

Learning to read Tualatin

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With support from the Confederated Tribes of Grand Ronde, Oregon, the authors are in the midst of conserving and processing a significant, heretofore largely unpublished corpus of linguistic data documenting one of the original tribal languages of Grand Ronde Reservation: Tualatin Northern Kalapuya. The centerpiece of this effort is an extended autobiographical text from the language's last known speaker, Louis Kenoyer. This paper is a report on our progress in understanding Tualatin, a task made necessary because this text in its received form is incompletely translated.

1 Historical background: who needs to read Tualatin?¹

Tualatin (*tʰálat'i* to its speakers, *twálat'i* in neighboring languages and Chinuk Wawa; synonyms: Atfalati, Tfalati, Tualaty, Twalati, etc.) is one of two documented dialects of Northern (or Tualatin-Yamhill) Kalapuya, the northernmost of three languages constituting the Kalapuyan family of Willamette Valley, Oregon. Its last known speaker was Louis Kenoyer (1868-1937), who provided linguistic data first to L. J. Frachtenberg (1915, ca. 1915); then to Jaime de Angulo and Lucy S. Freeland (1929); and finally, to Melville Jacobs (1936, 1936a, ca. 1936). The Frachtenberg and de Angulo-Freeland records are entirely independent of each other, although both were made at the behest of Franz Boas. De Angulo and Freeland provide a grammar sketch, a “semasiology” (thematically organized lexicon), and texts: all based entirely on the language's last speaker. They make no mention whatsoever of any previous work on the language. Frachtenberg, by contrast, used Kenoyer almost exclusively to re-elicite much of Gatschet's (1877) earlier Tualatin field notes, made at Grand Ronde Reservation, Oregon, with Louis Kenoyer's father, Peter Kenoyer, and other speakers. With these re-elicitations in hand, he set about preparing typescripts of Gatschet's Tualatin texts for publication, but had not finished the task when his association with Boas was abruptly terminated (the Tualatin is all typed up, but minus spaces left for hand-lettering of vowels, and minus most of the translations). Boas subsequently turned over the Frachtenberg and de Angulo-Freeland Tualatin mss to Jacobs, who took them back to Kenoyer in 1936 for another round of re-elicitations—unfortunately, the last,

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owing to Kenoyer's passing the following winter. In the course of these last field sessions with Kenoyer, Jacobs re-elicited nearly all of de Angulo and Freeland's illustrative sentences, texts, and semasiology, as well as about half of Frachtenberg's Gatschet-text typescripts. He also brought some of his Santiam (Central Kalapuya) field texts to Kenoyer for translation into Tualatin, a task made possible because Kenoyer could understand (though not speak) Central Kalapuya, his mother's natal language.

And to the point of the question introducing this section: he also took up the thread of an autobiographical text begun by de Angulo and Freeland, continuing it at some considerable length beyond the (re-elicited) original's termination. Jacobs' remarkable sensitivity to the phonetic nuances of NWC languages enabled him to produce phonetically accurate transcripts of his informants' live dictations, even (our impression is, usually) in the absence of passive comprehension on his part of the languages he was recording. His usual procedure, apparently, was to first transcribe a segment of text, then read the segment back to the speaker for correction and translation into English (which all of his informants spoke, if primarily in local rural varieties). The English translations are entered word-for-word, basically, under the original phonetic transcript. This is exactly how the major part of Jacobs' continuation of the Kenoyer autobiography appears in his field notebooks (Jacobs 1936). There is also a hand-copy of the text and translation (Jacobs ca. 1936), which we have termed the "printer's ms." This is divided into numbered paragraphs and paragraph segments, and shows vertical lines drawn through orthographic Tualatin words (we surmise, to orient a printer in setting type and/or determining line breaks; they appear not to be morphological marks). Conspicuous by its absence in the printer's ms is the last quarter, roughly, of the field text, for which the field notebooks show no English translation whatsoever. Having recorded the Tualatin, Jacobs left a large chunk of it untranslated, no doubt in anticipation of later returning to the speaker—an expectation dashed by Kenoyer's passing the following winter. Of the entire Tualatin corpus reviewed by Jacobs with Kenoyer, only the Frachtenberg Gatschet-text typescripts and Jacobs' own Santiam-Tualatin translations have appeared in print (Jacobs 1945:135-142, 155-198).

Hence, if the entirety of Kenoyer's autobiography—a richly detailed first-hand account of growing up on late-nineteenth century Grand Ronde Reservation—is ever to see the light of day, it falls to us to learn to read Tualatin. Or at least, to read it well enough to produce a credible translation of a substantial portion of the original Tualatin text.

2 Progress to date

At this writing, Schrock has entered all of the de Angulo-Freeland and Jacobs materials into an (SIL) Fieldworks database.

This digital corpus automates and facilitates the searching of extant materials. Word-forms which were glossed in the field by Jacobs exist in the database. New, un-glossed word-forms have glosses suggested by the database

based on previous glossings. Previously unseen word-forms are left blank. Due to diacritical marks, hyphenation, minor variations in Jacobs' transcription, and the fact that we have not programmed any grammatical rules yet, the results of the automated parsing returns accuracy of less than 50%. However, manually searching the corpus using the concordancing tool, based on intuitively deduced word stems, turns out to be highly productive. We tested the first six pages of untranslated fieldnotes, and by using the concordance, we were able to confidently translate all but three of the word-forms encountered. Searching can be done both on Tualatin strings of text as well as English strings of text.

An example of the translation thereby produced for a segment of heretofore untranslated text appears at the end of our paper: see Appendix 1 (sample text 1). In our judgment, the semi-“automated” translation thereby produced compares remarkably well to the English translations appearing in the already translated greater part of the text. While this represents real progress towards our goal, the field translations also come with some limitations, as discussed in more detail below; besides which, we would of course prefer to have as nuanced a sense as possible of how Tualatin morphology contributes to the meaning of all of the extant Tualatin texts.

3 Tualatin verbal prefixes

According to the only available structural description of the language to date, de Angulo and Freeland's (most likely, de Angulo's²) sketch of Tualatin as spoken by Louis Kenoyer, the language's morphology reveals very few nuances indeed. At the time, de Angulo was under the influence of Sapir's (1949 [1921]:142-143) taxonomy of language-types. Viewed in those terms, Tualatin seemed to him to reveal all the tell-tale indicators of a language “far along towards analysis, or isolatism” (de Angulo to Jacobs 1928): “The ‘fundamental type’ of Tualati is the SIMPLE PURE RELATIONAL. Its technique is isolating” (de Angulo and Freeland 1929:n.p.; the terminology is taken directly from Sapir).

But Kenoyer was also a last speaker, and such characteristics could also be indicative of language obsolescence—as de Angulo himself indeed recognized, albeit without the benefit of the modern literature going under that term. Howard Berman (personal communication to Zenk, 1987) has made the same point, observing that

[Kenoyer's] basic [Tualatin] sentence patterns are there, but not some of the rarer suffixes, the vocabulary is small, and when necessary, words from better known languages [for Kenoyer, English and Chinuk Wawa] are thrown in.

² While de Angulo and his wife (Freeland) evidently both worked with Kenoyer to secure field data, the terminology used and biases expressed in the grammar suggest Gui de Angulo's (2004) characterizations of her father's personality and views, much more so than they do those of her mother.

However, to judge from Berman's (n.d.) Tualatin slip-files, Kenoyer still employed a relatively robust Tualatin verbal prefix morphology. For example, Berman's files show the following list of prefix-clusters for the verb *bun* 'make, put on, build, prepare' (here and elsewhere we transliterate original transcriptions into the phonemic alphabet described in Berman 1990).

