# A SHORT NOTE ON CHANGES IN PRE-ASPIRATION IN WOODS CREE\*

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#### ABSTRACT

Woods Cree has five pre-aspirated consonants which occur in coda position. While the coronal segments, ht and hts, show little evidence of change, there is substantial evidence of weakening amongst the other three pre-aspirated segments. Data based on natural discourse with a small group of Woods Cree speakers show variation in the production of the pre-aspirated segments with hk and hp simplifying in one direction and  $h\tilde{\partial}$  in the other. This paper documents this change in the Woods Cree community of South Indian Lake, Manitoba.

#### **1. INTRODUCTION**

The Cree and Montagnais languages have a relatively simple phonological inventory and syllable structure with only a few permissible consonant clusters in onset and coda position. The most complex feature in the consonantal system is the series of pre-aspirated consonants which appear in coda position: hp ht hts hk and h + sonorant. These consonants have been analyzed both as clusters and as pre-aspirated single segments in the extensive literature on this subject (e.g. see Kenstowitz 1994; MacKenzie 1980; Scott 2000; Wolfart 1973).<sup>1</sup> The first four of these segments are traditionally relatively stable across the Cree/Montagnais dialect continuum; whereas the h + sonorant sequence shows more cross-dialectal variation. The latter sequence has a diverse range of realizations in various Montagnais and Cree communities. In Plains Cree, h + sonorant it is realized as hy, in Moose Cree as hl, in Swampy Cree as hn, and in Woods Cree as  $h\partial$ . In Montagnais, the situation is similar with either hy, hl, or hn combinations in the various

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<sup>&</sup>lt;sup>1</sup>The debate, interesting as it is, is beyond the scope of this paper. We note in passing however that there is considerable variability as to how the speaker views these consonants within the Woods Cree community, particularly with how they spell out this segment. Younger speakers separate h from the following segment while older speakers do not.

communities. Although accounts of Cree and Montagnais have noted variability, weakening and deletion in the pre-aspirated series (see Anthony 1972: 27, Clarke and MacKenzie 1982: 220, 1984: 234–235, Pentland 1979: 63–76 for further details), there has t een little discussion of variation in the pre-aspirated segments in Woods Cree. The single detailed account of pre-aspiration in Woods Cree is presented in Greens mith (1985: 126–133) who argues that hk loss in word-final position is a categorical rule in the Woods Cree community of Pukatawagan, Manitoba appearing ir both absolute word-final position and when preceded by another word. This paper shows this not to be the case in South Indian Lake Manitoba and presents an overview of variation in the pre-aspirated series in this Woods Cree community.

## 2. VARIATION IN THE PRE-ASPIRATED SERIES

In most Cree/Montagnais communities, lexical items with h + sonorant are simplified to a simple sonorant with only a few scattered relics remaining. While pre-aspirated hl is no longer noted in descriptions of Moose Cree (Ellis 1983), some Plains Cree sources still record hy in certain lexical items (Vandall and Douquette 1987). Lil ewise, there appear to be relics of hn in varieties of Swampy Cree (Pentland 1979: 91) as well as in Naskapi (Scott 2000). It is not surprising that this sequence is prone to simplification since the h + sonorant sequence is articulatorily complex requiring one glottal gesture for aspiration and another for the voicing (see Ladefoged and Maddieson 1996: 70–73). The h + sonorant sequence also has a low functional load, occurring in only a handful of lexical items in Cree and Montagnais, many of which occur infrequently in everyday conversation.

hp ht hts and hk are articulatorily less complex than h + sonorant and they occur much more frequently in everyday discourse. Changes in the h + obstruent sequences have been subject of much discussion with variation reported in the degree of pre-aspiration in various Cree communities. For example Ellis (1983: 18) notes phonetic differences across the dialects. Pre-aspiration is "very light in Moose Cree and on the west coast of James Bay, [but] becomes somewhat easier to disting ish as one moves inland to the West". Others, such as Clarke and MacKenzie (1984: 234–235), provide detailed accounts of the loss of pre-aspiration and the phonetic realizations that accompany this shift. They note several types of phonetic changes ranging from vowel lengthening to fricativization and segment loss.

