

Phonetic Variation in a Chinook Jargon Lexicon
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Phonetic variants of Chinook Jargon lexical items recorded by Jacobs and myself from five fluent speakers, all individuals whose experience of the language stemmed from long residence at Grand Ronde Reservation, Oregon, are collated. Notes highlight issues and problems encountered in the attempt to devise orthographic conventions applying consistently to all five speakers.

The collation of lexical data given here is meant to contribute to the eventual compilation of a comprehensive Chinook Jargon lexicon for the variety of the language once used daily at Grand Ronde Reservation, Oregon. As a first step to this end, I have compared selected lexical data representing several of the older fluent speakers. The substance of this exercise is given in the standardized spellings prefacing each of the numbered entries in the sample.

In arriving at these spellings, I have tried to avoid prejudging whether, or to what degree, the speakers share a uniform Jargon phonology. Accordingly, I have adopted a conservative attitude towards the retention of phonetic detail: where phonetic forms of a given item appear to resist simplification, or where a particular form appears to violate expected patterns, I have assigned variable features and/or variant forms to the item in question.

My own sense (after completing this exercise) is that the speakers indeed do share essentially the same repertoire of phonetic features and basic phonological patterns. This happens to be rather closely congruent with Thomason's (1983) outline of regional Jargon phonology. At the same time, the plethora of variant forms recorded suggests that

the repertoire provides something more like a menu of permissible options, than prescriptions dictating "correct" realizations.

Data

The comparisons adduced are based upon Jacobs's data from three of his tribal-language informants (actually two, supplemented by selected data from a third)--the only long-term residents of Grand Ronde from whom he secured significant Jargon data--and two of the nine non-tribal-language speaking Grand Ronde elders from whom I secured Jargon data--the particular two who, in my judgment, had had the most intensive early-life experience of Jargon. Two further restrictions have been imposed upon the sample: the sample is limited to items recorded from at least three of the four principal speakers; and comparisons are limited to stressed forms of items.

The speakers and sources are as follows:

JH: John B. Hudson. Languages: Santiam (Central) Kalapuyan, Chinook Jargon, English; passive competency in Yoncalla (Southern) Kalapuyan. Jargon data in Jacobs (1928, 1932, 1936).

VH: Mrs. Victoria Howard. Languages: Clackamas (Upper) Chinookan, Molala, Chinook Jargon, English. Jargon data in Jacobs (1929-30, 1936). Some items have been cited from her Clackamas text dictations; these appear with dashes, indicating that they form parts of Chinookan words (e.g., -guú, -guú-, item 55).

LK: Louis Kenoyer. Languages: Tualatin (Northern) Kalapuyan, Chinook Jargon, English; passive competency in Central Kalapuyan. I had originally intended to incorporate all the LK Jargon data, but have ended up citing them only selectively. Except for a short Jargon text recorded by DeAngulo and Freeland (1929), all Jargon items appear in the context of Tualatin dictation (Jacobs 1936a). Both sources must be taken with caution: DeAngulo and Freeland recorded without previous experience in the region; and LK tended to eke out his Tualatin with Jargon, so may have imposed Tualatin phonology on Jargon items dictated to Jacobs.

WB. Wilson Bobb. Languages: Chinook Jargon, English. Data are from my own retranscriptions of field tapes (recorded 1980-83).

EJ. Mrs. Esther LaBonte. Languages: Chinook Jargon, English. Data as for WB above.

Jacobs (1936:vi) advises us not to reside full confidence in his early (that is, 1928) Jargon recordings from JH. Nonetheless, the JH 1928 data offer some advantages: they are rather extensive; and the transcription is much narrower than the one Jacobs adopted during his 1929-30 sessions with VH, and continued to use from then on. The later transcription reflects Jacobs's grasp of regionally ubiquitous phonetic features, and is phonetically much simplified by comparison with the earlier. It must be noted that Jacobs explicitly assumed that Indians used tribal-language phonologies in speaking Jargon. Needless to say, a broad transcription produced with such a working assumption runs the risk of glossing over evidence to the contrary. That something like this may indeed have happened is suggested by a comparison of the two extant versions of the one JH 1928 Jargon text recorded--the original version in field notebook 34, and the published version in Jacobs (1936:14). The published version has been normalized by Jacobs without informant assistance. Where the original has *kám̄t̄ʌks* (item 52), *náika* (117), *íáat̄ʌ_owa* (87), *tílixam* (167), for example, the published has normalized *kám̄daks*, *náiga*, *íáadwa*, and *dílxam*. In each of these cases, variants more like the original forms than the normalized forms have been obtained from other Grand Ronde speakers, including JH's own daughters.

Observations

The phonetic simplifications worked out in the standardized spellings may be summarized with reference to the following list of suggested segmental phonemes.

| | | | | |
|-----|-----|----|-----|------|
| (b) | p° | p | p' | m |
| (d) | t° | t | t' | n |
| | | c | c' | s |
| | | ç | ç' | ʃ |
| | | | ɸ' | ɹ |
| | | | ɬ | l |
| | | | | y |
| (g) | k° | k | k' | x |
| | k°w | kʷ | k'w | xʷ w |
| | q° | q | q' | x |
| | q°w | qʷ | q'w | xʷ |
| | | | ? | h |

| | |
|---|-------|
| i | u |
| e | ə (o) |
| a | |

Notes

Parenthesized segments occur as variants of non-parenthesized counterparts, but evidently also as alternates of the latter in items of European (French and English) origin. In such items, that is, they appear to transmit source-language features into the speakers' Jargon (compare /r/, found regularly only in items of French provenience).

Vowels

Unstressed vowels are modally short, stressed vowels optionally long. Vowel length may convey emphasis or augmentation.

