

Comparative Phonology of Picurís and Taos

Dominic Yu

2006 December 18

1 Introduction

This paper is a comparative study of the phonology of the two documented Northern Tiwa languages, Picurís and Taos. We will attempt a reconstruction of the phonological system of proto-Northern Tiwa, then proceed to see what our correspondences can tell us about the structure of Picurís. We will focus mostly on Picurís; this is because all of our data on Picurís comes from a single, sparsely analyzed source: Harrington and Roberts (1928).

1.1 The Data

Harrington's data consists mainly of children's stories, along with selected textlets, dictated by a single speaker. These are presented in a partially phonemic, partially phonetic, transcription on the even-numbered pages, accompanied by an English translation on the facing odd-numbered pages. Unfortunately, it is not easy to extract individual morphemes and their meanings out of this format, a problem only hindered by typographical errors, inconsistent nasalization marking, cryptic macrons, the lack of any notation for tones, and a virtually useless "phoneme" chart.

Frustratingly, Harrington explains that "The texts were originally prepared with interlinear translation, but this has been omitted because of the cost of printing" (294).

The Fall 2006 Linguistics 170 class at UC Berkeley has attempted to rectify this problem by adding exactly these missing interlinear glosses; the result of these efforts is attached as an appendix. All story and line number references given here will correspond to this source.

1.2 Previous Work

Luckily, Harrington was not the only person to have done fieldwork on Picurís. G. Trager includes some of his own Picurís data in Trager (1942) and Trager (1943). F. Trager's Ph.D. dissertation (Trager 1968) was on Picurís, part of which she later published as an article on Picurís phonology (Trager 1971).¹

Much more has been written about Taos; there are grammatical sketches by both Harrington (1910) and Trager (1946). Trager later published a series of four articles, updating his analysis (Trager 1948, 1954, 1960, 1961). These sources can be useful for understanding Picurís as well (I have not been able to get a hold of Trager (1968) as of this writing). Just how much what is written about Taos can be applied to Picurís is exactly the topic of this paper.

2 Phonology

The results from this section come from compiling and examining an exhaustive list of all the cognates I could find between Harrington's data and Trager (1946, 1940) (totaling 183). This list can be found in the appendix.

Trager (1942) compared not only Picurís and Taos, but the Southern Tiwa dialects of Sandía and Isleta as well. The analysis given here differs somewhat, in ways which will be pointed out below.

2.1 Phonetics of Picurís

Before we continue, we must go over some phonological background of Picurís, necessary for interpreting Harrington's text. First, nasal codas can assimilate to

¹Sadly, Felicia Trager passed away before she could finish publishing the rest of her dissertation.

the following consonant, even across word boundaries. Thus, *han* ‘and’ can appear as *han, haw, hat, hax, hał*, etc. These assimilated nasals show up as geminate consonants word-internally.²

Another phonetic process that surfaces in Harrington’s text is that /l/ followed by /h/ can merge into a lateral fricative /ɬ/, as in /’q̄n-t’āł-hu/ ‘they(dual) began to cry’ showing up as ’q̄n-t’āɬu (Famine 16). Going through the texts, one must filter these out in one’s mind so as to avoid recording erroneous morphemes like t’āɬu.

Finally, syllable-initial /y/ assimilates to a preceding /n/ or /l/. This is evident in the number ‘five’, Taos *p’anyuo*, Picurís *p’q̄nnu*, and also when the topic marker *yo* follows /n/ or /l/ (-*kwillō*, -*h̄ennō*).³

2.2 Consonants

Below are the consonant inventories of Picurís (derived from my own analysis of Harrington’s data) and Taos (from Trager 1946):

Taos:

	bilabial	coronal	palatal	velar	labiovelar	glottal
voiced stop	b	d		g		
voiceless	p p ^h	t t ^h	c	k	k ^w	ʔ
ejective	p’	t’	c’	k’	k ^{w’}	
fricative		s ɬ		x	x ^w	h
nasal	m	n				
approximant	w	l	y			

Picurís:

	bilabial	coronal	palatal	velar	labiovelar	glottal
voiceless stop	p p ^h	t t ^h	č	k	k ^w	ʔ
ejective	p’	t’ c’		k’	k ^{w’}	
fricative		s ɬ		x	x ^w	h
nasal	m	n				
approximant	w	l	y			

²Vowels before a nasal coda can appear as either oral or nasalized, sometimes without the nasal coda. Take, for example, ‘all’, which appears variously as *p̄han, p̄h̄an, and p̄ha*. It may be the case that nasalization is not distinctive before a nasal coda, but more investigation is needed.

