

**TRANSLATING BLACKFOOT KINSHIP TERMS IN
A BLACKFOOT-ENGLISH BILINGUAL DICTIONARY**

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Dedication

To my family

Tetsuo

[ni'na/父 *chichi*/father]

Nobuko

[niksíssta/母 *haha*/mother, 1948-2006]

Kaoru

[nissíssa/妹 *imōto*/(younger) sister]

Kenta

[nitóótoyooma/義弟 *gitei*/(younger) brother-in-law]

Abstract

This research explores how to best translate Blackfoot kinship terms that do not have a one-to-one equivalent in English, and how to represent cultural information regarding these kin terms in the Blackfoot-English dictionary included in the Blackfoot Language Resources and Digital Dictionary project (<http://blackfoot.atlas-ling.ca>). Dictionaries for endangered languages, including Blackfoot, have to serve all audiences at once, since there are generally not the resources available to publish different dictionaries for different purposes, age and fluency levels, as is usual for dictionaries of major languages. The translator must therefore carefully consider how a dictionary can meet all levels of users: speakers, learners, and teachers. Based on a careful study of Blackfoot kinship terms as discussed in the literature and a fieldwork project with speakers of the three Canadian dialects of Blackfoot, I propose different ways to represent Blackfoot kinship terms that are suitable for all levels of users.

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List of Abbreviations

Linguistics

1	first person
2	second person
21	first + second person plural inclusive
3	major third person (proximate)
4	minor third person (obviative)
1PL	first person plural
2PL	second person plural (exclusive)
3PL	major third person plural (proximate)
4PL	minor third person plural (obviative)
AN	animate
IN	inanimate
OBV	obviative
PL	plural
SG	singular

Anthropological kinship notions

M	mother
F	father
D	daughter
S	son
W	wife
H	husband
B	brother
Z	sister
G	sibling
E	spouse
Co	cousin
Co ¹	first cousin (e.g. FByCo ¹ = father's brother's first cousin younger than Ego)
e	elder
y	younger
♂	male speaker's (e.g. ♂yB = male speaker's younger brother)
♀	female speaker's
(↑)	older than speaker (e.g. MBS(↑) = mother's brother's son older than speaker)
(↓)	younger than speaker

Others

F & R	Frantz and Russell (1995)
H & R	Hanks and Richardson (1945)
U & V	Uhlenbeck and Van Gulik (1930, 1934)
TRC	Truth and Reconciliation Commission of Canada (2015)

Chapter One: Introduction

1.1 Statement of the problem and research question

Recent discussions regarding the possible form and content of Native American language dictionaries have tended to focus on grammatical matters such as verb forms (see for example Montgomery-Anderson, 2008; Pulte & Feeling, 2001), online language learning materials such as Mobile Apps (see for example Begay, 2013), and online games (see for example Junker & Torkornoo, 2012). However, little research has focused on Lexical semantics. The representation of culturally specific lexical meanings and concepts in such dictionaries has received even less attention.

The strong relationship between language and culture has been recognized by numerous researchers since the seminal work in this area by Sapir (1929) and Whorf (1939/1956) (see for example Enfield 2002; Foley, 1997; Silver & Miller, 1997). A handful of recent articles discuss the significance of documenting culturally specific meanings in bilingual dictionaries of indigenous languages, including Marquesan of French Polynesia (Cablitiz, 2011), Yami of Taiwan (Rau, Yang, Ann Chang, & Dong, 2009), and Māori of New Zealand (Stephens & Boyce, 2011). If one of the goals of language documentation is language maintenance and revitalization,

then culturally specific meanings and concepts should also be represented in order to avoid misinterpretation of meanings, especially in an endangered language like Blackfoot.

One of the challenges in a bilingual dictionary is that a lexical item in Language-A seldom has an exactly matching equivalent lexical item in Language-B. (Ilson, 2013). This is especially significant when the differences between the two languages and cultures are substantial, as is the case with Blackfoot and English. As an example, consider the three Blackfoot lexical items corresponding to English 'brother-in-law'.

isstamo: 'brother-in-law of male, i.e. his sister's husband'

isstamoohko: 'brother-in-law of male, i.e. his wife's brother'

ootoyoom: 'brother-in-law of female'

(Frantz & Russell, 1995, s.v. *isstamo*, *isstamoohko*, *ootoyoom*)

English does not have lexical items corresponding exactly to those Blackfoot lexical items. Instead, multi-word descriptions of the Blackfoot lexical items are given. If the target language (English, in this case) does not have a matching lexical item, then a possible solution is to give an explanation of the term. However, there are two issues with this. First, the definitions given above, though correct, are conceptually complex for non-native speakers of Blackfoot or members of speech communities with less elaborate kin systems. That renders these terms difficult for

dictionary users to comprehend correctly without additional explanation. Secondly, the definitions represent the culturally specific meanings but do not provide information on the cultural background and the historical or contemporary Blackfoot kinship system which they describe. Providing this information in a dictionary is essential, since these Blackfoot lexical items represent different roles in Blackfoot society as opposed to English speaking societies. Therefore, making cultural information available in a Blackfoot-English bilingual dictionary potentially plays an important role in bridging gaps in understanding between Blackfoot and English speaking cultures, and helps users of the dictionary to comprehend Blackfoot lexical items.

Translation of culturally specific lexical items in their original context is particularly important for highly endangered languages spoken in communities undergoing cultural changes affecting local knowledge around traditional concepts and customs. The way in which bilingual dictionaries convey not only the concepts themselves but also any accompanying connotations and context from the source language (i.e. Blackfoot) to the target language (i.e. English) needs careful attention because an incorrect or incomplete translation might result in the loss of the original flavour of the lexicon (Chan, 2004). Correct translation of the current and/or

historical meaning of culturally specific lexical items does more than provide a translation: it also documents culturally specific concepts and practices. It is therefore crucial to examine the best way to translate and represent current and historical culturally specific meanings in bilingual dictionaries, especially in endangered languages. As the number of native speakers decline in an endangered language, it becomes increasingly difficult for fluent speakers to transmit cultural knowledge to non-fluent community members.

This research addresses the significance of representing cultural knowledge in dictionaries of endangered languages and examines ways to add cultural information to a Blackfoot-English bilingual dictionary. It focuses on the representation of Blackfoot kinship terms as a case study. This thesis addresses the following questions.

1. What is the best way to translate Blackfoot kinship terms in a Blackfoot-English bilingual dictionary?
2. What alternative ways are there to represent cultural information relating to Blackfoot kinship terms in a bilingual dictionary?
3. How can we generalize the solution for the representation of kinship terms to other parts of the dictionary?

These questions are examined based on the most current printed dictionary by Frantz and Russell (1995) and the Blackfoot Language Resources and Digital Dictionary Project (www.blackfoot.atlas-ling.ca), which is online resource for the Blackfoot Language that incorporates a digitized version of Frantz and Russell (fc.).

1.2 Motivation for studying Blackfoot kinship terminology

I spent most of my time in Japan, a society which is heavily monolingual and monocultural, except for ages five to eleven when I lived in Singapore and since the beginning of my post-secondary education in 2009 in Canada. Although English has been a compulsory subject in the Japanese education system for several decades, and the influence of Western culture and thought (mostly from the US and Western Europe) has been enormous during that same period, the Japanese language, culture, and focus on a collectivistic society remain central to the people of Japan.

Even in Singapore, a city in which the use of English is all-pervasive, the dominant language that framed my life at home and school was Japanese; my parents were Japanese and while in Singapore I went to a full-time Japanese school that was based on the Japanese education system. However, I had noted in Singapore that people from different ethnic backgrounds spoke different languages, practiced different cultures, and observed different religions. Yet while I had the

opportunity to learn and speak English throughout my lifetime, I did not notice the extent to which language and culture connect with each other until I began to speak English every day in Canada. I then quickly became aware that aspects of my language affect my world view. Of course this is not meant to say that a person's world view is affected by language alone; that is oversimplified. My point is rather that language affects a person's world view in addition to other factors. I started to think deeply about the relationship between language and culture, and eventually I had an opportunity to study linguistic relativism (Whorf, 1939, 1940) and the way in which language encodes the cultural/social information of a speech community.

One particular example of the types of differences I encountered was when I was talking about kinship terms with speakers of different languages, especially the marked differences in understanding between English speakers and Mandarin Chinese speakers. Given my own understanding of kinship, I used to ask English speakers whether their sister or brother was older or younger than the speaker when they talked about members of their family. I began to notice that there was often an awkward pause before they answered my question, but did not understand why they hesitated before they answered my question. Slowly, I became aware that I was asking for information regarding kin relations that is central to my native

language and society, but which does not inform kin or social relations in the English-speaking world to the same extent.

In Japanese, there are four sibling terms: *ane* 'older sister', *imōto* 'younger sister', *ani* 'older brother', and *otōto* 'younger brother'. In other words, in Japanese sibling terms are descriptive in terms of gender and relative age and do not simply classify sisters and brothers into two broad categories.

The differences in age and gender both play important roles in Japanese society and people expect them to meet society's expectations. Japan is a collectivistic society in which people behave based on collective norms shared widely in the society, as opposed to Western individualism, in which the preferences, beliefs, and goals of the individual are prioritized (Sugimura & Mizokami, 2012; Triandis, 1995). Each kin term carries with it societal expectations in terms of role both within the family and society. For instance, older siblings in Japan are expected to be a role model and be more patient toward their younger siblings because they have lived longer and it is expected/required that they be more knowledgeable than younger siblings. In return, younger siblings are required to respect older siblings and follow their advice as older, more experienced, and knowledgeable siblings.

Gender roles in Japan are less pronounced now compared to 20 years ago due to the increase of equal gender opportunities. However, a strong adherence to distinct and separate gender roles can still be found in many corners of Japanese society, and the personal and moral qualities ascribed to each gender have not disappeared. For instance, men are expected to be strong (both mentally and physically) and take on leadership roles, and women are expected to be humble. The age and gender differences reflected in the sibling terms match what people expect from older/younger people and men/women in Japanese society in general.

As noted above, after I arrived in Canada, I kept asking people whether their sister or brother was older or younger than them. Then I spoke with a classmate from China who was a native Mandarin speaker. He asked me whether my Japanese aunt was maternal or paternal when we were talking about our family and I found myself wondering why he cared whether my aunt was my mother's sister or my father's sister. I decided to find out more about Chinese kin terms and discovered that Chinese kinship systems distinguish their relatives depending on whether relatives are on the mother's (maternal) side or the father's (paternal) side. Accordingly, kinship terms for aunts in Mandarin distinguish between Mother's

sister, Mother's brother's wife, Father's sister, and father's brother's wife (Qian & Piao, 2009).