Vowel length is additionally related to syllable structure. Bi- and tri-syllabic items exhibiting the pattern CV/CV(C).. may show stress on either side (or sometimes, on both sides) of the mark -/-. A stressed initial syllable is rarely recorded long. A final or penultimate syllable that may accept stress may also occur long, whether stressed or unstressed: stressed, such a syllable is recorded long more often than not. A number of items with V/CV(C) and CVC/CV(C).. structures exhibit parallel stress placement (in 70 and 71, note, CVC/CV(C) appears in contracted alternates of modally-

patterned forms). I have tentatively imputed the basic pattern also to items 1, 41, 55, 122, based on what I take to be pattern resemblances.

Perhaps, the initial glottal stops recorded for some variants of items 1, 5, 7 should be attributed to the standardized forms: their syllable formulae would then conform to the modal pattern. The alternate form of 7 with initial /h/ offers some support for making such an adjustment.

/i/ and /u/ have the qualities [i], [u], respectively, when short, [i], [u] when long.

[e] occurs both as /e/, and as a variant of /i/.

o ([o], [ɔ]) occurs as a frequent variant of /u/ in indigenously-derived items: more frequently in association with velars, nearly predictably following back-velars. It is evidently to be interpreted as an alternate of /u/ in European-derived items, where it corresponds to French and English /o/, /ɔ/.

/a/ may have the quality [ʌ] when short, especially in environments where velars are present: however, there seem too many exceptions to make a consistent rule. I have normalized [ʌ] to /ə/ in items 43, 52, 110, rather than to /a/ (vs. Jacobs), since the items show [ʌ] consistently in narrow transcription.

/ə/ is also adapted to cover instances in which short vowels, stressed or unstressed, fluctuate wildly in quality. Environments with velar fricatives are especially likely to show such vowels.

Consonants

ɬ (L = Lambda) is an occasional variant of /t/.

All speakers show sporadic and inconsistent alternations involving /s/ and /š/ (and less frequently, /c/ and /č/). In items 107 and 144, the alternation appears to be regular: some speakers using an alternate with /š/, the others using an alternate with /s/.

The segmentation of the inaspirate stops (C^o), both in relation to the plain stops (C) and the glottalized stops (C'), presents difficulties. Indeed, there is some doubt as to whether the C^o series should be considered phonemically distinct. In the field transcriptions, C^o transliterates (a) unaspirated stops (and occasionally, affricatives) that may be accompanied by transitory voicing, and (b) glottalized stops (or affricatives) accompanied by inaudible or very feeble release. The two kinds of articulation are virtually impossible to discriminate accurately. The confusion between the two in my own transcriptions reflects a peculiarity shared by all the

speakers I have worked with: barring some expressive and individual variation, glottalized obstruents are quite weakly ejected. Since Jacobs encountered exactly the same difficulty in his work with JH (Hajda 1976), my own and Jacobs's usages here should be about comparable: i.e., my C^o should = Jacobs's "intermediates" (symbolized by small upper-case sonant symbols in his mature transcription, by small upper-case surd symbols in his 1928 transcription). In fact, I have experienced great difficulty in auditing the relevant distinctions on tape (Jacobs of course transcribed directly from live dictation). My marks [̣] (aspiration) and [̤] (brief voicing/weak glottalization) should be taken to indicate that the features in question were more-or-less audible to me on tape. Elsewhere, I write plain stop symbols. In Jacobs's mature transcription, plain stop symbols stand usually for aspirated stops; in the 1928 JH transcription, however, plain stops often appear where the later transcription would lead us to expect sonants. This variance between Jacobs's earlier and later usages complicates the evidence for a distinct C^o series.

However, while the evidence supporting an independent C^o series is ambiguous, it is also difficult to wish away. In a number of items (56, 127, 128, 130, 159, 160, 162, 171) inaspirate stops occur consistently (or nearly consistently) as initial segments of stressed syllables. A greater number of items (54, 55, 126, 129, 131, 163, 165, 166, 167, 168, 170) show this distribution in forms from certain speakers.

In medial positions, the C^o : C distinction appears to dissolve for all speakers. As a general rule, non-glottalized stops occurring medially are recorded voiced or inaspirate in the environment V V: plain stops may be substituted to convey an impression of extra careful or explicit speech.

Although C^o is also a variant of C', making for some ambiguity here too, the case for an independent glottalized series is quite strong. Of the items showing glottalized obstruents initially in stressed syllables, only a few (17, 99, 101, 124) prove somewhat problematic with respect to establishing a glottalized : plain contrast. 17 and 124, as it turns out, are probably explainable in terms of Chinookan alternate forms influencing the speakers: Sapir (in Boas 1911:628) cites the Wishram forms i-tsiktsik DIMN 'wagon', is-tsiktsik DIMN 'buggy', and i-djikdjik AUGM 'heavy truck' (the unmodified form, unattested, would have [tʃ]) as examples of diminutive and augmentative consonantism in Upper Chinookan. Similarly, WB's form p'us 'cat' may trace to a diminutive form ('kitty?') used in the Upper Chinookan extended family of his childhood (Sapir in Boas 1911:641 attests a-lap'us DIMN 'cat' in Wishram).

References

- Boas, Franz
1911 Chinook. In Handbook of American Indian Languages, vol. 1. BAE Bull. 40. Washington.
- DeAngulo, J., and L. S. Freeland
1929 The Tfalati Dialect of Kalapuya. (MS in the Melville Jacobs Collection, University of Washington Archives, Seattle.)
- Jacobs, Melville
(Note: all MS items are in the Melville Jacobs Collection.)
1928 [Chinook Jargon data from John Hudson, field notebooks 33 and 34.]
1929-30 [Clackamas Chinookan and Chinook Jargon data from Victoria Howard, field notebooks 51-69.]
1932 [Chinook Jargon texts from John Hudson, field notebook 87.]
1936 Texts in Chinook Jargon. University of Washington Publications in Anthropology 7(1):1-27.
1936a A Tualatin Autobiographic Fragment with some other Tualatin Texts. (MS, folders 91-1, 91-2.)
- Hajda, Yvonne
1976 Mary's River Kalapuyan: A Descriptive Phonology. (M.A. Thesis in Anthropology, Portland State University, Portland.)
- Thomason, Sarah
1983 Chinook Jargon in Areal and Historical Context. Language: 59(4):820-870.