³This was pointed out to me by Will Chang.

Taos and Picurís are pretty much identical, with the addition (preservation) of voiced consonants /b, d, g/ in Taos. These correspond to Picurís /m, n, n/. Thus, we can reconstruct /*b, *d, *g/ for proto-Northern Tiwa. (Trager was unable to find any reflexes of /*g/ in Picurís; I found one possible one, Taos/Picurís *tùl'oneg/thotanɛn* ‘evening’, where the nasalized /ɛ/ may be due to the following nasal consonant. Note, however, that the aspiration on initial consonant /t/ doesn’t match.)

In addition, there is another consonant correspondence: Taos /y/ with Picurís /č/. This can be reconstructed as a voiced palatal /j/. There are numerous examples of this, including *y,ot'ó/čāt'a* ‘to sing’, *y,iath'o/čitha* ‘there’, and *payuo/pa:ču* ‘three’.

There also seems to be a constraint in Picurís that disfavors bilabial nasal codas, e.g. *h'alum/hiaulon* ‘early’, *xwiab/xwin* ‘to run away’, and *c'ub/c'on* ‘first’. In some cases, nasal coda-induced gemination masks the place of articulation, so that in the case of ‘mocassins’, Taos *k,əob-¹enema*, the Picurís form never shows up with a nasal coda, but with an assimilated geminate consonant. However there are exceptions to this rule, namely *pòb-enema/pam'onɛ* ‘flower’, *wɛma/wɛm'a* ‘one’, and *'qma/'qm-* ‘to do, cause’, although these are all word-internal.⁴

2.3 Vowels

The vowel nuclei of Picurís are listed on the left side of the following tables, along with permissible codas along the top.

	w	y	l	m	n
i	iw	*	il	im	in
e	eu	*	el	em	en
a	au	ai	al	am	an
o	*	oi	ol	om	on
u	*	ui	ul	um	un
ə	əw	əi	əl	əm	ən
ia	iau	*	ial	iam	ian

	w	y	l	m	n
ɨ	ɨw	*		ɨm	ɨn
ɛ̣	ɛ̣w	*	ɛ̣l	ɛ̣m	ɛ̣n
ɤ	ɤw	ɤi	ɤl	ɤm	ɤn
ɔ̣	*	ɔ̣i	ɔ̣l	ɔ̣m	ɔ̣n
ɤ̣		ɤ̣i			

Starred forms are phonotactically disallowed sequences. Most importantly, /ei/ is

⁴Except for one instance of *wɛm* (Senge 84), though this may simply be *wɛm'a* with the last syllable dropped.

not a permissible diphthong in Picurís; all instances of “ei” in Harrington and Roberts (1928) are typographical errors!

Empty slots are considered to be accidental gaps. Most of the gaps are due to nasal schwa being exceedingly rare, the only token of it being *p^hɤi-* ‘nose’.

If nasalization is found to not be distinctive with nasal codas, then the last two columns may be omitted.

Note that there are only five nasal vowels, /ɥ/ being nonexistent (except allophonically) in Harrington’s data.⁵

We now turn our attention to the vowel correspondences:

pNT	Picurís	Taos	notes
*i	e	i	
*iw	iu	iw	
*e	e	e	noun endings only
*a	ia	a	stressed syllables
*a	e	a	unstressed syllables only
*o	a	o	
*ə	ə	ə	
*əo	ə	əo	
*u	o	u	
*uj	ui	uj	
*uo	u	uo	
*ɛ	ɛ	ɛ	
*ɤ	ɤ	ɤ	possibly found only after nasals /m,n/
*ɔ	ɔ	ɔ	
*ɤ	ɤ	ə	
*ɥ	ɔ	ɥ	
*iɛ	i	iɛ	
*i		i	no Picurís forms found
*ie	i	ie	only one form <i>kwⁱiem-/kwin</i> , in Trager (1942)

