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THE SAHAPTIAN INFLECTIONAL SUFFIX COMPLEX

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This paper traces the history of verb inflections in Sahaptian (Nez Perce and Sahaptin). It looks at all the component morphemes, comments on what appears to be older morphology versus what appears to be more recent innovations, and suggests possible lexical sources for the latter. Only the “inflectional suffix complex” (the term is from Aoki 1970:118) is considered. This constitutes a mix of tense/aspect/modality markers, directionals, and in Nez Perce singular and plural marking for nominative subjects.¹

Paradigms are given below for both languages. In Sahaptin the inflectional suffix complex (see Table 1) includes tense, aspect (imperfective and habitual), a conditional, and singular and plural imperatives. There are also inflections as indicated which mark cislocative (‘hither’) and translocative (‘thither’) directionals, with the translocative having special palatalized forms in the Northeast (NE) dialects.

The Nez Perce forms are given in Table 2. Here the paradigm is not as regularized as in Sahaptin. Also unlike Sahaptin, the aspects and conditional forms inflect for number, for whether the subject is singular or plural. Another feature which is different in the Nez Perce paradigm is the distinction between a remote and recent past. And unlike Sahaptin which has just one conditional marker *-taxnay*, the Nez Perce conditional has forms which inflect for tense and some for tense and aspect. The Nez Perce habitual suffixes which are labeled “indefinite past” and “present” are perhaps similar in origin to those labeled “present” and “future” in Sahaptin, but their ranges of meaning differ as indicated.

In Nez Perce all suffixes which begin with /s/ mutate this /s/ to [c] (= [ts]) after certain verbs. In Aoki (1970, 1994) verb stems are marked “c-Class” or “VC” and “s-Class” or “VS” depending on whether this mutation does or does not occur. Swadesh (1930) was perhaps the first to notice that the cause of the mutation was a phonological process which in Nez Perce

¹ The Sahaptian verb is morphologically complex, and its closed set inflections are both prefixal and suffixal. The inflectional prefixes are pronominal, coding 3rd person subjects and objects (with both referential and agreement marking functions), and also reflexives and reciprocals. None of this is covered here. Funding for this study was provided by grants from Cátedras Patrimonial Nivel II (given by Consejo Nacional de Ciencia y Tecnología, México, 1995), and from the National Science Foundation (BNS 8919577). Abbreviations are as follows: 1 First Person; 2 Second Person; 3 Third Person; ABS Absolutive; ALL Allative; BEN Benefactive; COND Conditional; CR Columbia River Sahaptin; CSL Cislocative; DES Desiderative; DIR Directive; FUT Future; HAB Habitual; HUM Human; IMP Imperative; IMPV Imperfective; IND Indicative; INST Instrument; LOC Locative; MOD Modal; N Nominalizer; n. Noun; NE Northeast Sahaptin; NHUM Nonhuman; NOM Nominative; NP Nez Perce; NW Northwest Sahaptin; OBJ Objective; OPT Optative; PF Perfect; PL/pl. Plural; PROHIB Prohibitive; PRS Present; PS Proto-Sahaptian; PST Past; RCP Recent; RDP Reduplication; REL Relative; RMP Remote; Sah Sahaptin; SG/sg. Singular; TRL Translocative; vi. Intransitive Verb; vt. Transitive Verb; vtt. Ditransitive Verb.

converts /n + s/ to [c]. In both Nez Perce and most of the Sahaptin dialects /n/ also happens to delete before /t/ as well as word finally when /a/ or /e/ precede, and thus a verb-stem final /n/ surfaces for the most part only before a vowel or velar/uvular consonant. In this paper I follow Millstein (1991) in referring to the two different verb stems as 0-verbs and n-verbs.

In the most recently developed TAM systems, i.e. those of Creoles, Givón (1984:291f.) finds a four-way marking system, zero for perfective (punctual, completed, realis, etc.), a stative verb for imperfective (durative, incomplete, progressive, habitual, frequentative, etc.), a motion verb for irrealis (future, conditional, imperative, etc.), and a verb like 'bin' (Hawaii Creole from English "been") for perfect (anterior, countersequence, lookback, etc.). For two of these, the perfective and anterior, both Sahaptian languages share remnants of an older system, i.e. *-e for perfective (which perhaps earlier simply marked the indicative) and *-š for perfect (which is an old patient nominalizer). For the other two TAM markers both Sahaptian languages share certain innovations. Both have more or less the same imperfective, except that in Nez Perce this is further elaborated by number marking, as is also the Nez Perce conditional (which also has different tense forms in Nez Perce). Both languages have innovated separate future tenses.

Table 1. Sahaptin inflectional suffixes

	Plain	CSL	TRL	NE TRL
Tense only				
Past	-a	-ima	-kika	-čiča
Perfect	(-š)	-imš	-kikš	-čiš
Future	-ta	-imta	-ki(k)ta	-či(č)ta
Imperfective/Progressive				
Past	-šana	-šama	-šayka	-šančiča
Present	-ša	-šamš	-šaykš	-šančiš
Future	-šata	-šamta	-šaykta	-šanči(č)ta
Habitual/Frequentative				
Past	-xana	-xama	-xayka	-xančiča
Present	-xa ²	-xamš	-xaykš	-xančiš
Future	-xata	-xamta	-xaykta	-xanči(č)ta
Conditional	-taxnay			
Imperative				
Singular	-k	-im		
Plural	-tk	-imtk		
WS Plural	-ti	-imti		

2 The habitual present is -x in NE Sahaptin.

Table 2. Nez Perce inflectional suffixes

	Plain	Cislocative	Translocative
Tense only			
Past	-e	-ime	-kike
Perfect	-s	-im	-ki
Future	-u?	-u?kum	
Imperfective/Progressive			
Remote			
Singular	-sene	-seme	-senkike
Plural	-sine	-sinme	-sinkike
Recent			
Singular	-saqa	-samqa	-sanqaqa
Plural	-siqa	-sinmqa	-sinqika
Present			
Singular	-se	-sem	-senki
Plural	-six	-sinm	-sinki
Future			
Singular	-senu?	-semu?	
Plural	-sinu?	-sinmu?	
Habitual/Frequentative			
Remote			
Singular	-qana	-qama	
Plural	-e?nixne	-e?nixnim	
Recent			
Singular	-qaqa		
Plural	-a?niqa		
Indefinite Past			
Singular	-x		
Plural	-e?nix		
Present			
Singular	-tetu	-tetum	
Plural	-te?nix	-te?nixnim	
Conditional			
Past	-o?qa	-o?komqa	
With Imperfective			
Singular	-sano?qa		
Plural	-sino?qa		
Present	-(t)'ax		
With Imperfective			
Singular	-san'ax		
Plural	-sin'ax		
Imperative			
Singular	(-x/-y)	-im	
Plural	-tx	-imtx	

1. Tense

1.1. The past

The PS past **-e* is likely very old and may be cognate with the Klamath indicative/declarative *-a* (for which see Barker 1963:41, 1964:163f). PS **-e* probably had a more general declarative sense before the more recent elaboration of the tense/aspect system. Evidence for this earlier indicative/declarative status might be that **-e* is frozen onto various suffixes which themselves have a more recent verbal origin, e.g. the Nez Perce applicative */-ʔini/* 'for' from Nez Perce */ʔini/* 'give'. The element */-e/* remains frozen to the primary verb stem whatever its current tense/aspect morphology, e.g. */hani-e/* 'make' + INDICATIVE and */ʔini/* 'give' provide the stem */hani-e-ʔini/* 'make for' as in exs. 1 and 2.³

- | | |
|---|--|
| 1 | <p>páanyaʔnya
 <i>/pé-hani-<u>e</u>-ʔini-e/</i>
 3/3-make-IND-give-PST
 He made [it] for him (Nez Perce)</p> |
| 2 | <p>páanyaʔnyoʔ
 <i>/pé-hani-<u>e</u>-ʔini-uʔ/</i>
 3/3-make-IND-give-FUT
 He will made [it] for him (Nez Perce)</p> |

In both languages the past tense co-occurs with the aspects, as is indicated in Tables 1 and 2. In Nez Perce, however, it contrasts in the aspects with */-qa/*, which marks a recent past (exs. 3, 4), and where */-e/* has come to mark a remote past (exs. 5, 6).

- | | | | |
|---|--|---|---|
| 3 | <p>ko-sáa-qa
 go-IMPV.SG.NOM-RCP
 I was going (recent)</p> | 4 | <p>ko-qáa-qa
 go-HAB.SG.NOM-RCP
 I used to go (recent)</p> |
| 5 | <p>ku-séen-<u>e</u>
 go-IMPV.SG.NOM-RMP
 I was going (remote)</p> | 6 | <p>ko-qáan-a
 go-HAB.SG.NOM-RMP
 I used to go (remote)</p> |

³ In my underlying transcriptions of Nez Perce, vowels with the macron (e.g. /ā ē î ô ũ/) derive historically from PS **i*. The particular vowel coloring in Nez Perce is completely predictable, e.g. the /i/ - /ā/ contrast is determined by whether the morpheme has inherent strong vowels, /ē/ occurs next to a velar/uvular, and /ū/ next to a labio-velar, with /ō/ being the strong vowel equivalent of /ū/. See Aoki (1966) for Sahaptian vowel harmony, and Rude (1992) for examples and further detail on the contrast between NP /ā ē î ô ũ/ and /a e i o u/. The major difference between the two kinds of Nez Perce vowels is that the former delete in certain environments, and the latter lengthen under stress. The use of the macron follows Aoki (1970). In this paper I indicate a stressed macron vowel by underlining, e.g. NP /ʔīte/, put in, has inherent stress on /ī/. Another feature of the orthography employed here that should be noted is the use of ʔ for the glottal stop. Word initial ʔ is omitted in the Sahaptian orthography. It is not omitted in the Nez Perce orthography

Nez Perce /-qa/ also occurs alone with the copula (ex. 6). There is no remote sense in the regular past form, however (ex. 7).⁴

7 wéek-~~q~~
be-PST
I was

8 wa-qa
be-RCP
I just happened to be

The Nez Perce recent past marker is probably related to the adverbial prefixes which imply suddenness and/or nonvolitionality, e.g. Sahaptin t~~x~~a-, x~~a~~-, tqa-, qa- and Nez Perce /têqe-/ for which see Jacobs (1931:150) and Aoki (1994:719). Also related is the Sahaptin 2nd position probability modal =x~~a~~ (Jacobs 1931:130). The Sahaptin forms show the t to be removable. The x - q contrast in the Sahaptin prefixes and the /a/ of the Nez Perce recent past are due to derivation by “diminutive” sound symbolism. Sahaptin t~~x~~ána ‘become, occur, happen’ is *tqe plus the directional *(n)en ‘thither’, and the same *tqe is also a probable component of Nez Perce /têqew-/ ‘fall’ (Aoki 1994:721). Perhaps Nez Perce /ŋiqan/ ‘lie on one’s back’ (Aoki 1994:1069) is a stativized form of the same basic verbal element, i.e. *qe ‘fall’. Both /ŋi-/ and /-n/ are old derivational elements, as the *t- of *tqe is as well. It is the ‘suddenly’ sense of ‘fall’ which would have lent itself to development into the recent past /-qa/ in Nez Perce. The ‘probability’ sense of the Sahaptin 2nd position modal enclitic =x~~a~~ would also derive from this notion of suddenness or inadvertent occurrence inherent in ‘fall’. See also the comments below on the habitual marker *-xan/*-qan.