I stopped asking English speakers whether their sister or brother is older or younger after having the experience with my Chinese classmate. I realized that for English speakers, it is not always relevant to ask whether their sibling is older or younger since there are no specialized terms in English. I also began to wonder whether a speaker's dominant language (e.g. Japanese or Chinese) determines his or her world view even in a different language setting (e.g. English). Moreover, I realized that people like myself, who are not initially aware of the culture of a speech community, keep asking for knowledge based on the kinship model encoded in their dominant language; like whether a person is an older or younger sister or maternal or paternal aunt.

When I first looked into Blackfoot kinship terminology, I was struck by the variety of its kinship terms and wondered why they have these terms which are not in English and Japanese. For instance, Blackfoot has terms for younger siblings in which it is not the gender of the sibling but of the speaker ("Ego") that matters: for example, *ihsiss* 'female speaker's younger sibling' or *isskán* 'male speaker's younger sibling'. Conversely, they also have terms such as *ínsisst* 'older sister' and *i's* 'older

brother', in which it does not matter whether the speaker is male or female. These terms appeared to suggest that relative age of speaker was an important concept in Blackfoot culture.

There are other terms that reveal traditional socio-cultural aspects of Blackfoot kin structure as well. For instance, the existence of terms like *iss-ohkiimaan* 'youngest wife' (lit: 'young-wife') and *i'sohkiimaan* 'least favored wife' suggests that a husband was able to have several wives and they were sometimes even ranked (Wissler, 1912). Moreover, there is a noun *kipitáipokaa* which means a child who was raised by grandparents (Hungry Wolf, 1980). There are no terms that exhibit a one-to-one correspondence with the Eskimo-lineal system's classificatory terms such as aunt, uncle, niece, nephew, and cousin. The question therefore arose: How do these terms encode Blackfoot social structure?

Based on my experience with my Chinese and English classmates, and rooted in my own Japanese understanding, I recognized that kinship terms have meanings and point to socio-cultural and familial roles in a speech community. I therefore took the position that Blackfoot kinship terms were highly representative and decided to work on Blackfoot kinship terminology and what these terms represent (or speak about) in Blackfoot culture and society.

1.3 About Blackfoot

Blackfoot is a member of the Algonquian language family. Algonquian languages are mainly spread from the Rocky Mountains in Western Canada to the East coast of Canada and were also spoken widely in the Eastern U.S. (see Figure 1).



Figure 1: A map of Pre-contact distribution of Algonquian languages (https://en.wikipedia.org/wiki/Algonquian_language)



Figure 2: A map of four Blackfoot tribes in Alberta, Canada and Montana, U.S.
 A: Siksiká, B: Piikani, C: Kainaa, D: Aamskáápipikani¹

The present-day Blackfoot Confederacy consists of four tribes. Three of these are located in Southern Alberta, Canada, while the fourth is found in Northern Montana, U.S. (see Figure 2). Respectively, they are known as the Siksiká/Blackfoot, Kainaa/Blood, Piikani/Peigan, (all in Canada) and Aamskáápipikani/Blackfeet (Montana). The Blackfoot language does not have one standard form, but it has four mutually intelligible dialects which each correspond to the four members of the

¹ I am grateful to Professor Kevin McManigal at the University of Montana for allowing me to use the map and for sharing its original file with me.

Blackfoot Confederacy; differences between the dialects are largely phonetic and lexical. For instance, the word for 'potato' is *mataki* in the Kainaa dialect, and it is *pataki* in Aamskáápipikani (Miyashita & Chatsis, 2015). The word for 'ice cream' is *sstónniki* (lit: 'cold milk') in the Kainaa dialect and *áísstoyi* (lit: 'that which is cold') in the Siksiká dialect (Frantz, n.d.). Frantz (n.d.) discusses that there are grammatical differences both between the Blackfoot dialects and even within a single dialect. For instance, the Siksiká dialect uses a prefix *na-* as a past tense or completive marker on verbs when a person prefix such as *nit-* is not indicated. There are differences in grammatical gender as well; for instance, the noun *iitáísapahtsimao'p* 'ashtray' is animate in the Kainaa dialect while it is inanimate in the Piikani dialect. The noun *iinán* 'banana' is animate for some speakers of Kainaa Blackfoot, but it is inanimate for others. Furthermore, sometimes there is variable gender within a single dialect.

In addition to these dialect differences, the Blackfoot language distinguishes between Old Blackfoot and New Blackfoot. Old Blackfoot speakers tend to be relatively elderly people who are in their mid-seventies or older, while New Blackfoot speakers are members of the younger generation; the majority are in their mid-fifties and sixties (Miyashita & Chatsis, 2015).

The number of Blackfoot speakers is about 3,250 in Canada according to the 2011 Census (Statistics Canada). 97.5% of Blackfoot speakers reside in Southern Alberta (Statistics Canada, 2011) and a very few speakers are found in Montana. Most Blackfoot native speakers belong to the older generation and the number of speakers of the younger generation (under 50 years) continues to decline (Frantz, n.d.; Frantz & Russell, 1995, p. xii; Genee & Russell, 2006; Statistics Canada, 2011). There are probably no truly monolingual speakers left (Frantz, 2009, p. viii). In addition, Blackfoot is now rarely transmitted from parents to children at home/ within the family home. Taken together, these facts demonstrate a continued decline in native speakers, meaning that the Blackfoot language may face extinction of their language in the near future. In fact, the number of Blackfoot speakers has decreased by 35 percent in a decade compared to data from the 2001 Census (Norris, 2007; Statistics Canada, 2011).

1.3.1 Grammar of Blackfoot nouns

This section provides some basic information on the grammar of Blackfoot nouns as it relates to Blackfoot kinship terms (the latter of which will be discussed in more detail in chapter 4). The information is intended for readers who are not

familiar with Blackfoot grammar so that they can properly interpret the glossed and analyzed examples in my text. I will restrict myself to the morphology of nouns only.

Blackfoot nouns are like English nouns in that they express number (singular vs. plural). They also express several grammatical distinctions that do not exist in English, such as gender (animate vs. inanimate), obviation (proximate vs. obviative) and specificity (specific/particular vs. non-specific/non-particular) (Frantz, 2009; Taylor, 1969). To understand the examples discussed in this thesis, only number and gender are important, so I will not discuss obviation and specificity here.

Gender (animacy) is an important feature of Blackfoot nouns: every noun is either assigned to animate or inanimate gender. In general, animate nouns refer to sentient living beings such as people or animals; however, there are some animate nouns which do not refer to living beings, such as *issk* 'pail'. Gender combines with number to create a basic set of four inflections for animate singular, animate plural, inanimate singular and inanimate plural nouns, as shown in Table 1 below.

Table 1: Comparison of Blackfoot nouns (Frantz, 2009)

	Animate	Inanimate
Singular	<i>póós-(w)a</i> 'a cat'	<i>ápssi-yi</i> 'an arrow'
Plural	<i>póós-iksi</i> 'cats'	<i>ápssi-istsi</i> 'arrows'

Another major difference between Blackfoot and English nouns is the Blackfoot distinction between independent nouns and dependent nouns.² Dependent nouns are obligatorily possessed: they cannot occur without a possessor. In Blackfoot, these include kinship terms and many body part terms. Independent nouns may occur with and without a possessor. When they occur with a possessor, a suffix has to be added to indicate it now is a possessed noun (see the morpheme *-iim* in example (1b) below). The following two examples illustrate the differences between (1) an independent noun and (2) a dependent noun in Blackfoot.

(1) Independent noun stem *(oh)poos* 'cat'

(a) *poosa*

poos-wa
cat.AN-AN.SG
'a cat'

(b) *nitohpóosiima*

nit-ohpoos³-iim-wa
1-cat.AN-POSS-AN.SG
'my cat'

(Frantz & Russell, 1995, s.v. poos)

(2) Dependent noun stem *inn* 'father'

(a) **inna*

inn-wa
father.AN-AN.SG
'a father'

(b) *ninna*

inn-wa
1- father.AN-AN.SG
'my father'

(Frantz, 2009, p.75)

² Frantz (2009, p. 71) uses the term "relational" for what is more usually called "dependent" in Algonquian linguistics.

³ The noun stem *poos* has the form *ohpoos* when it is preceded by a prefix.

Blackfoot kinship nouns usually contain three or four morphemes: possessive prefix⁴+noun stem+plural possessor suffix+noun gender/number suffix. A full paradigm of the Blackfoot stem *iksísst* ‘mother’ is provided as a reference in Table 2 below.

⁴ For the rules on when to use the long prefix (*nit-*, *kit-*, *ot-*) or the short prefix (*n-*, *k-*, *w-*), see Frantz (2009, p. 70-76)

Table 2: Paradigm of Blackfoot dependent noun *iksísst* ‘mother’ (Frantz, 2009; Frantz & Russell, 1995)⁵

Paradigm of dependent noun <i>iksísst</i> ‘mother’					
		SG Possessor		PL Possessor	
		SG	PL	SG	PL
person of possessor	1	<i>niksíssta</i> n-iksísst-wa 1-mother-AN.SG ‘my mother’	<i>niksísstsi</i> n-iksísst-iksi 1-mother-AN.PL ‘my mothers’	<i>niksísstinnaana</i> n-iksísst-innaan-wa 1-mother-1PL-AN.SG ‘our mother’ (Excl)	<i>niksísstinnaaniksi</i> n-iksísst-innaan-iksi 1-mother-1PL-AN.PL ‘our mothers’ (Excl)
	21	n/a	n/a	<i>kiksísstinnoona</i> k-iksísst-innoon-wa 2-mother-21-AN.SG ‘our mother’ (Incl)	<i>kiksísstinnooniksi</i> k-iksísst-innoon-iksi 2-mother-21-AN.PL ‘our mothers’ (Incl)
	2	<i>kiksíssta</i> k-iksísst-wa 2-mother-AN.SG ‘your (SG) mother’	<i>kiksísstsi</i> k-iksísst-iksi 2-mother-AN.PL ‘your (SG) mothers’	<i>kiksísstoawawa</i> k-iksísst-oaawa-wa 2-mother-2PL-AN.SG ‘your (PL) mother’	<i>kiksísstoawaiksi</i> k-iksísst-oaawa-iksi 2-mother-2PL-AN.PL ‘your (PL) mothers’
	3	<i>oksísstsi</i> w-iksísst-yi 3-mother-OBV ‘his/her mother’	<i>oksísstsi</i> w-iksísst-iksi 3-mother-AN.PL ‘his/her mothers’	<i>oksísstoawayi</i> w-iksísst-oaawa-yi 3-mother-3PL-OBV ‘their mother’	<i>oksísstoawaiksi</i> w-iksísst-oaawa-iksi 3-mother-3PL-AN.PL ‘their mothers’

⁵ Blackfoot also has forms with 4th person/Obviative possessor; however, it is omitted from the table. For details see Frantz (2009).

