
A NOTE ON PHONETIC REALISATIONS OF WOODS CREE /ð/¹

Elaine Ballard and Donna Starks: *Department of Applied Language Studies & Linguistics, University of Auckland, (PB 92109, Auckland, New Zealand).*

<d.starks@auckland.ac.nz or e.ballard@auckland.ac.nz>

Abstract

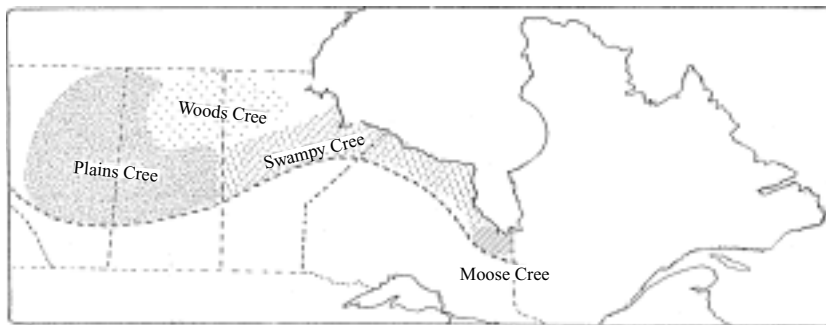
Cree dialects are often distinguished on the basis of their reflexes of Proto-Algonquian**l*. The reflexes cover a wide phonetic spectrum: a glide /j/, a liquid /l/, a nasal /n/ and /ð/.² This paper presents a description of the phonetic realisations of the most interesting of these segments: the Woods Cree phoneme /ð/.

1. Introduction

The Cree language forms a dialect continuum that stretches from Quebec in eastern Canada to Alberta in western Canada, see Figure 1. This dialect continuum consists of a number of varieties of Cree each with their own phonological and grammatical peculiarities. The most widely noted difference concerns the reflexes of Proto-Algonquian **l*. These include a glide /j/ in Plains Cree; a liquid /l/ in Moose Cree; a nasal /n/ in Swampy Cree; and /ð/ in Woods Cree. The most intriguing of these reflexes is /ð/. This segment is an unusual sound appearing in only 6% of the languages in the UPSID database (Maddieson 1984). It is also of interest because this particular phoneme phonologically patterns together with the sonorants in Woods Cree. Although we have detailed analyses of several of the European languages with this phoneme, where /ð/ patterns clearly as an obstruent, little is known about the phonetic realisations of /ð/ in languages where this segment does not fulfil this

function. This paper was written in attempt to stimulate others to provide documentation about the phonetic realisations of unusual segments in languages of the world, many of which are found in the Pacific region.

Figure 1: Distribution of Cree Dialects.



(Map adapted from MacKenzie and Clarke 1981: 138)

2. Data collection

The data for this paper are based on material collected in South Indian Lake Manitoba, a small isolated community with approximately 800 inhabitants. The recordings were made between 1983 and 1987 and included interview data, narratives, and elicited data from twenty-five respondents from different families, genders and age-groups.

At the time of the study, the community was undergoing significant language shift from Cree to English. Only a handful of the oldest community members were monolingual. Most older and middle-aged individuals in this community spoke Cree and English, having learned English in boarding schools in their primary and high school years. Here, they were punished for speaking Cree, even in the schoolyard. As a consequence of this, the language of the home shifted from Cree to a combination of Cree and English. Many of the younger members of the community could be classified as English-dominant or as Cree-passive bilinguals. The latter understand Cree but have

limited active knowledge of the language, a situation typical of the other Woods Cree communities (David Westfall, personal communication). Woods Cree is undergoing language shift, yet despite numerous changes, the phonological system has remained relatively intact.

3. Woods Cree consonantal inventory

An analysis of the Woods Cree inventory is presented in Table 1. With the exception of the phoneme /ǝ/, the consonantal inventory is simple. These sounds include two nasals /m n/, two glides /w j/, /h/, which exhibits characteristics of both glides and fricatives, and five voiceless obstruents: three stops /p t k/; one fricative /s/; and one dental-alveolar affricate /ts/. [l] is included in brackets because of its limited distribution, only appearing in loan words (eg. *ti:li:po:n* ‘telephone’), and in one specialised register ‘motherese’, described below, where it is a variant of /ǝ/.³ The vowel system is also simple, with three long and three short vowels.

