 'aví-vörí NT CN

Some branches have a term (Num, Tak), but no pan-UA word exists, and many are synchronically transparent. **2268.** *pa-hapi 'swim, lit. water-lie': I.Num131 *pahapi 'swim'; M88-pa15 'swim'; KH/M06-pa15: Mn pahabi; NP pahabi; Sh pa-hapi"; Cm pahabitï; and partially CU 'api-pori. Sh hapi" is lie down, be prone; so *pa-hapi" 'water-prone' appears to apply to the other Numic forms resembling *pa-hapi as well. [NUA: Num]

2269. *waya 'swim': Ls wááya 'swim'; Cp wáye 'swim, float'. [NUA: Tak]

2270. *pa-humay 'swim, lit. water-spread/prone': My bahume 'nadar'; AYq vahume 'swim'. Since being spread out is the swimming position, Cp hum(e)-ine 'spread a liquid or s.th. fine like sugar'; Cp hume-yaxe 'be spread out'; and others of the set at *humay 'smear, spread' represent the stem used in Cah's compounds for 'swim'. [SUA: Cah]

NB, for Num *na-pa-ki 'swim' (Mn nabakiya; Ch naváki; CU naváki), see 'wash'.

Swing: see shake Sycamore: see tree

TAIL; COLA

,					
Mn	kwazi	Нр	sïrï	Eu	basít
NP	kwasi	Tb	wišii-	Tbr	bakusí/wakusí-r
TSh	kwasi(cci)	Sr	a-wad	Yq	bwásia
Sh	kwaisi/kwesi	Ca	kwas	My	bwasia
Cm	kwasi	Cp	qwaš	Wr	wahsí
Kw	kwasi-vi	Ls	píqwsiv	Tr	wasí
Ch	kwasi	TO	bahi; baik	Cr	kwasí
SP	kwasi	LP/Nv	bahi/vahi	Wc	kwaašíi;

CU kwasí-ci PYp bahi CN kwitla-pil-li NT báhi 'anus-appendage' ST bai

2271. *kwasiC (AMR) 'tail, penis': Sapir; VVH51 *kwausi 'tail'; M67-430*kwasi/*kwaci; I.Num81 *kwesi / *kwasi; BH.Cup *qwas'; B.Tep2a *bahi; L.Son116 *kwasi 'cola'; M88-kwa2; KH.NUA; KH/M06-kwa2: this reflex is represented in every UA language except Azt; Hp kwasi 'penis' is cognate with UA *kwasi 'tail'; in fact, I once heard Miller state that the original meaning of *kwasi was 'penis' and changed to 'tail' in other UA languages. I do not know how he arrived at that opinion or if he was informally citing s.o. else, but Ls píqwsiv (< *pi-kwasi) suggests so, as more literally meaning 'back-penis'—i.e., 'tail'. NT baabáídyi 'carne'; NT baabáídyiuvai 'oler a carne, vi'; and NT baabáítyai 'hacer cecina [make jerky]' may also be of interest. Ktn kwacita-c 'tail' reminds us that c/s difficulties make consistency and clarity infrequent companions in UA work. Ktn and NT and Cahitan suggest a final C as AMR suggests. [*kw > w in Sr]

[NUA: Num, Hp, Tak, Tb; SUA: Tep, Trn, Cah, Opn, Tbr, CrC]

2272. *sati 'tail' > 'dog' (in Num) / > 'anus' (in Tak, Mn): I.Num179 *satii/*sati'i 'dog'; Fowler83; M88-sa15; KH/M06-sa15 'dog': NP sati'i 'dog' (may be a borrowing from Sh Miller suggests); Sh satii; SP sarii-; WMU sarí-či; CU sarí-či; Cm sarii' 'dog'. Hp sïrï 'tail' is feasibly cognate with Num *sati 'dog' after vowel leveling: *sati > sïrï. The most prominent feature of a dog (vs. other animals) is its wagging tail and these Num-only words for 'dog' as a branch innovation are either a loan or a semantic shift. Ktn šïri-c 'anus, stingy' is a decent tie between Hp sïrï 'tail' and Num *sati 'dog'. Mn céde 'anus, butt, bum' likely belongs as well; and Hp, Ktn, and Mn suggest that 'tail' may have been the original sememe, shifting to 'dog' in Num and 'anus' in Tak. Similar instances of V leveling occur in Hp (Hp CeCe/CïCï vs.Num CaCi; e.g., see at kidney, rain). Another potential support for *sari 'tail' > 'dog' is the SNum slow(ly): CU sarív 'slow(ly)'; WMU sarív 'slow(ly)'. This fits the pattern *sari-va 'tail-at' (-va 'at' being a common adverb ending in Ute); that is, one who is slow is at the "tail" end, at the tail of the one(s) in front. As in *kwasi 'penis > tail', so Hp may again be the lone retainer of original meaning in *sati 'tail > dog/anus'. [NUA: CNum, SNum, Tak, Hp]

Take: see carry
Take care of: see care

Talk: see say
Tall: see long, up

TASTE; PROBAR, CATAR, SABOREAR; see also suck and eat

2273. *yïka '(have) taste': VVH107 *yïkï 'to taste': M88-yï16; KH/M06- yï16: TO jïïk; Hp yïkï. Add Nv duka (dïka) 'probar'; NT dïdïïkai 'probar (comida), vt'; ST dïïka' 'probar, saborear (alimento), vt'. [NUA: Hp; SUA: Tep]

2274. *tima / *tiCma 'taste': Mn tima 'taste, v'; Sh timmai 'taste, v'; Kw timaka'a 'taste, v'; Cr ra-teémwa'a 'lo prueba, lo saborea'. What of Tr ra*ma 'probar, gustar, tomar el sabor'? [NUA: Num; SUA: CrC, Trn]

2275. *hiwV 'taste': Yq hiiwe 'taste'; My hiiwe 'taste'. [SUA: Cah]

NB, for *kaCma 'taste' see at 'eat' and 'face'.

NB, though uncertain, Cp málaxwi 'taste, approve' and Tb milh'milh 'taste good' are worth keeping in mind as both contain something of a m-l-k/' pattern with possibly assimilated vowels.

NB, for *kaka '(taste) sweet', see sweet.

NB, for Hp kwïlo 'sample by tasting', see swallow.

Tear: see cry or break Tease: see laugh Tell: see say

Ten: see under the numbers toward the end

TENDON, SINEW; TENDÓN

2276. *tammu / *ta(L)wa 'sinew, tendon, nerve': VVH125 *ta- 'sinew'; BH.Cup *ta 'sinew'; B.Tep219a *tataga 'nerve' (ST tataa'; LP tatgi); B.Tep219b *tatai 'nerve' (NT tátai; UP tatai); M67-377 *ta 'sinew'; I.Num204 *tahmu 'muscle, thread, sinew'; L.Son279 *tawa/tawi 'nervio'; M88-ta19 'sinew'; KH.NUA; AMR 1993a *tap 'sinew'; KH/M06-ta19 *tap: Miller includes all these together, yet beyond initial *ta-, the NUA and SUA forms differ. Let's divide them thus:

2276a. *tammu: Mn tammu 'muscle'; NP ddammu 'thread, sinew, muscle'; TSh tammo 'sinew'; Sh tammu 'sinew'; Kw tamu-vi 'sinew'; SP tammu-vi 'sinew'; CU tamu-vï 'muscle, sinew, ligament, thread'; Tb tap-t 'tendon, cartilage, gristle'; Cp te 'sinew, nerve'; Ls tá' 'sinew'; Gb tán 'nerve'; Sr tap 'muscle'; Hp tahï 'ligament, tendon, sinew, gristle, cartilage, muscle'.

2276b. *tawa (perhaps < *taLwa < *tatawa): Eu tavíra 'nervio'; Wr tawá 'vein, tendon'; Tr ŕawá 'nervio, tendón; My táttem 'tendon'; Yq tátem 'tendon, nerve'; Tbr tatamwá-t 'tendon'; Wc taatáá 'nerve, tendon'; Cr tááta'a 'sinew'; and CN tlalwa-tl 'sinew, tendon' (Andrews, 179); CN tlalwayoo-tl 'tendon, blood vessel'. Add PYp tatgara 'nerve, tendon, root'. Like reduplicaton in Tbr *tatawa, CN's -l- may be from reduplicated -t-: *tatawa > *talawa > *talawa. Note that in both *talwa 'tendon/sinew' and *nalwa 'root', CN shows the -lw- medial cluster, while many TrC forms show all else except the liquid: tawa and nawa respectively. Could the -p- in Sr tap and Tb tap-t be due to V loss, then the bilabial nasal in cluster with the stop -t changed the bilabial to a stop also: *tamu-t > *tam-t > *tap-t? [*-lw- cluster also in root] [NUA: Num, Hp, Tb, Tak; SUA: Opn, Tep, Cah, Tbr, Trn, CrC, Azt]

Testicle: see egg Thaw: see melt There: see here

Thick: see big and deep Thigh: see foot and hip

THIN, SLIM, SKINNY; DELGADO, FLACO; see also dry

2277. *yawi 'thin': M88-ya26; KH.NUA; KH/M06-ya26: Ca yáwi 'get skinny, thin'; Ca yáwi-š 'skinny one'; Sr yaipk 'be thin'; Gb yaróri' 'flaco'. Add Wc yéu/yéva 'ancho, angosto'. [*w > CrC v/p] [NUA: Tak; SUA: CrC]

2278. *kana 'thin, flat': Sh kanah 'thin (of animal or person)'; CN kanaaw(a) 'make s.th. thin and flat'; CN kanaawa-k 'something flat and thin'; perhaps Kw 'ani-gi- 'be thin, frail', if missing initial k-. [NUA n: SUA n] [NUA: Num; SUA: Azt]

2279. *taki 'thin': Mn tagi'acicí 'be extremely thin'; Mn tïgíbï 'skinny one'; NP tïgïya'i 'skinny'; Cm tahi 'flat, thin, lightweight'; Kw takena-pii-či 'slim'. [*-k->-h- in Cm] [NUA: Num]

2280a. *picawa 'thin': CL.Azt166 *pVca(awa)k 'thin, skinny'; M88-pi20; KH/M06-pi20: CN picaawak; HN picaawak; Pl picaawak. I like Jane Hill's (p.c.) observation that CU čaa 'thin, skinny, narrow', may tie in here, as SNum forms often lose the first syllable of PUA terms when stress falls on the 2nd syllable; e.g., *tosa 'white' > SNum *sa-ka-t 'white'. Thus, *caha below is made a letter of the same set.

2280b. *caha 'thin, slender, wrinkled': Ktn cahawïk 'be lean'; Ktn cahwkit 'lean'; pl: cawcawkit; Kw čaa- 'wrinkled'; SP čaa- 'wrinkled'; WMU čaa- 'skinny'; čaa-ġa-y 'be thin, skinny, narrow, vi'; CU čáa-ĝay 'be thin, skinny, narrow'. Consistent with the -h- in Ktn, the falling tone in CU often represents a lost intervocalic consonant, and a final -wV syllable is in both Ktn and Azt. [Azt initial *p-] [SUA: Azt; NUA: Tak, SNum]

NB, for *(ta)pasi 'thin', see 'dry'. NB, for *waki 'dry, thin', see 'dry'. NB, for *komaL 'thin', see 'flat'.

THING, SOMETHING; COSA, ASUNTO

2281. *(hi)-tapi(ri) 'thing': Eu hitávic 'algo, cosa indeterminada'; Wr ihtapéripéri 'thing'; Wr ta'peri 'thing';

Tr tábiri 'cosa'; Tr ŕapé 'thing, a little (amount)'; CN tepi/tipi- 'small thing' in tepi-cin 'small thing' and CN tepiton 'small thing'. Do AYq hita 'what, thing, something' and UA *hiCta 'what?' tie in? [SUA: Opn, Trn, Cah, Azt]

2282. *ti'ita 'thing': Cr ti'itaï 'cosa'; Wc tííta 'lo que, que? [what, what?]'. [SUA: CrC]

2283a. *hini 'thing': the latter part of Mn (inahu)híípï 'something'; TSh himpï 'thing'; Cm hihini 'thing'; SP ini'aa 'thing, something'.

2283b. *inahV 'thing': Mn (inahu)híípï 'something'; the -naha- portion of TSh nanahakaittïn 'things'. [NUA: Num]

THINK, REMEMBER; PENSAR, ACORDARSE

2284. *T'La 'think, remember, believe, feel, want': B.Tep337 *iridai 'believe'; L.Son12 *'ira 'sentir, desear'; M88-ï7 'think'; KH.NUA; KH/M06-ï7 'think of/about': Hp ï'na 'recall, remember'; TO ïliđ 'think (about), decide, conclude, wish; fear, be in awe of, vt'; TO ïliđaDag 'plan, thought, care, n'; Eu erá 'pensar, v'; Eu erádawa 'pensamiento, n'; My éyya; Pl el-kaawa 'forget'; Pl el-naamiki 'remember'; Wr e'réba-ni 'remember'; Wr e'lá-ni, e'la-má 'think about, be concerned about, be considerate, work for the welfare of others, be useful, think to be so'. The applicative of that is Wr e're-na/ma 'care to do s.th., take good care of s.th., think about, consider s.th.' Wc 'érie 'sentir, pensar, creer' also belongs with Tep ïri- and SUA generally. The il- of CN ilnaamiki 'remember, reflect on s.th.' and Pl elnaamiki 'remember' and Pl elkaawa 'forget, v'. Tep: UP 'ïlidï; LP 'ïle; NT ïlídīti 'believe, think,want; ST 'ïl^yiid^y. In Tak are Sr ïnaan 'know, recognize, learn'; Ca 'é'nan 'know, recognize, learn, find out'; Ls 'ó'na 'know, recognize, be acquainted with'. Add Nv ïra (urha); AYq ea 'think, feel, vi'. Ken Hill adds Ktn ïn 'know, know how, understand'. Eu and TO share a compound *ï'Le-yawa. [SUA L; NUA N] [NUA: Hp, Tak; SUA: Tep, Opn, Trn, Cah, CrC, Azt]

2285. *wïy'a 'think' (with *suna 'heart'): Ls (-şuun)wóy'a- 'think, vi; count, vt'; Cp wéye 'worry, think'. Though uncertain and not yet countable, what of Hp wïiwa 'think, ponder, wonder' and SP waika 'to deliberate in council' and AYq wáate 'think of, remember'? [NUA: Tak, Hp, Num; SUA: Cah]

2286. *tikay 'think': TO čegito 'think'; PYp tekito 'think, need'; not Hp tikay 'temple, n'? [SUA: Tep]

2287. *summay 'think about': Ch sumái 'remember'; SP šummay 'have in mind, think of, remember'; NP suma'yï 'remember'; CU sumáy-('ni) 'think of' (but CU máy-kə-ni 'think, believe' and Ch mái-ni 'think'); Mn tïsumiya 'ponder, think about'. At M88-su15 'know', Miller has CNum/ TSh/Sh sumpanai 'know' and at M88-su13 'heart' he has the many *suLa forms and CU sumay; however, six Num languages have intervocalic -m-, not -n-/ -l-. For potential overlap or confusion in forms, see discussion at 'breathe' for *sumaC 'breathe', *summay 'think, remember', and *suwaC 'want'. [NUA: WNum, SNum]

2288. *tama 'remember' or Num *na-suN-tama 'remember': TSh nasuntamah 'remember'; Sh na-suntama 'remember, v'; Cm nasutamïkatï tamai 'think about s.th., remember'; Sr camaqaan 'think'; Sr -caamqana' 'thought'. [*t > c] [NUA: Num, Tak]

2289. *natya / *natay 'plan': Hp tïnatya(w-ta) 'plan, n(v), be careful, prudent, mindful'; Hp tïnatïy-ta 'plan, v'; Tr natá 'think, reflect'. [NUA: Hp; SUA: Trn]

2290. *mukuwa-tu 'think': TSh mukuatu 'think, vi'; Kw muguwa- 'mind, thought, n'; Kw muguwa-rï- 'think, v'; Ch muguaru 'think, v'. [NUA: Num]

2291. *mïLy 'remember': Ls móli 'remember'; PYp ameldim 'hear, remember'. [NUA: Tak; SUA: Tep]

THIRST(Y); (TENER) SED

Mn	payatee; pasïtugu'i	Hp	paa-naq-moki	Eu	varákce; n: váhkarawa
NP	puitai, pl: pïddaipï	Tb	taa-muukut	Tbr	watisám/watíram
TSh	taku"	Sr	pahpan	Yq	ba'aimuuke
Sh tak	ku"-(ppïkka) n(suffer fro	om) Ca	tákut piš	My	ba'imuuke
Cm	takosuaitï	Ls	páapavi-š	Wr	palamú-na
Kw	tagu-(ye'e)	Cp	pápaviču	Tr	barace-
Ch		TO	kuust; tonom(kam)	Cr	ne'i'imï'ï 'tengo sed'
SP	taġu"	Nv	tonomu(giga) v(n)		te'i'ihcuh 'tenemos sed'
WMU	tagúnarů'i	PYp	tono	Wc	
CU	tagúy-narú('/w)ay	NT	tonómo	CN	aa-miki
		ST	tanoom/čanoom/tonmo	,	

2292. *toŋo-mukki 'be thirsty, heat-die': B.Tep225 *tonomo/tonomu 'thirsty'; M88-to22; KH/M06-to22: TO tonom(kam); Nv tonomu(giga) v(n); LP tono; NT tonómo; ST tanoom/čanoom/tonmo. In light of the severe segmental/phonological reductions that occur in the latter parts of UA lexemes (i.e., little evidence of final -ki), this is likely a compound of *toŋo-mukki 'heat-die > thirst'. NT tonóómu/tonóómuka 'tener sed' and NT tonómukurui 'darle sed' support such. [SUA: Tep]

2293a. *takuC 'thirst(y)': Stubbs2003-11: TSh taku" 'thirst, n'; TSh takukko'ih 'be thirsty'; TSh takuccïïwah 'be thirsty'; Sh taku-pïkkah 'be thirsty'; Kw tagu-(ye'e) 'be thirsty'; Kw tagu-pï 'thirst, n'; SP taġu" 'be thirsty, vi'; WMU tagúnarú'i; CU tagúy-narú'ay 'be thirsty, lit: thirst-buy'; Mn pasïtugu'i 'be dry from thirst'; Ca tákut piš 'with/because of thirst'.

2293b. *pa-takcï 'thirsty': Stubbs2003-1: Eu varákce 'tener sed'; Tr baracé- 'darle a uno sed, tener sed'. Perhaps *pa-takcï < *pa-takucV, i.e., with Num *takuC. At 616 Eu tékso 'pierce' also shows -k- as first C in a cluster, while other languages show *tíso. [*-CC- red] [NUA: Num, Tak; SUA: Opn, Trn]

2294. *paLa-mukki 'thirsty': Yq ba'aimuuke; My ba'imuuke; Wr palamú-na. CN aa-miki 'be thirsty' derives from a compound of *pa-mukki 'water-die' while TrC appears to contain *paLawa 'juice, liquid'; thus, different. [SUA: Trn, Cah]

2295. *pappapi(tu) 'thirsty': Ca, Ls. [NUA: Tak]

THORN, STICKER; ESPINA

2296. *wicaC (AMR) / *wiCcaC 'thorn, awl': Sapir; M67-14 *wi 'awl'; L.Son332 *wica 'espina, aguja'; CL.Azt167 *wic 'thorn', 202 **wi 'awl'; M88-wi5 'awl': KH.NUA; KH/M06-wi5 *wicaC (after AMR): Mn wíti 'awl'; NP wïccï 'awl'; Kw wiya-ci 'awl'; CU wiyú-ci 'awl, large needle'; Cp íwye-l 'spine, thorn'; Ca wíya-l 'pencil cactus'; Ca 'íwya-l 'thorn, sticker'; Ls wíyáá-la 'quartz crystal'; Sr wihaaţ 'thorn, needle'; Ktn wiha-č 'cholla cactus'; Eu wecát; Wr wehcá 'needle, thorn'; Tr we'cá / wi'cá 'needle, thorn'; Tr wičá*ka 'type of bush'; Yq wíča; AYq wičakame 'thistle'; My wiča; CN wic-tli 'thorn, spine'. Add SP wii 'awl' and Sapir himself also compares SP wii"/wii-ci 'knife'; in fact, NUA (SNum, Tak) *wiya- and TrC *wica align well. However, Tak *"ïvi does not equate to Tak *wiya. Manaster-Ramer includes this set in his article "A Northern UA sound law: *-c-> -y-," in which he lists My wicca and other forms above to demonstrate NUA *wiya < PUA *wica. Sapir ties these above with Tep *gisu 'cactus sp.' (< *wicu) which is possible. Note Ca wíyal 'pencil cactus' and Ca 'íwya-l 'thorn, sticker', the latter showing a pattern of CVCV > VCCV, like CN sometimes does. [*-c-; *i-a > e-a] [NUA: Num, Tak; SUA: Opn, Cah, Trn, Azt]

2297. *so'i 'thorn, pierce': VVH132 *so'i 'thorn'; B.Tep74 *ho'i 'thorn'; L.Son255 *so, so-i 'espinarse'; M88-so2; KH/M06-so2: Ls şé'i 'pierce, shoot with a bow'; Sr hö'i 'to sew'; TO ho'i; LP ho'i/hoi'; PYp ho'i; NT hoi; NT hoi; NT hoi; NT hoi'; NT hoi'; NT hoi'/hoii; Wr so'i 'espinarse'; Tr so'iwá 'espina, astilla'; Tr so'(w)i-mea 'pierce'; My soóso-k 'se espinó'; AYq sooso 'thorn, sticker'; HN so' 'to string with a needle and thread'. Add Nv hoi 'espina [thorn]'. What of CN pa'sol-li 'briar patch'? [NUA: Tak; SUA: Tep, Cah, Trn, Azt]

2298. *mana 'thorn': Kw mana-vi 'thorn, spine, porcupine quill'; Ch(L) manavï 'thorn, new branch budding out on a cholla cactus'; SP manna-vi 'thorn, spine'; CU maná-vi 'quill, thorn, spine, needle, cactus'; WMU manná-vi 'cactus, tumbleweed, thorn'; Ktn manač 'small prickly pear sp with inedible fruit, cactus'. [NUA: SNum, Tak]

2299. *aiku 'thorn': TSh aikupicci / ekupicci 'cactus, thorn, porcupine'; Sh aiko-pin 'thorn, prickly pear cactus'. [NUA: CNum]

2300. *hu'uC 'thorn': Fowler83 *hu'u 'boxthorn, Lycium andersonii': Kw hu'u-pi-vï 'boxthorn, desert thorn'; Sh hï'i- 'stickers'; Mn; NP; SP; CU. Fowler has forms not shown. [*u > Num i] [NUA: Num]

2301. *cuNa 'thorn, sticker': M88-cu21; Munro.Cup124 *čunáá-la 'sticker, cocklebur, sandburr'; KH/M06-cu21: Ls čunáá-la 'cocklebur'; Ca čúηα-l / čúka-l 'sticker, thorn, jumping cactus'; Cp čúna-l 'sandbur'. [SUA: Tak]

NB, for *cikka / *cinkV 'thorn, poke, point', see edge.

NB, for *opi and Tak *ïvi, see awl.

NB, for *sana, see bee.

NB, do we have cognates for Hp kiita 'thorn, briar, sticker, spine'; Hp(S) kyeeta 'thorn'?

Thread: see rope

Three: see under numbers toward the end

Throat: see neck

THROW, SHOOT, POUR, EMPTY; TIRAR, LANZAR, ECHAR, FLECHAR, DISPARAR, VERTER, DERRAMAR, VACIO, VACIAR

2302. *pasa/i 'throw at': L.Son *pasa/*pas-i 'tirarle'; M88-pa40 'tirarle'; KH/M06-pa40: Wr pahsíba-ni; Tr basá, basí-mea; Tbr wasa. [*p > w in Tbr] [SUA: Tbr, Trn]

2303. *wina 'throw down/out, spill, empty': M67-157 *wen 'empty'; M88-wï4; KH/M06-wï4: NP wïnai 'throw, v'; Cm wï-nïñ-kupa 'be knocked down, be thrown down'; Kw winee 'throw down, drop'; SP wïnnai 'throw down'; CU winay 'throw'; but Sh wïttia 'to empty, spill' may better belong below with *witta. Add Mn wïna'i 'throw away, get rid of'; Sr wiin 'throw away, throw down, roll (dice), neglect (a child)'; Eu wáhna- 'pour, throw'; WMU wináy-y / wünáy-y / wünnáy-y 'throw down, sell, throw away, get rid of, give, vt'; and maybe Sh wii" 'throw s.th. light away or aside'. Below are Sh tawi" 'throw s.th. big or solid, sg obj' and other terms compounding this with *taC- prefixed. [NUA: Num; SUA: Opn]

2304. *taC-(k)wina / *taC-kuna 'throw down/away': Mn takwina'i 'release, throw'; Mn takuna'i 'throw away, vt'; TSh (tak)kuna' 'throw, vt'; Mn tigwi'na 'spill, dump'; Sh(C) takkwi' make a snapping sound'; perhaps Cm cah-kwa'nu'iti 'throw down a person (as in wrestling)'; Ls tókwi 'throw away'; Cp tékwe 'throw away'. Notice that the Tak forms derive from *tikwi (< *takwi). These could feasibly have a morpheme prefixed to what is *wina above. [w > kw] [NUA: Num, Tak]

2305a. *witta/i 'throw away': BH.Cup *wiíc 'throw away': Cp wícəxi / wíčaxe / wičáxe 'throw down, drop'; Ca wíčahan; Ls wíča/i 'throw away, waste, release pl obj's'. These are in M88-wi3 with *wicV 'fall' (NUA medial -'- or -y-), but the NUA medial -c- usually derives from *-tt- because *-t- > -l/r-.

2305b. *witti 'pour out, spill': Sh wittia 'to empty, spill'; TSh wittia 'pour, spill, dump, empty out, discard'; Hp wiita 'pour liquid'; Sh(C) wihtia 'pour, throw out (liquid), spill'; and Ch wicói 'pour'. Is this s.th. like a causative suffix on *wina above: *win-ta > witta? [NUA: Tak, Hp, Num]

2306a. *wïkwatti 'pour': Mn wïqwati 'empty, empty out, drain (of liquid)'; NP wïkwati (< *wïkkwatti) 'pour contents, spill'. [NUA: WNum]

2306b. *wï'wanVta 'spill': TSh wïwe'i 'pour/dump/empty out, discard'; Cm to'wï'wenitï 'empty, dump, pour into'; Cm pi'wï'wenitï 'spill, sprinkle'; Ktn waw(-)k 'throw down ,vt'. [medial *-kw-/-'w- in WNum/CNum] [NUA: CNum, Tak]

- **2307.** *ma'i...: B.Tep150 *ma'ihisai 'to throw at' {UP ma'ihiši; NT máíšai; ST ma'ias}; M88-ma31; KH/M06-ma31: ST mai'ñña' 'tirar' (prêt: ma'ya' sg obj; ma'yasa' pl obj); PYp ma'i 'with hands'; PYp ma'i-a 'throw, vt'; PYp ma'i-asa 'throw, desiderative'. [SUA: Tep]
- **2308.** *katti 'throw': M88-ka35; KH.NUA; KH/M06-ka35: Cp qášine 'to shovel'; Ca qáčaw 'to hit splashing against'; Ls qáči 'throw away'; Sr qačkin 'to dowse, throw water on'. [NUA: Tak]
- **2309a.** *tapa / *tapi 'throw, hit': Mn tabi 'strike' and Mn tabipa'i 'strike repeatedly'; NP tabi 'throw'; NP tïtabi 'hu 'throw, vi'; Kw tavi 'throw, hit'; Kw ta-tavi 'throw, hit, redupl'; Ch tïrávi 'throw down'; SP tïravi 'throw'; SP tavi 'hit by throwing'; CU tïrávi 'throw at, vt'; Eu mútava 'hit'; CN tepiiniaa 'punch, hit, strike, vt'.
- **2309b.** *tipa 'throw, hit': Hp tiïva 'throw'; Hp tahtiva 'hit with thrown obj'; Hp tatatipna 'throw stone'; *tipa may be a relaxation of *tapa. Below, the consonants harmonized from *tipa to *pipa / papa:
- **2309c.** *pïpa / *papa 'throw' (< *tïpa): Yq hibéeba 'hit, throw'; AYq veeva 'hit, strike'; AYq hiveva 'hit, strike it'; My béeba-k 'throw out'; Wr paba-ní 'throw pl objs'; Wr ihpába-ni 'throw, drop pl objs';
- Wr ihpa-ní 'throw, drop sg obj'; Tr pa, apa, iba; Tr ne-pabá 'throw rocks'; NP pibu'a 'throw pl objs'; Ls píva(n) 'throw stones'; NT vúúpai 'throw'; NT vúúpakaroi 'sling'. This stem appears to be a consonant harmony of *tïpa/tapa 'throw'. M88-pi22 and KH/M06-pi22 list Tak forms of *pi'a 'throw, bewitch' (see at bewitch) which may be a different stem or possibly a reduction of the consonant harmonization: *tVpa > pipa > *pi'a 'throw' (Sr pii' 'throw sg obj'; Sr piivi' 'throw pl objs'). [NUA: Num, Hp, Tak; SUA: Tep, Opn, Cah, Trn, Azt]
- **2310.** *tikwa 'hit by striking or throwing': TSh tikwan 'hit, strike, vi'; Sh tikwa 'hit, knock down, vt'; Cm tahtikwari 'throw at, vt'. [NUA: CNum]
- **2311.** *ŋaLaw 'throw out': Hp iinyala 'reject, exclude'; Hp(S) iinala 'drive away, exclude, throw out, vt'; Ca ŋálaw 'fall/throw in a hole, vi/vt'. What of Cp xálewe 'fall, sg'? [NUA: Hp, Tak]
- **2312.** *puCka > *poka 'throw': Sr puk|ai 'drop, throw away/out'; Tbr (w)okoa-ka-t 'he threw'; Ca vuk- 'hit (s.o.) with a stick, throw stick at s.o.'; Ca vuk-alaw 'go over and hit, throw away'; Ca vuk-čípi-n 'throw'; Hp pòokya 'shoot an arrow, vt'. Tbr w < *p allows its inclusion. Could the Cah forms below be a borrowing from Tbr? Ls péŋa/i 'be thrown, vi, throw, vt' is puzzling. Might the Ls form be a cluster reduction from whatever cluster yields -k- (vs. -x-) in the other Cupan languages? [Nk/k or ŋ/k, o/u or u-a > o-a] [SUA: Tak, Hp; SUA: Tbr]
- 2313. *wo'o 'throw': Yq wo'ota 'tirar, echar'; My wo'o-tia 'throw'. [SUA: Cah]
- 2314. *mu'a/i / *mu(h/k)a? 'shoot (arrow)': M67- 373 *mu 'shoot'; BH.Cup *muh-' 'shoot'; L.Son152 *mu 'flechar'; M88-mu5 'shoot'; KH.NUA; KH/M06-mu5: Tb(M) muu'at / 'umuu'at ~ 'uumuu' 'shoot'; Tb muu'išt 'gun, shooter, hill'; Tb(V) 'uumu'~'uumuu' 'shoot'; Ls mu'án 'shoot with a bow'; Cp muha / muháán / mumhane / múxane 'shoot with a bow'; Ca múx/múh/mú 'shoot'; Gb muhú 'tirar'; Sr muli 'shoot'; Sr muum 'shoot (more than once)'; Ktn mu 'shoot, throw, grind'; Hp mi'a 'shoot, sting, fasten (by piercing)'; TO mummu 'shoot at'; Eu mumú 'flechar, tirar con flecha'; Wr muhíba 'tirarle con arma'; Cr ra-a-tá-mwii 'he shot it with an arrow'; CN mii-tl 'arrow'; CN miina 'shoot arrows, pierce with arrows; Pl miima 'shoot with an arrow' (miin-ki pret.); Pl mii-t 'bow and arrow'. Add Tr muhubu 'tirarle a algo (proyectil)'; Tr u'mu 'asaetear, flechar, tirar a algo'; Tr ohi-mea 'acertar, atinar'; Yq múuhe 'flechar'; My muhhe 'shoot'; Nv mu'u 'flechar'; PYp muuhu 'shoot, vt'. With medial consonants -x-/-h-/-'-, we must wonder if a cluster of some sort is reducing variously or if *k/x > h/'. [k/x/h/'?] [NUA: Tb, Tak, Hp; SUA: Tep, Trn, Cah, Opn, CrC, Azt]
- 2315. *siLa/i 'spill': Ls síla/i 'spill, pour out'; Ca silye-če 'spill, drip (of liquid)'. [NUA: Tak]
- **2316.** *putu 'throw, scatter': SP purui / puru-ġi 'throw about, scatter'; TSh (top)pociki 'throw, v.instr.pl'. [NUA: Num]
- **2317.** *paCta/i 'thunder, exploding noise like thunder > shoot with a gun': Ls páta/i 'be shot, shoot with a gun'; Cp páte 'shoot with a gun'; Yq péhte 'thunder, explode'. [NUA: Tak; SUA: Cah]

- **2318.** *sïk 'beat, throw (with power, furry)': Ca séqay 'whip'; Ca pe-séqay 'whip, throw (one's power at s.o. to kill him)' and perhaps CN šookoaa 'hurl s.o. or s.th. down in scorn'. CN assimilated V's from *sïk. [NUA: Tak; SUA: Azt]
- **2319a.** *yu'ri / *yuLi '(be) empty': Eu dúri-da'a- 'vaciarse'; Wr yu'ripú- 'empty, throw out liquid, vt' (Wr yu'ri 'fall by itself'); Tr ŕu'ri 'derramarse, verterse'; Tr ŕu'ri-wa- 'derramar, verter, vt'; Ls yuya/i 'bec. empty, vi, empty, vt'. Eu d (< *y) and Wr agree; Tr and Ls each harmonized consonants in opposite directions, which we see often in TrC area. NUA forms below have expected n < *L. [SUA: Trn, Opn]
- **2319b.** *yuna/i 'pour': Mn tïyuna 'pour into'; Cm payunitï 'pour water on, water, vt'; Ch yuná 'put pl obj's'; CU yunáy 'scatter, put pl obj's'; Kw yïna/yuna 'pour'. This shows *L > y in Ls, > n in NUA. [*u > ï in Num; r > y; C harmony in Tr or influence from Eu; *L > n] [NUA: Num, Tak; SUA: Opn, Trn]
- **2320.** *kimi(n) 'go down, fall': Sr kimiin 'spill, overflow, pour out, vi'; Sr kimia'n 'spill, pour out, vt'; Tr na'mina 'derribar, echar por tierra'; Tr na'mi 'caerse'. If a na- prefix is involved in the Tr form, then a stem similar to *kimi aligns with both the Tr and Sr forms (Tr na'mina < *na-kmina). [cluster reduction] [NUA: Tak; SUA: Trn]
- **2321.** *kwaCti 'shoot': I.Num77 *kwahti/*kwihti 'shoot'; M88-kwa10 'shoot'; KH/M06-kwa10: Mn kwati/qwati (<*kwatti); NP kwati (<*kwatti); TSh kutti; Sh kwiittih; Cm kwiihtikiri 'shoot' (Miller kwiihti-). [*a > i in CNum, but *a > a in WNum] [NUA:WNum, CNum]
- **2322.** *kuCkwiC / *kukkwiC 'shoot': Kw kukwi; CU kukwi/kúukwi (<*kukkwi). As Miller and Hill have in kwa10, these SNum forms may well tie to *kwaCti of CNum and WNum, though the first vowel and medial consonants are different, perhaps explainable with kw-reduction (*kwaC-kwaC > *kuCkwiC) and vowel change, and/or reduplication (*kwiC-kwiC > *kukkwiC) or any number of possible explanations, which makes the tie a tad dubious. Nevertheless, the SNum forms are quite consistent among themselves in PSNum *kukkwiC 'shoot, sting'. To Kw and CU, add Ch kukwi 'shoot, sting'; SP quqqwi''- 'shoot at'; WMU quhqqwi 'sting, shoot at'; WMU qúqqwi 'shoot pl times'; WMU na-gúkkwi 'fight, have war' which all point to geminated medial *-kkw-, noting -k- instead of -g- in Kw, Ch, and CU. [NUA: SNum]
- **2323.** *mota 'throw at, hunt': CL.Azt170 *mootla 'throw'; M88-mo11; KH/M06-mo11: CN mootla 'stone, throw a rock, hunt'; Pl muula 'throw at, heave'. [SUA: Azt]
- **2324.** *cayawa 'throw out, pour': Stubbs2003-19: CN čayaawa 'scatter, pour, sprinkle s.th. down'; CN čayaawi 'for s.th. to spill, sprinkle down'; Wr cewá-ni 'throw, hit with a missile'; perhaps Mn pazawa 'pour'. [CN aya = e in Wr; aya > e] [SUA: Trn, Azt]
- **2325.** *...kis 'empty': Ca 'íŋkiš 'empty, desert'; Cp kí'kiswe 'it is gone, it is empty'. The velar nasal in Ca and the glottal stop in Cp together suggest a cluster of some kind, but what? [cluster] [SUA: Tak]
- **2326.** *(a)taka-pi 'empty, fruitless': Ls 'atáxvi-š 'empty'; Kw tïkïpiwa-a-tï 'empty' (Kw tïkïpiya-a-tï 'fruitless, barren of fruit'; Kw tïkïpiya 'fruit'). UA *taka 'fruit' may be involved. [NUA: Num, Tak]
- **2327.** *sïL 'shoot, hunt': Eu hísera 'tirar'; Tr seru 'atinar, ser certero, tener buena puntería, cazar, pezcar'. With a c/s explanation, this may tie to *cïLa 'straight' at 'straight'. [Liquid] [SUA: Opn, Trn]
- NB, for *tu'a 'pour, put' see 'put'.
- NB. for *cïL 'shoot, make straight' see 'straight'.
- NB, for *mana/i 'fall, spill, pour, lie flat', see 'lie'.
- NB, for *pi'a 'bewitch, throw', see 'bewitch'.

THUNDER; TRONAR, TRUENO

While Miller separates a (M88-ta7) and b (M88-ta46), some overlapping relationships seem likely; other groups seem potentially related as well, all showing initial t, round vowels, glottal stops—a difficult sorting task, if even related. If we care to complicate matters further, we could entertain ties to *tomo 'cloud' or 'winter' as well.

2328a. *taw 'thunder': BH.Cup *táw 'thunder'; M88-ta7; KH.NUA; KH/M06-ta7: Cp táwşenve'e-t 'thunder, autumn'; Ca táwva 'thunder, n'; Ca táwvalu 'thunder, v'; Ls táwşuŋva 'autumn (found only in BH)'; Sr taüü'ţu' 'thunder, become cloudy with thunder clouds, vi' (ü = high central retroflexed V); Sr taüü'ţ 'thunder, thunder cloud, cloud'; Gb tá'or / taa'ur 'trueno' and Gb táwvar 'thunder', poss'd: -táveyaŋa. Hill (KH/M06-ta8) is probably right to combine ta46 and ta8, though Gb's two forms puzzle, as Gb tá'or and Sr taüü'ţ could look s.th. like *ta'V(r), not unlike *tV'o below. Jane Hill (p.c.) provides the very astute addition of Tb(H) taŋ|at 'rain, vi', for we see ŋ < *w often enough in NUA; furthermore, such a form is nearly what is reconstructed for letter d below. [NUA: Tak] 2328b. *tï'o- 'thunder': Wr te'ó-na 'buzz, roar, thunder'; Tr fe'o-ma 'thunder'.

2328c. *to'om 'thunder': Sh(C) to'ompaix, toom-picci, toompai-picci' 'thunder'; Cm tomoyaketi' 'thunder'; Ls tóómawu-t 'thunder, n'; Mn tooyaga 'thunder, v'; TSh tooyakai" 'thunder, vi'. Might the Num forms suggest *to'om-yaka 'thunder/cloud-cries', from which WNum reduced to *tooyaka, yet Sh shows the glottal stop; and Cm tomoyak... agrees well with WNum *tooyaka in all segments, with an extra m. The fact that the stems for the above semantic sets are identical or near identical so often makes one wonder: Mn too 'cloud'; Mn too 'winter, year'; Wr tomó 'winter'; Wr tomóari 'cloud'. It's possible that the similarity in forms for 'cloud' (*tomo) and 'thunder' recommends a tie between the two, and possibly 'winter' *tomo; for in some languages the forms for 'cloud', 'winter', and 'thunder' are quite similar: Mn too" 'cloud'; Mn too 'winter, year'; Mn tooyaga 'thunder, v'. Yet in other languages the forms are different: Tr tomóa 'be cloudy'; Tr re'o- 'thunder, v'; and Tr romó 'winter', and Wr te'ó- vs. tomó... So for now let's keep them separate. We can also add SP tom'mu 'make a big noise, v' in contrast to SP tommo 'winter'. And what of Tr ru'rumi- 'zumbar, ronroncar'? [m > \psi in Mn, TSh] [NUA: Num, Tak; SUA: Trn]

2328d. *ta'ŋa 'thunder': M88-ta8 'to thunder'; KH/M06-ta8: TO tataññï / tatañigi 'thunder, n'; Wr ta'na/ta'ni-'tronar'; Tr ra'ná 'tronar'; Eu tártare kúsa- 'tronar'. These are SUA forms, for which NUA ŋ often corresponds to SUA n; and then Jane Hill (p.c.) provides us with Tb(H) taŋ|at 'rain, vi'. [NUA: Tb; SUA: Opn, Trn]

2329. *(t)unu 'thunder': CU tunu-'ni 'thunder, v'; SP unnua 'thunder, v'; Kw taza-no'o-(rï) 'thunder, v(n)' (Kw taza 'summer'). [NUA: Num]

Tick: see bug Tickle: see laugh

TIE; ATAR, AMARRAR, LIGAR, ANUDAR

2330a. *puLa/i 'tie': VVH97b *puli/*pula 'to tie'; M67-437 *pul 'tie'; L.Son221 *pura, pur-i 'amarrar'; B.Tep285a *vurai 'he ties up'; 285b vurisa 'to tie up'; 285c *vuu 'he tied up'; CL.Azt173 *ïlpi; M88-pu2; KH/M06-pu2: Tb puunat~'umbun 'tie a knot'; TO wuuD; wuDakuD 'rope, strap'; TO wul 'be tied together'; wulim 'bale, bundle'; Nv vurha 'atar'; PYp vuura 'fasten, tie'; NT vúli 'está amarrado'; NT vupúúčapai 'amarrar (animal), vt'; NT vupúúrai 'amarrar, vt'; ST vulyi' 'amarrar'; ST vuraak 'lo amarró'; Eu búra/vúra; Wr pula/puri; Tr burá/buri; Wc hïa 'amarrar'; CN ilpiaa 'gird oneself, tie s.th./s.o. up'; CN piloaa 'hang s.th./s.o./self up'; Pl pilua 'hang, wear about the neck'. What of Ls póna/i 'be entangled, vi; tie up (as package), vt' Miller asks; perhaps *u-a > o-a, or what of Ls póta/i 'fasten, pin'?

2330b. *pïna 'tie': Jane Hill (p.c.) provides Ktn pïn 'tie' which matches Ls póna/i perfectly in *pïna (perhaps < *puna ?). [SUA L: NUA n; CrC ï < *u; CrC's loss of *-L-; anticipatory nasalization in Tb; Azt p-] [NUA: Tb, Tak; SUA: Tep, Opn, Trn, CrC, Azt]

2331a. *suma 'tie': M88-su17; M67-439 *suma 'tie'; KH/M06-su17: Hp soma 'to tie s.th.'; Hp somi 'thing tied up'; My summa 'amarrar'. Miller includes NP comipi 'bead'; CN coma 'sew s.th.'; Pl cuma 'sew', which I separate and put at 'weave'. But we should add Yq súma 'atar, amarrar'; AYq suma 'tie, vt'. [NUA: Hp; SUA: Cah]
2331b. *suC(ti) 'tie': KH.NUA: Ca súti 'be tied around'; Cp súle 'tie up'; Sr soiitk 'get, become tight' (*suti > *soti > soit); Ca súke 'tie around' (Ca -t- and -k- suggests clusters). [t vs. 1 in Ca and Cp, c/s, u/o] [NUA: Tak]

2332a. *tappiCta 'tie': M67-438 *tapi 'tie'; M88-ta24; KH/M06-ta24: NP tappi 'tie'; Kw tapiči 'tie'; SP tavičča 'tie'; CU tapic'a-y 'tie'; Cr tápi-'i 'he is tied to the stake'. Would Eu hitápura 'make a knot' and Eu hitápuri 'knot' tie in here (pun intended) or at *puLa? Eu búra/vúra is already there.

2332b. *tuppa 'tie(d)': NP tupaga (< *tuppaka) 'tie with', Mn wïtopisa (<*wï"-toppisa) 'tie a knot in'; and what of Ls túúča/i- 'be tied, vi, tie, vt' with loss of p in a cluster? [NUA: Num; SUA: CrC]

- 2333. *ŋaLiC / *ŋaLim 'entangle(d)': Ls ŋalípa 'become entangled'; Ca ŋáli- 'throw a lasso, get entangled, be out of place', distributive: pe-ŋáŋlami; Ca pe-ŋálamni-ly 'roping (of the cows), n'; Cp ŋále 'fasten, get into, vt'. Ls -p-suggests a final consonant, and -m- appears often enough in Ca—could that be it? Does Sr ŋur-kin 'lasso, rope, vt' belong here? Or at *ŋatCa 'weave, tie'? [NUA: Tak]
- 2334. *(caC-)kïna 'hand-tie': Mn cakïna 'tie up'; NP wïcakïna 'tie (horse, shoe, willows)'; NP nacakïna 'tie up sg obj'; NP nacakïnita 'tie up pl obj'; TSh (cak)kïmi 'tie tight, tighten'; Cm niïcïkïnarï 'tied up'. [NUA: Num]
- 2335. *tama 'tie': TSh tamah 'secure, tie tight, vi'; Sh tama 'tie, vt'; Cm tiïhtama' 'string, yarn, ties'. [NUA: CNum]

NB, for *witta 'tie, wrap', see at 'blanket/wrap'. NB, for *natCa 'weave, tie', see at 'weave'.