1.4 Structure of the Thesis

This study is organized into eight chapters. Chapter One is the introduction of this thesis which addresses the issue of translation and representation of culturally specific meanings in bilingual dictionaries of endangered languages. This Chapter also provides general information about Blackfoot. Chapter Two provides information on endangered languages and introduces lexicography of endangered languages in the past and present. Chapter Three discusses translation issues relating to bilingual dictionaries and the significance of cultural knowledge in dictionaries of endangered languages by drawing from research on the relationship between language and culture. Chapter Four discusses the Blackfoot kinship system and terminology; it provides a table that compares Blackfoot kin term usage and meaning over the past 100 years. In Chapter Five, I provide the results of my fieldwork that I conducted in 2015-2016. In Chapter Six, I suggest three possible solutions to improve the Blackfoot online bilingual dictionary. Chapter Seven discusses my findings and makes suggestions for future study arising from the fieldwork data.

Chapter Two: Lexicography of Endangered Languages

2.1. Endangered languages

An endangered language is “a language that is at risk of no longer being used, as its speakers shift to another language or die out” (SIL International, n.d.-b).

Approximately 7,105 languages are currently spoken in the world (SIL, n.d.- a).

Simons and Lewis (2013), however, found that “global linguistic diversity has declined 20% over the period 1970-2005” (p. 2). Research on the vitality of the world’s languages demonstrates that 63% of the 7,480 languages which were spoken in 1950 are still being used and transmitted from parents to their children (Simons & Lewis, 2013, p. 9). On the other hand, the same research reveals 32 % of the languages in the world are mainly spoken among the older generation, but not transmitted between generations, and 5% of the languages are no longer spoken or there is no speaker left in that speech community. In addition, Simons and Lewis (2013, p.10) note that the ratio of endangered or extinct (37%) is higher than the ratio of languages in stable condition such as English or French (30%).

The numbers given in the previous paragraph indicate that there is a serious problem in preserving minority languages, and illustrate that languages in stable condition (e.g. English and French) become more prevalent among speakers of minority languages. One of the interesting aspects of Simons and Lewis' (2013) study is that it underscores the fact that language vitality varies enormously between geographical regions. The top five regions in which languages have been and continue to die out are Australia and New Zealand (371 languages), South America (204 languages), North America (163 languages), South-East Asia (131 languages), and Melanesia (81 languages). They argue that "these five regions account for over two-thirds of the dead and dying languages in the world" (p. 11). On the other hand, the top five regions where languages are vital are Western Africa (88% of languages in the region are vital), Eastern Africa (82%), Middle Africa (81%), Southern Africa (77%), and Northern Europe (76%). Northern America (7%) and Australia and New Zealand (9%) are lowest in rank (Simons & Lewis, 2013). Several factors are involved in language shift or loss; these could be economic pressure, political decision such as language policy, military, and other social factors

(Hans Rausing Endangered Languages Project, 2013; Thomason 2015). This includes colonization by European countries (Mufwene, 2002).

In the Canadian context, the majority of speakers of aboriginal languages are now older people who were sent to and educated by the infamous church-run residential school system. This system removed aboriginal children from their family for several years and forced them to learn the colonizers' culture (e.g. Western culture) and to speak English or French although. Most of these children were able to speak only their aboriginal language and did not speak English or French when they entered the school. This has been called "cultural genocide" (Truth and Reconciliation Commission of Canada, 2015a, p.1). The children were not allowed to practice their cultures and to speak their own language; rather, they were taught aboriginal cultures and languages were inferior. As a consequence, many aboriginal children lost an opportunity to acquire their own language and lost confidence in the language as well. The negative psychological effects of the residential schools and the influence of the dominant language (e.g. English) over

the years resulted in many aboriginal languages becoming endangered (First Nations Studies Program, 2009; Miller, 1996; TRC, 2015).

In North America, currently only 7% of the languages spoken are designated as Vital, giving it the lowest rank of language vitality among 22 world regions (Simons & Lewis, 2013). In addition, 32% of languages in Northern America are considered Trouble and 61% of them are considered Dead or Dying. The *Ethnologue* (Lewis, Simons, & Fenning, 2015) places Blackfoot in the category known as Shifting; “the child-bearing generation can use the language among themselves, but it is not being transmitted to children” (Lewis, Simons, & Fenning, 2015, “Language Status”). In my opinion, SIL’s prognosis is too optimistic about the status of Blackfoot because there are only several thousand Blackfoot speakers, most of whom are mostly elderly (Frantz, n.d.; Frantz & Russell, 1995), and intergenerational transmission is probably already broken (Frantz, 2009). It seems that the status of Blackfoot is moving from Shifting to Dying. Lewis, Simons, & Fenning, (2015) define Dying means “the only fluent users (if any) are older than child-bearing age, so it is too late to restore natural intergenerational transmission through the home, a situation in

which a mechanism outside the home would need to be developed” (“Language Status”). If the status of Blackfoot is indeed moving closer to Dying, then it is important to consider how the language could be maintained. One of the ways to do this is to document Blackfoot language and culture as discussed in the following section.

2.2 Language documentation for revitalization

Documenting endangered languages has a long tradition (Ogilvie 2011). The majority of early language documentation was done by linguists or anthropologists who did fieldwork to conduct their research or by missionaries who lived in the speech community (Mosel, 2004). Researchers recorded and archived speech sounds, language grammar, and local culture. Most of these archives, however, were intended for professional purposes and were not shared with members of the researched communities in ways that would benefit them. For instance, a professional language dictionary contains linguistic terminology such as subject, object, or causative, which is familiar to the linguist but which may not be intelligible for community members without linguistic training.

In the past two decades, linguists working in the field of language documentation began to realize that the data they collected should be returned to and shared with speech communities, especially in the case of endangered indigenous languages, where revitalization efforts were most needed. Language loss in a community is not merely losing the way to communicate with others in society, but “when a language disappears so do a culture and a speech community’s unique way of seeing and ordering the world” (Ogilvie, 2011, p. 392). One of the ways to share research data is to produce a dictionary for a community; dictionaries of endangered languages are considered an important way to support language documentation and revitalization as well as acting as to act a cultural heritage repository.

2.3 Current trends in dictionaries of endangered languages

An important issue to be discussed when compiling dictionaries of endangered languages has to do with the way they are presented. Most currently available dictionaries of these languages are presented alphabetically, although a few recently published dictionaries use original syllabic systems (see for example

Eastern James Bay Cree dictionary, Online Cree Dictionary). This is because these dictionaries were compiled by Western researchers or missionaries who were non-native speakers of that language. Perhaps in part for that reason, many of these dictionaries do not represent the best way to make the material accessible to the speaker community.

In order to be accessible for the speaker community, Mosel (2011) discusses two types of lexicography for endangered languages: a mini-dictionary and a thematic dictionary. A thematic dictionary classifies vocabulary items into semantic categories like “kinship terms, animal and plant names, terms relating to natural environment, the material culture and the social structure...” (Mosel, 2004, p. 41). The semantic classification depends on the language under investigation, since languages do not share the same culture and concepts (Sapir, 1949). The advantage of a thematic dictionary is that target vocabulary can be found more easily compared to traditional alphabetically organized dictionaries. However, the disadvantage of a thematic dictionary is that common words might not be in a

dictionary if these words do not belong to categories of a theme in a dictionary (Mosel, 2004).

Several dictionaries of endangered languages have been published both in print and online in the last decade. Each dictionary is published in a unique way. One of the interesting ways to represent culture in a dictionary is to present the material in the form of a thematic dictionary, as discussed in section 2.2.

As discussed, a thematic dictionary categorizes lexical items into semantic categories. It also allows for the inclusion of culturally specific categories such as in ceremony, hunting, or fishing. In Canada, Eastern James Bay Cree thematic dictionaries provide over 140 themes and sub-themes; for instance, bear, caribou, moose, and hare (rabbit) and other animals which are associated with hunting are assigned as sub-themes of the main theme “The hunt” (Visitor, Junker, & Neacappo, 2013) as shown in Figure 3.

The hunt.....	106
Bear.....	106
Bear names.....	106
Bear parts.....	106
What bears do.....	107
What people do with bears.....	107
Related bear words.....	108
Caribou.....	110
Caribou names and types.....	110
What caribou looks like.....	111
Caribou parts.....	111
What caribous do.....	113
What people do with caribou.....	113
Related caribou words.....	114
Moose.....	120
Moose names.....	120
Moose parts.....	120
What moose do and what they look like.....	121
What people do with moose.....	121
Other related moose terms.....	122
Beaver.....	124
Beaver names.....	124
Beaver body parts.....	124
What beavers do.....	125
What people do to kill beaver.....	126
What people do with beaver.....	127
Beaver hut properties.....	128
What happens in the beaver hut.....	128
What things are called related to beaver.....	128
Related beaver terms.....	130
Hare (rabbit).....	132
Rabbit names.....	132
Rabbit body parts.....	132
What rabbits do.....	132
What people do with rabbits.....	132
Other rabbit related terms.....	133
.....	135

Figure 3: An image of Table of Contents in *the Eastern James Bay Cree dictionary* (Visitor, Junker, & Neacappo, 2013)

Another way to represent culturally specific lexical items is to provide pictures and illustrations. The *Iñupiaq to English Dictionary* (MacLean, 2014) of Alaska is a good example of this. The dictionary provides drawings under some lexical items which are difficult to express in English. The tremendous number of pictures relating to traditional materials such as an *umiak* (p. 846) or a traditional sod house (p. 853) are provided in the Appendix as well.

