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 tuskímcí “sit down”, uskístum “sit upon”, and icésí “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 kʰ 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. sk’ in “point” and “index finger”.

Here are some examples, as rectified, showing the sqa root, which I have glossed “delimit, arrange, enclose”:

- itasqáwami  finish  tisqááti  set it up (as sign)
- tilísqáwami  finish  winasqááti  set or prepare
- tasqááwaci  rest, have free time  tilísqááti  point
- tasqááwa  (now you can) retire!  tilísqáámé  pointer, index finger
- isqaawi  viscous, thick (no drip)  tintusqáwti  break it off
- tinkusqááwi  plug it up, close it, shut it  tilísqáápi  curse, swear at
- tíncasqaqawi  close it  ticusqáápi  drown
- tiwasqááwé  door; box, enclosure  tásqápčááhi  fall into water
- tincasqáwtañyí  open it up  sácasqápli  I blister
- tiwasqááwamátánumé  trap door

Harrington recorded a placename, álísti sqaw sqaw íwalmi where rocks (álísti) form a line (a delimitation) crossing (íwalmi) a creek. A look-alike ó tykwínisqáátáké “he prayed for himself” has qát “approach, compact” after the root for speaking, followed by the reflexive -áké.
A number of these have stem-final -\(\acute{w}\). I have glossed this as a stative suffix. A \(w\) with stative meaning may occur in other places:

- The pronominal prefix \(\acute{w}\)- “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 \(tiwasyq\áwe\) “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 \(cʰ\á\) where + \(cʰ\á\á\á\) in what place.
  On nouns, the place where the named thing may be found

- \(wát\é\) \(wa\) durative, habitual + \(tu\) upon or \(t\) 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: \(kwán\ wáká\), but \(tátí\ ka\))

- \(wáli\) the kind that does

- \(wál\) with (comitative)

- \(wáwi\) collective

- \(wayne\) right here; just so

- \(wam\) separating: \(wa\) + -\(m\) “thither”

In the story of the mother deer, mother bear, and their children, the mother deer doesn’t just say \(kicíwasq\á\á\á\á\) “you two should shut them in”, she says says \(kicíwasq\aa\á\á\á\á\) “you two should shut them in tight”. This looks like the locative \(-wá\á\á\á\á\á\á\) 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:

*yámmacwí ka iáqʰá tslhuptéumá máhʰíka.*

Having finished eating, we traveled all night, then we arrived.

The *ka* just comes at the end of the dependent clause *yámmacwí*. 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 *máhʰíka* “all night” has a different origin. The root is *máh* “dark” (e.g. *tičumáhhi* “get dark”). The noun *máhʰí* “dark, night” may have -wi “having, belonging to” with the w assimilated to the final consonant (cp. *láhhá* “with the head”). A common usage is *máhʰí issi* “in the middle of the night; midnight”, and we see *Cʰú máhʰíwáté čé tykúuwí* *tíntímmááci*. “He couldn’t see anything in the dark.” In *máhʰíkca* “a night”, the individuating suffix -ca(n) is attached to *máhʰík*, which is not in the database. The suffix -k “time of” is seen in names of seasons and months, e.g. *iiwáámak* “autumn”, the time for *iiwáámí* “going in”. Then *máhʰíka* “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:

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<th></th>
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</thead>
<tbody>
<tr>
<td><em>máh</em></td>
<td>dark</td>
<td>(mat)</td>
<td>(light?)</td>
</tr>
<tr>
<td><em>máhʰí</em></td>
<td>dark, night</td>
<td>(máttí)</td>
<td>(daylight?)</td>
</tr>
<tr>
<td><em>máhʰíkca</em></td>
<td>a night</td>
<td><em>máttíkca</em></td>
<td>a day</td>
</tr>
<tr>
<td><em>máhʰíka</em></td>
<td>all night</td>
<td><em>máttíka</em></td>
<td>all day</td>
</tr>
</tbody>
</table>

Both *máh* “dark” and *huk* “black” are in *tičumaahóktumi, winčumaahóktumi* “completely dark”.

