Achumawi Database

Summary of July 2023 work

You can download the current backup from

- [http://zelligharris.org/Achumawi/achumawi-db.html](http://zelligharris.org/Achumawi/achumawi-db.html)

I have updated the webonary at

- [https://www.webonary.org/odissi/](https://www.webonary.org/odissi/)

Since I replaced my computer FLEx has not crashed during routine work. Last night I got it to crash with no error message by pushing hard on an editing method that I knew had preceded such a crash: selecting a bit of the raw text in Baseline and typing so as simultaneously to delete and replace it. (First deleting then typing seems to work OK now.) I have now FLEx 9.1.22, the newest stable release. I’ll push on it again.

I plan to travel to California for the last weekend sessions in the Language House in Round Mountain. I hope to have an Atsuge database started by then. The final 3-year grant of the Achumawi Database Project begins in September.

Sections in this report are:

1. Zellig’s advice
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3. Of men and boys: *yályú, yályúlc*an
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9. Of stretching and extending: *táq*
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1. Zellig’s advice

In 2015, when I was helping Naomi Sager pack up the papers of her late husband, Zellig Harris, and ship them to the American Philosophical Society for archiving, I scanned an undated, handwritten page of his notes apparently giving advice to a student at work on some language. Here is a relevant portion:

“Let the language decide — do not tell the language what to do — do not project, that is one of the greatest dangers.”

One corollary which may not be obvious is that a phonemic representation established at one stage of analysis should not ‘tell the language what to do’ when subsequent analysis indicates otherwise. Morphological analysis can lead to rectification of phonological representations.

A case in point is my discovery last May of má̊h ~ má̊āhi̊y ~ má̊āhi̊y ka ~ maahiy ca(n) vs. what I had always written mahhike (‘a day’, and correspondingly maatiẙ ka ‘all night, at night’ ~ maatiẙ can ‘a night’, which I formerly wrote as mättikcan. The misperception of a k was recognized by re-hearing and analyzing the acoustic record. As you see, I now analyze these with the stative ẙ.

Other reconsiderations follow below.
2. Of various kinds: *cihe*

This month, on returning to progress through initial *i* in the lexicon, I came to *ihaånâkcihé* ‘light weight (thing)’ alongside *ihaani* ‘light (in weight)’. The apparent suffix *cihe* has been puzzling for a long time. Its meaning intersects that of *ca*, *can*, ‘an individual of this kind’. Indeed, I did write *ca* in Grandma Lela’s word *aatímcə* ‘Maple Creek person’ because she identified it with *aatíma* ‘Maple Creek’.3 From her I also have *istímcə* ‘*a heavy one*’ (*istími* ‘heavy’), *custámcihe* name of the old man in Day who could direct hunters to deer (*custam* place where grew lots of *cust* ‘sweet anise’); *iscúpcihe* ‘skinny, sharp-featured person’ (*iscúupí* ‘sharp pointed’, *scúp scúp waláátiwi* ‘darts around’), *aatúúcehe* name of a butte near the old Lee place (*aaqú* ‘mountain’). I sometimes wrote *cehe* (as I have done above), and Harrington recorded *e* in *aaqú isčákcehe* ‘sharp mountain’ (across the river from The Cove; *scák* ‘sharp pointed’), *paacáwílóó úúlímcehe* ‘ridge/cliff kind of black manzanita’.4

This *cihe* is preceded by *k* in records of *tʰúsyíkcihe* (de Angulo) ‘nice kind’, *iihâánákcihe* ‘light, agile kind’ *mékcihe* ‘more than’. Considering these of course immediately brought to mind my discovery last May of *mah ~ maahí ~ maahí’ka ~ maahí’can* vs. what I had always written *mahhíkcan* ‘a day’, and correspondingly *maati’ka ~ maati’can* vs. *maatíkcan* ‘a night’.

The most frequent occurrence of *kcehe* by far is in a word that I transcribed as *mékcehe*, which may be translated as ‘more’ or as ‘compared to’ in comparative constructions. There is one occurrence at 14:45-46 in CLA recording 18 (grandmother’s escape from soldiers) and three in recording 30 (Spider and Lizard), e.g. at 14:51.9. The clearest of the three examples that I extracted is in the file bigger3.wav, which I invite you to download from Dropbox [here](#) now. Listen to the sound of this *mékcehe* before reading farther. The visual analog is in the Praat sound spectrogram below.