Appendix 22 Ivrulik Kataligaaq Iglu Traditional Sod House

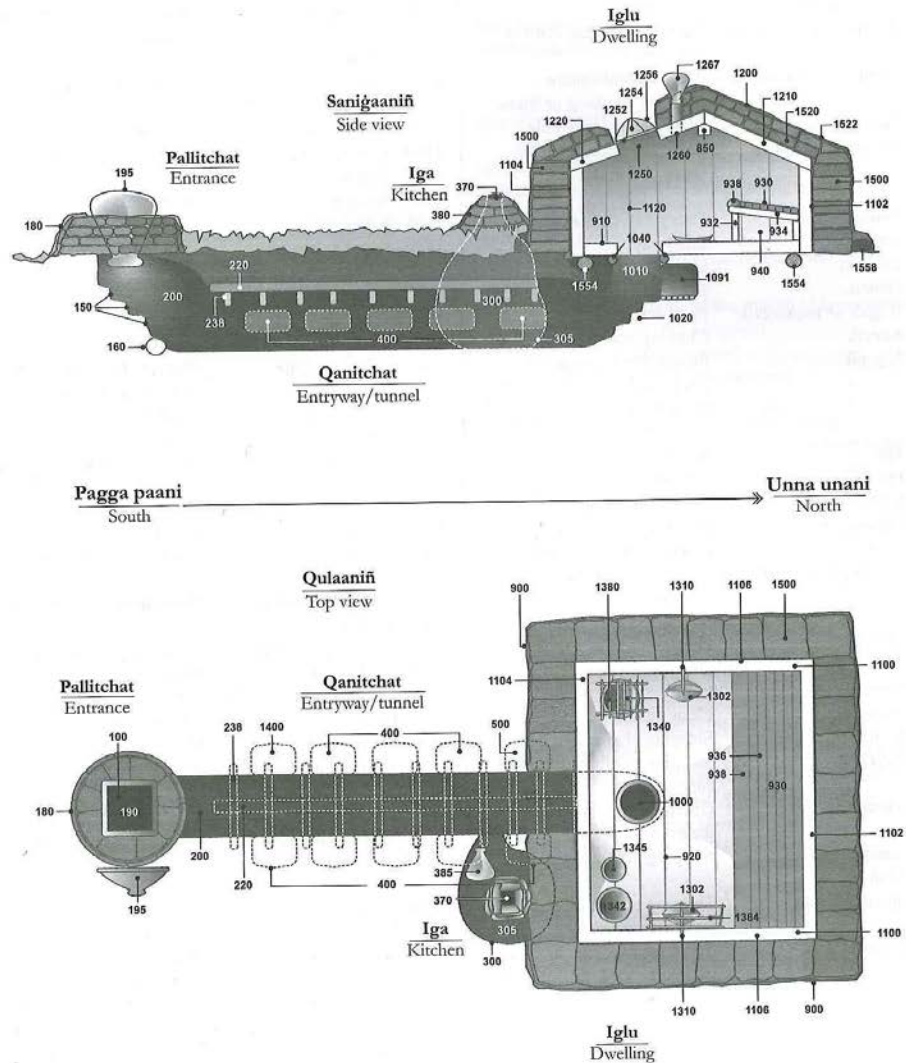


Figure 4: An image from *the Iñupiaq to English Dictionary* (MacLean, 2014, p853)

In the age of the internet online dictionaries and mobile Apps have become much more popular for those languages. These mediums can provide more sample sentences to users, allow the inclusion of visual materials such as maps or drawings,

and facilitate the inclusion of audio materials in the voices of native speakers. A digital dictionary is also able to provide its contents in colour which helps both users and providers in term of cost and size since a printed colour dictionary usually costs more than black-and-white dictionaries. The dictionaries underpinning the *Algonquian Linguistic Atlas* project (<http://atlas-ling.ca>) are a good example of the integration of audio and visual materials. The atlas itself is an open source online multimedia linguistic atlas which contains a large collection of key phrases in 14 languages from the Algonquian language family (Plains Cree, Swampy Cree, East Cree, Moose Cree, Métis Cree/Michif, Algonquin, Ojibwe, Woodland Cree, Naskapi, Atikamekw, Innu, Oji Cree, Mi'kmaw, and Blackfoot). The atlas provides speech sounds which are spoken by native speakers of those languages.

Another website is *Innu Language website* (<http://www.innu-aimun.ca>).

Innu-Aimun is spoken in Labrador and Quebec in Eastern Canada. The website provides in-depth detail on the Innu language as well as cultural data. Printed bilingual dictionaries are also available in Innu–English, English–Innu and in Innu-French, French-Innu. Moreover, a trilingual Innu-English-French dictionary is

available online (<http://www.innu-aimun.ca/dictionary/Words>). It also provides free English–Innu dictionary Apps. In 2014, the project published *the Innu Medical Glossary* app which contains pictures and is available in English and two Innu dialects: Mushuau and Sheshashiu. The Apps for the online dictionaries are available from their website (<http://www.innu-aimun.ca/english/download-the-apps>).

Furthermore, the Blackfoot Language Resources and Digital Dictionary Project (<http://www.blackfoot.atlas-ling.ca>) is currently underway. The digitized dictionary, which will be available in Blackfoot-English and English-Blackfoot formats, will provide several features in addition to a standard Blackfoot-English dictionary. For instance, there will be audio files, stories, video clips, language lessons and games etc. It is expected to be ready for the general public in 2017 and mobile Apps are expected to be ready in 2018 (Genee, 2015).

2.4 Lexicographical history of Blackfoot

Within the past 130 years, three Blackfoot dictionaries were compiled: Tims (1889), Uhlenbeck and Van Gulik (1930, 1934), and Frantz and Russell (1989, 1995). In addition to the dictionaries, there are a number of ethnographies that discuss or

touch on the Blackfoot kinship system and terminology as shown in Table 3 on the next page. This section introduces both the anthropological and linguistic studies of Blackfoot.

Table 3: List of Blackfoot researchers

Name of Researchers	Background	Location of fieldwork	Years of fieldwork	Publication date	Type of publication
Tims	Anglican Church Missionary	Siksiká	1883-1887	1889	Dictionary & Grammar
Uhlenbeck & Van Gulik	Linguists & Linguistics student	Blackfeet	1910-11	1930 1934	Dictionary
Frantz & Russell	Linguists & Graduate student	Siksiká/Kainaa	mainly 1960s by Frantz	1989 (1st Ed.) 1995 (2nd Ed.)	Dictionary
Morgan	Anthropologist	Manitoba Montana	1861 1862	1868	Book
Maclean	Methodist Missionary	Kainaa	1880-1889	1896	Article
Wissler	Anthropologist	Blackfeet	1906	1975	Book
Michelson	Linguist/ Ethnologist	Blackfeet	1916	1916	Article
Hanks & Richardson	Anthropologists	Siksiká	1938-1941	1945	Article

2.4.1 Reverend John W. Tims

The first ever Blackfoot dictionary, *Grammar and Dictionary of the Blackfoot Language in the Dominion of Canada: For the Use of Missionaries, School Teachers and Others*, was compiled by Rev. John W. Tims in 1889. He arrived at Blackfoot Crossing as a missionary in 1883. The book is divided into two sections: grammar and dictionary. The dictionary section is an English-Blackfoot dictionary only; a Blackfoot-English dictionary is not included since its anticipated audience only included English speakers, although Tims (1889) mentions in his preface that the book is also for “the Indians who comprise the Blackfeet nation” (p. vii). This raises the question of how many Blackfoot people at that time could read the dictionary since Blackfoot was an oral culture that did not have a standardized writing system until 1975 (Franz & Russell, 1995). The lexical items were collected during fieldwork at the Siksiká reserve for four and a half years (Tims, 1889). As Tims (1889) states in the preface “the Grammar is by no means complete, nor does the Dictionary contain, by a long way, all the words, even of common occurrence” (p. ix) because he did not have enough time to spend on his linguistic research. A digitized

copy of this book is available at the CIHM monograph Collection as a digital archive at the University of Alberta Libraries.

2.4.2 C. C. Uhlenbeck and Robert Hans van Gulik

The second Blackfoot dictionary was compiled by Christianus C. Uhlenbeck and Robert Hans van Gulik. *An English-Blackfoot Vocabulary* and a *Blackfoot-English Vocabulary* were published in 1930 and 1934 respectively. The lexical items in both books were collected by Uhlenbeck and his Ph. D. student J.P.B. de Josselin de Jong during their fieldwork in Montana in 1910 and 1911 (Genee, 2008). Compared to Tims' dictionary, the volume and quality of the dictionaries are much improved; however, Uhlenbeck developed an original phonetic transcription system which is both very different from Tims' and from the current orthography. The vocabulary books are available at Peel's Prairie Provinces as digital archives at University of Alberta Libraries.

2.4.3 Donald Frantz and Norma Russell

These two dictionaries compiled by Tims and Uhlenbeck and Van Gulik, were published before World War II, yet it took more than half a century before the third

Blackfoot dictionary, compiled by Frantz and Russell (1989, 1995), was published. This is the most up-to-date print version of a Blackfoot dictionary so far. Its lexical items were initially collected at the Siksiká reserve, but they were checked with Kainaa speakers (Frantz & Russell, 1995). The Frantz and Russell dictionary is a Blackfoot-English dictionary with an English Index. The first edition was published in 1989, exactly a century after Tims' dictionary was published, and the second edition was published a few years later and included an additional 300 new lexical items and 1000 corrections (Frantz & Russell, 1995). Frantz and Russell have a third edition planned for publication in the Spring of 2017.

2.4.4 L.M. Hanks Jr. and Jane Robinson

The only publication on the Blackfoot kinship system to date is *Observations on Northern Blackfoot kinship* (1945) by L.M. Hanks Jr. and Jane Robinson. Together, the authors conducted fieldwork on the Siksiká reserve during the summers of 1938, 1939, and 1941 (Archives Society of Alberta, n.d.). The couple, who had previously specialized in ethnography in Thailand and were known for their research on that area, were hired by Abraham Maslow, a professor at Columbia University for a

research project among the Blackfoot (Keyes, 1992). The data was collected from a total of seven language consultants, three male and four female Blackfoot speakers. Their resulting short monograph analyzes the Blackfoot kinship system and the way in which it encodes Blackfoot social structures. Hanks and Richardson also provided componential analysis with unique charts. At the end of their article, they briefly discuss pre-contact kinship/social structures and the colonial pressures on both, including enforced reserve life and a completely unrecognizable post-treaty subsistence/economic structure in terms of what had gone before. The Blackfoot had of course been nomadic prior to the signing of Treaty 7, and had relied primarily on the buffalo. In keeping with the Canadian government's conviction that the only 'civilized' lifestyle was an agricultural one, the Blackfoot were expected to transition immediately from hunting to farming once they were on reserve. Further details of the results of their fieldwork is discussed in chapter 4.3.

2.4.5 Other literature

In addition to Hanks and Richardson's work, brief discussions of Blackfoot kinship are found in the works of other scholars. Henry Lewis Morgan, the

prominent kinship scholar, interviewed both Piikani and Kainaa speakers in 1861-62. He briefly noted a few facets of their system and recorded Blackfoot kinship terminology in his book, *Systems of Consanguinity and Affinity of the Human Family* (1868).⁶

In 1916, Truman Michelson published *Notes on the Piegan system of Consanguinity* (1916).⁷ He was a linguist and ethnologist of the Bureau of American Ethnology and the Smithsonian Institution and worked on Algonquian languages, concentrating on Fox (Cooper, 1939). He collected Blackfoot kinship terms in the winter of 1916. In his article, Michelson selected the work of seven previously published Blackfoot kinship researchers, including Morgan (1868), and Tims and Uhlenbeck (1913), to analyze the Peigan kinship system through a comparative analysis of the terms he had collected through his two language consultants and the previously published literature.

⁶ However, Spier (1915) criticizes Morgan's work as "palpable errors, apparent contradictions, and frequent omissions...presented in an atrocious form" (p. 603).

⁷ Michelson did not mention whether Piegan was Northern Piegan (Piikani) or Southern Piegan (Blackfeet).

Another noteworthy piece of research was published under the title *Social organization of the Southern Peigans*. J.P.B. de Josselin de Jong, the author, was Uhlenbeck's Ph.D. student and conducted fieldwork in Montana in 1910. The paper discusses whether Blackfeet's bands are exogamic by analyzing marriage relations between Peigan clans.