The Sample

Phonetic forms from all sources have been transliterated into the same phonetic orthography. It should be borne in mind that orthographic identity does not imply that the original transcriptions are 100% congruent. My own data, Jacobs's JH 1928 data, and the few LK forms cited from DeAngulo and Freeland are considered to be narrowly transcribed: these are cited without underlining. Underlining is reserved for forms appearing in Jacobs's normalized (post-1929-30) transcription. However, for economy's sake, normalized forms are sometimes cited without underlining: in such cases, they exhibit accidental orthographic identity to narrowly-transcribed forms, permitting the same form to be cited for two or more speakers. Where Jacobs's original field texts reveal errors in, or interesting points of variance with respect to his published forms, the former are bracketed and placed with the latter (Jacobs's field forms are also normalized, but somewhat less broadly so than the published ones).

- 1) (')a/'lim 'to rest'. JH alím, WB ʔàlím, EJ ʔa...lím, ʔalé(e)m.
- 2) 'alta 'now, then'. JH á_ált°a, VH, WB, EJ (ʔ)álda.
- 3) 'atqi 'later'. JH á_átk°i, JH, VH á_tqi, WB á_tqi_e, EJ ʔá_tqi, ʔá_tqi°i.
- 4) 'anqati 'long ago'. JH áraqatí, JH, VH á(a)ngadi, WB ángadi, EJ ʔaanqadi (AUGM).
- 5) 'a/'éa 'to wait'. JH, VH a_dá(a), WB atá, ʔat°áa, EJ ʔát°aa.
- 6) 'au 'y. brother'. JH, VH áu, VH, WB áau.
- 7) 'a/'yaq, ('ha/'yaq) 'quickly'. JH (h)áyáq, (h)áyáq, á_yáq, VH á_yaq, a(a)yáq, WB ʔáyaq, ʔáyáq, [áyáq], EJ ʔayaq.
- 8) 'bastən 'white person'. JH bástən, WB báasdən, báasn, EJ báasdʔn, báasn. [b = slightly devoiced]
- 9) 'čaku/-a 'come' > 'čaku-('čau-)'becomə'ΛuxV. JH tšáak°o, tšágwa, VH tšágu-, tšágu, tšáguwá, WB tš'águ-, tš'áu-, tš'á(a)go.u, tš'ágwa, EJ tš'águ_o-, tš'áago. (Cf. items 48, 87)
- 10) 'čəč, 'čič 'grandmother'. JH tšítš, VH 'čəč, EJ tš'ítš.
- 11) 'či/'nuk 'Chinook Jargon'. JH tšínuk, WB tš'ínu(u)k, tš'inúk, EJ tš'ínuk.
- 12) 'čxəp, 'čip 'to extinguish'. VH tšxəp, WB tš'íp, tš'xíp, tš'xəp, (tš'xəp, tš'əxp), EJ tš'íp, tš'əp.
- 13) 'čxi, 'či 'new, young, anew'. JH tšxíi, tšhíi, tš(')íi, VH tšxíi, WB tš'íi.
- 14) 'cuq, 'c(č)əq 'water'. JH tsúq_k, VH tsúq, WB ts(')əq, ts(')ú_óq. (tšəq), EJ tsəq.
- 15) 'c'əm 'mark, to mark'. JH ts'ím, VH ts'əm, WB, EJ ts'ám.
- 16) 'c'ipi 'to miss'. JH ts'íip°_pí?, tsíipí?, WB ts'íip°_bí, EJ ts'íip°_pí.
- 17) 'c(')ikc(')ik, 'č(')ikč(')ik 'wagon'. JH ts'íkts'ík, tsíktsík. tš'íktš'ík, WB, EJ ts'íksík, LK tšíktšík, tšíktšík.
- 18) 'd.t°ala 'dollar, money'. JH, LK t°á(a)la, WB, EJ dá(a)la.
- 19) 'd.t°an(i)s(š) 'dance, to dance'. JH t°ánis_š, VH dáanə_is, WB dáans, dáans.
- 20) 'dret 'right, true, rightly'. JH dré(é)t, diréct, (t°iréct), VH, WB dré(é)t.