1.2. The present perfect

In PS the present perfect was marked by *-š. The similarity of this morpheme to a Sahaptian patient nominalizer *-š matches the use of the past participle in the English perfect.⁵ In combination with no aspectual marker, *-š has a present relevance sense, as illustrated in ex. 9 from Nez Perce (where PS *š and *s were merged). Ex. 10 contrasts the active nominalizer /-t/, and 11 the past tense.

9 híps
/hîpî-s/
eat-PRS
I have just eaten (Nez Perce)

10 hípt
/hîpî-t/
eat-N
eating (Nez Perce)

⁴ The copula has two allomorphs, *we before a vowel and *wek before a consonant. In Sahaptin *wek is palatalized before *-e, e.g. lwačá ‘he/she/it was’.

⁵ For examples of this nominalizer in Sahaptin, see Jacobs (1931:216). It is less productive in Nez Perce, but examples can be found, e.g. NP tím’es ‘book, paper’ (cf. /tím’en/ ‘mark, write’). Not to be confused here is the purpose nominalizer, Sahaptin -aš and Nez Perce /-7es/. The most productive patient nominalizers are -i in Sahaptin and /-i7in/, /-i7is-/ in Nez Perce (with [y] inserted after i-stems and [ʔ] after other vowel stems, see Aoki 1994:186).

- 11 **hípe**
 /hîpî-e/
 eat-PST
 I ate (Nez Perce)

Nez Perce /s/ and /t/ both delete word finally when /n/ preceeds, and so n-verbs appear to suffix zero in the present perfect as also in nominalizations, e.g. 12. The n of n-verbs also surfaces in the past (ex. 13).

- | | | | |
|-------------------|--|----|--------------------|
| 12 héekin | | | |
| /hekîn-s/ | | or | /hekîn-t/ |
| see-PRS | | | see-N |
| I have just seen; | | | seeing (Nez Perce) |

- 13 **héexne**
 /hekîn-e/
 see-PST
 I saw (Nez Perce)

N-verbs which are a- or e-stems delete both the /n/ and the final /s/ or /t/, e.g. 14 (cf. 15 where the stem final /n/ surfaces before a vowel).

- | | | | |
|-------------------|--|----|---------------------|
| 14 wihne | | | |
| /wihnen-s/ | | or | /wihnen-t/ |
| leave-PRS | | | leave-N |
| I have just left; | | | leaving (Nez Perce) |

- 15 **wihnene**
 /wihnen-e/
 leave-PST
 I left (Nez Perce)

In Nez Perce /-s/ does not co-occur with the directionals. This may be for phonological reasons (not completely clear at this time) and/or because of skewing by reanalysis. I put them in the underlying forms in exs. 16 and 17, though I know of no phonological process to delete them.

- | | |
|------------------------------|---------------------------------|
| 16 kúum | 17 kúuki |
| /ku-m-s/ | /ku-kik-s/ |
| go-CSL-PRS | go-TRL-PRS |
| I have just come (Nez Perce) | I have just gone on (Nez Perce) |

The present perfect -š surfaces in all the Sahaptin dialects before an enclitic, e.g. before =naš 'I/me' in 18.

- 18 **wiyánawi-š=naš**
arrive-PF=1SG
I have just arrived (Sahaptin)

Sahaptin -š also survives everywhere after the cislocative (exs. 19, 20, 21) and translocative directionals (exs. 22, 23, 24).

- 19 **i-wína-m-š**
3NOM-go-CSL-PRS
He has just come (Sahaptin)

- 20 **i-wína-ša-m-š**
3NOM-go-IMPV-CSL-PRS
He is coming (Sahaptin)

- 21 **i-wína-ḡa-m-š**
3NOM-go-HAB-CSL-PRS
He comes (Sahaptin)

- 22 **i-wína-kik-š**
3NOM-go-TRL-PRS
He has just gone on (Sahaptin)

- 23 **i-wína-ša-yk-š**
3NOM-go-IMPV-TRL-PRS
He is going on (Sahaptin)

- 24 **i-wína-ḡa-yk-š**
3NOM-go-HAB-CSL-PRS
He goes on (Sahaptin)

In NE Sahaptin the translocative plus the perfect -š is realized as -čiš, e.g. 25, 26, 27.

- 25 **i-wína-či-š**
3NOM-go-TRL-PRS
He has just gone on (NE Sahaptin)

- 26 **i-wína-šan-či-š**
3NOM-go-IMPV-TRL-PRS
He is going on (NE Sah)

- 27 **i-wína-ḡan-či-š**
3NOM-go-HAB-TRL-PRS
He goes on (NE Sahaptin)

Note that although the present marker co-occurs with the directionals (exs. 19 through 27 above), it does not co-occur with the aspect markers, e.g. /-šan-š/ equals -ša (ex. 28) and /-ḡan-š/ equals -ḡa (ex. 29).

- 28 **i-wína-ša**
3NOM-go-IMPV
He is going (Sahaptin)

- 29 **i-wína-ḡa**
3NOM-go-HAB
He goes (Sahaptin)

The present -š deletes on all Sahaptin verbs in final /an/. There is, however, no 0- versus n-verb contrast for a-stems in Sahaptin. Sahaptin a-stems are derived historically from *a-stems (ex. 30), *e-stems (ex. 31), *an-stems (ex. 32), or *en-stems (ex. 33). Here only Nez Perce preserves the

0- versus n-verb distinction, i.e. the past /-e/ takes the form **-ya/-ye** after the former and **-a/-e** after the latter.

- | | | | |
|----|------------------------|---------------------------|--|
| 30 | PS *a-stem | | |
| | a. i-wapáatan-a | b. hi-wapáayata-ya | |
| | 3NOM-help-PST | 3NOM-help-PST | |
| | He helped (Sahaptin) | He helped (Nez Perce) | |
| | | | |
| 31 | PS *an-stem | | |
| | a. i-támyan-a | b. hi-táamyan-e | |
| | 3NOM-hit-PST | 3NOM-hit-PST | |
| | He hit (Sahaptin) | He hit (Nez Perce) | |
| | | | |
| 32 | PS *e-stem | | |
| | a. i-tíyan-a | b. hi-tíy'e-ye | |
| | 3NOM-laugh-PST | 3NOM-laugh-PST | |
| | He laughed (Sahaptin) | He laughed (Nez Perce) | |
| | | | |
| 33 | PS *en-stem | | |
| | a. i-wínan-a | b. hi-wíhnen-e | |
| | 3NOM-go-PST | 3NOM-leave-PST | |
| | He went (Sahaptin) | He left (Nez Perce) | |

Nez Perce /-s/ is preserved in all PS 0-verbs (exs. 34a, 35a), whereas /n + s/ gets deleted in n-verbs (exs. 34b, 35b).

- | | | |
|----|---------------------------------|------------------------------|
| 34 | a. PS *a-stem | b. PS *an-stem |
| | hiwapáayatas | hitáamya |
| | /hi-wapáyata-s/ | /hi-támyan-s/ |
| | 3NOM-help-PRS | 3NOM-hit-PRS |
| | He has just helped (Nez Perce) | He has just hit (Nez Perce) |
| | | |
| 35 | a. PS *e-stem | b. PS *en-stem |
| | hitíy'es | hiwíhne |
| | /hi-tíy'e-s/ | /hi-wíhnen-s/ |
| | 3NOM-laugh-PRS | 3NOM-leave-PRS |
| | He has just laughed (Nez Perce) | He has just left (Nez Perce) |

Having reanalyzed all *a- and *e-stems as an-stems, Sahaptin marks the present perfect as zero for all these verbs, e.g. 36a & b and 37a & b.

- | | | |
|----|-------------------------------|----------------------------|
| 36 | a. PS *a-stem | b. PS *an-stem |
| | i-wapáata | i-támya |
| | 3NOM-help | 3NOM-hit |
| | He has just helped (Sahaptin) | He has just hit (Sahaptin) |

- | | | | | |
|----|----|---|----|--|
| 37 | a. | PS *e-stem
i-tiya
3NOM-laugh
He has just laughed (Sahaptin) | b. | PS *en-stem
i-wina
3NOM-go
He has just gone (Sahaptin) |
|----|----|---|----|--|

Sahaptin i- and u-stems, however, still retain their 0- versus n-verb status. Those that are 0-verbs suffix -ya in the past (exs. 38b, 39b), and zero in the present perfect (exs. 38a, 39a).

- | | | | | |
|----|----|--|----|---|
| 38 | a. | Present perfect
i-ʔaní
3NOM-make
He has made [it] (Sahaptin) | b. | Past
i-ʔaní-ya
3NOM-make-PST
He made [it] (Sahaptin) |
| 39 | a. | Present perfect
i-kú
3NOM-do
He has done [it] (Sahaptin) | b. | Past
i-kú-ya (CR: pa-kwí-ya)
3NOM-do-PST
He did [it] (Sahaptin) |

In CR Sahaptin i- and u-stems that are n-verbs are treated similarly, i.e. -a marks the past (exs. 40b, 41b) and zero the present perfect (exs. 40a, 41a). In un-stems the n is often deleted in the perfect (ex. 41a).

- | | | | | |
|----|----|--|----|---|
| 40 | a. | Present perfect
pa-wxín
3PL.NOM-lose
They have lost [it] (CR Sahaptin) | b. | Past
pa-wxín-a
3PL.NOM-lose-PST
They lost [it] (Sahaptin) |
| 41 | a. | Present perfect
pa-tmíyu(n)
3PL.NOM-plan
They have planned (CR Sahaptin) | b. | Past
pa-tmíyun-a
3PL.NOM-plan-PST
They planned (Sahaptin) |

NW Sahaptin, however, has innovated a special form -a for the present perfect of i- and u-stems that are n-verbs. These are treated as a special kind of i- or u-stem in which the past is marked with -na (ex. 42b, 43b) and the present perfect with -ya (ex. 42a) or -wa (ex. 43a).⁶

- | | | | | |
|----|----|--|----|--|
| 42 | a. | Present perfect
pa-ʔámtkwi-ya
3PL.NOM-overtake-PF
They have overtaken
(NW Sahaptin) | b. | Past
pa-ʔámtkwi-na
3PL.NOM-overtake-PST
They overtook
(NW Sahaptin) |
|----|----|--|----|--|

⁶ For similar examples of the in-stem *ámtkwín* 'overtake' see Jacobs (1929:230:1, 222:11), and for the un-stem *mč'ún* 'sleep' see Jacobs (1929:206:19-20, 205:12).

- | | | | | |
|----|----|--|----|--|
| 43 | a. | Present perfect
pa-nč'ú-wa
3PL.NOM-sleep-PF
They have just gone
to sleep (NW Sahaptin) | b. | Past
pa-nč'ú-na
3PL.NOM-sleep-PST
They went to sleep
(NW Sahaptin) |
|----|----|--|----|--|

In Nez Perce the present /-s/ survives on i- and u-stems that are zero verbs (exs. 44a, 45a), but not on n-verbs (exs. 44b, 45b). Here, however, the /n/ is lost on un-stems (45b).