2.5 Summary

This chapter discussed the current situation of endangered languages and the relationship between these languages and lexicography and why it is important to document language and culture for languages which are endangered. It also briefly introduced three Blackfoot dictionaries from past to present, as well as ethnographic and missionary materials that included details on the Blackfoot kinship system and its terminology. In addition, I discussed the different types of dictionaries of endangered languages published in print and those that are accessible on the internet and through mobile Apps.

In the next chapter, translation issues relating to culturally specific lexical items are discussed. A main question in the chapter is how we could translate and

represent culturally specific lexical items in a bilingual dictionary when one-on-one translation is not available.

Chapter Three: Representing culture in bilingual dictionaries for endangered languages

Translators don't translate *words*; they translate *what people do with words*.

(Robinson, 2008, p. 142)

Translation of indigenous language into English loses much of the inherent meaning.

(Indigenous People's Health Research Centre, 2005, p. 20)

3.1 Presenting culture in bilingual dictionaries

Robinson (2008) notes “cultural knowledge and cultural difference have been a major focus of translator training and translation theory” (p. 187), while Zhao and Huang (2004) argue that “the unit of translation may exceed text because translation, not merely transcoding or transferring of machine codes, involves both intertextual and extratextual factors” (p. 177). In addition, they emphasize that bilingual dictionaries include not only grammatical knowledge such as syntax or semantics but also “world knowledge” (p. 177). It is now commonly understood among linguists who conduct fieldwork for endangered languages that language and culture have a strong relationship (Cablitiz, 2011; Grenoble, 2011; Ogilvie, 2011; Sayas, 2004). For instance, Silver and Miller (1997) discuss how language expresses

culture, and Grenoble (2011) argues “language sustainability is at once an integral part of overall cultural sustainability...” (p. 14). Therefore, it is crucial to arrive at a translation that reflects cultural meaning in the language being translated—in both the denotative and connotative senses.

Arriving at a translation that accurately reflects the multiple meanings of a single word in a particular culture can be exceedingly difficult. Lexical items are often culturally specific in that they refer to an object, custom, or concept not found in both languages. These words are particularly difficult to translate (Robinson, 2008). Chan (2004) observes that while some lexical items in bilingual dictionaries are universal, elucidation of “untranslatable culture-bound words and phrases” (p. 188) remains the most exciting, yet challenging task for translators.

The way in which bilingual dictionaries convey concepts and connotations from a source language (in our case: Blackfoot) to a target language (in our case: English) needs careful attention because an incorrect or incomplete translation might result in the loss of the original flavour of the lexicon (Chan, 2004). Previous studies discuss how difficult the translator’s task is in selecting the right lexical

items. For instance, Chan (2004) notes that “selecting a word to fit the situation is often a kind of lottery” (p. 1) because bilingual dictionaries are able to give “only a limited range of equivalents and not a comprehensive list of possible translation” (p. 1) and “one of the primary tasks in translation is choosing a translation equivalent from among a set of semantically related words” (p. 1). Finding the correct culturally specific translation equivalents is tough and complicated, as Tseng (2004) says.

One of the issues in translation involves the challenge of anisomorphism.

Tseng (2004) argues that anisomorphism is a main concern when culture and language structure do not share the same referents, as for instance with English and Mandarin Chinese. The traditional Chinese women’s dress *qipao*, for instance, is translated from Mandarin to English as ‘a close-fitting woman’s dress with high neck and slit skirt as worn by women of the Manchu nationality’ (p. 170). The translator is unable to provide a single English lexeme for Mandarin *qipao* since English speaking culture does not have the same type of dress. Hence the English translation becomes a description of *qipao* rather than an equivalent lexeme. However, the dress style *qipao* is known as *cheongsam* in Cantonese and in this guise is an example of the

most common form of semantic borrowing where both object and name of object are integrated into the borrowing culture/language: Madonna's and Janet Jackson's (Tseng, 2004) popular adoption of the cheongsam as an article of clothing renders the translation of qipao into English possible albeit by using a word borrowed from Cantonese into English.

Ilson (2013) directs us to another translation issue. He notes that definitions of source languages in bilingual dictionaries are described in the target language and concepts and the connotations of the words in the source language are often not considered. For instance, the French word *garde champêtre* is translated as a 'rural policeman' in English in a French-English dictionary. Ilson points out that *garde champêtre* has a contrasting word *gendarme*, and the two lexical items have distinct meanings for French speakers. According to Ilson (2013), "a *gendarme* is a member of the national police force that is technically part of the French Army whereas a *garde champêtre* is employed by a local commune" (p. 391). The translation as 'rural policeman' does not express this distinction fully and therefore does not convey the concept and connotations of the French lexical item correctly.

The rest of this chapter discusses three different studies on translation issues in bilingual or multilingual dictionaries and how in each study, the translators attempted to resolve the issues around the translation of culturally specific words and their representation in bilingual dictionaries.

3.1.1 Study 1: Greek-Chinese lexicon for the New Testament

Wong and Wan (2004) discuss issues around translating the Bible, in particular the creation of a Greek-Chinese lexicon for the New Testament. They argue that the difficulty of translating the Bible is due to “cultural and temporal distance between the source text and the present day” (p. 157). Moreover, they claim that the impossibility of consulting the original authors of the text and checking with native speakers of the language makes it harder to understand “linguistic and stylistic information of the usage of the language” (p. 158). For instance, Chinese people who are not familiar with the Bible may not understand the importance and specific connotations of a words like “blood.” According to Wong and Wan (2004), blood in Christianity connotes redemption of sin, sacrifice, and life. For instance, the meaning of blood in the account of the Last Supper in Mark 14:22-

26 is metaphoric; the wine/blood is a shared symbol of Jesus and his choosing to die so humanity might live—a self-sacrifice. On the other hand, Wong and Wan (2004) discuss that in Chinese (and in not specifically Christian contexts in other languages as well) blood has more typical connotations of “lineage,” “kinship,” “bondage,” or “close relationship” (p.159); Chinese has many phrases and idioms that use blood in this sense, such as *xueyuan* ‘blood relationship’, and *xue nong yu shui* ‘blood is thicker than water’. Blood in Chinese also commonly connotes “violence” such as *xuexi* (awash in blood) (p.159).⁸ The authors argue that the use of the word blood in the New Testament needs additional “contextual information” and “cultural background” (p. 165) for a non-Christian audience to avoid confusion about the concept and its specific connotations in the context of the bible text.

3.1.2 Study 2: Documenting cultural knowledge in a Marquesan bilingual dictionary.

Cablitz (2011) also discusses the documentation of lexical and cultural knowledge in a bilingual dictionary. She raises an issue related to bilingual

⁸ Note that similar arguments can be made about English.

lexicography: “[...] it is difficult to find real translation equivalents between two languages because conceptual worlds evolve differently in different language and culture” (2011, p. 449). Svensén (1993) claims that translation equivalents are “approximate translations” (in Cablitz, 2011, p. 450) and do not give accurate translations of source language items due to cultural differences. Cablitz’s study on the Marquesan language, which is an endangered language spoken in islands of French Polynesia, discusses problems in compiling a bilingual dictionary when the target language (English in this case) does not have translation equivalents. His concern also attends to the fact that the Marquesan people, whose language is at risk, are facing a situation where the cultural knowledge embedded in their language will die out as the language disappears. Therefore, in Cablitz’s opinion, it is crucial to integrate cultural knowledge into endangered language dictionaries (2011).

An example of concepts difficult to translate from Marquesan into English are the lexical items pertaining to the different ripening stages of fruits. Marquesan has at least four different stages. The differentiation of ripening states is very important for Marquesan people since they are critical to the preparation of local medicines.

Marquesan has three different words for 'unripe': *puku*, *opĩo* and *oko*, while English only has the one lexical item 'unripe'. The question arises: how can these three different degrees of 'unripe' be represented in English without missing the original flavor of the lexical item? One meaning of 'unripe' in Marquesan could be translated into English; *puku* is "unripe and inedible, green fruit without kernel." However, *opĩo* is 'unripe and inedible, green fruit with kernel for which ripening process has started', and *oko* is translated as 'almost ripe fruit, pulp is yellow, but still hard and sour'. When translation equivalents do not exist, as with *puku*, *opĩo* and *oko*, translation becomes an explanation of the meaning.

One of the recommendations Cablitz makes is to include encyclopedic knowledge in a dictionary in English and French in addition to the translation of the lexical items. For instance, *ā* means one of the many types of stone structures found in the Marquesas; however, *ā* also means a sacred place for religious and social ceremonies in formal Marquesan society (Cablitz, 2011). The inclusion of cultural knowledge in the dictionary would therefore distinguish the roles of other stone

structures, facilitating the retention of cultural knowledge around stone for Marquesan themselves, while explicating the meaning for users of the dictionary.

3.1.3 Study 3: Multilingual dictionaries in Cavite Chavacano

Sayas' (2004) study of a multilingual dictionary discusses the situation where a dictionary needs to include four different languages. This situation arises for example, when the source language is a creole based on two languages and has itself additionally separated into two dialects. Sayas works on the Cavite Chavacano language, which is spoken in the Philippines by Caviteños and is a creole: a combination of Spanish and Tagalog. In addition, Cavite Chavacano has two dialects: Cavite City and Ternate. While Cavite Chavacano has been spoken for several generations, it is currently considered an endangered language. The majority of the people who are descendants of Caviteños have shifted to English or Tagalog as a mother tongue; therefore, in a Cavite Chavacano multilingual dictionary, headwords are written in Cavite Chavacano, but definitions of each headword are provided in Spanish, Tagalog, and Ternate translations. In addition to definitions in several languages, sample sentences in four languages (Cavite City, Ternate, Spanish, and

Tagalog) are provided. Below is an example of the lexical entry of the informal form of the second pronoun 'you' in Cavite Chavacano (the meaning of the sample sentence is "You speak Chavacano.")

TU. (tu) Ph. CC1. Vo Ter2. Tu Esp.3. Ikaw Tag.9
Tu ta platica Chavacano. CC.
Vo ta platica Chavacano. Ter.
Tu hablas Chavacano. Esp.
Ikaw ay nagsasalita ng Chavacano. Tag.

(Sayas, 2004, p.136)

Although Cavite Chavacano is adapted from Spanish and Tagalog, some words do not have translation equivalents. For instance, in Cavite City, Spanish, and Tagalog the pronoun 'you' distinguishes separate forms for formal and informal situations, but Ternate does not have this distinction. Ternate singular 'you' *vo/bo*, translated by the informal *tu* in both Spanish and Cavite City even though Ternate does not distinguish between formal and informal. These translations do not transfer the nuance of formal and informal in the Spanish and Cavite City languages to Ternate speakers. Therefore, when lexical items in Cavite Chavacano could not be directly translated into (any of) the other four languages, sample sentences in four

⁹ A list of abbreviations: CC=Cavite City, Ter=Ternate, Esp=Spanish, Tag=Tagalog.

languages are provided to illustrate the differences, as shown in the example above.