Tight(en): see crowd(ed)
Till: see plant and cut
Timid: see shame

TIRE(D), STRUGGLE, SUFFER:

CANSADO, ESFORZARSE, PADECER, AGUANTAR, SUFRIR

- **2336.** *LoCa/i 'tired': Tbr lo- 'cansarse'; Tbr lo-ká-n 'cansado'; Yq lótte-k 'cansar'; Yq lotlotte 'cansado'; AYq lotte 'get tired, vi'; AYq lottia 'tire, vt'; AYq lottila 'tired'; My lotte 'está cansado'; Wr e'loí-na 'be tired'; Wr(M) helowí 'estar cansado'; PYp lo'ig / lo'og 'poor'. [initial *L] [SUA: Trn, Tbr, Cah, Tep]
- 2337. *siyawi 'tire': CL.Azt174 *sVyawi 'tire'; M88-si13; KH/M06-si13: CN siawi 'get tired, attain s.th. by labor and fatigue'; Pl seewi 'put out, extinguish, rest'. Ken Hill adds Wc pi'óóşíya 'le hace cansar'; Tr(H) siwé 'calmarse (viento)'. [SUA: Azt, CrC, Trn]
- **2338.** *sota 'tire, wear out': CL.Azt56 *soota 'fade, tire, be afraid'; M88-so11; KH/M06-so11: CN soloaa 'exhaust oneself, vrefl, wear out, vt'; CN sotlaawa 'faint, v'; HN sootlawa 'be weak'; Pl sutaawa; and feasibly Tr sóta 'pudrirse (madera)'. [SUA: Azt, Trn]
- **2339.** *maksoni 'tire, work hard': Hp maqson 'hard work'; Hp maqson-ta 'work tediously on'; ST magoon 'cansado'; ST magooñia' 'cansarse, vi'. With *s > h > ø, typical of ST, and with voicing of intervocalic k, this pair of Hp and ST forms, outside of expected ö for Hp, match for a considerable length. [NUA: Hp; SUA: Tep]
- 2340. *mi(N)howi / *mihaC 'tired': Mn na'mihoowi 'be tired, vi'; Mn wïmihoowi 'be tired, exhausted, vi'; TSh tamminoi 'be tired, vi'; Sh wïmmiha" 'be less, be tired' (Sh siï wïmmihantïn 'nine, lit: one less); Cm niï'maitï 'tire out, become lazy'. The length of this suggests a compound, yet the reduction patterns are interesting, and speaking of compounding, there may be some overlap between these and *wïmma at 'pain'. [NUA: Num]
- **2341.** *yu'ma 'tired, worn out': Tbr yum- 'cansarse'; Yq yúume 'cansarse'; My yuúme 'se está cansando'; Ch yum'á 'tired, suffer, drunk, dead, pl'; Tb yu'mat~'uuyu'm 'worn out'; Tbr yu-nium-ká-m 'anciana' (-ni- = Tbr ñ < *y, thus < *yuyum). [NUA: Num, Tb; SUA: Tbr, Cah]
- **2342.** *yowa 'suffer': CN tla'yoowa 'to suffer, to fast'; Nv dodoa 'cansar'; Nv t'igi dodoa 'padecer'; besides *yowa, these forms also share a t and glottal stops before *yowa. [no *w > g in Tep '] [SUA: Tep, Azt]
- **2343.** *'opa/i 'tire(some), labor(ious)': Eu naóve 'padecer'; Yq 'obíači 'laborious'; AYq ouva 'difficult'; AYq o'ouva 'tired of'. [SUA: Opn, Cah]

2344. *haLi 'endure, tire of': Wr naharí-na 'suffer, endure'; Wr eri-ná 'struggle to do s.th. hard to do' (Miller compares Wr eína 'difficult'); Ca háy 'end, come to an end'; Ca háyin 'be tired'; Cp háye 'finish, tire of'. [r > y, h > ø] [NUA: Tak; SUA: Trn]

2345a. *musu'i 'try but not be able to do': SP -muššui 'try to do s.th. (seldom used except as second element in compound verb)'; Ch musu 'try (in vain), unable'; Mn musu'i 'almost, nearly'; Kw miisi 'be exhausted'; WMU misi-y 'try to do s.th., but not be able to'. The CNum forms below, resembling *-mii, with loss of -s-, may be related, though some show -n- instead of -s-. [NUA: SNum, WNum]

2345b. *-mii / *-**mini** / *-**minki** 'be unable, fail (to do s.th.)(in compound verbs, suffixed to what one cannot do): TSh -miih 'be unable, can't, fail to'; Sh(C) -miih 'be unable to'; WSh -miih / -minih 'be unable to do, can't, fail to'; Sh(M) minki' 'fail at doing s.th.'. [NUA: CNum]

NB, *pïNka 'persist in, continue, bear with, suffer from' is at 'strong'.

TO, TOWARD; A, HACIA

2346. *Li 'to, for': Sapir: Sapir unites/suggests CN -li- / -lia 'to, for' and SP ŋkï 'to, for' (< *li-kï), which is plausible, though difficult to prove, being so short. [SUA: Azt; NUA: Num]

2347a. *-ki / *-kï 'to(ward), for, applicative, benefactive, distributive': Cp -ka / -yka / yik 'to, toward'; Mn -kï- 'do s.th. for s.o., causative'; Wr -ké/-gé 'for the benefit of s.o.' (Miller 1996, 161); Tbr -ki, -kit 'por eso'; TSh -ka(") 'at, to, in, on'; perhaps Hp -k, -kye 'diffusive suffix, all over the place'.

2347b. *-(N)kï 'person obj, benefactive suffix': CU -kï- 'for (s.o.), benefactive morpheme' (Givon 1980, 81); SP -ŋkï- 'to, for' (Sapir 1930, 63); Kw -gï 'for, to (benefactive)'; CN ki- '3rd sg obj'.

Toad: see frog

Horned-toad: see lizard

[NUA: Num, Tak; SUA: Tbr, Azt]

TOBACCO; TABACO

2348. *pipaC / ***piipat** (**AMR**) 'tobacco': Sapir; VVH12 *pi_Spa 'tobacco'; B.Tep272 *vivai; M67-440 *pipa; I.Num133 *pahmu(h); BH.Cup *pivat; L.Son199 *pipa; Munro.Cup130 *pííva-t; M88-pi1; KH.NUA; KH/M06-pi1: Cp pívat; Ca píva-t; Ls pííva-t; Gb pívat; Sr piivt; Sr -piiva' 'to smoke tobacco'; Hp piiva; TO wiw; UP vivï; LP viv; NT vívai; ST viv; Eu vivát; My biipá; Wr wipá; Wr (River dialect) pipá; Tr wipá. Sapir astutely associates Wc yáa 'tobaco' and Cr ya-na 'tabak rauchen' with *pipa, for we have seen that h (< *p) is quite feeble in CrC; thus, *pipa > *hiha > *ia > *ya for both Cr and Wc is plausible. [*p > CrC h/ø; p > w in Tr/Wr] [NUA: Tak, Hp; SUA: Tep, Opn, Cah, Trn, CrC]

2349. *pahmu / *pahmu / *paCmu 'tobacco': I.Num133 *pahmu(h); M88-pi1. Miller includes Num with *pipa; however, they have little in common except initial *p; the next three segments are quite different *-ipa vs. *-amu. Thus, they merit separate consideration: Mn pammu"; NP pahmu; Cm pahmu. A medial cluster seems likely. [NUA: Num]

2350. *pahoN 'tobacco': TSh pahompi 'tobacco'; Sh pahon / pahun 'tobacco'. [NUA: CNum]

2351. *ko'aC / *kwa'aC 'tobacco': Kw ko'o-pi; Ch ko'á-p*i*; Ch(L) ko'^wa- 'tobacco'; SP qwo'a"- 'tobacco'; WMU qoo'á-pp*ii* / qwa'á-pp*ii* 'tobacco'; CU qo'á-pï 'tobacco'. [NUA: SNum]

TODAY, NOW; HOY, AHORA

2352a. *aya 'then, (effective/effecting) now': M88-'a35; KH/M06-'a35: Cp áye 'now, then'; Ca 'áy, 'áy-ax 'already'; Sr 'ayaït 'so, then'. Sapir has CN aš-< *aye for CN aš-kaan 'now, today' and ties Num aï (below) to it.
2352b. *aï-pi 'now': Sapir; M88-ï19 (one item); KH/M06-ï19: Kw 'ïivi 'now, today, be new'; Ch áï-vi 'today, now'; SP aï-vi 'now'; WMU aa-v / aavuru 'now, today, adv'; CU 'áa-vï 'now'. These may tie to Tak above and Tep below.
2352c. *(h)ï(C)pï 'also, more, again, now': B.Tep335 *'ïpï 'also'; M88-ï5 'now'; KH/M06ï5: Tb 'ïmbï 'more, again'; TO ïïp 'again, also, more'; UP 'ïïpï; LP 'ïïp; NT ïpï; ST 'ïp; Wr ehpío 'now'; Tr hí-pe 'now'. Add Hp pï' 'today, now'. [NUA: SNum, Hp, Tb, Tak; SUA: Tep, Trn, Azt]

- **2353.** *cipi 'today, now': B.Tep194 *sivi 'today, now'; M88-ci16; KH/M06-ci16: LP šiv 'today, now'; PYp sivi(g) 'today, now'; NT šívi 'today, now'; ST šiv 'today, now'. [SUA: Tep]
- 2354. *opa'a 'now, right away': KH.NUA: Sr öövai't 'right away'; Ca 'ív'a-x 'now, right away'. [NUA: Tak]
- **2355.** *pitï 'now, soon': Ls pitóó 'now'; PYp vete(d) 'recently, soon'; Nv vïtï 'now'; Nv vïtïba 'ahora al punto'; either Tep assimilated *pitï > pïtï, or Ls (expected poto < *pïtï) allowed a schwa-like i in the unaccented syllable, while the latter syllable retained the expected vowel. [NUA: Tak; SUA: Tep]
- **2356.** *aLopi 'soon, near': PYp aliv 'soon'; Tr ayobe/ayowe/ayowi 'soon, immediately'. Perhaps *aLopi > alipi > aliv (PYp). [L/y] [SUA:Tep, Trn]
- **2357.** *mikkwa 'now': TSh miikkwa / miikka 'now, today'; Cm meeku 'right now'. [*i-a > e-a > e-ø] [NUA: CNum]

Toloache: see at plant Tomato: see at plant

TOMORROW; MAÑANA

2358. *ta'ika / *taCika 'tomorrow': Kw te'eka-su 'tomorrow'; Ch ta'ika 'tomorrow'; and what of Ca túleka 'tomorrow, in the morning'? [V leveling in Kw] [NUA: SNum, Tak]

2359. *ima 'tomorrow': TSh (n)imaa 'morning, tomorrow'; Sh imaa 'tomorrow, tomorrow morning, morning'; Cr rúíhimwa'a 'día de mañana'. [NUA: Num; SUA: CrC]

2360. *muCa / *mo... 'tomorrow': Mn mowahúsu 'tomorrow'; NP muu'a 'tomorrow'; CN moostla 'tomorrow'. [NUA: Num; SUA: Azt]

- 2361. *pi'aLi 'tomorrow': Wr pi'arí 'tomorrow, morning'; Tr be'arí 'tomorrow, morning'. [SUA: Trn]
- **2362.** *kapu 'tomorrow': Hp qaavo 'tomorrow'; ST kavuimuk 'morning'. Hp o < *u, so the first four segments of both match perfectly. KH/M06-ka45 ties Hp to NT taqaavo 'yesterday' and the other Tep forms and queries whether Eu keko 'mañana' is cognate—all merit mulling. [NUA: Hp; SUA: Tep]
- **2363.** *wiCtuku 'tomorrow': WMU wíicuk; CU wíickus/wíicku-. The CU and WMU reflexes should be sufficient to establish that they are different dialects. [NUA: SNum]

TONGUE; LENGUA

Mn	éġo	Нр	leŋyi/leŋi	Eu	nenét
NP	igo	Tb	lalan-t / lalun-t	Tbr	niní-r
TSh	ekon/okon	Sr	naŋ ač	Yq	níni
Sh	aikon	Ktn	nïŋi-č	My	ninni
Cm	eko	Ls	wéeyi	Wr	yení
Kw	'egu-(m)bï	Cp	naŋ	Tr	inará/inirá; ča';
		Ca	náŋ-ily		ča'mékowa; ča'méroa
Ch	agó-mp(i)	TO	neeni; B: ñïïñi; wiini	Cr	nanuri
SP	akoN	LP	nïnni; B: nïïiñ	Wc	neení
WMU	agwő-ppi	PYp	neeni		
CU	'aġó-pi	NT	niïni	CN	nenepil-li
		ST	nii̇̃n/nn	Pl	nenepil

2364. *Laŋu 'tongue': Sapir; VVH94 *lïŋi 'tongue'; M67-441a *neni 'tongue'; L.Son176 *nïni/*nïnï; B.Tep182 *nïnï/i; M88-nï3 'tongue'; KH.NUA; KH/M06-nï3: Cp naŋ; Gb -nóŋin (poss'd); CN nene-pil-li 'tongue'; CN nene-tl 'female genitals'; Pl nenepil 'tongue'. Sapir suggests that Hp and Tb dissimilated *neŋi > leŋi, then Tb assimilated again > l-l. The reverse is also possible (*Laŋa > naŋi) as anticipatory consonant harmony is most common in UA. And Tb does preservative V assimilation, so perhaps in this case preservative C harmony also. Initial *l is not common in UA, so assimilation to the usual (*l->n-) seems more likely than dissimilation to the unusual (*n->l-). Sapir also notes the voweling *a-u in Cr and Tb. Since none of the languages show *e-u, but rather all with u show first vowel a, then the voweling *ï-i could be the first assimilating to the second, such that the original first vowel was likely a, as it appears in Tb, Sr, Ca, and Cr. The second may have more likely been u, since final V > i is common, but anything else > u is not. [NUA: Hp, Tb, Tak; SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]

2365. *akoN 'tongue': I.Num7 *ekoN; M88-'a22; KH/M06-'a22: SNum (Kw, Ch, SP, CU). Miller and Hill both have the correct 1st V, since Sh aikon and the other Num languages suggest *akoN > aiko(N) > eko/iko(N). Cf. dove *hawi > haiwi > hewi. NoteSP aġo-rovwi 'licks'. [a >ai > e] [NUA: Num]

TOOTH; DIENTE

Mn	táwa	Hp	tama; piŋyanpi (adj)	Eu	tamít / támit; zarátamit 'muela'
NP	tama"	Tb	taman-t	Tbr	tamó-r; tamáN-r
TSh	taman	Sr	tamač	Yq	támi
Sh	taman	Ktn	tama-c	My	tammi;
Cm	taama	Ls	tamá-t		tampa'arim 'muelas'
		Ca	táma-l	Wr	tamé
Kw	tawa-bi	Cp	tam'a '&mouth, lips'	Tr	ŕamé; matá
Ch	tawá-mp(i)	TO	ki'i; taatami; tam; tamš	Cr	tame; sï'ïtame 'muele'
SP	taŋwaN	Nv	tatami; mamturi 'muela	s' Wc	tamé (vs. táme 'nosotros')
WMU	ta <u>wa</u> -pp <i>i</i>	PYp	tama		
CU	tawá-pï	NT	taatámu 'teeth'	CN	tlan-tli
		ST	taatam; tatmutda 'cure t		

2366. *tamaC / *tamaN / *taman (AMR) 'tooth': Sapir; VVH29 *ta_sma 'tooth'; BH.Cup *tama mouth, tooth; HH.Cup *tama; B.Tep214 *taatamu/i 'teeth'; M67-442 *tam; I.Num207 *tamaN; L.Son272 *tami diente'; Munro.Cup133 *tamá-t; M88-ta14; KH.NUA; KH/M06-ta14 *taman (AMR): A pan-UA stem showing reflexes in all languages; but a few particular patterns are apparent, such as a final nasalization in Num, Tb, and Tbr, some distant branches; and *m > w in all of SNum, as well as Mn; and a high front 2^{nd} vowel in TrC rather than the a of the other branches. Note the rounded 2^{nd} vowels in Tbr, NT, and ST. As Sapir (1913) notes , spirantization of the nasal (*m > η w > w) occurred in SNum. Preceding the absolutive suffix in both 'tongue' and 'tooth', note nasalization in Ch and SP and stops in Kw and CU. Bascom lists *taatamu-i 'teeth' and *taatamudi' / *taatamidi' 'his teeth'. [a-a vs. a-u] [NUA: Num, Hp, Tb, Tak; SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]

2367. *cara 'moler': Eu cará-tamit 'muela'; NT taamúsaragai 'la muela'; Cr sï'ï-tame 'muele'. [-r->-'- in Cr] [SUA: Tep, Opn, CrC]

TOP, SUMMIT, PEAK; CIMA, CUMBRE, LO ALTO; see also head, hair, mountain 2368. *kumisa 'top, tuft, crest': L.Son105 *kumisa 'copete'; M88-ku24 'copete'; KH/M06-ku24: Eu kumísa 'plumero, plumaje, penacho'; Op kumi-to 'plumaje'; Tr kumisa/gumísa-ri 'copete, penacho, cresta'; Yq kumsa-kam; My kumsa-m 'cejas'. Miller adds NP kutuggwa 'top', which might possibly share an initial *ku- at best. [SUA: Trn, Cah, Opn]

- **2369.** *taka'a 'top, point': Mn taqazúna 'tip, top, point'; Ch takáa 'top, roof'; Cp taká'a-t 'peak'; Kw ta'awaa 'top, ridge'. [k > ' or ø in Kw] [NUA: Num, Tak]
- 2370a. *ko'ay / *ko'aiC 'top': TSh ko'e/ko'i-cci 'peak, point, top; crown of head'; Sh(M) koi 'point, top'; Sh(C) ku-kko'ai-cci 'hills'; Cm ku'e 'top, summit, on top of'. [NUA: CNum]
 2370b. *kwiyV 'top': SP ukkwiya 'top'; SP kwivuaa 'top'; CU kwiyú 'top of head'. [NUA: SNum]
- **2371.** *pa'akwi '(on) top': Ca pá'akwen 'on, on top of'; Cp pá'axwi 'top'; Ls pa'áq 'on top'. Cf. Num *pa'a 'tall'. [NUA: Tak]
- 2372. *wï(N)ka 'peak': CU wïgáa-ma 'hill, hilltop, high point'; Tb wïŋaa-l 'peak of mountain'. [-k- and -ŋ- correspondence] [*-NC->-CC-] [NUA: Num, Tb]
- **2373.** *katto 'top, head': SP kacoaa 'top end'; Hp qötö (< *koto < *kato) 'head'; AYq hikat 'on top'; AYq hikači 'top, apex'; AYq hikattana 'on/from the top, postp.'; My hikači 'arriba'. The Cah forms have their frequent *hiprefix. [NUA: Num, Hp; SUA: Cah]

TOUCH, RUB, WIPE, SMEAR, SCRATCH, ITCH; TOCAR, TENTAR, (R)ESTREGAR, FROTAR, (RE)FREGAR, ENJUGAR, UNTAR, EMBADURNAR

- **2374.** *taki / *takki 'touch': M88-ta9 'to touch, feel'; KH/M06-ta9: TO taatk 'feel, lay hands on, become conscious'; Wr tahki-pú-na 'empujar muchas veces'; Tr rakí 'empujar'; My táktia 'tocar, picar'; AYq tahta 'touch, bump into, hit with an impact'; Cm ma-rïki-tï 'touch (with hand)'. [SUA: Tep, Cah, Trn; NUA: Num]
- 2375. *tam 'touch': TO taatam 'touch, feel, pet, vt'; NT táátamai 'touch, feel, realize'. [SUA: Tep]
- **2376.** *pikka 'touch': Kw ma-piika 'touch'; Ch mapík(a) 'touch, v'; SP pikki 'touch'; CU pikyá-y 'touch, feel'; Cp píqe 'touch, feel, reach out to, vt'. [medial kk and hk vs. x] [NUA: SNum, Tak]
- **2377.** *masu 'touch, feel': Wr imasú 'feel, probe (by feeling)'; Tr masu- 'feel (with hands), look for (with hands)' (Brambila supposes ma- 'hand'). And Cp míse 'guard with hands' if its wrong vowel were explainable. [NUA: Tak; SUA: Trn]
- **2378.** *cima 'touch': NP cimma 'touch with finger/stick'; AYq čimta 'touch, grab, kiss'; Sh (to/wï)-cima 'scrape, wipe, rub'. Jane Hill (p.c.) adds Ktn šïm 'scratch'. [NUA: Num; SUA: Cah]
- **2379.** *rusa / *Lusa 'rub, touch': Eu marúsa 'tentar con la mano'; AYq ruuse 'rub'; My ruuse 'raspar, tallar'. [SUA: Opn, Cah]
- **2380. *pu'ana** 'wipe': Nv oana 'borrarlo'; Nv oani 'borrado'; PYp oana 'erase, wipe'; PYp oani 'clean'; NT vuaánai 'borrar, menear'; NT vuaányi 'despintar, limpiar'; ST uañ 'clean, clear (water), adj'; ST uana 'clean, wipe a surface, vt'. [-a/i: vt/stative; vu/wu > u] [SUA: Tep]
- **2381a.** *humay / *humaL 'smear, spread, rub, paint': Ca húmay 'smear, paint, vt'; Cp hume- / hum-ine 'spread a liquid or s.th. fine like sugar'; Cp hume-yaxe 'be spread out'; Tr na'oma 'erase, cloud up' (with na- prefix); PYp huhul 'rub, paint' (if *humaL > huml > hul); and perhaps the -maa of Wc šúurí.maa 'smear blood' (Wc šuure 'red'). The Cah languages compound *pa- with this for 'swim' as in 'water-spread/be prone': My bahume 'nadar'; AYq vahume 'swim'. [r > y] [NUA: Tak; SUA: Tep, Trn, Cah, CrC, Tep]
- **2381b.** *ma'a 'smear on, paint': Ch ma'á- 'color, mark, paint'; SP ma'a- 'decorate, mark'; WMU ma'á-y 'smear on, paint, decorate, spread (like jam on bread)' (past: ma'á-qa); CU ma'áy 'put on, rub on/into, apply to, anoint with'; and the -maa of Wc šúurí.maa 'smear blood' (Wc šuure 'red'). [NUA:SNum, CrC]
- 2382. *tuCci'a 'wipe': Mn toci'a 'wipe, vt'; TSh toccoa 'wipe off, clean off'; Kw toca'a-tii 'clean up'; Ch wïtúc(a) 'wipe'; Eu tucá 'apagar'; AYq tuuča 'erase'; My tuuča 'apagar, borrar'. [NUA o vs. SUA u] [NUA: Num; SUA: Opn, Cah]
- 2383a. *tikka 'touch': NP tika / tiga 'smear'; Ls tíga 'touch, brush against'.

- 2383b. *tuCka 'touch': Tr ničugé 'caress'; Hp toŋo(k-) 'come into contact with, touch, reach'. NP and Ls suggest *tikka, while Tr and Hp may suggest *tuNka. [velar nasal and voiced velar stop, V i/u] [NUA: Tak, Num, Hp; SUA: Trn]
- **2384.** *nama 'experience, feel like, try, vt': Mn -naama- 'feel (a state of being), feel like (doing s.th.)'; Ca námaan 'try to do (s.th.), feel, taste, measure'. Though these may reveal two different meanings of 'feel' on the surface, they both align with a sense of 'experiencing s.th.' [NUA: Num, Tak]
- 2385a. *kïca 'scratch': B.Tep134 *kïsa 'to scratch'; KH/M06-kï19: LP kïšm(im); NT kïïsa; ST kïs. Add TO keš-kud 'back scratcher'. A c/s difference may or may not preclude those in b. 2385b. *kïskia 'itch': CL.Azt93 *kəškia 'itch'; M88-kï13; KH/M06-kï13: CN kekeškia; Pl kekeš; Po koški; T kekeškla. This may have the same stem as Tep *kïsa above, with another morpheme added. [SUA: Tep, Azt]
- 2386. *ŋaska < *ŋacka 'be rough, scratch': Cp ŋášxa 'be rough'; Cp ŋašxaŋášxa'a-š 'rough, adj'; Ls ŋááxa/i 'scratch, scrape, vi, scratch, brush against, vt'. When something is rough, it scratches; so the semantics are closer than might be obvious. Phonologically they are identical except for a cluster in Cp being reduced in Ls with compensatory lengthening of the vowel compensating for the reduction. I also tried not to mention the similarities with *kVskia 'scratch' above, but failed. [NUA: Tak]
- 2387. *saLuki / *suka/i 'scratch': M88-su2 'to scratch': KH/M06-su2: Cp salákwe; Ca sáluk; Ls şóoki 'scratch, v' (vowels are wrong for these three preceding forms, Miller and Hill note); Ls şuká-laqi 'to claw s.th. as a cat'; Ls şuká-pi 'scratch, v'; TO hukitš 'slash, claw, v'; Wr suhku/ suki 'rascar, en el cuerpo'; Tr sukú 'rascarse'; My súkke 'arañar'. Both Cp and Ca show an extra syllable with a liquid, while none of the other forms do, yet we know how perishable liquids and syllables are in UA, so that should not discount the probability of these as a cognate set, brought together by Miller. [NUA: Tak; SUA: Tep, Cah, Trn]
- 2388. *ŋisi 'touch, feel cautiously': Ls ŋési 'touch lightly (as a missile), graze, vt'; Cp ŋíse 'scratch, vt'; Sr ŋiđi'-kin 'touch, vt'; and Ca -ŋísan- 'move slowly' as feeling/touching in the dark would have one moving slowly.
 [NUA: Tak]
- **2389.** *kwata' 'smear, daub, plaster': Ktn kwara' 'smear (with mud, tar, etc)'; Ls kwáči 'daub, plaster'. [NUA: Tak]
- **2390.** *pihya 'itch': Jane Hill (p.c.): TSh pihyakai"; WSh pihyakih 'itch, vi'; Kw piyagïgï 'itch'; Ch piyáġankï-'itch'; WMU piyáġaikkü-y 'itch'; CU piyáĝa / piyáĝaküi 'itch'. A phonological match is SP piyaġa-ŋqï- 'be easy to do, overcome' while the semantic difference puzzles. [NUA: Num]
- 2391. *maka'ani 'touch, feel, wipe': Kw ma-ġá'ani 'touch, feel'; WMU maána-y / maánna-y / maánna-y / maánea 'wipe off, vt'; CU maá'nay 'wipe, wipe dry'. Less certain is Ch maván'i 'pet, vt'. [NUA: SNum]

TRACK, FOOTPRINT; HUELLA, PISADA, RASTRO; see also foot

- **2392.** *woki / *woku'i 'track, footprint': M67-257b *wok 'leg'; L.Son348 *woki 'pie'; B.Tep47 gookui-i 'track, footprint'; M88-wo3 'foot'; KH/M06-wo3: TO gooki 'footprint, track'; LP goki; NT goókui; My wókki-m 'pie'; Tbr nyokí-r 'track, foot'; Tb wïgii'ït 'make tracks'; Tb wïgii-l 'tracks, trail'. Add Yq wóoki 'pie, pata'; Yq wokte 'seek tracks'. NT ' and Tb '. [*o > ï in Tb; *w > ny in Tbr] [NUA: Tb; SUA: Tep, Tbr, Cah]
- **2393.** *yïki 'make/follow tracks': M88-yï4 'to make tracks'; KH/M06-yï4: TO jïikc 'look for tracks'; TO jïki 'track'; Wr yehki 'hacer huellos'; Tr hiyé/(h)iwé/huwe 'observar, espiar, huellear'; Tr iyé-to 'seguir la huella'. [SUA: Tep, Trn]
- NB, for *nanapuni 'track' see with *naNpa 'foot, footprint' at 'foot'.

TRADE, BUY, PAY, SELL, LEND, BORROW;

TROCAR, COMERCIAR, COMPRAR, PAGAR, VENDER, PRESTAR, PEDIR PRESTADO

- **2394.** *ti'a/i 'borrow, lend': BH.Cup *tə' 'borrow'; M88-ti'35 'to borrow'; KH.NUA; KH/M06- ti'35: Kw ti'a 'borrow'; Tb ti'at~'iidii' 'lend, borrow'; Tb ti'inat~ 'itii' iin 'lend, borrow'; Cp té'e 'lend, borrow'; Ca té'e 'borrow, rent from'; Ls tóó' 'borrow'; Ls tó'-ni- 'to lend'; Sr tii'in 'borrow'. Let's add Hp ti'i 'buy, ransom self (put into debt)'; this is a nice clean set for a change. [Tak V's] [NUA: Num, Hp, Tb, Tak]
- **2395a.*namïki** (< *na-maka) 'pay, sell': B.Tep167 *namïki 'pay': M88-na33 'pay'; KH/M06-na33: TO namkið(a) 'pay'; NT ááta namïïkidïi 'pay'; ST namki 'pay, vi': ST namkia 'cost'; ST namkidya 'pay him'. Cf. CN tiaamiki 'buy, sell'. Add Mn no'mahi/no'mihi 'buy, vt'. Kenneth Hill also lists:
- 2395b. *na-maka 'distribute, sell, give out': KH.NUA; Sr naamq 'distribute, give out, give to several people'; Cp námxalayka 'to the store'; Cp né-mexe 'sell, give as gift'; Ls námxa 'give to several people, distribute'. In regard to both of the above, consider also: Ca máx 'sell'; Eu nemáka 'sell'; Yq nénka 'sell'; My nenka 'sell' (Cah *nïmka < *nïmaka); CN namaka 'sell'; and Ktn no'mk 'buy, vt'. Perhaps all from < *na-maka, with reciprocal naprefixed to *maka 'give' as buying/selling requires reciprocal giving, i.e., giving s.th. in exchange for the goods. Zigmond et al (1991) have Kw na-waga 'buy' from *na-maka. [k > h; mk > nk in Yq] [NUA: Num, Tak; SUA: Tep, Opn, Cah, Azt]
- **2396.** *samsa 'buy': BH.Cup sámsa 'buy'; M88-sa21; KH/M06-sa21: Bright & Hill say this may be borrowed from non-Cupan language: Cp sámse 'buy, vt'; Ca -sáámsa- 'buy'; Ls saamsa 'buy'. [NUA: Tak]
- **2397.** *wika/i 'owe': M88-wi3 'to owe'; KH/M06-wi3 'owe': Wr wiga-ní/má 'sacar fiado, deber'; Tr wiká 'deber, ser deudor'; My wikiríiya 'deber'; Eu vikiryáve; CN wiikiliaa 'take, carry s.th. for s.o., owe s.th. to s.o.' Ken Hill adds TO wiklaDag 'debt' and Wc wikie 'está casado' with a question mark. TO aligns even to the liquid 3rd C, though TO w instead of g (< *w) means it may be a loan from TrC. [SUA: Trn, Opn, Cah, CrC, Azt]
- **2398.** *kowa 'buy': CL.Azt22 *kowa 'buy'; M88-ko23; KH/M06-ko23: CN koowa 'buy s.th., vt'; Pl kuwa 'buy'. [SUA: Azt]
- **2399a. *timi** 'buy': NP timi 'buy, vt'; TSh timiih 'buy, vt'; Sh timiih 'buy'; Cm mahipirimiri 'buy for self, possess (hold in hand)'; Cm marimiri 'buy s.th.'; Cm narimiiri 'trade, sell to one another, exchange'. [NUA: WNum, CNum]
- **2399b.** *na-tuwa / *tu'wa / *rukwa 'buy': Ch narú-ga 'buy'; SP naroo'ŋwa 'barter'; CU narúway 'buy'; CU narúgway 'trade'; but CU taguy-naru'ay 'be thirsty, buy-thirst'. Notice both here and at *nampV that WNum and CNum show -m(p)- while SNum has -w-. [medial kw, w, or m?] [NUA: SNum]
- **2400.** *waLa / *wara 'sell': B.Tep37 *gagara 'he sells'; KH/M06-wa30 'sell': TO gagda; LP gagara; PYp gagara; NT gagára/gáágarai; ST ga'ara; ST gara 'sell it'. Add Tbr mará/wará 'sell'. [SUA: Tep, Tbr]
- **2401.** *taLi 'sell': Wr tariké 'sell s.th. to s.o.'; Wr tala-ní 'buy, vt'; Tr ŕari-mea 'buy'; Tr ŕarinéa-ma 'sell'. [*L] [SUA: Trn]
- **2402.** *napi(C)tu 'trade': NP nabido 'trade, vi'; Sh napittï 'trade, vt'; perhaps CN patla '(ex)change'. [*u > i/o; CN p] [NUA: Num]
- **2403.** *cami 'turn over, exchange': Mn camina 'change, exchange, turn s.th. over'; TSh nacammii 'ah / nacami 'ah 'trade (for), barter (for)'; TSh cammii 'ah / cami 'ah 'turn over'. [NUA: Num]
- **2404.** *cahap(aya) 'buy, trade': TO ša'awai 'buy, buy from'; Nv savaida 'permutar'; NT saviïli 'compró'; NT saviïdai 'lo compra'; NT sáápïdai/sáápudai 'comprar'; ST sava'da' 'comprar'; perhaps Eu sáde 'comprar' borrowed from Tep? [SUA: Tep, Opn]
- 2405. *ηani / *ηina 'pay': Cp náŋani 'pay, vt'; Ca ηíñan / ηíiñan 'pay s.o., be expensive'. [NUA: Tak]

TRAP, SNARE; TRAMPA, ENTRAMPAR

2406. *hïwaC / * hï'aC 'trap': M67-444 *hewi; I.Num46 *hïya 'to trap'; M88-hï6 'to trap'; KH.NUA; KH/M06-hï6: Mn (tï)hïya 'trap, vt'; NP hïya 'trap'; NP ahï'a 'trap, vt'; TSh hïwa 'trap, vt'; TSh hïwanïmpï 'trap, n'; Sh hïa" 'trap, vt'; Sh(C) hï'a" 'trap, catch, vt'; Kw hïa 'trap, set a trap, v'; CU 'ïa-y 'trap, plant, sow, cultivate, farm'; Ca héw 'trap, v'; Ls xáwi 'trap, v' (cognate? Miller queries; I would say probably); Sr hïiiñ 'hunt (for game)'; Hp hïwa 'trap s.th., vt'; Hp hïwi 'a set trap, n'; Tb 'ïw 'trap, v'. Add Cm hïarï 'fish, v'; Cm hïawapi 'trapper'. Though all start with *hï-, the 2nd consonant shows considerable variation: *hï'a/hïya/hïa/hïwa. For *hïwa, we have TSh hïwa, Tb 'ïw-, Hp hïiwi, and Ls xáwi. The hïa forms probably simply lost a consonant, and y in *hïya may be somewhat excrescent. More than ample evidence in CNum and SNum also suggests a final geminating consonant. [-w-, -a/i; x/h; prefix a- in NP] [NUA: Num, Tb, Hp, Tak]

2407. *ti'niyaC 'trap': Stubbs2003-7: Kw ti'niya 'trap, v'; Kw ti'niya-pï 'trap, n'; ST tiï'ñja' 'set trap'; a nice fit, since ST j < *y, and both are fairly long. [NUA: Num; SUA: Tep]

Trash: see garbage

TREE, WOOD, FOREST; ÁRBOL, MADERA, LEÑA, BOSQUE, SELVA; see also pine, cottonwood, cedar, willow

The forms of *kut 'fire, firewood, wood' and other initial *ku- words need a more careful sorting; Miller has them in five places (ku4, ku5, ku6, ko1, kï17), along with *kwawï and *kuna, which may have a common element in a compound; nevertheless, a sorting is needed.

2408. *kut-(ta) (*kut AMR) 'tree, wood, firewood': Sapir; M67-170d *kuta 'stick of wood'; I.Num64 *kuh- 'fire, heat (instr. prefix)'; BH.Cup *kut 'fire'; L.Son101 *ku 'palo, madera'; B.Tep129 ku'agi 'firewood' and B.Tep120 *kua'agï 'to get firewood'; CL.Azt280 **ku(')a 'tree, wood' (besides CL.Azt177 kwawï tree, wood); M88-ku4,6 'tree, (fire)wood'; Munro.Cup44 *kú-t 'fire'; AMR 1993a *kut; KH/M06-ku4 *kut (AMR): Gb kotá 'palo, leña'; Sr ku|t 'fire'; Sr kuṭaa|t 'firewood, wood, stick'; Ktn kut 'fire'; Ktn kučat 'stick, pole, firewood'; Hp koho '(fire)wood, stick'; Hp kotqa 'wood pile'; Eu kut 'palo'; Tbr utá 'árbol, palo, viga, madera, leña'; CrC *kïye (<*kuyï) 'tree, etc.'; My kútta 'madera, leña'; AYq kuta 'stick, pole'; Wr kuú 'palo, leña'; Tb ku-t 'fire'; Tb kutuugat ~ ukutuk 'gather firewood'. Ca, Cp, Ls, Ktn all show kut 'fire' and while the UAnists' usual tie of wood with fire is possible, is it certain? The SNum compound *kukkwaC is separated to below. [NUA: Tak, Hp, Tb, Num; SUA: Trn, Opn, Cah, Tbr, CrC]

2409a. *kutawi > *kïlawï: 'gather firewood': BH.Cup *kəláwat 'wood'; *kəláw- 'gather wood'; HH.Cup *kəlááwVt 'wood'; *kəlááw- 'gather wood'; M88-kï17 'to gather firewood'; KH.NUA; KH/M06-kï17: Cp keláwe 'gather wood'; Ca kélaw 'gather wood'; Ls kuláaw 'gather wood'. Hill notes Sr kuṭaai 'gather firewood, vi' (only missing -w-); Sr kuṭaat 'firewood, wood, stick'; Hp kó-lawï 'cut firewood' (-lawï 'continutive / imperfective verb suffix)'; Hill also notes related noun forms: Ca kélawa-t, -kélaw'a; Cp keláwa-t; Gb kotá; Ls kuláawut. The Hp form is transparent, to make one wonder if it is the source for Tak loans, but to these might be added Yq ké'ewe 'get wood' and Tr ka'wí 'ir a cortar leña' which are a long way from Hp. The Cah forms (here Yq) typically lose intervocalic liquids to glottal stop; in other words, perhaps *kutawi > *kVlawV (Tak), > *ku'awi (Tep and Cah) are feasible. Note both here and at *hïwi 'trap' that Sr lost intervocalic -w-.

2409b. *ku'awi 'wood, tree, firewood': B.Tep129 ku'agi 'firewood': TO ku'ag 'get firewood'; TO kuagi 'firewood'; TO ku'agi 'have firewood'; LP kuagi 'leña'; PYp kuagi/kuhagi 'wood'; NT kuáági 'firewood'; ST ku'aa' 'leña'; ST kua'gia' 'cortar leña'. B.Tep120 *kua'agï-i 'to get firewood': TO ku'agï; LP kua'ag; NT kúágï; ST kua'gi. Wc kï'ai 'fetch wood' matches well and also suggests that the glottal stop may better belong between u and a, as in Wc and TO: *ku'awai 'fetch firewood'. Miller's adding Azt kwawi < *ku'awi is feasible, except for Cah *bwawi which also aligns well with *kwawi and complicates the nicety of such. [NUA: Tak, Hp; SUA: Tep, Trn, Cah, CrC, Azt]

2410. *kukkwaC (< *kut-kwaC ?) 'wood (> gather wood)': M88-ku4; KH/M06-ku4: Kw kuko-pi (< * kukkoppi) / kukwa-pi 'piece of wood, stick'; Ch kukwapi (< *kukkwa-ppi) 'wood, stick, firewood'; SP quqqwa'' 'gather wood' (SP ku''- 'with fire'); WMU k*uh*kkwé-y 'chop (wood), vt'; CU kukwáy 'chop firewood'; CU kukwappi '(fire)wood'. [NUA: SNum]

- **2411.** *kuttumu 'pole of solemn purpose': M88-ku37 pole: KH/M06-ku37: Ls kutúumu-t 'ceremonial pole'; Gb kutúmut 'grave pole, painted pole'. This pair may share a morpheme with the above, but it is compounded with s.th. different. [NUA: Tak]
- **2412.** *kusi 'wood': M67-170c; M88-ku7; KH/M06-ku7: Mn kussi-woqqopï 'Jeffrey pine'; Wr kusí 'branch, brush, thicket'; Tr kusí/gusí 'stick'. [NUA: Num; SUA: Trn]
- **2413.** *wopiN (< *wapaL?) 'wood': Sapir; M67-15; I.Num276 *wopi(n) 'wood'; M88-wo10 'wood'; KH/M06-wo10: Mn wopikusu 'woodpecker'; NP wopi 'burnt board'; TSh wopin 'pole'; Sh wo-pin 'board, vehicle'; Cm woop/wopi 'board, wood'; Kw wo-vi 'old timber, wood'; SP ovi(N)- 'wood'; My ówwo 'mata'. I like Sapir's inclusion of CN wapal-li 'board, small beam' with Num *wopi, since a > 0 between two bilabials is plausible and a > i before a liquid (now N in SP) is also consistent with vowels before liquids in UA. Might this tie to M88-'o2 *opi 'awl' at 'awl'? [NUA: Num; SUA: Cah, Azt]
- **2414.** *tukïnu 'alder tree, aliso: M88-tï51 'alder tree'; KH.NUA; KH/M06-tï51: Cp túkene-t (vowel is wrong for tï, unexpected stress); Ls tukón-la / tukóónu-t; Sr tïkït. [NUA: Tak]
- **2415.** *(h)ota(N) 'pole': M67-327; M88-ho2; KH/M06-ho2: SP otaa; Ch horaa; Tb olon-t; Tr otowá 'rama grande'; CN otla-tl 'bamboo'; HN ohtlatl 'river cane'. [NUA: Num, Tb; SUA: Trn, Azt]
- **2416.** *uLi 'ash (tree?), aliso'?: Fowler83: Tr ure; CN iilii-tl 'alder tree'. [SUA: Trn, Azt]
- **2417.** *cima 'branch, limb': M88-ci23; KH.NUA; KH/M06-ci23: Ca číma 'branch, limb'; Sr čim 'branch, limb'. [NUA: Tak]
- **2418.** *waCka 'rabbit throwing stick, boomerang': M88-wa27 'rabbit throwing stick or boomerang'; Munro.Cup106 *wááka-t 'rabbit stick'; KH/M06-wa27: Cp wáka-t; Ls wááka-t; Ca wáka-t; Gb wáka-t. [NUA; Tak]

NB, for *yami 'grow thick, forest' see grow

NB, for *hu(ca) 'arrow/wood' see arrow.

NB, for Hp coki, see stalk.

NB, for * sinna 'cottonwood, aspen' see cottonwood.