Table 1 shows that the voiced inter-dental segment is the sole voiced non-nasal consonant with full phonemic status in the Woods Cree phonological system. Of particular interest is the fact that this segment does not have a voiceless counterpart.

Table 1: Woods Cree Phonemic Inventory.

p	t	ts	k
	s		
	ǝ		
	l		
w	j		h
m	n		

4. Phonetic realisations

There are seven possible phonetic realisations of Woods Cree /ð/. These include [ð̥], [ð̥̥] a tap represented here as [ɾ], a glide [j], [l], [θ] and [t].

[ð̥] or [ð̥̥]

Woods Cree /ð/ is usually realized in South Indian Lake either as [ð̥] or as an open, more approximant-like sound [ð̥̥], not unlike the approximant variant found in Spanish. The realisation of this phoneme as either [ð̥] or [ð̥̥] is an individual one — with individuals in the South Indian community having a preference for one or the other. Those who have a closed variant consistently use a closed variant; those with a more open variant consistently use that. Individuals with the more open realisation of /ð/ often also have a similar realisation for their corresponding English system.

Of all the realisations of phonemic /ð/, [ð̥] or [ð̥̥] is the unmarked and most frequently occurring phonetic variant in South Indian Lake occurring in elicitation style, in word lists, when translating stories from Woods Cree into English, and in everyday free conversation. [ð̥] or [ð̥̥] may appear in place of any of the other phonetic realisations described below.

[ɾ]

The second most common variant is the tap [ɾ]. A tap is the unmarked form in rapid spontaneous informal speech of all speakers in the sample. It shows considerable alternation with [ð̥], as illustrated in the examples below, and it never appears, to our knowledge, in formal elicitation.⁴

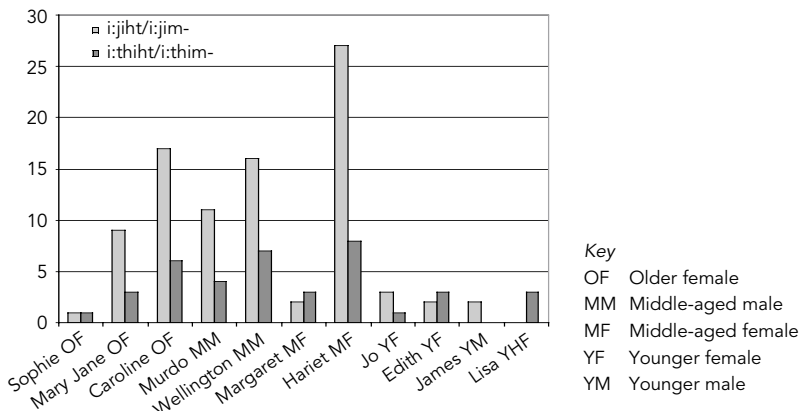
- | | |
|--|-------------|
| 1. <i>wītha</i> ‘3rd singular’ | [ð̥] or [ɾ] |
| <i>nītha</i> ‘1st singular’ | [ð̥] or [ɾ] |
| <i>kātha</i> ‘don’t’ | [ð̥] or [ɾ] |
| <i>iṯhimīw</i> ‘s/he thinks about him/her’ | [ð̥] or [ɾ] |

[j]

A further variant of /ð/ is [j]. [j] appears when both preceded and followed by a high front vowel, as in the illustrative examples listed under 2. As is the case for many of the other variants, there is considerable variability here. [j] alternates with both [ð] and [ð̥]. However, unlike the case presented for the tap, [j] appears to be restricted to a subset of lexical items, with a strong preference for, but not restricted to, the bound morpheme set, *ĩthiht-ĩthim-* ‘by thought’. Figure 2 presents a graphic illustration of those speakers who pronounced this morpheme set in free conversation. The columns represent the number of tokens per speaker. This figure shows that both older and younger members of the community use both variants, with the preferred variant being [j]. This variation appears to be stable across all age groups.

- | | | |
|--------------------------------------|----------------------|-------------|
| 2. <i>mithwĩthimĩw</i> | ‘s/he likes him/her’ | [ð̥] or [j] |
| good-by-thought\TA3-3’I ⁵ | | |
| <i>mithwĩthihtam</i> | ‘s/he likes it’ | [ð̥] or [j] |
| good-by-thought\TI-3-0I | | |

Figure 2: j ~ ð̥ Alternation Amongst Woods Cree Speakers for the Bound Morphemes *i:thim-/i:thik-* ‘By Thought’.