- (1) Tualatin verbal prefix-clusters: selected examples from Berman

<i>gu-</i>	<i>gumni-</i>	<i>dum-</i>
<i>gud-, gut-</i>	<i>gumini-</i>	<i>dumdit-</i>
<i>gudit-</i>	<i>guni-</i>	<i>dudinit-</i>
<i>gudini-,</i>	<i>gunid-</i>	<i>din-</i>
<i>gudin-</i>	<i>ginni-</i>	<i>dinni-</i>
<i>gudnid-</i>	<i>ginit-</i>	<i>s-</i>
<i>gudip-</i>	<i>did-</i>	<i>bibs-</i>

The many permutations of recurrent elements evident from the above list certainly suggest the workings of some sort of productive prefix morphology. But de Angulo's tabulation of Tualatin predicative prefixes shows only the following close matches to this list:

- (2) Excerpts from *Table of Pronominal Forms* (de Angulo and Freeland 1929:8-9)

<i>kot-</i> [cf. <i>gut-, gud-</i> above]	1 sing/plural-2 sing- 3 sing past
<i>kin-</i> [cf. <i>ginni-</i> above]	3 plural past
<i>tit-</i> [cf. <i>did-</i> above]	1 sing/plural-2 sing/plural- 3 sing future
<i>tun-</i> [cf. <i>dinni-</i> above]	3 plural future

[supporting notes (excerpts):]

. . . the forms given in the above table are only the ones most frequently encountered. But for each one there are many variants. This is especially the case with the third person plural, for which we find the following variations: *kun-*, *kunt-*, *kunt-*, *kutn-*, *kutn-*, *kun-*, *ku-*, *tun-*, etc. . . .

The distinction [sic] of time are not strictly adhered to, as will be seen by a mere glance at the texts. There is a tendency to use the Past to express an indefinite time. The Present (rather a Continuative) is often combined with the Future (rather an Inceptive) in such forms as *tcitt-*, *tcitp-* [*tc-*, *tcit-*, *tcip-* appear in the table for 1/2 sing present, 1 plural present, and 2 plural present, respectively], etc. . . .

4 Comparisons with other dialects

We have been attempting, albeit with mixed results so far, to develop a more complete picture of what may be going on in Kenoyer’s verbal prefix morphology. To that end, we have compiled a sample text comparing Kenoyer’s Tualatin verbal morphology with previous studies of Kalapuyan morphology (Appendix 2: sample text 2), all of which to date have been conducted on another of the three Kalapuyan languages, Central Kalapuya (see Lewis 2003 for overviews of the history of research and materials extant for all Kalapuyan dialects). We also append an excerpt from Gatschet’s (1877) Tualatin corpus (Appendix 3: sample text 3), in which we have lined up Gatschet’s original against Frachtenberg’s (ca. 1915) and Jacobs’ (1945:173-178) re-elicitations from Kenoyer: note that Jacobs’ (and Gatschet’s) verbal prefixes correspond to proclitics in Frachtenberg’s analysis; and that Thompson and Kinkade (1990:41) concur with Frachtenberg on this point. We do not feel ready yet to give the Gatschet comparisons the attention they deserve, but submit them as historical documentation. In point of fact, the only detailed record of what Tualatin was like when it was still sustained by a living speech community resides in Gatschet’s 1877 fieldnotes.

Appendix 2 (sample text 2) consists of a short Santiam Central Kalapuya text originally dictated to Jacobs by John Hudson in 1928; knowing that Kenoyer understood (though did not speak) Central Kalapuya, Jacobs had Kenoyer translate this and four other short Santiam texts into Tualatin. While the Tualatin appears to have been elicited word-for-word in response to Jacobs’ word-by-word reading of the Santiam—rendering the result problematic for assessing Kenoyer’s Tualatin syntax—it should at least provide us with a good indication of how he registered, in Tualatin, what he was understanding when he heard differently prefixed forms of corresponding (mostly cognate) Central Kalapuya verbs. The following tabulation shows Santiam verbal prefixes appearing in this text, parsed according to available analytic treatments (It:Takeuchi 1969; yh:Hajda 1978; hb:Berman ca. 1986; jb:Banks 2007); they are listed opposite the Tualatin verbal prefixes that Kenoyer used in each case to translate the Santiam text into Tualatin. The Santiam text also appears in Banks (2007:94-97), fully parsed following Banks’ own analyses. All original spellings have been transliterated into Berman’s (1990) phonemic orthographies for Central Kalapuya and Northern Kalapuya.

Table 1: Tualatin verbal prefixes appearing in sample text 2

<i>Tualatin translations</i>	<i>Santiam Central Kalapuya models (parsed following hb:Berman, It:Takeuchi, yh:Hajda, jb:Banks)</i>
gu- (_c) ¹ (2.25)	den- /dam- ² (>dan-/_c) 1/2/3 sg usitative indicative (hb) den- /dem- / (>den-/_c) 1/3 sg punctual (It) tan- 1/3 sg past non-continuative (yh) d-e-n- narrative/habitual-irrealis-finite (jb)

<p>gut-, gud- (2.2, 2.3, 2.9, 2.16, 2.21, 2.23, 2.24, 2.26)</p>	<p>1) den- (as for <i>gu-</i> above) 2) gint- /gum-t-/ (>gin/_t) 1/2/3 sg aorist-directive (hb) /gum-t-/ (>gin-/_t) 1/2/3 sg habitual-completive (lt) /kin-t-/ 3 sg past non-continuative-directive (yh) g-i-n-t- potential-realis-finite-translocative (jb) 3) gindan- /gum-dan-/ (>gin/_d) 1/2/3 sg hab-(completive?) (lt) g-i-n-dan- potential-realis-finite-emph.locative (jb) 4) int- /um-t-/ (>in/_t) 3 sg present-directive (hb) /um-t-/ (>in-/_t) 3 sg progressive-completive (lt) um- 3 sg present continuative (t- directive) (yh) i-n-t- realis-finite-translocative (jb) 5) namit- /nam-mi-t-/ 2 sg future temporal-dir (hb) nami-t- 2 sg potential temporal/sub-completive (lt) n-a-m-i-t- 2 pers irrealis-irrealis-finite-transloc (jb)</p>
<p>gudi-(<i>c</i>) (2.28)</p>	<p>dedima- /da=dii-ma-/? 1/2/3 sg usitative temporal-dir (hb) dedii-ma- 3 sg punctual temporal/sub-loc (lt) d-e-di-ma- narr/hab-irrealis-sub-cislocative (jb)</p>
<p>gudit- (2.1, 2.7, 2.10, 2.13, 2.20)</p>	<p>1) dedima- (as for <i>gudi-</i> above) 2) dumidan- /dumi-dan-/ 1/2/3 sg objective-directive (hb) dumi-dan- purposive-emph.translocative (jb) 3) namihan- /nam=mi-(han)/ 2 sg fut temporal-?- (hb) nami-han- 2 sg potential temporal/sub-loc (lt) n-a-m-i-han- 2 pers irrealis-irrealis-finite-proximal (jb) 4) gidema- /gi=da-ma-/? 1/2/3 sg aor contrastive-dir (hb) gide-ma- 1/2/3 sg hab neg-loc (lt) gi-de-ma- 2 sg infinitive-neg-cislocative (jb) 5) gindan- /gum-dan-/ (>gin/_d) 1/2/3 sg aor-loc (hb) gin-(dan-) /gum-/ (>gin/_d) 1/2/3 sg hab-(compltv?)- (lt) g-i-n-dan- pot past-realis-finite-emph.loc (jb)</p>
<p>guddit- (2.17)</p>	<p>dun- /dum-/ (>n/_g) 1 sg fut indicative (hb) dun- 1 sg pot (lt) tum- 1 sg fut contin (yh) du-n- 1 subj irrealis-finite- (jb)</p>
<p>guddis- (2.27)</p>	<p>den- (as for <i>gu-</i> above)</p>