Trip: see fall Trunk: see stalk Trust: see believe Try: see tire(d)

TURKEY; PAVO, GUAJOLOTE

2419. *ciwi 'turkey (sp.)': L.Son35 *ciwi; M88-ci8; KH/M06-ci8: Eu civí/ciwí; Wr ciwí 'kind of turkey'; Tr čiwí; Op ciwisi; Yq cíwi 'clase de guajolote'; perhaps Cr siïpí 'guajolote'? [SUA: Trn, Opn, Cah]

- **2420.** *topa 'turkey': B.Tep229 *tova 'turkey'; Fowler83; M88-to16; KH/M06-to16: TO toowa; LP tov; NT tóva; ST tovaa. Add PYp tova 'turkey'. Though Miller (M88-to16) combines *topa 'turkey' with *toLi 'chicken', the differing second syllable justifies separate etyma: *topa 'turkey' and *toLi 'domestic fowl' at bird. [SUA: Tep]
- **2421.** *kuyuŋV / *kuyuNV' / *kuyuNCV 'turkey': Fowler83; Ken Hill (p.c. 2004); KH/M06-ku40: Hp koyoŋo; Cm kuyu'nii / kuyunii'. Hill adds Ch kuyuita and WSh kwi'na. Let's also add Sh(GL) *kuyuŋwi'yaa' 'turkey' and CU kwiyú-tï (< *kwiyuC-; otherswise, -r- vs. -t-) 'turkey'. Hp and Sh(GL) agree perfectly for five segments; and Cm agrees through four, then has a glottal stop plus nasal (cluster) aligning with ŋ of the others. CU lengthens y/i (*kuyu > kwiyu), but agrees with both Cm and Hp, lacking only a late nasal, but its -t- instead of -r- suggests a cluster: CU < *kwiyuC-tï. ['n vs. ŋ, unaccented vowel assimilates more easily in CU] [NUA: Num, Hp]

Turkey buzzard/vulture: see buzzard

TURTLE, TORTOISE; TORTUGA

- **2422.** *ayaC / *ayoC 'turtle': Sapir; M67-445*'ay 'turtle'; M67-341*ay 'rattle'; BH.Cup*'áyila 'turtle'; CL.Azt179 *aayoo- 'turtle', 28 **ay- 'turtle'; Fowler83; M88-'a14 'turtle'; Munro.Cup134 *'ááyi-la; KH.NUA; KH/M06-'a14: Kw 'aya; SP 'aya; CU 'ayapï-ci; Cp áyily; Cp -áyi 'turtle shell rattle (poss'd); Ca 'áyily 'turtle'; Ca -'áyi 'turtle shell rattle'; Ls 'áy-la 'abalone'; Ls páá'i-la 'turtle'; Ls páá'aya-t 'turtleshell rattle'; Hp aaya 'rattle'; Tbr haya-wé-t 'tortuga'; Wc 'ayé/'aayée; CN aayoo-tl; HN aayoo-tl. Jane Hill (p.c.) reminds that CN aayoo-tl < *aya-wï- (turtle-big). CU -p- (vs. -v-) and Ls -t- (vs. -l-) suggest a final C. The 2nd V is difficult. SNum, Hp, Tbr, and one Ls form suggest *'aya, while CN and the other Tak forms are more consistent with *ayo, since Ca and Cp i < *o, then there is Wc 'ayé, whose 2nd V does not fit either. Might these relate to 'gourd' (see at squash) as a turtle's shell somewhat resembles a gourd? [-a/o] [NUA: Num, Tak, Hp; SUA: Tbr, CrC, Azt]
- **2423.** *kopota 'turtle': M88-ko10 'turtle': M67-446 *ko turtle; Fowler83; KH/M06-ko10: Sr qöpöt-t 'turtle'; Ktn kopota-t 'turtle'. Miller includes NP kota 'crayfish'; NP kotyottï 'whiteshell necklace'; Tb kooyoo-t 'turtle'; but they and this collection of initial *ko... syllables needs more study. Jane Hill (p.c.) notes Mojave kapet 'turtle' (Munro et al 1992) and Yavapai kpit and Yokuts koykoyot to suggest that areal influences may be involved. [NUA: Tak]
- **2424.** *komikt(')ïl 'turtle': TO komkč'ed 'turtle' (komi 'back, shell'); Nv komikturhu 'tortuga'. Cf. Tep *komi 'back, cáscara'; TO komi-tp 'to break shell covering'; and CN komi-tl 'container, vessel'. [SUA: Tep]
- **2425.** *muLi (< *muti ?) 'turtle': L.Son159 *muri 'tortuga'; Fowler83; M88-mu6; KH/M06-mu6: Op muri; Eu múri/muri(k); Wr murí; Tr murí. Fowler adds here My mótěik 'tortuga' (thus also Yq móěik), which I consider interesting possibilities in light of *t > r/c elsewhere in UA. But whether the Cah forms belong or not, we can add Tepiman forms such as PYp muuli; NT muúli; ST muly; Cr muaaríh. [SUA: Tep, Trn, Cah, Opn, CrC]
- **2426.** *yu'a 'wet, (water/wet) turtle': M88-yu22; KH/M06-yu22: Ca yú'ai-l^y 'small turtle'; Sr yu'aa-ţ 'water turtle'; Cp yú'e-l 'large lizard'; Cp yú'i-š 'wet'; Ls yulú' 'lizard, sp'; Ls yú'a 'get wet'. [NUA: Tak]

NB, what of *(t)uLu 'turtle': the -turhu of LP komikturhu 'tortuga'; PYp hu'uruga / huhuruga 'mud turtle'?

TWIN(S); GEMELO(S), CUATE(S)

- 2427. *cikw / *ciko 'twin(s)': M88-ci21 'twin(s)'; KH.NUA; KH/M06-ci21: Cp číšxilyim; Ca číšxiniš, pl: číšxinčem; Sr čiiqwţ, poss: -čiiqw, pl: čiiqöm. Add Ktn cicikwin 'copy, mimic, vt'. Probably related is CN čiko 'to one side, indirectly, perversely' which is used in verbs of 'slander, curse' and otherwise maligning on the side or on the sly; CN čiko/čikwa (in compounds) also serves as 'five' (one side of a hand count)—CN čikwa-see 'six' (see 'one'); CN čikoome 'seven' (oome 'two'); CN čikweeyi 'eight' (eeyi 'three'). So twin is one of a pair and mimicking is pairing or acting as the other side or mirror image, if you will, and in a not altogether positive sense. So 'twin', 'one side of the two', 'mimic', and 'slander' seem semantically compatible. Cupan -š- may be from reduplication: *ciciko > cicko > ciški? [NUA: Tak; SUA: Azt]
- 2428. *cono'o 'twin(s)': Kw cono'o-vi-mï 'twins'; Tb čono' 'twins'. [NUA: Num, Tb]
- **2429.** *topi 'twin(s)': Hp cööviwï; Eu toví, tovíke (gen), tovík (acc) 'twin'. [*t > c] [NUA: Hp; SUA: Opn]
- **2430.** *oma 'twin': CN oome 'two'; Tr omarači / a(')mara*či 'twin'; Wr mahtací / muhté 'twin'. [SUA: Trn, Azt]
- **2431.** *wa'wa 'twin(s)': Mn wa'wahá'; TSh waawa(cci); Sh wawa; Cm wa'wa; Cr wa'apuarií 'twins'. [NUA: Num; SUA: CrC]

NB, note also *koNwa 'serpent, twin' at snake, from which Spanish cuate (< kooaa-tl) is a loan.

Twist: see circle

Two: see under numbers toward the end

Ugly: see bad

UNCLE; TIO

2432. *ta'ta 'uncle, usually mother's younger brother (myb) or father's sister's husband (fsh)': B.Tep220 *tatari 'uncle'; L.Son277 *tari 'hermano menor de la madre'; M88-ta16 'younger maternal uncle'; i.e., myb; KH.NUA; KH/M06-ta16: NP aacci 'mb'; Sh ata 'mb'; Cm ara' 'mb'; CU 'aa-ci 'fyb'; Tb toohan (cognate? Miller wisely queries); Cp táşma 'mb'; Ca tas 'mb'; Ls táá'aş 'mb'; Sr taar 'cross uncle (mb, fsh)'; Hp taaha 'mb'; TO tatal(i) 'myb'; LP tatari 'myb'; NT tatáli; ST tataaly; Wr ta'téi 'myb'; Tr ra'té 'myb'; CN tla'-tli 'uncle'; Tbr tayí 'fob' (cognate? Miller queries; I say yes). Add TSh atapu 'mb, fsh'; note the glottal stop in Wr, Tr, N, Cm, and the Takic languages. Could Wr and Tr be borrowed from CN, showing an earlier lower vowel on a fossilized absolutive suffix (*ta'-ta > ta'te)? [*-t-> r > y in Tbr?] [NUA: Num, Hp, Tak; SUA: Tep, Tbr, Trn, Azt]

2433. *kumu (< *kamu) 'uncle, usually father's older brother (fob)': Ken Hill (in KH/M06-ku30) wisely combined the duplications in M88-ka30 'uncle' and M88-ku30 'older parallel uncle'; M67-499 *kumu 'uncle'; L.Son106 *kumu 'fob'; KH.NUA; KH/M06-ku30: Ca kum 'fob'; Cp kum 'fob'; Ls kamú 'fob'; Gb kukma 'tio'; Sr kuumu' 'older parallel uncle, man's younger parallel nephew or niece'; Ktn kum / kuhm 'uncle'; Wr kumú 'tio, sobrino, sobrina (hermano mayor del padre, hijo o hija del hermano menor de un hombre)'; Tr kumú-či 'tio paterno'; My kúmuri 'tio'. [NUA: Tak; SUA: Cah, Trn]

2434. *mas 'uncle': M88-ma40 'uncle, fyb'; KH.NUA; KH/M06-ma40: Cp meš; Ca mas; Ls máş; Gb más; Sr maq. [NUA: Tak]

2435. *puyu' 'male relative': M88-pu11 'uncle'; KH/M06-pu11: Mn pu' 'mother's brother'; Sr puyu' 'male friend, cross-cousin'. [NUA: Num, Tak]

2436. *hay 'uncle, father's brother': Kw hee- 'father's younger brother'; SP ai- 'uncle (paternal / maternal), male's nephew/niece'; WMU aa-či-(n) / aáji-(n) '(my) uncle, dad's brother, n'; CU 'áa-či; Sh hai / hee 'uncle, father's brother'. [NUA: Num]

Under: see down

UNTIE, LOOSE(N); DESATAR, DESAMARRAR, SOLTAR

2437. *pu'ta/i 'become/get loose': L.Son215 *pota 'soltarse'; M88-pu8; KH/M06-pu8: Yq búta; My búttia 'desatar'; Wr po'tá; Tr botá/bo'tá; CN petlaawa 'undress, uncover' (cognate? Miller questions; see at 'open'). Add PYp voragi 'naked'; PYp voragim 'strip, vt' may belong. The first element matching *puL- in TO wul'ok 'untie' and Nv burioka 'desatar'; Nv virioka 'desatar lo atado'; Nv virioki 'cosa desatada'; ST vulyio'ka' 'desatar, vt (animate obj)' (but ST vulya' 'amarrar') likely belong as well. Is Hp wilökna 'slacken, loosen' a loan from TO wul'ok or other Tep language? Note that the glottal stop in Wr, TO, and Tr, and gemination in AYq, all four suggest at least a medial cluster, whether 'or else. A vowel sequence of u-a (Yq) could raise *u > o (*o-a, as in Tr, Wr, PYp). [*u-a > o-a; -a/i in Nv] [SUA: Tep, Trn, Cah, Azt]

2438. *yucaL 'loose(n)': B.Tep24 *dusarakai 'loose'; M88-yu18; KH/M06-yu18: TO jušaDkaŏ 'loosen'; TO jušaDk 'loose'; UP(B) jušadikai; NT dusárakai; ST dyusaarak. [SUA: Tep]

2439. *kasa 'get well, loosen': CL.Azt69 *kašaani 'get well, loosen, soften'; Dakin 1982; M88-ka25; KH/M06-ka25: CN kašaani 'loosen, slacken, lose courage'; HN kašaani' 'be soothed'; HN kašaania' 'soothe, vt'; Pl kašaania 'loosen'. Note Dakin's inclusion Cr raa-kwá'asïs-te'e 'lo afloja (cerco)' though a difference of k- vs. kw- is substantial. [SUA: Azt]

2440. *toma 'loosen, undo, take from': Sapir; CL.Azt181 *toma 'untie'; M88-to26 'untie'; KH/M06-to26: CN toma 'loose(n), undo, untie, free, unwrap, vi, vt, v.reflx'; Pl tuhtuma; SP tooŋwai 'pick up a cast-off object'. This connection of Sapir's merits consideration; the sound correspondences match, and though the semantics are not

identical, picking s.th. off the ground and picking s.th. off of s.th. else are not that different. I separate *toma and *tupa (below) for lack of other evidence of an m:p correspondence. [SUA: Azt; NUA: Num]

2441. *tuCpa 'untie, loosen': Mn toba 'unfasten, untie, free'; NP u cadubba (< *catubba) 'untie'; TSh cattïpïah 'undo, untie, open by grasping'; SP toppa / toppi / tovi 'come loose, vi; pull out, vt'; and AYq topečei 'naked, nude'. There are similar forms missing an intervocalic bilabial (see below at NB). Some evidence for a cluster exists, though WNum voiced -b(b)- instead of voiceless, brings *-mp- to mind, but SP would normally show nasalization for such. So exactly what kind of cluster, I'm not sure. [*u > ï] [SUA: Cah; NUA: Num]

2442. *kwu(C)ta / *kwuta 'untie, loose(n)': Stubbs1995-3: CN kwitlašiwi 'get loose, go weak'; Ls kurá-vi'untie'; Ls kúúra/i 'shed hair or skin, unwind a string'; Tr o'tá- 'be slack, loose'; Tr o'ta-na- 'let loose, give
freedom, pardon'; and the Cah forms Yq buta and My buttia, listed also above at *puta, could feasibly fit either
since *bwuta > buta. All segments of all these forms fit *kwuCta, since *u > CN i and *kw > Tr w (wo > o). In
fact, AYq vutta 'untie, loosen, release grip' is interesting in that *kw > bw, and *p > p, but *p > v also?
Admittedly, *pu'ta above and *kwu'ta are so similar that an early split in a UA form may have produced a couple
of variant forms, for Brambila has separate Tr forms—Tr botá 'soltarse, desatarse' and Tr o'tá 'aflojarse, perder
tension'—which fit *pu'ta above and *kwu'ta, respectively, and the CN and Ls forms could not fit *puta, though
the Cah forms could fit either. The matter is puzzling. [*kwu > Tr o] [SUA: Trn, Cah, Azt; NUA: Tak]

NB, for *huppa 'untie, come loose, let down', see at 'down'. These are the active/transitive forms *huppa 'let down, cause to go down (by untying)' vs. intransitive *(h)uppi 'go down, sink' (Ch hupá 'untie'; SP uppa 'untie'; WMU uppaa 'untie'; Kw nohopï 'unravel'; ST hupaañ 'deshilado'.

NB, some of the following (looking like *toa 'let loose, leave') likely belong with *to(h)a 'leave'; see at 'leave': Sh toya 'untie sg obj, v'; Wc tua 'soltar, entregar'; Cr raa-tátua 'lo suelta'; Kw tato'oy / tata'uwi 'take off sg obj'; Sh kwaitoa 'shed, take off'; Nv dakitoa 'soltar, dejar'. Cr, Wc, Nv often do not show intervocalic *p, so they might belong with *topa above.

UP, ABOVE, HIGH; ARRIBA, SOBRE, ALTO; also see climb and sky; for 'on', see 'at') **2443. *yama** 'up, over, above': B.Tep12 *dama 'over, above'; M88-ya14; KH/M06-ya14: TO ðaam 'above, over, on top of'; PYp daam; NT daáma; ST daam. These may well be cognate with *yama 'come up, spring forth (vegetation)' in KH/M06-ya23 at 'grow'.

[SUA: Tep]

2444. *-mo- 'up(ward)': Wr i'móla 'stairs'; Eu mówa 'arriba'; Tr mo- 'encima'; Tr -mo-ba 'encima de'; Tr nemo(nó) 'mount on'; Tr mowi 'subirsele, encimarsele', pl: himo; Wr i'mó- 'climb'; Wr mohéna- 'climb'; Wr mo'tepú- 'climb up s.th., vt'; Eu hámu 'subir'; Eu hámudau 'subida'; Kw mo'osï 'rise, vi'; perhaps Hp mó'o'-ta 'be piled high in a mounded shape'; Hp mo'ola 'pile up, make mound', though Hp V should be ö. [Hp o vs. ö, glottal, L] [NUA: Num, Hp; SUA: Trn, Opn]

2445. *ti / *tiiN 'up': Kw tii 'up'; Kw tii-kwee 'go up'; Ch(L) tih/tii 'up (loosely north also)'; SP tiiN / tiiN 'up'; WMU tii 'up, above, adv'; CU tii 'ascend, go up, v'; Wc ti- 'up'; and perhaps Tr fiwiná 'hacia arriba, cuesta arriba'. Perhaps Nv titidi 'subir'. [NUA: SNum; SUA: CrC]

NB, for *huLa 'come up (sun), look in/over', see 'see'. NB, for *tukuN-pa 'sky, up' and *tïkpa 'up' see 'sky'.

URINATE, URINE, BLADDER; ORINAR, MEAR, ORINA, VEJIGA (v 'urinate', then n 'urine')

Mn	siina; n: síípï	Hp	sisiwkï(yi) v(n)	Eu	sísa-
NP		Tb	ši'	Tbr	n: sií-r
TSh	sii"; n: siippï	Sr	șii'; șiaa'vun	Yq	síisi; sí'ika 'bladder'
		puraq	-q 'go/come out, urinate,	v'AYq	siise
Sh	sii"; n: sii-ppï	Ca	sí'; pís	My	siise; n: siisi
Cm	siitï; n: siipï'	Ls	șíi'a-; pisá-ŋa-	Wr	si'a-ní; n: si'í
Kw	si'i-; n: nazipi	Cp	kílyma; n: sí	Tr	isá/isí-; n: isí(ara)
Ch	si'í	TO	hi'a (n. & v.)	Cr	se'e; n: sí'isuri
SP	si'i	Nv	i'a/'i'a	Wc	šíi v.

		PYp	hıa'a; n: hı'ı		šíi.pári 'vejiga'
CU	sï'í; n: sï'í-pï	NT	ííštyai	CN	šiiša v.
		ST	ya'aa'; n: hi'	CN	šiš-tli n.

Miller helpfully separates the verb and noun as separate derivations of a common stem:

2446a. *si'i / *si'a 'urinate, v': Sapir; VVH67 *siu('i)/*siu('a) 'to urinate'; M88-si8; M67-447 *si' 'urinate'; I.Num188 *si'i 'urinate'; CL.Azt182 *šiiša 'urinate'; KH.NUA; KH/M06-si8; Mn; NP; TSh; Sh; Kw; SP; CU; Tb; Cp; Ca; Ls; Gb si' 'mear'; Sr; Hp; TO; Wr; Tr; My; Wc; Cr; CN. Add Nv, PYp, Eu. Vowel anticipation in PYp. 2446b. Num *si'iC-pi 'urine, n': BH.Cup *si urine; L.Son237 *sia 'orinar', *si-i 'orines'; M88-si9 'urine'; KH/M06-si9: Mn; NP; TSh; Sh; Kw; SP; CU; Cp; Ca; Ls; Gb si'iy; Sr; Hp sisikiyi; Hp sisimoki 'bladder'; TO; Wr; Tr; My; Tbr; HN maašiiš-tli'. [NUA; Num, Hp, Tb, Tak; SUA: Tep, Cah, Trn, Tbr, Opn, CrC, Azt]

NB, *pisa 'urinate' (Ls pisá-ŋa-, Ca pis): is this the same stem as *pisa 'go/come out' since identical stems mean both 'go out' and 'urinate'? It was customary to 'go out' (outside) to urinate before indoor plumbing. Or does it tie to *pisa 'penis'?

Use: see eat, finish, with

VAGINA, FEMALE GENITALIA

2447. *muc 'female genitalia': M88-mu4 'vagina'; KH/M06-mu4: TO muus; Wr muhcí; Tr mučí; and Hp mosŋya 'clitoris'. [NUA: Hp; SUA: Tep, Trn]

2448. *kwita/i 'vagina': M67-448 *kwi 'vagina'; I.Num84 *kwi vagina; M88-kwi8; KH/M06-kwi8: TSh(M67) 'ungwida 'her vagina'; TSh(I.Num) ukwita; NT bíši; perhaps Mn tekwi with a prefix. Miller includes Kw and CU, which seem to better belong below. With a 2nd V change of -a > -i, the Tep biši < *kwici < *kwita is typical. [NUA: Num; SUA: Tep]

2449. *wïkkaN (< *wï'aC-kani) 'vagina (penis-house)': Kw wïka-(m)bï 'vagina, vulva'; Ch(L) wïgïmpï 'vagina'; SP wïkïN; CU wïgï-pï; Mn kwïgï 'clitoris' may belong as well, as other instances of *w > kw in WNum, especially WNum are numerous. CU -pV (vs. -vV) suggests a final C, and Kw, Ch, and SP suggest it is a nasal. [kw/w] [NUA: SNum]

2450. *ta'i 'female genitalia': TSh ta'i 'vagin, vulva'; Sh ta'ai / ta'i. [NUA: CNum]

2451. *tipiL 'vulva': Stubbs2003-46: CN tepil-li 'vulva'; Tbr tipisí-r 'vulva, feminine gender'; for alternations between liquids and s, cf. Tbr watisám/watíram 'thirsty'. [L > s, Tbr-Azt] [SUA: Tbr, Azt]

2452. *ciŋiC / *siŋiN 'female genitalia': Ca číŋi-l^y 'vulva'; CU sigíi-pï 'vagina'; SP šïnï-mpï 'vulva'. An interesting trio that I must guess are related (whether by loan or descent). The two Num forms show a 3rd C: final gemination in CU, nasal in SP. For the 2nd C, a velar nasal may have denasalized to g in CU and develarized to n in SP, or it is a cluster that reduced in three different ways. Only two of three agree on the first C as well, but all have a general semblance for some length and with highly specific semantics. [NUA: Num, Tak]

Valley: see canyon Vegetation: see plant Venom: see poison Very: see all

VOMIT, NAUSEA; VOMITAR, BASQUEAR

2453. *piso 'vomit, v': B.Tep269 *vihotai 'to vomit'; M67-450 *pisot/pisata; M88-pi26 'to vomit'; KH/M06-kwi8: TO wihot; LP viohta; NT vióóšigai 'vomit, n'; ST viota; My bísata; Yq bísata; CN i'sootla; Pl isuuta; Tr o'pésu 'vomit, vi'; Tr ku'péso 'vomit, vi'; SP pippitta'ni 'vomit, vi'. Add Sr piiş 'vomit'; PYp viohsim 'vomit, vi'; perf: vioht-, viohot. Like SP cited by Miller, the initial pi(s)- portions of Ch pipitan'a, Kw pitahni, and TSh pitani also belong, compounded with s.th. like *-ta'ni from -ta 'verbalizing suffix' (as in SUA) and -'ni 'intensive'; thus, *piso-ta-'ni > *pista'ni > *pitta'ni; whatever the case, -s- is lost as first element in the cluster, as

is usual. Considering a triplication of the initial syllable, Ca pípivis 'vomit, v' belongs. Most languages, whose segments go that far, show o. Azt's lack of initial *p is expected. [o-a >a-a in Cah?; CN Ø < *p] [NUA: Num, Tak; SUA: Tep, Cah, Trn, Azt]

2454a. *yo'a 'vomit': M67-451; L.Son359 *yoa 'vomitar'; M88-yo10 'to vomit'; KH/M06-yo10: Hp naayö'-; Eu dóda-; Op do-doa; Wr yo'a; Tr o'yó. Probably Tb(M) wayuubat ~ 'awayuup 'vomit, v' with wa- prefix. Jane Hill (p.c.) adds Gb yoyi (Merriam).

2454b. *o'a / *o'V 'vomit': Mn o'i 'vomit, vi'; NP oa'i'hu 'vomit, v'; Cm oo'itï 'vomit, v'; Tr o'a / o'o / o'awa 'vomitar'. [NUA: Num, Hp, Tak, Tb; SUA: Trn, Opn]

2455. *hara / *haLa 'belch, vomit': Cr hára'a 'vomita'; Cr hara'iri 'vómito'; NT aráávai 'belch'. [SUA: Tep, CrC]

Wade: see cross Waist: see stomach

WAIT; ESPERAR

2456. *nïnïLa 'wait': B.Tep179 *nïnïra 'wait'; M88-nï15; KH/M06-nï15: TO neahim 'wait for, expect, look for'; TO neniDa 'wait for, vt'; LP(B) nïnr; Nv nï'ïra / nïhïra / nïnïra 'esperar'; Nv nïahimï 'te espero'; PYp neneri '(a)wait' (neena 'look'); NT nïnïra; ST nïïra / nra. Add Hp nï `itay/nïhtay-ta 'wait for'. [SUA: Tep; NUA: Hp]

2457a. *popica 'wait': M88-po6 'esperar'; KH/M06-po6: TO wo'išïg; My boobícca. Add AYq voviča 'wait for, vt'. Eu oiswe/oisiu-ce 'aguardar por mucho tiempo' may be a loan from a Tep form like TO above, and the TO item may be a dissimilation (*popica > *po'ica) or a cluster reduction. The Cahitan forms (AYq, My *popica) likely contain *pica 'look', with initial *po possibly being 'in/at' (an object), thus 'looking for him' much like Latin ex-pect 'look out' and Spanish esperar. Note also the 'look/see' morpheme in Kw pïni-kee 'watch, wait for'. [SUA: Tep, Cah]

2457b. *puwi 'wait': Wr pué 'wait for, vt'; Tr buwé 'aguardar, esperar'; Tr nipuwe sg; Tr napuwe pl. **2457c.** *puCta/i 'wait for': Sr puhča' 'watch for, wait for, take care of' and Ktn puhci' 'wait for, take care of'. [NUA:Tak; SUA: Trn]

2458. *ciya 'wait': CL.Azt183 *čia 'wait'; M88-ci13; KH/M06-ci13: CN čia; Pl čiya; Po če; Z čiya. [SUA: Azt]

WAKE (UP), AWAKE(N); DESPERTAR(SE)

2459. *pusaC (AMR) 'wake up, open eyes': VVH74 *pusa 'waken'; L.Son223 *pusu, pus-a 'abrir ojos'; M88-pu3; KH/M06-pu3 *pusaC (AMR): TO wuhan, vt; Eu busá 'awaken, vt'; Eu busú 'wake up, vi'; Wr pusa; Tr busá 'despertar a otro, vt'; Tr busi-mea 'despertarse'; Tr busire 'be aware, conscious, awake'; My bussa; CN i'sa. The glottal stop in CN i'sa appears in other initial *p-loss forms, it seems (cf. *piso 'vomit'). Overlooked, however, is Cr hïsti 'despierto', of which hïs- fits *pus perfectly. Likewise, Wc hiï.tïa 'despertar', with the loss of -s- in a cluster, belongs as well. Add Yq busa 'despertarse'; Nv vui-ta-nu/ku) 'despertar entre sueños sg/pl'. This set appears tied to *pusi 'eye'. I am impressed with AMR discerning a final -C. [glottal in CN, s > zero in cluster] [SUA: Tep, Trn, Cah, Opn, CrC, Azt]

2460. *tay 'wake': Hp tay- 'be awake, conscious'; Cm tayïcïrï 'awaken s.o. by shouting'; and Numic *tay-puni > tïppuni 'wake-look': Mn tïbuni; NP matïpunni; TSh tïpunitaippïh; Sh tïpui; Cm tïbunitï; Kw tïpïni; Ch tupúni'i; SP tupu'ni 'wake up (at once), vi'; SP tuvu'ni 'wake up, vi'; CU tavï'ni / tapï'ni 'wake up, vi'. Note that Cm furthest out maintained a form closer to TSh than did Sh. [NUA: Num, Hp]

2461. *nïC 'wake': TO nehhim 'wake up'; Nv nïnï 'despertar del sueño'; PYp neenim 'wake up'; ST ñiñia' 'despertarse'; Wc nieree / nieriiya 'despierto, visible, haber, mirar, vivo'. What of Tbr hi-nare-té 'despiertate' (Tbr nare 'aclarar el día'). This is distinct from 'see' in TO and others. [SUA: Tep, CrC]

Walk: see go

WALL; PARED, MURO

- **2462.** *-kowLi / *kori 'wall': Tr tegori 'cerca de piedra o adobe, tapia, pared' (< *tï-kori); Tr tegó-ma 'cercar, hacer cercas de piedra o adobe'; Wr isígori 'waddle and wicker wall'; Eu satékori 'pared'; Eu satékora-n 'hacer una pared'; Ca kíwniš 'wall' is interesting in that *o > Ca i and could correspond to PUA *kowli, though we would expect q instead of k, so it may or may not belong. [NUA: Tak; SUA: Opn, Trn]
- **2463.** *paya 'wall, surface': Kw paayaa 'wall, surface'; CU payá / payáa 'side, flank, slope, hillside, side of building or wall'. [NUA: SNum]
- **2464. *-pakki** 'wall' in *kwiya-paki 'earth/adobe-wall' (> Tep *bida-vaki): Nv bidobaki 'wall of adobe'; NT bidyááviki 'la pared'. [SUA: Tep]
- **2465.** *yaŋi 'fence, enclosure, roofless wall(s)': M88-ya24; KH.NUA; KH/M06-ya24: Sr yaaŋič 'enclosure with walls but no roof'; Ca yaŋi'a-t / yaŋi-š, né-yaŋi'a 'encircling fence, roofless shed as windbreak'; Ca yaŋi 'build an encircling fence, roofless shed as windbreak for people or for gathering animals'; Gb yáŋe 'windbreak'; Gb yáŋ'ar 'Los Angeles'. Add Ktn Ktn yaŋeki(-)n-i-c / yuŋ-e-kin'-ic 'brush wikiup'. [NUA: Tak]
- **2466. *iso** 'dab, make mud wall': Wr isígori 'waddle and wicker wall'; Wc 'išúma 'untar, embarrar [cover with mud]' and Wc 'išumári 'pared embarrade [mudded wall]'. The isí- portion of Wr shares two of three segments with Wc 'išúma, and Tr/Wr tend to assimilate often to i at almost any excuse. [SUA: Trn, CrC]

NB, have I not seen cognates for Hp tïyïqa? NB, for *pana 'wall, surface', see 'at' (Sh tï-pana 'rock-surface'; CN paan-tli 'row, wall'; CN te-paan-tli 'rock wall')

WANT, LIKE, LOVE, PLEASE, ENJOY; OUERER, AMAR, GUSTARLE, DISFRUTAR

2467. *naki 'want': M67-452 *naki 'want'; L.Son164 *naki 'desear'; CL.Azt184 *nïki, 284 **naki; M88-na2 'like, want'; KH/M06-na2: NP naki 'chase'; Op naki; Eu nake 'querer, amar'; Yq nák; My nákke 'amar'; My -neke 'future suffix'; Wr nahki 'querer, noviar'; Tr nakí 'querer, desear, requerir'; Cr na-'a-ráa-nahči 'it pleases me'; Wc náaki 'love, like'; CN nek(i) 'want, use, accept, engage s.o. in an enterprise'; Pl neki 'want, wish'. Add PYp naak 'want food'; NT naákyi 'like'; Hp paanaqmoki 'thirsty' and Hp paanaqa-w 'thirst, lack of water' likely contain *naka / *naki 'want, desire', i.e., water-want-(die). Might Ca -nax 'supposed to (do s.th.)' (Seiler 1977, 95) or the allomorphs Cp neqa and Ca nék-en to Cp menmáx 'will come' (neqa 'is coming'); Ca ménvax 'come' (nék-en an allormorph) tie with these, since 'run/go' and 'want' are semantically tied elsewhere in UA. SP naaġi 'seize' may belong also. Cf. also *naka 'copulate'. [k > č in Cr] [NUA: Num, Hp, Tak; SUA: Tep, Trn, Cah, Opn, CrC, Azt]

2468a. *suwaC 'want': Sapir; I.Num185 *su(h)wa'i want; M88-su14 'want'; KH/M06-su14: NP sugwai-dï 'want'; Sh suai, suani 'want, vt'; Cm suwaai 'want, desire'; My súale 'creer'; My suáya 'cuidar'. Add TSh suwa" 'want, desire, think, feel'; TSh suwan 'want to, feel like, auxiliary v'; NP sugwa'i 'like, vt'; Ch suawa-ga(i) 'want, v'; SP šuya-ŋwa 'would that ...'; CN -soaa in CN tlaso'-tla 'love' (< *tlasoaa 'value, love, affection'); Pl tasuhta 'love, esteem, vt'; Yq súa 'cuidar'; Cm suatïtï 'want, desire, need, v'; Cm su'acitï 'think about s.th., make a plan'; and perhaps Sh taccoa 'take care of a child, baby sit' with a prefix (cluster causes fricative to affricate in Sh). Add also WMU suwáy-y / suwáy-y 'be happy, feel good'; WMU suwáy-'ni 'be always happy, by nature/habit'; Kw suvi-ye'e 'be happy'; SP šuai- 'be glad'; SP so'ai-yüi 'is very good, feels very well'; CU suwáay 'be happy'. Other words (below) showing *sVwa may tie in, suggesting *sïwa; yet any vowel before w becoming a back round vowel is not unusual, which fact may also suggest *sïwa (> *suwa). Sapir ties CN seya/siya 'to consent' and SP šuya-ŋwa 'would that ...' –worth noting. Tb(H) šooyi-n 'his wife' is possible, but not probable.

2468b. *sïwa 'want': PYp heehega 'want, desire'; Nv 'ï'iga 'querer, consentir'; possible is Hp salayti 'become gratified, fulfilled, pleased by/from, joyful over good luck', but with a different vowel. All words (and some from other branches) beginning with initial *su- and meaning 'want, know, recognize, remember, think, heart' need a thorough sorting should anyone feel so inclined. For distinction between *sumaC 'breathe' and *suwaC 'want, be glad' (here), see discussion at 'breathe'. [V's] [NUA: Num; SUA: Tep, Cah, Azt]

2469a. *ya'a 'yearn after, cherish': VVH129 *ya'a 'yearn after, cherish'; M88-ya21 'yearn after, cherish'; KH/M06-ya21: TO đa'a 'be selfish, thrifty, stingy'; Tb yaa'~'aaya 'cherish'.

- **2469b.** *aya(-)w 'like, want': Ca 'áyaw 'be fond of, love (s.o./s.th.), want (to do)'; Cp áyu 'like, want'; Ch ayáwa'i 'love, respect, admire'. [NUA: Num, Tb, Tak; SUA: Tep]
- **2470.** *pi'tu / *piCtu 'want': Cp víču 'want'; Ch tïvicu 'want, ask'; NP nannitïbiciyai 'want s.th. for nothing, v'; perhaps NP picabi 'like, v'. Cp and Ch even agree in the 4th segment *picu; so u is more likely original. [NUA: Num, Tak]
- **2471.** *pisa 'like': Kw pišaawe 'like, love' (Kw pišaa 'be pretty, brave, good'); Sr piiha'n 'like, love, be fond of'; NP bisa'yu 'good, gentle, kind'; NP bisa subbida 'love between man and wife, v'; NP bisa tabïadï 'beautiful'. These are in contrast to NP pihapi 'sugar'; Kw piha-vi 'sugar'; Sr piṣaa'i' 'sweet, adj' which are at 'sweet' though Sr is opposite of Kw and NP. Do we have recycled loaning/meshing movements? [c/s] [NUA: Num, Tak]
- **2472.** *ukoL 'want': My ukule 'lo deséa, lo apetece'; Yq'ukkule 'desear'; AYq ukkule 'desire'; CN iikool-tiaa 'long for, desire'; CN iikool-li 's.th. desired'; Wc -ku 'querer'; and maybe Ca 'i'iklu 'want, be fond of', though its voweling needs explanation. Wc and CN both agree with a vowel of o following k (*ukol), and Wc lacks the initial vowel. [o/u, Ca k/q] [NUA: Tak; SUA: Cah, CrC, Azt]
- **2473.** *(sun)-taha 'pity, have compassion for'; Mn (wi)sutihai 'pity, feel sorry for'; NP titiha 'pity, vt'; NP suddihai; Sh suntahai 'feel sorry for, pity, save'; CU tiáa-ni 'pitiable'; CU tiáa 'space, area, room'. [NUA: Num]
- **2474.** *(ha'a)-sun-tu'i 'want, wish': Ch ha'ï-suntu'i 'like, v'; SP 'aššïntu'i 'like, want, v'; WMU ásütti'i / ásti'i 'want, like, love, vt; CU 'ásti'i 'want, v' or the sötö- of CU sötö-'na-y 'wish' (< * söCtö-Cna-y) could be from dialect variants. [reductions] [NUA: Num]
- **2475.** *sohiwa > Tep *ho'iga 'feel sympathy or compassion for': TO ho'ige'id 'pity, vt'; PYp ho'igad 'be sympathetic, vi'; PYp ho'igelit 'have sympathy for, vt'; PYp ho'ig 'sad'; ST hoimdak 'one having compassion'. [SUA: Tep]
- **2476.** *pawa 'like, want': Hp palki 'get a craving or urge for, vt'; Hp -valkiwta 'hungry for'; PYp vagam/pagi 'like, vt'. [NUA: Hp; SUA: Tep]
- **2477.** *kwamusa 'like, long for': Eu bamúse 'desear, apetecer'; Wr wemú 'like'; Tr ne'we / ni'wimu 'miss s.o., have nostalgia for' (with na- prefix, and -'w- is the Tr intervocalic reflex of *-kw-); My musá'ule 'like, consider appealing'. Probably not here, but where does Hp kwaŋwa- 'taste pleasant, be delicious, sweet' belong? [SUA: Trn, Cah, Opn]
- **2478.** *supi 'like, want': NP subidda 'like, v'; Eu sovíce 'desire'; Kw sïbi 'want, need'; Kw ku'u-sïbi 'want, desire, need'; perhaps Tb šuubu'šuuba 'copulate' in light of *naka/i and *pisa seeming to share 'want/like' and copulative semantics. Tep should have h < *s, but let's mention Nv saptua 'love s.o.' [NUA: Num, Tb; SUA: Opn]
- **2479.** *tinV 'want, like': Eu hiténe 'probar, gustar'; Tbr riné / liné 'want, future marker'. [SUA: Opn, Tbr]

NB, for *i'La 'want, think' (perhaps also *na-ïla), see 'think'. NB, for *mïLi 'run, want' see go.

War: see hit Warm: see hot

WART, MOLE; VERRUGA, MOLA

2480. *miCta / *miCca 'wart': Cm ku'miica 'wart'; Cm ta'ka'miica' 'wart'; Hp mïca 'wart'. There are no NUA - c- < *-c-, and a single intervocalic -t- would likely yield a liquid in Num, so I reconstruct a medial cluster involving *-t- or *-c-. [*i-a > ï-a in Hp] [NUA: Num, Hp]

2481. *upuLiwa 'wart': TO upulig 'wart'; Nv upurhiga 'verruga'. [SUA: Tep]

- 2482a. *ci'a 'mole, wart': Kw či'aa-vi 'mole, wart'; WMU či'æ-vi 'wart, mole, n'; CU čü'á-vi.
- [NUA: SNum]
- **2482b.** *(ti)-ci'wa 'a sore, wart': Wr tehciwari 'verruga, granos del cuerpo, mezquino'; Wr či'wá 'have a wound, sting, smart'; Eu tečut 'grano, enfermedad'; Tr kičíwa 'mezquino, grano en la piel'.

[SUA: Opn, Trn]

2483. *tasuku 'wart': My tésu'ukiam 'verruga'; Cr taáskïri 'verruga' (Cr ï < *u). [SUA: Cah, CrC]

WASH, BATHE, WIPE, CLEAN; LAVAR, BAÑARSE, LIMPIAR; see also sink and touch Following Sapir's listing a few forms, Miller included all initial *pa- words together in M88-pa14 'wash, bathe' (and B.Tep260 *vakuanai/a 'wash'M67-454; L.Son187 *pako lavar; KH/M06-pa14). Understandably, many 'wash' words contain *pa- 'water'. However, beyond initial *pa-, sufficient variety exists to constitute separate forms: 2484. *pa-ko 'wash': L.Son187 *pako 'lavar'; B.Tep260 *vakuanai/a 'wash'; NP pakomi 'wash, v'; TO wakon; UP wakuani; LP vakn-; PYp vakna; NT vakúánai; ST vakuana; Eu vakóra / bakóra; Eu hipákora 'wash clothes'; Tr bako / bago 'sumergirse, lavarse, bautizar'; Wr pahko-ná; Tr bisi-go- 'wash face'; Tr kora 'wash one's face'. Tr bisi-go- 'wash face' not only isolates *-ko-, but shows an interesting reflex of *pusi 'eye, face'. Note PUA *pa (> Tep *va-/-wa-) 'water' in the Tepiman languages, though the common word for water in Tep languages is not from *pa. [SUA: Tep, Opn, Trn]

2485a. *pa-ksi (<*pa-kasi) 'wash': My baksia 'be washing, vt'; My hipaksia 'be washing'; Yq hipaksia 'lavar'; AYq vaksia 'wash, vt (not clothes).

2485b. *(na-)pa-kka/i 'bathe': NP napaki'a 'bathe'; Kw na-vaka-tii (< *na-pakka-) 'bathe oneself'; SP na-vakkï 'bathe, v refl'; Mn nabakiya; Ch navákï; CU naváki; Ls páči 'wash'; CN paaka 'bathe, wash'. These may all be reductions from *pa-ksia > paki / paci. [CN p] [NUA: Num, Tak; SUA: Cah, Azt]

2486a. *ma-pa' 'rub': M88-ma36 'rub'; KH/M06-ma36; KH.NUA: Ca mávay 'rub'; Ls mávi 'scrape or gather up with the hands'; Sr mava' 'rub'. These may derive from *ma 'hand' + *pak... 'wash' above.

2486b. *ma-pak 'wash face/hands': M88-ma35 'wash one's face': KH.NUA; KH/M06-ma35: Cp máve 'wash face'; Ls muváay 'wash one's face'; Sr maava'q 'wash the face'; Hp maavaq-ta 'wash hands'. Though Ls has a differing form, perhaps 'wash face' (mu) instead of 'hands' (ma), these may relate to M88-ma36 above. [NUA: Tak, Hp]

2487. *(pa)-caka/i 'wash': Mn pacaga 'wash, vt'; Ch pa-cága 'wash'; Kw pa-zagi- 'wash, scrub, mop'; Kw zïgi 'wash'; WMU paajákkwa-ka 'got wet'; WMU paajákkwi-kye 'is still wet/damp'; CU caqXóyi (< *cakkoyi) 'get wet', but see CU also at wet. What of WMU č*öh*kkwé-y 'ash (clothes)'? [NUA: Num]

2488. *pa-şama 'wash': Cp páşmaxa 'wash (s.th. other than self, e.g. clothes)'; Ca pášam 'wash clothes (sometimes hair)'; CN šaamiaa 'wash one's face'. For *sami 'adobe' and *sami 'wet', Ca and Cp here show retroflex ş vs. s at 'wet'. Thus, we keep them separate. [NUA: Tak; SUA: Azt]

2489. *kaya/i 'wash': BH *qáyi 'wash'; M88-ka24; KH/M06-ka24: Cp qáye; Ca qáyi 'get clean, clear (of ground, body, etc.)'; Ls qáya/i 'wash hands'. This, in reduced form after being compounded with *pa-, could be the source of some of the 'wash' verbs above. [NUA: Tak]

2490a. *yupu: M88-yu24; KH.NUA; KH/M06-co6: Ca yúvušxu 'wash one's hair'; Sr yuuvu' | k 'dangle? (2001), for hair to be dangled (in water) (1994)'? Hill notes the Sr meaning is uncertain; his best hypotheses are listed in the two drafts; the context is coyote dangling his tail in the water. The two terms are likely cognate. [NUA: Tak] **2490b.** *yukwaCta/i 'wash hair': Cp yúxuče 'wash hair'; Ls yuxwáč(a) 'wash hair'. [NUA: Tak]

2491. *pa-tiki 'wash': SP parigi 'wash'; WMU pa-rügi 'wash (s.th. solid, like dishes, baby), vt'; CU na-vá-rigí 'wash oneself'. [NUA: SNum]

2492. *patupi 'bathe' (Tep): TO waččui; Nv vativi / batibi 'bañarse'; Nv vativida 'bañar a otro, vt'; PYp vatpim; NT váïtïvïi; ST vatvia; vt: vatvičdya. [Tep V anticipation] [SUA: Tep]

2493. *asa/i 'bathe, wash': M67-26 *'as; VVH139*'asi; BH.Cup *'aš; M88-'a11; KH.NUA; KH/M06-'a11 *asi: Tb 'aasit~'a'aas 'bathe, swim'; Sr 'a'ah(i); Cp áşe; Ca 'á'as; Ls 'áaş(a); Gb 'ás-; Hp aasi 'wash one's own hair'. Add Ktn 'ah-an 'bathe, vt' and Ktn 'ar 'bathe, vi'. [NUA: Tak, Tb, Hp]

2494. *up(p)a 'bathe': M67-27 *u-pa; L.Son25 *'upa; M88-'u2; KH/M06-'u2: Op uva; Eu úva/huba; Yq úba; My úbba; Wr u'upá; Tr úba; Cr -ï'ïwá; Wc -'ïïva/'ïïya. In light of the sememes 'rub' and 'wash' often sharing lexemes in language, Ktn hïpïpk 'rub s.th. between hands to soften it' should be considered. [*-p- > -w/v- in CrC] [SUA: Trn, Opn, Cah, CrC; NUA: Tak]

2495a. *pi'wa 'clean': Wr pi'wa 'get clean, vi'; Tr bi'wá / be'wá / be'wé 'clean, purify, wipe'; Eu pí(g)wa-n 'limpiar, v'; Eu pigwi 'limpio'; Eu pígwide / pivide 'limpiar a otro'; Op pivide 'cleanse' (Shaul 2007); TO -pig 'remove from, verbal suffix'.

2495b. *powa (< *pi'wa) 'clean, repay': CL Azt28; M88-po20; KH/M06-po20: CN poopoowa 'repay, make restitution'; Pl puupuuwa 'clean (people), pluck (feathers)'. Cf. CN siwaa-tl / sowa-tl 'woman'. [SUA: Trn, Opn, Tep, Azt]

2496. *kawa/i 'clean, clear': Tr kawi / gawi- 'become clean, clear, transparent (water, sky), become daylight'; Wr kawe 'good, well, fine'; Wr kaweruma 'new, young, clean, good'; Ls qawa/i 'become clear weather, escape, v'; Ls qawi-si 'clean, vt'. Might these tie to *kïwa 'good': TO keeg 'good, nice, beautiful, completely'; PYp keega 'good, beautiful'; NT, ST, Tbr? [-a vs. -i for vt vs. vi or stative] [SUA: Trn; NUA: Tak]

NB, for *kwiCtV / *kwaCto'i 'wash, wring (clothes), weave, twist', see 'weave'.

