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CATAWBA MORPHOLOGY IN THE TEXTS OF FRANK SPECK AND OF
MATTHEWS AND RED THUNDER CLOUD¹

Paul Voorhis

Abstract: The Catawba verb morphology revealed in Frank Speck's texts differs somewhat from that described by Matthews and Red Thunder Cloud. The dubitative suffix has a different shape. Sequences of suffixes occur in Speck that are forbidden in Red Thunder Cloud's usage. Object suffixes appear only in Speck. Matthews and Red Thunder Cloud's subject suffixes do not occur in Speck; their future imperfective suffixes seem to be positional variants of the momentaneous, which look like Speck's subject suffixes. First and third plurals have post-vocalic variants. Speck also records aspect suffixes not found elsewhere.

1. Introduction

G. Hubert Matthews and Red Thunder Cloud (1967, p. 7) say of Red Thunder Cloud's speech, 'the dialect . . . as regards verb morphology is in some respects simpler than those represented in the texts published by Frank Speck in 1934 . . .' We may ask, just how do the verbs in Speck (1934) differ from those in Matthews and Red Thunder Cloud (1967)? The present paper attempts to answer that question, at least in part. It is based on a partial catalog of the words and morphemes in Speck (1934).

Citations of the form (12.3) specify text 12, line 3, in Speck (1934).

2. Changes in Transcription

The following changes are made in Speck's transcription of Catawba.

For greater convenience in typing and for easier recognition α is rewritten as v, and i· is replaced by i:.

To conform to more modern practice, the stress accent, which Speck writes after a vowel, is replaced over the vowel, dj is rewritten as j, and tc as c. Elsewhere, c is replaced by š. ' is replaced by ʔ.

In an attempt to achieve a more phonemic transcription, nasal consonants before a homorganic stop are dropped after a nasalized vowel, or they are rewritten as nasalization of the preceding vowel if that vowel is in alternation with a nasalized vowel: i:pi 'fire' (9A.11, 9B.1); kj:t 'the' (11.2, 13.3); nu:ti(:) 'sun, moon' (11.5, 51.2).

For the same reason, ' is dropped between consonants and finally after consonants; otherwise ' before a consonant is rewritten as h for it is in complementary distribution with h, which precedes vowels: yitkíthv 'broke in pieces' (1A.11); watkút 'snail' (16.18, 16.19); déhçire 'lost' (1A.1); huktúkvhv 'she fell down' (1A.16).

A high dot appears very infrequently after vowels other than i, and generally in free variation with its absence; it is assumed to be non-distinctive except after i and is therefore dropped in this paper: wé 'town' (16.23, 19.1).

Matthews and Red Thunder Cloud's transcription is changed only by replacing their macron over a vowel with a colon following the vowel. Similarly, Siebert's high dot (Siebert 1945) is replaced by a colon.

3. Problems in Transcription

Vowel length, or perhaps vowel tension, is evidently phonemic in Catawba: mit- 'to shut one's eyes', mi:t- 'to have a cramp' (Siebert 1945, p. 216), híya:p 'his tooth', ísap 'leggings' (Siebert 1945, p. 215), hinúksu 'his armpit', hidúksu:ʔ 'his ear' (Siebert 1945, p. 215).

But the transcription in Speck (1934) is intended to distinguish vowel quality only (p. xvi). And Speck states specifically that i: is higher, but not longer, than i, in contrast with the more typical use of these symbols. Perhaps his monitoring of non-distinctive quality, rather than distinctive length or tension, is responsible for the confusion in the recording of vowels, deplored on page xviii, and evident throughout the texts.

Speck's vowels can be classified as follows.

	<u>long or tense</u>	<u>short or lax</u>
high front	<u>i:</u>	<u>i</u>
low front	<u>e</u>	
neutral		<u>ə</u>
high back	<u>o</u>	<u>u</u>
low back	<u>a</u>	<u>ɜ</u>

Most or all of these can also be nasalized, indicated in writing by a hook under the vowel letter.

The most frequent variations in the transcription of vowels can be described in terms of the classification above as follows.

long varies with short: ci:rik- (5.1), ci:rik- (9A.9) 'to run',
omé (17.2), umé (12.7) 'alone', atýde (83.3), vtýde (88.9),
atāde (100.5) 'wash'

nasalized with non-nasalized: hí:pv? (9B.3), hí:pv? (25.4) 'his
foot'

high front with low front: wi:b- (33.2), web- (32.15) 'to catch'
u with v: suk (12.9), svk (28.7) 'house'

ə with other short vowels, with e, and with zero: sinu (98.9),
sənu (54.2) 'money', sare (7.1), sarə (19.5) 'sorry', kurí:
(1A.17), kərí: (1A.19) 'son', cigné (19.1), cigəné (19.2)
'raccoon'

Sometimes one variant is much more frequent than others, and can be taken as a basic form by that criterion: ci:rik- 'to run' with variants ci:rik- (5.1, 8.3, 10.9 bis, 16.12, 16.16, 16.22, 35.2, 36.12, 63.3, 100.9, 101.10), ci:rik- (9A.9, 13.1, 13.4, 115.16), ci:ri:k- (115.11, 116.20).

Many words and morphemes are recorded sometimes with, and sometimes without, a final glottal stop: yj:cá? (1A.1), yj:cá (1A.7) 'child', -né (11.4), -né? (34.8) 'interrogative'. The variant with the final glottal stop is assumed to be basic.

In many words in Speck's texts there is apparent random variation in the place of accent: yúksu (1A.6), yuksú (1A.8) 'his mother'. No attempt

is made here to discover a basic or phonemic accent. Full words are cited with whatever accent(s) Speck recorded for them, and roots, stems, and affixes are cited without accents.

Indeed, there is no clear evidence that the accents recorded by Speck can ever distinguish otherwise identical words. On the contrary, the many words with varying accent suggest that it is bound up with intonation. A final-syllable accent is especially common on nouns near the beginning of sentences; perhaps it marks a topic, or at least some special emphasis: ni:pŷ? cí:ʔcure ní:pv? pácure. 'My foot is very cold, my foot must be near the fire.' (9A.3).

Final-syllable accents possibly result from rising intonation non-final from falling. Thus the interrogative suffixes -ne? and -do? (section 6) are usually accented, probably due to rising intonation.

Matthews and Red Thunder Cloud (1967) use a phonetic transcription (pp. 8, 9), but it appears to be free of the random variation between presumably phonemically distinct vowels that is rife in Speck's work.

Siebert (1945) apparently writes phonemically.

4. Problems of Translation

Speck's translations have to be used with some caution. For example, in text 98, the sentence beginning on line 19 is translated as an instruction in the imperative, 'When the clay is dug, put it in a bag to take home.' But analysis shows that the verbs are really third person plural continuative. So it should be translated, 'When they dig the clay, they put it in a bag and take it home.' For another example, in text 10, line 5 is part of a conversation in which Rabbit's remarks are translated as, 'I very much need some water.', and Snapping-turtle answers, 'You can't have water.' Speck encloses the personal pronouns in square brackets indicating an editorial addition. But there are pronouns present in the Catawba. What Rabbit actually says is, 'We very much need some water.' And Snapping-turtle's answer is second-person plural, indeed, the clearest example of a second plural form yet found in these texts.