gut-si- (2.19)	g(ə)ded- /gi=da-t-/² 1/2/3 sg aor contrastive-dir (hb) gide-t- 1/2/3 sg hab neg-completive (lt) kta-t- 1/3 sg non-cont tentative-dir- (yh) gi-de-d- 2 sg infinitive-neg-transloc (jb)
di- (2.14)	dint- /dum-t-/ (>din/_t) 1 sg fut indicative –dir- (hb) /dum-t-/ (>din/_t) 1 sg pot-completive (lt) tum- 1 sg fut continuative (yh) di-n-t- 1 pers irrealis-finite-transloc- (jb)
det- (2.22)	de- /da-/² 2 sg imper (hb) de- 2 pers imper (lt) ta- 2 sg imper (yh) de= “indef” (jb)
cedit- (2.12)	de- (as for <i>det-</i> above)
u- (2.5, 2.8)	dem- (~ den-, as for <i>gu-</i> above)
ut- (2.11, 2.15, 2.18)	dem (~ den-, as for <i>gu-</i> above)
cum- (2.4, 2.6)	cum- cum- 1/2 sg present indicative (hb) cum- 1/2 sg progressive (lt) cum- 1/2 sg present continuative (yh) c-u-m- Speech.Act.Participant-realis-finite- (jb)

¹ Only before /_c/ in text 2; but /gu-/ also appears in 3.2, 3.3, 3.5, 3.6.

² Regarding a~e: see sample text 2.1 (hb notes).

It is worth noting that analyzing only one genre of speech act (narrative) is likely to not reveal the full spectrum of grammatical elements contained in a language. Tense and aspect would be an example. Berman (ca. 1986) posits six Santiam Central Kalapuya tenses: present, future, recent past, usitative, aorist, and mythical past. Takeuchi (1969) thinks that “an aspectual system [for Santiam and Marys River Central Kalapuya] from the translations is much more reasonable than a tense system”; she posits six aspects, the first five of which correspond (in the order given) to Berman’s first five tenses: progressive, potential, perfective, punctual, habitual, and repetitive. Takeuchi’s sole source, the Santiam and Marys River texts published in Jacobs (1945), shows Berman’s mythological tense hardly at all; his description of that tense was based on Santiam texts from a speaker named Eustace Howard, which Jacobs recorded

but chose to leave unpublished.³ Takeuchi's repetitive is classified by Berman as one of nine modes cross-cutting his six tenses: indicative, contrastive, repetitive, relative, temporal, locative, subjunctive, objective, and imperative.

We have found elements resembling what Berman posits as present (Takeuchi: progressive), future (potential), usitative (punctual), and aorist (habitual). The overwhelming majority of verbs are marked for aorist tense (Berman) or habitual aspect (Takeuchi) in Louis Kenoyer's narratives. This is what one would expect in a narrative. However, many of the phrases that originate from de Angulo's "semasiology" list take elements which resemble the present tense in Berman's description (progressive aspect in Takeuchi's). It would be ideal to have a wider range of speech genres to analyze before stating anything definitive about the tense-aspect system of Tualatin. So we may have at least two processes at play, in this regard, which might skew our analysis of the verbal system: limited scope of context for the language in our corpus; and language obsolescence.

5 Concluding remarks

Based on the Central Kalapuya comparisons adduced in Table 1, with reference also to Berman (ca. 1986:11-12), we venture the following tabulation as a tentative first attempt at identifying some basic elements composing Kenoyer's Tualatin verbal prefixes.

Table 2: Identification of some constituent elements of Tualatin verbal prefixes

gu-	<i>cf</i> CK gum-, gint- /gum-t- ¹ 1/2/3 sg aorist indicative (<i>g</i> aorist) (Berman) 1/2/3 sg habitual (Takeuchi)
t-	<i>cf</i> CK t~d- ¹ directive (direction away from speaker) (Berman, Hajda, Banks) completive? directive? (Takeuchi)
di-	<i>cf.</i> CK di(i)- 3 sg punctual relative (Takeuchi) subordinate realis (Banks) <i>cf.</i> CK dedi- /da=dii- ² 1/2/3 sg usitative temporal (Berman) (modal element: <i>dii</i> temporal) 3 sg punctual temporal (Takeuchi)

³ Central Kalapuya myth texts originally dictated to Frachtenberg in a more southerly dialect, termed by Jacobs Lower McKenzie (Jacobs 1945:351-369), appear largely in this tense, which is marked by the initial element *b-*: e.g., compare Santiam *asni gum-nágat* <acni Gum'náGaD> : Lower McKenzie *asni bum-nágat* <acni Bum'náGaD>, both translating 'Coyote said [in myth]' (Jacobs 1945:94, 360).

de- [da-?] ²	<i>cf.</i> CK de- /da-/ ² 2 sg imperative (Berman) 2 pers imperative (Takeuchi) 2 sg imperative (Hajda)
ma-	<i>cf.</i> CK ma- directive (direction towards speaker) (Berman, Takeuchi, Hajda, Banks)
u-	<i>cf.</i> CK um-, int- /um-t-/ ¹ 3 sg present (Berman) 3 sg progressive (Takeuchi) 3sg present continuative (Hajda)
cum-	<i>cf.</i> CK cum- 1/2 sg present indicative (Berman) 1/2 sg progressive (Takeuchi) 1/2 sg present continuative (Hajda)

¹ In CK, *m* usually > *n/* *t*; *u* usually > *i/* *n*. These changes are however not invariable. They are observed only occasionally in Tualatin.

² Regarding a~e: see sample text 2.1 (hb notes).

While we expect to expand and refine the foregoing tentative list as we continue to process texts, we should point out that any attempt to unravel the inner secrets of the Kalapuyan verb is greatly complicated by the quality of the available text translations. By and large, they are too imprecise to lend decisive weight to any one, as opposed to any other interpretative approach featured in Table 1. All are based on field translations secured in local English; and all appear for the most part without benefit of supporting linguistic analysis. Lacking any fluent native speaker with whom to formulate and test hypotheses, these very imperfect translations stand as the main reference point for deciding between alternative descriptions. The situation faced by Hajda (1978:1-2) in her attempt to disentangle Marys River verbal morphology confronts anyone attempting to understand Kalapuyan morphologies:

The greatest difficulty in working with the [Marys River] texts is that neither Jacobs nor Frachtenberg gave literal translations: I have seven different forms translated simply as “they went,” for instance, and typically any one of these forms has three or four different translations—thus, *kini ?i?it* appears as “they went,” “they kept going,” “they used to go,” “they would go.” . . . Sometimes there is enough consistency in the translations so that a form tends to appear with one translation somewhat more often than another, but locating these tendencies is extremely slow. . . . At this point my results are unimpressive compared to the amount of time involved in obtaining them, but at least I can tabulate some of the formal patterns and speculate a bit on their implications.