- | | | | | |
|----|----|---|----|---|
| 44 | a. | i-stem
háanis
/hani-s/
plan-PF
I have made [it] (Nez Perce) | b. | in-stem
wiqiin
/wíqín-s/
lose-PF
I have lost [it] (Nez Perce) |
|----|----|---|----|---|

- | | | | | |
|----|----|--|----|---|
| 45 | a. | u-stem
kúus
/ku-s/
go-PF
I have gone (Nez Perce) | b. | un-stem
timmiyu
/tímmiyun-s/
plan-PF
I have planned (Nez Perce) |
|----|----|--|----|---|

The validity of the 0- versus n-verb analysis of these i- and u-stem verbs is shown by the past tense forms in exs. 46, 47.

- | | | | | |
|----|----|---|----|---|
| 46 | a. | i-stem
haníya
/hani-e/
plan-PST
I made [it] (Nez Perce) | b. | in-stem
wiqíine
/wíqín-e/
lose-PST
I lost [it] (Nez Perce) |
| 47 | a. | u-stem
kúye
/ku-e/
go-PST
I went (Nez Perce) | b. | un-stem
timmiyune
/tímmiyun-e/
plan-PST
I planned (Nez Perce) |

Nez Perce n-verbs that are C-stems delete the present perfect /-s/, as in 48b, whereas they retain /-s/ when they are 0-verbs, as in 48a.

- | | | | | |
|----|----|---|----|--|
| 48 | a. | 0-verb
hiíwéeks
/hi-hiwék-s/
3NOM-dream-PF
He has dreamed (Nez Perce) | b. | n-verb
hi?yáaqin
/hi-?iyáqín-s/
3NOM-find-PF
He has found [it] (Nez Perce) |
|----|----|---|----|--|

In NW Sahaptin (at least in Jacobs' recorded Klikitat texts), the present perfect -š is preserved on both types of consonant stem, e.g. 49a and 49b.

- | | | | | |
|----|----|---|----|---|
| 49 | a. | 0-verb
i-ʔwák-š
3NOM-dream-PF
He has dreamed (NW Sahaptin) | b. | n-verb
i-ʔyáx-š
3NOM-find-PF
He has found [it] (NW Sahaptin) |
|----|----|---|----|---|

In CR Sahaptin all C-stems look like n-verbs in the present perfect: -š is lost and -in has been generalized as a kind of present perfect marker for both 0- and n-verbs, e.g. ex. 50.

- | | | | | |
|----|----|---|----|---|
| 50 | a. | 0-verb
i-ʔwáčin
3NOM-dream
He has just dreamed (CR Sahaptin) | b. | n-verb
i-ʔyáxin
3NOM-find
He has just found [it] (CR Sahaptin) |
|----|----|---|----|---|

Jacobs (1931:206) cites -in as a NE suffix, with the comment that it "is important and unfortunately very much in doubt." His examples, however, make it clear that as in CR Sahaptin, this is simply the n of n-verbs extended to mark the perfect for all consonant stems, whether n-verb (51b) or 0-verb (51a).

- | | | | | |
|----|----|--|----|---|
| 51 | a. | 0-verb
i-wuwákin
3NOM-have.nightmare
He has just had
a night mare
(Jacobs 1931:206) | b. | n-verb
i-láxwiixin
3NOM-be.warm
It has just gotten warm
(Jacobs 1931:206) |
|----|----|--|----|---|

As always, however, the perfect -š resurfaces before an enclitic (ex. 52).

- 52 áw-iyaxin-š=naš=ta áw
 3ABS-find-PF=1SG=MOD now
 I may have found it now (NE, Jacobs 1931:133)

In CR Sahaptin, probably NE Sahaptin also, the 0- versus n-verb distinction survives in the past tense, e.g. 53.

- | | | | | |
|----|----|--|----|---|
| 53 | a. | 0-verb
i-ʔwáč-a
3NOM-dream-PST
He dreamed (CR Sahaptin) | b. | n-verb
i-ʔyáxn-a
3NOM-find-PST
He found [it] (CR Sahaptin) |
|----|----|--|----|---|

For at least some speakers of Yakima (NW Sahaptin) this distinction seems to be breaking down. Some speakers find either -a or -na an acceptable past marker for all consonant stems. There also seems to be some confusion over the 0- vs. n-verb status of C-stems in Jacobs' Klikitat texts. For

example, in Jacobs (1929:176:18) and (1929:208:21) we see ʔyáxin ‘find’ (clearly an n-verb in CR Sahaptin, cf. also Nez Perce /ʔiyáqin/ ‘find’), treated as an n-verb, but in Jacobs (1929:185:8) and (1929:208:19-20) we see it treated as a 0-verb.

1.3. The future

The Sahaptin future **-ta** clearly involves a reanalysis of **-ta** (PS ***-ten**) ‘go for a purpose’, which is itself probably the nominalizer ***-t** plus ***hen**, go. That we should reconstruct this verb (i.e. ***hen**, go) with initial ***h** is suggested by the fact that in Sahaptian all words begin in a consonant, and that an initial glottal stop would have glottalized the nominalizer ***-t** in Nez Perce. Though ***hen** does not survive as a primary verbal root, it is to be found in the directional ***-en**, motion thither.⁷ Compare also Nez Perce /henîmn/, not go, which, if derived from ***hen**, go, and ***-im**, hither, confirms the initial ***h** of our hypothetical verb ‘go’. Compare also Klamath **en**, go, which always has a classificatory prefix (Barker 1963:129). The ‘go for a purpose’ and future functions of Sahaptin **-ta** may co-occur, e.g. 54.

- 54 **i-tkwáta-ta-ta**
 3NOM-eat-go-FUT
 He will go eat, he’s gonna go eat (Sahaptin)

The origin of the Nez Perce future **-uʔ** is perhaps not quite as clear. Aoki (1994:821) lists a directive suffix **-uʔ** ‘to, toward, against’ which is restricted to a very few verbs, and which Aoki suggests might be a form of the directive **/-úu/** (from ***-éwe**, cf. the NW Sahaptin directive **-áwa**, for which see Rude 1991b). This highly restricted directive has the same form as the Nez Perce future, it could represent the same source. But it transitivizes a motion verb with the sense ‘toward a direct object’. The future derives from the metaphor of ‘notion toward the action’, and would thus represent a separate development. This directive **-uʔ**, however, is interesting in that underlyingly it appears to have the form **/-ʔu/**, and by regular phonological processes of vowel assimilation and deletion (and vowel harmony) yields the forms in 55 and 56.

- 55 **ʔatóʔsa**
 /ʔátí-ʔu-s-en/
 exit-DIR-IMPV-SG.NOM
 I am exiting toward you (Aoki 1994:977)
- 56 **hicóʔsa**
 /híca-ʔu-s-en/
 climb-DIR-IMPV-SG.NOM
 I am climbing after you (Aoki 1994:821)

A similar analysis lets us unite as allomorphs two intensifier enclitics listed separately in Aoki 1994, e.g. **-uʔ** on page 821 and **-ʔu** on page 1102, e.g. as in exs. 57, 58.

⁷ Sahaptian ***-en** is also the likely source of the NP objective case suffix ***-(n)en** (see Rude 1991a).

- 57 **kínik'u** 'surely from this' (from /kínik=ʔu/)
- 58 **kiimuʔ** 'surely these' < /kímu=ʔu/ by Final Vowel Deletion
< /kíme=ʔu/ by Vowel Assimilation

The Nez Perce future also appears to be underlyingly /-ʔu/. This is suggested by the fact that when it is suffixed to a stress neutral verb stem, as in ex. 59, stress is word final. Root final vowels delete word finally in words of three or more syllables in Nez Perce,⁸ and Nez Perce has penultimate stress except when there are morphemes with inherent stress, e.g. compare exs. 60 and 61.⁹

- | | |
|---|--|
| <p>59 hipúʔ 'I'll eat' < /hípú-ʔu/ by Final Vowel Deletion
< /hípî-ʔu/ by Vowel Assimilation
< /hípî-ʔu/ by the Penultimate Stress Rule</p> | <p>61 hipe
/hípî-e/
eat-IMPV-SG.NOM
I ate (Nez Perce)</p> |
| <p>60 hipíse
/hípî-s-en/
eat-IMPV-SG.NOM
I am eating (Nez Perce)</p> | |

But the future does not attract stress in the same way that the directive -uʔ does. The future -uʔ attracts stress only when no other morpheme in the word has inherent stress (ex. 59), the directive -uʔ attracts stress even away from a stressed root, as in 55 above. Compare the same stressed root /ʔátî/ with the future in exs. 62, 63. And after a regular vowel stem (not after /i/) the future takes the form -yuʔ (-yoʔ by vowel harmony) (ex. 64), the vowels do not assimilate as in 56 above. All this does not preclude an earlier identity /-ʔu/ for both the directive and future. But it does indicate a certain amount of reanalysis if they are from the same source morpheme.

- | | |
|--|---|
| <p>62 ʔáatoʔ
/ʔátî-ʔu/
exit-FUT
I will go out (Nez Perce)</p> | <p>63 ʔáatoʔkom
/ʔátî-ʔu-kum/
exit-FUT-CSL
I will come out (Nez Perce)</p> |
|--|---|

⁸ Compare Nez Perce *tiwéet* and Sahaptin *twáti*, both 'shaman'. That Nez Perce preserves the final vowel underlyingly (e.g. /tiwéti/) is evident from the oblique cases (e.g. objective *tiwéetline*) where /i/ surfaces.

⁹ All roots appear to have had morpheme inherent stress in Proto-Sahaptian. Sahaptin preserves this where Nez Perce does not, e.g. Sahaptin *aní* 'make' as opposed to Nez Perce /hani/ 'make' (which is without inherent stress). Nez Perce roots which have inherent stress always have it on the same syllable as their Sahaptin cognates, e.g. Nez Perce /tíy'e/ 'laugh', Sahaptin *tíya* 'laugh'. Stress assignment does not always apply before vowel deletion, however. Compare *háham* 'men', which is underlyingly /ha-háma/. But /háma/ 'man' does have inherent stress, and so *háham* probably represents reanalysis. There are also a few exceptions to the root final vowel deletion rule, e.g. Nez Perce *tíʔila* 'crawfish', *tuʔúynu* 'tail', *ʔiléxni* 'many, much', *tim'íne* 'heart', *mac'áyo* 'ear', *kikéeye* 'service berry'.

- 64 **hicayo?**
 /hi-ca-uʔ/
 climb-FUT
 I will climb (Nez Perce)

Whatever the source of the Nez Perce future marker **-uʔ**, earlier on this morpheme probably simply functioned as ‘to’ in concert with the verb for ‘go’, as in English “gonna” from “going to”. Since the cislocative future is **-uʔkum**, i.e. **-uʔ** plus /ku-m/ ‘come’ (/ku/ ‘go’ plus the cislocative /-m/), it seems safe to assume that the noncislocative future originally also contained /ku/ ‘go’, e.g. as **-uʔku** and that **ku** later dropped off.