This also applies to other second person (singular and plural) pronouns in Cavite Chavacano, such as *uste* (SG), *vo/bo* (SG), *vosos* (PL), *tedi* (PL), *ustedes* (PL). This allows the dictionary users to comprehend the complexity of their pronouns.

3.1.4 Summary

These three studies illustrate how a number of linguists confronted the challenges regarding culturally specific lexical items in bilingual or multilingual dictionaries. In each case, they chose a slightly different approach to the translation of culturally specific words and the way they chose to convey meaning with respect to those culture-bound lexical items. All three, however, share a common denominator: they all made the decision to offer detailed socio-cultural glosses when no lexeme was available in the target language for one found in the source language. While acknowledging that explanations do not always accurately convey the precise connotations of a given word in a source language, they all remained committed to the principle that linguists must find a way to record specific cultural meanings. My study extends this mandate by examining culturally specific kin terms

—the Blackfoot kinship system—and how to represent them in a bilingual Blackfoot-English dictionary.

3.2 Additional issues for dictionaries for endangered languages

One of the major differences between dictionaries for endangered languages and for major languages (e.g. English, French, Spanish etc.) is that it is difficult to publish them for different types of users due to limited time, funding, and other resources (Mosel, 2004). This is one of the challenges that lexicographers or linguists face when they compile dictionaries for endangered languages. According to Atkins & Randell (2008), there are eight properties to be considered when publishers compile a dictionary and every dictionary needs to account for these eight categories. For instance, a dictionary needs to pay attention to its potential users' level (e.g. children, adult, or language learners). Does it aim to reach beginner, intermediate, or advanced users? While it is relatively easy to publish different levels of a dictionary for the world's major languages, it is difficult to do so for endangered languages. Indeed, dictionaries for the major languages come in many forms: general dictionaries, picture dictionaries, encyclopedic dictionaries or

dictionaries for specific terminology (e.g. law) or a specific area of language (e.g. phrasal verbs). English monolingual full-colour picture dictionaries for example, which are aimed at beginner level English speakers, or younger users, have been published by many different publishers (see for example Cambridge, Merriam-Webster, National Geographic Learning, Oxford, and Pearson Longman). The target users of dictionaries are varied and publishers are able to meet demand for major language dictionaries according to dictionary users' language levels and type.

Targeting dictionaries for user age, abilities, and interests is not easy for dictionaries of endangered languages however, and Blackfoot is no exception. Therefore, it is important that linguists compile a dictionary that takes into account all possible ability levels of potential language users, as well as the different type of users: for example, speakers, learners, and teachers for a Blackfoot-English bilingual dictionary.

Another issue to be taken into account is lack of actual Blackfoot language data. In English, there are different types of corpora that collect spoken and written language data from a variety of sources (see for example Corpus of Contemporary

American English <http://corpus.byu.edu/coca>, British National Corpus <http://www.natcorp.ox.ac.uk/>, The Strathy Corpus of Canadian English <http://www.queensu.ca/strathy/corpus>). On the other hand, there is no such corpus of Blackfoot since the majority of Blackfoot written materials are provided in English. For instance, the Blackfoot Nation websites (the Kainaa First Nation <http://bloodtribe.org>, the Siksiká Nation <http://siksikanation.com/>, the Piikani Nation <http://piikanation.wixsite.com/piikanation>, and the Blackfeet Nation <http://blackfeetnation.com>) and Blackfoot related websites (see for example Blackfoot Crossing <http://www.blackfootcrossing.ca>) are written in English. Moreover, there are no Blackfoot language TV or radio programs. This lack of recording/usage complicates our ability to update contemporary language usage and include it in a Blackfoot-English bilingual dictionary as well.

Chapter Four: Blackfoot kinship

4.1. The study of kinship systems

The study of kinship and its componential analyses constitutes a rich component of the anthropological literature (Buchler & Selby, 1968; Fox, 1967; Lévi-Strauss, 1969; Murdock, 1949; Radcliffe-Brown, 1950; Rivers, 1968 and more) as the subject has been studied for over 150 years (Kronenfeld, 2015). Seminal works include those by Fox (1967), Goodenough (1956), Leach (1958), Lévi-Strauss (1969), Lounsbury (1965; 1969), Needham (1971), Radcliffe-Brown (1924), Rivers (1914), and Schneider (1984). Moreover, the study of kinship terms has been expanded to sign languages in various societies such as Argentine (Massone & Johnson, 1991).

The foundational and first comparative study of kinship was completed and published by Lewis Henry Morgan in the late 19th century as *Systems of Consanguinity and Affinity of the Human Family* (1868). One of the key contributions of his work was the introduction of the distinction between classificatory systems and descriptive systems of kinship (Fortes, 1969, p. 20). Classificatory systems are

characterized by the categorization of different relatives under a single term, while descriptive systems “describe” each relative in relation to Ego (Trautmann & Whiteley, 2012). While it is true that certain systems favor classification and others description, in practice all kin systems show elements of both.

Morgan identified six distinct kinship systems from the data he collected from different cultures; the bulk of his sources were derived from ethnographic and linguistic studies among North American First Nations. The names he gave to each system reflect that fact; the Hawaiian, Eskimo (currently known as Lineal), Iroquois, Omaha, and Crow systems are all named for First Nations that stand as “blueprints” for the system-type, while the Sudanese structure, not found among North American First Nations, carries the label of the African culture using this type of kin nomenclature (Morgan, 1868). According to McKinney (2000), these systems are not equally distributed across the globe; for instance, Iroquois (unilineal) systems are the most frequently occurring kinship system in the world, while the Eskimo kinship system, which is the closest to that adopted in “most English cultures” (p. 158), is less used.

4.1.1 Kinship around the world

Understanding kinship systems, their terminologies and the social institutions they encode is critical to understanding a speech community's social organization and culture. Kinship terms prescribe an individual's role with the framework of family/kin as defined by the culture, as well as the relationship between family/kin and the overall social structure. As an example, in Japan the usage of the word *ane* is not limited to the Japanese family; it is also used in society with a broader meaning. For instance, some adult people use a vocative of *ane*, *onē-san*, to address a woman with respect and to convey a sense of close relationship. While in general, *onē-san* is addressed to an older sister in a family in Japan, it is therefore extended to society: when a non-family member addresses an older woman as *onē-san*, it indicates that the speaker shows respect to the older woman because the term *onē-san* includes a meaning of respect. It also shows a sense of close relationship because *onē-san* is used within a family and it is not a term used normally for non-family members. This is important because relationships between

people in Japan are based on whether a person stands inside or outside a particular social circle: family or non-family for instance.

Kinship systems differ across speech communities and each system reflects unique ways of organizing family structure and society among a group of people. As Pericliev and Valdés-Pérez (1998) state “[...] not every language uses the same system: different systems group together under one linguistic label, or kin term, different relatives, or kin types” (p. 272). For this reason, the kinship system of another culture can be difficult to comprehend for outsiders who are from a different kin system. In the Chinese kin system for example, a Sudanese descriptive system, there are a total of 20 different terms to express the English noun ‘cousin’. Chinese cousin terms specify whether a cousin is from the paternal or a maternal side of the family, as well as gender and age of the cousin. Paternal cousins share the same family name since all relatives descended through males from the father’s side of the family belong to the same house. Maternal cousins on the other hand are in effect not considered to be relatives of Ego as they do not belong to Ego’s lineage.

In the Watam kinship system, ancestors and descendants in particular generations share the same kinship term regardless of their age and sex differences. For instance, Ego's great-grandmother, great-grandfather, great-granddaughter, great-grandson and all relatives in this generation share the same term *bijir* 'fourth generation relative'. The term *bijir* does not distinguish between age and sex among this generation. Similarly, Watam uses the kinship term *ngamar* for all grandparent and grandchild generations. Third-generation ancestors and descendants are classified under the single term *ngamar* regardless of their age and sex (Foley, 1997).

These examples of kinship terms in Chinese and Watam demonstrate that each society has a unique set of kinship terms that do not have a one-to-one translation in English. Blackfoot kinship terms have similar difficulties; the system's proliferation of terms poses a unique challenge for the Blackfoot-English translator. In the next section, various Blackfoot kinship terms are discussed.

4.2 The Blackfoot kinship system

The Blackfoot kinship system is fundamentally an Omaha system of kinship with its own unique transformations built in. I explain the most important aspects of this system in this section with an emphasis on what is important for the kinship terms I will discuss in section 4.3 and chapter 5. In the generation up from Ego, Father and FB¹⁰ share the same kin term, as do Mother and MZ. MB is designated by a unique term, as is FZ. In Ego's generation parallel cousins are B and Z, (Omaha kinship, n.d.), but the children of MB are described by two kin terms derived from the generation up: MB's son is known by the same kin term as MB and MB's daughter shares a kin term with M and MZ. This is because the males are being designated as "carriers of the line," while the females are classified as "out women"—women that will not carry on the name of MB house. On the paternal side, FZ is designated by a unique term (woman that will not carry on my father's house) and her children (who are not members of Ego's patriline) are dropped a generation

¹⁰ See List of Abbreviation in p. xvi for anthropological abbreviations used in this thesis.

(English equivalent: niece/nephew or son/daughter)—they will stand in a junior position to Ego who is a member of Father's house.

The Blackfoot kinship system does not show a one-to-one correspondence with the Omaha system, but fundamentally, it operates on the same principles, although it is more complex. Some classificatory principles are the same, such as mother and mother's sister being referred to as 'mother' (Frantz & Russell, 1995; Hanks & Richardson, 1945). Blackfoot kin principles focusing on 'age' and 'distance' complicate the system. Parallel cousins for example, are not merely B or Z but 'older brother', 'older sister', or 'younger sibling'; their description being dependent upon Ego's relative age (Hanks & Richardson, 1945). As I discuss below, the key components that the Blackfoot system shares with all Omaha systems is that it is Ego-focused, not Ancestor focused (Goodenough in Fox, 1964, p. 164), that it has important relationships with matrilineal relatives, especially MH and MB, that age of kin is an important factor in how Ego classifies or describes his/her relatives, and that sex of speaker/ego alters Omaha-Blackfoot kin terminology.

On the other hand, most English speaking cultures structure family and society through the Lineal (also as known as Eskimo) system which does not distinguish between patrilineal and matrilineal relatives. In fact, the only descriptive terms utilized by the Lineal system are for father, mother, brother, sister, son and daughter. All other relatives are mainly classificatory. MZ and FZ all fall under ‘aunts’ (female relatives in the same generation as my parents) and ‘uncles’ (male relatives in the same generation as my mother and father). The descriptive elements are gender and generation. In the classification “Grandparents,” generation and gender again refine the classificatory element through the use of “grandmother” and “grandfather” (McKinney, 2000).