At first glance (looking, say, only at the monophthongs), it may seem equally plausible to say that Picurís vowel quality is reflects the original system and that Taos vowels were raised, as opposed to Taos being original and Picurís vowels

⁵Note that Trager (1968) lists exactly one case of /ɥ/, *mɥ-* for the C::2pl possessive agreement prefix (Taos *mɥw-*), which she states also shows up as nonnasalized.

lowering. However, I have followed Trager in reconstructing the proto-system based on Taos, as it seems that there have been a number of vowel mergers in Picurís. Most obviously, /*ə, *əo/ have become /ə/ in Picurís. Also, /a/ comes from /*a/ and /*o/. Finally, Picurís /e/ comes from three sources: (1) /*i/, (2) /*e/ (curiously enough, /e/ in Taos and presumably proto-Northern Tiwa appears *only* in noun endings), and (3) unstressed /*a/. Interestingly, two of these changes actually manifest themselves a single word: *w'iwa/wēwe* ‘again’, where the first /e/ is type (1), and the second /e/ is type (2).

The rest of our reconstruction then follows rather straightforwardly, if we assume that the remaining vowel shifts (lowering, monophthongization) parallel those of the front vowels discussed above.

Finally, there are some issues that remain unexplained. For one thing, the diphthongs /oi/ and /eu/ seem to have no source in Picurís (these only show up in *xweu* ‘bench’ and *hoi* ‘bet’). This is because /*iw/ and /*uj/ remain essentially unchanged in Picurís, but the source of /e/ and /o/ are /*i/ and /*u/, respectively. In other words, if ‘bench’ was /*xwiw/, it should remain /xwiu/ in Picurís (and such a form is attested, though no Taos cognate has been found: Picurís *k'ūxwiu'enε* ‘squirrel’); but the proto-form can't have been /*xwew/, unless we abandon the claim that /*e/ is only found in noun endings. Similarly, /*huj/ gives Picurís /hui/, and /*hoj/ gives Picurís /hai/, with no way to derive /hoi/.

The other remaining issue is that of the third person pronoun, *ᵐqwaŋ(a)/'εweŋ*. This is the only instance of Picurís /ε/ corresponding to Taos /a/.

3 Morphology

In this section, we will briefly examine some morphological issues that arise from our discussion of phonology above.

3.1 Noun Endings

It is clear that noun endings have been completely regularized in Harrington's data, having no distinctions for noun class or even number.⁶ This is true even for nominalized clauses, where Taos (Trager 1946:207) states that possessed class II nouns have *-wá'iną* (corresponding to Picurís *-wia-'e-...*). However, an example from Senge 143 (*'qm-p'e-wia-'e* B::3sg-head-be-NOM) shows that 'head', which is class II, does not do this in Picurís.

3.2 Agreement Prefixes

Trager (1946:221) states that "The systems of pronominal reference are the same in Taos and Picurís". While I am skeptical that the two systems are exactly the same, the agreement prefixes in Picurís, as based on the Harrington data, have not yet been fully explained. At this point, we can only agree with Trager (1942): "When complete descriptive grammars of each of the Tiwa languages become available, it will be possible to extend the list of formulas here given to include those covering affixes which now seem not to fit into the comparisons stated here, and it may be that some special and rare correspondences will become evident."

However, one thing that can be gleaned from Harrington that Trager (1946) does not make clear is that we must record separate forms for the negative forms of the prefixes. For example, the 2:1 prefix is *mai-*, but the negative form is not simply *mai + wa*, but *miya-*.

3.3 Verb Suffixes

The tense/aspect suffixes in Picurís seem to have nontrivial differences from Taos, and it is only possible to find cognates for a few them, and these are often not without problems (these tentative comparisons are listed in the appendix).

One representative problem is that the imperfect suffix seems to be *-hu* in both Taos and Picurís, which does not follow the regular correspondences.

⁶Trager (1968), however, describes a singular/plural distinction based on stress and nasalization, along with various other noun endings in citation form.