Zenk wonders whether, realistically, we can hope for any better result than this from our present investigation of Tualatin verbal prefixes. Schrock is hopeful that an expanded Tualatin database incorporating the Gatschet corpus will enable us to use both sentential syntax (syntax that spans word-forms rather than word-internal syntax) and discourse analysis, to determine when and why different tense-aspects are used in different contexts. This should help us considerably in sharpening our definitions of relevant grammatical categories.

On an optimistic concluding note, we are confident in our ability to formulate a translation of the untranslated portions of Kenoyer's autobiography that will be about as good as that of the balance of the text, even lacking a definitive description of the morphology. We can do this in the Fieldworks database program, simply by assigning translations of already translated word-forms to corresponding untranslated word-forms, making adjustments where the same prefixes appear with different root forms. Our results so far in applying this method appear to us to be about comparable to the de Angulo-Freeland and Jacobs translations of the main Kenoyer corpus.

Appendix 1 Sample text 1: Fieldworks output

First line: Jacobs' field text, original transcription.

Second line: semi-automated interlinear translation.

Third line: free translation.

Note: This part of the narrative finds Kenoyer as a pupil in the government boarding school on Grand Ronde Reservation. "The Sister" is a Catholic sister, one of the teachers.

(1.1) **pe''ma ye'tc ɣɔdɔdkwi'st dɔdɔ'ndɔn ɣɔ'sa-abu'dzat**
 then nearly when nine its bell the sister

ɣɔ'ɪ'nda-t-adi'ndɔn.

rang the bell

'Then when it was nearly nine o'clock, the Sister rang the bell.'

(1.2) **βɔ'ɣɔlfan-ci''wei ɣɔdnɔmɪ'ndɔjɔs dʒɛha'l-a ɣɔ'sa nɪku'uɪ**
 all children they ran to where that wash

dɔnɪ'la'qʷ dɔnɪkwa'l-ak.

their hands their faces

'All the children ran to their washing (to) wash their hands and faces.'

- (1.3) **pe''ma gonitʰsʰ-i-diniku''ul gon-ila'm-u**
 then they finished their washing they went inside
tcegosʰsa ha'l-a ginʰok ginila'gwag aha'm-i
 to the where they their play room
 'Then they finished their washing (and) they went inside to where
 their play room was.'
- (1.4) **gosʰsabe-d gudiniyu'w-u-t gosʰsa-adi'ndin.**
 there they waited the bell
 'They waited there for the bell.'
- (1.5) **pe''ma gosʰca-abu'djat god-i'nda-t-adi'ndin.**
 then that sister rang the bell
 'Then the Sister rang the bell.'
- (1.6) **bu'gulfan-si'wei gudiniwe'cdap tce'd-inigu'n**
 all the children they stood at their slot
ha'l-a gosʰsa ginʰok gudini-da'f.
 where that they they stood
 'All the children stood at their designated spots where they (always?)
 stood.'
- (1.7) **pe''ma gosʰsa-abu'dzat gudna'git,**
 then the sister she said
"mi'd-i psla'm-ucda si'y-u tce mi'd-i diduplada'm."
 you all come here sit down to you your desks
 'Then the Sister said, "all of you come here and sit down at your
 desks."'
- (1.8) **be''ma qe'd-ak gosʰsa-abu'djat god-i'nda-t**
 then she that sister she rang
gosʰsa-wadi't'saq-adi'ndin bu'gulfan-si'wei gudiniwe'sdap.
 that little bell all the children they stood
 'Then the Sister rang the little bell (and) all the children stood.'

- (1.9) **qe'd·ak ɣɔɔna'ɣit ɣɔ'sa wate'n·a ha'mha.**
 she she said that prayer
 'She said the (morning) prayer (literally, the good words).'

Appendix 2: Sample text 2: Central Kalapuya comparisons

Rabbit and deadfall trap (original: Jacobs 1928, 35:115-17; published: Jacobs 1945:136-37). Linguistic authorities cited: Banks (2007), Berman (ca. 1986, 1990), Hajda (1976, 1978), Takeuchi (1969).

Each line-set is laid out as follows:

- (2.x) **xxx | xxx** [1928 Santiam field text: transliterated following (with allowances for some superfluous phonetic detail) Berman (1990); original spellings in < >-brackets; | = breaks in the (roughly) word-for-word field translation.]
 xxx | xxx [1928 Santiam field translation by Jacobs.]
xxx | xxx [1936 Tualatin field translation as written by Jacobs into his 1928 field notebook: transliterated (as above).]

KT: xxx xxx [Above Santiam text as published in *Kalapuya Texts*: transliterated (as above).]

S(lt): [Santiam text parsed following Takeuchi: transliterated (as above).]

E(lt): [Interlinear translation of S(lt), based on Takeuchi's grammatical notes and Santiam-Marys River glossary.]

hb notes: [Santiam morphology following Berman.]

yh notes: [Marys River (MR) morphology following Hajda (MR phonemic spellings after Hajda 1976).]

S(jb): [Transliterated Santiam text parsed following Banks (2007:94-97).]

E(jb): [Interlinear translation of S(jb) following Banks (2007:94-97).]

- (2.1) **gusʔambúʔn <ɣvs'ampó'n> | dádimaʔí <ráɾima'í> |**
gusdudingáuniʔ <ɣvɕɕɕɕɕɕɕɕɕɕ>
 Rabbit | when he came | onto his trail
gúsa-a-mámp'un | gudit'íid /gudit-ʔíid/ | ce-gúsa-
dudigúun

KT: gus-ambún dedimaʔí gus-dudingáuniʔ

S(lt): gus am-bun dedi(i)-ma-ʔi¹ gus du-din-gauni²

E(lt): dem art-*rbbt* 3sg.punct.sub-loc-go¹ dem loc-3sg.poss-*trail*² (¹3 sg punctual aspect/temporal subordinate-locative [ma- 'here']-V [-ʔi 'go': yielding 'come' with ma-]. ²locative-3sg possessive-N [dun~din-: "the alternations in vowel quality, i/u are not completely predictable".])

hb notes: ¹) /dii-/ 1/2/3 sg usitative relative, /da-dii-/ 3 sg usitative temporal;

/ma-/ directional (motion toward here). Note also: dá- <τὰ> (Jacobs 1928) > de- <δε> (Jacobs 1945): hb considers <á> a variant of /a/ (modal value: IPA [a]), where Jacobs normalized it to <ε> when he copied out his field texts for publication. <á> is probably a low front vowel, more-or-less IPA [a]. DeAngulo/Freeland show both [a] and [a] in their Tualatin transcriptions from Louis Kenoyer; but Jacobs no longer recorded that contrast by 1936 when he recorded Kenoyer: hence, Jacobs' Tualatin transcriptions show only <a> (transliterated: a), <ε> (transliterated: e).

yh notes: ¹) cf. MR /tii-/ 3 sg present tentative non-continuative. ²) cf. MR /tæn-/ 3sg possessive.

S(jb): gus am-bun d-e-di-maʔ-i¹ gus du-din-gauni²

E(jb): dist art-rbbt narr-irr-sub-cis-go¹ dist obl-3.poss-trail²

(¹narrative/habitual-irrealis-subordinate-cislocative-V. ²oblique case-3sg possessive-N)

(2.2) l[auʔmde] | gus dámhóodu <τámhó·τυ> | ant'áada.
then | he saw | a trap/deadfall
péʔma | gut-hóod | gúsa-at'áad.