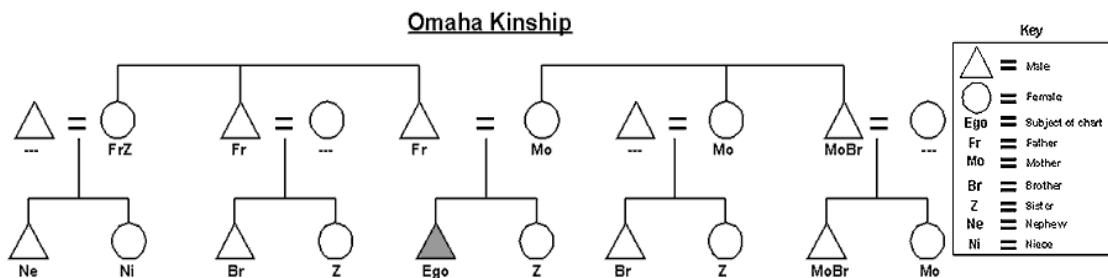


Figure 5: Omaha System
https://en.wikipedia.org/wiki/Omaha_kinship

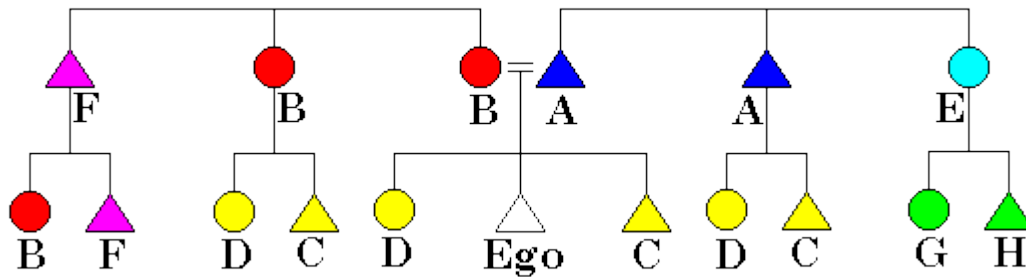


Figure 6: Omaha System Clarified
<https://umanitoba.ca/faculties/arts/anthropology/tutor/kinterms/termsys.html>

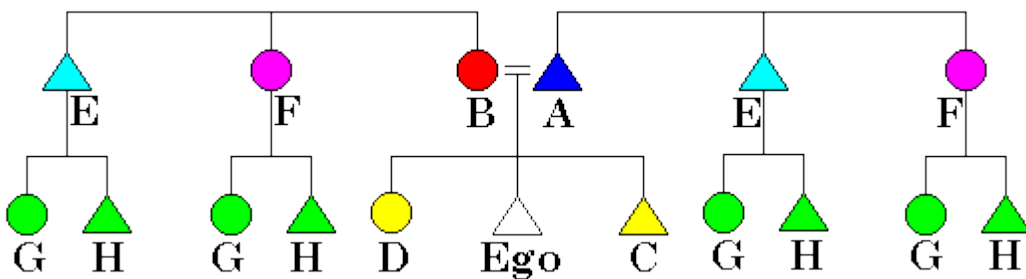


Figure 7: The Lineal (Eskimo) System
<https://umanitoba.ca/faculties/arts/anthropology/tutor/kinterms/termsys.html>

The Omaha and Lineal system kinship charts illustrate that the terms do not overlap. The lineal system is bilateral. Relatives stand *in the same degree to Ego* on both sides and both sides are 'relatives'. Terms that the systems may be thought to share, such as Mother, or Brother and Sister, are in fact extended in the Omaha system: parallel cousins are siblings and M/MZ and F/FB share kin terms.

It is critical to take into account the differences in kinship systems between Blackfoot and English since kinship terms carry cultural information. For an

endangered language like Blackfoot, it is possible not only to arrive at the meaning of kin terms as they are used today (see chapter 5), it is possible to reconstruct the pre-contact kin system, and the societal structure it encoded, from those terms. The majority of users of a Blackfoot-English bilingual dictionary are second language learners from Blackfoot communities. Their first language is English and they have been exposed to the lineal system of kinship as a normalized, 'natural' system. Therefore, the principles underlying Blackfoot kinship terms, as well as the familial and societal relationships they described, may be confusing to users who speak English on a daily basis, and those dictionary users who are not of Blackfoot heritage.

4.3 Features of Blackfoot kinship

There is comparatively little published research on the Blackfoot kinship system. Major research was conducted by Hanks and Richardson (1945) and other research that provided short descriptions of Blackfoot kinship system with a list of kinship terms were conducted by Morgan (1868), Maclean (1890), Tims (1890), Wissler (1906), Michelson (1916), Uhlenbeck and Van Gulik (1930, 1934), Collier

(1939 in Hungry-Wolf, 2006), and Frantz and Russell (1995). For this short sketch, I have used data derived from these nine research projects.

In this section, I discuss features of the Blackfoot kinship system laid out by Hanks and Richardson (1945). The complete list of Blackfoot kinship terms is provided in the following section 4.4.

Hanks and Richardson have published the most complete of the various research undertakings focussed on Blackfoot kin terms. They conducted their fieldwork among the “Northern Blackfoot” (Siksiká) roughly 50 years after the signing of Treaty 7. As a consequence, the Blackfoot had already lived a reserve existence for a sustained period of time, although they were able to access data from multiple consultants that had lived the traditional Blackfoot life. They recognized that both the kin system and its referents were shifting (Hanks & Richardson, 1945, p. 27ff) and they discuss the variations found in terminology among the Blackfoot Nations. However, no sustained attempt is made to reconstruct the outlines of the pre-contact system or why the structure, and the kin terms, were shifting in the ways they identify. They simply record the terms, some of the institutional

structures they refer to, and note the linguistic variants among the Blackfoot dialects. However, they do spend considerable time on identifying and discussing the principles that, in their view, drive the system.

Hanks and Richardson note that the Blackfoot kinship system refines its descriptive kin terms on the basis of eight major elements: 1. by generation; 2. by relative age (to Ego); 3. by sex of kinsman; 4. by sex of the speaker; 5. whether the person being addressed or spoken of belongs to Ego's father's family, mother's family, or the affinal family; 6. whether that person falls into a particular line of Ego's relatives; 7. whether people live with Ego, and 8. according to marital status (applies only for women) (p.1). Two realizations must be kept in mind: not all distinctions operate in any single term and no distinction operates throughout all the terms (Hanks & Richardson, 1945, p. 1). For instance, marital status only alters kin terminology for women, both in the case of a married speaker designating her relatives, and any other speaker addressing a married woman. For the purpose of addressing translation issues in Blackfoot-English dictionaries, I have focused on the features of the Blackfoot kinship system mentioned by Hanks and Richardson that

challenge and underline issues of translation, in particular those dealing with 1. Generation (4.3.1), 2. Relative age (4.3.2), and 4. Gender of Ego (sex of speaker (4.3.3)). I discuss social distance in section 4.3.4.

4.3.1 Generation

When Ego speaks to or about female members on his mother or father's side of the family, generational differences are distinguished. Female members of father's family are designated according to generation in general although age also matters on a practical level. All women of father's generation and of the preceding generation and their husbands are called *aaáhs* 'grandparent'. Women of ego's generation are called *iihsiss* 'younger sibling' or *ínsst* 'older sister' based on relative age to Ego. Among mother's side of the family, female members are simply designated according to generation regardless of gender or marital status of a speaker. Women of mother's generation are called *iksísst* 'mother' and women of mother's mother's generation are called *aaáhs* 'grandparent'. Moreover, the difference in kin terms allocated to the generations is fundamental to the creation of

social distance in father's family, which designates authority, and the affinal family, which also designates distance.

4.3.2 Relative age

Relative age is critical to Ego in terms of how he/she addresses and speaks of his/her kin. Among father's family, age difference gives rise to kin terms that designate social distance. Male members in father's family utilize kin terms based on relative age to Ego and to Ego's father. For instance, people who are older than father and their wives are called *aaáhs* 'grandparent', but those who are younger than father, but older than ego are called *í's* 'older brother'. People who are father's age are called *inn* 'father'. These terms do not apply to mother's side of the family which is discussed in 4.3.1. In the affinal family, relative age of female Ego is fundamental to kin terms employed by a female speaker. People who are older than her husband are called *aaáhs* 'grandparent' and who are younger than her husband are called *ohko* 'son' or *itan* 'daughter'.

The rule of relative age also applies to Blackfoot sibling terms. It distinguishes older and younger siblings; *ínsst* ‘older sister’, *i’s* ‘older brother’, *isshsiss* ‘younger sibling of female’, and *isskán* ‘younger sibling of male’.

4.3.3 Gender of Ego (Hanks & Richardson: “sex of speaker”)

The Blackfoot kin terms for affinal family are determined according to gender of speakers, not the gender of kin as opposed to father and mother’s side family. For male Ego, his wife’s father, her (wife) father’s siblings, her mother, and her mother’s sister are called *aaáhs* ‘grandparent’ whether they are older or younger than ego. As for female ego, I have noted the differences in section 4.3.2. On mother’s side of the family, male members are determined according to gender and marital status of Ego. For instance, unmarried females and both married/unmarried males say “older brother” for all men of mother’s family.

Gender of Ego is also important for some Blackfoot sibling terms. For instance, a younger sibling needs to distinguish gender of Ego (either male or female) for terms like *ihsiss* ‘younger sibling of female’, and *isskán* ‘younger sibling of male’. In addition to these terms, sibling-in-laws are distinguished on the basis of

both gender of Ego and gender of affinal relative. Consequently, there are three different terms for brother-in-law. A male Ego would use 1. *isstamo* 'sister's husband' (ZH) or 2. *isstamooko* 'wife's brother' (usually glossed 'brother-in-law of male') (WB), while female Ego would use *ootoyoom* 'brother-in-law of female' (HB). While sister-in-law of male *ootoohkiimaan* (WZ) is known, sister-in-law of female is not recorded.

4.3.4 Social distance

Integrated into Blackfoot kin terminology is the principle of social distance; terms reflect Ego's relative closeness or distance from classificatory relatives. Especially among the father's side of the family, social distance is created between Ego and his "grandparent" through kin terminology. Given the patrilineal tinge we see in the kin system, these terms evoke 'authority and respect'. On the paternal affinal side however, kin terms connote distance from the father's family. In short, the kinship terminology for the father's family evokes "authority," while "isolation" is denoted for the patri-affinal family. Among the Blackfoot however, as is typical of multiple Omaha systems, we see the establishment of a "joking relationship" with

mother's side of the family. Kin terms denote closeness, not social distance, between Ego and his/her mothers, fathers, and brothers.