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1 Also Harrington’s *ihaaláli tííqaati* “A litl mt. dr. of Fender's Flat on n. side of P. River. Across from wacúw (Scott's place)” (spelling unchanged). This is Grapevine Tom’s translation of Yana *kahwáyna* into Pit River, and his substitution of *l* for *n* (albeit a common alternation) is here probably his non-native innovation.

2 Given the CVC root *haw* and the reduction of *w* to *w* in some constructions (*haway*, *ihwaají* ‘light, agile’, *ticahwáyčíci* ‘lift something lightly’, etc.), there arises the prospect of rectifying this construction as *ihawnákcihé* and looking for phonetic evidence of an overlooked lenis *aw* diphthong, or even registering *haw* as an allomorph of *haw* before *n* (if there are no counterexamples). There’s too little evidence at present to sustain that.

3 The *tim* may be *te* ‘lateral, broad’ + *m* ‘thither’. I don’t know where this creek is. The name may have been changed. There is a Maple Creek in Humbolt County, but no Maple Creek is presently listed in [Shasta](http://www.mol.org/3) or [Lassen County](http://www.mol.org/3).

4 Setting aside (as less certain) *icýáncehe* name of Walter Moody’s mother (in The Cove), and Curtin’s *yátsahe* ‘scar’.
The energy of the voiceless release labeled ’ is clearly visible before the following c. The first formant is at about 500Hz and the second at about 2360Hz, consistent with a short i vowel, somewhat low toward ɛ. The second formant is is slightly higher for the final i. This and a close listening to the vowel quality indicates a rectification to mikihi.\textsuperscript{5} I do not yet have an analysis. The second and third formants rise before the k.

A brief tutorial on formants is perhaps long overdue for some readers of these reports.

The image on the right, from one of the many open-source Praat tutorials, shows the formant transitions characteristic of various stop consonants for F1 and F2.

Since these are CV syllables, the vowel formants in each case are on the right. the F2 for i has a high frequency, but F2 for g (or k) is even higher and drops down to it. F2 for d (or t) is lower than F2 for i, and rises to it.

A mirror image is seen for the close of the mik syllable in the spectrogram for mikihi above:

If it were mit or mic (not shown), F2 would curve down, and if it were a glottal stop no curve would be expected.

At 2.03.34 in ‘CG1 Rules for boy coming of age’ is ihaanākcihé, which I have exported to light-weight.wav. Although Craven’s articulation is too lenis in the recording, evidently he articulated it more clearly when I

\textsuperscript{5} In his grammar, de Angulo also recorded the t+c cluster as tk. He interpreted this form as related to wáqči ‘grow, become’:

\begin{itemize}
\item d-i māk ’āt-gū-kūwá hūtāmākčā
\item ti’macqjátkú kúwá hūta měkčihe ‘You will learn after a while longer’
\item wá’wá-maqtšě qá town Alturas-ú-wádé
\item wawá měkčihe qa t’áwn altr’údlas u wáté ‘This is a bigger town than Alturas’
\end{itemize}
transcribed the tape with him. At the end of that recording, the release of the medial \(k\) in \(k'okca\) is clear (although the initial \(k^h\) is not clearly aspirated). In Grandma Lela’s stories, there is a clear release of the medial \(k\) in \(k'okca\), \(moníkca\), and other words with this cluster that I was able to check.

3. Of men and boys: \(yályú, yályúlc\)an
There are four occurrences of \(yályúlc\)an ‘boy’ in the story of Spider and Lizard, clustered fairly closely in sentences 12.3, 12.4, 12.11, and 13.5, and in CLA recording 18 they may be heard between 14:00 and 14:46. I have exported these to the files \(yályúlc\)an-1.wav, \(yályúlc\)an-2.wav, \(yályúlc\)an-3.wav, and \(yályúlc\)an-4.wav. They differ slightly in phonetic detail.

1

\(yályúlc\)an
Initial \(ʒ\) glottalized.
The signature of the \(l\) before \(c\)an is rise of the second formant and increased energy in higher formants, despite devoicing before \(c\).

2

\(yályúlc\)an
The glottalized \(ʒ\) glide is lenis.
Glottalization of the second \(l\) appears as a slowing (wider spacing) of the glottal pulse (vertical striations).