- 21) 'haus 'house'. JH, VH háus, WB, EJ háaus.
- 22) 'ha/'yaš_s 'big, great'. JH háyaas, hayáas, háyas_š, hayá(a)s, VH háyaš_s, hayá(a)š_s, {háyašhayaš, hayáašhayaš}, LK háyas, WB háyaš, háya(a)š, EJ háyaš.
- 23) 'ha/'yu 'many' > 'hayu-, 'hai- FREQ (Aux). JH, VH háyu, hayú(u), háyu-, háí-, VH háya-[háyu], WB háyu, háyu(u), háyu-, háí-, EJ háyu.
- 24) 'hihi 'to laugh'. JH hí'hil, VH, EJ híihi.
- 25) 'hilu 'nothing, without-'. JH hé(e)lo, hílu, JH, VH híilu, WB hí(i)lo.
- 26) 'íc/-x*(ə)t(_u(ə)t) 'bl. bear'. JH ítsxwəat, VH ítsxut, EJ ?íts(w)ut, ?ítswat.
- 27) 'ikta 'thing, something'. JH, VH íkda, JH, WB, EJ íkt'a, JH, WB, EJ íkta, WB, EJ íkda.
- 28) 'iləp 'first, ahead'. JH, VH, WB íiləp, JH í(i)lup_p°.
- 29) 'ili?/-i, 'ilihi 'ground, country, place'. JH íle(ə)?i, íli?i, VH ?íli?, WB ?íle_i, ?íle_l_i, ?ílehi, EJ ?íli(ə)hi.
- 30) 'itukum/-a 'bone game'. JH ítuk_k°uma, WB ítukuma, EJ ?ítiko_um.
- 31) 'it(?)wəl/-i 'meat, flesh'. JH ítw_l_l_i, VH ít?wəl, LK ítw_l_l_i, WB ?ítwəl, WB, EJ ?ítwəl_l.
- 32) 'ina 'beaver'. JH, VH íina(?), EJ íina.
- 33) 'inatai 'across'. JH íinatai, VH í(i)naqai, WB ?í(i)natai, EJ ?í(i)natai.
- 34) 'in(ə)pu 'bug'. JH ínpu, ínpuu, WB ?ínpu, EJ ?ínpu.
- 35) 'iskam 'to get, obtain'. JH ísk°am, JH, VH ísgam, WB ?ísk°_g_kam, EJ ískam.
- 36) 'ixpui 'covered'. VH íxbui, WB áxpoi, EJ ?éxp°oi.
- 37) 'ixt 'one'. JH íix't, íix- (before consonants), JH, VH, WB, EJ íixt, WB, EJ í(i)x- (before alveolars).
- 38) 'kamukš_s 'dog'. JH kámuks, WB ká(a)mukš, EJ ká(a)muks_š.
- 39) 'kanawi > 'kana_u- 'all, every'. JH kánawi, kánu-, k°ánu-, JH, VH kánawi, VH kánawi, kána-, WB, EJ k(°)ánawi_e, kánawi, WB kánu-, k°ánu-, EJ kánawi-. (cf. LK kénawi)

- 40) 'ka/'p°a, 'ku/'p°a DEM AV > 'kapa-, 'kupa- PREP. JH kabáa, kápa-, JH, VH kába-, VH kábá, kába, WB kap_p°á, k°ap°á, kabá, kobá, k°á_lba_Λ-, káp°Λ-, kú_oba-, EJ kup_p°á, kúpa, kúba-, (cf. LK kabá-)
- 41) 'ka/(°)pit 'finish, stop; only, just'. JH kápit, JH, VH kábit, (VH-ət), WB k°ápit, WB, EJ k(°)ábi_ət.
- 42) 'ka/'p(°)u_o 'coat'. JH kápuo, LK kapó, EJ kap_p°úu.
- 43) 'kaltəs 'worthless; only, just'. JH kált°is, k°áltəs, VH kálda_əs, WB k(°)álda_əs, EJ kált°_das.
- 44) 'ki/'lai 'to cry'. VH kíla_i, WB k°éla_i, k(ə)láui, EJ kílaai.
- 45) 'kim/'t'a 'behind, last'. JH kímt°a, k°ímt'a, VH kimt°á, WB k°ímt'á, kimtá.
- 46) 'ki/(y)utan 'horse'. JH kiyú(u)t°an, VH -kíyutan, -kíwtan, WB kiúdən, LK kíutan, kíut°ən, kíut°in.
- 47) 'ku_ol 'cold'. JH k°ool, k°óolt°, kóol, VH kúul, WB k°úuw, k°úuwəl.
- 48) 'k(°)aku/-a 'like, thus'. JH k_k°ák°wa, JH, VH gá(a)gwa, WB k(°)á(a)gwa, k(°)ágo_u, EJ ká(a)gwa, káagwa.
- 49) 'k(°)akupus 'seem like' (contr. of 'k°akua + p°us). JH k°ák°wa p°úš, VH gágu-bus, gágu-bús, WB kágup°us, k°águbəs, kákwa pús (EMPH), EJ kágupus.
- 50) 'k°ap/'s_šwala 'to steal'. JH k°ap°swáala, k°ápswala, WB kápšwala, kapšwáala, EJ kápšwal[a].
- 51) 'k°ələ, k°ələ, ('k°ala, k°ala) 'bird'. JH k°áalak°alo, k°_kálak°alla, WB k°áalak°alla, k(°)álakála, EJ k°áalak°alla.
- 52) 'k(°)əmtəks 'to know'. JH kámt°_taks, kámdaks, VH gámdaks, WB, EJ kámdaks, EJ k°ámdaks, kámt°aks.
- 53) 'k(°)ik*(ə)li 'down, below'. JH k°íik°wəl_i, kíikwəl_i, VH gíigwli, WB k°íikwəl_i, kíikwəl_i, EJ kíkwəl_i, (LK kíkw_l_l_i).
- 54) 'k°uri, ('k°uli) 'to run'. JH k°úuri, k°óuri, VH gúuri, (gúul-, before ʔ), WB kúuri > k°úurik°uri, kúurikuri, EJ kúuri, kuuli.
- 55) 'k°u/(°)šu 'pig'. JH k°úúšu, VH -gúšu, -gúšú-, WB kúšu, EJ kúúšu.
- 56) 'k°°anisəm, 'k°°ansəm 'always'. JH k°_kwáansum, gwáansum, VH gwáanisim, WB k°wáansa_əm, k°_kwáansu_Λ_əm, EJ k°_kwáanisr_əm.
- 57) 'k°ainut 'tobacco'. JH k°áinut ("or káinut"), WB k°áainut, EJ k°á(a)inut.