The [j] realisation is somewhat unusual. In most lexical items, when both preceded and followed by a high front vowel, [j] does not occur, as in the word *ithiniw* ‘person’. In other words, it is heard in natural conversations, but in the recorded texts, there are no tokens of this realisation. One example of this is the word *pīthisk* ‘finally’. This is commonly pronounced as [pi:jisk] in formal elicitation and ordinary conversation, but all occurrences of this word in the recorded texts or conversations have [ð]. The restriction on the use of [ð] to certain lexical items could be due to the phonetic overlap between /ð/ and the phoneme /j/. A second possible explanation is the association of the [j] variant with its use in the Cree Bible written in the /j/ dialect. The most commonly occurring forms with Woods Cree [j] tend to be those which occur frequently in biblical sources (eg., *pīthisk* [pi:jisk] ‘finally’, - *īthiht/-* *īthim-* [i:jiht/i:jim] ‘by thought’).

[l]

Another variant of /ð/ is [l]. This variant appears in motherese, a type of talk directed at small children.⁶ As an input source, parents use motherese as one of several possible linguistic choices. This register has a small set of lexical items containing the Woods Cree phoneme /ð/. When these words occur in motherese, the highly marked form [ð] is replaced with a less marked form [l]. The use of [l] in this specialised register may be a conscious attempt by parents to help children interpret this segment.

3.	Unmarked Speech	Motherese
<i>kītha</i> ‘2nd singular’	[ki:ða]	[ki:la]
<i>kātha</i> ‘don’t’	[ka:ða]	[ka:la]
<i>mīth</i> ‘give it’ ⁷	[mi:ð]	[mi:l]

[t]

[t] is the most restricted of the allophones. It only appears, variably and possibly only in younger speakers, in word internal position, when preceded and followed by syllables beginning with a nasal, in other words /Nasal V ð V Nasal V/. This context occurs in words such as those listed below in 4.

Fortitions of this type (where a segment becomes less sonorous in the environment of a sonorant segment such as a nasal) are not unusual and generally result in a change in the stricture of a segment (see Hume & Odden 1996). What is worthy of mention here is that the fortition affects both the stricture and the voicing of /ð/, yielding [t] rather than the expected [d]. [d] does occur in Woods Cree but only as a phonetic variant of the phoneme /t/, so perhaps [t] is chosen to maintain distinctiveness.

4. <i>nīthanān</i>	‘we (exclusive)’	[ð] or [t]
<i>nimīthānān</i>	‘we (excl) give it to him/her’	[ð] or [t]

[θ]

[θ] appears only in word final position, where it alternates freely with [ð] in the handful of lexical items that end in this segment. This voiceless realisation may be due to its word final position, but devoicing in this context is restricted to this segment. Other types of sonorants do not show this pattern of variation. Examples of word final devoicing are given in 5.

5. <i>kītahtawīth</i>	‘suddenly’	[ð] or [θ]
<i>wīth</i>	‘name him’	[ð] or [θ]

5. Discussion

Very few languages have a voiced inter-dental segment in their phonemic inventory. In many of these better known languages, /ð/ has a limited phonetic range. Woods Cree appears to be an exception. It has a wide range of phonetic realisations including both obstruent and sonorant-like variants. It is possible that some of the phonetic variability is due to the simple contrastive system as there are only a handful of consonants in this language. It might also be possible that some of the obstruent realisations of Woods Cree /ð/ could be attributable to language contact with English where /ð/ is clearly identified as an obstruent. [t], for example, has only been recorded in the speech of the youngest members of the community, all of whom are bilingual. A third possibility is language attrition. Languages that undergo attrition often exhibit

considerable phonetic variability (see Craig 1997), and this might be having some influence on the phonetic realisations of /ð/. There appears to be less variability in the speech of the oldest monolingual members of the community. A further possibility is that /ð/ may exhibit more phonetic variability, when the segment does not function as an obstruent. In order to tease out some of these issues, we need detailed descriptions of this segment in non-European languages. There is an urgent need for detailed phonetic descriptions as many poorly documented languages are weakening to a state where issues of language attrition and language contact make analyses complicated and problematic. It is hoped that the Woods Cree data presented in this paper may provide the impetus for documentation of the phonetic realisations of uncommon segments in other languages, including those in the Pacific region (and perhaps this outlet may be one place for this discussion to take place).