3

\(qa\ yályúlc\)an
The loss of sound energy where the second formant rises to a peak marks glottalization of the initial \(ʒ\) after \(qa\).
qa yályúlcan

The initial widely spaced glottal pulses reflect the very low pitch of qa as well as glottalization centered at the F2 peak for y.

The second l is devoiced before the c.

Evidently, the word is yályúlcan ‘boy’. Is the word glossed ‘man’ yályúl, with a final l?

The central phrase in sentence 26 of LR: Bear Doctor cures a thief is hanís yályú taacááwaci qa áppʰit ‘a man was stationed in the doorway’. The excerpt from CLA recording 12 at 11:42.20 (available here) ends with the syllable taa. In the sound spectrogram below, the vertical dotted line marks the onset of a rise in F2 as the articulation changes from u to the t of taacááwaci. If the word were yályúl, this rise would be seen in the preceding devoiced segment, as it is in the examples of yályúlcan, above. Compare the medial l of yályúl about a third of the way from the beginning, where the energy of F2 is reduced even as higher formants appear. The laryngealization of taa prior to c is evident in the progressively wider spacing of laryngeal pulses though there is no lowering of pitch.

At 30:36.40 of CLA recording 11, Father finds the deer, we hear yályu ka, with the agentive ka. Again (below), the usual word-final attenuation of formant energy, but neither subjective sound nor visual signature of a final l. This suggests (albeit not conclusively) that the relevant context is morphological rather than phonological.
At 5:37.30 of CLA recording 2, Fox and hungry Coyote, we hear *qa yályú čkiší*. The devoiced segment just after the vertical dotted line sounds like a bilabial /ʃ/ fricative with a bit of whistle, so the faint trace of F2 rising toward the articulation of /ʃ/ from its low frequency for /u/ in the spectrogram is no indication of an /l/.

Other occurrences of *yályú* confirm this.

Since *can* generally distinguishes individual instances, it seems peculiar that in this one domain it makes an age distinction between ‘man’ and ‘boy’. The explanation may be simply in the greater audibility of the /l/ before *can*, because *yályú* and *yályúl* are difficult to distinguish. It is likely that a final /l/ in an ancestral form of the word for ‘man’ was retained in the construction with *can* but lost elsewhere, and it is the /l/ and not *can* which carries the semantics of youth. The morphological status and origin of the /l/ remain to be explained, as indeed does the etymology of *yályú*. 

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4. Word assembly and lexicalization

By ‘word assembly’ I mean the creative capacity to combine roots to convey a particular meaning in context. Lexicalization is the institutionalizing of a particular combination as the normal idiom. I sometimes refer to ‘word assembly’ as the ‘inner syntax’ which creates the complex sentential verbs among the words of the language, where the ‘outer syntax’ puts words together into sentences.

I’ve previously touched on the problem of productive derivation vs. etymology. The meanings of many of the complex word forms follow easily from the glosses of their constituent roots. In other forms, the shape results from the same productive patterns of derivation, the ‘inner syntax’ that combines roots into words, but the relation of the resulting word meaning to the meanings of the roots is not obvious, or not obvious to a speaker of English. I’ve also previously questioned how much of this may be due to a mismatch of the semantic fields in English vocabulary to those of Pit River roots.

I’ll recapitulate here something that I sent to the o-issi email group 3 December last year, but this time using a figure that I have used in my DEL proposal.

Each morpheme specifies some aspect or characteristic of the perceived world. To represent that, we may imagine that it draws a boundary, a circle that contains all the things and phenomena in which we perceive that characteristic. The meaning of the combination of morphemes is within the intersection of their circles, like a Venn diagram in set theory. This illustration from the DEL proposal refers to words with hay/hy ‘constrain’:

- tiluuhááyi ‘pull by tether’,
- tiluuhááyé ‘kite’
- tiluuhííca ‘lead it!’ (dog, goat, etc.)
- tiluuhíntíwa ‘lead it around on a leash!’
- tiluuhíwca ‘pull it back to you!’ or ‘bind it!’
- tiluuhíwce ‘belt’

The construction of meaning from the meanings of constituent morphemes reminds me of Chinese writing. In that system, there are 214 ‘Radicals’ (roots) which are combined to form many thousands of complex characters. Each radical and each complex character represents one word. The meaning of the word is derived from the meanings of the roots, but often in ways that are not obvious to us. For example, the radical 人 ren ‘person’ is a component of the characters translated ‘you’, ‘body’, ‘rest’, and many others.