5. Morphology

The details of Catawba morphology as revealed in Speck (1934) will now be discussed, along with how those details differ from the structure described in Matthews and Red Thunder Cloud (1967). Verb and noun morphology are sharply distinguished. The former will be discussed first in sections 6-15, the latter in section 16.

6. Final Suffixes

Catawba has a series of suffixes of generally modal meaning. These suffixes are always last in the verbal complex, so they can be called final suffixes. Final suffixes that occur with some frequency and certainty in Speck (1934) are listed with examples below.

- re indicative: hore 'he came' (115.2), kánire 'she saw' (18.1)
- we potential: kániwe 'if he sees' (55.1)
- ne? interrogative: honé 'did he come?' (11.4), kúdyané? 'do you say?' (34.8)
- do? emphatic interrogative: yahši:adó? 'are you afraid?' (stem ši:a-) (101.11)
- de imperative: hóde 'come' (114.7)
- ce? prohibitive: udyi:ce? 'don't say' (5.3)
- ny dubitative: kény '[one must have] put' (16.18)
- he? continuative: kéhé? '[one] puts' (100.4)
- yvt conjunctive: hóyvt 'when he came' (11.2)
- ? after vowels, zero after consonants, participial: kúsa? 'standing' (15.7), ho? '[coming]' (114.7), dugdán 'whom I got back' (stem kan-) (18.9)
- ti(:)ri(:)e narrative: kusáhatírie 'he stopped, it is said' (13.4), hotí:ri:e 'he came [it is said]' (115.27)

The participial suffix -? is somewhat uncertain. Speck's recording of glottal stops is unreliable by his own admission (Speck 1934, p. xviii), so what is taken here to be a suffixed glottal stop could be the sporadically appearing final consonant of a root or stem.

The final suffixes gleaned from Speck (1934) are compared with the list of Matthews and Red Thunder Cloud (1967) below. Siebert (1945) also discusses this series of suffixes, and his list is added here. Different names are used for some of the suffixes in the different sources, but it is still easy to identify suffixes of similar form and use.

	<u>Speck</u>	<u>Matthews & R.T.C.</u>	<u>Siebert</u>
indic.	<u>-re</u>	<u>-re</u> E	<u>-re:</u>
poten.	<u>-we</u>	<u>-we</u> E	<u>-we:</u>
inter.	<u>-ne?</u>	<u>-ne</u> E	<u>-ne</u>
emphat.	<u>-do?</u>		<u>-du:</u>
imper.	<u>-de</u>	<u>-de</u> E	<u>-de:</u>
prohib.	<u>-ce?</u>	<u>-ce</u> A	<u>-ce:</u>
dubit.	<u>-ny</u> _l	<u>-wo</u> E	
			<u>-ti</u>
contin.	<u>-he?</u> _l	<u>-Ehè?</u> A	
conjunc.	<u>-yvt</u>	<u>-yót</u> A	
partic.	<u>-(?)</u>	<u>-hò?</u> A	
narrat.	<u>-ti(:)ri(:)e</u>	<u>eti:rie</u>	
subjunctive			<u>-te:</u>
optative			<u>-nu:</u>
hortative			<u>-ru:</u>
repudiative			<u>-ta?</u>

Matthews and Red Thunder Cloud divide the final suffixes into two classes. A-class suffixes take no preceding suffixes. E-class suffixes may follow certain other suffixes. The classification is indicated by the capital A or E after each suffix in the list above. This classification will be discussed further as the non-final suffixes are introduced below.

The three sources have three suffixes of very different form, but similar enough in meaning to be all listed as dubitative. Aside from this dubitative suffix, though, Speck offers no suffixes that do not appear also in at least one other source. Matthews and Red Thunder Cloud do not mention the emphatic interrogative, but Siebert lists it. Siebert omits the continu-

ative, but Matthews and Red Thunder Cloud have it. The conjunctive and participial are not illustrated by Siebert, but they may be what he has in mind in using the phrase 'a few participles' on page 211. On the other hand, Siebert obviously has four suffixes that are not found in the other sources; for examples and meanings see Siebert, page 211.

The narrative clearly has a different appearance from the other suffixes, and Matthews and Red Thunder Cloud treat it as a separate word, listing it in their vocabulary on page 21. But in Speck's texts it seems to be always mutually exclusive with the other final suffixes, so it is listed here as one of them.

Several of Speck's final suffixes end with a glottal stop that is not recorded in the other sources. Other than that, suffixes written on the same line above probably represent the different writers' transcriptions of the same Catawba phonetic sequences with three exceptions: Matthews and Red Thunder Cloud have E at the beginning of their continuative suffix, hɔ at the beginning of their participial, and e at the beginning of their narrative. These sounds seem to be missing in Speck's versions of the suffixes.

In Speck's texts, final suffixes are often preceded by a or e after a consonant, as described in the next section. The E in Matthews and Red Thunder Cloud's continuative suffix, and the e in their narrative, may represent this same postconsonantal vowel. But the hɔ in their participial suffix may be, at least in origin, an additional morpheme, namely, the third-person singular subject suffix. This will be discussed in more detail below.

7. Subject Suffixes

If a final suffix is preceded by another suffix, in the majority of examples in Speck (1934) the preceding suffix is one of a group of six which specify person and number of the subject. Matthews and Red Thunder Cloud (1967, p. 10) cite the same suffixes, attributing to them an aspectual meaning, the momentaneous. And Siebert (1945) gives several examples of them (pp. 102 footnote, 216, 218), also identifying them as

momentaneous aspect (pp. 217, 218). They will simply be called subject suffixes here. Their form is discussed in this section, and the reasons for the change in terminology will be taken up later (section 9).

The subject suffixes are listed below in their basic forms with examples:

- s- 'I': huktúksere 'I am falling down' (1C.4), krúksəre 'I'll drink' (10.6), ciriksəhɛ? 'I run' (101.10)
- y- 'you (singular)': kərí:yané 'were you good?' (61.1), nuwí:yəhé? 'you tie' (99.5)
- h- 'he, she, it': huktúkhəre 'she fell down' (1A.15), kurí:ʔhere 'he is good' (9A.11), ciríkhəre 'it ran' (10.9)
- ʔa- after vowels, -a- after consonants 'we': kéʔáwe 'we [may] put' (64.1), kərugáwe 'we will drink' (109.3)
- w- 'you (plural)': followed by -a- 'not' in t́vnci:wáre 'you cannot' (10.5)
- ki:- after vowels, -i:- after consonants 'they': wi:yáki:re 'they ate' (32.3), bvgi:hɛ? 'they put' (98.19)

(Final stops in roots and stems are generally voiced before voiced sounds, voiceless before voiceless sounds or before pause, so k(ə)ruk-, k(ə)rug- 'to drink above'.)