Wash, n: see canyon Wasp: see bee

WATER: AGUA

* * * * * * *	ER, AGUA				
Mn	páya; payawi 'be water	'Hp	paahï; kïïyi (in container)	Eu bat/ba	íat; baú-dóno 'fetch water'
NP	baa'a;	Tb	paa-l	Tbr	va-tá/ba-tá/wó-ta;
	pannïnïdï 'lake'		paadziiwa-t 'lake'	1	ovó-r 'mosto, grape juice'
	_	Sr	paaţ; wanut 'flowing water'	AYq	vaa'am; vaawe 'ocean'
TSh	paa(cci)		miimt 'ocean'	Yq	báa'a; báa'am 'lake'
		Ca	pá-l; -paw'a (poss'd)		báhkum 'lake'
Sh	paa		pal múumat/núkat 'ocean'	My	baá'a(m)
Cm	paa/pai; tuupï (in containe	er) Ls	páa-la	Wr	pa'wí
Kw	pa, paa-po'o,	Cp	pál; paw	Tr	ba'wi/ba'we/ba'
	po'o 'water, spring'	TO	šuuđagi; wa'ig 'get water'	Cr	hah
Ch	páa	Nv	suudagi; vaigi 'traer agua'	Wc	háa; haarée 'drink water'
SP	paa		vagi murha 'fetch water'		haa.nïiya 'fetch water'
WM	paa	PYp	varag 'liquid, soup, juice';		háa.yáari 'juice'
			suudagi 'water' (< suuda 'ful	1');	háa.raa.kúuna 'lake'
			va'igim 'get water'		vitáari 'en las aguas'
CU	páa	NT	suudági; váígïi 'fetch water'	CN	aa-tl;
	ST suuda'i/su	ıudai'; v	vaar ga'n 'juice, stew'; hiš-vaa	'wet, gree	en';
	susda 'por	nd'; vair̂	ídya/vaigiñ 'get water for s.o.';	; vai'gia' '	get water'
	varaa 'juicy	, of frui	t&greens'; ti'ngiak 'waters of	rainy seas	on'; toiñkam 'hot springs'

2497. *paC / *pa'wi 'water': Sapir; VVH123 *pa 'water'; M67-455a *pa 'water', *pa-cak 'wet'; I.Num127 *paa / *pa- (pref) 'water'; BH.Cup *pa 'drink', *pala 'water'; L.Son180 *pa; M88-pa7 'water'; B.Tep252 *vaagi 'wet'; Munro.Cup *páá-la; KH/M06-pa7: A pan-UA etymon; some of the more interesting forms are NP paa'a; My báa'a; Tr ba'wí 'agua, jugo'; Wr pa'wí; Hp paahï; Gb par; Sr paaţ; Ktn pa-c; cf. also M88-pa8 'ocean': Wr pa'wé 'mar'; My báawe 'mar'. Note TO & Tr *pa'wi or pa'iw. Though the Tepiman word for water (*sudagi < *cuyawi) is different than most of UA (*pa), note that reflexes for UA *pa are found in Tep forms of 'fetch water' (Bascom: *va'igii), 'wet', and 'wash'. Several forms suggest rounding late in the word (Kw, Ca, Cp, Tr, Wr, which Miller and Hill put in a separate set M88 and KH/M08-pa8) and many show a glottal stop (NP, Kw, PYp, Yq, My,

- Wr, Tr) in three branches, no less; and some show both glottal stop and rounding (Kw, Ca, Tr, Wr). Some languages show a glottal stop in the verb 'drink': Sr paa' 'drink' and Sr -paa' 'water (poss'd)'; Gb pa'; Ls paa'i 'drink'. Others show w in the possessed forms of 'water': Ca -paw'a; Cp -paw; Ls -paaw; and two with -n: Gb -panen (par) 'water'; Tb -paan (paal) 'water'. Some Uto-Aztecanists consider TrC -wV a separate morpheme, perhaps *-wï 'big'. [*p > ø in CN] [NUA: Num, Hp, Tb, Tak; SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]
- **2498.** *cuyawi 'water': B.Tep207 *suudagi 'water'; M88-cu16; KH/M06-cu16: TO; LP; PYp; NT; ST. The origin of Tep *sudagi has to do with 'fill, full': note PYp suuda 'full' and PYp suudagi 'water'; TO šuuđagi 'water, liquid, pond'; TO šuuđađ 'fill up'; TO šuuđags 'be filled'; TO šuuđ 'be full of liquid'; TO šuuđ-k 'full'. See more at 'full'. Might part of Tb pacu'aa-t 'pond' be cognate with Tep *cuya ...? [SUA: Tep; NUA: Tb?]
- **2499.** *mima 'ocean'; M88-mi10 'ocean'; Munro.Cup84 *məəma-t 'ocean': KH.NUA; KH/M06-mi10: Cp méme-t 'ocean'; Cp mémŋaxwi-š 'white man'; Ca móoma-t / múuma-t 'ocean' (Ls loan?); Ls móóma-t 'sea, ocean'; Gb mómot 'mar, lake'; Sr mim-t 'ocean, lake'; Ktn mimit 'lake, sea'; perhaps Cr mwaíhete 'mar'. What of the mVm- portion of a couple of 'wave' words: Cp memtú'iš 'wave' and CN(RJC) amimil-li 'wave'? [Gb V] [NUA: Tak; SUA: CrC?]
- **2500.** *pa'iwi 'carry/fetch water': B.Tep266 *va'igïi 'fetch water'; M88-pa12 'carry water'; KH/M06-pa12: Cp pái/páwi; Ca páw; Wr pa'i; Tr ba'wirú 'haber agua, hacerse aguado, disolverse, traer agua'; TO wa'ig 'get liquid (usually water)'; Nv vaigi 'traer agua'; PYp va'igim 'get water'; NT váíguii 'fetch water'; ST vaigia 'get water'; ST vaigia 'get water for s.o.' [NUA: Tak; SUA: Tep, Trn]
- **2501.** *paN... 'water baby, supernatural creature living in water': M88-pa58 'water baby'; KH.NUA; KH/M06-pa58: Sr paaŋät; Cp páwe-t; Ls páa-ŋawi-š; Ca páŋa-t 'reed'. [NUA: Tak]
- **2502.** *pa-waki 'destroy by water, lit: water-dry': Jane Hill (2001) notes this interesting pair of compounded cognates: CN aa-waaki 'flooded'; Hp paa-laki 'die of over watering'. The pair suggests *waki may have meant 'shrivel, waste away' as in thin more than dry, for 'water-shrivel/wasted' explains the compound better than 'water-dry'! [NUA: Hp; SUA: Azt]
- NB, could Cm tuupï 'water (in container)'; Kw tupi 'leak, v'; and Tbr tovo-r 'must, grape juice' be related? NB, for Hp kïiyi, see melt.
- NB, Ktn oka-č 'sand, sandy area' and Ktn 'a-'oka' 'orroyo, canyon' are suspiciously similar to Hokan water terms resembling *oka.

WAVE (OF WATER); OLA, ONDA, ONDEAR

2503. *tonika 'wave (of water)': TO toonk 'wave, n'; Nv mutotonikada 'hacer olas el agua'; Nv totonikada murha 'correr el río hacienda ondas'. [SUA: Tep]

2504. *kam 'water to rise, make wave': Eu káme 'encharcarse el agua, v'; Yq bahekam 'ola(s)'. [SUA: Opn, Cah]

WEAK: DÉBIL

2505. *kwï'Lawi / *kwïCtawi 'weak': CN kwetlawi 'weaken, wither, crumple'; Tr we'ro / wi'ro- 'estar débil, desforzado, desmazalado'. [SUA: Trn, Azt]

Wear: see in(side)/enter and clothes

WEASEL

2506. *sïsïka 'weasel': Fowler83 *sïsïka 'weasel': TSh sïsïka 'yïsïka 'weasel'; Kw sïsïga 'weasel'; Mn. [NUA: Num]

WEAVE, BRAID, SEW, SPIN; see also blanket, tie, cloth(ing), rope TEJER, TRENZAR, ENTRELAZAR, COCER, REMENDAR, HILAR

- **2507a.** *kwiCta 'braid, wind around': M67-57 *kwi 'braid'; M88-kwi4 'braid'; KH/M06-kwi4: Mn kwïtta-t 'wrap, twine, wind around'; Hp kwite 'braid'; Pl tahkwil 'braid'; Ca kwíče'an 'wring, wash (as clothes)' (Wanikik dialect); Cp kwíča 'wring out, squeeze, ball up, vt'; Ls kwííči 'wring (as clothes)'; Sr kwicq 'wash, vi'. Add Ktn kwirav 'braid'. What of Wr witá- 'make rope, weave' at rope? [NUA: Num, Hp, Tak; SUA: Azt]
- **2507b.** *kwiNtu 'wring, squeeze, wash (clothes)': Sh kwincunah / kwincuniih 'twist sg/pl obj'; Sh kwitunii 'to wring out s.th.'; Sh kwitupih / kwitupiih 'wrap string or rope around sg/pl obj'; CU kwin'way 'lie crooked, lie twisted'. [NUA: Num]
- **2507c.** *kwisiC 'weave, twine, v': M88-kwi4 'braid': NP kwisi 'weave, v'; Sh kwisi" 'to twine, embroider'; Cm kwisi 'braid'. [NUA: Num]
- **2507d.** *kwaCto'i 'wash, wring (clothes)': Sh kwaicoi/koicoi 'wash'; Cm -koce-rï/tï 'wash'. Sh has separate forms in b, c, and d; thus, sorting remains. [NUA: Num]
- **2508.** *coma 'sew': VVH37 *coma 'sew'; B.Tep201 *sooma 'to sew' and *soo 'he sewed'; CL.Azt142 *coma; M88-co15 'sew'; KH/M06-co15: Miller lists initial *co forms that might best be divided into *coma vs. (a)cola (below): TO šoom; Nv soma; PYp sooma; NT soomá; ST sooma; CN com(a) 'sew s.th.'; Pl cuma 'sew'; NP comipi 'bead'. To these we can add Yq čomásoi'itíria 'el telar, n'. [SUA: Tep, Cah, Azt; NUA: Num]
- 2509. *(a)coLCa 'sew': Mn acuna-t 'sew up'; NP acona 'sew'; Tb(M) colhat ~'oocool 'sew'. [NUA: Num, Tb]
- **2510.** ***uLa** 'sew': BH.Cup *'ula 'sew'; M88-'u4; KH/M06-'u4: Ls 'ulá'na 'do dressmaking, make clothes'; Ls ulá'-qi 'sew (single article)'; Ca 'úlan 'sew, vt'; Cp 'uláán / 'ú'lan; Miller's inclusion of Eu vúra-n fits better with *puLa 'tie'. [NUA: Tak]
- **2511.** *su 'sew': Wr su'ka 'sew'; Tr su 'sew' prs: su/sugú; Tr i'su 'sew (frequentive/emphatic of su-)'. [SUA: Trn]
- **2512.** *si'aLa/i 'braid': Ca si'al 'braid'; Cp si'ale 'braid'; Ls şiyála/i 'be braided, braid'. [NUA: Tak]
- **2513.** *tuL 'weave': Ls tuli'i 'weave net'; CN tilaawa 'close-woven'. [CN i < *u] [NUA: Tak; SUA: Azt]
- **2514.** *siCtoko 'braid': TSh sittoko'e 'braid'; Kw šidogo'o 'braid'; Sh(C) tasittokoi" 'braid'; Sh(C) tasinku-naih 'braid'. CU sugway 'braid one's own hair' and Sh tasinku- both reduced the -Cto- syllable out. [cluster] [NUA: Num]
- **2515.** *mo'(t)ï 'braid, weave': Tr mo'e 'entretejer, entrelezar'; Tr mo'te 'trenzar el pelo, hacer trenzas'; Wr mo'e 'tejer canasta'; Ls móči 'weave twined baskets or mats'. [NUA: Tak; SUA: Trn]
- 2516. *ti 'sew': KH/M06-ti57: Hp tii'iha; Tr(H) te 'tejer'; Tr(H) téra 'telar'. [NUA: Hp; SUA: Trn]
- **2517.** *ŋaLa / *ŋatCi / *ŋataC 'weave, fasten, tie': Ls ŋára/i 'be fastened, vi; fasten, as in lacing shoes or tying a horse, vt'; Ls(E) ŋáára/i 'be fastened, woven, crocheted, take hold (a root)'; Hp ŋat'a 'tumpline, headstrap or shoulder strap for carrying a burden on the back' (combining form ŋata'); perhaps Sr ŋur-kin 'lasso, rope, vt' except Sr vowel is unexpected. Ls(E) ŋáaroyta 'spider web (archaic word)' as s.th. woven likely ties in as well. Consider Cp ŋáyl^ya 'spin, twirl, vi' also. [NUA: Tak, Hp]
- NB, for *naLim 'lasso, entangle' with different Ls and Cp forms, see at 'tie'
- NB, regarding CN tlašoneepal-li 'braid, plait', note Yuman words approximating *sonap (Wares 51).
- NB, Kw ca-pugwi'i 'sew, mend' and Ch ca-pika'a 'sew' both show the *caC- prefix and the consonants p-k-' with different vowelings, but are worth listing for future potential considerations.
- NB, for *cupa / *copa 'weave, braid' see at 'finish' (weaving).

Web: see net and spider

West: UA terms for west are usually recent compounds like sun-set, downhill, etc. See at 'sun' and 'set'.

WET, MOIST(-URE/-EN); MOJARSE, MOJADO

Mn payaġa; patata'i Hp mowa-ti; mowa-; Eu samé-

			halasami 'moist soil'	Tbr	tovó-r 'mosto, jugo de uva'
NP	paada'yu; samipï;	Tb	halai'-		
	pazoko-ga'yu 'damp'	Sr	miişk; paaţu'; päävk	Yq	kómonia; bá'ari
TSh	paco'in(tïn)			AYq	komona; va'ari
Sh	paa-kwicci/kwiccï	Ca	pál-(n)ek; pávas	My	kómonila
Cm	pa'isoketï; paco'itï	Ls	páa-muwi-š	Wr	sami-ná; sampá-ni;
					sampáre-na; waló-na
Kw	huuva-gi-; pa-soozi-	Ср	yú'iš	Tr	sami-mea; vt: samibáti-;
		-			mi*-mea
Ch		TO	waDag; wa'u	Cr	pe'estí; vt: ra-táru'une;
					wáhaata 'as rain wet road'
SP	pa-cahkwi; pa-cahkwaa	Nv	si-varhaga; vaduhu	Wc	haa.víi(ya) 'mojar';
	pannoxqwai;		vt: vaktu		hapïca 'rociar';
	pacahkï-nwa- 'water,vt'	PYp	vadim 'get wet'		haatúiya 'regar';
	1	1	varag; ti'aga 'humid'		haatúa 'regarlo'
WM			buugi 'moisture'		vitáari 'en las aguas'
*****			vaaga 'moisten, water,	vť'	Traditi VII Ius uguus
CU	pacáaqXoy	NT	vaági	CN	paltiy
CO	pacaaq210y	ST	vaa'; vt: vakčia;	CIV	kwečaawa 'moist, damp'
			· · · · · · · · · · · · · · · · · · ·	cook de	
		cuvaa;	vannia; kipiča; kapaiña '	soak, ur	EIICII

2518. *pawa/i 'wet': B.Tep252 *vaagi 'wet'; NT vaági; ST vaa'. Add PYp vaaga 'moisten, water, vt'. Note UA *pa 'water' in Tepiman, and note the active/transitive sense of final –a in PYp. [SUA: Tep]

2519. *cakkway 'wet': I.Num255 *cank(w) 'wet, soaked'; M88-ca8 'be soaked'; KH/M06-ca8: SP pa-čakkwi / čakkwa 'be/get wet'; Hp cèekwe(-k) 'dripping wet, soaked, drenched'; CU pacáaqXoy (< *pacakkoy) 'get wet'; CU pacokkway 'get soaked, drenched'; Sh cïnki 'be soaked'; NP paca-ggwïnï 'soak'; even if -tas- > -c- for NP patasawa-kïtti 'absorb, soak' were the case, the former and following NP forms seem more likely. Add NP pazoko-ga'yu 'damp'; Cm paco'itï 'damp, wet'. Cf. *cikwa 'rain' at rain for Hp cekwekwe-ta 'rain big drops'. [NUA: Hp e] [NUA: Num, Hp]

2520a. *papasi 'wet': M88-pa60; KH.NUA; KH/M06-pa60: Cp paváṣi-š 'damp'; Ca pávas 'get wet from rain, dew'; Ca pávas-iš 'that which is wet, damp'; Ls páavuş 'bec. dewy'; Gb pavár 'mojado'; Sr päävk 'bec. wet'. **2520b.** *papusi 'wet': Wc hapïsa 'rociar' corresponds well with Ls páavuş 'become dewy', both showing u vs. a for the 2nd vowel. [NUA: Tak; SUA: CrC]

2521. *sami / *sami C 'be wet, numb(ing), drizzly': L.Son231 *sami 'mojarse'; KH.NUA; M88-sa18; KH/M06-sa18: NP samipi (< *samippi) 'wet'; Sr şamimi'n(a) 'be drizzling'; Sr şamim-q 'become numb, vi'; Cp sáme 'be dewy'; Ca sámam 'be seized with a chill, become numb, drizzle'; Wr sami 'be wet'; Tr samí-mea 'be wet'. Ken Hill's addition (to M88) of Hp sámakna 'speak or sing out with a hoarse voice' is good. Add Op sahm and Eu samí 'mojado, verde'. Noteworthy among these is the lack of compounding with the morpheme *pa- 'water'; that means *sami really does mean 'wet' all by itself, without help from water. Consider also Hp halasami 'moist soil'. Could these relate to SUA *sami 'adobe or mud brick'? [NUA: Num, Hp, Tak; SUA: Trn, Opn]

2522. *haLa 'moist': Hp halasami 'moist soil'; Tb halai'- 'wet'. [NUA: Hp, Tb]

2523. *muwa/i 'wet': Hp mowa-ti 'be wet, moist'; Ls páá-muwi-š 'wet'. Could Sr miiş-q 'get wet' be a loan from Cupan? Not counted, only listed for consideration. [NUA: Hp, Tak]

2524. *komona 'wet': Yq komona 'mojarse'; Yq komonia 'mojar'; Yq komonla 'húmedo, mojado'; My kómonia 'mojar'; AYq komona 'get wet, vi'; AYq komonia 'moisten, vt'; AYq komonla 'wet, adj'. [SUA: Cah]

NB, for *yu'a 'wet, water turtle', see turtle.

NB, for paLawa 'juice, soup, wet' see soup.

T, HOW; QUE, COMO)	(rel pron = relative pronoun); see also thing			
hééti; himáá; híípï;	Hp	hin; hinta; hihta'a	Eu	hat; hit	
hani'í-tu 'what kind?'	Tb	haainda '¬hing'	Tbr	ha-te-p; ha-te-k	
		maal 'which one'; matwan 'what '	kind'	-	
haka; hii/hinna (obj)	Sr	hiit	Yq	háisa; híta; AYq hitaa	
hiin; hina"; hakai	Ca	híče'a; míŋki 'what kind?'	My	hita; hítasa	
hina/hini	Ls	híi-ča	Wr	ihtá	
ha-ga; hi-ni	Cp	híš; mí'i 'which'	Tr	číri; čú; píri; tabíri	
-	_	míkŋawaš 'what time is it?'		'which (rel pron)': ki, ma	
himpï; hanía '&how'	TO	hab (pron)	Cr	ti'itané	
ania	Nv	satvururh; asiburh;	Wc	mï'áne; ke; tíitai	
		satudi; kos'hasi		tíšáïtï 'thing, s.th.'	
pu, pï(ra), ipï	PYp	heg tu'u;			
	•	ha'atu '&thing'; tu'u 'thing'			
	NT	tumááši;	CN	tle'	
		maá 'how? in what way?';			
		•			
	ST	1 (1)	w man	y';	
		rel pron: dyi; na tu	•	•	
	hééti; himáá; híípï; hani'í-tu 'what kind?' haka; hii/hinna (obj) hiin; hina"; hakai hina/hini ha-ga; hi-ni himpï; hanía '&how' ania	hani'í-tu 'what kind?' haka; hii/hinna (obj) hiin; hina"; hakai hina/hini ha-ga; hi-ni Cp himpï; hanía '&how' nu, pï(ra), ipï PYp NT	hééti; himáá; híípï; hani'í-tu 'what kind?' haainda '¬hing' maal 'which one'; matwan 'what haka; hii/hinna (obj) hiin; hina"; hakai hina/hini ha-ga; hi-ni himpï; hanía '&how' nia Tb haainda '¬hing' maal 'which one'; matwan 'what haka; hii/hinna (obj) hiit hiit hiit hiit hii-ča Ca híče'a; míŋki 'what kind?' míkŋawaš 'what time is it?' himpï; hanía '&how' TO hab (pron) Nv satvururh; asiburh; satudi; kos'hasi pu, pï(ra), ipï PYp heg tu'u; ha'atu '&thing'; tu'u 'thing' NT tumááši; maá 'how? in what way?'; maákïrï 'el que (rel.pron.)' ST tu', haš, natu', na haš; hi'k 'ho	hééti; himáá; híípï; hani'í-tu 'what kind?' Tb haainda '¬hing' Tbr maal 'which one'; matwan 'what kind' haka; hii/hinna (obj) hiin; hina"; hakai hia-ga; hi-ni ha-ga; hi-ni Cp híš; mí'i 'which' mikŋawaš 'what time is it?' himpï; hanía '&how' TO hab (pron) Cr ania Nv satvururh; asiburh; satudi; kos'hasi pu, pï(ra), ipï PYp heg tu'u; ha'atu '&thing'; tu'u 'thing' NT tumááši; CN maá 'how? in what way?'; maákïrï 'el que (rel.pron.)' ST tu', haš, natu', na haš; hï'k 'how many	

2525. *han-ta / *hiCta / *hin-ta 'what, something': I.Num39 *hii 'what, who'; CL.Azt188 *tla- 'what' < 287 **hita; M88-in2; Munro.Cup136 *híí-ča 'what, something'; KH/M06-in2; KH/M06-ta50 *tahV (after AMR): Mn himaa 'what' (of people, things, living and non-living)'; Mn heeti(sa') 'what' (on non-material objects, like ideas, words)'; Mn hani'í-tu 'what kind?'; NP hii 'what'; Sh hiin, acc. hina; WSh hiin, acc. hinni 'what, s.th.'; Cm hina/hini; Kw hini; SP inni- 'who? what?'; SP annia 'what? (obj)'; CU iniisappa 'whoever'; CU ippïsappa 'whatever'; Hp himï, acc. hìita 'what'; Sr hiit, acc. hiiti; Ls híiča, acc. híš, 'what?'; Ls hík 'how much?'; Ls híínay 'why?'; Cp hiš 'what, s.th.'; Cp -híkus- 'what?'; Ca híč'a / híče'a / híčaxa; Eu hat/hit, gen. híte, acc. hitá; Tbr hatep-, haték-; Sr hiit; Ktn hit; Yq híta; My híta; CN tle 'what'; Wr ihtá. The unusual Ca forms, as Munro states, may be derivatives of accusatives or other inflected forms. I reconstruct a cluster *haNta / *hiCta, for the following reasons: (1) the fact that we see Cupan *hiča instead of *hila suggests that the t is clustered with another C, because a lone intervocalic *-t- > -l- in Cupan; (2) we see the actual cluster *-nt- in some forms (Tb, Hp); (3) the tendency of V > i before alveolar consonants is strong enough in UA, that a cluster of two such alveolar consonants may explain the first vowel i in most forms, though a appears in one Mn and SP form, and in Tb, Tbr, and Eu. Hp hinta and Tb haainda are instructive, if *a > i before the alveolar cluster; and if the cluster -nt- reduced variably to either n or t for various languages, then s.th. near *hanta may be the underlying form. [cluster; V assim] [NUA: Num. Tak, Tb, Hp; SUA: Trn. Opn. Tbr. Cah, Azt]

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2526a. *tu('u): Mn -tu; PYp tu'u 'thing'; ST tu'; NT. [SUA: Tep; NUA: Num] 2526b. *ha'i-tu'u / *ha'a-tu'u 'what, thing': Nv haitu 'cosa'; PYp ha'atu 'what, thing'. [SUA: Tep]
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2527. *ma 'what, which': Sapir: Tb(V) maal 'which one?'; Tb(M) maa'al 'which one?'; Tb(V) matwan 'what kind?'; Tb(M) ma'/mah 'where?'; Tr ma 'rel pron'; Tr mapu 'what, rel pron'; NT maá 'how? in what way?'; NT maákïrï 'el que (rel pron)'; Hp himï 'what'; Mn himáa 'what'; SP ma-/maa- 'thing, clothing, brush, plant'. [NUA: Num, Tb; SUA: Tep, Trn]

2528. *ha- 'interrogative particle' (Langacker 1977, 49): Langacker notes PUA *ha, a question marker widespread throughout UA (Langacker 1977, 49):

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Eu ha(i)- interrogative particle (Shaul 1991, 94); ha-/he- 'interrogative marker' (Lionnet 1986, 45);

Hp -haa 'interjection: 1. 'Yes? What? When asking for a repeat, at not understanding';

2. 'tag question suffix—isn't it so?—requiring a yes or no answer';

TO ha 'what?' used to ask for a repeat of something spoken';

NP -ha (bound form after first constituent of sentence),

ha'a (free form) 'interrogative particle for yes-no questions';

TSh -ha 'interrogative for yes/no questions, 2<sup>nd</sup> element in sentence' (Dayley 1989, 45);
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Sh ha 'enclitic particle used to make yes-no questions and indefinite sentences, usually

placed after the first word of the sentence (Miller 1996b, 699);

Cm -ha 'interrogative particle after first constituent of sentence' (Charney 1993, 209);

Kw ha:

WMU -a / -aa' 'interrogative suffix, usually after the first sentence element'

cu -aa 'question marker after first word of a sentence' (Givon 1980, 241-2);

ST -a 'interrogative clitic for yes-no questions when speaker seeks confirmation (Willett 1991, 142).

In the following Tak languages (Ca, Sr, Cp), the use of *ha* as both an interrogative in Ca and to mean 'or' is interesting. If a question shaped like 'whether [this] or [that] prefixes ha- to both parts, and if the first ha- were lost, then the middle ha- would certainly act like it means 'or' as in Ca and Sr:

Ca haa/ha' 1. 'or' 2. an interrogative: it adds indirect character;

Sr ha 'or';

Cp ha 'probably' but the examples are questions.

Tbr ha Lionnet considers this an interrogative element as most Tbr wh-interrogatives begin with ha(Lionnet 1978, 40); likewise, many UA languages have a number of wh-interrogatives beginning with ha[Note TO h < *h] [NUA: Num, Hp, Tak; SUA: Tep, Opn, Tbr]

2529. *kim 'how': CL.Azt86 *keem 'how'; M88-in4; KH/M03-in4: CN keen, keenin, keme' 'how'; Pl keen; HN keenihki. [SUA: Azt]

2530a. *mi 'wh-base': BH.Cup *mi 'when'; eliminate M88-mu22, as it is a subset of the same forms in M88-in6; KH/M03-in6 'wh-/qu- formative interrogative or indefinite': Cp mi- 'wh-base for postpositional locatives' e.g., Cp mipa 'when?'; Ca mipa 'when?'; Ca mi' = mi'vi, pl. mivim 'which'; Ls mičá' 'where?'; Ls mičát 'which?'; Ls miíkiŋa 'sometimes, when?'; Gb meyí' 'what?'; meyíha' 'how?'. To these we might add Wc mi'áne 'who, what'; Sr hami' 'someone, anyone, who'. [NUA: Tak; SUA: CrC]

2530b. *min 'what kind, how': Ca míŋki 'what kind'; Sr hamiin 'how, anything, what'; Ktn haminat(a) 'what, why, how, how are you'. [NUA: Tak]

2531. *ki 'interrogative': Tr ki 'particle involved in many interrogatives'; Wc ke 'como, lo que'; Ca míŋki 'what kind?'; NT máákïrï 'el que (relative pron)'; -kV syllables are found in UA words for 'when' as well. [SUA: Trn, CrC, Tep; NUA: Tak]

2532. *ina 'introduces yes-no questions, emphatic, topicalizer': TO n-/na- 'introduces yes/no questions'; Tb an- 'interrogative particle' (Voegelin 1935, 137, 177); CN in- 'the, as for, with reference to' is probably a merging of early morphemes—one 'the' and another 'as for, with reference to'. ST na 'subordinator' (Willett 1991, 233-248) may be another merger of two previous morphemes in ST (or greatly expanded its uses) and may be partially cognate with TO na-. [SUA: Tep, Azt; NUA: Tb]

2533. *ma-(ma)-ntV 'some of': Ch manti' 'part of, some of'; CU ma-má-ta 'some of it'. [NUA: SNum]

WHEN; CUANDO interrogative or relative pronoun (rel pron)

Mn	hinó'o; -s(i) (rel pron)	Нр	hisat; ason	Eu	hekó; héko (rel pron)
NP		Tb	aš, š, -kša (same subj), -ŋ	Tbr	ha-k-e-ró(p(e))
TSh	himpe; -ku (rel pron)	Sr	haiipa'n	AYq	hakwo; intok(o)
Sh	himpai;	Ca		My	hawéeyo; hawéesu
Cm	hipe'	Ls	míiki-ŋa	Wr	
Kw	ha-na-'oko	Cp	mípa; kwáando	Tr	či kabú; ekó; (e)kabú;
			číŋa '&then'		ma ï, ï arí
Ch	hanóko	TO	hekiđ	Cr	ha'anáhané
SP	hanohko	Nv	ikido	Wc	keepáu-ku/kwa/ka
WM		PYp	hekid; ket(ke); naav '&if'		
CU		NT		CN	iik &by/with;
		ST	no '&if'; paa duk; na paidyuk '	rel.adv'	
			hano 'the time/day when'		

2534. *ha-na-'oko 'when': If we may follow the morpheme breaks suggested for Kw ha-na-'oko, they may work for Ch hanóko, SP hanohko, Mn hinó'o, and perhaps Cr ha'anáhané, as well. What of AYq intok(o)? [NUA: SNum]

2535. *hinipa > himpai 'when': Along with TSh, Sh, and Cm, note that Ktn hinipa' 'when?' once again preserves separate consonants that are clustered by vowel sycope in other languages followed by assimilation. Consider also Sr haiipa'n, though. Note that we may also be dealing with s.th. similar to *hiN- / haN- in various interrogatives. [NUA: CNum, Tak]

2536a. *hiko 'when': Eu heko, Tr ekó; CN iik (< *iiko) 'when, by, with'. [SUA: Opn, Trn, Azt]

2536b. *hikiyo 'when': TO; Nv; PYp. [SUA: Tep]

2536c. *hak(w)ïro 'when': Tbr hakeró-(pe) 'cuando?'; My hawéeyo 'cuando?' What of AYq hakwo 'cuando'? Might Tep *hikiyo and Tbr kahero be related, and possibly exemplifying r > y?

2537. *kapaw 'when': Tr či kabú; ekó; (e)kabú; Wc keepáu-ku/kwa/ka. [SUA: Trn, CrC]

NB, for CrC *ti'ita, see thing.

NB, for BH.Cup *mi 'when', see above at 'what'.

WHERE, PLACE; (A)DONDE, LUGAR

Mn	háno 'where at'	Ĥр	haqam E	u hakú; re	l pron, verb: kawa (pret);
	háútï 'where to'	Tb	maa; maa'ayn 'where from'		dawa (prs), cídawa (ftr)
NP			'amay 'some place'	Tbr	ha-kám/há-kom;
					kahá/ka-m
TSh	haka-pan/pa'an/ttuh	Sr	haiip; haiipio' 'from where'	Yq	hákuni
			haiinkwa' 'to where'	AYq	haku'u; haksa; hakunsa;
		Ca	míva'	hakuni 'w	. to'; haku'uvo 'w. from'
Sh	hakka	Ls	mičá'	My	hákuni; háku'u
Cm	hakapu; hakï(se')	Cp	mivíyka 'where to'	Wr	ahká
Kw	ha-ga-(nu);	_	miví'aw 'where at'	Tr	kámi/kúmi; himi;
	ha-ga-ruwa/tïa/ge'e	TO	hebai		kabé; kábu; ko; kobé;
			heba'ijed 'from where'		ma ï pron. ï goná
Ch	hagá-va 'loc'	Nv	ba; ubai; kami; karhami;	Cr	ha'uné
	motion: hagá-rua/vaant	ua	parhami; aikami		
SP	ai-	PYp	hebi/ebegi/ibigi	Wc	hake 'donde'
		NT	vááko(ga)		hakée-va/pai 'adonde'
WMU	háva, aġá-va, háp <u>ü</u> 'kw	ai	túídïïrï 'en que parte?'		-tïré 'lugar de'
CU		ST	paa; pai; na pai 'rel pron'	CN	kaan
			kan 'where (one had been be	fore)'	
			kap 'place'; pahak '¿a donde	,	

Among the following should not be excluded an encompassing possibility of an original near *ha-kami: **2538a.** *ha-kam 'where': CL.Azt189 *kaa(n) 'where'; M88-in3; KH/M03-in3: Cm hakï; Tbr hakám, hákom;

Wc hakéépai; CN kaan. Because Azt tended to change final -m to -n, the forms showing -kam (Tbr) are probably original. Thus, to these we can add Hp haqam; Nv kami; Tr kámi/kúmi

2538b. *ha-ka Numic, and Wr ahká. (Sapir)

2538c. *kami Tepiman and Tr.

2538d. *kan CN kaan, ST kan; final m > n is known for both CN and ST. At 'who' is overlap in *haka for Num and maybe others. [NUA: Num; SUA: Tep, Trn, Azt]

2538e. *ha-kuni Eu, My, Cr ha'uné (k > '). [SUA: Opn, Cah, CrC]

2539a. *haypa / *haypi 'where': Sr haiip, haiipio' 'from where' (note Sr haiipa'n 'when'); Ktn haypea; **2539b.** *Cíkwa: PYp hebi / ebegi / ibigi; TO hebai. Not likely the same as Tak above. [SUA: Tep]

WHIP; AZOTAR, FUSTIGAR, CHICOTEAR, AZOTE, LÁTIGO, FUSTA

2540. *wïpa / *wïppaC 'whip': Sapir; VVH17 *wïspa 'to whip'; M67-456 *wep 'whip'; I.Num283 *wïh- instr. pref. 'whip'; B.Tep50 *gïvai 'to whip'; M88-wï5 'to hit'; KH.NUA; KH/M06-wï5: Mn wï 'with whipping motion, with sideways motion of long object'; NP wïpagita (< *wïppakitta) 'spank'; Sh wï" 'with a long instrument or the body'; Kw wï- 'with an instrument'; SP wï"- 'with the length of a long obj'; Tb wïbat 'to hit, whip'; Tb wïbišt 'a whip'; Cp wéwva 'hit with a stick'; Hp wïvaa-ta 'be hitting, striking'; Hp wïvaapi 'a whip'; TO gew(i) 'strike, hit, v'; TO gewitta 'whip, n'; Nv gïbï 'azotar'; PYp geevi 'whip, hit, beat'; NT gïvai; ST gïv; Wr wehpa-ni/wehpi-ma 'hit'; Tr wepá, wipi-mea 'azotar'; Pl witeki 'punish, whip, beat, hit'. Miller queries whether My bébba 'pegar' is cognate; while the consonant harmony allows it, I put it with *pïpa (< *tïpa) 'throw, hit'. Tbr wewá/wiwá 'whip' is related to *wïpa 'whip' by consonant harmony the other way, as would be Eu véwa 'azotar' and Eu hivévira 'whip, n'. Note also Mn wïpacugi 'switch, whip'; TSh wïppai 'spank, whip, pound, hit with long instr, vt pl'; Tr newe(ba) 'azotar, flagelar, chicotear'; and perhaps *w > kw in Kw kwipa 'whip, hit, beat, vt, fall down, vi' and Ch kwipá 'whip, hit, fall'; Cm (tĭ)kwibukitī 'lash (as rain/hail), switch, whip'. Sapir also lists Cr ve 'schlagen, werfen, schiessen, treffen'. KH.NUA offers Sr wïīv 'dodge' and Sr wïqööv, distr: wühkuv 'beat, vt' for consideration with Cp wéwva 'hit with a stick' and the above. [NUA: Num, Hp, Tb, Tak; SUA: Tep, Trn, Opn, Tbr, CrC, Azt]

NB, for *sakwo 'whip, bewitch' see 'bewitch'.

Whisper: see say

WHISTLE; CHIFLAR

2541a. *pikuya 'whistle': M67-457b *piku 'whistle'; M88-pi14; KH/M06-pi14: Yq bikué 'chiflar'; Yq bikué 'chiflar'; My bikué 'está chiflando'; PYp vikdia; NT vikúúdai; Eu bíkudawa 'chiflar' (prêt: bíkudahri). [SUA: Tep, Cah, Opn]

2541b. *wikuya 'whistle': M67-457a *wiku; KH.NUA; M88-wi4; KH/M06-wi14:TO gikuj; NT gikúúdai; ST gikudyi / gikdyi; Nv gikuda 'chiflar'; Wr wikóa; Tr wikuwa; Cr víkï'e 'he is whistling'; Wc viikïari 'silbido'; Sr wiikwi'n; Ktn wikwi'; and perhaps Gb wík 'chupar'. Miller does well to divide these, in that agreeing with *piku are Yq, My, PYp, and Eu; while agreeing with *wiku are most of Tepiman, Tak, Wr, Tr, Cr, and Wc; and some languages like NT vikúúdai/gikúúdai have both forms. Some pattern of recycled loans is probably responsible for one of the groups, like the *wïru / *kwïru 'big' dichotomy. A plausible possibility is that from an original *piku, which corresponds to Tep *wiku, the Tep form *wiku diffused to other SUA languages, which came back into Tep in time for the change *wiku > *giku. The presence of y is strongly suggested by the Tepiman forms and is encouraged by the TrC and other forms: *wikuya. [NUA: Tak; SUA: Tep, Trn, CrC]

2541c. *kwiwi 'whistle': Ca kwiwi; Cp kwiwe. Might Cup *kwiwi be a metathesis of *wikwi < *wikui, or

*kwiku/*kwikwV > Eu biku, > Tak wikwV, Tr/Wr wikoV (Stubbs1995-58)? Cf. Sr wiikwi'n which also altered the emphasis to change *kui > kwi.

2542. *wisuko 'whistle': Mn wisïqohi 'whistle, vi'; SP uššu''-qqi 'whistle'. Might these forms tie to *wikuya above, if *wisïku > *wisku > wiku? [NUA: Num]

NB, for *kus, see noise.

WHITE; BLANCO

Mn	tucidaagi; tocci	Hp	qööca; qöya;	Eu	sútei
	ébi 'chalk, white paint'		tïïma 'white earth used as white	wash'	
NP	toha-ggwiddadï;	Tb	cuyuu-l 'white rock, lime'	Tbr	tosá-r; yolí-t 'anglos'
	ibi 'chalk, white paint'		čiiu-t 'lime'; poošï~'ooboošï;		
TSh	tosapi(tin); epimpitin	Sr	yaraara'-n/k(a')	Yq	tósa'i
	aipimpi 'white paint'		yaraa'-k 'bec. white'	$\overline{\text{AYq}}$	tasali/tosari; kaal 'lime'
			yarok-k 'bec. clean'	My	tósali/tósari
Sh	tosa"	Ca	téviš-nek; séken 'pale'	Wr	tohsána-ni;
Cm	tosa(pi)	Ls	xwáya-; tóova-l 'white clay'		mo'tosá 'white hair'
Kw	see-(gi-)	Cp	xwáye	Tr ŕos	sá-kame; pl: o'tosá-kame

Ch	tosá-ga	TO	toha	Cr	kwaina			
SP	toša(")	Nv	stoa	Wc	tušaa			
WMU	sá-ġa-rï	PYp	toha					
CU	sá-ġa-rï	NT	tóha	CN tiisa-	tl 'whitewash, white earth'			
		ST	t ^y ua/čua;	istaak	's.th. white'; ista-tl 'salt'			
	matai 'lime, ashes'; čuaa 'pale'							

2543a. *tosaC 'white': Sapir; VVH31 *to_usa 'white'; B.Tep222 *toha 'white'; B.Tep 223 tohari/tohadi 'to whitewash'; I.Num220 *tosa 'white'; L.Son315 *tosa 'blanco'; CL.Azt138 *ïsta 'salt, white'; 288 **tosa 'salt, white'; M88-to3 'be white'; KH/M06-to3: Mn tocci; TSh; NP toha; Sh; Cm; Kw toso 'gray-white, gray'; SP; TO; LP; PYp; NT; ST; Tbr; Yq; My; Wr; Tr; Wc; CN ista-tl 'salt'; CN istak s.th. white; Pl ista-t 'salt'; ista-k 'white'. As Ktn h < *s, Ktn towi-c 'white paint' might derive from *tosa > toha/tohi > towi. We also see *s > h in WNum again. **2543b.** *tusa 'white': While Wc and most forms suggest *tosa, CN tiisa-tl 'whitewash, white earth' and ST *tua agree with *tusa.

2543c. *sa-ka (< *tosa-ka)'white': CU sá-ġa-rï 'white'; Kw see-(gi-) 'be white'; Ca séken 'pale'. These simply lost the first syllable of *tosa, and the stress patterns strongly suggest it in SNum.

[*s > h in WNum] [NUA: Num, Tak; SUA: Tep, Tbr, Trn, Cah, CrC, Azt]

2544. *'apiN (> aipiN > epiN) 'chalk, white clay, white paint': Mn ébi 'chalk, white paint'; TSh epimpit"in 'white, adj'; TSh aipimpi 'white paint'; Ch(L) 'aavi / 'avi 'white clay'; Ch(L) 'aavimpah 'white clay water'. [a > ai > e] [NUA: Num]

2545. *kwaya 'white' (< *kwaca?): Ls xwáya 'be white'; Cp xwáye 'be white'; Hp qöya 'a bound form meaning white, pure, used especially in ceremonial contexts'; perhaps Cr kwaina. A wonderful example of *kwV reduction in Hp, with the original two consonants (*kw-c/y-) in Ls and Cp. What of Hp qööca 'white'? [NUA: Tak, Hp; SUA: CrC]

2546. *tipa/i 'white': Ca téviš-nek 'white, adj'; Ls tóóva-l 'white clay'. [NUA: Tak]

2547. *cïpa 'white, clean': CL.Azt190 *čïpa(awa)k 'white, clean, clear'; M88-cu14; KH/M06-cu14: CN čipaawak 's.th. clean, pure'; Pl čipaawak 'clear, white'. [SUA: Azt]

WHO; **QUIEN** (rel pron=relative pronoun)

	, .		,		
Mn	háġe; haqáá; haqisa'	Hp	hak(im) sg(pl); -qa (rel pron)	Eu	hevé
NP	hakka	Tb	'agi; 'indama 's.o.'	Tbr	ha-kí-(pe/pu)
TSh	hakatïn	Sr	hami'; pl: haiim	Yq	hábe
Sh	haka-tin; hakkai 'whon	n' Ca	háx'i	My	hábbe; hábesu
Cm	haki, hakarï	Ls	háx; hííŋay	Wr	aábu
Kw	ha-na; hi-ni	Cp	háx, háx'i	Tr	(y)éruka; yépuga;
		Gb	hakí		épuka; hiči
Ch	haŋá	TO	hedai	Cr	ha'atané
SP	aŋa-, aġa-	Nv	urho; doburh;	Wc	mï'áne 'who, what'
			para oblicuos: hukudoi		keepái
WM	aa-rá'i	PYp	heri/er/erigi		-
CU		NT	-	CN	aak; pl: aki'ke';
		ST	haroo; haroi 'indef'		aakin

2548. *haka / *haki 'who' (possibly *ha(N)-kV): Sapir; VVH138 *ha(ki) 'who'; KH/M06-in1: BH.Tak *hax-'who'; I.Num30 *hake 'who, which, what'; CL.Azt191 *aak 'who' < 289 *haka 'who'; M88-in1; KH.NUA; KH/M03-in1: Mn; TSh; Sh; Cm; Ch; SP; Hp; Tb; Ca; Cp; Ls; Tbr; and CN aak(in). [h > ø in Tb] [NUA: Num, Hp, Tb, Tak; SUA: Tbr, Azt]

2549. *hapi(su) 'who': Eu, Yq, My, Wr. [SUA: Trn, Cah, Opn]

2550. *(C)arV > Tep *hirai 'who': Nv urho (= iro); ST haroo; haroi 'indefinite', Tr (y)éruka; TO hedai; PYp heri / er / erigi. Kiowa-Tanoan languages have interrogatives resembling *hVrV like Tep forms. [SUA: Trn, Tep]

2551. *hami': Sr hami'; Ktn hami(c). [NUA: Tak]

NB, for *mi 'which, who, interrogative' see what.

NB, Op ne 'one who, -er' (Shaul 1990, 573) I think has cognates in UA, but recall of where I've seen such is lacking at the moment.

Wide: see big and flat Wife: see woman Wildcat: see bobcat

WILLOW; SAUCE, MIMBRERA

2552. *siħi 'willow': I.Num197 *siħi 'willow'; M88-si12; KH/M06-si12: Mn siħibi; NP siibi 'silver willow'; TSh siipin; Sh sihi-pin; Kw sii-vi; CU sii-vi-pi 'cottonwood tree'. With intervocalic *-k->-h- and *a > i (UA schwa), these may relate to *saka 'willow, grass' at 'grass'. Is NP saga-pi 'kinds of willows' (at grass) from one source, and NP siibi, from the other? Might these tie to *sihipi 'sumac, squaw bush, Rhus trilobata (used for weaving)? See among the later entries at 'plant'. [NUA: Num]

2553. *kana 'willow': M67-461 *ka/*kan 'willow tree'; M88-ka12 'willow'; KH/M06-ka12: Kw kahna-vï 'sandbar willow'; SP qanna-; CU kaná-vï; Tb haa-l; Ca qáankiš 'desert willow'; Hp qahavi 'willow'. [*k > Tb h] [NUA: Num, Hp, Tb, Tak]

2554a. *woata 'willow': Eu goát 'sauce'; Tbr ñoatá 'sauce' (Eu g < *w and Tbr ny < *w). **2554b.** *wata 'willow': AYq wata 'willow'; My watta 'sauce'; Ls wá-t 'black willow'; Wr watosí 'kind of willow'. [labials: Eu g < *w; Tbr ny < *w] [SUA: Opn, Cah, Tbr, Trn; NUA: Tak]

2555. *wasV 'willow': Cr waséh 'sauce'; CN wešoo-tl 'willow tree'. [SUA: CrC, Azt]

NB, for *sakat 'willow, grass' see at 'grass'.