- 人 Ren ‘person’
- 你 Ni ‘you’
- 体 Ti ‘substance, body’
- 休 Xiū ‘rest’

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6 I assume that this and the next three are reduced from e.g. tiluhyíca, or perhaps should be so rectified, though it is possible they have hi ‘head’ (in its sense of ‘lead’).
In Xiū ‘rest’ the second radical is 木 (mù ‘wood, tree’), and a usual story about it is a person resting under a tree. I have next to zero competence with Chinese, so I have nothing to say about the other radicals in these examples, nor about other and more complex characters in which ren has a part. I would call your attention to two aspects. First, Chinese is what is called an ‘isolating’ language with short words, many of them monosyllables. Secondly, Chinese comprises several mutually unintelligible languages, but famously a document written in one of these languages can be read in another, using this writing system. This is possible because all varieties have similar semantic and syntactic conventions for organizing the monosyllabic words into sentences. It would be very difficult for anyone to learn to write English using Chinese characters.7

Now I’m not suggesting that we try to write Pit River in Chinese characters! But there are reasons to suspect that the Shastan languages (including the Pit River languages and Yana) were ‘isolating’ languages with monosyllabic words combined more freely into idiomatic phrases than they are in the languages we consider today, but after their regular ‘Big Time’ gatherings down on the Sacramento at the spring and autumn salmon runs got disrupted, things like word order, idioms, and specializations of meaning went in different directions in the separated foraging communities because no longer regularly talked to each other. In Achumawi we still see this flexibility and divergence reflected in alternative names for things. We’ll look at some of these below.

As I suggested above, an immediate problem is that we're relying on English glosses to get at the meaning. In English, the different parts of the semantic field depicted in the Venn diagram above are expressed in entirely different words (tether, kite, belt, bind), and to translate various other uses of those Achumawi morphemes in various combinations requires even more words that are unrelated to each other in English. Context imposes further limits (Are you packing for a trip? Then think of tying a bundle rather than pulling a tether.), and in every language, words can be so highly expectable in a given context that language users normally just leave them understood but unspoken.

- Does John drive a Ford or a Chevy?
  Does John drive a Ford or [does John drive] a Chevy?
- I’ll get there on Tuesday so I’ll take an umbrella.
  I’ll get there on Tuesday [and this app says it will rain on Tuesday, and an umbrella protects one from rain] so I’ll take an umbrella.

In the report for November 2020 I mentioned the example of ‘paddle’ and ‘driftwood’, with a bit more detail in some email following that. In ticáapííli, the ča draws a circle around the semantic field of upright orientations , and pil draws a circle around complex collections of overlapping linear objects or strands, like a braid if it’s nice or like a tangle if it’s not. Because of the context (“Oh, yeah, we’re talking about crossing the river”) we can eliminate the possibility of, say, a tuft of hair sticking up from a braid. The word áw ‘wood’ doesn’t have to be said because driftwood is obvious in the river context. Maybe part of the context is that to 'harvest' a paddle you look for a nice piece sticking up clear of the water so it’s not waterlogged or rotten, or maybe the river is making it easy for you to recognize it and take it.

Prefixes and stem vowels proper to the verb or participle can get omitted to make a noun: čapíl for the paddle, and čapińlo ‘driftwood’ from which you can ‘harvest’ a paddle, much as you harvest the wood for a bow from a qüssiimalóo ‘juniper tree’ (qüssi was a word for ‘bow’ before the arrival of guns).

The generation I learned from had some uncertainty about the ‘paddle’ words. They probably did not have strong personal memories of paddling of canoes on the water, given the abductions to schools and the economic demands of colonization, but also people used the creative capacity in the language in different ways to make

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7 Some characters can be used as clues for pronunciation, but this is not germane here.
words for paddle and paddling. These words are all descriptive, so it's not just a matter of remembering a word, it seems also to involve remembering how to assemble the word so that it makes the meaning. So one day I was given two words one after the other, cāapiłlo = 'paddle' and qahpiłlo = 'driftwood' apparently as a source of firewood: qah ‘knock’ occurs in maqqah ‘pitch wood’ (ma ‘fire’), qahtaw ‘dry firewood’ (taw ‘divide, separate’; more on this below).