While the distinct post-vocalic version of the third-plural suffix is fairly certain, the glottal stop added to the first plural after a vowel is much less sure for the reason mentioned before (section 6), namely, Speck's unsteady recording of glottal stops.

The examples of -s-, -y-, and -h- show the vowels ə or e intervening before the final suffix after a consonant, as mentioned before (section 6). Probably the two vowels in this usage are variant transcriptions of the same sound. Vowels that prevent consonant clusters in this way will be called transitional vowels in this paper.

Speck's subject suffixes are obviously the same as Matthews and Red Thunder Cloud's and Siebert's momentaneous suffixes:

Speck	Matthew & R.T.C.	Siebert
<u>-s-</u>	<u>-s-</u>	<u>-s-</u>
<u>-y-</u>	<u>-y-</u>	
<u>-h-</u>	<u>-h-</u>	<u>-h-</u>
<u>-(?)a-</u>	<u>-a-</u>	<u>-?:a-</u>
<u>-w-</u>	<u>-w-</u>	
<u>-(k)i:-</u>	<u>-i-</u>	<u>-i-</u>

Matthews and Red Thunder Cloud state (p. 10) that the third-person singular suffix refers only to animate subjects. This is not borne out in Speck's texts, for example, the subject of ciríkhere above is yehi:yé 'water', and the subject of kərí:ʔhowe below is yumésəʔ 'your stomach'. There is no evidence of any gender system, in which 'water' and 'stomach' might be considered animate.

Siebert's examples show the transitional vowel i. Matthews and Red Thunder Cloud do not discuss the transitional vowel but examples in their texts have a for the transitional vowel: haké:səre 'I smell' (text I, sentence 41, p. 13), nidáhəre 'he talked' (text V, sentence 17, p. 18), kərukəde 'drink' (text I, sentence 21, p. 12).

Before the potential suffix -we-, the transitional vowels are u after -s- and -y-, and o after -h- in Speck's texts: mi:ráʔsuwe 'I am better' (23.1), tukéyúwe 'you will put in' (85.5), kərí:ʔhowe 'it may be good' (88.4)

Again, Matthews and Red Thunder Cloud list very similar forms but assign them an aspectual meaning, the future imperfective. The forms are (p. 10): -su- 'I', -yu- 'you (singular)', -ho- 'he, she, it', -aa- 'we', -wa- 'you (plural)', -iu- 'they'.

Speck does not record the second-person plural or third-person plural suffixes before -we, but the first-person plural is just -(?)a-, as already seen in the examples given previously.

In the participial forms, a follows -s-, but v follows -h-, presumably before a final glottal stop, which is not, however, written after any of the subject suffixes: tasə 'I making' (98.1), huktúkvhv 'she falling down'

(1A.16), wí:ba 'we catching' (105.22), wé?i 'they crying' (50.1) (for wéhi: ?).

Matthews and Red Thunder Cloud reject the use of subject suffixes in participial forms (p. 10), but their participial suffix appears to be the original third-person singular form, as pointed out above (section 6).

The examples above show subject suffixes before -re, -we, -ne?, -he?, and -(?). There are not many examples of subject suffixes before the remaining final suffixes, but the first-person singular -s- is recorded before -ny and -yvt. In the first instance it is followed by the usual transitional a, but in the second it replaces the initial y of the final suffix: katsəny 'indeed should I' (36.6), kvtsyt 'when I break' (111.4).

The prohibitive example already cited (section 6) must include the second-person singular -y-, perhaps with a different transitional vowel, but given the confusion in Speck's writing of front vowels (section 3), this i: may just be the usual a or e differently transcribed.

With the imperative, the third-person singular -h- appears with second-person meaning: cəhəde 'pour' (109.3). This parallels the treatment of mutating verbs whose unmodified roots are third person in most modes, but second person in the imperative: kani:de 'see' below (section 8).

Finally, there seems to be a narrative example with the third-person singular -h- and a transitional vowel a: ci:ríkhətiri:é? 'he ran, it is said' (13.4).

This adds up to at least one example of a subject suffix before every final suffix except -do?, including before all four members of Matthews and Red Thunder Cloud's class A, the class of final suffixes which in Red Thunder Cloud's usage are never preceded by other suffixes. But there are also numerous verbs in Speck's texts that have only a final suffix. Their occurrence will be discussed in the next section.

8. Subject Prefixes and Mutating Verbs.

It is well known that many Catawba verbs, though by no means all, inflect for person and number of subject by means of prefixes or mutations to the root. The phenomenon is discussed by Siebert (1945, p. 102), and is

well exemplified in the vocabulary of Matthews and Red Thunder Cloud (1967, pp. 20-24). Examples of such verbs from Speck (1934) follow.

- da- 'to go': dáre 'it went' (15.8), cáwe 'I will go' (40.3), í:nare 'they went' (27.3)
- dehc- 'to lose': dehcire 'she lost' (1A.1), déncəno?? (for déncədó? ?) 'did I lose?' (16.11)
- du- 'to take': duhóre 'he took and came' (27.4), cúsəre 'I take' (105.12), dúyare, dúre 'you take' (105.11 and footnote), yudúgrore 'they took and came home' (34.10)
- ho- 'to come': honé 'did he come?' (11.4), cowá 'I not coming' (?) (6.4), irúre 'they came' (35.4)
- kan- 'to find': kánəre 'she found' (1A.5), dancóre 'I find very much' (1C.7), i:yánəre 'they found' (15.9), same verb as the following?
- kani- 'to see': kánire 'she saw' (18.1), kániwe 'if he sees' (55.1), kani:de 'see' (115.3), dánire 'I saw' (1B.5), yáni:re 'you will see' (34.10), same verb as the preceding?
- kowa- 'to kill': kowáre 'he killed' (1A.9), digwáre 'I killed' (105.18), yi:gwáre 'you killed' (105.19), hagwáwe 'we will kill' (105.5), igwáre 'they killed' (26.3)
- na-, ny- 'to eat': nýhəre 'she ate' (1A.5), cáwe 'I may eat' (16.3), dvčá 'I eating' (116.17), cəwe 'we will eat' (19.2), hacəwe 'we will not eat' (105.25)
- sare- 'to be sorry': hi:sarecúre 'he was very sorry' (7.1), ni:sáre 'I being sorry' (7.3), i:sárecure 'they were very sorry' (15.8)
- ši:a- 'to be afraid': naši:acóre 'I am very frightened' (5.3), yahši:adó? 'are you afraid?' (101.11)
- yamusí: 'old woman' (1B.1), yanvmusí:sere 'I am an old woman' (32.11)

Note the transitional vowel ə (once written i) after dehc- and kan- in the examples just given.

Gatschet (1900, p. 538) cites the following prefixes used with adjectives: na- 'I', ya- 'you (singular)', hi- 'he, she', ha- 'we, you (plural)', wa- 'they'; ši:a- and musí: in yamusí: above may show examples of this series of prefixes.