2. The aspects

As is common in the history of many languages, the Sahaptian aspectual markers probably began their career as auxiliary verbs (cf. “be”, “keep”, “used to”, etc., in English). That the tense markers attach directly both to a verb stem (exs. 65, 66) as well as to the aspect markers (exs. 67, 68) suggests this verbal origin, i.e. as verbal auxiliaries they took the same tense markers as regular verbs.

- | | |
|---|---|
| <p>65 i-wínan-a
 3NOM-go-PST
 He went (Sahaptin)</p> | <p>66 i-wína-ta
 3NOM-go-PST
 He will go (Sahaptin)</p> |
| <p>67 i-wína-šan-a
 3NOM-go-IMPV-PST
 He was going (Sahaptin)</p> | <p>68 i-wína-ša-ta
 3NOM-go-IMPV-FUT
 He will be going (Sahaptin)</p> |

In the same way the directionals ***-im** and ***-kik**, which attach directly to a verb stem (exs. 69, 70), also suffix directly to the aspect markers (exs. 71, 72), which suggests a verbal origin for the aspect markers and an older grammaticalized status for the directionals.¹⁰

- | | |
|---|--|
| <p>69 hikúum
 /hi-ku-îm/
 3NOM-go-CSL
 He has just come (Nez Perce)</p> | <p>70 hikúuki
 /hi-ku-ki/
 3NOM-go-TRL
 He has just gone on (Nez Perce)</p> |
| <p>71 hikuséenm
 /hi-ku-sen-îm/
 3NOM-go-IMPV-CSL
 He is coming (Nez Perce)</p> | <p>72 hikuséenki
 /hi-ku-sen-ki/
 3NOM-go-IMPV-TRL
 He is going on (Nez Perce)</p> |

¹⁰ Berman (1993) points out that the Molala cislocative was also marked by an **-m**, as well as probably also the Cayuse cislocative. Takelma and Kalapuya, which are prefixing languages, have ‘hither’ prefixes with **m**, e.g. Takelma **meʔ-** (Sapir 1922:88) and Kalapuya **ma-** (Jacobs 1945:215:16).

Penultimate stress in Nez Perce is never assigned to the translocative /-kik/, e.g. 73, 74. Penultimate stress has full access, however, to the Nez Perce aspect markers, as can be seen in exs. 71, 72 above. It is not clear why /-kik/ has this peculiarity. Perhaps it preserves some earlier prohibition against stressing grammatical morphemes (perhaps this is a universal *tendency* as grammaticalization progresses). If so, then this might indicate the more recent development of the aspect markers and a greater age for the translocative.

73 **kúukike**
 /ku-kik-e/
 go-TRL-PST
 I went on (Nez Perce)

74 **kuséenkiye**
 /ku-sen-kik-e/
 go-IMPV.SG.NOM-PST
 I was going on (Nez Perce)

Another feature of the aspect markers, at least those in Nez Perce, is that they have different forms for whether the subject is singular or plural. The fact that they do not also mark person suggests a suppletive pattern, common in many Native American languages, where intransitive verbs have different forms depending on whether the subject is singular or plural (number suppletive transitive stems differ depending on whether the object is singular or plural). Such verbs are quite common in Klamath (e.g. *hod* 'run (sg.)', *din* 'run (pl.)', *dos* 'run (a few)', see Barker 1963). Though not as common in Sahaptian, there are, especially in Nez Perce, various adverbial prefixes which are probably verbal in origin and which indicate a plural subject, e.g. /téel-/ 'gallop (pl.)' (Aoki 1994:707), /ŋiyemî-/ 'run (pl.)' (Aoki 1994:1094), /ŋiyele-/ 'fly (pl.)' (Aoki 1994:1094). Without a co-occurring plural marker these generally indicate group action (ex. 74), with a plural marker the action is more dispersed (ex. 75).

75 **hi-téel-ixn-e**
 3NOM-gallop.PL-move-PST
 They galloped (as a group) (Aoki 1994:362:14)

76 **hi-pe-téel-ixn-e**
 3NOM-PL.NOM-gallop.PL-move-PST
 They galloped (as individuals) (Aoki 1994:362:14)

For these there are alternative adverbial prefixes (e.g. /qûqu-/ 'gallop', /wîlé-/ 'run', /wee-/ 'fly') which without a plural marker indicate singular action (exs. 77, 78).

77 **hi-qqu-liixn-e**
 3NOM-gallop-move-PST
 He galloped (Nez Perce)

78 **hi-pe-qqu-liixn-e**
 3NOM-PL.NOM-gallop-move-PST
 They galloped (Nez Perce)

2.1. The imperfective

The imperfective is marked by **-šen* in both Sahaptian languages. It regularly occurs with stative verbs (ex. 79a, 80a), and with nonstative it marks the progressive (ex. 79b, 80b).

79	a	i-q'ínu-ša 3NOM-see-IMPV He sees (Sahaptin)	b	i-tkwáta-ša 3NOM-eat-IMPV He is eating (Sahaptin)
80	a	hekíce /hekín-sen/ see-IMPV.SG.NOM I see (Nez Perce)	b	hipíse /hîpî-sen/ eat-IMPV.SG.NOM I am eating (Nez Perce)

Cross-linguistically the most common source for the imperfective/progressive is the metaphor of being *located* in time. This may be realized with a simple locative construction plus 'be' (the source of the English progressive), or a locational verb like 'stay' (Givón 1984:291). For the Sahaptian imperfective **-šen*, one thus suspects a connection with the directional **-če* 'on, upon' (which is often applicative in that the goal is or becomes a grammatical object). Its Sahaptin form is *-ša* (*-áša* with frozen indicative, Jacobs 1931:196, 200), and in Nez Perce it occurs as */-ce/*, cited in Aoki (1994) as */-ce/* 'on behalf of' on page 13, and as */-likéce/* 'on, upon, on top of' on page 370 (with removable */-lik/* 'do, act', Aoki 1994:368, and frozen indicative */-e/*). The only trouble here is that, according to the Sahaptian sound correspondences outlined in Aoki (1962), for which see 81 below, the locative morpheme reconstructs as **-če*, whereas the imperfective is **-šen*.

81 Some Sahaptian correspondences according to Aoki (1962)

PS	Sahaptin	Nez Perce
<i>*č</i>	<i>š</i>	<i>c</i>
<i>*c</i>	<i>s</i>	<i>c</i>
<i>*š</i>	<i>š</i>	<i>s</i>
<i>*s</i>	<i>s</i>	<i>s</i>

It is possible that the Sahaptian imperfective was originally **-čen*, which would give it its present form in Sahaptin, i.e. *-ša(n)*, and that */-cen/* was actually its earlier form in Nez Perce. In Sahaptin *š* productively alternates with a sound symbolic *s*, and in texts one regularly encounters the imperfective in its diminutive *-sa(n)* form. In Nez Perce the nondiminutive counterpart of *c* is *s*, and if the original form of the imperfective was */-cen/* in Nez Perce, it may be that it was everywhere reanalyzed to a nondiminutive form */-sen/* (ex. 83), except on n-verbs where */c/* has been phonologically preserved (ex. 82).

82 **wihnece**
 /wihnen-cen/
 leave-IMPV.SG.NOM
 I am leaving (Nez Perce)

83 **tíy'ese**
 /tíy'e-sen/
 laugh-IMPV.SG.NOM
 I am laughing (Nez Perce)

Now based on the most common cross-linguistic source for the imperfective, and considering PS *-če 'on, upon' as a cognate of the Sahaptian imperfective, we should assume an old auxiliary verb *če 'be on, upon' or maybe 'sit'. This looks precisely like the Klamath č^v- 'sit (sg.)' (Barker 1963:67), which even matches perfectly the suppletive singular subject preserved in Nez Perce. Aoki (1963) finds three different Sahaptian correspondences which match Klamath č (see 84 below). The first (š - s) fits the correspondence found in the Sahaptian imperfective, Sahaptin -ša(n), Nez Perce /-sen/, but not if we assume an earlier PS *-čen with Sahaptin -ša(n) and Nez Perce /-cen/ (see 80 above). If there is no way around these correspondences, and if we still want to relate the Sahaptian directional, then we will have to assume that the Nez Perce /-ce/ 'on, upon' was derived via diminutive sound symbolism. Note also the alternative Nez Perce forms even with diminutive glottalization, /-c'e/ 'on, upon' (Aoki 1994:66), and strong vowel, /-c'a/ 'on, upon' (Aoki 1994:58).¹¹

84 Sahaptian correspondences matching Klamath č (Aoki 1963)

Klamath	Sahaptin	Nez Perce
č	š	s
č	s	c
č	č	c

The *individuating* status of our hypothetical *če or *še(n) 'sit sg.' may also be reflected in the Sahaptin pronominal enclitic =sá 'alone' (Jacobs 1931:256). Here the s is likely the sound symbolic derivative of š, since =sá initiates diminutive symbolism in the whole word, e.g. *ilk*=sá 'I alone' (cf. *ink* 'I'). Thus =sá points to a source *še(n), which if the same 'sit sg.' would mean *ilksá* 'I alone' originated naturally as 'I sit sg.' or 'I sit alone'. That plural pronouns also take =sá (e.g. *pmak*=sá 'they alone') only means generalization throughout the paradigm of the individuating sense of *še(n).

For the Nez Perce imperfective plural /-sik/, one is tempted to consider the possibility that Nez Perce /sikís/ 'nest' (Aoki 1994:638) is a nominalization of an earlier /sik/ 'sit (pl.)'.¹² Klamath čii 'stay, live, dwell' (Barker 1963:77) is likely related to Klamath č^v- 'sit (sg.)', and though it preserves no plural sense, it may have originally had such a sense and may be connected to the Nez Perce imperfective /-sik/, /-sin-/.

¹¹ Sound symbolism is ubiquitous in Sahaptian, for which see "Addenda I" at the end of this article. There are many examples within Sahaptian where /s/ alternates with /c/, and where plain obstruents correspond to ejectives. Aoki (1994:60), for example, suggests that /c'âsin/ 'spread out (e.g., of feather, tail), sprinkle (of water)' is "probably phonosymbolic in basic form and related to" /câsin/ 'scatter' (Aoki 1994:10).

¹² According to Millstein (1990a), however, Sahaptin *siks*, friend, pal, partner (NP /sikís/ also has these meanings) is "from Chinook Jargon, ultimately from Chinook language".

2.2. The habitual

The habitual/frequentative is marked in Nez Perce by separate morphemes depending on whether the subject is singular or plural, /-qan/ or /-tu/ if singular and /-eʔnik/ if plural. It is thus probable that these morphemes, just as was hypothesized above for the imperfective/progressive, derive from number suppletive verbal auxiliaries. Nez Perce /-qan/ and Sahaptin -xan may be related to Nez Perce /ʔiqan/ 'lie on the back, be supine' (Aoki 1994:1069). And if Klamath sq'ol 'lie down (sg.)' (Barker 1963:391) is cognate, it would preserve the notion of singular subject. The /ʔi-/ is removable from the Nez Perce verb, and the /s-/ probably is from the Klamath. The PS *a - Klamath o and PS *n/*l - Klamath l correspondences are already attested in Aoki (1963), and sound symbolism might explain the Sahaptin x - Nez Perce q - Klamath q' anomaly. See also comments on the Nez Perce recent past marker /-qa/ in section 1.1. above.