KT: láuʔmdé gus-demhóodu ant'áada,

S(lt): lauʔ=mde gus dem-hoodu¹ an-t'aada

E(lt): then dem 3sg.punct-see¹ art-trap (¹1/3 sg punctual aspect-V).

hb notes: ¹) /dam-/ 1/2/3 sg usitative indicative (see 2.1, hb note on á).

yh notes: ¹) cf. MR /tam-/ 3sg past non-continuative.

S(jb): lauʔm[d]e gus d-e-m-hoodu¹ an-t'aada

E(jb): then dist narr-irr-fin-see¹ art-trap (¹narrative/habitual-irrealis-finite verb marker-V).

(2.3) l[auʔmde] | dāmʔnísdiʔni | ant'áada
then | he said | [to] the trap
péʔma | gut-níssin | a-t'áad.

KT: láuʔmdé demʔnísdni ant'áada,

S(lt): lauʔ=mde dem-nis-d-ni¹ an-t'aada

E(lt): then 3sg.punct-say-indir.obj.-dir.obj¹ art-trap (¹1/3 sg punctual aspect-V-indirect object-direct object).

hb notes: ¹) /dam-/ 1/2/3 sg usitative indicative (see 2.1, hb note on á).

yh notes: ¹) cf. MR /tam-/ 3sg past non-continuative.

S(jb): lauʔmde d-e-mʔ-nis-d-ni¹ an-t'aada

E(jb): then narr-irr-fin-say-appl-3.obj¹ art-trap (¹narrative/habitual-irrealis-finite verb marker-V-applicative-3rd person object)

(2.4) níkeema^hcumyúwadi <níke·má'tcumyúwari>
what are you waiting for?
ágga-máha-cumyúwwuut?

KT: "níkee-má^h-cumyúwadi?"

S(lt): níkee ma cum-yuwa-di¹

E(lt): *what* 2sg 2sg.progr-wait-ind.obj¹ (1/2 sg progressive aspect-V-indirect object [or 3rd person object marker?]).

hb notes: ¹) /cum-/ 1/ 2sg present tense indicative mode.

yh notes: ¹) cf. MR /cum-/ 1/2 sg present continuative; yh notes: "third person objects are not expressed (except occasionally by the use of independent pronouns)."

S(jb): níkee ma^h c-u-m-yuwa-di?¹

E(jb): *what* 2sg s.a.p-real-fin-follow-appl¹ (1speech act participant subject [non-past realis]-realis-finite verb marker-V-applicative).

(2.5) óo <ó·> | gus?ant'áada | dām?nák

'oh' | that trap | it said

úu | gúsa-a-t'áad | pá-u-míut

KT: "úu," gus-ant'áada dem?nák,

S(lt): (uu) gus an-t'aada dem-?nag¹

E(lt): __ dem art-trap 3sg.punct-speak¹ (1/3 sg punctual aspect-V).

hb notes: ¹) /dam-/ 1/2/3 sg usitative indicative (see 2.1, hb note on à).

yh notes: ¹) cf. MR /tam-/ 1/3 sg past non-continuative.

S(jb): 'uu' gus ant'aada d-e-m?-nak¹

E(jb): disc dist art-trap narr-irr-fin-say¹ (1narrative/habitual-irrealis-finite verb marker-V).

(2.6) cumyúwacubumá^h <tcumyúwatcupumá'>

I'm waiting for YOU!

cí?i ciyúwwupfun máha

KT: "cumyúwacubu-má^h

S(lt): cum-yuwa-cubu¹ ma

E(lt): 2sg.progr-wait-2sg.ind.obj¹ 2sg (1/2 sg progressive aspect-V-2 sg indirect object).

hb notes: ¹) /cum-/ 1/2 sg present indicative.

yh notes: ¹) cf. MR /cum-/ 1/2 sg present continuative; /-c(i)pu/ 2sg object [e.g. (from MR texts in Jacobs 1945): cum-?núidi-cbu 'I am afraid of you'].

S(jb): c-u-m-yuwa-cubu¹ [ma^h > 7 below]

E(jb): sap-real-fin-follow-appl.2sg.obj¹ (1speech act participant subject [non-past realis]-realis-finite verb marker-V-applicative 2sg object [/di/ (applicative) + /-fubu/ (2sg direct object) > -cubu]).

(2.7) há'snamihángán <há'c[namı]háŋqán>¹

when you go by here (1<namı> written above crossed-out text: <κε>)

hésa máha gudit'fid.

KT: hēs-namihangán"²

²note: hân > han (not hen).

S(lt): hes nami-han-gan³

E(lt): here 2sg.pot.sub-loc-go.by³ (³2 sg potential aspect/temporal subordinate-locative ('there')-V).

hb notes: ²) (see 2.1, hb note on à.) ³) /nam-(m)i-/ > nami- 2sg future temporal.

yh notes: ¹) cf. MR /kii/ 2 sg tentative noncontinuative. ³) cf. MR /tamii-/ 2 sg tentative continuative.

S(jb): ma^h [sic] hes n-a-m-i-han-gán³

E(jb): 2sg proximal 2.irr-irr-fin-sub-prox-go.by³ (³2nd subject irrealis-irrealis-finite verb marker-proximal deictic/static locative-V).

(2.8) óo <ó·> | gus?ambú?n <'αμπό'n> | dām?nák,

'oh' | [said] that rabbit | it said

úu | gúsa-a-mámp'un | pá-u-míut

KT: "úu," gus-ambún dem?nák,

S(lt): (uu) gus am-bun dem-?nag¹

E(lt): __ dem art-rbbt 3sg.punct-speak¹ (¹1/3 sg punctual aspect-V).

hb notes: ¹) /dam-/ 1/2/3 sg usitative indicative (see 2.1, hb note on à).

yh notes: ¹) cf. MR /tam-/ 3sg past non-continuative.

S(jb): uu gus am-bun d-e-m?-nak¹

E(jb): disc dist art-rbbt narr-irr-fin-say¹ (¹narrative/habitual-irrealis-finite verb marker-V).

(2.9) óo <ó·> | cí?gusgindangán?wii

oh | I can go right through there!¹ (¹can pass [right through there!])

úu | cí?i gut'íid gúsabeed

KT: "úu cí?-gus-gindangán-wii!²

²note: dán > dan (not den).

S(lt): (uu) ci gus gin-dan-gan-wii /gum-../³

E(lt): __ 1sg dem 1sg.habitual-(?)-go.by-(?)³ (³1/2/3 sg habitual aspect [/gum-/ > gin/__d]- (?) [variant of d- completive?]-V-(?) [emphatic?]).

hb notes: ²) (see 2.1, hb note on à.) ³) /gum-/ 1/2/3 sg aorist indicative (/gum/ > gin/__d); dan- location (at a place).

yh notes: ³) cf. MR /kam-/ (> kan/__t?) 1sg past non-continuative.

S(jb): uu cí? gus g-i-n-dan-gan=wii³

E(jb): disc 1sg dist pot-real-fin-empht.loc-go.by=emph³ (³potential-realis-finite verb marker-emphatic translocative-V=emphatic)

(2.10) wá?lau?má^h | gədámagwínfa? <κατάμακwínfa'>

not now you | could you catch, get me!

wánq-lúf máha | gudit-gwínfu

KT: wáʔ-lauʔ-má^h gdemagwínfaʔ."