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

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td><em>pas</em></td>
<td>eye, face</td>
<td><em>tikúápascumáké’</em></td>
<td>put (poultice) on eyes</td>
</tr>
<tr>
<td><em>pasíltóo</em></td>
<td>buckeye</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>yúálapas</em></td>
<td>ripe buckeyes, ripened on ground</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>icapscáci</em></td>
<td>wash face</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>yáápáást</em></td>
<td>has blemish/sore/disease on face</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>timáapáást</em></td>
<td>acne, rash</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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, ḱil, ḵas, ḵat, ḵay, so this is now in the C(V)C sheet of the CVCroot spreadsheet.

In the above examples, ḵassi is a plural of ḵas (cp. ʰitʰuíni issiₕlòo "our people", ṭossa ḱsi wa"speak in the Indian manner!", etc. The more common plural is with ʰcó 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 ḵáásá, or one of the two morphemes áásá vs. ḵás might be an unrelated innovation. The possibility that ḵspi “tears” is a compound with ḵas “water” + ḵ suggests that ḵas might be the older form. We can make a parallel supposition for ḵsci “rain” as a compound with c “do”.

The ṭo “tree/plant/bush” suffix (-op in Atsugewi) identifies the origin, source, or basis from which the harvest is taken. We see it above, in ḵassǐlòo “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 ḵwlò referring e.g. to a deceased relative might be analyzed as -wi "having, characterized by, belonging to" plus this “source” suffix ṭo? The ranges of meanings for both suffixes need to be tested against the database. I don’t say ʰitʰú ṭatỳǔlòo (which sounds like a bush from which mothers are harvested), but rather ʰitʰú ṭatỳǔw̓lílòo my late mother.

Connor asked for

I’ve been usability-testing Connor’s new O-issi keyboard customization, which he created with 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 iićá “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:

- tintáphaacíwé, táphaacíwé, táphaacé
- tintaałúucíwé, taalúucíwé, taalúúcé
- tintaatíílíwé, taatíílíwé, taatíúlé

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 pić.

<table>
<thead>
<tr>
<th></th>
<th>by doing X</th>
<th>do Y</th>
<th>(while doing Z)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ti-</td>
<td>ca</td>
<td>pić</td>
<td>ċu ci</td>
</tr>
<tr>
<td>grasp, use fingers</td>
<td>pinch</td>
<td>rise, lift</td>
<td></td>
</tr>
</tbody>
</table>

ticaapíććúčít "pick up (thread, something delicate)"

- The main root Y is typically a CVC syllable like pić (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 pić the č changes to s when it is reduced to ps “pinch”. (Because of words like tulúpći “sunset” we know this doesn’t always happen when p comes before č.) Examples:
ticapsítýéimi “tear off a piece”

tilapsííli “eat with fingers”

Another example is pas/ps “with the eyes/face”, in e.g. tikúúpascumi “press (a poultice) on the eyes”, ticapsááci “wash face”.

The “tooth / bite” root

On the analogy of ticapsááci “wash face” we might consider making a verb stem around the root for teeth. That root is č when it’s the main root, as in tčić “bite”, sóóčá “I bite”, but čwa otherwise, as in sačwaaqéési “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 ĭićá “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 ĭićá “clean off the teeth, polish the teeth”, but that doesn’t get us a noun meaning “toothbrush” unless we use both words: ĭićá 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 īul “foam, suds”. Since tincaalúuílí 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, tintaaalúuílé could be another general-purpose cleaning implement, this one involving suds, and with ĭićá “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 ticuphitcí, 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 ticuphitcí “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 pah “using the face or eyes”, which I described in the monthly report for December. (Examples include tincéépáahi “shut one’s eyes”, tiphältí “face, turn toward”.) Here are some words with this pah/PH root.

<table>
<thead>
<tr>
<th></th>
<th>X</th>
<th>Y</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>talphi: liphe</td>
<td>sweep; broom</td>
<td>li extend hand/arm</td>
<td>ph</td>
</tr>
<tr>
<td>tophi</td>
<td>cover up, bury</td>
<td>o-/awa- TBD</td>
<td>ph</td>
</tr>
<tr>
<td>tákuphitcí</td>
<td>knock something off with hand</td>
<td>ku press with hand</td>
<td>ph i + ta c</td>
</tr>
<tr>
<td>tiláphaací</td>
<td>untie, release (hair, a net)</td>
<td>la linear movement</td>
<td>ph</td>
</tr>
</tbody>
</table>

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 ph and ta. The syllables of that word are tá-kúp-ḥit-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 pah/ph describe?**

The verb topṭi “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 leq “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.)