- 58) 'k'au 'tied; to tie'. VH > k'áauk'au, WB k'áau > k'áauk'au, k'áak°_kau, EJ k'k°áau.
- 59) 'k'ilapai 'to return'. JH k'ilap°_pai, k'ilabai, JH, VH k'ilabai, WB k'ilap_bai, k°ilap°_bai, EJ k'ilap°_bai.
- 60) 'k'ipwət 'needle; to sew'. JH k'ipwat, VH k'ipwat, EJ k'ipwət.
- 61) 'k'was 'afraid'. JH k°wás, (k'was, stress unmarked), VH, WB, EJ k'wás, WB k'wás.
- 62) 'k'wa/'t(°)in 'stomach'. JH q'watí(i)n, k'k°watíin, VH k'watíin, *yák'watiin (miscopied for field kaba-yá k'watiin 'PREP-3PS stomach'), WB k'wat_t°íin, k'wát_t°íin, k°wat°íin, EJ k°watiin.
- 63) 'k'wi/'(°)nin 'to count'. VH k'wínin, WB k'wínən, EJ k'wínin, k°wíniin.
- 64) 'k'wit/-k(°)wit 'broken off; to break off'. VH k'wít'wit, WB k'wít'wit, EJ k'wót'wat. (Simplex form attested from other speakers.)
- 65) 'la/'haš 'axe'. JH laháaš, VH laháš, EJ láhaaš, liháaš.
- 66) 'la/-k(°)a'mas_-'k(°)amas 'camas'. JH lakamáas, VH lágamas, lagamas, lagamas, EJ lákomaas.
- 67) 'la/ka/'-rat(°)lat 'carrot'. JH lekarát, WB ləkará(a)t, ləkarát, lekarát, EJ líkarəet, lak[ə]lát.
- 68) (')la/'kúm_-'gom 'pitch'. JH lak°úm, lakúm, VH lagúum, WB lagóom, EJ ləkóom, lekúwm, lekúm, LK lagóm.
- 69) 'lam 'booze'. JH lá(a)m, VH -lám, WB lám.
- 70) 'la/mə'cin>'lam/'cin 'medicine'. JH lámtsín, lametsiin, WB lámtsiin, lámtsiin, EJ lámtsiin, (LK lámitsiin, lámitsiin, lamtsiin, lámts°in).
- 71) 'la/mi'yai>'lam/'yai_-'ye 'old woman'. JH, VH lamiyái, VH lám(i)yai, lámýái, EJ lámýee.
- 72) 'la /mo_-'t°ai 'mountain'. JH lamot°_tái, JH, VH lamudái, EJ lámítai, lámotai.
- 73) (')la/'port, ((')la/'p°olt) 'door'. JH lapóort, VH labóot [labóo[1]t, [1]= x-out in field ms.), WB lɪp°óolt.
- 74) (')la/'p°uš(°)s 'mouth'. JH lapúus, lap°úus, VH labúuš, WB lap°úš, lapúuš.
- 75) 'la/'t(°)am 'table'. JH latáam, VH -ladám, WB lítáam, (LK lát°aam, lat°áam, lát°áam).

- 76) (')la/'t°it_-'tət 'head'. JH latét, VH lodíit, EJ latét.
- 77) 'lili 'awhile'. JH léeli, JH, VH, WB, EJ líili.
- 78) 'li/'ma 'hand, arm'. JH líma, límá, lemáa, VH líma, límá, WB, EJ límá, WB lemáa, lemáa.
- 79) 'li/-pi'yi_-'p(y)i 'foot'. JH lepiyé, lípiyii, VH lípyii, WB líp'ii.
- 80) 'li/'p(°)u_om 'apple'. JH lepóom, lep°óom, VH -libúm, WB lípóom, líp°óom, EJ líp'uum, líp°uum.
- 81) 'li/'sak 'sack'. JH lésaak°, VH -lisák, WB le_sák, lísák.
- 82) 'lulu 'to carry, bring'. JH lólo, VH, WB, EJ lúulu, WB lúlu.
- 83) 'lu_op 'rope'. JH lōop, VH lúup, WB lúwp, lúp.
- 84) 'lu?lu 'round; something round'. JH lólo, l°ó?əlo, VH lú?lu?, LK lu?lu, (lúu?lu).
- 85) 'taska 'tas(-) '3 PP'. JH tá(a)ska, tá(a)ska, JH, VH tásga, VH (tásg [tásk], táš), WB tásk°a, (tás), EJ tásk°_ka, (lēs-).
- 86) 'taq(°) 'off'. VH táq°, WB, EJ tá(a)q.
- 87) 'tatu/-a 'to go'. JH tá(a)t°uwa, JH, VH, WB tá(a)dwa, VH, WB tádu- (WB _wə-), WB tádowa, EJ tá(a)dua, táaduwa, táadu, (táaduwa).
- 88) 'tax 'out'. JH táax_x, VH táx, WB tá(a)x.
- 89) 't_Éax(a)ni 'outside'. JH táaxani, VH tá(a)xni, WB, EJ t_Éá(a)xani.
- 90) 'ta/-'xayam_xau?'yam 'poor; hello/goodbye'. JH, WB tá(a)xayam, JH táxayam, VH táaxau?yam, EJ táaxayam, táxayim, táaxayem.
- 91) 'tq'up 'cut; to cut'. JH tq'óp, WB tq°ó_úp, t.qóp, EJ t.q'óp, tq°úp.
- 92) 'tučmən, ('klučmən) 'woman'. JH, VH tútšmən, JH, WB, EJ tútšmən, EJ tútšmín, (JH "or klútšmən").
- 93) 'tun 'three'. JH, EJ túun, WB tóon.
- 94) 'tuš(-)s 'good'. JH, VH, WB, EJ túuš, VH, WB, EJ túš, JH tōoš, túus.
- 95) 'tx'ap 'hole'. JH, EJ thwáap, VH txwá(a)p, WB, EJ txwáp.
- 96) 'b'ap 'to find'. JH, VH tɪ'á(a)p, WB, EJ tɪ'áp, tɪ°áp.
- 97) 'b'ax 'torn'. JH tɪ'áx, WB, EJ tɪ'áx.

