Achumawi Database: Summary for January 2021

The current backup can be downloaded (with instructions) from the usual location at http://zelligharris.org/achumawi-db.html

This has been a popcorn month, metaphorically speaking, with requests and opportunities popping up unexpectedly. Consequently, I have progressed little on the words in the Swadesh list (matched up to Yana words), and not at all on the pronominal prefixes, but a lot has developed.

In my ongoing work organizing lists of examples and looking for the patterning of pronouns I inevitably notice unresolved things in the verb stem that follows. Now what do you suppose closing, locking, arranging objects, and drowning have in common?

In September, I wrote about *ski* and *ska* as possibly alternate forms of the same root. Examples of *ski* include *tuskímci* "sit down", *uskístum* "sit upon", and *icéski* "look for".

However, upon further examination I recognize the other root as not *ska* but rather *sqa*. Most of the occurrences are from Curtin, Radin, and de Angulo, who are unreliable about *k* vs. *q* and sometimes wrote *q* in these words. Harrington did not distinguish *q* from *k* at all. Although my own record is also somewhat variable, *q* is well supported. I understand the confusion. Articulation of *s* at the front of the mouth can sometimes pull the articulation of the following *q* farther front towards *k*. The stop can sound like aspirated k^h after the voicelessness and increased airflow for *s*. Closure at the back of the oral cavity for *q* has been recorded as glottalization, e.g. *sḳ́* in "point" and "index finger". Here are some examples, as rectified, showing the *sqa* root, which I have glossed "delimit, arrange, enclose":

itasqááwami	finish	*tisqááti*	set it up (as sign)
tilísqááwami	finish	*winasqááti*	set or prepare
tasqááwací	rest, have free time	*tilisqááti*	point
tasqááwa	(now you can) retire!	*tilisqáámé*	pointer, index finger
isqaaẇi	viscous, thick (no drip)	*tinṭusqáwti*	break it off
tinkusqááẇi	plug it up, close it, shut it	*tíĺísqáápi*	curse, swear at
tíncasqaaẇí	close it	*ticusqáápi*	drown
tiwasqááwé	door; box, enclosure	*tásqápċááḥi*	fall into water
tincasqáẇtaẇáyi	open it up	*sácasqápl̓i*	I blister
tiwasqááẇamtánumé	trap door		

Harrington recorded a placename, *álisti sqaẇ sqaẇ íwalmi* where rocks (*álisti*) form a line (a delimitation) crossing (*íwalmi*) a creek. A look-alike *ó tykwíṅisġáátáké* "he prayed for himself" has *ġát* "approach, compact" after the root for speaking, followed by the reflexive *-áké*.

A number of these have stem-final *-ẇ*. I have glossed this as a stative suffix. A *w* with stative meaning may occur in other places:

- The pronominal prefix *ẇ-* "3rd person habitual/characteristic/force of nature".
- The *uw* stative copula. In English and other languages, what traditional grammar calls "adjectives" are really stative or durative predicates requiring an extraposed carrier for tense and aspect morphology (the copula or so-called verb "to be"), and in Achumawi the form of the adjectival copula is *uw*.

There is also the *awa* which alternates with *oo* at the beginning of a verb stem, if a stative or durative meaning can be demonstrated. If that is so, there would be two occurrences in *tiwasqááẇe* "door; box, enclosure". The vowel alternations of e.g. *tupti* "go", *sápti*, sápté "I go" tupté "go!" siwápté "I go back", tépte "go back!" will probably be explained as reductions of such morphemes. This *w* morpheme may be cognate to the *ʷ* morpheme that Talmy has in his examples (but does not explain) in his 1972 dissertation on Atsugewi semantics.

In this context, my sceptical eye returns to suffixes and postpositions beginning with *w-*.

-wa	locative, as in *cʰá* where + *cʰááẇa* in what place. On nouns, the place where the named thing may be found
wáté	*wa* durative, habitual + *tu* upon or *ti* toward + *-e* substantive (a "do X" verb + *-e* becomes "the thing you do X with")
waci	*wa* durative, habitual + *c* do? The *s* of *s-waci*, etc. may refer to an indefinite object, TBD.
wáka	agent (reduced to *ka* after vowel: *kwán ẇáká*, but *tatʲí ka*)
wáli	the kind that does
ẇal	with (comitative)
wáwi	collective
ẇaymi	right here; just so
wam	separating: *wa* + *-m* "thither"

In the story of the mother deer, mother bear, and their children, the mother deer doesnʻt just say *kicíwasqááẇa* "you two should shut them in", she says says *kicíwasqaaẇáté* "you two should shut them in tight". This looks like the locative *-wáté* applied to a verb instead of to a noun. The analysis given above into *-wa* + *ti* suggests that the final vowel may be the imperative indicated not by *-á* but rather by the infrequent *-é* as seen in e.g. *tupté* go! The mid vowels *e* and *o* appear to result often

from assimilation of one of the apex vowels *i, a, u* to some kind of affix which, once the semantic burden is carried by that vowel change, has been reduced to zero.