It may be tempting to apply our analysis of syllable-initial /y/ gemination above to try to account for geminates in passives, such as *-’qmmia* ‘was told’. However, this would be wrong; some verbs that end in /l/ do not exhibit this, such as *-kqlia* ‘was brought’. Moreover, the Taos form for ‘to tell’ has a passive form *’umma*. Thus, the passive alternations must be older than proto-Northern Tiwa.

3.4 Initial Consonant Alternations

Below is a list of all initial consonant alternations in verbs found in Trager. Unfortunately, an analysis of these alternations is beyond the scope of this study.

’ole	kole	to take
wan	kwan	to arrive
mɔ	pɔ	to see, to look
kal	k’al	to eat
k’ui	kui	to lay down
pɛ	mɛ	to go
tɛ	t’ɛ	to cut
ka	’a	to wash
xwekwan	xwewan	to hang
tʌn	t’ʌn	to help
tīle	t’īle	to separate
čən	c’ən	to enter/to bring in
kɛ	’ɛ	to sit
hānɛ	xānɛ	to eat, devour
wīle	xwīle	to climb, go up
hōwe	xowe	to believe
xwɛl	wel	to dig
c’auwa	sauwa	to rattle
xai	hai	to get, gather

3.5 Verb Ending Alternations

Trager (1946) states that Taos verbs roots that end in /a/ drop this vowel before certain suffixes, such as *-hu*. The same phenomenon seems to happen in Picurís;

however, the vowel in this case is /e/. Since there is no /a/ to /e/ correspondence, how can this be explained?

The answer may lie in the negative preterite forms that Trager gives, where /a/ changes to /i/. Notice that Taos /i/ corresponds to Picurís /e/. Apparently, in Picurís, all of these “epenthetic” vowels have been regularized to /e/.

Trager (1946:198) also states that /a/ at the end of a word may optionally be dropped; if this became obligatory in Picurís, this might explain why the *-maq* verb suffix, cited in Trager, seems to be nonexistent in Picurís; the /a/ deleted, leaving a syllable-final /m/, which changed to a syllable-final /n/ (see discussion of final /m/, above), which does seem to occur occasionally in Picurís. An alternative explanation of *-n* in Picurís is that it is related to Taos *-gq*, following a similar line of argument.

4 Conclusion

This paper is merely a jumping-off point for further work. Armed with phonological correspondences, the basic morphological system, and the lexicon, there is much more that can be done with Harrington’s data.

So now, dear reader, it is your turn. Kaꞑwęki.

5 References

- Harrington, John P. 1910. An introductory paper on the Tiwa language, dialect of Taos, New Mexico. *American Anthropologist* 12.
- Harrington, John P., and Helen H. Roberts. 1928. Picurís children's stories with texts and songs. In *The 43rd annual report of the Bureau of American Ethnology*, 289--397. Washington: United States Government Printing Office.
- Nichols, Lynn. 2001. The syntactic basis of referential hierarchy phenomena: Clues from languages with and without morphological case. *Lingua* 111:515--537.
- Trager, Felicia H. 1968. Picuris pueblo: An ethnolinguistic "salvage" study. Doctoral Dissertation, State University of New York at Buffalo.

- Trager, Felicia H. 1971. The phonology of Picuris. *International Journal of American Linguistics* 37:29--33.
- Trager, George L. 1940. Appendix. In *Taos tales*, ed. Elsie Clews Parsons, volume 34 of *Memoirs of the American Folklore Society*, 173--181. New York: J.J. Augustin.
- Trager, George L. 1942. The historical phonology of the Tiwa languages. *Studies in Linguistics* 1.5.
- Trager, George L. 1943. The kinship and status terms of the Tiwa languages. *American Anthropologist* 45.4:557--571.
- Trager, George L. 1946. An outline of Taos grammar. In *Linguistic structures of native america*, ed. C. Osgood, 184--221. New York: Viking Fund Publications in Anthropology Number 6.
- Trager, George L. 1948. Taos I: A language revisited. *International Journal of American Linguistics* 14:155--160.
- Trager, George L. 1954. Taos II: Pronominal reference. *International Journal of American Linguistics* 20:173--180.
- Trager, George L. 1960. Taos III: Paralanguage. *Anthropological Linguistics* 2:24--30.
- Trager, George L. 1961. Taos IV: Morphemics, syntax, semology in nouns and in pronominal reference. *International Journal of American Linguistics* 27:211--222.