- 98) (')B'(ə) /'min/-x*(i)t(_u(i)t) 'to lie'. JH tɨ'aminhwit, tɨ'minuwit, WB tɨ'omínhwət_xwɨt, EJ tɨ'imínhwit, tɨ'aminhwət, tɨ'émínhut, tɨ'ominwat.
- 99) 'B'i/'min 'mashed'. JH tɨ'mín, tɨimín, VH tɨ'món, WB tɨ'imín, tɨimín, tɨimín > tɨiméntɨimən, k'límín_ən, EJ tɨ'tɨ'émín, tɨ'imín.
- 100) 'B'ip 'to go in, to sink'. JH, WB tɨ'íp, VH tɨ'íp.
- 101) 'B'u/(')nas(_š), ('k'lunas) 'maybe'. JH tɨ'unáš, tɨonáš, JH, VH tɨ'únas, VH tɨ'únus, WB k'lúnas, k'lonas, EJ tɨ'únas, tɨ'ó(o)nas, tɨ'ónas.
- 102) 'maika, ('mai) '2 PS'. JH máik°_ka, JH máiga, VH máiga [máiga, (máiku)], WB, EJ máiga, WB mái.
- 103) 'mak°st_št, /'maks(t)' '2' JH má(a)k°st, VH mák°št(_st), WB máks, EJ mákst, máaks.
- 104) 'ma'ma 'mother'. JH máma(a), VH máma, WB máma(a).
- 105) 'mamuk 'to do, make; to fornicate'. JH má(a)muk, VH mámk, *máuk(k) [mámuk] (mámuk "corrected" to máunk on inf. review, inf. claiming that mámuk can only mean 'to fornicate'), WB, EJ máamuk, mámk.
- 106) 'man 'man, male'. JH, VH, WB má(a)n, EJ máan.
- 107) (')ma/'s_šatši 'bad'. JH masátšɨ, VH mašátšɨ, WB mašá(a)tšɨ, EJ ma_ésá(a)tšɨ.
- 108) 'maš(_s) 'to throw, cast aside'. JH, VH máš, JH máas, WB, EJ máš.
- 109) 'ma(u)wič 'deer'. JH má(a)witš, VH má(a)witš, EJ máauwitš.
- 110) 'mákmak 'food to eat'. JH mákmak, JH, VH mákmak, WB mákmak.
- 111) m(ə)'saika, (mə'sai) '2 PP'. JH mɨsáika, mɨsáiga, VH mɨsáiga, WB mɨsá(a)iga, mɨsai.
- 112) 'mi/'tɨit(>'mitət) 'to sit, stay, reside'. JH mítait, JH, VH mí(i)tɨit, WB, EJ mítait, WB mítait, mítət, (míiitət AUGM).
- 113) 'mim(ə)lus/-t 'dead, to die'. JH mímlus, mímlust, JH, VH mí(i)mlust, WB mí(i)mlust, EJ míimlu_ost.
- 114) 'mitx*(i)t(_u(i)t) 'to stand'. JH míthwit, mítwit, mítxwit [míitxwit], VH mí(i)t_xwit, WB mítxwət, EJ míthwət.
- 115) 'munk, 'mank 'to do, make' > (')mu_ank-CAUS(AuxV). JH mánk, mánk, VH múnk, (máank), WB mú_ňk, EJ múnk-.
- 116) 'musum 'to sleep'. JH, WB músum, JH músum, VH músum.

- 117) 'naika, ('nai) '1 PS'. JH náik_k°a, JH, VH náiga, WB, EJ náiga, WB náí.
- 118) 'nan(i)č(_c) 'to look, see'. JH nánitš, ná_úants, JH, EJ náantš, JH, VH nántš, VH ná(a)nitš > náantšnantš, WB, EJ ná(a)nitš, LK nánits.
- 119) n'caika, n(i)'saika, ('caika, ui'sai) '1 PP'. JH nɨsáika, nɨ_ésáiga, nsáiga, JH, VH ntsáiga, WB nɨsáiga, ntsáiga, tsáiga, (sáiga, after alveolar) EJ nɨsáiga, nɨsái-.
- 120) 'ni/'x°a EXHORT ("look here, let's see, let's...", etc.). VH, EJ níxwa, WB nixwá.
- 121) 'pač(_b) 'full'. JH páat, VH páat, WB páč, EJ p°áat.
- 122) 'pa/(')t_bam 'drunk'. JH páatam, WB páčlaam (=páat+lám, inf's etym.), EJ páč_Λ(Λ)m.
- 123) 'pik'u 'back'. JH píik'o, p°íik°u, VH píik'°u, píik'°u [píik'°u], WB p°íik°wo_o.
- 124) 'pus, 'puspus, 'p'us 'cat'. JH pûs, pûspus, WB p'úus, EJ p°_pûus.
- 125) 'p(°)aya 'fire'. JH pá(a)ya, VH bá(a)ya, WB p°_p'á(a)ya, EJ p_p'á(a)ya.
- 126) 'p(°)alač, ('p°atač) 'to give'. JH páallatš, pálatš, VH báatš, WB p_p'álatš, EJ p°_á_álatš.
- 127) 'p°a/'p°a 'father'. JH, EJ p°áp°aa, VH bába, WB p°a_áp°á(a).
- 128) 'p°i CONJ. JH p°íi, bíi, VH bíi, EJ p°íi.
- 129) 'p°ipa 'paper'. JH p°íip°Λ?, WB p°í(i)pΛ, p_p'í(i)pΛ, (p'éeppΛ), EJ p°íipa.
- 130) 'p°ulakli 'night'. JH p°ólakli, p°(o)lakli, búlakli, VH búlakli, WB p°úulakli, EJ p°úulakli.
- 131) (')p°us(_š) PCL (conditional-hypothetical). JH p°úš, búš, JH, VH búš, WB p°ús, pús, p'ù_és-.
- 132) 'qa, 'qax 'where'. JH, VH qá(a), VH qá(a)x, WB, EJ q'á(a).
- 133) 'qata, ('kata) 'how'. JH k_k°áat°a, (qáat°a), JH, VH qáada, VH (káda), WB, EJ q'á(a)da.
- 134) 'qanč(_c)i 'when, to that degree'. JH kántšɨ, kánsɨ, qánsɨ, VH qántšɨ, WB, EJ qántšɨ, WB q'ántšɨ.
- 135) 'q°w_ε_ət_b 'hung'. VH qwét, WB q'wét_t, EJ qwét, qwét.
- 136) 'q°w°nəm 'five'. JH qwínum, qwénum [qwénəm], VH qwénəm, WB kwínum, EJ qwínəm, qwénəm.