Some of the forms in Matthews and Red Thunder Cloud's vocabulary disagree with forms found in Speck's texts. For example, they say that -re is deleted after da- 'to go' which is contradicted by the examples above, their verb 'to see' seems to have received the third person singular prefix hi- or hi:- in place of its original first syllable, and their verb 'to eat' is quite different: orá? 'third singular', decá? 'first singular', hará? 'first plural'. Some verbs found in Speck's texts are not listed by Matthews and Red Thunder Cloud, for instance, dehc-, kowa-, sare-, and ši:a-. On the other hand, Matthews and Red Thunder Cloud cite all three persons, both singular and plural, for each mutating or prefixing verb in their list. These six forms do not occur for any verb in Speck's work.

Several of the mutating verbs have an initial i: or i in their third-person plural forms. Siebert points out (p. 102 footnote) that this is a prefix, and that it precedes other prefixes. An example from Speck's texts is ipkoáre 'they killed them' (33.1) in which p- 'them' follows the initial i (cf. section 11).

9. Distribution of Subject Suffixes

It is apparent that many of the verbs in Speck (1934) that lack a subject suffix, either (1) express the subject by a prefix or mutation, or (2) have a noun as subject.

The examples in section 6 of this paper were chosen, as much as possible, to show no suffix other than a final one, and as a result, most of the verbs there are mutating or prefixing, as shown in section 8. But subject suffixes are not unknown with prefixing or mutating verbs. Occasionally they appear redundantly, or perhaps to resolve ambiguity, for example cúsare, dúyare, nýhære, and yanvmusí:sere in section 8.

Similarly, with non-prefixing and non-mutating verbs, the third-person subject suffix may be absent when there is a noun subject, but it is not necessarily absent. For example, ugní: huktúgere 'Ugni fell down' (1C.4), with no subject suffix, and úgni: huktúkhære 'Ugni fell down' (1A.15), with the subject suffix, describe the same event in two different versions of the same story.

In sum, (1) the subject suffixes seem usually to occur where there is no other way of expressing the subject, and (2) there is no apparent difference in meaning between a verb bearing a subject suffix and the same verb lacking one. This suggests that there is no aspectual meaning attached to these suffixes. Possibly the redundant subject suffixes are similar to English sentences like 'Ugni, she fell down'. And we may imagine that if the fortunes of the Catawba language had been different, Catawba school teachers might have corrected a pupil's dúyare 'you, you take' to dúre 'you take', just as Speck's informant corrected it on repetition (105.11 and footnote).

On the other hand, Matthews and Red Thunder Cloud (1967, p. 10) describe a slightly different way of indicating person and number of subject when it is not otherwise expressed, namely, with the subject (or momentaneous) suffixes preceded by -hi- or -hi:-. No examples of this usage have been found in Speck's texts (cf. section 14).

10. Aspect Suffixes

Between the subject suffixes and the final suffixes, morphemes with aspectual or adverbial meanings can occur. These morphemes will be called aspect suffixes in this paper.

Matthews and Red Thunder Cloud (1967, p. 10) recognize just four of these aspect suffixes (in addition to their momentaneous and future imperfective already discussed), namely, a negative, an intensive meaning 'very (much)', a perfective, and an augmentative. The first three of these turn up in Speck (1934) too, but no example of the augmentative has been found there. In addition, Speck's texts yield several other suffixes in the same position. Six of the more frequently attested are listed below.

- a- negative: dúgare 'not again' (32.10)
- c- causative: músí:cere 'he raised' (34.7)
- co-, -cu- intensive: barácure 'it is very bad' (16.11), naši:acóre 'I am very frightened' (5.3)
- ha-, -hv- inceptive: ciríkhare 'ran away' (5.1) wýhvde 'sit' (9B.3)
- r- circumstantial: nýrære 'and ate' (19.6), khórehé (for kóhrehé ?) 'went' (115.8)

-ta- perfective: sayatáre 'was frightened' (29.3)

The examples above show the aspect suffixes with no subject suffix. The combinations of subject and aspect suffixes sometimes show irregularities, as can be seen in the following.

-a-: -sa- 'I' in kajsáre 'I don't cut down' (107.4), -ha- 'he, she, it' in wehháre 'he did not cry' (7.2), -(k)i:ha- 'they' in watarakí:hahé? 'they do not wash away'

-c-: -svc- 'I' in héri:svcére 'I am cooking' (116.16), -hc- 'he, she, it' in hukhóhcāre 'he let down' (1A.14)

-co-, -cu- : -svcu 'I' in wéhsvcúre 'I cried hard' (?) (16.21), -hacu- 'he, she, it' in cí:rikhacúre 'he ran very much' (9A.9), -(?)acu- 'we' in gyéraacúre 'we need very much' (10.5)

-ha-, -hv- : -ste- 'I' in cirikstére 'I run' (8.3), wéhstewe 'I may cry' (?) (16.20)

-r- : -ser- 'I' in mbaresérere 'I know [because]' (34.9), -h(ə)r- 'he, she, it' in nvmóhārāre 'he is a cloud' (1A.17), atkúhruwe 'they were going to gather and' (8.2)

-ta-: -əstā- 'I' in nóhəstāre 'I left for home' (?) (29.5), -(?)atā- 'we' in wí:patāre 'we will catch' (105.14), -(k)i:ta- 'they' in wí:bi:tare 'they caught' (37.5)

Several of the first-person forms above bear a question mark because Speck translates them as third-person, namely, wéhsvcúre, wéhstewe, and nóhəstāre. Presumably either the translation or the original text is in error.

atkúhruwe (written atkú'hruwe) appears to contain -h- 'he, she, it', but the subject is clearly plural. Perhaps -h- is also 'they' before -r-, or perhaps this is an error.

The examples above show aspect suffixes before final -re, -we, -de, and -hə?. There are also a few participles with aspect suffixes: dukcowá '[I] not coming back' with w before -a- after o (6.4), kuní:co (for kurí:co ?) 'very good' (111.3), hi:núyetá 'having stolen' (20.1).

The occurrence of aspect suffixes in continuative and participial forms again violates Matthews and Red Thunder Cloud's classification of final suffixes, for -he? and -(?) are class A and should not follow any other suffixes.

Note that the transitional vowel is usually a or e after -c- and -r-, but it is u before -we, examples above.

It would seem unlikely that the negative can cooccur with the imperative, since the prohibitive covers the expected meaning of such a sequence. It would also seem unlikely that the negative can cooccur with the prohibitive, for that would be redundant.

The perfective forms given by Matthews and Red Thunder Cloud closely resemble those found in Speck's texts. Matthews and Red Thunder Cloud's intensive and negative, however, are said (pp. 10, 11) to reject use with subject (or momentaneous) suffixes, though the old third-person singular suffix appears to have become a freely occurring meaningless extension on the intensive.