6 Appendix: List of Cognates

Lex	alt	gloss	...	pos	PgLn	Taos lex	Taos cla...	Taos gloss	Taos sou...	id
'aixɛn		if			320.15	'oyx'enhi		if		7
'aŋ	'ame, 'ammia	to cause, to make, to do				k'ʷam(aʷi/ma		to do, cause to	5:212	9
'au		on, over to		p	384.31	'ow		up to	4:3	14
c'ə:		face		n	330	c'əo		face	5:3	20
c'ən	c'əte	to enter		v	322.5	c'əoda		to enter	2:34	21
c'əte	c'ətia	to carry		v	300	c'əoda ~ c'əoti		to bring in	2:34	22
c'iaueŋe		bluejay		n	376	c'aw-'ena	I.2bb	bluejay	5:113	25
c'ol		yellow		adj	318.12	c'ul-wi		yellow	5:222	27
c'on	c'ɔn	first		adj	384.28	c'ub		first	178.3	29
ča:(t'a)		to sing		v	360.13,364.	y,ot'ó		to sing	5:21	33
čače	čaipia	to tell, to ask, to allow		v	366.10	y'oy(i		to command	5:21	36
čal		blue, green		adj	318.17	c'ɔlwi		blue, green	5:223	37
če		eye		n	320.7	c'i-nema	II.4aa	eye	5:121	43
če:čo'o'onę		mouse		n	344	c,iy'u-na	I.1bd	mouse	5:113	44
čel		to catch; claw		v	368.20	c'el(aʷi/la		to catch	5:21	48
čə:		to hunt		v		c'ə		to hunt	5:21	52
či:	čiče	to talk		v	374.9	mo-c'ia/ti		to talk		59
či:		to walk		v	374.8	y'ia ~ cia		to walk	2:34	60
či:ueneŋ		eagle		n	320.1	c'iw-ena	I.2db	eagle	5:113	67
či:wa	čiwa	to wake up		v	322.2, 344	y'iauwoma		to be awake	5:221	68
čile		to sweep, to comb		v		c'iali		to sweep, comb	5:21	73
čitha		to there		adv	388.10	y,iath'o-		there	4:4	75
čito		leggings		n	344	c,iat'uną	I.3bb	legging	3:21	76
čiučo'onę		bird		n		c,iwyu-'una	I.1hd	bird	5:113	78
čon-	čot	shirt		n	344	c'ud-ena	III.5db	shirt, garment	5:124	91
'e		sit		v		'ema		to sit	5:221	910
'e		you		pron	384.4	'e		you	3:4	911
'e		to come		v	350	'e		to come	5:21	98
'e-		shoulder	II	v		'e-nema	II.4aa	shoulder	5:121	99
'ewɛn		3rd person (he/she/they)		pron	314.26	'awɛn(a)		he, she, it, they	3:4	110
'ə:		herbs		n	394	'əna	III n.5aa	leaf	5:121	112
'əučo-nę		boy	I	n	388.13	'əwyu-'una	I.1hd	boy	5:111	115
Hɔlp'a:na		Santa Fe		place	392.24	h'ɔlp'ɔno		shell-water-in	5:31	125
han		and		conj		h'oda		and	5:3	918
hattą		now		adv	354.6,	hoda		and	5:3	128
-hę		impending		tam	374.4	hę		impending	3:33	131
hele		none, whatever			354.3,360.1	h'ili		what	3:4	134
hewia		to be rich		v	372	h'eywoma		to be rich	5:222	139
heyo		what			354.4	hijod		what		142