- 137) 'q'u? 'to arrive'. JH q'ó(?)², q'ó², VH q'ú? [q'ú?, (q'ú?)], WB q'ó², q'ó², (q'ó), EJ q'ó².
- 138) 'q'wa/lan 'ear'. JH, WB q'waláan, JH, EJ q'waláan, JH q'waláan, (k'waláan), WB q'waláan, q'waláan, EJ q'wáalaan.
- 139) 'q'wat 'to hit'. JH, VH q'wát, WB, EJ q'wát, WB q'wát, EJ q'wá²é².
- 140) 'saliks(_š) 'angry'. JH sá(a)lks, sáaliks, VH sáaliks_s, WB sáalr_ə_aks.
- 141) 'samən 'salmon'. JH, EJ sáamən, VH sámən, WB sáamən.
- 142) 'san 'sun, day'. JH, VH, WB, EJ sáan.
- 143) 'sap/'lil 'flour, wheat, bread'. JH saplél, sapélél, VH sáblil, EJ saplíil, LK saplíil, sáp^olil.
- 144) 'sa/'waš(_s) 'ša/'waš 'Indian'. JH šawáš, šawáš [šawáš], sawáš, sáwáš, WB šawáš, šawá(a)š, šawáš, EJ sá(a)waš.
- 145) 'saχ(ə)li 'above, high up'. JH sáaxa_əlī, sáaxali, VH sá(a)xli, WB sá(a)xəli, EJ sáaqəli, LK sáxli.
- 146) 'sa/'ya 'far'. JH sayáa, JH, WB sayáa, VH sayá, WB sáyá(a), VH, WB, EJ sáya.
- 147) 'sik 'sick'. JH, WB, EJ sík, JH, VH sík.
- 148) 'sitkum 'half'. JH, WB, EJ sitkum, JH sítk^oum, VH sítgum, WB, EJ sitgum.
- 149) s(i)'yax^o(ə)s 'eye'. JH, WB siyá(a)xwus, JH siyáaxwəs, siyáxu_wus, VH syáxus.
- 150) 'skin 'skin, hide'. JH sk^ofin, sk^oin, VH sgiin, WB, EJ sgíin, WB sgiin.
- 151) 'sku/'k^oúm >
 'skukum 'strong, tough'. JH, WB skú(u)kum, JH skukúum, WB sgúgum.
 sku'kum 'something dangerous'. VH sgu^oú(u)m, WB skukúum.

- 152) 's(_š)tik 'stick, tree, wood'. JH stík^o, VH sd^otik, šdiik, WB, EJ sdík.
- 153) 'sup(ə)na, 'sup(')na 'to jump'. JH, WB súpna, VH sú(u)p'na, WB súp^ona, EJ sú(u)pəna.
- 154) 'til 'tired'. JH tíl, WB, EJ t'íl, EJ t'íl.
- 155) t^(o)i'ya(?)wət 'leg'. JH t^oi^oyá^owít, ^{VII} t(i)yá^owít, WB t^(o)i^oyá(a)uwa_ət, EJ t^oi^oyá^owət.
- 156) tq'i (unstr.)>'t^ot^oiki 'to like, want, need'. JH, WB, EJ tík^or, JH tík^oi, tíqi, tq'i^o, VH tq'i, WB, EJ t^oík^or, tík^o_gr, WB tiki, t^oík^o_gr.
- 157) t'q'up, 'k'up 'white'. JH tq'ó(o)p, WB k'úp, EJ k'ú(u)wp.
- 158) t^odu'mala 'tomorrow'. JH, WB t^(o)umáala, VH, WB dumáala, WB, EJ tumáala, VH dmáala.
- 159) t^oa(ə)ntki 'yesterday'. JH t^oá^oantki, WB t^odá(a)ntg^oki, EJ t^oána^oti, t^oán^oá^oti(EJ confused with á^oti?).
- 160) t^oaəm 'ten'. JH t^otá^oam, WB dá^olam, EJ dá(a)tum, dá^otum, t^oátum.
- 161) t^(o)ə/'nas 'child'. JH t^oánás, ténəs, JH, VH danás, VH dána(a)s, WB t^oánás, t^(o)ənás, EJ t'ánas.
- 162) t^oaq^o(ə)la 'hazelnut ; nuts'. JH t^oák^owala, WB dáq^o(ə)la, dákwla, EJ dáq^owala.
- 163) t^oa(_e)/'t^ois 'flowers'. JH t^oat^oíis, VH dadíis, WB datíis, dátíis, EJ tétíis, tétíis.
- 164) t^oa/'yi 'chief, boss'. JH t^oayii, VH dái, WB, EJ t^oáyii, WB t^oayi.
- 165) t^oəmtəm 'heart, mind, spirit; to feel, think'. JH t^oəmt^oum, dúmdum [dúmdum], VH dímdim [dímdim], WB t^oəmdəm, EJ t^oəmdəm.
- 166) t^oi/'lai, t^(o)'lai 'dry'. JH t^oilái, t^o.lái, VH dlái, WB tálái, t^olái, t^(o)lái, EJ t^oilái, dílaai.
- 167) t^oilxəm, t^(o)ilixəm 'person, people'. JH t^oilixam, dílxam [t^oilixam, dílxə_əm], VH dí(i)lxam, WB t^ot^oilixam, EJ t^oilxəm, t^oilxə_əm, t^oilxum.
- 168) t^oulu 'to win, beat out, earn'. JH t^oúlo?, VH dúulu?, WB t^oúlu, t^oúlu (t^o=t^o?), EJ t^oúllu.