The meanings of the negative, the causative, and the intensive suffixes are quite clearly 'not', 'cause to', and 'very (much)' respectively. The perfective may indicate completion of an act prior to further action, the circumstantial may indicate that an act accompanies another or results from it, and the inceptive may indicate a sudden onset of action, but the meanings of these last three suffixes are very uncertain. The perfective is so labelled mainly because Matthews and Red Thunder Cloud call it that. And the inceptive and circumstantial meanings are hardly more than guesses.

Speck sometimes translates the inceptive 'do' in his literal inter-linear translations (8.3, 9B.3), indeed, these translations are the basis for identifying the first-person singular form -ste- with -ha-, -hv-.

The only clear example of aspect suffixes in sequence is the negative causative -ca-: rvpni:cáre 'not cause me pain' (32.9).

The inceptive -ha-, -hv- has a form that can be easily confused with the third-singular subject suffix plus a transitional vowel. The evidence that -ha- or -hv- in participial and narrative forms (section 7)

and before the intensive suffix is the subject suffix rather than the inceptive is threefold: (1) no other aspect suffixes are found before the narrative or the intensive, (2) other subject suffixes do appear before the intensive and participial, and (3) Speck's interlinear translations clearly suggest that -hv- in participial forms is the third-singular suffix: pvsí:hv 'she being poor' (1A.1), huktúkhv 'she falling down' (1A.16).

11. Object Affixes.

Object affixes do not turn up very frequently in Speck (1934). All the best examples of them are given below.

ni:- 'me': hakpiní:cvde 'help me' (9A.5), rvpni:cáre 'not cause me pain' (32.9), udni:yv? 'she told me' (117.1), ni:yanidó 'do you see me?' (20.4)

yi-, ye-, ya-, yv- 'you (singular)': bó?yayire 'they shoot you' (32.5), yecúwi:nósuwe 'I will take you with us' (2.3), nowe?ya? 'tying you' (41.1), webyv 'catching you' (41.1)

zero 'him, her, it': dánire 'I saw him' (1B.5), naparáhãre 'he ate him up' (20.5), wí:phare 'he caught him' (37.4), yudúgrore 'they brought him home' (34.10)

nó-, nu- 'us': hapi:núci:dé (for hakpi:núci:dé ?) 'help us' (86.3), hadútnoyv? 'they told us' (84.1), yecúwi:nósuwe 'I will take you with us' (2.3)

?o- after consonants, p- after vowels 'them': wéb?oki:re '[they] caught [them]' (26.1), bykóre '[they] put them' (8.2), ipkoáre (for ipkowáre ?) 'they killed them' (33.1), webip 'they catching them' (101.5)

kó- 'to him, her, or them': útkoyv? 'said to him' (116.1), hindákoyv? 'spoke to them' (29.5)

The object morphemes are called affixes because they are sometimes prefixed and sometimes suffixed. It may be that they are prefixed to the verbs that express subject pronouns by prefixes or mutation, and suffixed to other verbs. The examples do not contradict this suggestion, but they are too few to be certain.

When suffixed, the object affixes generally precede other affixes, but when third-person plurals are involved, there are occasional exceptions, thus wéb?oki:re above has object before subject, but webip shows the opposite order.

Matthews and Red Thunder Cloud (1967) do not mention the object affixes, and examples in their texts show independent personal pronouns used as objects: otǫ? dumaráre 'he took him' (text III, sentence 6, p. 16), dí iya:nire 'they found me' (text V, sentence 13, p. 18).

A few more examples of most of the object affixes can be found in Gatschet (1900, especially p. 542). Gatschet's informants apparently wouldn't stick to one paradigm, so he had to content himself with merely demonstrating that verbs vary for person and number of object. But with Gatschet's and Speck's material together, it is possible to discern some pattern and isolate some affixes.

12. Problem Suffixes.

Another quote from Matthews and Red Thunder Cloud (1967, p. 10) is appropriate at this point. They say, 'we do not pretend to understand fully the structure of verb forms . . .'. That statement goes for the present writer too. While it has been possible so far in this paper to isolate a number of Catawba morphemes that fit into a neat, ordered system, generally object plus subject plus aspect plus final suffix, there remain a number of probable and possible verb suffixes whose place in this system is uncertain or wholly undetermined. Some of these forms will be discussed below (sections 13, 14).

13. Possible Final Suffixes.

There are a few more sounds and syllables that occasionally turn up at the ends of verbs, and therefore could be final suffixes. Some of these are discussed below.

-t and -ye are obviously not confined to verbs, in fact they seem to occur more typically with nouns and noun phrases: wá? (13.3), wát (9A.12), wáye (15.8) 'sitting', cf. wáre 'sat' (10.2); i:yé, yé (29.3), í:yét (36.14), yéye (27.2) 'person, man'; kustá? (103.2), kustáye (105.9)

'corn bread'; moṭú? (99.4), moṭút (98.8) 'when'; kj: (1A.3), kj:t (11.2), kj:ye (20.1) 'the'.

No meaning for -t or -ye is readily discernable. Perhaps they express some subtle nuance like English 'anyway' or 'you know', or convey some mild demonstrative information. They certainly do not appear to alter the participial status of wá? 'sitting', so they are probably not to be included among the modal final suffixes of verbs.

Perhaps one or both of these suffixes arise before a pause or before some other phonetic feature not present in the transcription. Or perhaps Speck's informants had quite forgotten their original use or distribution, and just served them up on occasion to impart an archaic or authoritative flavor to the text. The fact that only a few words are recorded with these suffixes, but some of those few fairly frequently, seems to suggest that -t and -ye are phonological or stylistic phenomena, rather than morphological.

The suggestion that -t is a subject marker (Speck 1913, p. 321) is untenable and was dropped when the texts were republished (Speck 1934, p. 83).

-yv? follows object pronouns at the end of verbs of saying and speaking. It is not readily distinguishable from the indicative in gloss or translation: udni:yv? 'told me' (117.1), útkoyv? 'said to him' (116.1), hadútnoyv 'told us' (84.1), hindákoyv? 'spoke to them' (29.5).

The same suffix seems to have a participial meaning in owócíyv? 'using' (114.4).

-hvk and -hvt each appear to be both second-singular and third-singular forms of the conjunctive: kai:ʔhvk 'when you throw' (115.39), kái:hvt 'when you throw' (115.38), céhvk '[when] he poured' (115.36), átkvnihat 'for a long while' (for 'when it was a long while' ?) (34.6).

-hayvt is either another third-singular conjunctive form, or perhaps inceptive conjunctive: kí:phayvt '[when] he stabbed' (114.9).

-ke? is clearly a variant of, or an error for, the prohibitive -ce?: udwvpke? 'don't (plural) tell them' (95.5). If a variant, the conditions for its occurrence cannot be determined for there are too

few examples of prohibitives. Note also the second-plural subject suffix -w- followed by a vowel v before the postvocalic form of the third-plural object affix p-.

14. Possible Prefinal Suffixes.

Quite a few possible non-final suffixes are found in Speck (1934). Their meanings are generally unknown, and it is not even sure whether they are aspect, subject, or object suffixes. Indeed, some may be parts of stems, parts of roots, or just plain errors. A few such suffixes are described below.