Notes

- 1 We would like to give a special 'thank you' to the community of South Indian Lake, Manitoba for sharing the richness of their language.
- 2 See Wolfart 1973 for Plains Cree, Starks 1992 and Castel and Westfall 2001 for Woods Cree, Anthony 1972 for Swampy Cree, and Ellis 1983 for Moose Cree.
- 3 Loan words with /l/ are noted in many Algonquian languages including a number of Cree dialects (Ellis 1983:17 for Moose Cree and Anthony 1972: 26 for Swampy Cree), the Ojibwa dialect of Ashinaabe (Artuso 1998), and several varieties of Montagnais (McKenzie, personal communication).
- 4 Greensmith (1985) notes a 'flap' variant of /ð/ in the speech of the youngest of her Pukatawagan respondent. The tap variant in the South Indian Lake community does not show any evidence of age-grading.
- 5 The following abbreviations occur in example 2: TA 'transitive animate' verb, TI 'transitive inanimate verb', 3 '3rd person animate', 3' '3rd person animate obviative', 0 'inanimate third person', I 'independent verb form'.
- 6 'Motherese' or 'baby talk' has been recorded for the East Cree dialect, where Proto-Algonquian */l/ is regularly realised as [l]. In this variety of Cree, 'babytalk' or 'motherese' is recorded with the phoneme *l* (Jones 1986). Castel and Westfall (2001) note the use of *l* in motherese in the Pukatawagan variety of Woods Cree but provide no examples.
- 7 *mīth* 'you give it to him' is a transitive animate imperative construction with a double object. However, in 'motherese' objects are not specified.

References

- Anthony, Robert J. 1972. 'A preliminary report on the Swampy Cree of Shamattawa, Manitoba.' *Linguistics Circle of Manitoba and North Dakota Proceedings* 12: 24-28.
- Artuso, Christian. 1998. 'Language change across four generations of an Algonquian family: some preliminary findings.' *Papers of the 29th Algonquian Conference 1-17*. Winnipeg: University of Manitoba.
- Castel, Robert J. and David Westfall. 2001. *Castel's English-Cree Dictionary and Memoirs of the Elders Based on the Woods Cree of Pukatawagan, Manitoba*. Brandon, Manitoba.
- Craig, Collette G. 1997. 'Language contact and language degeneration.' In Florian Coulmas (eds) *The Handbook of Sociolinguistics*. Cambridge: Blackwell. 257-270.
- Ellis, C. Douglas. 1983. *Spoken Cree*, rev. edition. Edmonton: Pica Pica Press.
- Greensmith, Jenny. 1985. Phonological variants in Pukatawagan Woods Cree. Unpublished MA. thesis, University of Manitoba.
- Hume, Elizabeth and David Odden. 1996. 'Reconsidering [consonantal]'. *Phonology* 13: 345-376.
- Jones, Linda. 1986. 'East Cree baby talk.' *Actes du dix-septième congrès des Algonquinistes*. Ottawa: Carleton University. 175-182.
- Maddieson, Ian. 1984. *Patterns of Sounds*. Cambridge, Cambridge University Press.
- MacKenzie, Marguerite and Sandra Clarke. 1981. 'Dialect relations in Cree/Montagnais/Naskapi verb paradigms'. In Lynn Drapeau (ed) *Linguistique Amérindienne II: études algonquiennes*. Montreal Working Papers 16: 135-192.
- Schmidt, Annette. 1985. *Young People's Dyrbal. An Example of Language Death in Australia*. Cambridge: Cambridge University Press.
- Starks, Donna. 1992. Aspects of Woods Cree syntax. Unpublished PhD dissertation, University of Manitoba.
- Wolfart, H. C. 1973. *Plains Cree: A Grammatical Study*. Transactions of the American Philosophical Society n.s. 63(5). Philadelphia.

Copyright of Te Reo is the property of Linguistic Society of New Zealand. The copyright in an individual article may be maintained by the author in certain cases. Content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.