The agentive *ka* on a noun marks which noun refers to the agent. On a verb, it makes a dependent clause. Example de A – Uldall 1.13:

yámmacẇí ka t̓áqʰá tslhuptéumá máh̓h̓íka.
Having finished eating, we traveled all night, then we arrived.

The *ka* just comes at the end of the dependent clause *yámmacẇí.* Despite de Angulo's and Uldall's implicit assurance that they all ate, it is possible that the singular 3rd person might not mean an impersonal "one finished eating" but literally "when he finished eating we traveled all night".

The *ka* of *máh̓h̓íika* "all night" has a different origin. The root is *máh̓* "dark" (e.g. *tiċumáh̓h̓i* "get dark"). The noun *máh̓h̓í* "dark, night" may have *-wi* "having, belonging to" with the *w* assimilated to the final consonant (cp. *láh̓h̓a* "with the head"). A common usage is *máh̓h̓í issi* "in the middle of the night; midnight", and we see *Cʰú máh̓h̓íwáté ċé tykúuwí tínímmááci.* "He couldn't see anything in the dark." In *máh̓h̓íkca* "a night", the individuating suffix *-ca(n)* is attached to *máh̓h̓ík,* which is not in the database. The suffix *-k* "time of" is seen in names of seasons and months, e.g. *iiẇáámak* "autumn", the time for *iiẇáámi* "going in". Then *máh̓h̓íika* "all night" adds the stative/locative *-wa* with the *w* lost after the consonant. We have two of the parallel words for "day"; the other two are in parentheses:

máh̓	dark	(*mát*)	(light?)
máh̓h̓í	dark, night	(*máttí*)	(daylight?)
máh̓h̓íkca	a night	*máttíkca*	a day
máh̓h̓íika	all night	*máttíika*	all day

Both *máh̓* "dark" and *h̓uk* "black" are in *tíċumaah̓ók̓tumi, winċumaah̓ók̓tumi* "completely dark".

I reported the following to the o-issi group in the middle of the month.

ṗas	eye, face	*tikúúṗascumáké'*	put (poultice) on eyes
		ṗassíloo	buckeye
		yúúl̓aṗas	ripe buckeyes, ripened on ground
		icaṗsááci	wash face
		yááṗáási	has blemish/sore/disease on face
		timaaṗáási	acne, rash

These previously arbitrary words now have an easily understood explanation of their meanings. The (CV)CVC(CV) template for verb stems is further vindicated. We also see here another root that alternates between CVC and CC forms. The six we've identified so far are: *laq*, *kʰay*, *k̓il*, *ṗas*, *q̓at*, *qay*, so this is now in the C(V)C sheet of the CVCroot spreadsheet.

In the above examples, *ṗassi* is a plural of *ṗas* (cp. *ittʰúúni issiilóo* "our people", *ó tissa íssi wa*"speak in the Indian manner!", etc. The more common plural is with *ċó* or sometimes with the "individuating/several" suffix *-can*.) A ‘doublet’, a pair of words with intersecting distribution/meaning, provides clues to language history. *Áásá* might at an earlier stage have been *ṗáásá*, or one of the two morphemes *áásá* vs. *ṗás* might be an unrelated innovation. The possibility that *asṗi* “tears” is a compound with *as* “water” + *ṗ* suggests that *ṗas* might be the older form. We can make a parallel supposition for *asci* “rain” as a compound with *c* “do”.

The *óo* “tree/plant/bush” suffix (*-op* in Atsugewi) identifies the origin, source, or basis from which the harvest is taken. We see it above, in *ṗassílóo* “buckeye”. Just as acorns derive from oak trees, individual humans derive from their family tree, their ancestors and their family of relatives. Is it possible that *ẇílóo* referring e.g. to a deceased relative might be analyzed as *-ẇi* "having, characterized by, belonging to" plus this “source” suffix *óo*? The ranges of meanings for both suffixes need to be tested against the database. I don't say *ittʰú tatṫíílóo* (which sounds like a bush from which mothers are harvested), but rather *ittʰú tatṫííẇílóo* my late mother.