<table>
<thead>
<tr>
<th>ckwaláphaací kac’ú t’iyí qa kwán.</th>
<th>Fox untied his hair (released it from the hairpin).</th>
</tr>
</thead>
<tbody>
<tr>
<td>tykwáláphaací kac’ú t’iyí qa kwán.</td>
<td></td>
</tr>
<tr>
<td>ckwaláphaací qa iüqilá.</td>
<td>He untied the net.</td>
</tr>
<tr>
<td>tsikúłáphádʒí qa i’qílà.</td>
<td></td>
</tr>
</tbody>
</table>

Though it is the same speaker and in the same text, de Angulo writes ḥ in one occurrence of the verb and plain h in the other. He often misheard things, but that h/ḥ contrast can be hard to discern (especially after a voiceless-released consonant). I, too, wrote a plain h when Grandma Lela said tiláphádca "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 tiláphádca with ḥ, then the pah/ph 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 pah/ph is something like "loose, unconstrained, unorganized”, then we aren’t going to imagine that we use a hairbrush to clean off hásli and dirt.

**Splat**

There’s also tiláphádía "squash it with something!" (e.g. a bug). It might be possible to extend the meaning of the pah/ph root to include this, but the consonant in the Y slot is not t, it is laryngealized.
I am not (yet) aware of any other occurrences of ṭ̣ in the Z template slot. We do have two CV roots beginning with ṭ̣. One is ṭu “using fist” in e.g. tituuqáádi “hit with fist” (combined here with qal “hit”), but this is not how we use a toothbrush. Nor does ṭe “broadly” suit our purpose without a considerable stretch of semantics. It is seen in e.g. yanaaíééléqṭi “he flattens it” together with léq “flat”; compare sádłeqq̣í “I flatten it” which lacks ṭe.

Instead, I believe that ph̓aɪ̚ is an onomatopoeic syllable, like qh̓ot “crush (chalky, crumbly material)”. Parallel to qh̓ot qh̓ot yuwi “it’s crumbly” and ticíqhoóta “crunch it!”, perhaps one could say ph̓aɪ̚ ph̓aɪ̚ yuwi “it makes that sound when you squash it” and ticíphááá “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. ču if you’re brushing your teeth while going somewhere.)

In the X slot of tiláph̓aácí “untie” the CV root is la, in titaalaúci qá iičá “clean off, polish” the first morpheme in the stem is ta, and in ticápsáácí “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”, túl “foam, suds”, and ph̓ + 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 -íwī 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*, *tul*, and *ph* (+ vowel + c, making a CVC syllable).

<table>
<thead>
<tr>
<th>brush teeth</th>
<th>toothbrush</th>
</tr>
</thead>
<tbody>
<tr>
<td>tintaalúciwí qá iičá</td>
<td>tintaalúciwé</td>
</tr>
<tr>
<td></td>
<td>taalúciwé</td>
</tr>
<tr>
<td></td>
<td>taalúcé</td>
</tr>
<tr>
<td>tintaaiúiliwí qá iičá</td>
<td>tintaaiúiliwé</td>
</tr>
<tr>
<td></td>
<td>taaíiiliwé</td>
</tr>
<tr>
<td></td>
<td>taaíiilé</td>
</tr>
<tr>
<td>tintaphációwí qá iičá</td>
<td>tintaphációwé</td>
</tr>
<tr>
<td></td>
<td>taphácwówé</td>
</tr>
<tr>
<td></td>
<td>taphácé</td>
</tr>
</tbody>
</table>

“something you move around to clean things off or polish them”

“something you stir around in suds”

“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 *tintaphációwí*, 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 iičá kitaphációwáké.*

*Mìmú caphácé wá, čilléq! Háptiisámé’ yá tʰámíyí!*