- 169) 't(°)u/°nus > 't(°)ənəs- (> tə'nəs) 'a little (AV); small-'.
JH t°_tánas-, tənəs-, ténas-, dənəs_š-, VH dúnus-, dənəs-
dónus-, dúnus, WB dənəs-, túnus-, t°_dúnus, t_dənús,
EJ túnus-, t°únas-, tunús, t'ənées.
- 170) ('t)u/'t°uš(°s) 'breasts; to suck'. JH t°ut°úš_š, VH dudúšš,
EJ tu.utúšš.
- 171) 't°u/'wax, 't'wax 'light'. JH t°u.uwá(a)x, t°úwax, WB t°uá(a)x,
t°wax, t'wa(a)x, EJ t°wax, t°úwax.
- 172) 't'alap(')əs 'coyote'. JH t'álap°as, t'álap°a?š, t'á(a)lap°as,
t'álap°aas, WB t'álapas, EJ t'álapas, t'álapus, t°aalap°as,
tálapus.
- 173) 't'a'manus 'spirit power'. JH t'amánuwas, WB t'Λ_əmáanəwas,
t'.máanəwas, EJ t'Λmáanwəs, t'.máanwəs.
- 174) t'ú?(w)an 'to have, keep, wear'. JH t°ú?wan, t'ú?wan, VH t'ú?an,
WB t'úw?Λ_ən, t'úw.Λn, t'ú.(w)an.
- 175) 'uixat, 'uix°(ə)t 'road, trail'. JH óixat, WB ?óixat, ?úixət,
?úixwət, ?óixut, EJ ?úix°ət.
- 176) 'ukuk > 'uk, (')uk- DEM ('it, that'). JH ók°uk°, JH, VH úk-,
JH, WB úguk, VH, WB úguk, WB, EJ ók(-), EJ úguk.
- 177) 'wam 'warm, hot'. JH, VH, WB, EJ wám.
- 178) 'wap(ə)tu 'Sagittaria latifolia; potato'. JH wáptu, WB, EJ wá(a)peto,
EJ wápetu, LK wápto.
- 179) 'wax 'to spill'. JH wáx, JH, EJ wáax, VH, EJ wáx.
- 180) 'wawa 'to talk; speech'. JH, VH, WB, EJ wá(a)wa.
- 181) 'wəxt 'again'. JH wé_úx°t, wíxxt, wəxt, VH, WB wəxt.
- 182) 'wik 'no; not-'. JH, WB wík-, wéik, JH, WB, EJ wéek, JH, VH wík-,
wíik, WB, EJ wík-, wék-.
- 183) 'xalaqš 'open'. JH xáalaqš, WB xá(a)lΛ_əqš, xálaqš, EJ xá(a)lΛqš,
hálaq[š], qáalaqš.
- 184) x(ə)'luima 'other, strange, different'. JH x°Λ_ulóima, hulóima, xlóima,
JH, EJ xlóima, VH xlówima, xlóima [xlówima], WB xəlóoima,
q(')lóoima.
- 185) 'xauqš, 'xauq°(ə)š(°)xauš, 'hauš 'can't, unable'. JH qáuk°_qwat,
VH xauqš, WB, EJ xauqš, WB xauqΛ_əš, xauqwš, xáu(.)Λš, xáuš,
q'áuwš, há(a)uqΛ_əš, háu(w)š, EJ xauq°š, xáu.š, háuq°š,
háuqš, háwat.

- 186) 'xulxul 'rat'. JH x°úlx°ul, WB, EJ xólxul, EJ húlhlul, hólhlul.
- 187) 'yaka, 'yaxka > 'ya, (')ya- 'j's'. JH yá(a)k°_ga, JH, VH, WB yá(-),
JH, VH, WB, EJ yága, JH, EJ yáaga, yák°a, VH, WB yáxga, WB
yáaxg_ka, yáaxya.
- 188) 'ya/'k°wa 'here'. JH yakwáa, yaq°wáa, yágwá, VH yágwa, yagwá,
WB yakwá, yákwá(a), EJ yákwa, yakwá.
- 189) 'ya/'wa 'there'. JH yawá(a), yawáa, yáwa, VH, WB yawá, WB yáwáa,
yáwa, yáwa-.
- 190) 'ya?/-im_yəm 'to tell'. JH yá(a)?yım, VH yá?im, EJ yáa?ım,
(?iyáayım).
- 191) 'yutšqat 'long'. JH yúšqat, yú(u)šqat, VH yúuušqat (AUGM), WB yúutšqat,
EJ yúušqat.
- 192) 'yutšitš 'proud'. JH yúutšitš, WB, EJ yúutšitš, EJ yúutšitš, yúutšitš.