Little is kncwn about pre-aspiration in dialects in the west, although several changes in the pre-aspirated series have been noted (see Anthony 1972, Greensmith 1985, Per tland 1979). For example, Pentland (1979: 64–76) remarks on the tendency tov/ards fricativization and vowel lengthening in Cree dialects, and makes passing mention of the loss of k in hk clusters in both Plains and Woods Cree (1979: 76). The present paper focuses on segment loss in the variety of Woods Cree spoken in South Indian Lake, Manitoba.<sup>2</sup> Our analysis is based on language materials collected from 25 speakers recorded between 1983 and 1987. These speakers included males and females from different age groups and families.<sup>3</sup> The proficiency of the speakers determined the type and amount of language data collected. Fluent bilingual speakers provided a range of stylistic materials including texts, conversations and formal elicitation (i.e., translations of stories, short descriptions of pictures, translations of sentences and words). Elicited data was not collected from monolingual Cree speakers.

## 3. PRE-ASPIRATED SEQUENCES IN WOODS CREE

Woods Cree has five pre-aspirated consonants hp ht hts hk hð. hp is usually realized as [hp], except in a few instances in word-final position, described below. Two clusters, ht and hts, show no evidence of change. In contrast, k loss in hk clusters and h loss in hð clusters is wide-spread, especially in word-final position.

#### 3.1. hð

There are only a handful of lexical items known to contain this pre-aspirated sound. Where there is variation present in the community, it appears to be lexically based. The word with the 'name him', for example, retains ho; as does ahthiw 'he places him [there]'. Most words with this consonant sequence occur infrequently in conversation, and most of these are not in the active vocabulary of younger members of the community. Of particular interest is the one lexical form that appears relatively frequently in discourse. wāhthaw 'far away', which also occurs as the root in longer words such as *wāhthawītamihle* 'outside', has been recorded both with [hð] and [ð]. On the basis of several hours of conversational data with four older and five younger members of the community, it appears that this lexical item exhibits considerable variability (see Figure 1). Amongst these particular speakers, one older female is split between  $[h\delta]$  and  $[\delta]$ . The other older female and the middle-aged female have more of [hð] than [ð], while the two middle-aged males show a preference for [hð]. Thus on the basis of this limited data, middle-aged males appear to have more [hð] than their older and middleaged female counterparts. In the recorded speech of the younger female and the younger mixed group, there are no instances of ho. All cases of ho are realized as [ð]. For younger speakers, the sound change appears to be complete, a point verifiable through word list elicitation data, where  $h\partial$  does not appear.

<sup>&</sup>lt;sup>2</sup>Greensmith (1985: 126–136) argues for word-final *-hk* deletion rather than *-k* deletion on the grounds that final [h] is phonetic rather than phonological. Although it is possible that the former analysis is indeed the correct one, we believe a detailed analysis of word-final *-h* is needed to confirm that the phonetically similar sounds are phonologically equivalent.

<sup>&</sup>lt;sup>3</sup>There were no older males in the sample.



OF Older females MM Middle-aged males MF Middle-aged females YG Youn; group (mixed younger males and females)

## FIGURE 1

Number of tokens of *hth* and *th* in *wāhthaw-*  $\sim$  *wāthaw-* 'far'

#### 3.2. h + obstrue it

The *hp ht hts hk* series are in contrast relatively stable with no variation reported for *ht* or *hts*. For *hp* and *hk* there is little evidence of segment loss in word-medial position, however in word-final position, the situation is more varied. *p* in *hp* clusters deletes in some lexical items (e.g.,  $t\bar{t}pakohp$  'seven' [ti:pakohp] or [ti:pakoh]) but not in others (*akohp* 'blanket' [akohp]).