-hi:- or -hǐ:- and -wa- are probably the most frequently encountered of the enigmatic prefinal suffixes. The first of these two is obviously reminiscent of the subject-suffix formant in Matthews and Red Thunder Cloud (1967, p. 10), but both of these suffixes appear only as third-person forms in Speck's texts, and have not been found in conjunction with subject suffixes: wébhǐ:re 'he caught' (22.8), kǎrij:hǐ:we 'she seems good' (2.5), wí:rvhǐ:we 'he got burned' (3.4), patkǐ:ware 'he was big' (26.5), átkowa 'gathering' (8.4)

-wo- and -kiat- seem to be different morphemes because of the two examples given below. Beyond that, nothing can be said of them. Matthews and Red Thunder Cloud's dubitative suffix -wo (section 6) is, of course, a final suffix, unlike the form given here: niáwóhere 'he passed' (17.3), niakiátere 'he passed by' (17.2).

15. Plural Roots.

Some transitive verbs appear to have two different roots, one referring to a singular object, the other to a plural one. Verbs used only for plural objects do not require, and perhaps reject, the object affixes ?o- and p- 'them': wí:rǎhre 'he ate them' (22.4), cf. nǎhǎre 'she ate it' (1A.5), harvyane? 'do you see them?' (36.15), cf. yǎni:re 'you will see him' (34.10).

There is no mention of such roots in Matthews and Red Thunder Cloud.

16. Noun Inflection.

Nouns take affixes expressing person and number of possessor. With most nouns these personal affixes are suffixes. With the remaining nouns, which denote body parts and a few other intimate possessions, the personal affixes are prefixes.

The following personal suffixes are found with nouns in Speck (1934).

-nv? 'my': yj:cánv 'my child' (1A.18), kurí:nv 'my son' (1B.9, footnote), yuksunv 'my mother' (29.3), yuksúnv? 'my mother' (25.1), (m)baránv? 'my brother' (25.2, 25.4, 32.12), nvnenv? 'my father' (101.1), súgnv 'my house' (28.6), wí:tin 'my medicine' (88.40), iscínv 'my mother' (117.1), hi:músnv 'my father' (117.1)

-yv? 'your (singular)': kurí:yv 'your son' (1B.4), kurí:yv? 'your son' (1B.7)

-wv? 'his, her': yj:cáv 'her child' (1A.6), kurí:wv 'her son' (1C.2), yetarowá? 'her child' (3.3), súgwa 'his house' (12.12)

Cf. yj:cá? 'child' (1A.1), kurí:hi:nu 'small son' (1A.17), yúksu and yuksú 'his mother' (1A.6, 1A.8), súk 'house' (12.9), wí:ti: 'root, medicine' (88.5, 88.6).

Note that the uninflected form yúksu, yuksú 'mother' seems to imply a third-person singular possessor. The same is true of yákaci: 'wife' (7.1).

The examples suggest that the glottal stop is dropped before the personal suffixes: yj:cá? becomes yj:cá-. Note also that stops are voiced before the personal suffixes: súk becomes súg-.

yuksodv? 'my mother' (28.1) and suknu 'my house' (1A.12) are probably in error for the forms recorded above.

Both Matthews and Red Thunder Cloud (1967, p. 9) and Siebert (1945, p. 217) describe the same personal suffixes:

	Matthews & R.T.C.	Siebert
'my'	<u>-nɔ̃?</u>	<u>-na?</u>
'your (singular)'	<u>-yɔ̃?</u>	<u>-ya?</u>
'his, her'	<u>-wɔ̃?</u>	<u>-wa?</u>

They also cite the following not found in Speck's texts:

	Matthews & R.T.C.	Siebert
'our'	<u>-a?</u>	<u>-ʔa:ʔ</u>
'your (plural)'	<u>-wɔ̃?</u>	<u>-wa?</u>
'their'	<u>-owā?</u>	<u>-wa?</u>

These would presumably be written -ʔa? or -a? 'our', -wv? 'your (plural)', and -wv? or -owa? 'their' if they were recorded in Speck's texts.

Note that a final glottal stop in a noun is retained before the personal suffixes in Siebert's examples.

Concerning the personal prefixes, Siebert (pp. 215-216) gives a much more complete description of them than can be gotten from the examples in Speck's work. The basic forms of the prefixes can be viewed as the following: da- or na- 'my', ya- 'your (singular)', hi- 'his, her', ha- 'our', wi- 'your (plural)', hi- or a- 'their'.

These should appear as dv-, nv-, yv-, hi-, wi-, hi-, v- respectively in Speck's transcription.

Prefixing nouns are divided into seven classes as follows.

Class 1 nouns begin with a nasal vowel before which the vowel of the prefix is dropped. They take n- 'my' and h- 'their'.

Class 2 and 3 nouns replace the vowel of the prefix with i except in ha- 'our'. Class 2 takes ni- and class 3 takes di- 'my'. Both classes take hi- 'their'.

Class 4 and 7 nouns take the prefixes in their basic forms with hi- 'their'. Class 7 takes na- and class 4 takes da- 'my'.

Class 5 and 6 nouns take the prefixes in their basic forms with a- 'their'. Class 6 takes na- and class 5 takes da- 'my'.

Matthews and Red Thunder Cloud list several prefixing nouns with all their prefixes in their vocabulary (pp. 20-24). They give some class 3 nouns which have hi- instead of ha- 'our', and some class 7 nouns that have joined class 3.

The following variants of the personal prefixes are recorded in Speck's texts.

- di- 'my': dískv? (32.8), diský (88.44) 'my head'
n- 'my': ní:pv? (9B.2), ní:pv? (9A.3), ni:pV? (9A.3) 'my foot'
nv- 'my' (?): námusigri (61.2), namusígri (61.3) 'my dream'
ni- 'my': ni:hág (88.35) 'my body'
yv- 'your (singular)' (?): yamusígri (61.1) 'your dream'
yi- 'your (singular)': yíkxa? (94.10) 'your hand'
h- 'his, her': hí:pv? (9B.3), hi:pV? (88.26) 'his foot', hí:tú (106.3) '[his] eye'
hi- 'his, her': hiský? (3.2), hísky? (6.5) 'his head', hisumó? (27.6) 'his mouth'
 Cf. iksV 'hand' (68.3), í:pv 'foot' (9B.4)

Speck also has nu- 'my' in nusáp 'my bone' (88.37), cf. sap 'bone' (26.2). This may be an error for nv-, but Matthews and Red Thunder Cloud give disóp 'my bone' (p. 20).

Note also yu- 'your (singular)' (?) in yumésə? 'your stomach' (88.3).

17. Personal Pronouns.

Independent personal pronouns consist of personal prefixes with -tv?: détv 'I' (10.4), yétv 'you (singular)' (1B.7, 19.5), ótV, otV? 'he, she' (17.2, 18.1).

-tv? has an alternate form -t, at least after de-: det 'I' (16.4, 20.4).

inú 'we' (96.4) is suppletive.