From talićuumi ‘paddle along’, wallićuumi ‘one paddles’, tilıcak ‘go ahead and paddle hither!’, a creative speaker could probably make another synonym, talićuumé ‘a paddle’ and a person would probably know what you’re talking about. To the extent that it is an unaccustomed idiom, it might mean that they were making do with something other than a regular paddle to propel their canoe (but they’d be just as likely to use the regular word for comic effect of a significant mismatch).

In the context of cooking we have táláyiwi ‘stir (mush)’, láyiwé ‘stirring paddle’. The la ‘move in a line’ and iwi ‘around about’ are well attested. I have glossed yi as a ‘move’ root, but I’m considering that it may be the familiar stative y of twi, etc. and now recognized at the end of maahiy, etc. In cooking, the emphasis is on the state or condition. Other occurrences that are questionably glossed as ‘move’ include cíiyime ‘socks’ from ticíiyimi ‘put foot into; socks; overshoes’, tááyiimi ‘put on underneath; underclothes, anything you put on under your clothes’, as tôóciimi ‘water bag’, anúáyiílimi ‘inside’ (nu ‘inside’), etc. Either way, context assures that you wouldn’t use láyiwé ‘stirring paddle’ in a canoe: you don’t move a canoe by just stirring the paddle in circles.

On to more examples of—what shall we call it—semantic mad-lib?

5. Of what is divided and what is set aside: taw and s

In qahtaw ‘dry firewood’ and in Harrington’s tilaatáwei ‘store food in a tree’ we see the CVC root taw ‘separate, divide, aside’ and not áw ‘wood’; unlike the Chinese ‘rest’ example there are no instances in the database where áw ‘wood’ refers to a tree, and if that were the source the i would require explanation. It is followed by s in the following examples:

<table>
<thead>
<tr>
<th>cíiyimi</th>
<th>cíiyimi</th>
<th>cíiyimi</th>
<th>cíiyimi</th>
<th>cíiyimi</th>
</tr>
</thead>
<tbody>
<tr>
<td>wícuutáwísi qá t’iiyi</td>
<td>tástaatáwísi</td>
<td>yáátáwísi</td>
<td>aqtáwísu</td>
<td>palá’ kʰip cktáwáátáwísi</td>
</tr>
</tbody>
</table>
| ‘one parts hair’ | ‘give equal shares to’ | ‘separated, divorced’ | ‘on either side’ | ‘they had already jumped aside’*

The occurrence of s ‘indefinite, unmanifest’ makes sense for a mass noun like water and hair, it asserts the fungibility of items in masses or collections that makes them suitable for dividing into shares, in divorce it asserts that a relationship becomes ‘unmanifest’, and a warrior dodging side to side has a purposely indeterminate location. The firewood and the wrapped bundle of stored food are well-defined resources.

6. Of hidden things: quul

The CVC root quul occurs in

<table>
<thead>
<tr>
<th>waaquuli</th>
<th>waaquúliweí</th>
</tr>
</thead>
<tbody>
<tr>
<td>He gambles</td>
<td>They gamble</td>
</tr>
</tbody>
</table>

8 Or maybe the pair of Mouse Brothers jumped ‘to either side’, but it’s the sideways arrow-dodging of traditional warfare.
They gamble together
Pocket knife

In gambling, whether in the hand game or with cards, the players conceal what they hold from one another.

7. Of taking: su

isúúcak ‘wealthy’ (isúúcakí, isúúcakkwaci, tilisúúwaci)
tisúucí ‘grab, seize’
tiliisuuče ‘bad luck; a stranger must feed the country to be safe’

8. Of cause and pretense: áyám

támmááyamí feed someone (cause him to eat)
mlámmááyamí I’ll feed him (future volitional)

Speculative analysis: volitional -a followed by an auxiliary verb yami ‘it furthers’, with m ‘thither’.

sáliictíikáyámáké I pretended to be afraid

A causative followed by reflexive, ‘cause myself to be afraid’, doesn’t fit, but a less specific meaning of m as root of an auxiliary works better.

tpus yááma tsíyi I’m in a good place

This is consistent with a ‘furthering’ and even a causative sense of yááma. This may be considered an ‘impersonal’ use of the 3rd person y-, perhaps ‘I am one who progresses well’.