While *p*-loss in *hp* clusters occurs infrequently and appears to be restricted to the speech of you nger members of the community, k loss in hk is more widespread and somewhat more interesting. Although there is little evidence of k-loss in word-medial position (see Clarke and Mackenzie 1984 for the situation in Montagnais),<sup>4</sup> in word-final position, k-loss appears to be a robust change in progress,

<sup>&</sup>lt;sup>4</sup>In word-medial position, [hk] tends to be realized as a velar fricative.



FIGURE 2 Percentage of final -hk deletion by age

ranging from a fully released [k] to an unreleased [k] to slight fricativization to complete loss with or without concomitant vowel lengthening. This paper compares the complete loss of the segments with all other variants. The final hk sequence occurs frequently enough to be reported in percentages, with several hundred tokens occurring in each of the groups. As illustrated in Figure 2, older men and women are divided in their choice, using [hk] in some contexts and [h] in others. For both older males and older females, final k-deletion is favoured before a natural pause, typically in clause- or sentence-final position. Over half of all k-loss occurs before a pause in both groups, but this is not unexpected given that deletions of this type often occur word finally where the phonetic cues to identify consonantal place are not as robust as they would be in medial position (Baken and Orlikoff 2000: 273). The difference between the older females and the males is at the level of statistical significance and would suggest that women may have played a role in the change, as they have more deletion than their male counterparts ( $\chi^2 = 58.690$ ; p = .000). This result is not surprising since it has been demonstrated in many sociolinguistic studies that females tend to lead in sound change (see Labov 1990). It is of particular interest here because of the reported lack of gender differences in the closely related language of Montagnais (see Clarke and MacKenzie 1984: 237). The change from hk to h is all but complete in the speech of the youngest bilingual members in this Woods Cree community. The only [hk] in their conversation occurred in the word *atihk* 'caribou', discussed in further detail below.

## 4. DISCUSSION

Pre-aspiration is rare in the world's languages (Laver 1994: 356). It is therefore not surprising that pre-aspirated consonants are simplifying in Cree/Montagnais dialects, including Woods Cree. In the Woods Cree community of South Indian Lake, the simplif cation is most common for  $h\partial$ , hk and hp.

While the simplification of  $h\tilde{\sigma}$  is in favour of  $\tilde{\sigma}$  and occurs both word internally and word finally, the simplification of hk and hp occurs in favour of h and predominantly in word-final position. The difference of patterning between  $\tilde{\sigma}$  and the stops can be accounted for phonetically. As we noted above the cues for stops in word-final position are not particularly robust and it is therefore not uncommon for these segments to be lost completely (Baken and Orlikoff 2000: 273). By contrast  $\tilde{\sigma}$  is more likely to be retained in this position and other positions since this consonant with the combination of glottal pulsing and frication turbulence is highly salient and less likely to be lost (p. 271).

Furthermore the changes affecting both types of pre-aspirated sequences appear to reflect an inter-generational shift over time. Both hk and  $h\partial$  are more common amongst older speakers than younger members of the community. In the conversational data from the youngest members of the community, hk only appears in one lexical item *atihk* 'caribou'. This lexical item differs from most others in that it is a reflex of a proto-Algonquian form that ends in \*hkw. The final -w is reflected in the Woods Cree plural form, *atihkwak* 'caribou'. It is possible that final -w is still present in this lexical item at an underlying level; affecting the pronunciation of younger members of the community. If this is the case, it would mean that there are no tokens of word-final [hk] derived from Proto-Algonquian \*hk in the recorded conversation with younger speakers. All final [hk] are reflexes of Proto-Algonquian \*hkw.

## 5. CONCLUSION

This paper adds to the ongoing discussion of the simplification of *h*-clusters in Cree and Montagnais by detailing segment loss in these clusters in one Woods Cree community. The findings show two different types of age-graded changes in South Indian I ake, both of which appear to be close to completion. While the weakening of  $h\delta + \delta \delta$  varies depending on the lexical item under consideration, the weakening of  $hk + \delta h$  appears to be conditioned by the position of the segment in

the word. The differential use of hk vs. h by older men and older women suggests that the older women in the community may have played a role in the spread of this change.

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