The same or similar prefixes are used with several other words and morphemes: kv 'now' (4.3, 23.4), dókv 'now I' (23.1), yékv 'now you' (9A.4, 19.2), ókv 'now he, now she' (22.4), -me 'alone', demé 'I alone'

(5.5, 6.1), yámé 'you alone' (16.9), omé, umé '[he] alone', '[she] alone' (10.3, 12.7), ra 'with, and' (5.2, 13.1), dérv 'and I' (8.4).

NOTES

1. An earlier version of this paper was read at the Siouan Conference, Rapid City, South Dakota, May, 1983.

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APPENDIX I

This is a list of possible basic forms of roots and stems from Speck (1934) that appear in this paper. It is presented here as an aid for following the analysis.

By basic form is meant, as a rule, the most frequent variant, with final ? if recorded anywhere (cf. section 3). Accents are not indicated in this vocabulary. A homorganic nasal consonant before an initial voiced stop is ignored. All final stops are assumed to be basically voiceless.

Prefixing nouns and verbs are cited in the third-singular form. If that form is not actually recorded, the presumed third-singular form is given preceded by an asterisk.

The alphabetical order used here is as follows: a/v e/ə i(:) o/u
? b c d g h j k m n p r s š t w y.

atā-, aty-, vtý- 'to wash' (83.3, 88.9, 100.5)

atkvni 'to be a long while' (34.6)

atko-, atku- 'to gather' (8.2, 8.4)

inu 'we' (96.4)

j:pi:? 'fire' (9A.1, 16.21, 22.2, 28.2)

isci 'mother' (117.1)

j:yē 'man, person' (29.3, 35.1, 35.4)

ugni: 'comet' (1A.15, 1C.4)

ut- 'to say' (5.3, 20.2, 32.10)

owāc- 'to use' (28.4, 99.6, 101.4), dowvc 'I use' (98.6), yoc 'you use' (82.1, 82.4)

bv- 'to know' (1A.7, 27.6), bare 'I know' (34.9, 36.10), bvyv 'you know' (34.9)

bvk-, buk- 'to put' (8.2, 16.6)

bara 'brother' (25.2, 25.4, 32.12)

bara 'bad' (1A.16, 5.4, 10.3, 16.11)

bo?(ki:?)yā- 'to shoot' (32.5 bis)

buk-, see bvk-

- ce?- 'to pour' (109.3, 113.1, 114.5)
ci(:)? 'cold' (9A.3, 9B.2)
cig(ə)ne 'raccoon' (19.2, 19.6)
cirik- 'to run' (5.1, 8.3, 10.9 bis, 16.12)
da- 'to go' (16.17 bis, 36.3), ca 'I go' (40.3), i:na 'they go' (11.1, 27.3 bis)
dehc- 'to lose' (1A.1, 21.3), denc 'I lose' (16.11)
du- 'to take' (27.4, 36.7 bis), cu 'I take' (105.12), du 'you take' (105.11), yu 'they take' (34.10)
duk 'again, back, back home' (11.2, 11.3, 30.3, 32.10)
*duwi: 'to take along', cuwi: 'I take along' (2.3)
gwa-, see kowa-
gyera- 'to need' (10.5)
hadut- 'to say' (13.6, 23.2, 84.1)
hakpi(:)- 'to help' (9A.5, 86.3)
harv- 'to see' (36.15)
heri:?-, see hi(:)ri:?-
*hi:hak 'his body', ni:hag 'my body' (88.35)
hiksv? 'his arm' (32.13), yiksv? 'your hand' (94.10), iksv? 'hand' (113.3)
*himeṣə? 'his stomach', yumeṣə? 'your stomach' (88.3)
hi:mus 'father' (117.1)
*himusigri 'his dream', namusigri 'my dream' (61.3), yamusigri 'your dream' (61.1)
hin(i:)da- 'to speak' (28.5, 29.5)
-hi:nu? 'little, small' (1A.17, 33.1, 116.1)
(h)i(:)nyy- 'to steal' (21.1, 22.1, 30.5, 32.12 bis)
hḷ:pv? 'his foot' (9B.3, 25.4, 36.5), ni:pv? 'my foot' (9A.3 bis, 9B.2),
i:pv 'foot' (9B.4)
hi(:)ri:?-, heri:? 'to cook' (102.3, 111.1, 114.8)
hisky? 'his head' (3.2, 6.5, 19.5, 33.4), disky? 'my head' (32.8)
hisumo? 'his mouth, his face' (24.6, 27.6, 36.18)
hḷ:tu '[his] eye' (106.3)
ho- 'to come' (1A.2, 9A.12, 11.2, 11.4, 36.9), co 'I come' (?) (6.4),
i(:)ru(?i) 'they come' (31.4, 34.2, 34.3, 35.4), replaced by ro
 after a consonant (34.10)

- huk 'down' (1A.14-16, 15.8, 36.4)
kv? 'now, and, but; now the' (1A.11, 1B.4, 4.3, 24.7, 29.2, 34.5)
kaj(:)- 'to cut' (1A.9, 107.3, 107.4)
kai:? 'to throw' (115.38, 115.39, 115.43)
kan- 'to find' (1A.5), dan 'I find' (1B.9, 1C.7), yan 'you find' (36.11)
i:yan 'they find' (15.9, 26.3)
kani- 'to see' (18.1), dani 'I see' (1B.5, 34.9), yani 'you see' (20.4,
 34.10), hani 'we see' (?) (1B.7)
kat-, kvt- 'to break' (36.13, 111.4)
kat 'indeed' (5.7, 36.6)
ke- 'to put' (16.18, 16.20, 40.2, 40.4), kai? 'we put' (36.14), 'they put'
 (103.2 bis, 103.4)
kari:, kuri: 'son' (1A.17, 1A.19, 1B.9, 1C.2)
kari:?, kuri:? 'good' (1A.14, 1A.17, 2.5, 9A.11)
k(ə)ruk-, kuruk- 'to drink, to swallow' (10.6, 21.2, 23.5, 109.3)
kj: 'the' (1A.1, 1A.3, 1A.4, 1A.5)
ki:p- 'to stab' (114.4, 114.9)
kitkit- 'to break off, to rub' (36.4, 100.3)
koh- 'to go' (1C.3, 12.6, 16.1, 35.5)
kuri:, see kari:
kuri:?, see kari:?
kuruk-, see k(ə)ruk-
kusa?- 'to stand, to stop' (13.2, 13.4, 15.7, 116.25)
kusta? 'corn bread' (1A.4, 1A.5 bis, 1A.6)
kut- 'to say' (6.1, 8.5, 12.12, 23.2)
kowa- 'to kill' (1A.9, 2.4, 2.5, 15.6), digwa 'I kill' (105.18), yi:gwa
 'you kill' (105.19), hagwa 'we kill' (105.5), i:gwa 'they kill'
 (26.3, 33.3, 35.6 bis), ikoa 'they kill' (33.1, 33.2)
-me 'alone' (5.5, 10.3, 12.7, 16.9)
mi:ra? 'great' (12.1, 19.2, 23.1)
musi:? 'grown, old' (1B.2, 1B.3, 2.4, 34.6)
moṭu? 'in, on' (1B.5, 16.4, 16.21, 17.2), 'when' (15.3, 15.9, 33.5, 40.1)
na-, ny- 'to eat' (1A.5, 19.6, 115.3), ca 'I eat, we eat' (16.3, 19.2),
dvca 'I eat' (116.17), hara 'we eat' (51.5, 51.7, 51.8)