If we subtract from the Nez Perce plural subject /-eʔnik/ the frozen indicative /-e/ and a plural /-ik/, the latter perhaps on analogy with the plural imperfective /-sik/, then we are left with what looks like the Nez Perce verb /ʔin/ 'lie, lie down, be lying down' (Aoki 1994:1005). And here one wants to connect Klamath lol'al 'pl. lie' (Barker 1963:222). Though this looks like a reduplicated stem, perhaps a doubly reduplicated *ʔol, Barker notes that it cannot be "descriptively" so analyzed. But this could simply be a matter of reanalysis. Perhaps related is the Klamath 'pl. objs.' classifier ʔi- (Barker 1963:32).

The singular indefinite past /-q/ is probably a reduced form of -qa, which is the form /-qan/ would take word finally, and which is suggested by the fact that words in /-q/ show strong vowel harmony the same as words in /-qan/, e.g. 85 and 86.

85 **hikóox**
 /hi-ku-qa/
 3NOM-do-HAB.PRS
 It keeps doing
 (Phinney 1934:366:6)

86 **hiwyankaaxnóox**
 /hi-wíyenkehekîn-úu-qa/
 3NOM-aim.bow-DIR-HAB.PRS
 He keeps aiming his bow at
 me (Phinney 1934:140:12)

There is also a process in Nez Perce which deletes final vowels in words of three or more syllables, e.g. háama 'man', but with reduplication we get háham 'men' (from the trisyllabic /ha-hama/). Compare also the Northeast Sahaptin present habitual/frequentative -x, which elsewhere is -xa (Jacobs 1931:204).

The initial element of the singular present /-tetu/ probably derives from an old Sahaptian verbal root *te 'stand', e.g. /te/ in Nez Perce (Aoki 1994:701) which occurs in /ʔisépte/ 'stand with a load' (cf. /ʔisépî/ 'carry a load', /ʔisépik/ 'walk with a load', /ʔisépen/ 'bring in game'). In Sahaptin this *te occurs in páta (sg.), ptá (pl.) 'stand up, stick up (of inanimate objects)' (from Millstein 1991a).

There is also an old Sahaptian verbal root *tu which probably meant 'stand (sg.)'. It occurs in Nez Perce as an irregular inflectional suffix which combines the notions of "singular subject" and "stative" (Aoki 1994:790). The plural equivalent is /-tn'ix/. Sahaptian *tu is also a

component of certain Sahaptin verbs which similarly lack dynamic aspectual forms, i.e. there is only a stative present **-tun** (**-tuwa** in NW Sahaptin) and stative past **-tuna**. Though Sahaptin **-tun** does not imply a singular subject, it does co-occur with other number suppletive elements, e.g. **pátun** (sg.) and **ptún** (pl.) 'sit (of inanimate objects)'. Sahaptian ***tu** is also a component of Sahaptin **nišátun** 'live' (Jacobs 1929:176:19), **túti** 'stand', and the transitivized stems **pátuk** (sg. object) and **ptúk** (pl. object) 'set up, set out'. The verb ***wéwtuk** 'camp overnight' occurs in both languages and probably contains this element. For a possible Klamath cognate, see Klamath **tg^v-** 'stand (sg.)' (Barker 1963:405), perhaps also **din** 'lie (animal)' (Barker 1963:117).¹³

For a comparison of the Nez Perce stative /te/ and /tu/ forms, see Table 3 below (Aoki 1994:1033 provides a paradigm of a /-te/ verb).

Table 3. Nez Perce irregular stative forms

	*te forms	*tu forms
Remote		
Singular	-tecene	-tune
Plural	-tecine	
Recent		
Singular	-taqa	-toqa
Plural	-tiʔniqa	
Indefinite Past		
Singular	-tene	
Plural	-tene	
Present		
Singular	-te	-tu (translocative -tunki)
Plural	-tiʔnix	-tʔnix
Future		
Singular	-tenuʔ	
Plural	-tenuʔ	
Imperative		
Singular		
Plural	-teeʔnimtx (cislocative)	

¹³ Perhaps related are the Klamath interrogative **dat** 'where?' and locative noun case marker **-dat** (Barker 1963:126).

3. The conditional

The Nez Perce present conditional **-ʔax** suffixes to 0-verbs that have been nominalized by **-t** (ex. 87), and to n-verbs without **-t** (ex. 88). This **/-t/** was likely present in both cases and simply deleted phonologically (or historically) in the latter (see ex. 12 above).

- 87 **hiwat'áax**
 /hi-we-t-ʔaq/
 3NOM-be-N-COND.PRS
 It would have been (Aoki 1970:114)

- 88 **ʔaakín'ax**
 /ʔe-hekín-ʔaq/
 3ABS-see-COND.PRS
 I would have seen him (Aoki 1970:123)

The Sahaptin conditional **-taxnay** is a large enough morpheme that it ought not be too old and its derivation should be more or less transparent. There is no immediately discernable source in Sahaptian, however, and so it is likely that the **-tax** portion of this suffix is cognate with the Nez Perce conditional present **/-t'aq/**. Though **/-ʔaq/** glottalizes the **/-t/** in Nez Perce, this should not be expected in Sahaptin.¹⁴ The source of the remaining **-nay** portion of the Sahaptin conditional is probably **n** plus the past **-a** (see comments below), though it is not clear why this takes the form **-nay** in NW Sahaptin, **-na** NE and CR, and **-ni** Taytnapam or Upper Cowlitz (another NW dialect, see Jacobs 1931:206). The ***ʔaq** or ***ʔax** element is probably related to the nominal enclitic of the same form, e.g. the Nez Perce “optative” **/=ʔaq/** (Aoki 1970:59), ex. 89 below, and the Sahaptin **=ax** ‘wish, desire, hope’ (Jacobs 1931:129), ex. 90, and to the Nez Perce verbal desiderative **/-ʔeq/** ‘try, strongly wish’ (ex. 91). The desiderative meaning of these nominal and verbal elements thus suggests their verbal origin (‘want, wish, desire’), which would also represent the source of the Sahaptian conditional ***-ʔaq**.¹⁵

¹⁴ Note how the purpose nominalizer **/-ʔes/** similarly suffixes to 0-verbs with **/-t/** in Nez Perce and causes glottalization, e.g. **kúut'es** /ku-t-ʔes/ ‘in order to go’ (Aoki 1994:88), but that the **/-t/** is always missing on n-verbs, e.g. **tím'en'es** /tím'en-ʔes/ ‘in order to write, for writing, a pen’ (Aoki 1994:87). In Sahaptin the same purpose nominalizer suffixes to both types of verb stem with **-t**, and in neither instance does the **t** glottalize, e.g. **áštaiš** ‘in order to enter’ (**ášt** ‘enter’ is a 0-verb) and **wíyánintaiš** ‘in order to travel around’ (an n-verb). Both Sahaptin examples are cited from Millstein (1990b).

¹⁵ There seems to be no readily identifiable potential cognate in Klamath. Barker (1963) lists only one such verb, **san'aaWawli** ‘want, desire, wish’. It is large enough that one suspects a recent development. Barker (1963:348) suggests that the initial **sa-** may be the reflexive, and **Wawli** looks suspiciously like the Nez Perce **wéwluq** ‘want, desire, wish’ (already compared in DeLancey et al 1988:217). And according to DeLancey et al (1988:204), “[T]here is some evidence to suggest that postvocalic back fricatives [in Sahaptian] correspond to vowel length in Klamath”. It is thus possible that Klamath **san'aaWawli** contains an **ʔaa** element that is cognate with Sahaptian ***ʔaq**.

- 89 **ʔiin='ax hi-wtini-s**
 1SG.NOM=OPT 3NOM-share-PF
 I wish he would share with me (Phinney 1934:298:17-299:1)
- 90 **nimí=š=ax wá-taxnay**
 mine=1SG=wish be-COND
 I wish [they] were mine (Jacobs 1931:129)
- 91 **wiyúuy'eqse**
 /wîyé-vey-ʔeq-s-en/
 going.along-part-DES-IMPV-SG.NOM
 I am trying to go, I am dying to go (Aoki 1970:103; Aoki 1994:990)

Sahaptin has but the one conditional (see Table 1), whereas Nez Perce has two conditionals (Table 2), the present conditional **-ʔaq** just discussed above, and a past conditional **-oʔqa**. This past conditional is obviously constructed from the future **-uʔ** and recent past **-qa**, which suggests an origin as a counterfactual conditional. According to Givón (1990:831), “counterfactual clauses tend to be marked, cross-linguistically, by a combination of two *semantically conflicting* verbal inflections:

- (a) A prototypical *realis* operator, such as *past*, *perfective* or *perfect*; and
- (b) A prototypical *irrealis* operator, such as *future*, *subjunctive*, *conditional* or a *modal*.”

The counterfactual status of **-oʔqa** seems to have weakened and not apply in every example, however, e.g. compare 92 and 93 below.¹⁶

- 92 **c'alawí hi-páayn-oʔqa ʔipí watiisx,**
 if 3NOM-arrive-COND 3SG.NOM yesterday
- kaa ʔa-axn-óʔqa**
 and 3ABS-see-COND
- If he had come yesterday, I would have seen him (Aoki 1970:114)
- 93 **ʔa-kiyóo-yoʔqa c'alawí hi-tan'wáa-yo'qa**
 3ABS-marry-COND.PST if 3NOM-propose-COND.PST
 I would marry him if he proposed (Aoki 1978:63[11]:20)

¹⁶ For the first example Aoki notes that **/-ʔaq/** may be substituted in either the first or second clause without a change in meaning. Aoki also suggests that there is no change in meaning when **/-ʔaq/** marks both clauses, but perhaps such a construction would better be translated such that a degree of probability exists, e.g. ‘If he came yesterday I might have seen him’.

Sahaptin counterfactual conditionals mark both verbs with the conditional (ex. 94), whereas irrealis conditionals have the future in both clauses (ex. 95).

- 94 **iniit=naš wá-taxni ana=ku čáw i-lú-taxni**
 house=1SG be-COND REL=and NEG 3NOM-burn-COND
 I would have had a house had it not burned (Jacobs 1931:206)
- 95 **páyš=nam á-tkwata-ta ku=nam laʔák ʔ'iyáwi-ta**
 maybe=2SG 3ABS-eat-FUT and=2SG maybe die-FUT
 If you eat it you might die (CR Sahaptin)

Irrealis conditionals in Nez Perce also most often occur with both verbs in the future (ex. 96).

- 96 **c'alawí ʔée taxc wileliixn-u?**
 if 2SG.NOM FUT run.away-FUT
- méetmet ʔile-wiyn-úu-yu?-kum héenek'u?**
 do.not loudly-cry-DIR-FUT-CSL again
 If you run away, do not loudly beseech me again
 (Phinney 1934:7:16-17)

Both Nez Perce conditionals also serve as simple irrealis modals, often with an abilitative sense (exs. 97, 98). The same applies to the single Sahaptin conditional (ex. 99).