Connor asked for

I’ve been usability-testing Connor’s new O-issi keyboard customization, which he created wtih Keyman. I previously used Keyman, a product of the Australian company Tavultesoft, beginning in the 1990s. When Jim Bauman proposed the Amerindi keyboard customization that could be used for diverse languages I changed, partly because we could not be certain of the future of Tavultesoft. Today, Keyman is a cross-platform product. This means that Connor’s O-issi keyboard will work on tablets and phones as well as on Windows and Linux

computers. (Last I heard, Chromebook support is still in the development queue, but the Chrome OS keyboard can be remapped, and Keyman Web is always available.)

I haven't made any instructional videos since these two in August

- Laryngealized stops
- Plain vs. aspirated stops

It's on the radar.

Connor and Paul have both been developing language for restricted domains. For a "brushing teeth" domain, Connor and I worked on figuring out a word for the thing you brush your teeth with, which could be translated to English as "toothbrush". We came up with three candidates, and the consensus choice seems to be *tintapʰááciwé*, "something you brush or sweep around with", which might be shortened in the usual manner to *tapʰááciwé* or even to *tapʰáácé*

For the record (and for a wider audience) that interim report to the o-issi group is inserted here.

Toothbrush: how to make a new word

Revitalizing Íssi wa Ó Tissi in today's world will require words that aren't in the database. The language contains resources for creating new words. These few pages illustrate the process of creating a verb that describes brushing teeth, and then getting from that verb a word for the thing that you use to do that—a toothbrush. Because this is an addition to the vocabulary, it is subject to community approval and use.

What's in a verb stem?

In this language, to create a new noun that names a thing, we typically start with a verb that describes what you do with that thing. To create a noun for "toothbrush" we first have to build a verb stem for "brushing teeth", perhaps in combination with the noun *iiċá* "teeth". From that verb stem we can make a noun for the thing that you brush your teeth with—a toothbrush. At the end you'll see three candidates, each with a long form and two short forms:

- *tintápa̓acíwé, tápa̓acíwé, tápa̓acé*
- *tintaalúúcíwé, taalúúcíwé, taalúúcé*
- *tintaaṫúúl̓íwé, taaṫúúl̓íwé, taaṫúúl̓é*

The X-Y-Z template for the most common type of verb stem has three verb roots. The gloss for the template is "by doing X do Y while doing Z". To illustrate, here's a verb where the main CVC (consonant-vowel-consonant) root is *piċ*.

ticaapíċċúcí "pick up (thread, something delicate)"

	by doing X	***do Y***	***(while doing Z)***	
ti-	*ca*	*piċ*	*ċu*	*ci*
	grasp, use fingers	pinch	rise, lift	

- The main root Y is typically a CVC syllable like *piċ* (sometimes CCVC, as we shall see).
- X and Z are CV roots which, like adverbs in English, make the meaning more specific when they are present.
- Some other morphemes go before or after the stem. The prefix *t-* (plus the vowel *i*) is at the beginning; the root *c* "do" (plus the vowel *i*) comes at the end.

Some CVC roots may be reduced to CC with a vowel inserted after it. In the root *piċ* the *ċ* changes to *s* when it is reduced to *ps* "pinch". (Because of words like *tulúpċíci* "sunset" we know this doesn't always happen when *p* comes before *ċ*.) Examples:

ticapsítẏéimi “tear off a piece”

tilapsííli “eat with fingers”

Another example is *ṗas/ṗs* “with the eyes/face”, in e.g. *tikúúṗascumi* “press (a poultice) on the eyes”, *ticaṗsáái* “wash face”.

The “tooth / bite” root

On the analogy of *ticaṗsáái* “wash face” we might consider making a verb stem around the root for teeth. That root is *ċ* when it’s the main root, as in *tiiċí* “bite”, *sóóċá* “I bite”, but *ċwa* otherwise, as in *saċwaaq̇éési* “I break it by biting”. We’re not supposed to bite the toothbrush, as this root says, so this root seems to be out of contention. When we get a verb that describes the activity involved in brushing teeth, we could add the noun *iiċá* “teeth” to say what it is we’re brushing, if the word would be ambiguous without it. Most words are ambiguous, so that we require context to know exactly what the speaker intended. through usage and custom some meanings become more strongly or generally expected.

The “clean off / polish” root

For example, the root *luc* is used for cleaning off or polishing. We could say *titaalúúci qá iiċá* “clean off the teeth, polish the teeth”, but that doesn’t get us a noun meaning “toothbrush” unless we use both words: *iiċá ú titaalúúcé* perhaps (though the possessive is maybe a bit odd). *Titaalúúcé* talks about any kind of cleaning or polishing implement, not just toothbrushes.