WIN, BEAT; GANAR, LOGRAR

2556. *kwaC(ku) 'win': TSh kwaa" 'win, beat'; Sh kwakku" 'to win a game'; Cm kwakurï 'defeat, win over someone'; Kw kwaha 'win'; SP kwaa 'win, beat'; CU kwa'á-y 'win, beat, earn'; CU kwá-'ni 'win, beat, earn'. [k > h/'] [NUA: Num]

2557. *ma'i-(tu) 'win, gain': PYp ma'i-ca 'win'; PYp ma'i 'with hand'; Nv maitu 'ganar'; NT máítiïkyi 'earn, win'; ST maičia 'earn (money)'; Tr mi'ti-mea 'win, defy'; Wr me'tu-ná 'win, defeat'; Cr raa-muá'itïkï 'le gana'; Cr mwá'ituiči'i 'ganar'. [ma > mwa in Cr] [SUA: Tep, Trn, CrC]

NB, for *kopa 'win', see play.

NB, some UA terms for 'win' derive from 'strong'; see at 'strong'.

NB, might Ls číwa/i 'be defeated in a game, vi, defeat, win s.o. in a game, vt' relate to CN čiwa 'do'? That is, 'do' = 'win' and 'be done to, done in' = 'lose'.

WIND, BLOW; VIENTO, VENTAR

Mn	hïkwápe; wï- 'by the wınd'	Hp	v: hiïhïkya; hïïkyaŋw	Eu	v/bahéka
	pasuwaqa 'be windy before ra	in'			
NP	hïggwapï; pawïaba	Tb	'ïhkowa' 'wind blows'	Tbr	honí-t;
	pawïwïnï 'cold wind sweeps i	n canyon	s'		v: honá-/hone-
	hïca'wiba 'breeze, v'	Sr	şïvït;	Yq	héeka;
TSh	nïaitïn; nïai"		akwiinamo' 'east wind'	,	teekúuku 'remolino'

Sh	nyai"-(pin) 'v(n)'	Ca	yá'i hívuu	My	heeka; tápiča?
Cm	nïena; nïetï	Ls	húŋ-la; nóóşa-wu-t	Wr	ega-ní/egi-má
Kw	nee- $(d\ddot{i})$ ' $v(n)$ '	Cp	sevél	Tr	eká/iká; iwigá
Ch	nïgár(ï)	TO	hewastk; hewel	Cr	eeka
SP	nïa 'blow'	Nv	ïbïri; B: hïvil	Wc	'eekáa; 'éká 'blow'
WMU	nïá-y 'wind is blowing'	PYp	hevelim 'blow'		haikïri 'whirlwind'
CU	nïay; n: nïa-rï		n: hevel		kaa.šíivari 'storm wind'
		NT	ïvïli		kïïci.túiyari 'bad storm'
		ST	hïviïly	CN	e'eeka-tl '&air, spirit'

2558. *hïka / *hïkawa / *hïkwa 'wind, blow': Sapir; M67-462 *heka; I.Num41 *hïkwa 'blow (of wind)'; L.Son59 *hïka 'viento'; M88-hï2 'wind'; KH/M06-hï2: Mn and NP *hïkkwa-pï; Cm hïka- 'cool off'; Tb(M) 'aakawaal 'wind, n'; Tb(M) 'aakawaa' it ~ 'aakawaa' 'blow (of wind)'; Tb(V) 'ïhkowa' 'wind blows'; Hp; Eu; Yq; My; Wr; Tr; Cr éeka / háaka / wá-'aaka 'it is windy'; Wc; CN. Sapir also cites Gb qahika-. Eu and Wc show a prefixed syllable *pa-'ïka. Note highly different V's in the two Tb dialects. Might they be key to the lot of them: *hVkawa > *hïkowa > hïkwa? [V assim in Tb] [NUA: Num, Hp, Tb, Tak; SUA: Trn, Opn, Cah, CrC, Azt]

2559. *ciporika 'whirlwind': B.Tep195 *sivorika-i 'whirlwind'; M88-ci17; KH/M06-ci17 'whirlwind, remolino': TO siw(u)lok*i*; NT šivóliki; ST šivool^yik. [SUA: Tep]

2560. *nïka 'be windy, blow': I.Num119 *nïe 'wind, blow (of wind)'; M88-nï12 'wind'; KH/M06-nï12: TSh; Sh nïai 'blow (wind)'; Cm; Kw; Ch; SP; CU; Miller includes Ls nóóṣa-wu-t 'wind (ceremonial word)' whose initial CV agrees, though Ch nïgárï and Ls vary as to whether k or s is the lost medial consonant. [*k > ø] [NUA: SNum, CNum]

2561. *? 'whirlwind': KH.NUA: Ls 'atótokwa 'whirlwind'; Gb túkokar; Ktn atakuciva 'whirlwind'; Sr taaqčovaţ 'whirlwind, dust devil'; Ca téne'awka 'whirlwind, tornado'. While a reconstruction is difficult, I agree with Hill, that these are probably related, or at least the first four share a morpheme or two. Let's contemplate the collection while seeking other forms. [NUA: Tak]

NB, for *sïpïL / *sïCPïL 'cold, wind, windy' see cold.

WING; ALA

Mn	'ahaqqocci 'armpit'	Нр	masa	Eu	hanát
NP	kasa; anka 'armpit'	Tb		Tbr	
TSh	kasa(cci)	Sr	maha'/maho'/	AYq	masa
Sh	ahna 'armpit'		mahaač/mahaaţ '&feath	ner'	
	kasa '&feather'	Ca	wáka-t	My	mássa-m
Cm	kasa; ahna 'underarm'	Ls	kawí-t	Wr	aná; anasáwa-ni 'flap wing'
Kw	kaso'o-pi	Cp		Tr a	ná; ganá/gané; ma'sá '&feather'
Ch	wisía-v(i) '&feather'	TO	a'an	Cr	mua'askïbauri;
SP	kïššavï;	Nv	hukaddi		aná/haná/-'ana
k	assavï 'strike with wing' aŋavu / aŋavï- 'arm'	PYp a	'ana	Wc	'ánaa
WMU	husí'ævi /wəsí'ævi	NT		CN	a'tlapal-li '&leaf'
CU	'aa-pï 'upper arm'	ST	karvo		-

Above is provided a quick view of UA words for 'wing' though 'wing' and 'feather' are treated together at 'feather', as the same forms often mean both. Nevertheless, a summary of 'wing/feather' is here provided. NB, *'aŋap 'wing, feather, arm': Sapir; VVH58 *'auna 'wing, feather, arm'; B.Tep302*'a 'ana; M67-465 *ana; L.Son4 'ana; M88-'a3; KH/M06-'a3: Tb 'anambiï-1; SP aŋavu / aŋavï -vi 'arm'; Ch aŋavï 'arm'; CU aavï 'upper arm' Some Numic forms and Tr suggest the possibility: *akana/a'ana > akna/ahna > ahna/aŋa.

NB, *kasa 'wing': I.Num54 *kasa 'wing, feather'; M88-ka17: is in all Num languages. This may tie to *masa 'feather / wing'; Cr and Tr ma'sa both have glottal stops, so *masa may be from *maksa or *ma-kasa; thus, *masa apparent in Hp, Sr, and SUA may be related to Numic *kasa, with prefixed ma- and reduction: *ma-kasa > *maksa > *ma'sa > *masa.

NB, *waka 'wing, feather': BH.Cup *kawi 'wing'; Munro.Cup *wakí-t 'wing'; M88-ka18; KH/M06-wa29: Ca wákat, -wák'a (poss'ed); Ls kawí-t 'wing'; Ls no-wki 'my wing'; Ca wiki-ly 'feather'; Cp wíki-ly 'feather'. NB, for *masa, see feather.

WINTER; INVIERNO; see also cold, snow

toowáno; too-	Hp	tömö	Eu	tomó; utédo
tommo	Tb		Tbr	toamoa 'hacer frio'
tommo	Sr	tämöa'p 'in the winter'	AYq	severia
tommo	Ca	támiva'	My	séberia (Hagberg, p.c.)
tomoorï	Cp	támi'va	Wr	tomó
tomo	Ls	şuvóó-wu-t	Tr	ŕomó
tomó	TO	heepč'ed	Cr	sïskata'a (dry season)
tomo	Nv	tomudaga; tomuabagu be w.	Wc	
tömöt	PYp	tomdiaga; tomdagam 'in the w	inter'	
tőmö	NT	toomóko	CN	
	ST			
	tommo tommo tommo tomoorï tomo tomó tomó tomo tömöt	tommo Tb tommo Sr tommo Ca tomoorii Cp tomo Ls tomó TO tomo Nv tömöt PYp tőmö NT	tommo tommo Sr tämöa'p 'in the winter' tommo Ca támiva' tomoori Cp támi'va tomo Ls şuvóó-wu-t tomó TO heepč'ed tomo Nv tomudaga; tomuabagu be w. tömöt PYp tomdiaga; tomdagam 'in the wittömö NT toomóko	tommo Tb Tbr tommo Sr tämöa'p 'in the winter' AYq tommo Ca támiva' My tomoori Cp támi'va Wr tomo Ls şuvóó-wu-t Tr tomó TO heepč'ed Cr tomo Nv tomudaga; tomuabagu be w. Wc tömöt PYp tomdiaga; tomdagam 'in the winter' tőmö NT toomóko CN

2562a. *tommo / *toCmo 'winter': VVH165 *toumo 'winter'; M67-467; I.Num216: Mn too 'winter, year'; M88-to5 'winter'; KH.NUA; KH/M03-to5: Mn too 'winter, year'; Mn toowani 'be winter(time)'; NP tommo 'winter, year'; TSh tommo 'winter'; TSh tommo 'winter'; Sh tommo 'winter'; Cm tomo- 'to be winter, a year'; Kw tomo 'winter'; SP tommo-/tomma- 'winter'; Hp tömö 'winter'; Eu tomó 'winter'; Wr tomó 'winter'; Tr ŕomó; TO toom-dag 'late fruit'. To Miller's collection, add Ch tomó 'winter'; CU tömö 'winter'; NT toomóko 'winter'; Tbr toamoa 'be cold'; Nv tomudaga 'winter'; Nv tomuabagu 'be winter'; PYp tomdiaga 'winter'; PYp tomdagam 'in the winter, adv'. I often wonder whether the similar terms for 'cloud/rain' and 'winter' (*tommo) are related; Tr ŕomó- 'invierno, el tiempo de las lluvias finas de otoño e invierno' may suggest so.

2562b. *tamo' (Tak) 'winter, year': Sr tämöä'p 'in the winter, every year'; Sr a-tämöä' 'year, age, n'; Cp támi'va 'winter'; Ca támiva' 'winter'; Gb tamévŋey 'year, age'. Miller includes them with *tommo above; Hill also but with question marks, and it is a good question. They have a different 1^{st} V (Tak showing *tamo'), but the consonants and 2^{nd} V align, and the 2^{nd} V *o (> Ca/Cp i) could have caused assimilation in the 1^{st} V of the other languages (**tamo > *tomo); on the other hand, if both NUA and SUA have *tomo, but part of NUA retains *tamo, then parallel innovation is needed to explain the forms. More work is needed yet.

[NUA: Num, Hp, Tak; SUA: Tep, Opn, Tbr, Trn]

Wipe: see touch

WITH; CON; see also meet, gather

2563a. *pïma / *pïNa 'with': B.Tep291 *vïima(du) 'with'; M88-pp2; KH/M03-pp2: TO weem(aj) 'with'; PB vimatu; NT uumá / iïmá / uumádu / iïmádu; ST(B) vïimad; ST(W) vïim 'junto, con'; Cp pəči 'with, about'. [SUA: Tep; NUA: Tak]

2563b. *pïna 'friend, unite/go with': TO weenađč 'with'; PYp veena 'with'; PYp veen-k 'accompany, vt'; PYp veenag 'friend, n'; ST vïïna' 'compañero, cónyuge'; ST vïnta' 'unirse, juntarse, vi (subj anim)'; Eu venéri 'junto, cerca' and the Eu particle vené 'to, with' as in Eu amo vené 'a ti'. [SUA: Tep, Opn]

2564. *cïpa 'with': KH.NUA; M88-cï14; KH/M06-cï14: Gb (ne)-cóva 'with (me)'; Sr (ni)-cïïva' 'follow (me), go with'. [Gb o] [NUA: Tak]

2565. *kwan 'with': NT abáána 'junto a, junto de, junto con'; ST baan 'con (apartado)'. [SUA: Tep]

2566. *ma(C) 'with': BH.Cup *ma- 'and'; M88-pp1; KH/M03-pp1: Mn -maa 'with (instr'l), on, by'; NP -ma 'with (instr'l, accompaniment)'; Sh -ma 'with' (instr'l); Sh -ma'in 'with' (accompaniment); Kw -ma, -wa 'on, with, using, from, as a result of'; SP -ma 'with' (instr'l); SP -ma'ai 'together with'; CU -m 'with (instr'l); TSh ma'i / mai / ma'e; Ls(E) mán 'or, if, but'; Ls -man 'along with'; perhaps the first syllable of Ca mánax 'on/by the side of, near' (for 2nd syllable, see 'side'); Sr -mia' 'with, accompanying'. Add WMU -m, -maa 'with, using, postposition'. [NUA: Num, Tak]

2566b. *mak 'with': Tbr -mák 'con, acompañdo a'. Add Yq -mak/-make 'with'; ST maap 'juntos, adv' and perhaps Wc mátï(a) 'con, junto con'. [SUA: Tbr, Cah]

2567. *waka/i 'meet': TSh waka(ntïn) 'toward, by, near, with'; TSh waiki/weki 'meet'; Kw wuki-gwee 'meet'. [NUA: Num]

2568a. *nawi 'together with': My nawwi 'juntos' [together]; Yq nau 'juntos'; AYq nawi 'together'; AYq nawit 'both'; Ca -new 'with s.o., active accompaniment'.

2568b. *nama 'together with': SP nanwa'ai 'with each other, both (animate)'; Hp naama 'with each other, together, in a pair'. The SP form could feasibly fit either group, but Hp cannot. [SUA: Cah; NUA: Tak]

NB, for *wïC- 'with long object, instr prefix': Sapir; I.Num283 *wïh-; KH/M06-ip14, see 'big'. NB, Sapir offers CN waan 'and, with, in company with' and SP –ŋwa'ai 'together with'. While not without problems, we might mention this for future reference, in case new data adds potential to the possibility.

WOLF: LOBO

Mn	to'ápe	Hp	kweewï	Eu	húrve/húrue/wurwe
NP	isa	Tb	tïbaič	Tbr wawi	-nál 'lit: lion-cry'; vavi-nál; wowi
TSh	toopi; isapaippï(am) pa	pi Sr	wanaţ (or mtn lion?)	Yq	róobo (< Spanish)
Sh	pia-'isa; wonko-'ica	Ca		AYq	loovo (< Spanish)
	ica 'coyote, dog, wolf'			My	
Cm	kï'ceena; pia ceena'	Ls	'ís-wu-t	Wr	sa'pawóri (wori=lion)
	tuhceena'				
Kw	tïvi-ži;	Cp	íswet	Tr	narigoči/nariboči;
	nïwï-ga'a-wa-ga-dï				naríguri 'lit: cry-dog'
Ch	tïvác(i)	TO	šee'e	Cr	ïïra'abe(-te) (-pl)
SP	šïna-'avi; kwinuuta	Nv	sï'i	Wc	ïraave
	tïva 'mythical being'	PYp	see'e		
WM	süná'a-vi / saná'a-vi	NT	sïïyi/sïi	CN	kwetlaač-tli
CU	sináæ-vi	ST	siï'		

2569. *cï'ï 'wolf: B.Tep211 *siï'ïi 'wolf; Fowler83; M88-cï12; KH/M03-cï12: TO; LP; NT; ST. [SUA: Tep]

2570. *tu'apa 'wolf': M67-469 *tïpa 'wolf'; M88-tï42 'wolf'; KH/M03-tï42: Mn(KH) to'oppi 'wolf'; Mn to'ápe 'timber wolf'; TSh toopi / tooppi 'wolf'; TSh tïpo'isa 'wild dog, coyote'; Kw tïpi-či; Ch tïváci; SP tïva-ci 'wolf, powerful one'; Tb tïbaič. The following three—Cr ïïra'ave; Wc ïraave; Eu húrve / húrue / wurwe (from intermediate *huLapï or *hu-tu'apï?) could feasibly belong here, yet they may fit *huLapï 'badger' too, as Ken Hill has them both places as well. I'll continue indecisive with him. In fact, they fit phonologically best there, semantically better here. Many languages show a medial glottal stop, so that must appear in a reconstruction; likewise, Mn shows two different vowels on either side of the glottal stop (o'a), which would explain why many languages show round vowels (Num and Eu) and others a'a (Cr, Wc) if assimilation went one direction or the other: *u'a > o'a/o'o/a'a, the *a* lowering the *u > o in many; for *u is a better choice in light of Num ï, which often derives from *u, and next to *a, *u > o is also natural. Jane Hill (p.c.) adds Ktn tïva-č 'God'. [u'a > o'o/a'a] [NUA: Num, Tb, Tak]

NB, for *is, see coyote; thus, *is-wi 'big coyote' or wolf. NB, for *sina'a / *sinawa, see 'coyote'.

WOMAN, WIFE, DAUGHTER, GIRL; MUJER, ESPOSA, HIJA, MUCHACHA

2571. *okaci '(old) woman': Sapir; B.Tep319 *'okisi 'woman, little girl'; CL.Azt104 *okïc 'male'; M67-473 *'ok 'woman': M88-'08 'woman' and o14; KH/M06-'08 and '014: TO oks 'adult female, lady, woman'; LP(B) 'okš; Nv oksi; PYp okasi; NT okíši; ST(B) 'o'okiš ST(W) o'kiš 'aunt, mos'; Eu hokíci 'muchachita'; Op (')oki 'woman'; Cr úúka 'women'; Wc 'úúkáá 'woman'. Note NT oóki 'woman'; NT ookímuturui 'hacerse anciana = become old (of a woman)'; NT ookíši 'niña'. Actually, CN okič-tli and the other Azt forms also belong. Tepiman *okisi 'woman' and CN okič- 'man' identically point to PUA *okic; and if we consider a Tr form whose 2nd vowel matches the PYp, Cr, and Wc forms *oka 'woman', then Tr wegaca- 'grow old (of women)' may provide the semantic key to these similar forms for men and women, such that *okVc originally meant 'old woman' then 'old one/old person/man', in some languages. English 'guy' is now changing from masculine to genderless and 'girl' went from genderless to feminine (Stewart and Vaillette 2001, 410). And I've heard men called 'woman!' on politically incorrect construction sites where attempts to highlight ineptitude at the male-dominated occupation revealed a lack of sensitivity that surely permeates all construction crews by now, though perhaps not all of UA prehistory aligned with such sensitivities. Note 2nd V (a vs. i) in PYp okasi 'fos', Cr, Wc, and NT ookáli 'fos' (-li likely non-stem) and Tr wegaca, in three branches, no less, all of which suggest a as the 2nd vowel: *okaci > okVci 'woman'. Furthermore, the assimilation *a-i > i-i is natural, especially in light of an alveopalatal between the two, recommending that change more than *i-i > a-i for the five languages showing the V a. [vowels: *a-i > i-i in CN. most of Tep, Opatan] [SUA: Tep, Opn, Trn, CrC, Azt]

2572a. *hupi 'woman, wife': VVH79 *huspi; B.Tep332 *'uvi 'girl, female'; M67-471 *hupi; I.Num45 *hipi 'woman'; M88-hu4 'woman'; L.Son68 *hupi 'to marry'; KH/M03-hu4: TO uwi 'female, woman'; Nv ubbi; NT úvi 'female, girl'; ST 'uvii 'female, girl'; Eu hoít 'mujer de edad, aunque no muy vieja'; Eu huhwa 'mujer, esposa'; My húúbi 'esposa'; Yq húubi 'woman, wife'; Wr upí 'wife'; Tr upí 'wife'; Cr ïita'a 'woman'; Cr nya-'ïh 'my wife'. Let's also add Wc 'ïya 'woman, wife' and Tb hu'ubanah 'widow, widower'. Note the consistency of sound changes in Cr ïita'a 'woman': PUA *u > Cr ï and loss of intervocalic *p: *hupi > (h)ïi-, and similarly for Wc. Numic often changes *u > ï, so I would consider Numic *hipi 'woman' to be related also:

2572b. Numic *hipi 'woman': M88-hi8; KH/M03- hi8: Mn hiipi'; TSh hippicci(cci); Sh hipi; Cm hibi; I.Num and *hVppi. [Cr, Num *u > i; p > ø in CrC] [NUA: Num, Tb; SUA: Tep, Opn, Cah, Trn, CrC]

2573. *wa'iC 'woman': I.Num266 *wa'ihpï('ï) 'woman'; M88-wa16; KH/M03-wa16: NP piawabi 'old woman'; TSh wa'ippï woman'; Sh wa'i-ppï 'woman'; Cm nanawa'ihpï'anï 'womenfolk'. NP has pia- compounded. [NUA: Num]

2574. *nos-tu 'old woman': BH.Cup *néc 'old woman'; M88-no11 'old woman'; Munro.Cup140 *nééči-la; KH.NUA; KH/M03-no11: Cp níču 'grow old (of women)'; Cp níšlyuve-l 'old woman'; Ca níšlyuvel 'old woman'; Ca níšlyuvel 'old woman'; Ls néš-la / néš-ma-l 'old woman'; Sr niihtavï^rţ 'old woman', pl: niniihtavï^rm; Sr niihtavï^rţu' 'grow old (of a woman), become an old woman, v'. Ken Hill notes the 1st V is likely due to Ca influence. Sr niiht 'woman' also exists. Ken Hill also adds Ktn nohtat, pl: nonohtam. Cf. *tup... at 'old' for terms above ending in -tu/-cu. Of Serrano's four terms—Sr naašt 'girl', Sr näähţ 'young woman', Sr niiht, pl niniim 'woman', and Sr niihtavï^rţ 'old woman'. [NUA: Tak]

An odd variety of forms make a single reconstruction difficult, but Miller (M67-470, M88-sï11, so8, su21) seems also to sense that a relationship likely exists, after Sapir identified the CN and Ls forms as probable cognates: **2575a.** *siwa < *siNwa / *siwNa 'female, sister, daughter': Sapir; M67-470: Hp siwa 'sister of a man'; CN siwaa-tl / sowa-tl 'woman, wife'; Pl siwaa-t 'woman, wife'; Ls ṣawáa-may 'daughter'. Miller and Bright's observation that Ls ṣawáá-may 'daughter' is the diminuitive of Ls ṣuŋáá-l 'woman' is very relevant to the nasal clustered with -w-. CN may show a vowel assimilation to w (*siwa > *sowa) that occurred in other languages also, probably in Tak *suŋa, TrC *sona 'wife' and Tep *hooniga 'wife'. We may be dealing with a consonant cluster involving w and a nasal dimension.

2575b. *si'a 'girl': I.Num195 *si'a (young) girl; M88-si'l1 'young girl'; KH/M03-si'l1: Mn si'a; NP sia'a / cia'a. Miller includes some *siwa forms, such as CN siwaapil-li 'lady'; Pl siwaapil 'girl (teenage)'. The WNum forms likely tie to *siwa/siwŋwa, but until an explanation emerges, a separate letter is good. [w/' w vs. glottal, n/ŋ/w; NUA u and SUA o]

- 2575c. *suŋa 'man's daughter, wife': M88-su21; KH.NUA; KH/M03-su21: Cp şuŋáma 'man's daughter'; Ca súŋama 'man's dau'; Ls şuŋáa-l 'woman, wife'; Gb ásoŋ 'wife'; Sr şuuŋ 'man's dau'. Add Ktn huŋ 'descendant' and Ktn nïmihuŋ 'wife', pl: nïmihuŋam (< *nïmi-suŋa 'man's-girl/woman'). Miller includes Hp siwa 'younger sister of a man', which is cognate, but better fits with the subset *siwa.
- 2575d. *sona < *suŋa < *si(ŋ)wa 'woman, wife': B.Tep73 *hooniga 'wife'; B.Tep72 *hoonita/hoonata 'to take a wife'; L.Son256 *sona 'esposa'; BH.Cup ṣuṇáma' 'daughter of man (diminuitive of woman)'; M88-so8; KH/M03-so8: Tb so'yiil / šooyi- 'wife' (cognate?); TO hoont 'take a wife'; TO hooñig 'wife'; Pima Bajo hoiñc 'take a wife'; Pima Bajo hooñig 'wife'; NT hoonty 'take a wife'; NT ooñiga 'wife'; ST hontya 'take a wife'; Tbr soná-r 'esposa'. [NUA: Num, Hp, Tb, Tak; SUA: Tep, Tbr, Azt]
- **2576.** *paCtï' (< *paNtï') 'daughter': I.Num147 *petï 'daughter'; M88-pa22; Stubbs2000a-4; KH/M06-pa22: Mn pédï'; NP bbatï; TSh paitï"; Sh paitï"; Cm petï'; Kw pedï; SP pačï; CU páci; patï-ci-ci. Cr pa'arï'ï 'girl' may also belong. Ch, SP, and CU also show *-tt- > c/_high vowel. In addition, many forms have raised and fronted the first vowel due to assimilation in anticipating the high 2nd V ï and/or the alveolar consonant; the ai dipthong in CNum would suggest the same, which dipthong sometimes went to e. Sh shows the same change (*a > ai/_Ci/î) both here and in *hawi 'dove'. In fact, Kw -d- may suggest the medial cluster involves *-Nt-, as ordinary gemination *-tt- > -t- in Kw, but *-Nt- > -d- in Kw. [*-Ct- > -c-] [NUA: Num; SUA: CrC]
- **2577.** *tihia / *tikia 'girl': B.Tep238 *tihia 'young girl'; B.Tep238b tiihiasi 'baby girl'; M67-195 *te girl; M88-ti4 'girl'; KH/M03-ti4: TO čihia 'girl'; NT tihi/təxi 'girl'; NT alí-tihi; ST ti'yaa/ti'yaa 'young girl'; ST tii'yaš 'baby girl'. Ken Hill 2006 added NP tiha'a'yu 'child' but not in 2019 file. [SUA: Tep; NUA: Num]
- 2578. *tiwi 'girl': Wr kuhtewé 'girl, daughter' (dau is secondary meaning)'; Tr tewé 'girl'. [SUA:Trn]
- **2579.** *piCwa (< *piCti-wa) 'wife': Kw pihwa; Ch piwá; Ch(L) piwa-vi 'a wife'; WMU piwá; CU piwá 'spouse'; Ls péew 'spouse'. Add WMU piwá (nasal vowels). Kw pihwa < Kw pihi-wa 'feeling, breast-have' is underlying (Zigmond et al, 1991), for indeed *piCti > pihi 'breast' in SNum. [*i-a > e-a, thus e in Ls] [NUA: SNum, Tak]
- **2580.** *pami 'girl': My beeme 'girl'; Yq béeme; AYq veeme; Tr bamirá. Tr probably shows the more original vowels with vowel leveling occurring in Cah: *a-i > e-e. TrC terms level the vowels of 'sand' similarly: *siwa > se'e. [*a-i > e-e] [SUA: Cah, Trn]
- **2581.** *naka 'young woman': AYq naaka 'lady, daughter, young woman'; Sr nääht 'young woman'. This may be a good set or may be a degradeable set in light of Sr's four terms at *nos- above and AYq possibly deriving from s.th. like Cp nawíka-t 'woman' below, with syllable loss (not unknown in Cah). [NUA: Tak; SUA: Cah]
- 2582. *notikkwa 'wife': Mn nodikwa 'wife'; NP nodiggwa 'wife'. [NUA: WNum]
- **2583a.** *mama'u 'woman': Kw momo'o 'woman'; Ch mamá'u 'woman'; Ch(L) mamau'u 'woman'; SP mamma'u-ci 'woman, young woman'; WMU mamá-či 'woman'; CU mamá-ci 'woman'. Note the vowel leveling in Kw. These may be a reduplication of *ma'aC 'old, (later) old woman', which see at old, though some forms reflect the non-reduplicated stem: Kw ma'apï-zi 'old woman'; Ch(L) maa'ïpïci 'old woman'. Note also a compound of this stem:
- **2583b.** *ma(ma)'-sakwa-ci 'older woman (woman-belly)': SP ma'šakwoi 'old woman'; WMU mamá'saġwa-či / mamá'sa(ġ)wij / mamá'so(ġ)wai-či 'older woman, n' (woman-belly); CU mama-saĝóy-ci 'old lady, lit: woman-belly' (CU saĝóy-vi 'belly'). Note that WMU has the glottal stop apparent in *mama'u above. [V leveling in Kw] [NUA: SNum]
- **2584.** *muk / *mok 'woman': Wr mu'kíra 'wife'; Tr mukí / mugí / muhí 'woman', pl: omugí; higómari / igómuri; NP mogo'ni 'woman'; perhaps Ls míxa 'wife', though we would expect Ls e rather than the i expected in Ca and Cp (if < *mok), or borrowed from but then lost in Ca or Cp. [metathesis, Ls i < *o/u] [NUA: Num; SUA: Trn]
- **2585.** *tihima 'spouse': Wr tehimá / tehíma 'esposo, esposa'; Ls to'ma 'wife'; Ls tó'ma-vu 'husband'; Ls tó'ma 'marry a wife (of a man)'. [NUA: Tak; SUA: Trn]

2586a. *nawiC 'girl': BH.Cup *nawí girl; HH.Cup nawíi girl; Munro.Cup49 *nawi-l/*nawii-l 'girl, young woman'; M88-na21; KH.NUA; KH/M03-na21: TSh nawi 'girl'; Tb 'aanaawiš-t 'girl'; Cp nawí-ly 'young lady'; Cp nawísma-l 'girl'; Cp nawíka-t 'woman'; Ca náwišmal 'girl'; Ls nawíi-l 'young woman'; Ls nawí-t-ma-l 'girl'; Sr naašt 'girl'. Sr näähţ 'young woman' is at *naka above and Sr niiht, pl niniim (ä is a pharyngealized vowel) 'woman' is at *nos-tu above (for *s > Sr h happens), though Sr niihtavi'ţ 'old woman' is also there. Sr's four terms to think about yet. Some terms suggest a final -C (Tb, Cp, Ca). [NUA: Tak, Tb, Num]

2586b. *na'a- 'girl, boy': M88-na21; Mn na'ací' 'little boy'; NP naaci'i 'boy'; TSh naipi 'teenage girl'; Sh nai-pin; Cm nai'pi 'young woman'; Kw na'aa-ci; SP na'ai-N /na'ai-nci 'girl'; WMU na'áčič 'girl'; CU na'a-ci-c 'girl from five to teens'; Ktn naha-č 'older/teen girl' (vs Ktn naca-t 'little girl'); Ca ñíči-l^y, pl: ñíŋkič-em 'woman, female'. Interestingly, the reflexes in WNum mean 'little boy' while in the other two branches they mean 'girl'. [NUA: Num, Tak]

NB, like *piya 'mother, big', another association of 'female, mother' and 'big' is Munro.Cup *yə-t (PUA *yï 'mother'): Ls yó-t 'big'; Ca yé-t 'female'; Ls 'a-yó' 'thumb' at 'mother'.

Womb: see belly Wood: see tree

WORK; TRABAJAR, LABORAR, TRABAJO, TAREA, LABOR

2587a. *tīkiL-panawa 'work, cut': CL.Azt193 *təkītī 'work, cut'; as M88-tī23 and KH/M06-tī23 note, this ties to *tīki 'cut' though here that morpheme is compounded with *panawa: CN teki-panoaa 'work, v' (as well as CN teki-ti 'work, pay tribute, v'; CN teki-tl 'work, tribute, n'); Tbr tekipa-(na)- 'trabajar'. Note Yq tékil 'trabajo, n' and Eu tékirwa 'trabajo, n' without *panawa. Though possibly borrowed directly from CN, we ought to note also *tīki-panawa in Yq tékipanóa 'trabajar'; My tekipanoa; TO čikpan 'work (on), vt'; TO čikpana 'work, n'; PYp tekpana 'work, vi'. As for *tīkipanoa being a compound of *tīki 'cut' plus *panawa, note Eu panawa 'trabajar'.

2587b. *tīk... 'work, cut': KH.NUA: Sr tīhtī(i) 'work, vi, vt'; Sr tīhtīyič 'work, n'; Hp tīkī 'cut'. I like Hill's tying these two together, for 'cut' (cut earth, cultivate) and 'work' pair themselves more than once in UA, and initial *tīk in these and the above set makes the two groups likely related as well. Ktn cīk 'stick, stab, vt' may belong also. **2587c.** *tī'ai 'work': TSh tītīai 'work, v & n'; Cm tīrī'aitī 'do work, v'. [k > zero?] [SUA: Tep, Opn, Cah, Tbr, Azt; NUA: Hp, Tak, CNum?]

2588. *tupVka 'work': Ca tuvxá' 'work, v'; Cp tevxáá'a 'work' (suggested from Spanish trabajo); NP maddubï'na 'make s.th. in hands'; Ch tïvíyawi 'work'; Wc -tïve 'be doing s.th.'; NT -tuday 'causative suffix' (after Tep's typical loss of p); perhaps Ls luví-'i 'make better, fix, make' (subsumed under Ls loovi 'good'). Ca and Cp might derive from Spanish as suggested, but not the others. [NUA: Num; SUA: CrC]

2589. *timaLa / *timaLa 'work': Hp timala 'work, job, task, labor'; NP u timabia'a 'aid, help, vt'; NP u timmaci 'aid, help, vt'; Cr ti'imwarieh 'trabajar'. [NUA: Hp, Num: SUA: CrC]

2590. *paLV / *paLpu(LV) 'help': ST palvuidya 'help'; Cr -baïre 'ayuda'; Eu vade/bade 'work planting'. [med C's] [SUA: Tep, Opn, CrC]

2591. *-noca 'work': Wr inóca-ni 'trabajar'; Tr noca- 'work'; what of ST vanoosa 'do religious rite, make pledges'? [SUA: Trn, Tep]

NB, NT saikónakaroi 'kind of axe'; NT saikónai 'work s.th., vt'. Note two forms (*tiki and *caikona) that semantically expand from 'cut' to 'work'.

NB the loans from Spanish: Wc tïraváaku and LP haitu uravogu.

World: see earth

WORM, CATERPILLAR, CENTIPEDE, MAGGOT(S); GUSANO, LÓMBRIZ, CRESA, GORGOJO, ORUGA, CENTIPEDO

2592a. *kwici (<*kwit(a)-kowa) 'worm, feces-snake': M67-475 *kwic 'worm'; L.Son120 *kwici; M88-kwi11; Stubbs 1995; Stubbs2000a-8; KH/M03-kwi11: NT obí-bisi (Lionnet); Wr ihkucíwa 'gusano' (ih- is a moribund noun prefix, notes Miller); Tr kučíwa-ri 'gusano'; Yq bwicia; My bwítcia 'gusano'; Tbr hi-kwicí-t 'oruga'; Wc kwísi/kwíici 'gusano'; Cr čú'ihnu 'caterpillar'; CN kwitkooaa-tl 'tapeworm'; Miller also includes Pl kwil-in 'worm' and Eu hícira 'gusano'; the initial consonant of the latter is strange, yet Lionnet queries whether it is an error for *bici-ra*. The CN form may be a prototype for UA *kwici: *kwitkoa > *kwittia > *kwici(a). Consistent with that is SP nakkwicu 'worm' which shows a round vowel in the expected spot and intervocalic -c-, which cannot be from *-c-, but *-Cc- or *-Ct-. Could the forms under Tak *ku'a 'worm, maggot, fly' (at fly) tie in with kwV-reduction, as the Tak forms at *kwïs > kus 'take' (at carry) did? Note also Wc kwïsíyaarí 'corn worm'. Jane Hill (p.c.) points out the similarity of SP wišši-ci 'caterpillar'.

2592b. *koci (<*kwici): Note the similarity between CN i'koč-in 'type of earthworm' and Wr ihkuciwa 'worm' and Nv kosiburi 'worm sp'. Because Tep s < *c, Tep *kosi- reflects *koci of CN and Wr. [SUA: Tep, Trn, Cah, Tbr, CrC, Azt; NUA: Num?]

2593. *wo'a 'worm': I.Num272 *wo'a 'worm'; M88-wo8; KH/M03-wo8: Mn wo'ábi 'worm, maggot'; NP wo'aba 'worm'; TSh wo'api; Sh wo'a-pin; Cm wo'api; Kw wo'o-vi. For Kw vowel leveling, note Kw momo'o for *mama'u 'woman'. [V leveling in Kw in worm, woman, and water] [NUA: Num]

2594. *pi'akïN 'caterpillar, worm': Fowler83: Mn piyagï 'caterpillar'; NP piaga 'bull pine caterpillar'; TSh piakïn 'caterpillar'; Sh piakën 'caterpillar'; Hp pi'akï 'caterpillar'; Tb pi'aagïn-t 'worm'; Ca píyaxa-t 'rainbow, worm with two horns'. Jane Hill (p.c.) noticed that SP pi'aġu 'centipede' belongs as well. What of CN okwilin (< *okil) 'worm, caterpillar, wild animal' and CN naka-okwil-in 'maggot, lit: flesh-devourer'? Both Tb and Ca suggest a final consonant. [NUA: Num, Hp, Tb, Tak]

2595. *pa'a 'worm': Ch pa'á-vi 'worm'; WMU pa'á-vi 'worm'; CU pa'á-vi 'insect, larva, worm'. [NUA: SNum]

2596a. *sipuLi 'worm': Cp sívuye-l 'worm, maggot'; Ca sívuy-al 'worm'; Ca sivuy-iš 'being wormy, having many worms'; Nv kosiburi 'gusano'. Perhaps containing only the -puri portion: Ktn purpur 'worm sp'; Nv cuagi vuri 'gusano'; Tr činigúpuri 'gusano'; and less likely are Nv duburh hihi 'lombrices' and PB(EF) túbehil 'gusano'. Morpheme divisions debateable. [r > y]

2596b. *sipuyu 'rotten, wormy': Cp sivúyu'i-š 'rotten, decayed, adj' (cf. Cp sívuye 'worm, maggot'); CN popoyoo-tl 'rottenness, decay, n'. [slight V discrepancy]

2597. *-kuLi 'worm': in NT tiimikuli 'worm, sp.'; Wr nuhkuri 'kind of worm'. [SUA: Tep, Trn]

2598. *masiwa 'centipede': M67-82 *ma; L.Son130 *ma-siwa; M88-ma23; KH/M03-ma23: Eu másiwa; Yq masiwe; My masia; TO maihogi; PYp maihig; Nv maiokka (< *mahioga < *masiwa). Wr ma'yáka, Tr maagá / ma'agá, and Tr mahará may derive from Tep loans: *masiwa > Tep *mahiga > mahaga (Tr) and > ma'yaka (Wr). [SUA: Tep, Cah, Trn, Opn]

NB, for *ku'a 'worm(y), maggot, fly' see at 'fly'.

Wound(ed): see sore Wrap: see blanket Wrestle: see fight Wrinkle: see fold Write: see draw Wrong: see bad

YAWN; BOSTEZAR

2599. *kïsa('apaka) 'yawn, open (mouth)': NP kïsa'a 'to open one's mouth'; TSh kïsaapahah 'to come open';

Sh ïkkihsa; Sh ïppii-kisappax. [NUA: Num]

2600. *kappï / *kaCpï 'yawn': Ca kákape; Cp kápe. [NUA: Tak]

2601. *hatawa 'yawn, v': Stubbs2003-21: Mn na'ïdawï 'yawn, vi'; NP ïdamuwïnï 'yawning, vi'; TSh hïtawa 'yawn, vi'; Cm ïhtamakï'atï 'yawn, vi'; Kw 'atawa 'yawn'; Eu hátawa (prêt: hátauhri) 'bostezar'; My ten háha'awa 'está bostezando'; Yq háawe 'bostezar'; Cr ha'ateewa 'bosteza'. Note the glottal stop in Cahitan corresponding to *t in the other UA languages: *t > 1/r > ' in Cah. Interestingly, in Cahitan where the 1^{st} V is stressed, the *a is retained while 2^{nd} and 3^{rd} V sometimes change, but in Num where the 2^{nd} V is more often stressed, the 1^{st} V goes to "i, the UA schwa, in all Num forms except Kw. Do we have *-w-> -m- in Num? Ktn hakwakwa'y 'yawn' may belong if syncope then *-tw-> -kw- occurred as AMR discovered (1993a). [*t>r> ' in Cah; unstressed a > "i; w/m] [NUA: Num; SUA: Opn, Cah, CrC]

2602. *tï'ni-akV 'yawn': TO činniak; Nv tuniaku; PYp teni-k. UA *tï'nV 'mouth' is probably the initial element of this compound and *akï 'open mouth' perhaps the second. [SUA: Tep]

YEAR; AÑO

2603. *pami 'year': Wr pamíbame 'years'; Wr pamíbari 'year'; Tr bamí; bamíbari; consider also Wr pamí(ni) 'summer'. [SUA: Trn]

2604a. *suwaC 'year' (AMR): AMR combines CN šiwi-tl 'year, grass, turqoise' and Tb šuwaa-l ground, earth, year' as PUA *u > CN i; but AMR also has it with Hp siwi at 1077 'green grow'. perhaps the 2nd syllable of Yq wasúktia 'year' and My wasuk-tiria/tiriam 'year' in Cah *wa-su(k) 'year'. The set below is too different. [NUA: Tb; SUA: Azt, Cah]

2604b. *yasayawa 'year':

Hp yaasanw;

TO ahiđag (< *asiyaw, because *s > h, *y > đ, *w > g)

Tbr asa-k 'year'

NB, for *tomo, see winter, since the Numic words for year derive from winter.

NB, for the Takic words *tawpa, see summer (*tawpa).

Yell: see shout

YELLOW; AMARILLO

Miller groups together the two sets below, which are also cited by Sapir; VVH62 *'oha; B.Tep327 *'uama; M67-477 *'oha; I.Num12 *ohah; M88-'o13; KH/M06-'o13: they probably are related; in fact, a reconstruction of *uha would do fairly well for both Num *oha (with a second low vowel lowering the first vowel a little: *u-a > o-a) and for Tep *u'a (since Tep normally shows ' < *h); nevertheless, let's separate them under the same number for discussion.

2605a. *uhaC (> ***ohaC**) 'yellow': Sapir *hoa; I.Num12 *ohah; M67-477 *'oha 'yellow'; M88-'o13 'yellow'; KH/M06-'o13: Mn ohobanagi 'yellow, tan, brown'; NP oha-ggwiddadï 'yellow'; TSh 'oa"- 'yellow'; Sh oa" 'yellow'; Cm oha-/ohap- 'yellow'; Ch owásia-ka 'yellow'; SP oa" 'yellow'; CU 'oa-kka-ti 'yellow'. Add WMU öá-qqa-*rh* 'yellow, adj/n'.

2605b. *'u'ama < *'uhama 'yellow': B.Tep327 *'uama 'yellow': UP 'uamï 'yellow' (Bascom); LP 'uaam; NT vuaáma / wáma; ST 'uam; TO oam / o'am '(be) brown, orange, yellow' (Saxton). Since dipthongs in PUA are highly debatable, an original glottal stop, h, or other consonant between the vowels seems more likely. [*u-a > o-a, '/h; NUA o sv. SUA u] [NUA: Num; SUA: Tep]

2606a. *sa'wa 'yellow': M67-478 *sawa; L.Son234 *sawa; M88-sa5; KH/M03-sa5: Eu sávei/sábe/sáwe;

Wr sa'wató-ni; Wr sa'wamúriwa-ni; Tr sawaróame; My sawali/sawari; Yq sawái 'yellow'. Could these tie to Num *sa(k)wa 'green' as Wr sa'wa- may suggest? [SUA: Trn, Opn, Cah]

2606b. *kosawa / *kosawiya 'yellow': CN kosawiya 'to turn yellow'; CN kostik 's.th. yellow'; and perhaps Tbr kísara-ka-r 'amarillo' and Yq huusái. These TrC (a) and Azt (b) forms are likely related, for CN ko-, as a prefix, precedes other color terms, and the two sets otherwise match well. In fact, except for an initial k and a metathesis (s-w vs. w-s), Ch owásia-ka 'yellow' and CN kosawiya 'turn yellow' have much in common—(k)osawi(y)a and owasi(y)a—seven segments, no less.