- 97 **kaa nek-s-iix ʔimé ʔéetx wi-s-iix**
 and think-IMPV-PL.NOM 2PL.NOM 2PL be-IMPV-PL.NOM
- ci-cikaw'is kaa ʔéetx ʔe-pe-x-yóʔqa**
 RDP-powerful and 2PL 3ABS-PL.NOM-do-COND
 And we think you are very powerful and you can/could do it (Phinney 1934:400:9-10)
- 98 **ʔitúu-ne páa-ko-t-ʔax**
 what-OBJ 3/3-do-N-COND.PRS
 What could she do? (Phinney 1934:114:7)
- 99 **áw=nan mš-knik ku=nan wínp-ata-taxnay ilkwiš**
 now=1PL what-INST and=1PL get-go-COND fire
 Now with what can/could we go get the fire? (Jacobs 1929:175:6-7)

Aoki (1994:974) notes that /-ʔaq/ occurs in prohibitive clauses, e.g. 100. The future is also very common in such constructions (ex. 101).

- 100 **kaa wéetmet wiyáa-q'ilawn-ʔax**
 and PROHIB going.along-look.back-COND.PRS
 And don't look back while going along (Aoki 1994:974)

- 101 **méetmet máwa q'ílaw-n-o?**
 PROHIB when look.back-FUT
 Do not ever look back (Phinney 1934:275:6)

Both Nez Perce conditionals co-occur with the imperfective. Aoki (1970:114) describes one instance where the imperfective plus /-ʔaq/ is used “to ask a rhetorical question” (ex. 102).

- 102 **mine ʔée paaláy-c-an-ʔax**
 where you run.away-IMPV-SG.NOM-COND.PRS
 Where do you get away? There is no place to run away to (Aoki 1994:974, Aoki and Walker 1989:185:53)

An example of the conditional /-oʔqa/ with the imperfective is **hiwsíinoʔqa** ‘they would be’ in 103 below.

- 103 **c'alwí páaxa-ti-px meqséem-ne páa-yawnan-oʔqa**
 if five-NHUM-ALL mountain-OBJ 3/3-cross.over-COND
 If he had crossed the fifth mountain

q'oʔ yox kíne ʔéleyn-pe
 indeed that this.LOC west.country-LOC
 then in this country indeed

hi-w-s-iin-oʔqa kúnk'u-ʔayn ʔóykala
 3NOM-be-IMPV-PL.NOM-COND always-BEN all
 they would be living for all time

yox ka hi-ʔnakiix-c-in-m-qa
 that REL 3NOM-bring-IMPV-PL.NOM-CSL-RCP
 those (game animals) which he was bringing (from the East Country) (Phinney 1934:75:5-7)

4. Imperatives

The Sahaptian imperative *-k is shared by both languages, e.g. Sahaptin (ex. 103) and Nez Perce (ex. 104).

- 104 **át-k**
 exit-IMP
 Go out!
 (Jacobs 1931:208)

- 105 **ʔáatx**
 /ʔáti-k/
 exit-IMP
 Go out! (Aoki 1994:188)

Nez Perce /-k/ deletes on all n-verbs (exs. 106, 107, 108).

- | | |
|--|---|
| <p>106 hín
 /hín-k/
 say-IMP
 Say! (Aoki 1970:117)</p> | <p>107 ʔehékin
 /ʔe-hekín-k/
 3ABS-see-IMP
 See it! (Aoki 1970:117)</p> |
| <p>108 wiskeʔéyn
 /wiskeʔéyn-k/
 travel-IMP
 Take a trip! (Aoki 1994:215:18)</p> | |

The /n/ also deletes after back or low vowels (exs. 109, 110).

- | | |
|--|--|
| <p>109 ʔipsqílehne
 /ʔipsqílehnen-k/
 walk.down-IMP
 Walk down!
 (Aoki 1970:117)</p> | <p>110 timmíyu
 /tímmíyun-k/
 figure.out-IMP
 Figure [it] out!
 (Aoki 1994:744:27)</p> |
|--|--|

Note also the behavior of k-stems:

- 111 **ʔew'níix**
 /ʔew-ʔínikî-k/
 3ABS-place-IMP
 Place it! (Aoki 1994:1040:13)

Nez Perce has a special imperative /-i/ for V-stems which are 0-verbs (exs. 112, 113, 114, 115). This imperative may be cognate with the Klamath imperative singular -i (Barker 1963:174).

- | | |
|---|--|
| <p>112 kúy
 /ku-i/
 go-IMP
 Go! (Aoki 1994:244:16)</p> | <p>113 wécey
 /wéce-i/
 2 ride-IMP
 Ride! (Aoki 1994:844:5)</p> |
| <p>114 haníi
 /hani-i/
 make-IMP
 Make! (Aoki 1994:96:16)</p> | <p>115 ʔew'níi
 /ʔew-ʔíni-i/
 3ABS-give-IMP
 Give him [something]! (Aoki 1994:1036:29)</p> |

In both languages the imperative is pluralized by *-t (exs. 116, 117). In Warm Springs, one of the CR dialects of Sahaptin, the imperative plural takes the form -ti (ex. 118), which probably preserves the same old imperative *-i which occurs on V-stems in Nez Perce and serves to mark the imperative singular in Klamath (see above).

116 **tkwáta-t-k**
eat-PL-IMP
Eat! (Sahaptin)

117 **hipítx**
/hîpî-t-k/
eat-PL-IMP
Eat! (Nez Perce)

118 **tkwáta-t-i**
eat-PL-IMP
Eat! (Warm Springs)

This *-tk complex also pluralizes the Nez Perce indeclinable pronoun ʔée 'you (sg.)', e.g. ʔéetx 'you (pl.)'. This pluralizing *-t is probably cognate with the /-ad/ or -at element which pluralizes Klamath personal pronouns (119 below).¹⁷

119 Klamath personal pronouns (Barker 1962:239)

	Singular	Plural
1st person	ni	naat
2nd person	ʔi	ʔaat
3rd person	bi	baat

¹⁷ Nez Perce has one other indeclinable pronoun, kfyé 'we, us (inclusive of hearer)', which is made exclusive by /-k/, e.g. kfyex 'we, us (exclusive of hearer)' or 'I, me'. This exclusive /-k/ is the same as the exclusive pronominal enclitic (see Aoki 1970:129f., 1994:187). Here we might consider the possibility of a connection to the Klamath 1st person hortative -ek 'let me ...' (Barker 1963:126:32), and ask if perhaps such a sense could have been extended in Sahaptian to 'let me have you ...'. Sometimes Sahaptin =maš 'I acting on you' (which contains the equivalent Sahaptin exclusive element =š) appears in imperative constructions, so perhaps it is not totally out of line to imagine marking the speaker in imperatives.

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ADDENDA I. SOUND SYMBOLISM

Besides regular sound change, one finds examples within Sahaptian where the sounds joined by the lines in the consonant chart below are related by sound symbolism. This excludes, of course, the aspirated series which Sahaptian does not have (but which Klamath does and where there is evidence of the same relatability by sound symbolism).

p	t	λ	—	č	—	c	k	—	k ^w	—	q	—	q ^w	?
p ^h	t ^h	λ ^h	—	č ^h	—	c ^h	k ^h	—	k ^{hw}	—	q ^h	—	q ^{hw}	
p'	t'	λ'	—	č'	—	c'	k'	—	k' ^w	—	q'	—	q' ^w	
		t	—	š	—	s	x	—	x ^w	—	x̣	—	x̣ ^w	— h
m	n	—		l										
w		—				y								

The Proto-Sahaptian vowel system is reconstructable as given below. In it vowel harmony related *u - *o and *e - *a, and two varieties of *i which are realized in Nez Perce as /i/ - /â/.¹⁸ In addition, the vowel *i alternated in an ablaut system with *ee/*aa and *ii (see Jacobs 1931:140). I believe that Sahaptian vowel harmony was originally the vocalic part of the more general sound symbolism so prevalent in Sahaptian and also areally. Though vowel symbolism later became automatic, the strong vowels are still diminutive in Nez Perce. And every sound symbolic alternation in Sahaptian is either a more or a less harmonic "across the board" feature. The *n - *l and *š - *s alternations are closer to the vocalic alternations in that they are pretty well assured by the symbolic status of the word. Within a word every *n tends to change to *l and every *š to *s, whereas in the same word *m is less likely to change to *w even though this is an attested sound symbolic alternation in both languages.

i	i	u
		o
e	—	a

In historical linguistics there is always the tendency to reconstruct too many sounds. Initially, at least, Proto-Inventories will tend to be large enough to accommodate every observable alternation,

¹⁸ That this latter alternation already existed in Proto-Sahaptian is suggested by the fact that the weak variety of *i caused palatalization in Sahaptin (e.g. Sahaptin čimti 'new', Nez Perce /k̄imti/ 'new'), whereas the strong variety did not (e.g. Sahaptin tlnf 'twist, intertwine, roll together', Nez Perce /tākālāyn/ 'exchange, trade', Sahaptin tk'in 'watch', Nez Perce /tāk'āyn/ 'watch'). But the derivational role played by sound symbolism sometimes skews this pattern, e.g. Sahaptin č'láy 'dried salmon' probably derives from a weak vowel variety of Nez Perce /k'āllay/ 'dog salmon'.

and thus the more daughter languages there are, the larger will be the sound inventory. Penutian is notorious here, with its seemingly sporadic correspondences across so many potentially good cognate sets. Some of this obviously represents borrowing. But if the field is ever to be put on a more solid footing, Penutianists must confront this issue. If we are going to relate the California and Oregon languages, we will have to ask ourselves whether the larger sound inventories that we find in the north better represent the Proto-language (with simplification having taken place in the south), or whether the earlier sound inventory looked more like a California language, that perhaps it was in the north, in contact with richer sound systems and a more productive sound symbolism, that the Oregon languages came to look more like Pacific Northwest languages. This would not have to imply a northward migration, just that those languages which remained in contact with the richer sound systems experienced the greater development. If we were to reconstruct a Proto-Penutian sound inventory something like that given below, sound symbolism would certainly allow for each phase of expansion in the Oregon languages. More likely the actual situation in Proto-Penutian, if such a language ever existed, was a compromise somewhere between the extremes suggested by the two sound inventories I have charted.

p	t	č	k	ʔ	i	i	u
	s	š	x	h			
m	n					a	
w		y					

Borrowing and influence can penetrate at many levels, vocabulary being the most obvious. And borrowing, along with pure chance, seems to be the currently most popular way to dismiss similarities. But areal influence is not always just an easy answer to similarity in vocabulary. Sometimes, as in our case, it can explain why similar vocabulary was NOT borrowed. Recognition of the areal influence of sound symbolism and the rich inventory of sounds this implies suggests that we might be able to discern more inherited Penutian vocabulary in all our languages.

This should not imply that for us anything goes, that in our field there are no regular sound correspondences. But it does mean that we need more detailed studies of sound symbolism in all our languages, of each particular alternation pattern and its semantic/derivational/functional motivations.

ADDENDA II. FORMATIVES OF SAHAPTIAN VERB SUFFIX INFLECTIONS

***7in.** Together with /-ik/ and the frozen indicative /-e/, this element forms the plural habitual in Nez Perce, e.g. /-e7nik/. The probable source is the Sahaptian verb ***7in** 'lie', but it has no inherent sense of plural subject. For this we might compare the Klamath classifier **7i-** 'pl. objs.' (Barker 1963:32), and perhaps also Klamath **lol'al** 'pl. lie' (Barker 1963:222).