Lex	alt	gloss	...	pos	PgLn	Taos lex	Taos cla...	Taos gloss	Taos sou...	id
hək		to like		v	390.11	h'əob(ą		to like	5:21	145
həl		to hurt, to be sick		v		h'əol-		sick	5:212	147
hi:u-enę		stone, rock		n	360.18	h'iw-		stone	180.-4	152
hialon		early		adv	320.21	h'alum		early	173.3	153
họ		cedar		n	380	hų-nemaą	ll.4aa	cedar	5:122	155
hoke(yo)		this is why, so			386.7	h'uki		whether	3:4	160
-hu		imperfect		tam		hu		present	3:33	171
hui	hu:	to carry		v	360.18	huy		to take	175.11	174
'ila:enę		willow tree, log		n	312.6	'ialo-na	ll.3db	willow	5:122	187
'iθo	'iθho	ladder		n	336	'iθthu-na	ll.3dh	ladder	5:124	191
k'ə		neck	ll	n	314	k'əo-nemaą	ll.4aa	neck	5:121	203
k'ətha		top		p	354.9,360.1	k'əoθho		up on top (as a	5:3	300
k'ia		quiet		v	330	k'atimaą		to be silent	5:222	215
k'ō		to be good		adj		k'umaą		to be good	5:222	301
k'ui		to put		v	322.19	k'uo ~ wò-k'uy		to put	2:33	227
k'wiačia-		magpie	l	n		kw'ay'a-na	l.1bd	magpie	5:113	228
ka	'a	to wash		v	322	'o+lo		to wash	5:21	230
ka:		to plant		v	348	'u-k'o ~ 'u-k'owi		to plant	2:34	232
ka:ča(tia)		to know		v	296	k'oyo		to know	5:21	233
ka:l	kəl	to bring		v	354.9	kəli		bring	174.6	236
ka:n-enę	kan	buffalo		n	396.2	k_on'e-na	l.2bb	buffalo	5:113	238
ka:se		cow		n	396.8	k_osi-'ina	l.1hd	cow	5:113	240
kal	k'ale	to eat		v	396.8	k'ol(ąⁱ/la		to eat	5:21	245
kāl-enę		wolf		n	354.4	k_ol-'ena	l.2bd	wolf	5:113	247
kąęenę		owl		n		k_ow-'ena	l.2bb	owl	5:113	250
kən		door	ll	n	296.23	kəd-'enemaą	ll.4aa	door	5:124	260
kən		moccasins		n	298	kəob-enemaą	ll.4aa	mocassin, shoe	5:124	261
kia-nę		mother		n		k'a-na	l.2aa	mother	5:112	266
-kin'au		?		p		-kin'ow		over (but not		919
kui		to lie down		v		k'uymą		to lie down	5:212	276
kwę		pitch		n		kwę		pitch	174.4	281
kwel		to close		v		k^w'ilą		to shut	2:33	283
kwęn		to stand, to become		v	344	kw'inmą		to stand	5:221	286
kwəl-'enę		girl/maiden		n	368.19	kwəl-ena		maiden		288
kwın		wife, maiden		n	320.10	kw'iem-		maiden	T:1942	296
kwiwil		to be strong		adj	384.26	kw_iiaw'al-mą		to be strong	5:222	298
ła:		big		adj	324	ł'o		to be big (in	3:5	307
ła:wia-nę		governor, chief		n	392.26	łowa-		chief	3:21	313
łai		to sit, ride, get on		v	354.5	łoy^k(ąⁱ		to sit down		314