YES; SÍ

2607. *hu'ï 'yes': M67-481; M88-'u7; KH/M06-'u7: Mn hïïhï'; Kw hï'ï; CU 'ïï; besides the Num forms, Miller includes Hp owí; Cr hïï; CN iye, all of whose first vowels agree with *u, not to mention Ls 'uhó; Ls 'uhó-van 'I believe, I obey', which he lists below; furthermore, Num ï sometimes < *u. [NUA: Num, Hp; SUA: CrC, Azt]

2608. *ha 'yes': M67- 480 *ha; I.Num28 *((h)a)ha'a; BH *hī (cognate?); M88-ha3; KH.NUA; KH/M06-ha3: Mn hīïhī / haaha'; NP aahaa; Sh haa; Cm haa; Tb ha; Sr haa; Cp hééhee; Ca héé. Miller here includes Kw hī'ī, hī'īhīï; Gb 'éhe'; Eu héve; My héewi; Wc huu, hīï; Pl eehe, all of which may better belong with *hī below, though as Mn hīïhī / haaha' and others suggest, the whole of them could well belong together. After all, what's a vowel among grunts of agreement? [NUA: Num, Tb, Tak; SUA: Cah, Opn]

2609. *hi... 'yes': M67-479 *he 'yes'; M88-hi5; KH/M03-hi5: Eu héve; My héewi; Cr 'éé(wi); Pl eehe. [SUA: Opn, Cah, CrC, Azt]

YESTERDAY; AYER

2610. *kï(C)aNwi 'yesterday': Sapir; Kw kiïawe; Ch kïaw(i); SP kïaŋwi; WMU gïáo / kïáw; CU kïaw. Sapir ties the SP form with CN kaawi-tl 'time' and Tepecano takaw. That is plausible since SNum and CN have only one vowel different (*kïawi > kaawi) and in light of CN's tendency toward anticipatory V assimilation. Tb(V) 'ïwï'a'ŋ 'yesterday'; Tb(M) ïwa'aŋ 'yesterday' may tie in as well, or at least the first part, though its inclusion would make a reconstruction more difficult. In fact, the reconstruction given considers Num and Azt, but not Tb. [Anticipatory V assim in CN in green, sand, yesterday] [NUA: SNum; SUA: Azt]

2611. *kintu 'yesterday': TSh kintu(si); Sh kintun; Cm kitu. [NUA: CNum]

2612a. *tapa(ku) 'yesterday': Tr ŕapáko; Wr tabaná; Hp taavok.

2612b. *taka(po) 'yesterday': TO tako; LP tako; PYp takav; NT takáá/takáávo; ST takav/takaav; Cr tahkaí. These may be a metathesis or maybe entirely unrelated, but for now, let's set them adjacently for contemplation. For terms similar to *tuka / *tuku 'yesterday' (Ca túku; Cp túku; Yq túuka; My tuuka) these are discussed at *tuka 'black, fire go out, night, last night'. [NUA: Hp; SUA: Tep, Cah, Trn, CrC]

2613. *yaLuwa 'yesterday': CL.Azt197 *yaalwa 'yesterday': M88-ya13; KH/M03-ya13: CN yaalwa; Pl yaaluwa; HN yelwaya'. [SUA: Azt]

Young: see new

YUCCA; YUCA; see also agave

2614a. *pana 'yucca whipplei': BH.Cup *panál; HH.Cup *panáal; Fowler83; Munro.Cup141 *panáá-l 'yucca, whipplei'; M88-pa46; KH/M03-pa46: Ls panáá-l; Cp pəná-l; Ca pána-l. [NUA: Tak] **2614b.** *pan... 'yucca': Munro.Cup141 suggests these alternate forms may form another complex set: Cp panáa-l; Ca pánu'ul; Ls panáá-l; [NUA: Tak]

2615. *hunupaC 'yucca mohavensis': HH.Cup *hunúúvat / *hənuúvat (depending on whether Cp or Ca has the errant vowel); Fowler83; M88-hu16; KH/M03-hu16: Ls hunúúva-t 'Mohave Yucca'; Ca húnuvat 'yucca'; Cp hənúvat 'yucca sp'. Jane Hill (p.c.) adds Gb hunuvat (Herrington noun list). [NUA: Tak]

2616. *hapa 'yucca': Fowler83; LP; NT; PYp apa 'sharp, adj'. [SUA: Tep] Fowler has the forms.

2617. *noni 'yucca fruit': Munro.Cup142 *nééni-l 'yucca fruit'; KH/M03-no13: Ls nééni-l; Ca níni-ly. [NUA: Tak]

3.2 NUMBERS, PRONOUNS, AND GRAMMATICAL MORPHEMES

ONE. LINO

ONE;	UNU				
Mn	sïmï'	Нр	sïïkya / sïïkya'	Eu	sei; Op se
NP	sïmï'yu	Tb	čiič	Tbr	hemé; hemetó-r
TSh	sïmï	Sr	haukp	Yq	séenu; wépul
Sh	sïmmï"	Ca	supl ^y e/supl ^y i	My	seenu; wépu'ulai
Cm	sïmï	Ls	supúl	Wr	piré/pié
Kw	suu-/suuyu	Cp	súlit/súplewet/súpul	Tr	biré
Ch	suu	TO	hïmako	Cr	saï´
SP	sïï / šuu	Nv	mako; maddo	Wc	șeevii-/șewi
WMU	süwíis / suwis	B.PB:	hïmad		şevítï 'sbj'; şeime 'obj'
CU	súu-yi-s	NT	ïmóko; B: ïmádo	CN	see
			parï 'algunos & negative particle'		
		ST	ma'n; B: maad		

2618. *sima' / simi' 'one': Sapir; B.Tep87 *himado 'one'; BH.Cup *su; M67-507 *se/*seme; I.Num198 *simi; HH.Cup *su / *supul; CL.Azt *see/*seem < *simayu; L.Son248 *si; M88-si9; KH/M03-si9: Hp siikya, siikw (obj); Wc şeevíi / şeime; Gb şoşóvram 'otras'; and most of the above forms. Tak and some WNum show *u instead of *i, perhaps due to bilabial m. Miller lists forms in all branches except Tb. Tak *supul may be from *sim-pVL, thus, p instead of v because of a cluster. However, the *-pVL form is additional and what explains the *si vs. *su variation? Note the Tak forms below with *pVL. A final glottal stop or some consonant is apparent in Num and in the gemination of Tbr -to (vs. -ro). [cluster] [NUA: Num, Hp, Tak: SUA: Tep, Opn, Tbr, CrC, Azt]

2619. *sinu 'one' (Yq, My; AYq seenu/senu 'one') has been moved and combined as part of *sinu 'another one, different' at 659 under 'different' where it is found in Hp, Num, Trn, and Cah.

2620a. *piLï / *puLa 'one, negative': Tr biré and Wr piré/pié. NT parï is worth noting in the fact that Tr biré and NT parï both mean 'one/some' and both also act as a negative particle. Or Wc şeevíi-; şevítï (sbj) minus the first syllable, that is, -vitï, also matches Tr/Wr *pitï. The latter part of Tb čii-bilo 'by oneself, alone' may also belong. If different prefixes are involved (*su-puLV vs. *wï-puLV), then the *-puL is common to Tak and Cah in Tak (Ca suplye / suplyi, Ls supúl, Cp súplewet / súpul) and in Cah (Yq wépul, My wépu'ulai).

2620b. *suC-puLa / *sum-puLa 'one, first, other, different': HH.Cup *su / *supul; KH.NUA; Munro.Cup85 *supú-l 'one': Ca supul(em) 'other(s)'; Ca supul-a'an 'different'; Cp súpul 'different, one'; Sr hovaa'i' 'different, changed'; Sr hova(ţ) '(an)other'; Sr hovaţ '(an)other, different one'; ST hup duñia 'become, change into, make'.

2620c. *wa-puL 'different, separate': TO gawul 'different, separate'; PYp gavil 'different'; Yq wépul; My wépu'ulai. [NUA: Tak, Tb; SUA: Tep, Cah, Trn]

TWO; DOS

wahá-i/tu	Hp	lööyöm	Eu wodí	(m) (gen. woke; acc. wok)
waha('yu)	Tb	woo/wooh; wooyo 'both'	Op	gode
		woo'ami 'twice'	Tbr	nyohór
waha	Sr	wöh	Yq	wói
waha/waa-ttïn	Ca	wíh	My	wooyi
waha	Ls	wéh	Wr	woká
waha	Cp	wíh	Tr	okwá
wahá	TO	gook; go'ol 'other'	Cr	wá'apua
waa	PB	gok	Wc	húuta 'pair, double'
wáyIni	NT	goóka		'útïmana '2nd (place)'
wáy-ini	ST	gok	CN	oome
	waha('yu) waha waha/waa-ttïn waha waha wahá waa wáyIni	waha('yu) Waha Waha Sr Waha/waa-ttïn Waha Ls Waha Cp Wahá TO Waa PB WáyIni NT	waha('yu) Tb woo/wooh; wooyo 'both' woo'ami 'twice' waha Sr wöh waha/waa-ttïn Ca wíh waha Ls wéh waha Cp wíh wahá TO gook; go'ol 'other' waa PB gok wáyIni NT goóka	waha('yu)Tbwoo/wooh; wooyo 'both' woo'ami 'twice'Op TbrwahaSrwöhYqwaha/waa-ttïnCawíhMywahaLswéhWrwahaCpwíhTrwaháTOgook; go'ol 'other'CrwaaPBgokWcwáyIniNTgoóka

2621. *na- 'twice, double': M67-514a *na 'twice, double'; M88-na25; KH/M03-na25: NP naapahi six (pahi three), as well as in most of Numic; Hp naalöyöm 'four' vs. Hp lööyöm 'two'. See *na-wakay 'four' and *na-pakay 'six'. na- is a plural marker in some Kiowa-Tanoan languages as well. [NUA: Num, Hp]

2622a. *wakay 'two, after (see note at 'seven')': I.Num267 *waha(h) 'two'; M88-wa10; KH/M03-wa10: Mn wahái/tu; NP waha('yu); TSh; Sh wahattïwïh; WSh wahattïn; Cm; Kw wahayu; Ch waha; SP waa; WMU wáyIni; CU wáyini; Sr waah- / wah- 'twice'; Gb wahá 'other, companion'. Ken Hill adds Ktn wah- / weh- 'twice'. The wá'a- of Cr wá'apua likely also belongs (see note at *wo-pusani 'seven'). While others divide them (wa10, wo1), I think the above (Num *wahay) and the below (*wokay) are all related. There are other sets showing Num -h-corresponding to SUA -k- (phonology 2.10), and *a > o/w_ is common. [-h-> ø, > ' in Cr]
2622b. *wokay: Sapir; VVH103 *wo 'two'; B.Tep46 *gooka; BH.Cup *wéh; M67-509 *wo / *woka / *woy; L.Son344 *wo; M88-wo1; KH.NUA; KH/M03-wo1: Sr wöh; Ls wéh; Ca wíh; Cp wíh; Gb wehé'; Hp; Tb; Eu wodí(m)/wok (Lionnet 1986); Eu godum, gen: goké; acc: gok (Pennington 1981); Tbr nyohór; Yq wói; My wooyi; Wr woká; Tr okwá. Note also Yq and My wo'olim 'twins'. [For medial k/h, cf. three, pine, deer: *k > k in Tep, Wr, Tr; *k > h in most of Num, Tak, Tbr; *k > ø in Hp, Tb, Cah, SP, CU, and one Eu form; Tbr ny < *w; o/a] [NUA: Num, Hp, Tb, Tak; SUA: Tep, Tbr, Opn, Cah, Trn, CrC]

2623. *omV 'two': CL.Azt180 *oome 'two': CN oome; Pl uume; Po omem; T ume; Z oome. Some combine this with *wokay; however, due to a differing 2nd C, these are likely a different stem, because *wokay is consistent in 4 of 5 segments with *wakay also, but omV has only initial o in common. [SUA: Azt]

THREE; TRES

Mn	pahí-i/tu	Нр	paayom	Eu	veidúm
NP	pahi'yu	Tb	paai	Op	vaide
TSh	pahi/pai	Sr	paahi'	Tbr	vayí-r
Sh	paih-	Ca	páh / páx	My	bahi
Cm	pahihtï	Ls	pááhay	Yq	báhi
Kw	pehe/peheyu	Cp	páh	Tr	bikiyá
Ch	pahí; Ch(L) pahaiku	TO	waik	Wr	paiká
SP	pai	Nv	vaiko	Wc	háika; hairíeka 3rd
WM	páyIni	NT	váíka	Cr	waihka
CU	pay-ni	ST	vaik	CN	eei

2624. *pakay 'three': Sapir; VVH1 *pahi three; B.Tep256 *vaika; BH.Cup *pahi; M67-510 *pahi; I.Num132 *pahi; L.Son184 *pahi; M88-pa23; KH.NUA; KH/M03-pa23: Mn; NP; TSh; Sh; WSh pahaittin; Cm; Kw peheyu; SP; CU; Hp; Tb; Sr; Ktn pahi'; Ca; Cp; Ls; Gb páhe'; TO; LP; NT; ST; Eu; Wr; Tr; Tbr; Yq; My; Cr; Wc; CN. Note the k syllable in Wr, Tr, and Cr, as in the Tepiman forms. Note also Ca páh / páx, with an alternate form also suggesting *-k->-x-/-h-. Thus, *pakay is found in all branches, even every language. In nearly the same languages as in *wakay 'two', here also *k > k in Tep, Wr, Tr, CrC; *k > h in most of Num, Tak; *k > Ø in Hp, Tb, SP, CU, Tbr, Eu. [NUA: Num, Hp, Tb, Tak; SUA: Tep, Trn, Opn, Cah, Tbr, CrC, Azt]

FOUR; CUATRO

Mn	wacikwí-i/tu	Нр	naalöyöm	Eu	návoi
NP	waciggwi'yu	Tb	naanaau	Op	nago
TSh	waccï(wi)	Sr	wačah	Tbr	narikí-r
Sh	wa-ccïwih-	Ca	wíčiw	My	naíki
Cm	haya-rokwe (two-exact)) Ls	wasá'	Yq	náiki
Kw	wacuu	Cp	wíčiw	Tr	nawosa / nagó
Ch	wacïw	TO	gi'ik	Wr	naó
SP	waciŋwi-	Nv	giko; makoba	Wc	náuka
WMU	k <i>oh</i> ččúwini / w <i>oh</i> ččúwir	ni NT	maakóva	Cr	muaakua
CU	wəcúwi-ni	ST	maakov	CN	naawi

2625. *maCkupa 'four': B.Tep140 *maakovai; M67-512 *mako; M88-ma19; KH/M03-ma19: Cr mwáakwa; LP makov / makoba; NT maakóva; ST maakov. Ken Hill adds Sr ma'kuvik 'nine' which suggests a 2nd V of *u that the others lowered to *o between two low *a's. Note also in nearly the same languages *ki-maCkupa 'nine' at nine. [SUA: Tep, CrC; NUA: Tak]

2626. *na-wakay 'four (2 x 2, two two's): CL.Azt68 *naawï, 233 **naawo; L.Son162 *nao, nariki 'cuatro'; M88-na24; KH/M03-na24: Tr nawosa/nagó; Wr naó; Eu návoi; Tbr narikí-r; Yq náiki; My naíki. Note the usual severe reductions late in the word: *na-wakay > *naiki (Cah, loss of -w- and assim of V's), > *nawi (Azt), > *nawka (Wc), > *na-woyo (Hp), > nawo / naw (Tb, Wr, Tr, Eu). Note *w > g in Op (Tr perhaps borrowed), but *w > v in Eu. [labials, x, *w, liquids] [NUA: Hp, Tb; SUA: Opn, Cah, Trn, Tbr, CrC, Azt]

2627. *wattiwi 'four': M67-511 *wa 'four'; I.Num268 *wa(h)cï; KH.NUA; M88-wa11; KH/M03-wa11: Mn wacï; NP waccï; TSh waccïwi(tïn); Sh wattïwih-tïn; Kw wa-cuu-yu; SP wacïŋwi-; CU wəcúwi-ni; WMU; Sr; Ca; Cp; Ls; Gb wačá'. Ken Hill adds Ktn waca 'four'. WMU k*oh*ččúwini introduces an interesting case of a Num language developing a sound change similar to Tep, with a vowel assimilation: *wa > wo > ko. Other instances of WM Ute showing k < *w exist as well. Sr wačah and Ls wasá' suggest that vowel assimilation also accounts for Ca wíčiw, Cp wíčiw, and thus perhaps also TO gi'ik, and LP giko. [*-tt->-c-] [NUA: Num, Tak]

FIVE; CINCO

Mn	manigí-i/tu	Нр	civot	Eu	márki; Op mariki
NP	manigi'yu	Тb	maahaijiya	Tbr	mamuní-r
TSh	manïki / manaki	Sr	mahäţ	Yq	mámni
Sh	ma-naikkih-	Ca	axnamekwánaŋ	My	mamni
			né-ma-kwanan (my-han	nd-half)	
Cm	mo'o-be' (hand-measure)	Ls	maháár	Wr	marikí
Kw	manïgi(yu)	Cp	siiku'um (Sp)	Tr	marí
Ch	manïg	TO	hïtasp	Cr	ansïbi / ansï´
SP	manniki	Nv	utaspo	Wc	
CU	ma-nïgi-ini	NT	taáma	CN	maakwiil-li
WMU	J manïgíyIni	ST	hiš-čamaam		čiko/čikwa (in compounds)

2628a. *manniki 'five': I.Num92 *manïki; L.Son128 *mamuni, *mari; M88-ma15; KH.NUA; KH/M03ma15: Mn; NP; TSh; Sh; Kw; SP; CU; Yq; My; Wr; Tr; Eu; Op. Add WM Ute manûgiyini / manïgiyIni. Miller notes that

beyond initial *ma... 'hand', these are not all cognate; so let's separate them (a, b, c, d). This, as well as other sets, suggests that in some cases PUA *n was denasalized to a liquid, rather than it always being the case that PUA liquids were nasalized in NUA; the key data are the n in three SUA languages (Tbr, Yq, and My) as well as NUA, while r appears in Tr, Wr, Eu, and Op.

[NUA: Num; SUA: Opn, Tbr, Cah, Trn]

2628b. *maha 'five': Sr, Ls, Tb. Hill adds Gb mahár and Ktn mahač. [NUA: Tak, Tb]

2628c. *na-ma-kwanaŋ 'five (my-hands-half)': Ca; Cp. [NUA: Tak]

2628d. *makwil 'five': CL.Azt62 *maakwil. [SUA: Azt]

2629. *cipo 'five': Hp civot and the *-s(i)p(o) in TO and -spo in Nv utaspo point to *cipo / *cipu.

[NUA: Hp; SUA: Tep]

NB, for CN čiko / čikwa (in compounds), see 'twin'.

SIX; SEIS

Mn	naabahí-i/tu	Hp	navay	Eu	vusani; Op bussani
NP	naapahi	Tb	napaai	Tbr	(w)osaní-(r)
TSh	naapai/nahapai	Sr	päävahi'	Yq	búsani/vusani
Sh	naah-paih-	Ca	kwansúple	My	búsani
Cm	naabaitï	Ls	pavááhay	Wr	pusáni
Kw	navaha-	Cp ne	makwánaŋax suplewet	Tr	usani
Ch	navá	TO	cuudp	Cr	aráhsebi; aráhsei
SP	navái	Nv	tutpo	Wc	
WM	naváiyIni	NT	naadámi	CN	čikwa-see
CU	navæ´y-ni	ST	hiš-umman	CL.Azt	t148 *čikwaseem

2630. *na-pakay 'six' (2x3, two three's): I.Num104 *naa(h)pahi; M88-na23; KH/M03-na23: Mn; NP; TSh; Sh; Cm; Kw; SP; Hp; Tb. WM Ute and CU can also be added. [NUA: Num, Hp, Tb]

2631. *pa-pakay 'six, Takic reduplication of three': KH.NUA; Sr, Ls, and Gb paváhe. [NUA: Tak]

2632. *pusani 'six': L.Son222 *pusani 'seis'; M88-pu16; KH/M03-pu16: Eu; Wr; Tr; My; Tbr. [SUA: Trn, Opn, Cah, Tbr]

2633. *cikwa-si'im 'six (lit: 5 + 1): CL.Azt148 *čikwaseem 'six'; M88-cï10; KH/M03cï10: Po čukose; CN čikwasee, čikwasem- in compounds before a V; Pl čikwasin; T čIkwasie; Z čikwaseen. [SUA: Azt]

SEVEN; SIETE

2634. *ta(kkwa)ci(k)wi 'seven': I.Num200 *taa(h)cïwih seven; M88-ta31; KH/M03-ta31: Mn tacïwï-i/tu (Miller has Mn taa' sïmï); NP naddakkwacciggwi'yu; TSh taaccïwi; Sh taa-ccuih-(tïn); Cm taacïkwitï. This stem appears in WNum and CNum, but not SNum. The NP form may suggest the loss of a syllable: *takwacïwi, which then reduced to something similar to Iannucci's reconstruction, which works well for the rest of the Numic forms. Another complication is that Mn, TSh, and Sh show intervocalic -w- while NP and Cm show -kw-. [w/kw labials; extra syllable in NP; -'s->-c-] [NUA: WNum, CNum]

2635. *wo-pusani 'seven': Eu seniovusáni; Op se-ni bassani; Tbr nyo-vosaní-r; My woibúsani; Yq wobúsani / wovusani. This etymon appears only in TrC. *pusani means 'six' and 'wo' is probably related to 'two'; yet 'two-six'

should be 8 or 12, but hardly seven by either multiplying or adding. However, 'after' as an underlying meaning for both this etymon and 'two' fits all semantic dimensions; that is, seven is *after* six. Compare Latin sekw- in Spanish seguir 'follow (after)' and segundo 'second'. Because liquids become glottal stop in Cr, then *puLa 'one' > -pua in Cr wá'apua 'two' and wa'a may mean 'after' there as well: *wa'a-pua 'after-one'. [SUA: Opn, Cah, Tbr]

2636. *waca'kVp... 'seven': KH.NUA: Sr wačkovik 'seven'; Gb wačá'kavya'am 'seven'; Ktn kwackaveykï. [NUA: Tak]

2637. *nomiNci 'seven': Kw no'mïzi / nomï'zi; Tb(V) nomndzin; Tb(M) no'modzin / nom'dzin. In light of the geographic proximity of Kw and Tb, contact influences may underlie this pair. [glottal hop] [NUA: Tb, Num]

2638. *na-pakay-ka-payini 'seven': SP navai-qqa-vai; WMU naváy'kya'vani / navé'kya'vani / navé'ka'vini; CU navéæ-kya-vææni. [NUA: SNum]

2639. *(iC)kicao 'seven': Wr ihkicáo; Tr kičáo. [SUA: Trn]

NB, we might wonder whether Hp cane 'seven' ties into either Num *taciwi or TrC -cao?

EIGHT: OCHO

2640. *wo-sïmï / *wo-sïwï 'eight': I.Num271 *woosïmih / *woosïwih 'eight'; M88-wo14 'eight': Mn woossïmï; TSh woosïwï; Sh woo-sïwih-. [NUA: Num]

2641. *waka-wattiwi 'eight, two-fours': NP woggwaccïggwai (Yer); SP wa'áŋwaššïŋwi-; CU wa-wəcúwi-ini; Sr waahwč. Let's add WM Ute waá k*oh*čúwiíni / waó k*oh*čúwinI / waó*h*čúwiíni we'kočuwini. These likely have the element 'two' or possibly a simple reduplication of initial syllable of 'four' in some? SP's velar nasal η at the morpheme boundary is interesting, and *-tt->-c->-s- in a longer word. [NUA: Num, Tak]

2642. *wo-sa-na-wakay 'eight, two-times-four': Yq wohnáiki, My wosnáiki; Eu gos návoi, Wr wosánao, Tr osá nawó. [SUA: Trn, Cah, Opn]

2643. *namiwattikwi: NP namiwacikwi'yu; Cm namewacikwiti. [NUA: Num]

2644. *na-na-wattV 'eight, two fours': Kw nanawacuu; Hp nanalt; Ch naanci. [t > c] [NUA: Hp, Num]

2645. *(nama)kwana(ŋax)-pah 'eight, five-three': Ca kwan-páh; Cp nemakwánaŋax páh. Note that Cupan *nama-kwanaŋ 'five (my-hands-half)' adds pah 'three'; and note that CN čikw-eei 'eight' uses the same notion 'five-three' though a different morpheme for 'five'. [NUA: Tak]

2646. *wi-wiko 'eight': TO gigi'ik; Nv gigiko. [SUA: Tep]

NB, the Numic languages furthest out in all three Num branches show some affinity to *waka-wattiwi while most of those closer to the Southern California NUA homeland later changed to or deteriorated to *wo-sïwï, which could possibly be a lenition of *wocïwï < *wa(ka)-wattiwi So *-cïkwi and *-sïwih from above may be related, since the slipperiness between intervocalic *c > s and *w/*kw, especially when late in a word, is elsewhere evident in UA.

NINE; NUEVE

2647. *suwatokoma'sï(N)wi 'nine': Kw suukumïsu; SP šuwárokomma'sïŋwi-yu; CU suwárogómasuwí-ini; WMU suwaroġomsu(wiini). Note the reductions in Kw and WMU. [NUA: SNum]

2648. ***pV**(**c**/**s**)**t** 'nine': Hp pevt; Yq bátani / vatani; My bátani; NT tuvuštyáma; Nv tumbustamama; Eu vesmákoi. [NUA: Hp; SUA: Tep, Cah, Opn]

- **2649.** *ki-maC-kopi 'nine, another (is) ten': Wr kimakói; Tr kímakoi; Op kimakoi (Shaul 1990, 569). *ma'-kopi 'ten' appears compounded in other terms for 'nine': Sr ma'kovik 'nine'; Eu vesmákoi 'nine'; perhaps TO humuk 'nine'. [SUA: Trn, Opn]
- 2650. *kwaniki 'nine': Mn kwanigi-i/tu; TSh waniki / waniki. Could this tie to Ca kwan- 'five' for numbers 5-9?

TEN; DIEZ

2651. *maC-kopi 'ten': L.Son135 *makoi 'ten': M88-ma16; KH/M03-ma16: Op makoi; Eu mákoi; Wr makói; Tr makoy. TrC *makoi (Op, Eu, Wr, Tr) may be a reduction of *ma-kopai (> *mako(w)ai > *makoai > *makoi). At 'twenty' (below), we see that the term kopai means something similar to 'one full count' (fingers and toes) of a person. So *ma-kopai may mean approximately the 'hand's full count', that is, ten. That kind of reduction for the latter stem in UA compounding is common. [SUA: Trn, Opn]

2652. *pïNku 'dime, bit': M88-pï17; KH/M03-pï17: Sr pïnk 'dime'; Ca (wih) púúŋku '(two) bit(s)' (monetary unit, two-bits = 25¢); Cp wih pəənku 'two bits, 25¢'; Gb pónko 'real'; Gb pónkewe' 'ten centavos'. This is apparently a fairly recent innovation in Tak. [NUA: Tak]

2653. *pic > Tep *vïs(tama): TO westmaam, NT baivuštaáma, ST mambïš. Cf. *pïtV > Tep *wïs 'all' at 'all'. [SUA: Tep]

2654. *sima 'ten': I.Num199 *siima(h) 'ten'; M88-si10; KH/M03- si10: Mn siwinotu/siwinoku; NP siima(no); TSh siiwa(no); Sh siimahtih; WSh siimaahtih; SP šinwi 'ten' (< SP šiu 'finger, toe' Sapir says). [NUA: Num]

2655. *(toko)ma'sï(N)wi 'ten': Kw mïmïsuu; Ch masïw; SP toġómma'nsïŋwi-yu; CU togó-ma-suwí-ini 'right through the other hand' Givon suggests; WMU toġomsu(wíini). [NUA: SNum]

TWENTY; VEINTE

2656. WNum *waka-mano- 'twenty < two hand-counts'?: Mn wahawanó-tu (*m > w?); NP waha mano'yu; and maybe TSh wahamootin. [NUA: WNum]

2657. SNum *waka-masïwi 'twenty, two-tens': SP waáma'sïŋwi; CU wáa-ma-suwi-ini; WMU wáamsu(wíini) / waámsu(wíini). [NUA: SNum]

NB, *opa 'person, twenty' (see at 'enemy'): David Challe (p.c.) pointed out to me that Tep *oba 'person, enemy' (< *opa 'enemy, strong') 'person' is the stem used mathematically as a (full) count, ie, 20, the total fingers and toes of man': NT ïmó kóbai 'twenty < one-person/count'; NT góó kóbai 'forty, two counts'; Nv mako opa 'twenty'; Nv goc obpai 'cuarenta'; Nv vaiko opa 'sesenta'; ST maa'n oo'm 'veinte'. CN seem-poowal-li 'twenty' also means one-count. [SUA: Tep]

3.3 PRONOUNS AND GRAMMATICAL MORPHEMES

2658. *nï 'I, me, my': Sapir; B.Tep 295 *'á:nï'i/'á:niï; BH.Cup *nə; I.Num 118 *nï; CL.Azt 89 *nəh' CL.Azt 247 *nï'; M88-pr1; KH/M06-pr1: WSh nï (acc. nïi); TSh nï (acc. nïa); Hp nï' (acc. nïy); Sr nï:' (acc. nï:i); Ktn nï' (acc. nïy); Ca ne'; Cp nə' (acc. nə'iy); Ls no: (acc. ney); Gb nóma'; TO aañi('i); NT aáni; ST aañi'; Nv ani; Eu nee (pospuesto ne, gen. no, acc. nečt); Tr nihé (Ht); My ne (clítico) (acc. ne:); Wc né; CN ne' / ne'wa(tl), acc v pref: neeč; Pl naha. [NUA: Num, Tak, Hp, Tb; SUA: Tep, Trn, Opn, Cah, CrC, Azt]

2659a. *'ï 'you sg' (sometimes *'ïm(ï) 'you pl' > 'you sg' as happened with English 'you' (pl) replacing 'thou' (sg): Sapir; BH.Cup * 'ə; I.Num 22 *ïh; M88-pr4; KH/M06-pr4: Mn ï: NP ï; TSh ï; Kw imi; CU ïmï; Hp ïm (acc. ïŋ; dl./pl. ïma, acc. ïmïy); Sr ïmi'(pl. ïm, acc.sg./pl.ïmï); Ca ét/'e (pl 'em); Cp ə'ə 'sg' (pl imi/əmə/əm'əm); Ls óm; Gb ó; Tb imbi; Yq -a'e (pl -a'em); My -'e (pl -'em); Tr eme/muhé; Cr mú'ee. Sapir (1930, 183) says, "the (SP) -' of the 2nd sg is entirely peculiar."

2659b. *'**im**(**i**) 'you pl': Sapir; Kaufman 1981 *'imV 'ye': Ca, Cp, Yq, and My (see above) show *'imi in contrast to *'i 'you sg'. Add CN am- 'you(r) pl'. In addition to those, Hp does not show the distinction 'i (sg) vs. 'imi (pl) in its independent pronouns, but does in its possessive pronouns and pronominal verbs: Hp 'i- 'your, sg' vs. Hp 'imi- 'your, pl'. Op emo/eme 'you, sg and pl' (Shaul 1990, 568).

[NUA: Num, Tak, Tb, Hp; SUA: Trn, Opn, Tbr, Cah, Azt]

2660a. *(n)api 'you sg': B.Tep 296a *'á:pi'i; M88-pr2; KH/M06-pr2: TO aapi('i); NT aápi; ST aapi'; Nv api; Eu nap 'tú', gen: amo, acc: eme; Eu -pi '2nd person sg suffix'; Wc á (with loss of initial p); Cr -pe (Vazquez Soto 1994, 150); Tb(H) pi 'you, sg subj'.

2660b. *apimV 'you, pl': B.Tep 296b *'aapí'imï; KH/M06-pr10: TO aapim; NT aapímu; ST aapib. [NUA: Tb; SUA: Tep, Opn, CrC]

2661. *ti / *tihwa 'you sg': KH/M06-pr2: CN te' / te'wa(tl) / tehwa(tl); Pl taha. Add Sr t 'you sg' (Ken Hill, Serrano Sketch, 2001). [NUA: Tak; SUA: Azt]

2662. *(i)tammu 'we': B.Tep 297 *'aatï'i; BH.Cup *c...m; I.Num 205 *ta(h)-mV; M88-pr5; KH/M06-pr5: Mn taqwa; NP tammi; Com tamï; TSh tammï; Kw tami; CU tami; Hp itam (acc -ïy); Sr ačam/ičam; Ktn icam; Ca čémem; Cp čəmə; Ls čáá'um, čáá's,. čá'a, čám; Gb eyómoma; TO aačim; NT aatï-; ST aat³i'; Eu tamíde; Tb ité; Tr tamu(he); Wr remé; My ítapo; Yq itepo, te, ítom; Wc tá:me; CN te'waan; Pl tehemet. The Numic languages definitely suggest a geminated m. The final vowel, in light of Numic ï (< *u often), Tr tamu, Yq ítom (< *itomo < *itammu likely), Ls čáá'um and Gb eyómoma (perhaps both also showing assimilation to a now lost final *-u), it seems *-u may well have been the final vowel. And in which language did I see tammo? [NUA: Num, Tak, Hp, Tb; SUA: Tep, Trn, Cah, Opn, Tbr, CrC, Azt]

2663. *yihwa 'that, he, she': CN (y)e' / (y)e'waa / yehwaa / (y)e'waatl (pl. (y)e'waan / (y)e'waantin 'that one, he, she, they, etc.'); Pl ya, yah 'he, she, it'; Pl ye(e)met 'they'. [SUA: Azt]

2664. *pu 'he, she, it, 3rd sg': Ls -pu-; Wc pï-; My -po is a peculiar element suffixed to the My pronouns with no apparent meaning other than adding emphasis to the My pronouns (Collard and Collard 1984, 214). Compare the My enclitic nom pronouns (first column) and emphatic pronouns (second column):

	Nominative pronouns	(Mayo) Emphatic pronouns
I	-ne	inapo
You, sg	-'e	empo
He/she/3 rd sg		aapo
We	-te	itapo
You pl	-'em	eme'e
Thev	-mme/-em/-m	bempo

Ls pu 'it/he' in copula structure: yixél**vu**-l 'intelligent, alert'.

Cr pu '3rd person sg subject particle' (Casad 1984, 297).

Wc pï 'it/he': e.g., Wc šasúni 'verdad' vs. Wc pïšasúni 'es la verdad'

Wr pū 'that'

Tr mapu 'relative pronoun, which, what' (< *ma-pu).

In Tr the -pu element is actually isolated to mean 3rd person pronouns:

Tr ke-ne 'my' (-ne = I)

Tr ke-mu 'your, sg' (-mu = you, sg)

Tr ke-tumu 'your, pl' (-tumu = you, pl)

Tr ke-**pu** 'his, her, their'; thus, -pu is isolated as a 3rd person pronoun (Brambila 1953, 33)

Kw pu-/pï- 'relative pronoun' (Zigmund et al,127).

SP pï- 'whom, which, what, relative pronoun' ($\ddot{i} < *u$ often).

Tbr pu 'non-first person pronoun' [SUA: Trn, Cah, Tbr, CrC; NUA: Tak, Num]

2665. *hïwa 'that one': B.Tep084 *hïgái 'that one'; KH/M06-dm4: TO hïga'i/hïg'ai/hïgi/hïg'i/hig; NT ïgai; ST gai'. It seems Op can be added here. [SUA: Tep, Opn]

2666a. *himV 'they': Dakin 1982-312 *yəha-(wa)-mi-(t) 'ellos'; M88-pr8; KH/M06-pr8: NP imi; Kw imi; CU umis; Pl yehemet.

2666b. *hiwama 'they': B.Tep 085 *higáma: TO higam; NT igáa. [SUA: Tep, Azt]

2667a. *i- 'this': VVH 116 *'i 'this'; B.Tep306 *'idá/*'idí'i 'this (one)'; BH.Cup *'i(ví) 'this'; HH.Cup *'iví- 'this (obj. case)'; KH/M06-dm1: Mn ihu/ekahuna; NP isu; Wsh itïn (acc. ikka, pl. itïin) 'this right here'; Cm isï; Kw ina; Ch ic(ï) (pl. im(ï)) (P); CU in, ič 'this, these'; Hp i' (acc. it, pl. ima); Sr ivi' (acc. ivi(ï-), pl. iim); iip 'here'; Ca i'i (acc. iv'i); Cp i'i (acc. ivi-, ivinx); Ls ivi; ivá' 'here'; Tb ih 'here'; TO iia'a 'here'; NT idyi; ST dyii'; My i'i; Wc óóva 'aqui (limitado)'; CN iin (proximal particle) 'this, these'; Pl ini.

2667b. *ya 'this, here': NP yaa 'here'; Hp yàa 'this, here'.

2668. *hu 'that': I.Num018 *u(sï(N)) 'that'; KH/M06-dm2: NP usu; Cm usï 'that, that one (removed, definite)'; CU u/uru 'that, those, it'; Tb undugal 'that, that one'; My hu'; Pl uni (vowel is wrong, notes Hill). Add Op hu (Ju in Spanish orthography) 'that one' (Shaul 2007); and Tr hu/u 'is' is thought to be a participle of ni-ma 'be' but its juxtaposition to nouns and between nouns had it reinterpreted from 'that (is) a dog' to '(it) is a dog' or from 'John that('s) the man' to 'John (that) is the man'. Might this tie to *hïwa above?
[NUA: Num, Tb; SUA: Opn, Cah, Trn]

[NUA: Num, Tak, Hp, Tb; SUA: Tep, Cah, CrC, Azt]

2669. *pa / *pï 'that, 3rd person pronoun': BH.Cup *pə 'that'; KH/M06-dm3: NP pï 'him, her, it'; Cm pï 'him, her, it'; Hp pam (acc. pït; pl. pïma, acc. pïmïy) 'that, he, she, it'; Hp pan 'like that, that way'; Sr pat; pï- '3P prefix on postpositions' (e.g., pïhpa' 'on him/her/it'; Sr pïmia' 'with him/her/it'); pïï-/pïï-/puu- 'their' (possessive prefix); pana' 'like that, that way'; Ca pe' 'the, that'; Cp pə 'he, she, it (pointing to s.th. remote from the speaker)'; Ls póó' (acc. póy, pl. pumóm) 'that; he, she, it'; Gb paráma' (acc. pára, pl. pámo) 'aquèl'. Add Wc p- 'it, obj, e.g., p-áine 'lo dice' vs. (h)áine 'dice'. [NUA: Tak, Hp; SUA: CrC]

2670a. *ma 'that': Sapir: Cora ma / man 'hier, dort'; SP ma- 'that (visible)'. To Sapir, add Sr ama' (acc. amai; pl. a:m) 'that one, he, she, it' (Sr a- 'third person sg. pronominal prefix') and Ktn 'ama' 'that (distal)'. **2670b.** *mi 'that, this': KH/M06-dm5: Hp mi' (acc. mit; pl. mima, acc. mimïy) 'that (far from speaker and hearer)'; Gb menè' 'this'; pl. memo 'these'; Tr(H) mi 'aquel, aquella'; miká 'lejos' (Ht); Cr mïimï 'ese'.

[NUA: Num, Tak, Hp; SUA: Trn, CrC]

2671. *a- 'that': KH/M06-dm6: Hp a-/áá- (pl. aamï) 'third person pronominal prefix'; Sr ama' (acc. amai; pl. a:m) 'that one, he, she, it'; Sr a- 'third person sg. pronominal prefix'; Ktn 'ama' 'that (distal'. It seems that this is in Opata also? [NUA: Hp, Tak]

2672.*-(i)s(a) 'time(s)': KH/M06-'av1: Cm -sí: sïmIsï 'once'; Hp -s: lö:s 'twice'; pa:yis 'three times'; na:lös 'four times'; ïyis 'during planting time'; Sr -ia/i: wö'hia 'twice'; haukpi(a) 'once'; Ktn -i: hawkupi 'once'; Ls -iš: súpliš 'once'; Gb -ş: ayó'eş/ ayóheş 'many times'; Eu -s/-sa: wos/wosá 'dos veces'; márkis 'cinco veces'; mákois 'diez veces'; Wr -ş: wosá 'dos veces'; Tr -sa: baisá 'tercero'; Tbr -sa: vayisá 'tres veces'; narisá 'cuatro veces'; My -sa: wóosa 'dos veces'. Add Kw -ca 'times'. [NUA: Num, Hp, Tak; SUA: Opn, Cah, Trn, Tbr]

2673. *-ima (> -im, -m, -mi) 'plural suffix': Sapir; Langacker, 1977, 80 (*-mi); KH/M06-ns5: Hp -m/ -mi- 'nonsingular suffix'; Sr -m / -mi-; Ktn -m; Ca -m; Cp -m; Ls -m; Gb -m; CN -me' 'absolutive plural suffix'; -tin 'absolutive plural suffix' (with ns-01); CN -waan 'possessed plural suffix'. Langacker (1977, 80) reconstructs the UA plural suffix as *-mi, by taking an average of the more conservative forms, many of which indeed are -mi; however, several forms suggest *-ima. Consider Cp -im; Ca -em; Yq, My, and AYq -im (after C), -m (after V); Ls -(u)m; Hp -m; Sr -m; Tbr -m; Kw -mi; Cr -ma; Wc -ma; Wr -ma (pl verb suffix). And Dakin (1979) reconstructs an earlier *-ma for CN -mi. Add Op -m(e) (Shaul 2003, 27). Tep languages show pl -m only on pronouns. Though most UA languages begin the pl suffix with -m, five languages (Cp, Ca, Yq, My, AYq) show a high front vowel (i/e) before the m. Many show i or no vowel after the m; however, at least three show -ma, and because i behaves like the UA schwa, a change from final *a > i is natural in an unaccented position. Similarly, the loss of the first vowel *-i is also expectable, because most UA words end with a vowel, which creates an environment of two vowels, the second usually giving way to the first. For example, if a noun ends in -a, then: *-a+ -ima > -ami. Nevertheless, in spite of those two processes, the first vowel is apparent in five languages and the last vowel is apparent in at least three, making a reconstruction of *-ima quite viable, to which Miller agreed by p.c. prior to his untimely death that the case for *-ima is reasonable. In Tep this pl suffix is only found on pronouns:

- e.g., UP hïgam 'those' vs. hïga 'that'; and UP iidam 'these' vs. iida 'this'; Tep api 'you, sg' vs. apim 'you, pl'. [NUA: Num, Tak, Hp; SUA: Tep, Trn, Opn, Cah, Tbr, CrC, Azt]
- **2674.** *-tï 'plural suffix': KH/M06-ns6: Hp -t/-tï- 'dual/plural suffix'; CN -tin 'absolutive plural suffix' (with ns-05). To these we can add the CrC pl suffix *-te and Op -te 'pl possessive suffix' (Shaul 1990); Op -t 'plural verb ending' (Shaul 2003, 27). [NUA: Hp; SUA: Opn, CrC, Azt]
- **2675.** *na- 'reciprocal/reflexive/passive prefix': KH/M06-vp1: Hp naa- 'reflexive prefix on verbs'; TSh na- 'passive prefix on verbs' (Dayley 1989, 50); Sh na- 'passive/reciprocal prefix on verbs' (Crapo 1976, 12, 19-20); Cm na- 'passive/reflexive/reciprocal/plural prefix on verbs' (Charney 1993, 103-4, 126); Ch na- 'reflexive/reciprocal prefix (Press 1979, 49); SP na- 'reflexive/reciprocal prefix'; CU na- 'reciprocal prefix on verbs' (Givon 1980, 159-60); Eu na- 'reciprocal prefix on verbs' (Lionnet 1986, 29); Tr na- 'reciprocal prefix on verbs'; WTr na- 'reciprocal verbal prefix' (Burgess 1984, 33); CN ne- 'passive prefix' (Sullivan 1988, 75); Cr nya- 'refl prefix' (Casad 1984, 160). [NUA: Num, Hp; SUA: Trn, Opn, CrC, Azt]
- **2676.** *mo- 'reflexive pronoun': Langacker 1976, 50; Langacker 1977a, 47 *mo- 'reflexive pronoun for 3rd and 2nd person pl': CN mo-; Yq mo-; Tb 'omo(h)i(x); Tepecano m-; Pochutla mo-. [SUA: Cah, Azt]
- **2677.** *-wa / *-i-wa 'passive': Langacker 1976b, 143, 148-50; *-wa; Heath 1998: Hp -iwa 'passive suffix' also appears as -iw/-il/-wa (Hill 1998, 881); Tb -i-wa 'passive and impersonal suffix' (Voegelin 1935, 99-100; Langacker 1977a, 47); CN -i-wa 'passive suffix' some verbs that end in -i take -wa (Sullivan 1988, 74); CN -o 'passive suffix' also similar to -wa (Sullivan 1988, 74); My -wa 'passive suffix' (Collard and Collard 1984, 209); Wr -wa 'passive suffix' (Miller 1996, 143); Tr -wa / -riwa 'passive suffixes' (Brambila 1953, 90); Eu -wa/-u 'passive suffix' (Lionnet 1986, 37); Tbr -wa / -iwa 'voz pasiva-impersonal' (Lionnet 1978, 36); Yq -wa 'passive suffix' (Dedrick and Casad 1999, 283); Cr -(i)wa (Langacker 1976b, 143); Wc -wa (Langacker 1976b, 143). The -i-(preceding -wa) in Hp, Tb, Tbr, Azt is likely the pervasive UA stative/passive -i suffix at 2703. [NUA: Hp, Tb; SUA: Trn, Opn, Cah, Tbr, CrC, Azt]
- **2678.** *-ta 'non-possessed/absolutive suffix': Whorf1937b; BH.Cup*-ta/*-la/*-ca 'absolutive suffix'; Miller1983,120; KH/M06-ns1: TSh -tta 'accusative'; Sh -tta (obj form); Tb -l, -t; Hp -t(a-) 'non-possessed accusative singular'; Sr -t(a-)/-č(a-)/-č(a-) 'singular'; -t(a-) 'non-possessed'; Ca -t/-l/-ly/-š/-č; Cp -t/-l/-ly/-č; Ls -t(a-)/-l(a-)/-š/-ča; Gb -t/-r/-y; My -ta 'accusative'; Op -ta 'accusative for class I verbs in Op (Shaul 1990, 563); TO -t, -č; CN -tl/-tli/-li < PUA *-ta. [NUA: Num, Tb, Hp, Tak; SUA: Tep, Trn, Opn, Tbr, Cah, Azt]
- **2679a.** *-pï 'non-possessed/absolutive suffix (in Num)': SP -pï (Sapir 1930, 114); various fossilized morphemes in Tb and Tak potentially may or may not tie in also. One must wonder if the phonologically identical perfective participle, but as Sapir separates them, we will presently.
- **2679b.** *-pï 'perfective participle': Langacker 1977a, 62 *-pï 'active participle'; Num *-pï; Langacker (1977a,62) proposes proto-Cupan *-və 'aspectual suffix on subordinate verbs' and Jane Hill (2005, 116) identifies Cp aspectual suffix -ve 'realis, base is past tense inflected verb'; SP -ppï 'past, former, past participle (Sapir 1930, 123, 128); NP -pï 'perfective' (Thornes 2003, 401-2); WSh -ppï 'past participial suffix' (Crum and Dayley 1993, 63); Kw -pï 'perfective participial' (Zigmond at al 1991, 95-6). [NUA: Num, Tb, Tak]
- **2680.** *-pi 'non-possessed/absolutive suffix': NP -pi 'noun class marker' (Thornes 2003, 105-8); Kw -pi / -bi / -vi 'absolutive suffix, always takes -ta as the accusative suffix' (Zigmond at al 1991, 40); . SP -pi 'absolutive suffix implying indefiniteness or non-specification of possessor' (Sapir 1930, 113); Num *-pi is pervasive, but also occasionally fossilized in Tb and Tak; whether fossilized or borrowed in Hp is not clear. [NUA: Num]
- **2681.** *mik- 'possession': BH.Cup *míx- 'possession' (cp. ma-02); KH/M06-ns2: Cp -míxən; Ca -méxan; Ls -mííx 'property, thing possessed (poss. only)'; Ls mí/míx- 'to be'. [NUA: Tak]
- **2682.** *-yu 'nominative suffix': KH/M06-ns7: Kw -yu (frozen form?): su:yu 'one'; SP -yu- (Sapir p. 264); Hp -y/-yo-/-yö'/-yö-: wïy 'old (nom.)'; wï:yoq 'big, large'; lö:yö'/lö:yöm 'two';

- Eu -i (frozen form) : wé|i (gen. ~ke, acc. wek) 'grande'; CN -i/-yi (frozen form) : we:i/we:yi 'big'. [NUA: Num, Hp; SUA: Opn, Azt]
- **2683.** *-a 'accusative suffix': Langacker (1977a, 82-3) considers the accusative vowel *-a to have been the regular accusative suffix in PUA and he mentions it still being productive in Tb, SNum, and Sh. In fact, he considers the *-ta (< *-t-a) to be *-t- fused with this vowel as a reanalyzed absolutive-accusative suffix, being absolutive in some languages, accusative in others. He then cites examples that include the above branches and Yq -ta. For other examples, note that in Eu the nominative noun is suffixed by -te for 'genitive' and -ta for 'accusative'; and My -ta 'accusative'; Op -ta 'accusative for class I verbs in Op' (Shaul 1990, 563) are mentioned above; Kw -a 'accusative' (Zigmond at al 1991, 41). [NUA: Tb, Num; SUA: Cah, Opn]
- **2684.** *-cï / *-cV 'accusative suffix': Langacker 1977a, 82-3; KH/M06-ns8: Hill notes Hp -y/-yï-; Sr -i/-iï-; Ktn -y; CN -č-/-c-: neeč- 'me'; teeč- 'us'; CN mic- 'you (sg. acc.)'; ameeč- 'you (pl. acc.)'. Langacker (1977, 82-3) sees the NUA accusative suffix resembling *-i, *-y(i), *-yï apparent in Tb, Hp, and Tak, then Hill, considering the SUA *-c-> -y-, includes CN -č-/-c- suffixes as well. [NUA: Hp, Tb, Tak; SUA: Azt]
- **2685.** *-ku / *kw 'accusative suffix': KH/M06-ns9: SP -kku- (Sapir p. 264); Hp -kw/-ko-/-q(ö-): wiïkw 'old (acc.)'; wiïkoq 'big, large (acc.)'; lööq/lööqöm 'two (acc)'; TO -k (frozen form): waik 'three'; Eu -k: wé|i (gen. ~ke, acc. wek) 'grande'; CN -k/-ki 'adjectival suffix': kostik 'yellow'; waakki 'dry'.