***7aq.** With nominalizer ***-t**, forms the present conditional in Nez Perce, as well as the **tax** element of the Sahaptian conditional, **-taxnay**. As a verbal auxiliary, Sahaptian ***7aq** probably originally meant 'want, wish, desire', which is the meaning preserved in the Sahaptian nominal enclitic ***=7aq**.

***7u.** Future tense in Nez Perce, also a component of past conditional **-o7qa** in Nez Perce. Probably related to a Nez Perce directive **-ú7**, and probably originally took the form **-u7ku**, which now survives only with the cislocative.

***e.** Past tense, perfective aspect. Also marks past in aspects, remote in Nez Perce. Frozen on to various verbal suffixes. May be very old in Sahaptian, cf. for example the Klamath indicative/-declarative **-a** (Barker 1963:41, 1964:163f).

***i.** Imperative. Only on vowel stems in Nez Perce, and with plural imperative in Warm Springs, e.g. **-ti**. Probably very old, e.g. compare the Klamath imperative singular **-i** (Barker 1963:174).

***k.** Imperative.

***kik.** Translocative directional. Also takes the forms ***-ki** and ***-ik**, depending on morphophonemic environment. Palatalized in NE Sahaptian, e.g. **-čič**.

***m.** Cislocative directional. Probably very old. There are suffixal **-m** cislocatives in Molala and Cayuse (Berman 1993), and prefixal cislocatives **m-** in Kalapuya (Jacobs 1945:215:16) and Takelma (Sapir 1922:88). The probable ultimate source for these morphemes would be a verb 'come'.

***n.** Very common stem final element in Sahaptian. Used derivationally.

***qa.** Recent past, only in Nez Perce. Together with the future forms the past conditional, e.g. **-o7qa**, **-o7komqa** with cislocative. Probably related to other Sahaptian morphemes which imply suddenness, unexpectedness, involuntary action, and which probably derive from an older root meaning 'fall down'. Probably related to the habitual ***-xan/*-qan**.

***š.** Present perfect. From a patient nominalizer ***-š**.

***šen.** Imperfective aspect. Singular nominative in Nez Perce. Cognancy with Klamath **č^v** 'sit (sg.)' (Barker 1963:67) would indicate the singular subject meaning was inherent in the original verbal source for this auxiliary, and that ***-šen** subsequently lost this feature in Sahaptian.

***šik.** Imperfective plural nominative, only in Nez Perce. Takes the form /-sin-/ before other suffixes. Probably ***šik** or perhaps ***sik** represents an early suppletive auxiliary meaning 'sit (sg.)'. Compare Nez Perce /sikís/ 'nest' (Aoki 1994:638), which may be a nominalization, and Klamath čii 'stay, live, dwell' (Barker 1963:77).

***t.** Nominalizer. With ***-ʼaq**, forms the present conditional in Nez Perce, and the **tax** element of the Sahaptin conditional.

***t.** Pluralizer for the imperative. Probably a very old morpheme. Compare, for example, the /ad/ element on the Klamath plural personal pronouns, /naad/ 'we' vs. /ni/ 'I', etc. (Barker 1962:239).

***te.** Future tense only in Sahaptin. Obviously an extension of Sahaptian ***-ten**, go for a purpose, which was originally the nominalizer ***-t** plus ***hen**, go. Cf. also Klamath **en**, go.

***ten.** Together with /-tun/ this auxiliary element forms the present habitual singular nominative in Nez Perce, e.g. **-tetu**, and with /-ʔinik/ the Nez Perce present habitual plural nominative, e.g. **-teʔnix**. From Sahaptian ***ten**, stand.

***tun.** From a Sahaptian verb ***tun** which probably originally meant 'stand (sg.)'. With /-te/ this forms the singular present habitual in Nez Perce, e.g. **-tetu**. If a cognate, Klamath **tgʷ-** 'stand (sg.)' (Barker 1963:405) would preserve the earlier singular sense.

***xan.** Habitual aspect. Singular nominative in Nez Perce. Probably related to the Nez Perce /ʔiqan/, lie on the back, and also an older Sahaptian element ***xa/*xe/*qa/*qe** which probably meant 'fall, drop', and which would be more directly the source of the recent past marker in Nez Perce (see ***qa** above). Here the habitual meaning would have derived from the more stative notion inherent in 'be lying down'. The singular subject of the Nez Perce auxiliary may be preserved in the Klamath **sqʷol** 'lie down (sg.)' (Barker 1963:391).

ADDENDA III. SAHAPTIAN VERB STEM CLASSES

The following is a list of Proto-Sahaptian verbs classified as to stem type. The reconstructions are based on Aoki (1962) and Rude (1992). The Nez Perce underlying forms are based on Rude (1992). In order to complete the list, several forms are cited as hypothetically Proto-Sahaptian when they are attested in only one language, usually Nez Perce for the rarer vowel stems. The list is not intended to be complete, however. The Sahaptian verbs are not guaranteed to be current in all dialects with the same meaning and form, though I have mentioned variants of which I am aware.

Part 1. Vowel stems, 0-verbs

a-stem

*háya. vt. Scratch. Sah áya, NP /háya/.

*hiča. vi. Climb. NP /hica/ vi. 'climb'.

*wapáyata. vt. Help. Sah wapáata, NP /wapáyata/. This is *wepé-, with the hand, plus *yata. See Aoki (1994:939).

e-stem

*ʔíte. vt. Put in. Sah fta(a), NP /ʔíte/.

*-če. vt. Be on, upon. Sah -ša, NP /-ce/.

*-pe. vi. Move into brush. Sah -pa, NP /-pe/.

*šišiʔe. vi. Freeze. Sah šiša, NP /sɨc'e/.

*téwe. vt. Pierce, skewer, roast, broil. Sah táwa, NP /túu/.

*tiy'e. vi. Laugh. Sah tíya, NP /tiy'e/.

*wé. vi. Be. Sah wá, NP /we/. *wek before a vowel.

*wét'e. vt. Beat, whip. Sah wát'a, NP /we'te/. Contains *we-, with an implement, and *t'e.

*weyeče. vi. Dance. wáaša, NP /we(y)ece/. Probably *weyé-, with rapid movement, plus *če, be upon.

i-stem

*ʔúyi. vt. Begin, start. Sah úyi, NP /ʔúyi/.

*haní. vt. Make. Sah aní, NP /hani/.

*-hi. v. Verbalizer, derives verbs from nouns. Sah -i, NP /-hi/.

*hínewi. vt. Try, test. Sah ínawí, NP /hínewi/.

*hétewi. vt. Esteem, value, honor, admire, love, like. Sah átawí, NP /hétewi/.

*mí. vt. Do, treat. Sah mǐ.

*náq'i. vi. Finish. Always attached to another verb or prefix, e.g. the transitivizer *hí-: Sah ínǎq'i, NP /hínǎq'i/.

*(?i)nǐ. vtt. Give. Sah nǐ, NP /ʔini/.

*péxwi. vtt. Steal from, rob. Sah páxwi, NP /péxwi/.

*piʔni. vi. Come out, emerge. Sah pni, NP /pín'i/. Sah šápni, NP /séʔni/, ask (Aoki 1994:543).

*qiʔni. vt. Dig roots. Sah xni, NP /qíʔni/.

*tamánwi. vt. Decree, ordain. Sah tamánwi, NP /tamálwi/.

o-stem

I am aware of no examples of o-stems, but u-stems of course become o-stems by vowel harmony, e.g. NP kosáaqa /ku-sen-qa/, I was going.

u-stem

*kú. vt. Do. Sah kú, NP /ku/. Also means 'go' in Nez Perce and NE Sahaptin.

Part 2. Vowel stems, n-verbs

an-stem

*hátyan. vi. Blow (of wind). Sah átya (of cold northeast wind, WSD), NP /hátyan/.

***(ʔi)pítyan**. vt. Sah **pítya**, spear. NP /**ʔiptâyan**/, stab (with a knife). Probably contains ***(ʔi)p-**, with the hand.

***(ʔi)píwan**. vt. Place [baby] in cradleboard. Sah **púwa**, NP /**ʔipâwan**/.

***támyan**. vt. Hit, throw at. Sah **támya**. NP /**támyan**/, Contains ***tém-**, throwing.

***wáwyan**. vt. Hit, whip, beat. Sah **wáwya**, NP /**wáwyan**/, Contains ***wéw-**, striking, making contact.

en-stem

***hen**. vi. Go. As directional ***-en**, thither. Sah **wína**, go. NP /**wihnen**/, leave. Sah **nána**, carry. NP /**ʔinénnen**/, carry. Sah **wána**, flow. NP /**welen**/, flow. ***-ten**, go for a purpose. Sah **-ta**, NP /**-ten**/, Likely the nominalizer ***-t** plus ***hen**.

***hititémen**. vt. Count, read. Sah **ititáma**, NP /**hitémen**/.

***šiw'en**. vt. Fail to recognize, not notice. Sah **šíwa**, NP /**síw'en**/.

***(ʔi)šíwen**. vt. Skin, butcher. Sah **šúwa**, NE **išúwa**, /**ʔisjwen**/.

***šúkwen**. vt. Know. Sah **šúkwa**, NP /**cúkwen**/, Cf. ***šúkin** below.

***ték'en**. vt. Distribute, give away. Sah **ták'a**. NP /**ték'en**/.

***téw'yen**. vi. Live, stay, reside, dwell. Sah **táwya**, NP /**téw'yen**/.

***tím'en**. vt. Mark, write. Sah **tíma**, NP /**tim'en**/.

***tiwen**. vi. Smell, stink. Sah **tíwa**, NP /**tiwen**/.

in-stem

***k'eʔiin**. vt. Peek in at, spy on. Sah **k'iin**, NP /**k'eʔiin**/.

***nknín**. vi. Go around, move around, rotate. Sah **nknín**, NP /**likilín**/.

***wín**. vi. Cry, weep, moan, wail. NP /**wín**/.

***q'in**. vi. Adhere, stick. Sah **q'in**, NP /**q'in**/.

***skilín**. vi. Turn, return. Sah CR **sklín**, NE **selín**, NW **slín**, NP /**cikilín**/.

*wixín (also *wexín, *wixín, etc.). vt. Throw away, remove, lose, toss, shed, put down, lay down, loosen. Sah wixín, wiqín, NP /wíqín/, /wiqín/, /weqín/.

on-stem

NP /nóon/. vt. Go gather (grass, firewood, tepee poles, moss, pitch, etc., “but not food items such as salmon, and camas”, Aoki 1994:493).

un-stem

*himyun. vt. Call or designate as a relative. NP /himîyun/.

*mún. vt. Call, invite, summon. NP /mún/.

*timmiyun. vi. Deliberate, decide, plan, scheme, figure out. Sah tmíyun, NP /tîmmiyun/.

*tún. vi. Sit (of inanimate subjects). Sah tún, NP /tun/. Always frozen in various words and aspectual forms. Sah pákun (sg.), ptún (pl.), sit (of 3rd person inanimate subjects). NP /ʔipetun/ (sg.), /ʔipetn'ik/ (pl.), stand (of 3rd person inanimate subjects).