S(lt): wa lauʔ ma gide-ma-gwin-fa¹ /gum-de-ma-gwin-hwa/

E(lt): neg now 2sg 2sg.hab.neg-loc-catch-1sg.obj¹ (¹1/2/3 sg negative habitual
[/gum-de-/ > gide-]-locative ['here']-V-1 sg object [/-hwa/ > fa]).

hb notes: ¹ /gi-da-/ 1/2/3 sg aorist contrastive; /ma-/ directional (motion
towards here).

yh notes: ¹ cf MR /kta/ 1/3 sg non-continuative tentative (with example given
of /kta/ in a 3sg negated V; no examples of 2sg in negated Vs, but
according to hb Santiam /gide-/ is 1sg, 2sg, 3sg aorist contrastive); cf.
MR /-af/, /-nafaʔ/ (/na-faʔ/?) 1sg object.

S(jb): waʔ lauʔ ma^h g(i)-de-ma-gwin-fa¹

E(jb): neg now 2sg inf-neg-cis-get-1sg.obj¹ (¹2sg infinitive marker-negative-
cislocative-V-1sg object).

(2.11) l[auʔmde] | gusʔant'áada | dāmʔnák

then | that trap | it said

péʔma | gúsa-a-t'áad | pá-ut-míut

KT: láuʔmdé gus-ant'áada demʔnák,

S(lt): lauʔ=mde gus an-t'áada dem-ʔnag¹

E(lt): then dem art-trap 3sg.punct-speak¹ (¹1/3 sg punctual aspect-V).

hb notes: ¹ /dam-/ 1/2/3 sg usitative indicative (see 2.1, hb note on à).

yh notes: ¹ cf. MR /tam-/ 1/3 sg past non-continuative.

S(jb): lauʔmde gus ant'áada d-e-mʔ-nak¹

E(jb): then dist art-trap narr-irr-fin-say¹ (¹narrative/habitual-irrealis-
finite verb marker-V).

(2.12) déebaadágán <ṛé·[']pa·ṛáqán¹> (¹<'> crossed-out)

let's see you go by!² (²I dare you to go by!)

hínna ce-dit'íid /ce-dit-ʔíid/

KT: "t'ée-baa-degán³

³note: dée (1928) > t'ée (1945).

S(lt): t'ee (~dee)⁴ baa de-gan⁵

E(lt): emph.advers⁴ (?) 2sg.neg.imper-go.by⁵ (⁴emphatic adversative ['on the
other hand'], ⁵negative/emphatic imperative-V).

hb notes: ⁵ /da-/ 2sg imperative (see 2.1, hb note on à).

yh notes: ⁵ cf. MR /ta-~ti-/ 2sg imperative.

S(jb): t'ee baa de=gán⁵

E(jb): contr (?) indef-go.by⁵ (⁵indefinite=V (?) [but jb lists de- as negative
prefix; I find no treatment of de= as 'indef']).

(2.13) gúsdumidángán <κúctumιṛáqán>

if you can go thru there!

gúsabeed gudit'íid /gudit-ʔíid/.

KT: gús-dumidangán!"¹¹note: dán > dan (not den).S(lt): gus dumi-dan-gan²E(lt): dem (?)-(?)-go.by² [²prefixes unexplained: cf. dumi- 3sg progressive temporal subordinate (no 2 sg given), /dum-/ 1sg potential aspect (2 sg given as /nam-/)]).hb notes: ² /dumi-/ 1/2/3 sg objective ("used in a subordinate clause when the subject is the same as that of the main clause"); /dan-/ directional (location at a place).yh notes: ² cf. MR /tamii-/ 2sg tentative continuative (if..., when...).S(jb): gus dumi-dan-gan²E(jb): dist purp-emph.tloc-go.by² (²complementizer/purposive-emphatic translocative-V).**(2.14) dintq'úp <rintq'óp> | gus?antkwílilek | dumúc'ál**I can cut | that blackberry | its rope (vine i. e.)¹¹(note facing page:) "rope: mót'sál is not the best word; Hudson says he has forgotten the real word for blackberry vine."**cí?i dik'úpfan | gúsa-ántgwil | diláal****KT: "dintq'úp gus-antkwílilek dumúc'el,"**S(lt): dint-k'ub /dum-t-../² gus an-tkwililek du-muc'elE(lt): 1sg.pot-compl-cut² dem art-blackbrry 3sg.poss-rope (²1sg potential aspect [/dum-t-/ > dint-]-completive-V).hb notes: ² /dum-/ 1sg future indicative, /t-/ directional (m > n/ __t, u > i/ __n; no examples of /dum-t-/ > dint-, but hb shows /dum-da-/ > dinda- 1 sg future contrastive).yh notes: ² cf. MR /tum/ 1sg future continuative, /tam/ 1 sg future non-continuative; ..-t directional (away from speaker).S(jb): di-n-t-q'up² gus an-tkwililek du-muc'elE(jb): 1.irr-fin-tloc-cut² dist art-blackbrry 3.poss-rope (²1st person irrealis-finite verb marker-translocative-V).**(2.15) l[au?mde] | gus?ant'áada | dām?nák**

then | that trap | it said

pé?ma | gúsa-a-t'áad | pá-ut-mfút**KT: láum?dé gus-ant'áada dem?nák,**S(lt): lau?=mde gus an-t'áada dem-?nag¹E(lt): then dem art-trap 3sg.punct-speak¹ (¹1/3 sg punctual aspect-V).hb notes: ¹ /dam-/ 1/2/3 sg usitative indicative (see 2.1, hb note on á).yh notes: ¹ cf. MR /tam-/ 3sg past non-continuative.S(jb): lau?mde gus ant'áada d-e-m?-nak¹E(jb): then dist art-trap narr-irr-fin-sqy¹ (¹narrative/habitual-irrealis-finite verb marker-V).

(2.16) **namitq'úb <namitq'óp> | gusʔantkwílilek | dumúc'ál**
 when you cut it | that blackberry | rope, vine
máha gutk'úbban | gusa-ámpgwil | diláal.

KT: "namitq'úp gus-antkwílilek dumúcel.

S(lt): nami-t-tk'ub¹ gus an-tkwilileek du-muc'el
 E(lt): 2sg.pot.sub-complt-cut¹ dem art-*blackbrry* 3sg.poss-*rope* (12 sg potential aspect/ temporal subordinate-completive-V).
 hb notes: ¹) /nam-(m)i-/ > nami- 2sg future temporal; /t-/ directional (direction away from here).
 yh notes: ¹) cf. MR /tamii-/ 2 sg tentative continuative; /t-/ directional (away from speaker).
 S(jb): n-a-m-i-t-q'up¹ gus an-tkwililek du-muc'el
 E(jb): 2.irr-irr-fin-sub-tloc-cut¹ dist art-*blackbrry* 2.poss-*rope* (12nd subject irrealis-irrealis-finite verb marker-subordinate irrealis-translocative-V)

(2.17) **dísdungwínfub <τί·στυηκwínfop>**
 then I'll catch you!
cíʔi díś guddítgwin máha.

KT: díś-dungwínfub."

S(lt): diis dun-gwin-uf¹ /..-uhw/
 E(lt): *pretty soon, straight* 1sg.pot-*take*-2sg.dir.obj¹ (11sg potential aspect [dum-~dun-]-V-2sg direct object [/hw/ > f]).
 hb notes: ¹) /dum-/ 1sg future indicative; no clear rule stated for /m/ > [ŋ]/__gw, but hb notes "nasal assimilation is the only source of the allophone ŋ."
 yh notes: ¹) cf. MR /tum-/ 1sg future continuative; /-uf/ 2sg object.
 S(jb): diis du-n-gwin-fub¹
 E(jb): *soon* 1.irr-fin-*get*-2sg.obj¹ (11st subject irrealis-finite verb marker-V-2sg direct object).