 [NUA: Hp, Num; SUA: Tep, Opn, Azt]
- **2686.** *ti- 'indefinite non-human object': Langacker 1976b, 129 *ti- 'unspecified obj'; Langacker 1977a, 46 *ti- 'unspecified obj'; Dakin 1994-63; KH/M06-vp2: Hp tii-; NP ti-; Mn ti-; Sh tii-; TO ču- (Langacker 1976b, 130; Hale 1959, 75); CN te- '(indefinite human object)'; CrC ra- 'distributive sg prefix'.

 [NUA: Hp, Num; SUA: Tep, CrC, Azt]
- **2687.** *ta- 'unspecified subject': Langacker 1976b, 129 *ta- 'unspecified subj'; Langacker 1977a, 46 *ta- 'unspecified subj'; CN tla-; Sh ta-; TO ta-. [NUA: Num; SUA: Azt]
- **2688.** *-na / *-ina 'causative suffix': KH/M06-vs2: WSh -na : kahninai 'build a house'; Hp -ina/-in/-na; Sr -in(a-). This may be different than *'ani/*kani 'do, make'. Cf. separate Hp forms. [NUA: Num, Hp]
- **2689.** *-tu'a (Hill) 'causative suffix': KH/M06-vs1: Sr -tu'(a-) /-çu'(a-) / ču'(a-) : ki:ču' 'to build a house'; TO -t : ki:t 'to build a house'; CN -tia : kaltia 'to build a house'. Add SP -ru / -ttu / -ntu 'make' (Sapir 1930, 134). In light of SP -ru'iN / -ttu'iN / -ntu'iN 'become, turn into' (Sapir 1930, 136) being cognate with *tu' 'become' at 'old'. [NUA: Tak, Num; SUA: Tep, Azt]
- **2690.** *-ta 'cause, make, do, derive verb from noun': Langacker (1977, 45) cites *-ta 'make' with examples from Tepecano and Cr -ta 'make' (Casad 1984, 158). Note also Hp -ta (pl. -tota): ki:ta 'to build a house'; Eu vikat 'knife' and Eu vik-ta'a 'make a knife'; Tr -ta 'do s.th. with the noun' as in Tr o'paca-ta 'clothes/shirt-put on, i.e., do clothes'; Wr -ta/ra 'hacer' (Miller 1996, 95); Yq bwalko 'blando' and Yq bwalko-te 'ablandar'; NT voí, voogadï (poss'd) 'road' and NT voogïtai 'hacer camino'; NT úúpasai 'el adobe' and NT úúpastai 'hacer adobe'. [NUA: Hp, Tak; SUA: Tep, Trn, Cah, Opn, CrC, Azt]
- **2691.** *ŋu(N) 'momentaneous verbal suffix': SP ŋuN 'momentaneous' (Sapir 1930, 152); Kw -n /-nï / -nu 'momentous suffix' (Zigmond et al, 1991, 96); Ch ŋu 'momentaneous suffix' (Press 1979, 67); TSh -nnuh 'simulfactive completive' (Dayley 1989b, 61); WMU -ŋu; NP -kuha 'inceptive' might be included as the Num forms sometimes are used inceptively (Sapir 1930, 152); perhaps Ca -ŋi- unique or repeated onset of action' (Seiler 1977, 233) since Ca i < *o, perhaps *u > *o > i. [NUA: Num, Tak]
- **2692.** *-(n)tï 'habitual agentive suffix': SP -rï / -tï / -ntï 'present active participle' (Sapir 1930, 129-30); WMU -rï / -tï / -ntï 'one who (usually habitually) does (verb)'; WSh -tï(n) 'habitual, customary aspect suffix (Crum and Dayley 1993, 90-91); Cm -tï(n) 'imperfective participle indicating the person or thing which performs an action or

- possesses a quality' (Robinson and Armagost 1990, 276); Ch -t(ï) 'active participle'; NP -dï 'agent nominalizer' (Thornes 2003, 117-120). [NUA: Num]
- **2693.** *-ka 'perfect, past': Sapir *kai; SP -qqai, -qqa; CN *-ka (Dakin 1982); Num *-ka; Yq -k / -ka 'perfective' (Dedrick and Casad 1999, 310-12); My -ka 'pretérito'. This is found in many more and might relate to *-ka 'have, possessive suffix'; English 'have' serves both perfect and possession. [SUA: Cah]
- **2694.** *-va 'future-unrealized suffix': Kw -vaa 'unrealized suffix' (Zigmond at al 1991, 95-6); Ch -vaa / -va 'future tense suffix' (Press 1979, 71, 81); SP vaa(N) 'future, intentive' (Sapir 1930, 165); WMU -vaa-ni 'future suffix'; CU -vaa-ni. [NUA: Num]
- **2695.** *-mï(L)a 'future suffix': Miller 1996, 133: ST -mïra 'go to (do s.th.), suffix of purpose, sg' (Willett & Willett 2005, 289); Tr -méa / -ma 'future suffix'; Wr -ma (Miller 1996, 133); Ktn -mat 'non-proximal future' (Anderton 1988, 96); perhaps Sr mia 'may, might' (Hill 2001, 8) perhaps a 'future' that became a 'maybe'. Of course, this may well tie to *mïLi 'run' though some languages yield differing forms for the two. [SUA: Trn, Tep; NUA: Tak]
- **2696.** *-ca 'frequentative transitive suffix': Sapir: CN -ca 'frequentative transitive suffix'; SP -ca 'frequentative transitive suffix' (pl objs; also Sapir 1930, 143); Tr -ca 'type of causative suffix'; at least fossilized in NT also, as both Tr and NT show *supa-ca at 'adobe'. [NUA: Num; SUA: Azt, Tep, Trn]
- **2697.** *wa- 'perfect or past prefix': CN oo-/o- 'perfect marker' (Sullivan, 54); Cr wa- 'completive prefix' (Casad 1984; Vazquez Soto 1994, 154). Sapir (1914, 479) observes that PUA *w appears in CN before all vowels except o, before which *wo > o, so *wa- > wo- > oo- in Azt. [SUA: CrC, Azt]
- **2698.** *-i / *-y(V) 'present': Ch -yï (Press 1979, 64, 71); WMU -y / -i 'present tense verb suffix'; SP -i; CU -i; Wr -i (Miller 1996, 140). [NUA: Num; SUA: Trn]
- **2699.** *-ti / *-ti 'stative or resultative suffix, adjective suffix': CU -ti 'a suffix to derive adjectives from verbs' (Givon 1980, 30-31); Hp -ti 'realized suffix, verb is realized (Ken Hill 1998, 879); WTr -ri/-li 'stative / passive / participial suffix'; My -ri 'past participle': e.g. My yáa-ri 'is done' (Collard and Collard 1984, 208) or Cah *yara 'do'; Cah *yara-ti 'done'; Cm -ti 'predicate suffix with adjectives' (Charney 1993, 146, 198, 201); SP -tti 'passive' (Sapir 1930, 146); Wr -wari 'passive suffix' (Miller 1996, 143) probably < *-wa-ti; Tr -rati 'passive suffix of past tense' (Hilton 1993, 138) -ti portion compounded with s.th. else. CN -ti- 'derives adj's from verbs' (Sullivan 1988, 145). [NUA: Hp, Num; SUA: Cah, Trn, Azt]
- **2700.** *kamï 'participle suffix on verbs, person who does, is': Tr -(k)ame; ST -kam 'nativo de, indica que tiene cierta características'; TO -kam 'one who has done or will do, one characterized by'. It may be a compound (as specified by Saxton and others), but it appears in several SUA languages. [SUA: Trn, Tep]
- **2701.** *-'numpï < *CnuN-pï 'instrumental suffix, using, with it': WSh nompï (Crum and Dayley 1993, 63); NP -nu/-no (Thornes 2003, 123-4); SP -nïmpï / -n'ïmpï < *nïN-pï 'instrumental suffix, compound of nïN 'usitative' + -ppï 'passive participial' says Sapir (Sapir 1930, 124); Ch -numpï 'instrument'; WMU *-'nappï 'forms nouns with which one does s.th.' (Stubbs 2011). [NUA: WNum, CNum, SNum]
- **2702.** *-i / *-ya 'person from': Langacker 1977, 45 *-ya 'person from': Langacker lists Tr -i and Ls -ya-. [NUA: Ls; SUA: Trn]
- **2703.** *-a/-i 'vowel alternation on the end of verbs such that *-a 'transitive, active' and *-i 'intransitive, passive, stative': Sapir 1930, 73, 143; Whorf 1935; Langacker 1977, 132; Dakin 1982:

Cr -i 'stative suffix' (Casad 1984, 159);

Wc cana 'romper'; Wc sani 'roto';

Yq -i 'stative suffix' (Estrada Fernández et al 2004, 399);

Wr has transitive verbs ending in -a with corresponding intransitive verbs ending in -i (Miller 1996, 130):

Wr ço'a 'put out fire'; Wr ço'i 'be no fire';

Wr wela 'put upright/standing'; Wr weri 'be upright/standing';

Wr mo'a 'put pl obj's inside'; Wr mo'i 'enter, pl subj's';

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Wr sa'wa 'cure s.o., alleviate s.th.'; Wr sa'wi 'be alleviated, go away';
Tr also has such pairs of verbs' (Hilton 1993, 139):
Tr mana 'put, place, set'; Tr mani 'be (in/at a place), exist';
Tr bi'wá 'clean it'; Tr bi'wí 'be(come) clean';
Tr čiwá 'stick, vt'; Tr čiwí 'be stuck, vi';
CN also has such pairs of verbs (Sullivan 1988, 171):
CN tla-tema 'fill, place s.th.'; CN temi 'be full, be lying down';
CN tla-kotona 'break s.th.'; CN kotoni 'be broken';
CN tla-mana 'put s.th. on the floor'; CN mani 'be stretched out, extended';
CN tla-toma 'undo s.th.'; CN tomi 'be undone'; and so does Tbr:
Tbr towa 'leave s.th. behind, vt'; Tbr towi/tovi 'stay, remain, vi'.
Nv vurha 'atar, vt'; Nv vurhi 'atado';
Nv tuha 'moler, vt'; Nv tuhi 'cosa molida';
Nv virioka 'desatar'; Nv virioki 'cosa desatada';
TSh sawa 'boil, vt' and TSh sawi 'melt, vi'; and others;
SP muntunaa 'cover oneself' (active); SP muntun'i 'be covered' (stative) (Sapir 1930, 73, 143);
SP yauggwa 'push in'; SP yauggwi 'go in, set (of sun)';
SP yunna 'put down (pl objs)'; SP yunnia 'fall, drop down, pl';
SP ton'na 'strike, hit, vt'; SP ton'ni 'shake, vi'; SP ova 'pull out hair, vt'; SP ovi 'come out (of hair), vi'
SP pačá'a 'fasten s.th., vt'; SP pačá'i 'hang, be fastened, vi'
SP tuġwa 'put fire out, vt'; SP tuġwa / tuġwi 'fire goes out, vi'
SP yunna 'put down (pl objs), vt'; SP yunnia 'several fall, drop, vi'
SP münišša 'turn over, vt'; SP münišši" 'turn over, vi'
WMU spæ'naa-ti'(i) 'flatten, vt'; WMU spæ'ni 'flat, stative/adj'
WMU - 'núga-y 'put in, stick in'; WMU núgi 'wear, be put in, be in'
WMU tuġwá-y 'put fire out, vt'; WMU tuġwí- 'fire went out by itself, is gone out (stative/past)
Hp -iwa 'passive suffix' eliminates final -a of transitive verbs, so it is likely -a > -i with added -wa:
Hp aama 'bury, vt' vs. aamiwa 'was buried';
Hp paata 'melt, vt' vs. Hp paati 'melt, vi';
Hp maqa 'give' vs. makiwa 'was given' (Ken Hill 1998b, 881);
Tb -(i)w 'passive'; like Hp, the examples show -i of -iw changes verb final -a > -i (Voegelin 1935, 99);
ST taapna' 'partir, rajar, vt'; ST taapñia' 'partirse, rajarse, vi'.
Ls has this feature, but somehow reversed it to -a being intransitive/passive and -i being active/transitive.
Some languages have the final -i vowel as the perfective (having been done) rather than stative (is done):
Cm -i 'completive suffix on verbs' (Charney 1993, 142-3);
Ca -'i 'realised' (Seiler 1977, 138-40);
TO -i 'perfective is marked by a final vowel change to -i' (Langacker 1977, 131);
Op -i 'perfective changes final -a to -i' (Shaul 2003, 25);
Eu -i 'the final stem vowel changes to final -i for the Eu preterite (past tense) in many, if not most Eu verbs, vs. Eu
-a-n 'present indicative verb ending':
Eu hipra-n 'watch over, care for' vs. preterite: hipri 'watched over, cared for';
Eu maka-n 'give' vs. preterite: maki 'gave';
Eu taha-n 'burn' vs. preterite: tahi 'burned';
However, some Eu verbs show an -a transitive and -e intransitive distinction (e being halfway from a to i in
position), as well as the -i preterite for both:
Eu wehra 'stand s.th. up, vt' (pret: wehri); Eu wehre 'stand up, grow, vi' (pret: wehri);
Eu pitása 'smash, flatten, vt' (pret: pitási); Eu pitáse 'be/get flattened' (pret: pitási).
[NUA: Hp, Tak, Num, Tb; SUA: Tep, Trn, Opn, Cah, Tbr, CrC, Azt]
NB, for *wïC- 'with long object, instr prefix': Sapir; I.Num283 *wïh-; KH/M06-ip14, see 'big'.
NB, for *-e/i 'have, possess', see at possess.
NB, for *-tu / *-to 'go to get/do, pregressive suffix' and perhaps *-tu 'acquire' (Haugen 2006c), see at go.
NB, for *-pi 'suffix of place' and KH/M06-ns10, see at 'at'.
NB, for KH/M06-in5, see at 'all'.
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NB, for KH/M06-in6, see at 'what'.

NB, for KH/M06 various instrumental prefixes (ip), see the noun upon which it is based.

Additional Sets Added since the 2011 edition

2704. *kut-tunuhi 'firedrill': Jane Hill, p.c.: Kw kutunuhi 'make fire with a firedrill'; SP qutnuni 'to drill for fire'; NP toonoohinyu 'firedrill'; WMn tootonohiit 'firedrill'. Add NP(B) tonoinupï 'shaft of firedrill'. Kw -t- < *-tt-. [NUA: Num]

A UTO-AZTECAN BIBLIOGRAPHY

Albert, Roy, and David Leedom Shaul. 1985. A Concise Hopi and English Lexicon. John Benjamins.

Anderson, Arthur J.O. 1973. Rules of the Aztec Language. Translation of Francisco

Xavier Clavigero, Reglas de la Lengua Mexicana. Salt Lake City: University of Utah Press.

Anderton, Alice Jeanne. 1988. The Language of the Kitanemuks of California. Ph.D. dissertation, UCLA.

Andrews, J. Richard. 1975. Introduction to Classical Nahuatl. Austin: University of Texas Press.

Anonymous. 1981. Arte y Vocabulario de la Lengua Dohema, Heve, o Eudeva,

ed. Campbell W. Pennington. Mexico City: Mexico, Instituto de Investigaciones Filológicas, Universidad Nacional Autónoma de Mexico.

Armagost, James L. Comanche ma-: Undistinguished Deictic, Narrative Obviative. IJAL 51/3:302-10.

Baeza, Marcelino Montero. 2016. *Ejercicios para el aprendizaje de la lengua Nahuatl de Hueyapan: Diccionario Español-Nahuatl*. Comision Nacional para el Desarrollo de los Pueblos Indígenos,
Edicion electronica.

Bahr, Donald M. 1975. Pima and Papago Ritual Oratory. San Francisco: The Indian Historian Press.

Bahr, Donald M. 1986. Pima-Papago -ga 'alienability'. IJAL 52:161-71.

Balbastro, Pablo. 1878. Vocabulario de la lengua ópata, dialecto tehuima. Ms. Bancroft Library.

Barbastro, Antonio. 1792. Sermones en la lengua ópata. Ms. Bancroft Library.

Barragan, Luis M. 2003. Movement and Allomorphy in the Cupeño Verb Construction.

In Studies in Uto-Aztecan, Luis M. Barragan and Jason D. Haugen, eds., 141-161.

MIT Working Papers on Endangered and Less Familiar Languages, no. 5.

Barragan, Luis M. and Jason D. Haugen, eds. 2002. Reduplication in the Sonoran Languages. In *Sexto Encuentro Internacional de Lingüística en el Noroeste*, Memorias Tomo 2, Rosa María Ortiz Ciscomani and Zarina Estrada Fernández, eds., 53-76. Hermosillo: Universidad de Sonora.

Barragan, Luis M. and Jason D. Haugen, eds. 2003. Studies in Uto-Aztecan.

MIT Working Papers on Endangered and Less Familiar Languages, no. 5.

Barreras, Isabel. 1988. Posesión en Guarijio. Paper presented in the Simposio sobre

lingüística yutoazteca, CILI, Universidad de Guadalajara, Guadalajara, Jalisco, Mexico.

Barreras Aguilar, Isabel. 2000. Orden de Palabras en el Guarijío de Sonora.

In Uto-Aztecan: Structural, Temporal, and Geographic Perspectives, Eugene H. Casad and

Thomas L. Willett (eds.), 125-38. Hermosillo, Mexico: Universidad de Sonora.

Bascom, Burton W. 1965. Proto-Tepiman. Ph.D. Dissertation, University of Washington.

Bascom, Burton W. Northern Tepehuan Dictionary. in preparation.

Bascom, Burton W. 1982. Northern Tepehuan.

Studies in Uto-Aztecan Grammar: Uto-Aztecan Grammatical Sketches. vol. 3.

Ronald W. Langacker, ed. Arlington: Summer Institute of Linguistics.

Beatriz, Marcelino Hernandez. 2016. Vocabulario Nahuatl-Español de la Huasteca Hidalguense. 2nd ed. Mexico: Cruzhica.

Bednark, James, and Arie Poldevaart. Project director. 1987. Paiute-English, English-Paiute Dictionary.

A publication of the Yerington Paiute Tribe. Anchorage: Bilingual Education Series.

Beller, Richard and Patricia Beller. 1979. Huasteca Nahuatl.

Studies in Uto-Aztecan Grammar: Uto-Aztecan Grammatical Sketches. vol. 2.

Ronald W. Langacker, ed., 199-306. Dallas, TX: Summer Institute of Linguistics.

Bethel, Rosalie, Paul V. Kroskrity, Christopher Loether, and Gregory A. Reinhardt.

1993. A Dictionary of Western Mono, 2nd ed.

Bickerton, Derek. 1981. Roots of Language. Ann Arbor: Karoma Publishers Inc.

Bierhorst, John. 1985. A Nahuatl-English Dictionary and Concordance to the Cantares Mexicanos with Analytical Transcription and Grammatical Notes. Stanford: Stanford University Press.

Boas, Franz. 1917. El Dialecto Mexicano de Pochutla, Oaxaca. IJAL 1:9-44.

Brambila, David, and José Vergara Bianchi. 1953. Gramática Raramuri.

Editorial Buena Prensa: México.

Brambila, David. 1976. Diccionario Raramuri-Castellano.

Mexico: La Obra Nacional de la Buena Prensa.

Brambila, David. 1983. Diccionario Castellano-Rarámuri.

Mexico: La Obra Nacional de la Buena Prensa.

Brewer, Forrest, and Jean G. Brewer. 1962. Vocabulario mexicano de Tetelcingo, Morelos:

Castellano-mexicano, mexicano-castellano. México, D.F.: Instituto Lingüístico de Verano.

Bright, William. 1960. Accent in Classical Aztec. IJAL 26:66-68.

Bright, William. 1965. The History of the Cahuilla Sound System. IJAL 31:241-44.

Bright, William, and Jane Hill. 1967. The Linguistic History of the Cupeño.

In Studies in Southwestern Linguistics, Dell Hymes and William E. Bittle, eds., 351-371.

Bright, William. 1968. A Luiseño Dictionary. UCPL 51.

Berkeley and Los Angeles: University of California Press.

Bright, William, ed. 1978. Coyote Stories. IJAL-Native American Texts Series.

Brinton, Daniel. 1891. The American Race. New York: N.D.C. Hodges.

Brockway, Earl. 1979. North Puebla Nahuatl.

Studies in Uto-Aztecan Grammar: Modern Aztec Grammatical Sketches. vol. 2.

Ronald W. Langacker, ed., 141-198. Dallas, TX: Summer Institute of Linguistics.

Buelna, Eustaquio. 1890. Arte de la Lengua Cahita por un Padre de la Compañía de

Jesús. Mexico: D.F. [First published in 1737 by Juan B. de Velasco.]

Bunte, Pamela A. 1979. Problems in Southern Paiute Syntax and Semantics.

Dissertation, Indiana University.

Bunte, Pamela A. 1986. Subordinate Clauses in Southern Paiute. IJAL 52/3:275-300.

Burgess, Don H. 1984. Western Tarahumara [Grammar]. In Studies in Uto-Aztecan

Grammar, vol. 4: Southern Uto-Aztecan Grammatical Sketches, Ronald W.

Langacker, ed., 1-149. Dallas, TX: Summer Institute of Linguistics.

Burnham, Jeffrey. 1988. Mayo Suprasegmentals: Synchronic and Diachronic Considerations.

In William Shipley, ed. *In Honor of Mary Haas: From the Haas Festival Conference on Native American Linguistics*: 37-51. Berlin and New York: Mouton de Gruyter.

Buschmann, Johann Carl Eduard. 1859. Die Spuren der Aztekischen Sprache im nordlichen Mexiko und höheren amerikanischen Norden. *Abhandlungen der Königlichen Akademie der Wissenschaften* 1854, Supplement-Band II: 512-76.

Caballero Hernandez, Gabriela. 2003. Valence and Transitivity Changing Operations

- in Rarámuri. In *Studies in Uto-Aztecan*, Luis M. Barragan and Jason D. Haugen, eds., pp. 163-180. MIT Working Papers on Endangered and Less Familiar Languages, no. 5.
- Caballero Hernandez, Gabriela. 2005. Central Rarámuri Phonology and Morphology: An Overview. Ms. University of California, Berkeley.
- Callaghan, Catherine A. 2001. "More Evidence for Yok-Utian: A Reanalysis of the Dixon-Kroeber Sets." *IJAL* 67(3): 313-345.
- Campbell, Lyle. 1977. Quichean Linguistic Prehistory. Berkeley: University of California Press.
- Campbell, Lyle. 1979. Middle American Languages. In Campbell and Mithun, eds.,902-1000.
- Campbell, Lyle. 1985. *The Pipil Language of El Salvador*. Berlin, New York, Amsterdam: Mouton Publishers.
- Campbell, Lyle. 1987. Syntactic Change in Pipil. IJAL 53:253-80.
- Campbell, Lyle. 1988. *The Linguistics of Southeast Chiapas*. Papers of the New World Archaeology Foundation 50. Provo: New World Archaeology Foundation-Brigham Young University.
- Campbell, Lyle. 1997. American Indian Languages: The Historical Linguistics of Native America. New York: Oxford University Press.
- Campbell, Lyle. 1998. *Historical Linguistics: An Introduction*. Edinburgh: Edinburgh University Press; reprinted at Cambridge: MIT Press, 1999.
- Campbell, Lyle. 2001. What's wrong with grammaticalization? *Language Sciences* 23(2-3): 113-161.
- Campbell, Lyle and Alice C. Harris. 2002. Syntactic reconstruction and demythologizing 'Myths and the prehistory of grammars'. *Journal of Linguistics* 38: 599-618.
- Campbell, Lyle, and Ronald W. Langacker. 1978. Proto-Aztecan Vowels. *IJAL* 44: 85-102, 197-210, 262-279.
- Campbell, Lyle, and Marianne Mithun, eds. 1979. *The Languages of Native America: A Historical and Comparative Assessment*. Austin: University of Texas.
- Campbell, R. Joe. 1976. Underlying /ŋw/ in Hueyapan Nahuatl. *IJAL* 42:46-50.
- Campbell, R. Joe. 2006. Draft Lexicon of Molina and Florentine Codex Vocabulary.
- Canger, Una. 1988. Nahuatl Dialectology: A Survey and Some Suggestions. IJAL 54/1:28-72.
- Canger, Una, and Karen Adrian. 1976. Diccionario de vocablos aztecas contenidos en El Arte de la Lengua Mexicana de Horacio Carochi.Copenhague: Universidad de Copenhague.
- Canger, Una, and Karen Dakin. 1985. An Inconspicuous Basic Split in Nahuatl. *IJAL* 51/4: 358-361.
- Canonge, Elliott D. 1958. Comanche Texts. Arlington, TX: Summer Institute of Linguistics.
- Carpenter, John P., and Jonathan B. Mabry. 2001. La arqueología de los grupos yutoaztecas tempranos. In *Avances y balances de lenguas yutoaztecas*. Homenaje a Wick R. Miller, eds. José Luis Moctezuma Zamarrón y Jane H. Hill, 359-73.
- Casad, Eugene H. 1984. Cora. In Ronald Langacker (ed.), *Southern Uto-Aztecan Grammatical Sketches*, vol. 3: 153-475. Arlington: The Summer Institute of Linguistics and the University of Texas at Arlington.
- Casad, Eugene H. 1992. Cora postpositions. Leuvense Bijdragen 81: 45-70.
- Charney, Jean Ormsbee. 1993. A Grammar of Comanche. Lincoln: University of Nebraska Press.
- Charney, Jean O. 1996. Ute Dictionary. Ignacio, Colorado: Southern Ute Indian Tribe.
- Collard, Howard, and Elisabeth Scott Collard. 1984. *Vocabulario Mayo*. Serie de vocabularios indígenas, no. 6. Mexico, D.F.: Instituto Lingüistico de Verano.
- Copeland, James E. 1993. Tarahumara Reduplication: the Grammaticalization of iconic intensification. Published by The Linguistic Association of Canada and the United States, first edition.
- Copeland, James E. 1996. The copula in Tarahumara: paths of grammaticalization.

 In Bates Hoffer, ed. The twenty-second LACUS forum 1995. Linguistic Association of Canada and the United States. Chapel Hill, North Carolina.
- Cortina-Borja, Mario, and Leopoldo Valiñas C. 1989. Some Remarks on Uto-Aztecan Classification. *IJAL* 55(2): 214-39.
- Crapo, Richley H. 1970. The Origins of Directional Adverbs in Uto-Aztecan Languages. IJAL 36: 181-89.

- Crapo, Richley H. 1976. *Big Smokey Valley Shoshoni*. Desert Research Insitute Publications in the Social Sciences, number 10. Don D. Fowler, ed.
- Crum, Beverly, and Jon Dayley. 1993. *Western Shoshoni Grammar*. Boise State University Occasional Papers and Monographs in Cultural Anthropology and Linguistics, no. 1.
- Dakin, Karen. 1979. Phonological Changes in Nahuatl: The Tense/Aspect/Number Systems. *IJAL* 45/1:48-71.
- Dakin, Karen. 1982. *La Evolución Fonológica del Protonáhuatl*. México: Universidad Nacional Autónoma de México.
- Dakin, Karen. 1983. Proto-Aztecan Vowels and Pochutec: An Alternative Analysis. IJAL 49/2:196-219.
- Dakin, Karen. 1989. Los Origenes Yutoaztecas de –ilC en en Nahuatl. Estudios de Cultura Nahuatl, 19:347-360.
- Dakin, Karen. 1991. Nahuatl Direct and Mediated Possession: A Historical Explanation for Irregularities. *IJAL* 57/3: 298-329.
- Dakin, Karen. 1994. El Nahuatl en el Yutoazteca sureño. In Carolyn J. Mackay and Verónica Vazquez, eds. *Investigaciones Lingüisticas en Mesoamerica*, 53-86. Mexico: Universidad Nacional Autonóma de Mexico.
- Dakin, Karen. 1997. Long Vowels and Morpheme Boundaries in Nahuatl and Uto-Aztecan: Comments on Historical Developments. *Amerindia* 21:55-76.
- Dakin, Karen. 1999. Animals and vegetables, Uto-Aztecan noun derivation, semantic classification, and cultural history. In Laurel J. Brinton, ed. Selected papers from the 14th international conference on Historical Linguistics. Amsterdam/Philadelphia: John Benjamins.
- Dakin, Karen. 2000. Proto-Uto-Aztecan *p and the e-/ye- Isogloss in Nahuatl Dialectology. In *Uto-Aztecan: Structural, Temporal, and Geographic Perspectives*, Eugene H. Casad and Thomas L. Willett (eds.), 213-19. Hermosillo, Mexico: Universidad de Sonora.
- Dakin, Karen. Raíces en ih- y ah- en el Nahuatl y la **p Proto-Yuto-Azteca. Monograph.
- Dakin, Karen. 2001. Isoglosas e innovaciones yutoaztecas. In *Avances y balances de lenguas yutoaztecas*. Homenaje a Wick R. Miller, eds. José Luis Moctezuma Zamarrón y Jane H. Hill, 313-343. Serie Lingüística. México, D.F.: Instituto Nacional de Antropología e Historia.
- Dakin, Karen. 2004a. Nahuatl -ka words: Evidence for a proto-Uto-Aztecan derivational Pattern. *Sprachtypologie and Universalienforschung* 57:6-22.
- Dakin, Karen. 2004b. El Xolotl Mesoamericano: Una Metáfora de Transformación Yutonahua? In *La Metáfora en Mesoamérica, ed. Mercedes Montes de Oca Vega*, 193-233. Universidad Nacional Autónoma de México.
- Dakin, Karen and Soren Wichmann. 2000. Cacao and Chocolate: A Uto-Aztecan Perspective. *Ancient Mesoamerica* 11:55-75.
- Davis, Irvine. 1966. Numic Consonantal Correspondences. IJAL 32/2: 124-40.
- Davis, John F. 1976. 'Some Notes on Luiseňo Phonology'. IJAL 42, 192-216.
- Dayley, Jon P. 1989a. Tümpisa(Panamint) Shoshone Dictionary. Berkeley: University of California Press.
- Dayley, Jon P. 1989b. *Tümpisa (Panamint) Shoshone Grammar. UCPL* 115. Berkeley: University of California Press.
- De Wolf, Paul P. 1997. Esbozo del Mayo Sonorense. Hermosillo, Sonora: Universidad de Sonora.
- De Wolf, Paul P. 2001. Eudeve and Opata: A Reassessment of their Classification. In *Avances y balances de lenguas yutoaztecas*. Homenaje a Wick R. Miller, eds. José Luis Moctezuma Zamarrón y Jane H. Hill, 237-65. Serie Lingüística. México, D.F.: Instituto Nacional de Antropología e Historia.
- Dedrick, John M., and Eugene H. Casad. 1999. *Sonora Yaqui Language Structures*. Tucson: University of Arizona Press.
- $Demers,\,Richard,\,Fernando\,Escalante,\,and\,Eloise\,Jelinek.\,\,1999.$
 - Prominence in Yaqui Words. IJAL 65(1): 40-55.
- Dibble, Charles E., and Arthur J.O. Anderson. 1970. *Florentine Codex, Book 1—The Gods*. Translation of Fray Bernardion de Sahagún, General History of the Things of New Spain. Santa Fe, New Mexico: School of American Research and University of Utah. Monographs of the School of American Research. No. 14, part 7.
- Dibble, Charles E., and Arthur J.O. Anderson. 1961. Florentine Codex, Book 10—The

People. Translation of Fray Bernardion de Sahagún, General History of the Things of New Spain. Santa Fe, New Mexico: School of American Research and University of Utah. Monographs of the School of American Research. No. 14, part 11.

Elliott, Eric B. 1999. Dictionary of Rincon Luiseño.

University of California, San Diego doctoral dissertation.

Elzinga, Dirk. 1999. The Consonants of Gosiute. PhD dissertation, University of Arizona.

Encinas, Manuel Carlos Silva, Pablo Alvarez Romero, and Crescencio Buitimea Valenzuela. 1998. *Jiák Nokpo Etéjoim*. Hermosillo, Mexico: Departamento de

Escalante, Fernando. 1985. A preliminary view of the structure of Yaqui.

MA thesis, University of Arizona.

Escalante, Fernando. 1990. Voice and Argument Structure in Yaqui.

PhD dissertation, University of Arizona.

Letras y Lingüistica, Universidad de Sonora.

Escalante, Roberto, and Zarina Estrada Fernandez. 1993. Textos y Gramática del

Pima Bajo. Hermosillo, Mexico: Departamento de Letras y Lingüistica, Universidad de Sonora.

Estrada Fernández, Zarina. 1996. Pima Bajo. Munich: Lincom Europa.

Estrada Fernández, Zarina. 1998. Pima Bajo. Archivo Lingüístico. México, D.F.: UNAM.

Estrada Fernández, Zarina. 2000. Copulative Constructions in Uto-Aztecan.

In *Uto-Aztecan: Structural, Temporal, and Geographic Perspectives*, Eugene H. Casad and Thomas L. Willett (eds.), 139-54. Hermosillo, Mexico: Universidad de Sonora.

Estrada Fernández, Zarina. 2003. Typological Correlations and Middle Voice: The Case of Pima Bajo. In *Studies in Uto-Aztecan*, Luis M. Barragan and Jason D. Haugen, eds., 181-200. MIT Working Papers on Endangered and Less Familiar Languages, no. 5.

Estrada Fernández, Zarina. 2005. The Pronominal Form -a as a Middle Marker in Pima Bajo. *IJAL* 71/3: 277-302.

Estrada, Zarina and Susan Steele. 1999. Person prefixes in Pima Bajo and analytical decisions. *IJAL* 65(1): 84-120.

Estrada Fernández, Zarina, Crescencio Buitimea Valenzuela, Adriana Elizabeth Gurrola Camacho, Maria Elena Castillo Celaya, and Anabela Carlon Flores. 2004. *Diccionario Yaqui-Español y Textos: Obra de Preservación Lingüística*. Mexico, D.F.: Editorial Plaza y Valdez.

Fitzgerald, Colleen M. 1997. O'odham Rythms.

PhD dissertation, University of Arizona.

Fitzgerald, Colleen M. 2003. How Prosodically Consistent is Tohono O'odham? In *Studies in Uto-Aztecan*, Luis M. Barragan and Jason D. Haugen, eds., 55-74. MIT Working Papers on Endangered and Less Familiar Languages, no. 5.

Fowler, Catherine S. 1983. Some Lexical Clues to Uto-Aztecan Perhistory. IJAL 49: 224-57.

Fowler, Catherine S. 1994. Corn, Beans, and Squash: Some Linguistic Perspectives from Uto-Aztecan. In *Corn and Culture in the Prehistoric New World*, Sissel Johannessen and Christine A. Hastorf, eds., 445-468.

Fowler, Catherine S. 2001. Numic Cardinal Directions. In *Avances y balances de lenguas yutoaztecas: Homenaje a Wick R. Miller*, José Luis Moctezuma Zamarrón y Jane H. Hill, eds., 267-291.

Franklin, Robert, and Pamela Bunte. 1981. Southern Paiute Stress and Related Phenomena. Linguistics Association of Canada and the United States 7:339-43.

Freeze, Ray, and David Iannucci. 1979. Internal Classification of the Numic Languages of Uto-Aztecan. *Amerindia* 4:17-29.

Gelo, Daniel, ed. 1995. Comanche Vocabulary: Trilingual Edition. Austin: University of Texas.

Givon, Talmy, ed., and the Southern Ute Tribe. 1979. Ute Dictionary. Ignacio, Colorado: Ute Press.

Givon, Talmy, ed., and the Southern Ute Tribe. 1980. *Ute Reference Grammar*. Ignacio, Colorado: Ute Press.

Givon, Talmy, ed., and the Southern Ute Tribe. 1985. *Ute Traditional Narratives*. Ignacio, Colorado: Ute Press.

Givon, Talmy. 2000. The Grammaticalization of Verbs to Postpositions in Ute.

- In *Uto-Aztecan: Structural, Temporal, and Geographic Perspectives*, Eugene H. Casad and Thomas L. Willett (eds.), 221-39. Hermosillo, Mexico: Universidad de Sonora.
- Goddard, Ives. 1996. The Classification of the Native Languages of North America. In William C. Sturtevant (ed.), *Handbook of American Indians*, Ives Goddard, vol. ed. of vol. 17 *Languages*. Washington: Smithsonian Institute, pp. 693-720.
- Gould, Drusilla, and Chris Loether. *An Introduction to the Shoshoni Language*. Salt Lake City: University of Utah Press, 2002.
- Goss, James A. 1965. Ute Linguistics and Anasazi Abandonment of the Four Corners Area. In *Contributions of the Wetherill Mesa Archaeological Project*, Douglas Osborne, ed., 73-81. Memoirs of the Society of American Archaeology, no. 19. Supplement to American Antiquity 31.2.
- Goss, James A. 1968. Culture-historical inference from Utaztekan linguistic evidence. In *Utaztekan Prehistory*, Earl H. Swanton, Jr., ed., 1-42. Pocatello, ID: Occasional Papers of the Idaho State University Museum, no. 22.
- Grimes, Joseph E. 1959. Huichol Tone and Intonation. *IJAL* 25:221-32.
- Grimes, Joseph E. 1964. *Huichol Syntax*. The Hague: Mouton de Gruyter, Janua Linguarum Series, Practica 11.
- Grimes, José E., Pedro de la Cruz Avila, José Carrillo Vicente, Filiberto Díaz, Román Díaz, Antonio de la Rosa, and Toribio Rentería. 1981. *El Huichol: Apuntes Sobre el Léxico*. Ithaca, New York: Cornell University.
- Hagberg, Larry. 1988. Stress and Length in Mayo. *In Honor of Mary Haas: From the Haas Festival Conference on Native American Linguistics*, William Shipley, ed., 37-51. Berlin and New York: Mouton de Gruyter.
- Hagberg, Larry. 1990. Syllabification of Long Vowels in Mayo.

 Papers from the 26th meeting of The Chicago Linguistic Society, CLS 26.
- Hagberg, Larry. 1990. Stem, Word, and Phrase as Morpho-Syntactic Strata in Mayo. Friends of UA conference paper.
- Hagberg, Larry. 1993. An Autosegmental Theory of Stress. PhD dissertation, University of Arizona.
- Hagberg, Larry. 2000. Glottal Stop in Mayo: Consonant or Vowel Feature?. In *Uto-Aztecan: Structural, Temporal, and Geographic Perspectives*, Eugene H. Casad and Thomas L. Willett (eds.), 91-100. Hermosillo, Mexico: Universidad de Sonora.
- Hale, Horatio. 1846. *Ethnography and Philology. United States Exploring Expedition,* 1838-42. Reprinted: The Gregg Press, Ridgewood, N. J., 1968.
- Hale, Kenneth. 1959. A Papago Grammar. PhD dissertation, Indiana University.
- Hale, Kenneth. 1969. Papago /čim/. IJAL 35, 203-212.
- Hale, Kenneth. 1970. On Papago Laryngeals. In *Languages and Cultures of Western North America: Essays in Honor of Sven S. Liljeblad*, Earl H. Swanson, Jr., ed. Pocatello: Idaho State University Press.
- Harley, Heidi, and Maria Amarillas. 2003. Reduplication Multiplication in Yaqui: Meaning X Form. In *Studies in Uto-Aztecan*, Luis M. Barragan and Jason D. Haugen, eds., 105-140. MIT Working Papers on Endangered and Less Familiar Languages, no. 5.
- Harms, Robert T. 1966. Stress, Voice, and Length in Southern Paiute. IJAL 32:228-235.
- Haugen, Jason D., and Luis M. Barragan, eds. 2003. Studies in Uto-Aztecan.

MIT Working Papers on Endangered and Less Familiar Languages, no. 5.

- Haugen, Jason D. 2003. Allomorphy in Yaqui Reduplication.
 - In Studies in Uto-Aztecan, Luis M. Barragan and Jason D. Haugen, eds., 75-104.
 - MIT Working Papers on Endangered and Less Familiar Languages, no. 5.
- Haugen, Jason Derek. 2004. *Issues in Comparative Uto-Aztecan Morphosyntax*. PhD dissertation, University of Arizona.
- Haugen, Jason Derek. 2004. Denominal Verbs in Yaqui. In *Estudios en lenguas amerindias: Homenaje a Ken L. Hale*, Z. Estrada Fernández, A. Fernández Garay, and A. Álvarez Gonzákez (eds.), 229-267. Hermosillo, Sonora: Editorial Unison.

Haugen, Jason Derek. 2005. Reduplicative allopmorphy and language prehistory in Uto-Aztecan. In Studies on Reduplication, Bernhard Hurch, ed., 315-49. Berlin: Mouton de Gruyter.

Haugen, Jason Derek. 2006a. Laryngeals in Guarijio I and II: Issues in Synchronic Phonology. Ms.

Haugen, Jason Derek. 2006b. Comitative and Instrumental Postpositions in Uto-Aztecan. Ms.

Haugen, Jason Derek. 2006c. Derived Verbs of Possession in Uto-Aztecan: Reconstruction and Paths of Change. Ms.

Haugen, Jason D. 2007. On the development of pronominal clitics and affixes in Uto-Aztecan. Southwest Journal of Linguistics 26:1.

Haugen, Jason Derek. 2008. Morphology at the Interfaces: Reduplication and Noun Incorporation in Uto-Aztecan. Linguistics Today, volume 117. Amsterdam/Philadelphia: John Benjamins Publishing Co.

Heath, Jeffrey. 1977. Uto-Aztecan Morphophonemics. IJAL 43/1: 27-36.

Heath, Jeffrey. 1978. Uto-Aztecan *na-class Verbs. IJAL 44/3: 211-222.

Heath, Jeffrey. 1985. Proto-Northern Uto-Aztecan Participles. IJAL 51/4:441-3.