The “suds” root

We’re using toothpaste with that brush, so we can consider *ṫuḷ* “foam, suds”. Since *tincaaṫúúḷi* is already used for washing clothes and such (the *n-* is for repetitive activity), and *ca* suggests getting your hands working with those things right down in the suds, it would be better to begin the stem with *ta* indicating linear motion with an implement, as in *titaalúúci* and *titaalúúcé*. So, *tintaaṫúúḷé* could be another general-purpose cleaning implement, this one involving suds, and with *iiċá* “teeth” in the context either explicitly or implicitly we understand it to be a toothbrush.

The “brush/sweep” root

The toothbrush commercials have been selling the suds for years, but the point is to get the bristles to move stuff off the teeth, so let’s build on the analogy of *ticupʰé* "hairbrush". The X morpheme in the first slot of *ticupʰé* is *cu* "thrust, flow", describing the long motion for brushing long hair. The verb “brush hair” is not in the database, but it must be *ticupʰííci*, one of the large class of verbs with *c* “do” at the end of the verb stem. The final *-é* makes an implement noun from the verb stem—the thing with which you do what the verb describes.

Once a noun is made from a verb it is often shortened in use. For example, *ticaakʰáápé* “finger-ring” is shortened to *caakʰáápé*. We may presume that *ticupʰíícé* “hairbrush” was the longer form, though all we have is Jim Bauman’s upriver form *ticupʰé* "hairbrush" which omits the helping verb" *c*.

A CVC/CC root

In the second “do Y” slot, the main root is *pʰ*, so this must be one of those CVC roots which are sometimes reduced to CC (under conditions TBD). The other such CVC/CC roots that we have identified so far are listed in the C(V)C tab in this file. There, you can see that the dropped vowel is usually *a* (in one root it is *i*). On this basis, I assume that the full form of the root is *paʰ*, though I have not found it in the database. This contrasts with *ṗaʰ* “using the face or eyes”, which I described in the monthly report for December. (Examples include *tíncéépááʰi* “shut one’s eyes”, *tipʰááti* “face, turn toward”.) Here are some words with this *paʰ/pʰ* root.

		X		Y	Z	
taliphi; liphe	sweep; broom	*li*	extend hand/arm	*pʰ*		
tóphi	cover up, bury	*o-/awa-*	TBD	*pʰ*		
tákuphitcí.	knock something off with hand brush dust off with hand	*ku*	press with hand	*pʰ*	*i + ta*	*c*
tilápʰaací	untie, release (hair, a net)	*la*	linear movement	*pʰ*		*c*

In the stem of *tákupʰitcí* "brush dust off it with hand" there are a couple of changes in the shapes of morphemes that need some explanation:

- The final *t* is a reduced form of *ta* “make a line”, i.e. move linearly, line things up, carry out a sequence, etc. In the “while doing Z” template slot *ta* is often glossed "toward, in a direction".
- The default vowel *i* is inserted between *pʰ* and *t*.

These changes fit the word to a pattern of length, pitch, and stress which is still TBD. To conform to this patterning, a vowel may be dropped, changing CVC to CC and changing CV to C, as with *ta* above; or the default vowel *i* may be inserted to prevent consonants from clustering together in one syllable, as with the vowel *i* inserted between *pʰ̓* and *ta*. The syllables of that word are *tá-kúp-ʰ̓it-ci*. We will be able to analyze the *prosody* of the language (as this kind of patterning is called) based on examples such as this, in which the shapes of the morphemes change depending on the syllabic context and where the stress falls.

Back up out of the rabbit hole, then, and onward.

So what does paʰ̓/pʰ̓ describe?

The verb *topʰ̓i* "cover it up, bury it" describes covering something with loose material like dirt, whereas covering something with a blanket or a slab is built around the root *leą́* “flat surface”. In *tiláphaací* “untie, release”, the last example in the table above, material that was bound is made loose. Two places where it occurs are in a story told by Henry Wool. (The second line in each case shows de Angulo’s transcription.)

ckwaláphaací kacʰú tʰiyí qa kwán. *tykwaláphaací kacʰú tʰiyí qa kwán.*	Fox untied his hair (released it from the hairpin).
ckwaláphaací qa iiąiił́á. *tsìkùàláphà·dʒí qà ì’qì·’là.*	He untied the net.