(2.18) **l[auʔmde] | gusʔambúʔn <'ampó'n> | dāmʔnák,**
 then | (said) that rabbit | it said
péʔma | gusa-a-mámp'un | pá-ut-mfut

KT: láumʔde gus-ambún demʔnák,

S(lt): lauʔ=mde gus am-bun dem-ʔnag¹
 E(lt): *then* dem art-*rbbt* 3sg.punct-*speak*¹ (11/3 sg punctual aspect-V).
 hb notes: ¹) /dam-/ 1/2/3 sg usitative indicative (see 2.1, hb note on á).
 yh notes: ¹) cf. MR /tam-/ 3sg past non-continuative.
 S(jb): lauʔmde gus am-bun d-e-mʔ-nak¹
 E(jb): *then* dist art-*rbbt* narr-irr-fin-*say*¹ (1narrative/habitual-irrealis-finite verb marker-V).

(2.19) **wáʔlauʔmáʰgədádkwínfaʔ** <wáʔlauʔmáʰkəʔáʔkwínfaʔ>
 not now you could you get me,
wánq-lúf máha gut-sígwin cecíʔi.

KT: "wáʔ-lauʔ-máʰ-gdedgwínfaʔ!"

S(lt): wa lauʔ ma gide-t-gwin-fa¹ /gum-de-t-gwin-hwa/

E(lt): neg now 2sg 2sg.hab.neg-complt-catch-1sg.obj¹ (¹1/2/3 sg habitual negative [/gum-de-/ > gide-]-completive-V-1 sg object [/-hwa/ > fa]).

hb notes: ¹) /gi-da-/ 1/2/3 sg aorist contrastive; /t-/ directional (motion away from here).

yh notes: ¹) cf MR /kta/ 1/3 sg non-continuative tentative (with example given of /kta/ in a 3sg negated V; no examples of 2sg in negated Vs, but according to hb Santiam /gide-/ is 1sg, 2sg, 3sg aorist contrastive); /t-/ directional (motion away from speaker); /-af/, /-nafaʔ/ (/-na-faʔ/?)) 1sg object.

S(jb): waʔ lauʔ maʰ g(i)-de-d-gwin-faʔ¹

E(jb): neg now 2sg inf-neg-tloc-get-1sg.obj¹ (¹2sg infinitive marker-negative-translocative-V-1sg object).

(2.20) **gúsgindángánʔwi**

I can go right thru there

cíʔi gúsabeed guditʔfid /gudit-ʔfid/.

KT: "gús-gindengán-wii.

S(lt): gus gin-dan-gan-wii¹ /gum-.../

E(lt): dem 1sg.hab-(?)-go.by-(?)¹ (¹1/2/3 sg habitual aspect [gum > gin/__d]-(?) [variant of d- completive?]-V-(?) [emphatic?]).

hb notes: ¹) /gum-/ 1/2/3 sg aorist indicative (/gum/ > gin/__d); dan- location (at a place).

yh notes: ¹) cf. MR /kam-/ (> kan/__t?) 1sg past non-continuative.

S(jb): gus g-i-n-dan-gan=wii¹

E(jb): dist pot-real-fin-emph.t.loc-go.by=emph¹ (¹potential-realis-finite verb marker-emphatic translocative-V=emphatic)

(2.21) **gintqʔúb** <KINTQʔÓP> | **gusʔantkwílilek** | **dumúcʔál**

I'll cut | that blackberry | rope (vine)

cíʔi gutkʔúbban | gúsa-ántgwil | diláal.

KT: gintqʔúp gus-antkwílilek dumúcʔel,"

S(lt): gin-t-kʔub¹ /gum-t-../ gus an-tkwilileek du-mucʔel

E(lt): 1sg.hab-complt-cut¹ dem art-blackbrry 3sg.poss-rope (¹1/2/3 sg habitual aspect [/gum-/ > gin/__t]-completive-V).

hb notes: ¹) /gum-/ 1/2/3 sg aorist indicative (/gum/ > gin/__t); /t-/ directional (motion away from here).

yh notes: ¹) cf. MR /kam-/ (> kan/__t?) 1sg past non-continuative; /t-/ directional (motion away from speaker).

S(jb): g-i-n-t-q'up¹ gus an-*tkwílilek* du-muc'el
 E(jb): pot-real-fin-tloc-cut¹ dist art-*blackbrry* 3.poss-*rope* (¹potential-realis-finite verb marker-translocative-V).

(2.22) **déebaadáǵéʔc <τέ·ρα·τάκέ'tc>**
 let's see you do it!
hínna máha pésa det-híuʔnan.

KT: "t'ée-baa-deǵécl!"¹

¹note: *dée* (1928) > *t'ée* (1945).

S(lt): t'ee (~dee)² baa de-gec³

E(lt): emph.advers² (?) 2sg.neg.imper-do³ (²emphatic adversative ['on the other hand'], ³negative/emphatic imperative-V).

hb notes: ³) /da-/ 2sg imperative.

yh notes: ³) cf. MR /ta~ti-/ 2sg imperative.

S(jb): t'ee baa de=ǵec³

E(jb): contr (?) indef=*make*³ (³indefinite=V (?) [but jb lists de- as negative prefix; I find no treatment of de= as 'indef']).

(2.23) **wíinaswí | gusʔambúʔn <κvc'ampó'n> | gint'ídip**
 sure enough | that Rabbit | he jumped
gús-wi | gúsa-húmp'un | gut-íddap

KT: wíinas-wíi gus-ambún gint'ídip,

S(lt): wii-nas-wii gus am-bun gin-t-ʔidip¹ /gum-t-../

E(lt): *surely* dem art-*rbbt* 3sg.hab-complt-jump¹ (¹1/2/3 sg habitual aspect [gum- > gin/__t]-completive-V).

hb notes: ¹) /gum-t-V/ > gin-t-V 1/2/3 sg aorist indicative-directive-V (m > n/__t, u > i/__n) (cf. 35 [citing SKT 111]: *gidiit'ídip* '(the man) leaped (ashore)').

yh notes: ¹) cf. MR /kin-t-/ 3sg past non-continuative + directional (away from speaker).

S(jb): wíinas=wii gus am-bun g-i-n-t'-idip¹

E(jb): *indeed*=emph dist art-*rbbt* pst-real-fin-tloc-jump¹ (¹past-realis-finite verb marker-translocative-V)

(2.24) **intq'ádinidíʔ | gusʔantkwílilek | dumú'c'ál**
 he bit at it with his tooth¹ | that blackberry | its rope (vine)
¹and cut it thru; nipped it (as he went thru)
gut-k'wéihan | gusa-ántgwil | diláal

KT: intq'á-dinidí? gus-antkwílilek dumú'el,

S(lt): in-t-k'ad² /um-t-../ dini-di?³ /dun-ni-../ gus an-*tkwilileek*
 E(lt): 3sg.progr-complt-cut.across² 3pl.poss-teeth³ dem art-*blackbrry* (^{2,3}
 sg.progressive aspect [/um-/ > in-/_t]-completive-V. ³/dun-ni-/ >
 dini- [u > i/_dental-C, geminated nasal > single nasal].)
 du-muc'el /dun-../
 3sg.poss-*rope*

hb notes: ²) /um-/ 3sg present indicative tense (m > n/_t, u > i/_n).

yh notes: ²) cf MR /um-/ 3sg present (occasionally: ~past) continuative. ³) cf
 MR /tə- ~ tən-/ 3sg possessive.