9. Of stretching and extending: ḥaq

Confirmation of word boundary: ḥaq iyí ‘high, big’ (vs. ḥaqʰi'yí); ḥaq á ‘again’ = ḥaq (w)á ‘with extension, by extending’ (vs. ḥaqʰá); and of course ḥaq tuci ‘stretch’.

l̄aq yí, ḥaq yé ‘thus extent’ yí ‘manifest’; pi l̄aqɣé ‘this big’
l̄aq cán iyí ‘tall’ cán ‘individual’, yí ‘manifest’
s’i ḥaq ‘flabby, floppy, doughy’ s ‘indefinite’ (perh. like as ‘water’)
tikúsłaaqi ‘wipe off hand on something’
tikúsłaaqi qa âp ‘rub lips with hand (fingers)’

Free I put slimy stuff on board with hands
Note mud pies
Note LR 1973 37.6: 2/24

9 ‘By grasping concealing itself’? The ‘reflexive’ gloss of ak is problematic.
10. Pit River Band Names

This is a recurrent request. Here’s a current representation.

Matéési, Matéésivi (placename: matés ‘Big Bend’)
Iičáátawi (placename: iičááta ‘Burney Valley’)
Ilmdáwi (ilmáh ‘brush, bushes’)
Acúmmááwi (acúmmá ‘river’)
Atwámsini (atwam ‘valley, flat’)
Astaaqíwíawi (astaaqíw ‘hot place, hot springs’, astaaqiy, astaq ‘hot’)
Hééwíssátééwi (hééwís ‘high’ [w]áté ‘location’)
Qússi álláqtawi (qússi ‘bow; gun’, for qússimalóo ‘juniper tree’; álláqta ‘flat, draw’)
Hámmááwi (hámmáw ‘upriver’)

Atsuke, Atsukei and Apwaruke, Apwarukei are the Hat Creek and Dixie Valley names, or my semi-informed approximation to them. Perhaps we’ll work out etymologies for them that we can be confident of.

11. Of belonging: wi

The wi ending which is common to many of these is a stative morpheme with the sense ‘characteristic of, belonging to, that kind’. It also occurs

- At the beginning of a verb stem, with the sense ‘one who characteristically or habitually does this’, as in winilláátiwi ‘one who repeatedly goes from place to place all around; white man’.
- At the beginning of a verb stem as though a 3rd person pronoun. More on this below.
- At other places among the roots in a verb stem (sometimes reduced to u or changing a to o) with a sense of state, duration, purpose, etc.
  winilláátiwi ‘white man; one who moves around’ (tinééláátiwi ‘play around’)
  páálá is ikkááci ka waasiimí ka, sówaasiimíni.
  When (I was) first living, when (I became) one (who) hunts, I went hunting.
- As the root uv in e.g.
  astaaq yuwi ‘they’re hot’
  húúta ka iičí ikwuúaticka ‘a rattlesnake might bite you’

Both w- and y- occur as a 3rd person pronoun (he, she, it, they). The conditions for using w- vs. using y- are presently unclear, but seem related to the stative w above. It may be that w- is preferred when some change of condition or state is concerned, vs. a transitional or recurrent activity for y-, for example winimmaáci ‘he saw (it); one who sees’, yánaatánki ‘he walked down this way’. The y- form is treated as a noun with the sense of ‘one who ___’ in a few cases, such as yawas, tuwáási ‘singer’; yawás ‘hunter’ (but also awás); this is much more common with the w- form.

Examples with íaq ca and íaq yê (which are not verb stems, see the discussion above) strengthen the suggestion that wi be treated as a root rather than a pronominal prefix:

ílah wi íaq yê’ as big as (one’s) head
‘itt’há tálíllágti wi íaq ca as long as I like, as much as I like
qa qê qa táníísti wi íaq ca up to those foothills

—12—
In parallel, there is ki ḥaq ca ‘this far, up to here’, mi ḥaq ca ‘that far, up to there’; e.g. tuccimámé twiyí qá itbú lúpwíisé ki ḥaq ca ‘my bow won’t do that far’ ([tuui]sí tuci ‘do [shooting]’, ámé ‘lacking, without’).