- nvmo 'cloud' (1A.17-19)
nvne 'father' (101.1, Speck and Schaeffer 1942, p. 556)
napara?- 'to eat up' (1A.6, 2.5, 20.5, 25.4)
nia- 'to pass' (17.2, 17.3)
nqh- 'to go home' (29.5)
nuti(:) 'sun, moon' (11.5, 51.2)
nuwi:?-, nuwi:?- 'to tie' (1A.10, 3.2, 32.6 bis, 99.5, 103.7)
pa 'near the fire' (9A.4)
pvs: 'poor' (1A.1)
patk: 'big, large' (9A.11, 15.7 bis, 22.3 bis, 27.1)
ra? 'and, with' (5.2, 12.4, 13.1, 36.12)
rvp 'pain' (1C.6, 32.9)
svk, see suk
sap 'bone' (26.2, 88.37)
sare 'sorry' (7.1, 9A.6, 15.8, 19.5)
saya- 'to be frightened' (25.3, 29.3)
sənu? 'money' (54.2 tris, 97.3)
suk, svk, 'house' (1A.7, 12.9 tris, 12.12 bis, 28.7)
ši:a- 'to be afraid' (1C.5, 5.1, 16.12, 36.8)
ta?- 'to make' (98.1, 99.1, 99.4)
-tv? independent personal pronoun formant (1B.7, 3.4, 10.4)
ta:(:), ty:(:) 'how?' (16.7, 20.1) tyyaci 'how do you?' (16.18), with
negative 'cannot' (5.6, 7.2, 9A.4, 32.5)
tuk 'in' (8.3 bis, 16.17, 35.7 bis, 36.14)
tuk- 'to fall' (1A.15 bis, 1C.4 bis, 16.18, 36.6)
wa?-, wy?- 'to sit' (10.2, 13.3, 16.14, 30.3)
watara?- 'to be washed away' (12.12, 103.8), iwatara? 'they are washed
away' (27.2)
watut 'snail' (6.3, 11.1, 11.3, 16.19)
we 'town' (16.23, 29.1 bis)
weh- 'to cry, to weep' (1C.7, 7.2, 16.20, 34.1 bis)
wep-, wi:p- 'to catch' (22.7, 26.1, 33.3 bis, 38.2, 25.3, 33.2, 37.4, 37.5)
wi:rv- 'to burn' (3.4 bis, 3.5)

wi:ra- 'to eat' (22.4, 26.1, 26.5, 32.4), wi:ya 'they eat' (32.2, 32.3)
wi:ti: 'root, medicine' (88.1 bis, 88.2, 88.3, 88.5)
ya 'woman' (1A.1 bis, 12.1, 18.1, 31.2)
yakaci:, yakiv? 'wife' (7.1, 12.10), yagiv? (Speck and Schaeffer 1942,
 p. 557)
ye 'person, man' (1A.1, 1A.14, 9A.12, 11.4)
yehi(:)ye 'water' (10.5, 10.8, 10.10)
yetarowa 'child' (3.2, 3.3)
yj:ca? 'child' (1A.1, 1A.5, 1A.7, 1A.13)
yitkit- 'to break in pieces' (1A.11), probably in error for kitkit-
yuksu 'mother' (1A.6, 1A.13, 25.1, 29.3)

APPENDIX 2

Table 1: Subject and Final Suffix Sequences

	<u>-re</u>	<u>-we</u>	<u>-ne?</u>	<u>-de</u>	<u>-ce?</u>
<u>-s-</u>	<u>-səre</u>	<u>-suwe</u>			
<u>-y-</u>	<u>-yəre</u>	<u>-yuwe</u>	<u>-yəne?</u>		<u>-yi:ce?</u>
<u>-h-</u>	<u>-həre</u>	<u>-howe</u>		<u>-həde</u>	
<u>-(?)a-</u>		<u>-(?)awe</u>			
<u>-w-</u>					
<u>-(k)i:-</u>	<u>-(k)i:re</u>				
	<u>-ny</u>	<u>-ne?</u>	<u>-yvt</u>	<u>-(?)</u>	<u>-ti(:)ri(:)e</u>
<u>-s-</u>	<u>-səny</u>	<u>-səhe?</u>	<u>-svt</u>	<u>-sə?</u>	
<u>-y-</u>		<u>-yəhe?</u>	<u>-hvk/t(?)</u>		
<u>-h-</u>			<u>-hvk/t¹(?)</u>	<u>-hv?</u>	<u>-hati(:)ri(:)e</u>
<u>-(?)a-</u>				<u>-(?)a?</u>	
<u>-w-</u>					
<u>-(k)i:-</u>		<u>-(k)i:he?</u>		<u>-(k)i:?</u>	

Note: transitional ə is often written e.

¹Or -hayvt ?

Table 2: Subject and Aspect Suffix Sequences

	<u>-a-</u>	<u>-c-</u>	<u>-co/u-</u>	<u>-ha/v-</u>	<u>-r-</u>	<u>-ta-</u>
<u>-s-</u>	<u>-sa-</u>	<u>-svc-</u>	<u>-svco/u-</u>	<u>-ste-</u>	<u>-sər-</u>	<u>-əsta-</u>
<u>-y-</u>						
<u>-h-</u>	<u>-ha-</u>	<u>-hc-</u>	<u>-haco/u-</u>		<u>-h(ə)r-</u>	
<u>-(?)a-</u>			<u>-(?)aco/u-</u>			<u>-(?)ata-</u>
<u>-w-</u>	<u>-wa-</u>					
<u>-(k)i:-</u>	<u>-(k)i:ha-</u>					<u>-(k)i:ta-</u>

Table 3: Aspect and Final Suffix Sequences

	<u>-re</u>	<u>-we</u>	<u>-de</u>	<u>-he?</u>	<u>-(?)</u>
<u>-a-</u>	<u>-are</u>			<u>-ahe?</u>	<u>-a?</u>
<u>-c-</u>	<u>-cəre</u>				
<u>-co/u-</u>	<u>-co/ure</u>				<u>-co/u?</u>
<u>-ha/v-</u>	<u>-ha/vre</u>		<u>-ha/vde</u>		
<u>(-te-)</u>	<u>(-tere)</u>	<u>(-tewe)</u>			
<u>-r-</u>	<u>-rəre</u>	<u>-ruwe</u>			
<u>-ta-</u>	<u>-tare</u>				<u>-ta?</u>