Though it is the same speaker and in the same text, de Angulo writes *ʰ̓* in one occurrence of the verb and plain *h* in the other. He often misheard things, but that *h/ʰ̓* contrast can be hard to discern (especially after a voiceless-released consonant). I, too, wrote a plain *h w*hen Grandma Lela said *tílapʰ̓ááca* "untie it!". It's certainly fair to ask if *pah/ph* actually might be a different morpheme with a plain *h*, but this “untie” verb stem would be its only occurrence in the lexicon. If on the other hand we accept these words as *ckwaláphaací* and *tílapʰ̓ááca* with *ʰ̓*, then the *paʰ̓/pʰ̓* root seems to refer to any disorganized mass of separate elements, including dirt, dust, hair, and the strings or cords of a collapsed net. If we presume that the gloss for *paʰ̓/pʰ̓* is something like "loose, unconstrained, unorganized”, then we aren’t going to imagine that we use a hairbrush to clean off *ʰ̓ásli* and dirt.

Splat

There's also *tílapʰ̓ááta* "squash it with something!" (e.g. a bug). It might be possible to extend the meaning of the *paʰ̓/pʰ̓* root to include this, but the consonant in the Y slot is not *t*, it is laryngealized

ṫ. I am not (yet) aware of any other occurrences of *ṫ* in the Z template slot. We do have two CV roots beginning with *ṫ*. One is *ṫu* “using fist” in e.g. *tiṫuuḋááli* “hit with fist” (combined here with *ḋal* “hit”), but this is not how we use a toothbrush. Nor does *ṫe* “broadly” suit our purpose without a considerable stretch of semantics. It is seen in e.g. *yanaaṫéélέḋí* “he flattens it” together with *léḋ* “flat”; compare *sááleḋḋí* “I flatten it” which lacks *ṫe*.

Instead, I believe that *pʰaṫ* is an onomatopoeic syllable, like *qʰot* "crush (chalky, crumbly material)". Parallel to *qʰot qʰot ẏuwi* “it’s crumbly” and *tiċiqʰóóta* “crunch it!”, perhaps one could say *pʰaṫ pʰaṫ ẏuwi* “it makes that sound when you squash it” and *tiċipʰááṫa* “squash (that bug) with your foot!”.)

Brushing teeth with a toothbrush

Time to build a verb stem in the XYZ template. We’ll only use the X and Y slots. (You could always add something in the “while doing” Z slot, e.g. *ċu* if you’re brushing your teeth while going somewhere.)

In the X slot of *tiláphaací* “untie” the CV root is *la*, in *titaalúúci qá iiċá* “clean off, polish” the first morpheme in the stem is *ta*, and in *ticaṗsáái* “wash face” it is *ca*. The meanings of *la* and *ta* are similar. In the first template slot in verbs, *la* means "make a line or sequence" as in making a fence, or “move in a line” as in flying, and *ta* is for moving an implement in a linear or progressive way, with *perhaps* a suggestion that the implement itself has a linear or long shape. The meaning of *ca* in the X slot is “using fingers, grasping”. So as we build a verb that describes brushing teeth, we’ll start with *ta* because we move the stick-like toothbrush in a linear way, or with *ca*, because you work it by grasping it.

The Y slot is the main focus of discussion above. We have three options to try in the Y slot: *luc* “clean off, polish”, *ṫuḷ* “foam, suds”, and *pʰ* + vowel + *c* “do”.

The *n-* prefix at the beginning of the XYZ stem describes iterative, repeated activity. Finally, because we're working the toothbrush around about, we're going to want *-íwí* on the end of the stem. Choosing *ta* for the first slot, the next step is to insert the three roots into the “do Y” second slot of the template and see what we get.

The three roots under consideration are *luc*, *ṫul*, and *pḥ* (+ vowel + *c*, making a CVC syllable).

brush teeth	**toothbrush**	
tintaalúúciwí qá iiċá	*tintaalúúciwé* *taalúúciwé* *taalúúcé*	“something you move around to clean things off or polish them”
tintaaṫúúliwí qá iiċá	*tintaaṫúúliwé* *taaṫúúliwé* *taaṫúúlé*	“something you stir around in suds”
tintapḥááciwí qá iiċá	*tintapḥááciwé* *tapḥááciwé* *tapḥáácé*	“something you brush or sweep around with”

These are the candidate words for “brushing teeth” and “toothbrush”. Which shall we adopt?

[The consensus so far has been in favor of *tintapḥááciwí*, etc. Bear in mind that in a different context, where toothbrushing is unlikely and another fitting activity is likely, each of these words would describe a different activity and a different implement!]

Will we hear a dialog like this?

> *Qá iiċá ḳitapḥáácíwáké.*
> *Miiṁú capḥáácé ẇa, ċílléq! Háptiisámé’ yá tʰámiẏí!*