Heath, Jeffrey. 1998. Hermit crabs: Formal renewal of morphology by phonologically mediated affix substitution. Language 74:728-750.

Herrera, Fermin. 2010. Hippocrene Concise Dictionary Nahuatl-English English-Nahuatl. New York: Hippocrene Books. Third printing, first printing 2004.

Hill, Jane H. 1966. A Grammar of the Cupeño Language. PhD dissertation, UCLA.

Hill, Jane H. 1972. Cupeño Lexicalization and Language History. *IJAL* 38:161-72.

Hill, Jane H. 1973. Subordinate Clause Density and Language Function.

Proceedings of the Chicago Linguistics Society.

Hill, Jane H. 1983. Language Death in Uto-Aztecan. IJAL 49/3: 258-76.

Hill, Jane H. 1985. On the Etymology of Classical Nahuatl teekw-tli 'Lord, Master'. IJAL 51/4: 451-3.

Hill, Jane H. 1992. The flower world of Old Uto-Aztecan. Journal of Anthropological Research 48:117-144.

Hill, Jane H. 2001a. Proto-Uto-Aztecan: A Community of Cultivators in Central Mexico? American Anthropologist 103(4): 913-34.

Hill, Jane H. 2001b. Dating the breakup of Southern Uto-Aztecan.

In Avances y balances de lenguas yutoaztecas. Homenaje a Wick R. Miller, José Luis Moctezuma Zamarrón y Jane H. Hill, eds., 345-58. Serie Lingüística.

México, D.F.: Instituto Nacional de Antropología e Historia.

Hill, Jane H. 2002. Toward a linguistic prehistory of the Southwest: Azteco-Tanoan and the arrival of Maize Cultivation. *Journal of Anthropological Research* 58(4):457-76.

Hill, Jane H. 2003a. Cupeño discontinuous constituents. In Studies in

Uto-Aztecan, Luis M. Barragan and Jason D. Haugen, eds., 245-276.

MIT Working Papers on Endangered and Less Familiar Languages, no. 5.

Hill, Jane H. 2003b. Proto-Uto-Aztecan and the northern devolution. In Examining the Farming/Language Dispersal Hypothesis, Peter Bellwood and Colin Renfrew, eds., 331-40. Cambridge: McDonald Institute for Archaeological Research.

Hill, Jane H. 2005. A Grammar of Cupeňo. University of California Publications in Linguistics, vol. 136. Berkeley and Los Angeles, California: University of California Press.

Hill, Jane H. 2007. The Proto-Uto-Aztecan Cultivation Hypothesis: New Linguistic Evidence. Monograph to be published.

Hill, Jane H. 2008. Northern Uto-Aztecan and Kiowa-Tanoan: Evidence of Contact Between the Proto Languages? IJAL 74(2): 155-88.

Hill, Jane H. 2009. Old California Uto-Aztecan: A Reevaluation.

Hill, Jane H. 2010, March 16. New evidence for a Mesoamerican homeland for Proto-Uto-Aztecan. Proceedings of the National Academy of Sciences of the United States of America 107(11): E33.

Hill, Jane H., and Kenneth C. Hill. 1968. Stress in the Cupan (Uto-Aztecan) Languages. IJAL 34:233-241.

Hill, Jane H., and Kenneth C. Hill. 1970. A Note on Uto-Aztecan Color Terminologies.

- Anthropological Linguistics 12:231-38.
- Hill, Jane H., and Kenneth C. Hill. 1978. Honorific usage in modern Nahuatl. Language 54:123-55.
- Hill, Jane H., and Kenneth C. Hill. 1981. Regularities in Vocabulary Replacement in Modern Nahuatl. *IJAL* 47/3:215-26.
- Hill, Jane H., and Kenneth C. Hill. 1986. Viable developments of modern Mexicano –axca > possession. *IJAL* 52:404-410.
- Hill, Jane H., and Kenneth C. Hill. 1997. Culture influencing language: Plurals of Hopi kin terms in comparative Uto-Aztecan perspective. *Journal of Linguistic Anthropology* 7:166-180.
- Hill, Jane H., and Kenneth C. Hill. 2000. Marked and Unmarked Plural Nouns in Uto-Aztecan. In *Uto-Aztecan: Structural, Temporal, and Geographic Perspectives*, Eugene H. Casad and Thomas L. Willett (eds.), 241-75. Hermosillo, Mexico: Universidad de Sonora.
- Hill, Jane H., and Ofelia Zepeda. 1998. Tohono O'odham (Papago) Plurals. *Anthropological Linguistics* 40/1:1-42.
- Hill, Jane H., and Rosinda Nolasquez. 1973. *Mulu'wetam: the First People:* Cupeño Oral History and Language. Banning: Malki Museum Press.
- Hill, Kenneth C. 1967. A Grammar of the Serrano Language. PhD dissertation, UCLA.
- Hill, Kenneth C. 1969. Some Implications of Serrano Phonology. Proceedings of the Chicago Linguistics Society.
- Hill, Kenneth C. 1971. Gabrielino Data, from J.P. Harrington's Field Notes. Ms.
- Hill, Kenneth C. 1978. The Coyote and the Flood (Serrano text). In Bright, ed., 112-16.
- Hill, Kenneth C. 1994, 2001. A Grammatical Sketch of Serrano. Drafts of work in progress.
- Hill, Kenneth C. 1994, 2001. Serrano Dictionary Draft. Drafts of the work in progress.
- Hill, Kenneth C. 1998a. Introduction, in Hopi Dictionary Project (eds.), Hopi Dictionary: Hopìikwa Laváytutuveni. Tucson: The University of Arizona Press.
- Hill, Kenneth C., Emory Sekaquaptewa, and Mary Black, eds. The Hopi Dictionary Project. 1998b. *Hopi Dictionary/Hopìikwa Lavàytutuveni: A Hopi English Dictionary of the Third Mesa Dialect*. Tucson: The University of Arizona Press.
- Hill, Kenneth C. 1998c. Hopi Grammar. In *Hopi Dictionary: Hopìikwa Laváytutuveni*. Tucson: The University of Arizona Press.
- Hill, Kenneth C. 2001. Comments on Hopi and Comparative Uto-Aztecan. In *Avances y balances de lenguas yutoaztecas*, José Luis Moctezuma Zamarrón y Jane H. Hill, eds., 293-307.
- Hill, Kenneth C. 2003. Denominal and Noun-Incorporating Verbs in Hopi.
 In *Studies in Uto-Aztecan*, Luis M. Barragan and Jason D. Haugen, eds, 215-244.
 MIT Working Papers on Endangered and Less Familiar Languages, no. 5.
- Hill, Kenneth C. 2006, 2008. Revision and Expansion of Miller's 1988 Computerized Data Base for Uto-Aztecan Cognate Sets.
- Hill, Kenneth C. 2010. Tübatulabal Dictionary. Draft manuscript.
- Hilton, Kenneth Simón. *Tarahumara y Espaňol*. Mexico City: Instituto Lingüístico de Verano. Serie de Vocabularios Indíginas, No. 1.
- Hilton, Kenneth Simón. *Diccionario Tarahumara de Samachique*. 2nd ed. Serie de vocabularios indígenas, no. 101. Tuscon: Instituto Lingüistico de Verano, 1993.
- Hinton, Leanne. 1991. Takic and Yuman: A Study in Phonological Convergence. IJAL 57/2:133-57.
- Hopkins, Nicholas. 1965. Great Basin prehistory and Uto-Aztecan. American Antiquity 31:48-60.
- Hyde, Villiana. 1971. An Introduction to the Luiseño Language.
 - Ronald Langacker et al, eds. Banning, California: Malki Museum Press.
- Hyde, Villiana Calac, and Eric Elliot. 1994. *Yumáyk Yumáyk: Long Ago*. Universtiy of California Publications in Linguistics 125.
- Iannucci, David. 1972. Numic Historical Phonology. Ph.D. Dissertation.
- Ithaca, New York: Cornell University.

 Jacobs, Roderick A. 1975. Syntactic Change: A Cupan (Uto-Aztecan) Case St
- Jacobs, Roderick A. 1975. *Syntactic Change: A Cupan (Uto-Aztecan) Case Study*. Berkeley and L.A.: University of California Press. UCPL 79.

Jeanne, LaVerne Masayesva. 1982. Some Phonological Rules of Hopi. IJAL 48/3: 245-70.

Jelinek, Eloise, and Fernando Escalante. 1988. Verbless Possessive Sentences in Yaqui.

In Honor of Mary Haas: From the Haas Festival Conference on Native

American Linguistics, William Shipley, ed., 37-51.

Berlin and New York: Mouton de Gruyter.

Jelinek, Eloise. 2003. Quantification in Yaqui Possessive Sentences.

In Studies in Uto-Aztecan, Luis M. Barragan and Jason D. Haugen, eds, 201-214.

MIT Working Papers on Endangered and Less Familiar Languages, no. 5.

Johnson, Jean B. 1950. The Opata: An Inland Tribe of Sonora.

Albuquerque: University of New Mexico Press.

University of New Mexico Publications in Anthropology, no. 6.

Johnson, Jean B. 1962. El Idioma Yaqui. Mexico, D.F.: Instituto Nacional de

Antropología e Historia, Departamento de Investigaciones Antropológicas, Publicaciones 10.

Kalectaca, Milo. 1978. Lessons in Hopi. Edited by Ronald W. Langacker.

Tucson: University of Arizona Press.

Karttunen, Frances. 1983. An Analytical Dictionary of Nahuatl.

Austin: University of Texas Press.

Kaufman, Terrence. 1981. Comparative Uto-Aztecan Phonology. Ms.

Key, Harold, and Mary Ritchie Key. 1953. Vocabulario Mejicano de la Sierra de

Zacapoaxtla, Puebla. México: Instituto Lingüístico y la Secretaría de Educación Pública.

Kimball, Geoffrey. 1990. Noun Pluralization in Eastern Huasteca Nahuatl. IJAL 56/2:196-216.

Klein, Sheldon. 1959. Comparative Mono-Kawaiisu. IJAL 25:233-38.

Kroeber, Alfred L. 1906-7. Shoshonean Dialects of California. University of California Publications in American Archaeology and Ethnology, no. 4, 66-165.

Kroeber, Alfred L. 1925. *Handbook of the Indians of California*. Bureau of American Ethnology Bulletin 78. (Reprinted 1976 by Dover Publications.)

Kroeber, Alfred L. 1934. Uto-Aztecan Languages of Mexico. *Ibero-Americana* 8. Berkeley: University of California Press.

Kroeber, Alfred L., and George William Grace. 1960. *The Sparkman Grammar of Luiseño*. Berkeley and Los Angeles: University of California Press. UCPL 16.

Kroch, Anthony S., and Byron Marshall. 1973. Movement Rules and Modal Expressions in Papago. *IJAL* 39: 80-88.

Laird, Carobeth. 1976. The Chemehuevis. Banning, California: Malki Museum.

Lamb, Sydney M. 1958a. *Mono Grammar*. PhD dissertation, Berkeley: University of California.

Lamb, Sydney M. 1958b. Linguistic Prehistory of the Great Basin. *IJAL* 24/2: 95-100.

Lamb, Sydney M. 1964. The Classification of the Uto-Aztecan Languages: A Historical Survey. University of California Publications in Linguistics 34:106-25.

Lander, Herbert. 1967. Syntactic Patterns in Navaho and Huichol. IJAL 33:121-27.

Langacker, Ronald W. 1970. The Vowels of Proto Uto-Aztecan. IJAL 36/3:169-80.

Langacker, Ronald W. 1972. Possessives in Classical Nahuatl. IJAL 38:173-86.

Langacker, Ronald W. 1975. Relative Clauses in Classical Nahuatl. IJAL 41:46-68.

Langacker, Ronald W. 1976a. A Note on Uto-Aztecan Consonant Gradation. IJAL 42:374-9.

Langacker, Ronald W. 1976b. Non-Distinct Arguments in Uto-Atecan.

Berkeley and L.A.: University of California Press.

Langacker, Ronald W. 1977a. Studies in Uto-Aztecan Grammar I: An Overview of Uto-Aztecan Grammar. Dallas: Summer Institute of Linguistics.

Langacker, Ronald W. 1977b. The Syntax of Postpositions in Uto-Aztecan. IJAL 43:11-26.

Lastra de Suárez, Yolanda. 1986. Las Áreas Dialectales del Náhuatl Moderno.

México: Universidad Nacional Autónoma de México.

Lindenfeld, Jacqueline. 1973. Yaqui Syntax. Berkeley and L.A.:

University of California Press. UCPL 76.

Lionnet, Andrés. 1968. Los Intensivos en Tarahumara.

Anales del Instituto Nacional de Antropologí e Historia (México) 19:135-46.

Lionnet, Andrés. 1972. Los Elementos de la lengua Tarahumar.

México: Universidad Nacional Autónoma de México.

Lionnet, Andrés. 1977. Elementos de la lengua Cahita (Yaqui-Mayo).

México: Universidad Nacional Autónoma de México.

Lionnet, Andrés. 1978. El Idioma Tubar y Los Tubares, según Documentos Inéditos

de C.S. Lumholtz y C. V. Hartman. México, D.F.: Universidad Iberoamericana.

Lionnet, Andrés. 1985. Relaciones Internas de la Rama Sonorense. *Amerindia* 10:25-58.

Lionnet, Andrés. 1986. Un Idioma Extinto de Sonora: El Eudeve.

Mexico City: Universidad Nacional Autónoma de México.

Lionnet, Andrés. 1986. La Oclusión Glotal en Taraguarijío. In *Uto-Aztecan: Structural, Temporal, and Geographic Perspectives*, Eugene H. Casad and Thomas L. Willett (eds.), 101-104.

Hermosillo, Mexico: Universidad de Sonora.

Lombardo, Natal. 1641. Arte de la Lengua Tegüima vulgarmente llamada Ópata.

Ayer ms. 1641, Newberry Library, Chicago.

Lombardo, Natal. 1702. Arte de la lengua tegüima vulgarmente llamada Ópata.

México: Miguel de Ribera. [251 folios]

Luna, Felipe S. 1876. Vocabulario de la lengua oputo. Ms., Bancroft Library.

Malécot, André. 1963-64. Luiseño, A Structural Analysis I: Phonology;

II Morpho-Syntax; III Texts and Lexicon; IV Appendices.

IJAL 29: 89-95, 196-210; 30:14-31, 243-250.

Manaster Ramer, Alexis. 1984. Kern Laws. IJAL 50/3:325-34.

Manaster Ramer, Alexis. 1986. The Genesis of Hopi Tones. IJAL 52: 154-160.

Manaster Ramer, Alexis. 1991a. Proto-geminates in the Uto-Aztecan Languages of California. Languages of the World 2:34-35.

 $Manaster\ Ramer,\ Alexis.\ 1991b.\ Some\ Tubatulabal\ kinship\ etymologies.$

California Linguistic Newsletter 22(3): 8-9.

Manaster Ramer, Alexis. 1991c. Tubatulabal takaah 'quail'. California Linguistic Notes 23(1): 34.

Manaster Ramer, Alexis. 1991d. Uto-Aztecan *tw.

California Linguistic Newsletter 22(3): 25.

Manaster Ramer, Alexis. 1992a. A Northern Uto-Aztecan Sound Law: *-<u>c</u>-> *-<u>y</u>-. *International Journal of American Linguistics* 58/3:251-268.

Manaster Ramer, Alexis. 1992b. Uto-Aztecan Phonology: Evidence from Tubatulabal Morphophonemics. *IJAL* 58/4: 436-446.

Manaster Ramer, Alexis. 1992c. Tubatulabal /k/ before low vowels.

Folia Linguistica Historica 11(1-2): 183-186.

Manaster Ramer, Alexis. 1992d. Tubatulabal 'man' and the classification of Uto-Aztecan languages. California Linguistic Notes 22.4.

Manaster Ramer, Alexis. 1992e. Proto-Uto-Aztecan *pi 'younger sister' > 'great-

grandmother'. American Indian Culture and Research Journal 16(1): 111-117.

Manaster Ramer, Alexis. 1992f. A consonant-final pronominal stem in Tubatulabal. California Linguistic Notes 23(1): 27.

Manaster Ramer, Alexis. 1993a. Blood, Tears, and Murder. In *Historical Linguistics 1991: Papers from the 10th International Conference on Historical Linguistics*, J. van Marle, ed., 199-209. Amsterdam and Philadelphia: John Benjamins.

Manaster Ramer, Alexis. 1993c. On Lenition in Some Northern Uto-Aztecan languages. *IJAL* 59:334-341.

Manaster Ramer, Alexis. 1993d. Arguing about 'quail'. California Linguistic Notes 24(1): 4-6.

Manaster Ramer, Alexis. 1993e. 'One' and 'only.' California Linguistic Notes 24(1): 4.

Manaster Ramer, Alexis. 1994a. Eudeve and Huichol Evidence for Proto-Uto-Aztecan Phonology. Ms.

Manaster Ramer, Alexis. 1994b. Proto-Uto-Aztecan Stems with Two Heavy Syllables. Ms.

Manaster Ramer, Alexis. 1995a. On Nahuatl tl and Related Questions of Aztecan Vocalism. Ms.

Manaster Ramer, Alexis. 1995b. The Search for the Sources of the Nahuatl Saltillo. Anthropological Linguistics 37:15.

- Manaster Ramer, Alexis. 1996a. Lautgesetzlichkeit and Uto-Aztecan *-/w/- in Southern Paiute. Folia Linguistica Historica 16.
- Manaster Ramer, Alexis. 1996b. On Whorf's law and related questions of Aztecan phonology and etymology. *IJAL* 62: 176-187.
- Manaster Ramer, Alexis. 1996c. Some Eudeve and Huichol evidence for Proto-Uto-Aztecan phonology. Journal de la Société des Americanistes 82: 117-127.
- Manaster Ramer, Alexis. 1996d. The distribution of /s/ vs. /š/ and related issues in Aztecan phonology and etymology. Acta Linguistica Hafniensia 28:107-122.
- Manaster Ramer, Alexis. 1997. Uto-Aztecan *ps and Similar Clusters, Again. IJAL 63: 248-256.
- Manaster Ramer, Alexis. ? A tangled web: the reflexes of Uto-Aztecan vowels in Pochutec. Anthropological Linguistics.
- Manaster Ramer, Alexis. 2000. A word to the wise: Tubatulabal ooli- 'to get up'. In *Uto-Aztecan: Structural, Temporal and Geographic Perspectives: Essays in Honor of Wick R. Miller*, Gene Casad and Tom Willett, eds., 287-91. Universidad de Sonora.
- Manaster Ramer, Alexis. 2004. Ontology. A draft in preparation.
- Manaster Ramer, Alexis, and Ralph Charles Blight. 1993. Uto-Aztecan *ps (and *sp, Too?). *IJAL* 59/1:38-43.
- Marsden, W. L. 1923. The Northern Paiute Language of Oregon. *University of California Publications in American Archaeology and Ethnology* 20:175-91.
- Martinez, Esther, and Peter Povijua. 1982. San Juan Pueblo Tewa Dictionary. San Juan Pueblo, New Mexico: San Juan Pueblo Bilingual Program. Monograph.
- Mason, J. Alden. 1916. Tepecano: A Piman Language of Western Mexico. Annals of the New York Academy of Science 25:309-416.
- Mathiot, Madeleine. 1976. A Dictionary of Papago Usage. Tucson: University of Arizona Press.
- McIntosh, John B. 1945. Huichol Phonemes. IJAL 11: 31-35.
- McLaughlin, John E. 1987. *A Phonology and Morphology of Panamint*. PhD dissertation, University of Kansas.
- McLaughlin, John E. 1989. A Note on the Change of Strident to Nonstrident in Gosiute Shoshoni. *IJAL* 55/2:240-247.
- McLaughlin, John E. 1992. A Counterintuitive Solution in Central Numic. IJAL 58/2:158-81.
- McLaughlin, John E. 2000. Language Boundaries and Phonological Borrowing in the Central Numic Languages. In *Uto-Aztecan: Structural, Temporal, and Geographic Perspectives*, Eugene H. Casad and Thomas L. Willett (eds.), 357-69. Hermosillo, Mexico: Universidad de Sonora.
- McLaughlin, John E. 2001. Momentous aspect and durative aspect in Numic languages. Paper presented at the Friends of Uto-Aztecan Conference. Santa Barbara, CA.
- McMahon, Ambrosio, and Maria Aiton de McMahon. 1959. *Cora y Español*. Serie de Vocabularios Indigenas, no. 2. Mexico City: Instituto Lingüistica de Verano.
- McMahon, Ambrosio. 1967. Phonemes and Phonemic Units of Cora (Mexico). IJAL 33:128-34.
- Medina Murillo, Ana Aurora. 2012. *Diccionario Léxico-Morfológico del Guarijío*. Ediciones Especiales, 63. Hermosillo, Mexico: Universidad Nacional Autónoma de México, Instituto de Investigaciones filológicas, Universidad de Sonora.
- Merlan, Francesca. 1976. Noun incorporation and discourse reference in Modern Nahuatl. *IJAL* 42: 177-191.
- Merriam, C. Hart. Fieldnotes in Bancroft Library, UC at Berkeley. www.archive.org/stream/bancroft_chartmerriam-1556-59/60/61
- Merrill, William L., Robert J. Hard, Jonathan B. Mabry, Gayle J. Fritz, Karen R. Adams, John R. Roney, and A.C. MacWilliams. 2009. The diffusion of Maize to the southwestern United States and its impact. Proceedings of the National Academy of Sciences of the United States of America 106: 21029-21026.
- Miller, Irving W. 1982. Southern Paiute and Numic Final Features. IJAL 48/4: 444-49.
- Miller, Wick R. 1967. *Uto-Aztecan Cognate Sets*. UCPL 48. Berkeley and Los Angeles: University of California Press.

- Miller, Wick R. 1972. *Newe Natekwinappeh: Shoshone Stories and Dictionary*. University of Utah Anthropological Papers, no. 94.

 Jesse D. Jennings, ed. Salt Lake City: University of Utah Press.
- Miller, Wick R. 1983. Uto-Aztecan Languages. In William C. Sturtevant, (ed), Handbook of North American Indians, Alfonso Ortiz (vol. ed.) of vol. 10, Southwest, Washington DC: Smithsonian Institute, 113-124.
- Miller, Wick R. 1984. The Classification of the Uto-Aztecan Languages Based on Lexical Evidence. *IJAL* 50/1:1-24.
- Miller, Wick R. 1985. Lionnet's Article on the Intensive in Tarahumara. IJAL 51:502-04.
- Miller, Wick R. 1986. Numic Languages. In *Handbook of American Indians*, ed. William C. Sturtevant, vol. ed. Warren L. D'Azevedo, vol. 11, Great Basin, 98-106. Washington DC: Smithsonian Institute.
- Miller, Wick R. 1988. Computerized Database for Uto-Aztecan Cognate Sets.
 Unpublished monograph. Salt Lake City: Anthropology Dept., University of Utah.
- Miller, Wick R. 1991. Agent in Passive Sentences in Yaqui and Guarijio. IJAL 57:519-523.
- Miller, Wick R. 1996a. *Guarijio: Gramática, Textos, y Vocabulario*. Mexico, D.F.: Universidad Nacional Autónoma de Mexico: Instituto de Investigaciones Antropológicas.
- Miller, Wick R. 1996b. Sketch of Shoshone, a Uto-Aztecan Language. In *Handbook of American Indians*, ed. William C. Sturtevant, vol. ed. Ives Goddard, vol. 17, Languages, 693-720. Washington DC: Smithsonian Institute.
- Miller, Wick R., and Irvine Davis. 1963. Proto-Keresan Phonology. IJAL 29/4: 310-330.
- Miller, Wick R., and Shirley Silver. 1997. *American Indian Languages: Social and Cultural Contexts*. Tucson: University of Arizona Press.
- Miller, Wick R., Dirk Elzinga, and John E. McLaughlin. 2005. Preaspiration and Gemination in Central Numic. *IJAL* 71/4:413-44.
- Mithun, Marianne. 1999. *The Languages of Native North America*. Cambridge: Cambridge University Press.
- Miyashita, Mizuki. 2002. Tohono O'odham Syllable Weight: Descriptive, Theoretical, and Applied Aspects. PhD dissertation, University of Arizona.
- Miyashita, Mizuki. 2003. Tohono O'odham Consonant Clusters. In *Studies in Uto-Aztecan*, Luis M. Barragan and Jason D. Haugen, eds., 41-54. MIT Working Papers on Endangered and Less Familiar Languages, no. 5.
- Molina, Felipe S., and David Leedom Shaul. 1993. *A Concise Yoeme and English Dictionary*. Tucson: Tucson Unified School District, 1993.
- Molina, Felipe S., Herminia Valenzuela, and David Leedom Shaul. 1999.

 Hippocrene Standard Dictionary: Yoeme-English English-Yoeme,
 with a Comprehensive Grammar of Yoeme Language.

 New York: Hippocrene Books.
- Molina, Fray Alonso de. 1975. *Grammar of the Mexican (Nahuatl) Language*.

 Translation by Kenneth C. Hill, of Molina's *Arte de la Lengua Mexicana y Castellana*. 1571. University of Michigan Papers in Linguistics 1.4.
- Molina, Fray Alonso de. 1970. *Vocabulario en Lengua Castellana y Mexicana y Mexicana y Castellana*. Reprint of 1571 edition. Mexico City: Editorial Porrúa.
- Moctezuma Zamarron, José Luis. 1998. Yaqui Mayo Language Shift. PhD Dissertation, University of Arizona.
- Moctezuma Zamarron, José Luis. 2000. Southwestern Tepehuan Sound Symbolism:
 Bird and Insect Terms. In *Uto-Aztecan: Structural, Temporal, and Geographic Perspectives*, Eugene H. Casad and Thomas L. Willett (eds.), 51-56.
 Hermosillo, Mexico: Universidad de Sonora.
- Moctezuma Zamarron, José Luis, and Jane H. Hill, eds. 2001. Avances y balances de lenguas yutoaztecas. Collección Científica, Serie Lingüística.
 - México, D.F.: Instituto Nacional de Antropología e Historia.
- Monzón, Cristina, and Andrew Roth Seneff. 1984. Notes on the Nahuatl Phonological

- Change kw > b. IJAL 50/4:456-462.
- Munro, Pamela. 1973. Proto-Uto-Aztecan *w—One Source for Luiseño η. IJAL 39/2: 135-36.
- Munro, Pamela. 1977. Towards a reconstruction of Uto-Aztecan stress.
 - Studies in Stress and Accent. Larry M. Hyman, ed. Southern California
 - Occasional Papers in Linguisites 4: 303-326.
 - Pasadena: University of Southern California.
- Munro, Pamela. 1983. Selected Studies in Uto-Aztecan Phonology. IJAL 49/3: 277-98.
- Munro, Pamela. 1990. Stress and Vowel Length in Cupan Absolute Nouns. *IJAL* 56/2: 217-50.
- Munro, Pamela. 2000. The Gabrielino Enclitic System. In *Uto-Aztecan: Structural, Temporal, and Geographic Perspectives*, Eugene H. Casad and Thomas L. Willett, eds., 183-201. Hermosillo, Mexico: Universidad de Sonora.
- Munro, Pamela, and Peter John Benson. 1973. Reduplication and Rule Ordering in Luiseño. *IJAL* 39/1: 15-21.
- Munro, Pamela, Nellie Brown, and Judith G. Crawford. 1992. *A Mojave Dictionary*. UCLA Occasional Papers in Linguistics, no. 10. Linguistics Dept, UCLA.
- Munro, Pamela, and William E. Mace. 1995. *A New Tübatulabal Dictionary*. (Revised preliminary version) UCLA.
- Natches, Gilbert. 1923. Northern Paiute Verbs. *University of California Publications in American Archaeology and Ethnology* 20:245-259.
- Newman, Stanley. 1944. *Yokuts language of California*. New York: Viking Fund Publications in Anthropology 2.
- Nichols, Michael J. P. 1974. Northern Paiute Historical Grammar.
 - Berkeley: University of California dissertation.
- Norris, Evan. 1986. *A Grammar Sketch and Comparative Study of Eastern Mono*. San Diego: University of Californian dissertation.
- Ortega, Jose de. 1732. Vocabulario en lengua castellana y cora. [Reimpreso en el Boletín de la Sociedad Mexicana de Geografía y Estadística, 1a época, 8:561-605, 1860; reimpreso también en Tepic, 1888.] Mexico, D.F.
- Pauketat, Timothy R. 2009. Cahokia: Ancient America's Great City on the Mississippi. New York: Penguin Books.
- Pennington, Campbell W., ed. 1979. *Vocabulario en la Lengua Nevome: The Pima Bajo of Central Sonora, Mexico*. vol. 2. Salt Lake City: University of Utah Press.
- Perry, Edgar, Canyon Z. Quinero, Catherine D. Davenport, and Corrine B. Perry. 1972. *Western Apache Dictionary*. Fort Apache, Arizona: White Mountain Apache Tribe.
- Pimentel, Francisco. 1863. Vocabulario manual de la lengua ópata. *La Epoca*, Boletín de la Sociedad Mexicana de Geografía y Estadística 10:287-313.
- Pimentel, Francisco. 1874. *Cuadro descriptivo y comparative de las lenguas indígenas de México*. México: Isidoro Epstein.
- Pinarte, Alponse. 1878. Vocabulario del dialecto hehue de la lengua ópata interprete por la indita Rosa Tecla, Sinoquipe, rio de Sonora. Ms., Bancroft Library.
- Press, Margaret L. 1979. *Chemehuevi: A Grammar and Lexicon*. UCPL 92. Berkeley: University of California Press.
- Preuss, Konrad-Theodor. 1932. Grammatik der Cora-Sprache. IJAL 7:1-84.
- Preuss, Konrad-Theodor. 1935. Wörterbuch Deutsch-Cora. IJAL 8:81-102.
- Robinson, D. F. 1966. *Aztec Studies II: Sierra Nahuat Word Structure*. Summer Institute of Linguistics Publications in Linguistics, no. 22. Arlington, Texas.
- Robinson, Lila Wistrand, and James Armagost. 1990. *Comanche Dictionary and Grammar*. Summer Institute of Linguistics and the University of Texas at Arlington Publications in linguistics, number 92.
- Romney, A. Kimball. 1957. The Genetic Model and Uto-Aztecan Time Perspective. *Davidson Journal of Anthropology* 3(2):35-41. Seattle, Washington.
- Sapir, Edward. 1913, 1915. Southern Paiute and Nahuatl: a study in Uto-Aztecan, parts. 1 and 2.

- Part 1, 1913 in *Journal de la Société des Américanistes de Paris* 10:379-425. Part 2, 1915 in *American Anthropologist* 17:98-120, 306-328, reprinted 1919 in JSAP 11: 443-88. Parts 1 and 2 reprinted 1990 in *The collected works of Edward Sapir 5: American Indian Languages*, William Bright, ed., 351-444. Berlin: Mouton de Gruyter.
- Sapir, Edward. 1930. Southern Paiute, A Shoshonean Language.

 *Proceedings of the American Academy of Arts and Sciences, 65: 1-296.
- Sapir, Edward. 1931. Southern Paiute dictionary.
 - *Proceedings of the American Academy of Arts and Sciences* 65(3):537-730.
- Sauvel, Katherine, and Pamela Munro. 1981. *Chem'ivillu': Let's Speak Cahuilla*. Los Angeles: UCLA American Indian Studies Center.
- Saxton, Dean. 1963. Papago Phonemes. IJAL 29, 29-35.
- Saxton, Dean. 1982. Papago. In *Studies in Uto-Aztecan Grammar, vol. 3: Uto-Aztecan Grammatical Sketches*, ed. Ronald W. Langacker. Arlington: Summer Institute of Linguistics.
- Saxton, Dean and Lucille. 1969. *Dictionary: O'odham Milgaan, English Papago/Pima*. Tucson: The University of Arizona Press.
- Saxton, Dean, and Lucille Saxton. 1973. *Legends and Lore of the Papago and Pima Indians*. Tucson: University of Arizona Press.
- Saxton, Dean, Lucille Saxton, and Susie Enos. 1983. *Dictionary: O'othham Milgaan, English Papago/Pima*. 2nd ed. R.L. Cherry, ed. Tucson: The University of Arizon Press.
- Seaman, P. David. 1985. *Hopi Dictionary*. Northern Arizona Anthropological Paper, no. 2. Flagstaff: Northern Arizona University.
- Seiler, Hansjakob. 1965. Accent and Morphophonemics in Cahuilla and in Uto-Aztecan. IJAL 31:50-59.
- Seiler, Hansjakob. 1967. Structure and Reconstruction in some Uto-Aztecan Languages. *IJAL* 33:135-147.
- Seiler, Hansjakob. 1970. *Cahuilla Texts with an Introduction*. The Hague: Mouton. Indiana University Publications, Language Science Monographs, 6.
- Seiler, Hansjakob. 1977. Cahuilla Grammar. Banning, California: Malki Museum Press.
- Seiler, Hansjakob, and Kojiro Hioki. 1979. *Cahuilla Dictionary*. Banning, California: Malki Museum Press.
- Shaul, David Leedom. 1982. A Grammar of Nevome. PhD dissertation, University of California-Berkeley.
- Shaul, David Leedom. 1985. Azteco-Tanoan ***1/r. IJAL 51/4:584-86.
- Shaul, David Leedam. 1986. Topics in Nevome Syntax. Berkeley: University of California Press.
- Shaul, David Leedom. 1990. Teguima (Opata) Inflectional Morphology. IJAL 56/4: 561-73.
- Shaul, David Leedom. 1991. Eudeve Morphosyntax: An Overview. IJAL 57/1:70-170.
- Shaul, David Leedom. 1994. A Sketch of the Structure of Oob No'ok (Mountain Pima). *Anthropological Linguistics* 36(3), Fall.
- Shaul, David Leedom. 2001. The Opatan Languages, plus Jova. In *Avances y balances de lenguas yutoaztecas*. Hermosillo, Sonora: Instituto Nacional de Antropología e Historia.
- Shaul, David Leedom. 2003. Proto-Uto-Aztecan partials and Opata.
 In *Studies in Uto-Aztecan*, Luis M. Barragan and Jason D. Haugen, eds., 21-40.
 MIT Working Papers on Endangered and Less Familiar Languages, no. 5.
- Shaul, David Leedom, and Jane H. Hill. 1998. Tepimans, Yumans, and other Hohokam. *American Antiquity* 63:375-396.
- Shaul, David Leedom. 2000. Comparative Tepiman: Phonological Change and Inflectional Categories. In *Uto-Aztecan: Structural, Temporal, and Geographic Perspectives*, Eugene H. Casad and Thomas L. Willett (eds.), 319-56. Hermosillo, Mexico: Universidad de Sonora.
- Shaul, David Leedom. Comparative Tepiman Grammar. Monograph.
- Shaul, David Leedom. Hopi Grammar. Monograph.
- Shaul, David Leedom, and David Yetman. 2007. Opata and Eudeve Languages. Ms.
- Silver, Shirley, and Wick R. Miller. 1997. *American Indian Languages: Cultural and Social Contexts*. Tucson: University of Arizona Press.
- Simeon, Remi. 1977. Diccionario de la Lengua Nahuatl or Mexicana. Mexico City: Siglo

- Veintiuno, first published in French in Paris: la imprimerie nationale, 1885.
- Smith, Buckingham, editor. 1862. *Grammar of the Pima or Névome, a Language of Sonora*, from a Ms of the 18th century. New York: Cramoisy Press, pp. 1-97. [Edicion facsimilar, New York: AMS Press, inc., 1970.]
- Snapp, Allen, John Anderson, and Joy Anderson. 1982. Northern Paiute. Studies in Uto-Aztecan Grammar: Uto-Aztecan Grammatical Sketches. vol. 3, Ronald W. Langacker, ed., 1-92. Arlington: Summer Institute of Linguistics.
- Sparkman, Philip. 1905. Sketch of the Grammar of the Luiseño Language of California. *American Anthropologist* 7:656-62.
- Steele, Susan. 1975. Past and Irrealis: Just What Does It All Mean?. IJAL 41: 200-217.
- Steele, Susan. 1976. A Law of Order: Word Order Change in Classical Aztec. IJAL 42: 31-45.
- Steele, Susan. 1979. Uto-Aztecan. In *The Languages of North Amercia: Historical and Comparative Assessment,* Lyle Campbell and Marianne Mithun, eds., 444-554.

 Austin: University of Texas Press.
- Steele, Susan. 1988. Lexical Categories and the Luiseño Absolutive: Another Perspective on the Universality of Noun and Verb. *IJAL* 54/1: 1-27.
- Stewart, Thomas W. and Nathan Vaillette, eds. 2001. *Language Files*. Columbus: Ohio State University Press.
- Stubbs, Brian D. 1981. A Comparative Study of Tubar within Uto-Aztecan.

 Paper presented at the Friends of Uto-Aztecan Conference. Salt Lake City, Utah.
- Stubbs, Brian D. 1994. The Elusive Liquids of Uto-Aztecan.

 Paper presented at the Friends of Uto-Aztecan Conference. Albuquerque, NM.
- Stubbs, Brian D. 1995. The Labial Labyrinth in Uto-Aztecan. *IJAL* 61/4: 396-422.
- Stubbs, Brian D. 1996. Rio Grande Tewa: An Indexed Vocabulary. In preparation.
- Stubbs, Brian D. 1997. Book review of *Comanche Vocabulary: Trilingual Edition*, by Manuel García Rejón. *IJAL* 63/2: 282-84.
- Stubbs, Brian D. 2000a. More Palatable Reconstructions for Uto-Aztecan Palatals. IJAL 66/1: 125-37.
- Stubbs, Brian D. 2000b. The Comparative Value of Tubar in Uto-Aztecan. In *Uto-Aztecan: Structural, Temporal, and Geographic Perspectives*, Eugene H. Casad and Thomas L. Willett (eds.), 357-69. Hermosillo, Mexico: Universidad de Sonora.
- Stubbs, Brian D. 2001. A Bat Out of Where? In *Avances y balances de lenguas yutoaztecas*, José Luis Moctezuma Zamarrón y Jane H. Hill, eds., 309-312. Serie Lingüística. México, D.F.: Instituto Nacional de Antropología e Historia.
- Stubbs, Brian D. 2003. New Sets Yield New Perspectives for Uto-Aztecan Reconstructions. In *Studies in Uto-Aztecan*, Luis M. Barragan and Jason D. Haugen, eds., 1-20. MIT Working Papers on Endangered and Less Familiar Languages, no. 5.
- Stubbs, Brian D., Mary Jane Yazzie, Aldean Ketchum, and Loretta Posey. 2011. *White Mesa Ute:Dictionary and Lessons*. First preliminary edition. Sponsored and published by the White Mesa Ute Council.
- Stubbs, Brian D. 2014. "The Velar Nasal n of Uto-Aztecan." In *Lenguas Yutoaztecas:*Acercamiento a Su Diversidad Lingüistica, Karen Dakin y José Luis Moctezuma Zamarrón, eds, 177-89. Mexico, D. F.: Universidad Nacional Autónoma de México.
- Stubbs, Brian D. 2015. Book review of *A Prehistory of Western North America: The Impact of Uto-Aztecan Languages*, by David Leedom Shaul. Albuquerque: University of New Mexico Press, 2014. In the *International Journal of American Linguistics* 81/3, 449-54.
- Stubbs, Brian D. 2015. "Language evidence in comparative Uto-Aztecan for a Nahuatl point of contact from and/or into Mesoamerica." Presented at Second International Conference on Mesoamerican Linguistics, California State University, Los Angeles, March 6-7, 2015.
- Stubbs, Brian D. 2015. *Exploring the Explanatory Power of Semitic and Egyptian in Uto-Aztecan*. Provo, Utah: Jerry D. Grover Publications.
- Stubbs, Brian D. 2017, October 21. "Comparative Issues in Uto-Aztecan." Friends of Uto-Aztecan Conf,

- Boise, Idaho.
- Suarez, Yolanda Lastra de. 1986. Las Áreas Dialectales del Náhuatl Moderno.

Mexico: Universidad Nacional Autónoma de México.

- Sullivan, Thelma D. *Compendium of Nahuatl Grammar*. Translated from the Spanish by Thelma D. Sullivan and Neville Stiles; Wick R. Miller and Karen Dakin, eds. Salt Lake City: University of Utah Press, 1988.
- Swanson, Earl H., Jr., ed. 1968. Utaztekan Prehistory. Pocatello, Idaho: Occasional Papers of the Idaho State University Museum, no. 22.
- Thord-Gray, I. 1955. Tarahumara-English English-Tarahumara Dictionary. Coral Gables, Florida: University of Miami Press.
- Thornes, Timothy Jon. 2003. *A Northern Painte Grammar with Texts*. PhD dissertation, University of Oregon.
- Trager, George L. 1939. Cottonwood = Tree: A Southwestern Linguistic Trait. *IJAL* 9:117-18.
- Tuggy, David H. 1979. Tetelcingo Nahuatl. In *Studies in Uto-Aztecan Grammar: Modern Aztec Grammatical Sketches*. vol. 2, Ronald W. Langacker, ed., 1-140.
 Dallas, TX: Summer Institute of Linguistics.
- Vazquez Soto, Verónica. 1994. Los Conceptos de Propiedad en Cora: Modificación, predicación, y marcació. In *Investigaciones Lingüisticas en Mesoamerica*, Carolyn J. Mackay and Verónica Vazquez, eds., 53-86. Mexico, D.F.: Universidad Nacional Autonóma de Mexico.
- Vazquez Soto, Verónica. 2000. Morphology and Syllabic Weight in Cora: The Case of the Absolutive –ti. In *Uto-Aztecan: Structural, Temporal, and Geographic Perspectives*, Eugene H. Casad and Thomas L. Willett (eds.), 105-24. Hermosillo, Mexico: Universidad de Sonora.
- Voegelin, Charles F. 1935a. *Tübatulabal Grammar*. University of California Publications in American Archaeology and Ethnology, 34/2, 55-190. Berkeley: University of California Press.
- Voegelin, Charles F. 1935b. *Tübatulabal Texts*. University of California Publications in American Archaeology and Ethnology 34:191-246.
- Voegelin, C. F., and F. M. Voegelin. 1957. *Hopi Domains: A Lexical Approach to the Problem of Selection. IJAL* Memoir 14.
- Voegelin, Charles F. 1958. A Working Dictionary of Tübatulabal. IJAL 24/3: 221-28.
- Voegelin, C.F., F.M. Voegelin, and Kenneth L. Hale. 1962. *Typological and Comparative Grammar of Uto-Aztecan*. Indiana University Publications in Anthropology and Linguistics: Memoir 17, supplement to *IJAL* 28(1).
- Voegelin, C. F., and F. M. Voegelin. 1967. Passive Transformations from Non-Transitive Bases in Hopi. *IJAL* 33:276-81.
- Voegelin, C.F., and F.M. Voegelin. 1969. Hopi /?as/. IJAL 35: 192-202.
- Voegelin, C.F., and F.M. Voegelin. 1975. Hopi /-qa/. IJAL 41: 381-398.
- Walters, Joseph Carl Wolgemuth, Marilyn Minter de Wolgemuth, Placido Hernandez Perez, Esteban Perez Ramirez, and Christopher Hurst Upton. 2002. *Diccionario Nahuatl de los municipios de Mecayapan y tatahuicapan de Juarez, Veracruz.* Mexico, D.F.: Instituto Lingüístico de Verano.
- Wares, Alan Campbell. 1968. *A Comparative Study of Yuman Consonantism*. Juana Linguarum, Series Practica 57. The Hague: Mouton.
- Whorf, Benjamin L. 1935. The Comparative Linguistics of Uto-Aztecan. *American Anthropologist* 37:600-608.
- Whorf, Benjamin L., and George L.Trager. 1937a. The Relationship of Uto-Aztecan and Tanoan. *American Anthropologist* 39:609-624.
- Whorf, Benjamin L. 1937b. The Origin of Aztec TL. American Anthropologist 39:265-274.
- Whorf, Benjamin L. 1938. Some Verbal Categories of Hopi. Language 14:275-86.
- Whorf, Benjamin L. 1946. The Hopi Language, Toreva Dialect. In *Linguistic Structures of Native America*, Harry Hoijer, et al, eds. New York: Viking Fund Publications in Anthropology, 6.
- Whorf, Benjamin L. 1956. *Language, Thought, and Reality (Selected Writings of Benjamin Lee Whorf)*, John B. Carroll, ed. Cambridge, Mass.: MIT Press.
- Whorf, Benjamin L. 1993. Pitch Tone and the Saltillo in Modern and Ancient Nahuatl.

Edited by Lyle Campbell and Frances Karttunen. IJAL 59/2: 165-223.

Wichmann, Soren. *The Relationship Among the Mixe-Zoquean Languages of Mexico*. Salt Lake City: University of Utah Press, 1995.

Willett, Thomas. 1991. A Reference Grammar of Southeastern Tepehuan.

Arlington, Texas: The Summer Institute of Linguistics and The University of Texas at Arlington.

Willett, Elizabeth R. and Thomas L Willett. 2005. Diccionario Tepehuano de Santa María Ocotán, Durango. (on computer disk)

Wolgemuth, Carl. 1981. Gramática Náhuatl de Mecayapan. Mexico: Instituto Lingüístico de Verano.

Woo, Nancy. 1970. Tone in Northern Tepehuan. IJAL 36:18-30.

Zepeda, Ofelia. 1983. A Papago Grammar. Tucson: University of Arizona Press.

Zigmond, Maurice L. 1981. Kawaiisu Ethnobotany. Salt Lake City: University of Utah.

Zigmond, Maurice L., Curtis G. Booth, and Pamela Munro. 1991. *Kawaiisu: A Grammar and Dictionary with Texts*. UCPL 119. Berkeley: University of California Press.