Part 3. Diphthong stems (all are n-verbs)

awn-stem

*skáwn. vt. Fear, be afraid of. Sah skáwn, NP /cíkáwn/.

ewn-stem

*siséwn. vi. Drip, leak. NP /síséwn/.

iwn-stem

*ʔiwn. vi. Urinate. NP /ʔiwn/.

irwn-stem

*lirwn. vi. Burn. Sah lún, NP /lîwn/.

*q'ilirwn. vi. Turn the head around, look back. Sah q'inun, see (NW, CR only). NP /q'iláwn/, turn the head around, look back.

ayn-stem

*páyn. vi. Appear, arrive. NP /páyn/.

eyn-stem

*himéyn. vt. Suspect, blame, accuse. NP /himéyn/.

oyn-stem

*hoyn. NP /-hoyn/ (reflexive), exercise, get in shape, train, condition.

*poʔóyn. vi. Snow. Sah púuyn, NE puʔúyn. NP /pohoyñ/, snow, fine snow (n.).

uyn-stem

*múyn. vi. Rise (of steam, vapor). NP /múyn/.

*wúyn. vi. Escape, flee. NP /wúyn/.

iyn-stem

*p'íyn. vi. Drain, seep. Sah p'ín, NP /p'âyn/.

*tk'íyn. vt. Watch, look at. Sah tk'ín, NP /tâk'âyn/.

*tkníyn. vt. Sah tknín, twist, roll (strands together), NP /tâkâlâyn/, exchange, trade.

*toniyn. vi. Go upriver, go upstream. Sah túnin, NP /tolâyn/.

Part 4. Consonant stems, 0-verbs

*ʔáč. vi. Enter, go in. Sah áš, NP /ʔáci/.

*ʔát. vi. Exit, go out. Sah át, NP /ʔátí/.

*ʔáyx, *ʔíix. vt. Wash. Sah íix, NP /ʔayq/. The Nez Perce verb occurs only with /wepé-/ , with the hand. (Aoki 1994:982)

*híwék. vi. Dream. Sah ʔwák, NP /hiwék/.

*hip. vt. Eat. NP /hípí/.

*-k. v. Common derivational element. Derives verbs from adjectives, transitivizes some verbs, and co-occurs with certain adverbial prefixes. (Jacobs 1931:196; Aoki 1970:99)

***nék.** vt. Think. NP /nekî/. Perhaps a metaphoric extension of ***nék**, carry, which never occurs stem finally in Sahaptian.

***(?i)nik.** vt. Put, place, put away. Sah **ník**, NE **?ník**, CR **níč**, NP /?inikî/. With ***we-**, with the mouth: Sah **waník**, CR **waníč**, NP /we?nikî/, name, be named. With ***teme-**, throw: Sah **tamaník**, CR **tamaníč**, NP /tamanikî/, plant, sow.

***nip.** vt. Get, seize, grab, take, hold, buy. Sah **wínip**, NP /?inîpî/. Occurs in many derivations: With ***ke-**, with the teeth, Sah **čánp**, NP /ke?nîpî/, bite. With ***we-**, with the mouth, Sah **wánp**, NP /we?nîpî/, sing. Probably related to ***?ip**, hand. Cf. Klamath **n'ep**, hand (Barker 1963:275).

***ʔ'ik.** vt. Break, split, cut. Sah **ʔ'k**, NP /c'âk/. In both languages this root occurs only with an adverbial prefix.

***wéwtuk.** vi. Camp overnight, stay the night. Sah NW **wáwtkw**, NE, CR **wáwtuk**, NP /wéwtuk/. Probably contains the element ***tun**, sit, and stem final ***-k**.

***wek.** vi. Be. Allomorph of ***we**, be, which occurs before a vowel. Sah **wač-**, NP /wek/.

***wéyik.** vt. Cross over. Sah **wáyk**, CR **wáyč**, NP /wéyik/.

Part 5. Consonant stems, n-verbs

***?in.** vi. Lie, lie inanimately. Sah **ín** (Jacobs 1929:181:6-182:1; 186:3; 214:8), NP /?in/.

***?iyáqin.** vt. Find. Sah **?yáxin**, NP /?iyáqin/.

***hékin.** vt. See. NP /hekîn/. Sah **áčaš**, eye, is a derivation via the purpose or instrument nominalizer **-aš**. NE **túukin**, see, is probably connected via some adverbial prefix ***tew-**.

***héšin.** vi. Breathe. Sah **háašin**, NP /hésîn/. The Sahaptin word may be borrowed from Nez Perce, which would account for the preservation of ***h** and the long vowel.

***hín.** vt. Say, tell. Sah **inn**, NP /hîn/. The double n-verb status in Sahaptin (i.e. the **n** does not delete before **š** or **t**) is probably due to reanalysis based on the fact that in Sahaptin this verb is generally realized phonetically (especially after a prefix) as a syllabic **n**, i.e. [ʔn] as in **pá?ina** [pá.ʔn.na], he was told by him. Compare **áwna** [ʔáwina] or [ʔáwna], told him.

***hišin.** vtt. Win (from). Sah **išin**, NP /hisîn/.

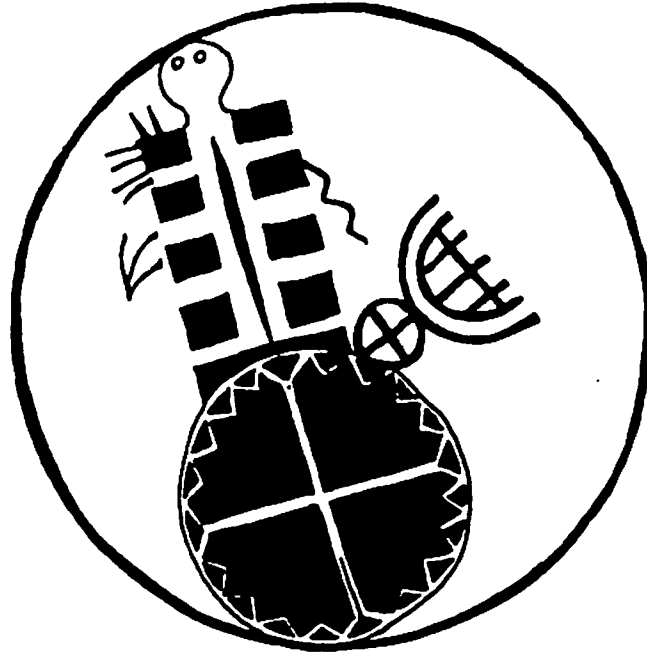
***na?ámn.** vi. Wear out, be exhausted, disappear. Sah **náamn**, NE **na?ámn**, NP /la?ámn/.

***šúkin.** vt. Know, find out. Sah **šúkin**, NP /sukîn/.

***tútín.** vt. Pound, grind. Sah **tútín**, NP /tútín/.

REPORT 9

**SURVEY OF CALIFORNIA AND
OTHER INDIAN LANGUAGES**



**PROCEEDINGS OF THE
HOKAN-PENUTIAN WORKSHOP**

**July 8-9, 1994
University Of Oregon, Eugene**

And

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INTRODUCTION

The papers in this volume were originally presented at the meetings of the Hokan-Penutian Workshops in Eugene, Oregon, July 8-9, 1994, and in Albuquerque, New Mexico, July 5-6, 1995. The 1994 Workshop was held in conjunction with a two-week invitational conference on Comparative Penutian Linguistics (the proceedings of which will be published in a forthcoming issue of the *International Journal of American Linguistics*) and was organized by the coordinators of that conference, Scott DeLancey and Victor Golla. The 1995 Workshop was one of a series of meetings on Americanist linguistics that formed part of the 1995 Linguistic Institute at the University of New Mexico, and was organized by Victor Golla under the auspices of SSILA.

A special feature of the 1995 Hokan-Penutian Workshop was a half-day session on the *Present Status of Hokan Linguistics* specially organized by Margaret Langdon and William H. Jacobsen, Jr. A substantial part of the present volume is given over to Appendices containing the bibliographies and short summaries of pronominal reference and case systems that were prepared for this session. Also included is the draft of a lexicon of Seri, prepared by Stephen A. Marlett and Mary B. Moser for Mary Ritche Key's "Intercontinental Dictionary Series," a lexical database designed to facilitate crosslinguistic research. The format of this database is derived from Carl Darling Buck's *Dictionary of Selected Synonyms in the Principal Indo-European Languages*.

This is the second volume of Hokan-Penutian Workshop Proceedings to be published by the Department of Linguistics, University of California, Berkeley, as one of the *Reports* of the Survey of California and Other Indian Languages, under the general editorship of Leanne Hinton.

Victor Golla
Volume Editor

CONTENTS

PENUTIAN LANGUAGES

<i>Harold Crook, On Nez Perce Nouns with Irregular Metrical Behavior or "Why 'Grizzly Bear' Has Horrible Stress"</i>	1
<i>Anthony P. Grant, John Milhau's 1856 Hanis Coos Vocabularies: Coos Dialectology and Philology</i>	15
<i>Marvin Kramer, The Development of Head Marking in Eastern Miwokan: Implications for Contact with Proto-Yokuts</i>	43
<i>Noel Rude, The Sahaptian Inflectional Suffix Complex</i>	51
<i>Marie-Lucie Tarpent, Reattaching Tsimshianic to Penutian</i>	91

HOKAN LANGUAGES

<i>Pamela Munro, Valence Arithmetic in the Tolkapaya Lexicon</i>	113
<i>Margaret Langdon & William H. Jacobsen, Jr., Report on the Special Hokan Session in Albuquerque, July 1995</i>	129

APPENDICES

A. Hokan Bibliographies

<i>Selected Bibliography of Recent Works Relevant to Hokan (William H. Jacobsen, Jr. & Margaret Langdon)</i>	131
<i>Publications Concerning Washo and Hokan (William H. Jacobsen, Jr.)</i>	133
<i>Bibliography of the Yuman Languages (1995 update) (Margaret Langdon)</i>	135
<i>Wordlists on Yuman Languages from Smithsonian in Yuman Archives, UCSD</i>	161
<i>Seri Bibliographical Items, Post-1980 (Stephen A. Marlett)</i>	163
<i>Bibliography of Oaxaca Chontal (Tequistlatecan) (Viola Waterhouse & Margaret Langdon)</i>	165
<i>Bibliography of Jicaque (Margaret Langdon & William H. Jacobsen, Jr.)</i>	169

B. Pronominal Reference and Case Systems in Selected Hokan Languages

<i>Karuk Pronouns (Monica Macaulay)</i>	171
<i>Washo Pronouns (William H. Jacobsen, Jr.)</i>	175
<i>Proto-Yuman (Margaret Langdon)</i>	177
<i>Sketch of Yavapai (especially Tolkapaya) (Pamela Munro)</i>	179
<i>Summary of Seri Pronominal Reference and Agreement (Stephen A. Marlett)</i>	187
<i>Oaxaca Chontal (Tequistlatecan) Pronominal Reference (Viola Waterhouse & Margaret Langdon)</i>	189

C. Seri Contribution to the Intercontinental Dictionary Series (Stephen A. Marlett & Mary B. Moser)

191