Lex	alt	gloss	...	pos	PgLn	Taos lex	Taos cla...	Taos gloss	Taos sou...	id
lamq-	la:mɔn	mouth		n		lɔm'ɯ-nə	ll.3bb	mouth	5:12	318
lē		grass		n	396.8	l'i-ne	lll.6a	grass	5:122	321
lēto		grandmother		n		litu-na	l.1bd	mother's mother	5:112	332
liu-ene		woman, wife		n		liw-'ena	l.2bb	woman	5:111	345
lol-ene		rain		n		lul-'ene	lll.6a	rain	5:123	352
lołene		old man, husband		n	314.5	luhi'ina	l.2hh	old man	3:21	355
mači:	mači:tia	to discuss		v	390.25	mo-c'ia(ti)		to talk		371
małe		6		num	342	małi		6		379
mał'e		to hit		v		mał'e(pi)		to hit	2:34	383
mę		walk/go		v	360.30	mę		to go, walk		389
-męn		during, as		tam		męga		when (past)	3:33	394
-męn		while, as		tam		mę xą	?			395
miau		to want		v	390.21	màw		to want	5:212	402
mọ	pọ, mɔn	to see		v	318.23	mų ~ mųmi		to see	2:34	404
müle		to return		v		m'uoli		to return	5:21	412
-n		?		tam		gą		past perfect	3:33	915
ną		1st person (I/we)		pron		ną		I, we	3:4	917
-nątha		under		p		nątho		under	5:3	921
nọ		to look for		v	364.30,	nų + mi/ma		to look for	5:21	440
'o:čo		to meet (convene)		v	384.8	'ucu/mi		to meet	2:34	446
'o:phu	'o:phučia	to throw down, to drop		v	312	'ùphuo		to drop	2:32	447
'ō'o-ne		baby		n		'ù-'una	l.2gg	son, child	5:112	913
'ome	'ommia	to tell		v		'um(ę/ma		to tell	5:21	912
'opęyo-ne		girl		n	388.11	'upęyu-'una	l.1hd	girl	5:111	452
p'ā-ne		water		n	354.3	p'ò-'one	lll.6g	water	5:123	619
p'a:'aya-		spider		n	332	p'ò'oyo-na	l.1dd	spider	5:113	457
p'a:čane		beaver		n	334	p'oyona	l.1db	beaver	3:21	460
p'a:či		ice		n	374	p'òc'ia-ne	lll.6a	ice	5:123	461
p'a:i'one		younger sister		n	336	p'ayu-'una	l.1hd	younger sister	5:112	462
p'a:i'one		younger brother, younger		n	370	p'oy-na	l.2aa	younger brother	5:112	463
p'a:k'ua		spruce tree	ll	n		p'òk'uowona	ll.3db	spruce, fir	5:122	464
p'a:thə-węn	p'a:tɔ:ə, p'a:tɔ:	white		adj	318.1	p'òth'əwi		white	5:223	477
p'a:xę-węn		gray		adj	318	p'òh'awi		gray	5:223	480
p'anę	p'a:	moon, month		n	392.8	p'o-na	lll.5a(a)	moon	5:123	620
p'annu	p'annu	5		num		p'anyuo		5		621
p'āxəła:-ne		star		n		p'òxəł'o-na	lll.5aa	star	5:123	622
p'e:		head	ll	n	314	p'i-nema	ll.4aa	head	5:121	493
p'ę:čone		snake		n	334	p'ęcu-'una	l.1hd	rattlesnake	5:113	494
p'i-ne		road		n	388.30	p'ię-'ena	lll.5aa	road	5:124	623