S(jb): i-n-t-q'a² dini-di? gus an-*tkwililek* du-muc'el

E(jb): real-fin-tloc-*rip*(?)² 3pl.poss-teeth dist art-*blckby* 3pl.poss-*rope* (²realis-
 finite verb marker-translocative-V)

(2.25) lau? | gus?ant'áadá | dántíic | cá'miyank | duubú?n

<ту'пó'н>

then | that trap | it fell | on top of | the rabbit

pé?ma | gúsa-at'áad | gucéggú <гуджéг'v> | ce-hálbam

<дје-..> | ámp'un

KT: láu?-gus-ant'áade dentíic cémiyank duubún

S(lt): lau? gus an-t'aada den-tic¹ /dem-../ cemiyank duu-bun

E(lt): now dem art-*trap* 3sg.punct-fall¹ on top of loc-*rbbt* (¹1/3 sg punctual
 aspect [/dem-/ > den-/_t]-V).

hb notes: ¹) /dam-/ > dan 1/2/3 sg usitative indicative (m > n/_d; á = a: see 2.1,
 hb notes).

yh notes: ¹) cf. MR tan-: variant of /tam-/ 1/3 sg past (non-continuative).

S(jb): lau? gus an-t'aade d-e-n-t-i-c¹ ce-miyank duu-bun

E(jb): now dist art-*trap* narr-irr-fin-tloc-fall¹ adv-above obl-*rabbit*
 (¹narrative/habitual-irrealis [a- ~e-]-finite verb marker [m > n]-
 translocative-V).

(2.26) l[au?mde] | dándáhai | gus?ambú?n <квс'ампó'н>

then | it killed him | that Rabbit

pé?ma | guddáhai | gusa-ámp'un

KT: láu?mde dendáhai gus-ambún

S(lt): lau?=mde den-dahay¹ /dem-../ am-bun

E(lt): then 3sg.punct-kill¹ art-*rabbit* (¹1/3 sg punctual aspect [/dem-
 / > den-/_t]-V).

hb notes: /dam-/ 1/2/3 sg usitative indicative (as in 25).

yh notes: cf. MR [tan-] (as in 25).

S(jb): lau?mde d-e-n-daha-i gus am-bun

E(jb): then narr-irr-fin-kill-3.obj?¹ dist art-*rabbit* (¹narrative/habitual-
 irrealis-finite verb marker-V-(?3sg object)

(2.27) **gusʔambúʔn <κυσ'αμπό'ν> | dántáq**
 that rabbit | he squealed, cried
gúsa-ámp'un | guddífsdaq

KT: gus-ambún dentáq

S(lt): gus am-bun den-tak¹ /dem-../

E(lt): dem art-*rbbt* 1/3 sg.punct-*cry*¹ (¹see 25).

hb notes: ¹) /dam-/ 1/2/3 sg usitative indicative (see 25).

yh notes: ¹) /tan-/ (as in 25).

S(jb): gus ambun d-e-n-taq¹

E(jb): dist art-*rbbt* narr-irr-fin-*shout*¹ (¹see 25).

(2.28) **gusʔant'áada | dádimahfíc**
 that trap | when it fell on him
gúsa-at'áad | gudi-céggú <GDDI-DJÉG'U>

(K): gus-ant'áada dedimahfíc

S(lt): gus an-t'aada dedi(i)-ma-hiic¹

E(lt): dem art-*trap* 3sg.punct.sub-loc-*drop*¹ (¹3 sg punctual aspect/temporal subordinate-locative ['here']-V)

hb notes: ¹) /da-dii-/ 1/2/3 sg usitative temporal (á = a: see 2.1, hb notes); /ma- / directional (motion towards here).

yh notes: ¹) cf.? MR /tii-/ 3 sg present tentative (non-continuative); /titaa-/ 3 sg past tentative continuative; /ktati-/ 1 pl past tentative non-continuative, /ktatip-/ 2 pl past tentative non-continuative.

S(jb): gus an-t'aada d-e-di-ma-hiic¹

E(jb): dist art-*trap* narr-irr-sub-cis-*fall*¹ (¹narrative/habitual-irrealis-subordinate irrealis-cislocative-V)

Appendix 3: Sample text 3: excerpt from Gatschet original (compare Jacobs 1945:173)

(Each line-set is laid out as follows:)

(3.x) [Excerpts from Gatschet's (1877:240) original field transcript, spelled following original.]
[Frachtenberg's (ca. 1915) original typescript, based on his review with Louis Kenoyer of Gatschet's original text; spelled following original.]
 [Frachtenberg's original word-for-word interlinear translation.]
 *Frachtenberg's grammar footnotes.
[Jacobs' re-elicitations with Louis Kenoyer, inserted by Jacobs in 1936 into Frachtenberg's typewritten original; transliterated into Berman's (1990) phonemic orthography.]
 Jacobs' translation (where different than Frachtenberg's).

- (3.1) **Lók^{mēn} pkē-ini-ímmim,**
lā'g pkúni mim.
 Long ago were they people.
láaq guni-ámmim.
- (3.2) **pkumayófintchau ámmim.**
pkú yō'fintcō am mím,
 Were increasing the people,
gu-yóofincu ámmim,
 there were lots of people
- (3.3) **pkupó-it háshka ánu;**
pkú póyit' hácka a nū.
 was filling this the country.
gu-bóoyut hésa ánnu.
 they filled the land
- (3.4) **pú'kělfan hálla pkúmayófintchau ámmim.**
púkilfan hálla pkúma yō'fintcō am mím.
 Every where were here increasing the people.
búgulfan hálla gumni-yóofincu ámmim.
 ... [were here] many of [the people]
- (3.5) **pkú-uá ámilfan;**
pkú wa' am ílfan;
 was not the sickness;
gu-wáha ílfan
 There was not much of sickness.
- (3.6) **pú'kělfan pkapúntchanaítin;** (note: <pka-> not pka-)
púkilfan pkú púntcanaitin,
 wholly did make self continually
búgulfan gu-búncanain
 All those who were made,
- (3.7) **ashí-uei pkupálatin.**
a sí'wē pkú pálatin.
 the children did big habitually.
a-síi?wei gut-báladin.
 all those [children] [did] become big (grow up - none died).

- (3.8) **päma pkútámagit hétuf,**
Pä'ma pku támakot'* há'tof.
 thereupon did live long time.
 *This is a passive form as shown by the suffix -kot^h; the stem tam- is used with plural subjects only and seems to denote TO LIVE.
pé?ma gut-dáamagot hédduf.
 So they [did] accumulate for a [long time].
- (3.9) **Péma pkuní-i ayúalak hú-wan ámmim;**
Pä'ma pkúni yī a yū'walaq hū'wan ám'im*;
 thereupon did they go the hunters five the people;
 *Contracted for am THE; mim PERSON, PEOPLE; such contractions are typical of the northern Kalapuya dialects.
pé?ma guni-yíyi a-yú?wilaq hú?wan ámmim
 Now they went [the hunters] (were) [five the people]
- (3.10) **uán mántal pkúnkuanbat.** (note: <uán> not <uán>)
wa'n mántal* pkun kwánpat'.
 one dog did them accompany habitually
 *Contracted for ma HERE; an THE; tal DOG. A number of stems occurring in other Kalapuya dialects as independent words appear in Atfalati (and Yamhill) as substantivals (suffixed nouns). This stem belongs to this category.
wá?an mánt'al guni-k'wéen.
 (...[habitually] crossed out)

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