Lex	alt	gloss	...	pos	PgLn	Taos lex	Taos cla...	Taos gloss	Taos sou...	id
p'in	p'in	mountain		n	384.14	p'ian-enema	II.4dd	mountain	5:123	624
p'q		who		pron	314.20	p'u		who	3:4	508
pə:ane	p'a?	earth, plains		n	396.1	pə'ona	III.5gg	land, country, the	5:123	519
pa:ču		3		num	388.4	payuo		3		521
pam'one		flower		n	306.6	pəb-enema	II.4aa	flower	5:122	529
papaane		older brother		n	370	pəp'o-na	I.1bd	older brother	5:112	530
-pe		opposite		p		pi		alongside	5:3	534
pə:-əne		fish		n	358	pə-'əna	I.2gg	fish	5:113	547
phaiwen		red		adj	346	ph'ay		red	3:5	555
phal		house (inside of), room,		n	322.5	phol		hole	174.7	557
phaya		bald		adj	348	ph'ayama		to be bald	5:222	561
phəi		nose		n	374.2	ph'əy-na	III.5aa	nose	5:121	563
phi:či		lice		n	332	ph'iy'a-na	I.1bd	louse, flea	5:113	571
phil	-phillo	with (accompaniment)		p	312.2	-ph'ialga		together with	5:3	578
phon	phəwwen	black		adj	318.6	ph'unwi		black	5:223	585
pi:n		half; noon; middle		n	392.34	p'iano		in the middle,	3:5	592
pi:ne		to think		v	390.34	p'ianem		think	177.3	593
pi:uene		rabbit		n	330	piw-'ena	I.2bb	rabbit	5:113	597
pia	piačia	to make, play, pretend		v	390.4	p'a ~ p'ayi		to make	2:34	599
-pə	pu	neg. future		tam	374.4	pu		preterit neg	3:33	608
pu	pu:	near		n	298.11	-putho		near	5:3	612
pu:i-ene		friend		n	312.12	puy-enə		friend		613
sə:n-ene		man, husband		n		s'əon-ena	I.2db	man	5:111	631
sə		to drink		v	314.20	sù		to drink	5:21	634
so:lene		bluebird		n	356	sùl-'ena	I.2bb	bluebird	5:113	635
t'a:		to do		v	354.4	t'ó		to do, to dance	2:32	637
t'a:ə'ene		ear		n	376.9	t'oləo-na	II.5dd	ear	5:121	641
t'ai-ene		person, Indian		n		t'oy-na	I.2aa	person, Indian	5:111	795
t'al	t'alia	to hear		v	360.16, 296	t'olo + puo		to hear	5:21	796
t'an	t'an, t'a(:)mia	to help		v	310	t'amə		to help	2:34	651
ta		on		p	360.14	-to		in, within	5:3	677
tə:mene		father		n	322.13	təm-'ena	I.2bb	father	5:112	684
tai	taitia	to put		v	322	toy		to place	178.11	688
te		from		p		-thoti		from	5:3	699
tə:tha		in the village				təotho		in the village	5:31	716
tha		at		p		-tho		at	5:3	725
thə	than, tham,	to find		v	354.15,360.	thə; thə		to find	2:32,	726
thə		to dwell		v		th'əmə		to dwell	5:221	733
thə	thəkia	to gather		v		th'əo/ki		to gather	2:34	734

Lex	alt	gloss	...	pos	PgLn	Taos lex	Taos cla...	Taos gloss	Taos sou...	id
thən-na		house		n		th'ə-na	III.n.5aa	house	5:124	744
thəu		to break		v	320.18	th'ə ~ th'əw		to break	2:34	747
thōl-enę	tho:le	sun		n	384.16	thùl'-ena	III.5a(a)	sun	5:123	766
thołanęn		in the evening		n	360.21	tùl'oneg		evening	178.1	771
tq		to say		n	320.22	tų + puo		to say	5:21	775
to:čolo'onę		hummingbird		n	354	tùcul'ona	I.1cf	beaver	3:21	776
toła:	to:ną	cottonwood		n	354.7	t'ulo-ną	II.3db	tree, cottonwood	5:122	784
toxwianę		Coyote		n	382.2	t,uxw'a-na	I.1bd	fox	5:113	785
wān	kwa:n	to arrive		v	354.16	w^kon(a		to arrive	5:21	805
wę		pine		n	330	wę-'enema	II.4gg	pine	5:122	810
wē-čo-tę		20		num		wi-tę		20		811
węn	węm'a	1		num	354.3	węma, wib		one	4:4	821
wēsęn		2		num		wi'ina		2		826
wewe	we:we	again			354.16	w'iwa		again	5:3	827
wəle		go out		v	354.18	wəli		come out	174.8	831
wia		to be		v		wáma		to be	5:212	834
wičia		to give, to hand over, to		v	360.27	w'ia^{iw}		to give	5:21	836
win	wit	4		num		wiana		4		841
xai	hai	to get, gather		v	354.4	h^ooy		to take	2:34	850
xəl		heavy		adj		xəl-mą		to be heavy		866
xia	xiawia	to wait		adj	384.27	x'i + mi		to wait for	5:21	869
xq:		leg		n		x'ų-nema	II.4aa	leg	5:121	874
xwąn	xwąm, xwantia	to hit, to whip		v	320.16,	x^wona ~ x^woti		to beat	2:34	886
xwel		bow		n	312.11	xw'il-ena	III.5db	bow	5:124	888
xwəl	wel	to dig		v	362	w^oel(aⁱ		to dig	5:21	889
xwin		to flee, to avoid		v	328	xwiab		run away	176.4	901
yqn		this		det	392.35	yqna		this one	179.14	909