4.4 Comparison of Blackfoot kinship terms

Immediately below, I provide two different comparison tables of Blackfoot kinship terminology based on the nine different sources mentioned in chapter 2. Table 4 contains all kinship terms occurring in Frantz & Russel (1995, henceforth F&R) compared with parallel terms from the other sources. The Blackfoot terms are given in their original spelling as found in the source, and are accompanied by the original translation. Please note that all sources except for F&R present kinship terms with the first person possessor prefix (*n-* or *nit-*) and the animate singular suffix (*-(w)a*) included. F&R do not do that, but I have added both affixes to facilitate comparison. To find the noun stem in F&R or the digital dictionary, simply omit the prefix (*n-* or *nit-*) as well as the suffix (*-(w)a*) to arrive at the dictionary entry. Table 5 provides the same basic data, but instead of the original translation I have provided the anthropological kinship notions in the form of their standard abbreviations, in order to facilitate easier comparison between the terms

themselves and their meanings, as given in the sources. The collection of these terms represents the fruits of research labours that span well over a century. The oldest kin terms come from Morgan (1868), and the most current terms are from Frantz and Russell (1995).

Table 4: Comparison of Blackfoot Kinship terminology¹¹

Blackfoot terms from F&R (1995)	Morgan (1861, 1862)	Maclean (1890)	Tims (1890)	Wissler (1906)	Uhlenbeck & Van Gulik (1911, 1912)	Michelson (1916)	Hanks & Richardson (1934)	Collier (in Hungry-wolf, 1939)
Siksiká/Kainaa ¹²	Manitoba/Montana	Kainaa	Blackfeet	Blackfeet	Blackfeet	Blackfeet	Siksiká	Pikánii
<i>niksíssta</i> my mother	<i>neex-ist'</i> my mother	<i>niksīsta</i> my mother	<i>niksīs'ta</i> my mother	<i>niksō'stak</i> my mother	<i>niksīsta</i> my mother	<i>niksi'sta^{εα}</i> my mother	<i>niksīs'ta</i> my mother	<i>niksīsta</i> mother
<i>ninna</i> my father	<i>nin</i> my father	<i>nina</i> my father	<i>nīn'a</i> my father	<i>nī'nna</i> my father	<i>nínna</i> my father	<i>ni'ñā^{εα}</i> my father	<i>nin.'a</i> my father	<i>ninna</i> father
<i>nitohkiimaana</i> my wife	<i>ne-to-ke'-man</i> my wife	<i>nītoqkeman</i> my wife	<i>nitokem'ani</i> my wife	n/a	<i>nitoχkèman</i> my wife <i>okǎχkèman</i> his first wife	<i>nitAχkyē'mān</i> my wife	<i>nitxki.'man</i> my wife	<i>nitoxkimana</i> wife
<i>nippitamma</i> my elderly wife	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<i>nitsíssohkiimaana</i> my youngest wife	n/a	n/a	n/a	n/a	<i>nitsisoχkèman</i> my youngest wife	n/a	n/a	n/a
<i>nooma</i> my husband	<i>nome</i> my man	<i>noma</i> my husband	<i>nom'a</i> my husband	n/a	<i>nóma¹³</i> my husband	<i>nō'mā^{εα}</i> my husband	<i>nom.'a</i> my husband	<i>noma, ninoma</i> husband, my husband
<i>ninaapiima</i> my old man	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<i>nitana</i> my daughter	<i>ne-tan'-ä</i> my daughter	<i>nītūna</i> my daughter	<i>nitūn'na</i> my daughter	n/a	<i>nitánna</i> my daughter <i>nitómaχkotanna</i> my eldest daughter	<i>nitA'n'na^{εα}</i> my daughter	<i>nitana.'a</i> my daughter	<i>nitana</i> daughter

¹¹ Abbreviations in Table 4. (m) for male speaker, (f) for female speaker.

¹² A place of fieldwork.

¹³ In addition, “a woman talks about her husband as *omáχk* ‘that one.’” A term “*nóma* is much more used.” (1930. p. 111)

Blackfoot terms from F&R (1995)	Morgan (1861, 1862)	Maclean (1890)	Tims (1890)	Wissler (1906)	Uhlenbeck & Van Gulik (1911, 1912)	Michelson (1916)	Hanks & Richardson (1934)	Collier (in Hungry-wolf, 1939)
<i>nohkówa</i> my son	<i>noh'-'-ko</i> my son	<i>noqkoa</i> my son	<i>noko'a</i> my son	n/a	<i>noχkóa</i> my son	<i>nAxko' εa^{εα}</i> my son	<i>nuxku'a</i> my son	<i>noxkoa</i> son
<i>nínssta</i> my older sister	<i>nee-mis'-tä</i> my elder sister	<i>niništa</i> my elder sister	<i>nín'sta</i> ¹⁴ my elder sister <i>ni'takem</i> my sister	<i>nĩnst</i> my elder sister (m) <i>nĩnsta</i> my elder sister (f)	<i>nín(i)sta</i> my elder sister <i>ni'takem</i> a man's elder sister	<i>ni'n^εsta^{εα}</i> my elder sister	<i>nin'sta</i> my older sister	<i>ninst</i> older sister
<i>ni'sa</i> my older brother	<i>neese-sä'</i> my elder brother	<i>neesa</i> my elder brother	<i>ni'is</i> my elder brother	<i>nĩssa^x</i> my elder brother	<i>ni'sa</i> my older brother	<i>ni' εi s̄a^{εα}</i> my elder brother	<i>ni's^a</i> my older brother	<i>nis</i> older brother
<i>nississa</i> my younger sibling of female	<i>ne-sis'-sä</i> my younger sister (m/f)	<i>nĩsisa</i> (f) <i>nĩtakim</i> (m) my younger sister	<i>nisĩs'sa</i> my younger sister <i>nisĩs'</i> my younger brother	<i>nĩssĩssa</i> my younger brother and sister	<i>nisĩs</i> my younger sibling	<i>nisi's^εsa^{εα}</i> my younger brother/sister	<i>nisis. ' a</i> my younger sibling	<i>nisis</i> younger sibling
<i>niskána</i> my younger sibling of male	<i>nis-kun'-ä</i> my younger brother (m/f)	<i>nĩskün</i> my younger brother	<i>něskün'</i> my younger sibling	<i>nĩ'skõn</i> (m) my younger brother	<i>niskáni</i> my younger brother	<i>niska'na^{εα}</i> my younger brother/sister	<i>niskän. ' a</i> my younger sibling	<i>niskana</i> younger sibling
<i>naaáhsa</i> my grandparent	<i>ne-ah'-'-sä</i> my grandfather	n/a	<i>naai'; naõx</i> my grandparent	<i>naa' xsa</i> ¹⁵ (f) grandparent	<i>naáχsi</i> my grandparent	<i>na^εa'x̄s</i> my grandparents	<i>naa'xs^a</i> my grandparent	<i>naaxs</i> grandparent
Other grandparent terms	<i>ne-tä-ke-ä'sä</i> my grandmother	n/a	n/a	n/a	n/a	<i>nitsi'n̄a^εaxs</i> my grandfather	n/a	<i>nitsimaaxs</i> grandfather <i>nitakiaaxs</i> grandmother

¹⁴ My elder sister, my sister, *nisis'sa*, and *neskun'* are all listed under a single entry "Sister" in the dictionary

¹⁵ father's sisters and their husbands

Blackfoot terms from F&R (1995)	Morgan (1861, 1862)	Maclean (1890)	Tims (1890)	Wissler (1906)	Uhlenbeck & Van Gulik (1911, 1912)	Michelson (1916)	Hanks & Richardson (1934)	Collier (in Hungry-wolf, 1939)
<i>níssoko'sa</i> my grandchild	n/a	<i>nísoqkos</i> my grandchild	<i>ni'okos</i> my grandchild	n/a	n/a	n/a	n/a	<i>nisoxkoa</i> grandchild
<i>nissotana</i> my granddaughter	<i>nee-so'-tan</i> my grandchild	<i>nísoṭúna</i> my grand daughter	<i>nis'otúnna</i> my grand daughter	n/a	n/a	<i>níšo^εtAn'na^{εα}</i> my granddaughter	<i>nis.tan. ' a</i> my grand daughter	<i>nisotana</i> grand daughter
<i>nissohkowa</i> my grandson	<i>nee-so'-tan</i> my grandchild	<i>nísoqkoa</i> my grandson	<i>nis'okku'yi</i> my grandson	n/a	n/a	<i>níšo^εxko^{εα}</i> my grandson	<i>nis.xku' a</i> my grandson	<i>nisoxko</i> grandson
<i>ninaaáhsa</i> my father-in-law	<i>ne-tä'-so-ko</i> my father-in-law	n/a	n/a	<i>naa' x's</i> (m) father-in-law mother-in-law	same as <i>naáxsi</i>	<i>nitsi'nā^εaxs</i> my grandfather	n/a	n/a
<i>naakiaaahsa</i> my mother-in-law	<i>ne-tä'-ke-äse</i> my mother-in-law	n/a	<i>naaw'a</i> my mother-in-law		same as <i>naáxsi</i>	n/a	n/a	n/a
<i>nimssa</i> my daughter-in-law	<i>nee-mis'</i> my daughter-in-law	n/a	<i>nīm'sa</i> my daughter-in-law	<i>nīmps</i> ¹⁶ (see footnote)	<i>nímsa</i> my daughter-in-law	<i>ní'ms^εsa^{εα}</i> my daughter-in-law	<i>ni. 'mps^a</i> my daughter-in-law	<i>nimps</i> daughter-in-law
<i>nissa</i> my son-in-law	<i>nís</i> my son-in-law	n/a	<i>nīs'</i> my son-in-law	n/a	<i>nís</i> my son-in-law	<i>ní'sa^{εα}</i> my son-in-law	<i>nís. a</i> my son-in-law	<i>nís</i> son-in-law
<i>nisstamowa</i> my brother-in-law of male	<i>nís-tä'-mo</i> my brother-in-law	<i>nīstúmo</i> ¹⁷ my brother-in-law	<i>nīstūmmu'</i> my brother-in-law	n/a	<i>nistámó</i> brother-in-law	<i>nīštAmō^{εα}</i> my sister's husband	<i>nistamo'</i> my sister's husband	<i>nistamoa</i> sister's husband

¹⁶ For male speaker: wives of my sons, younger brothers, and younger cousins. For female speaker: wives of my cousins, of my brothers and of the brothers of my mother.

¹⁷ the brother of my wife (p.132); husband of my sister (p.147)

Blackfoot terms from F&R (1995)	Morgan (1861, 1862)	Maclean (1890)	Tims (1890)	Wissler (1906)	Uhlenbeck & Van Gulik (1911, 1912)	Michelson (1916)	Hanks & Richardson (1934)	Collier (in Hungry-wolf, 1939)
<i>nisstamoohkowa</i> my brother-in-law of male	<i>nis-tä-moh'-ko</i> my brother-in-law	<i>nĩstũmoqko</i> ¹⁸ my brother-in-law	n/a	<i>nĩstõmmo'wak</i> my sister's husband ¹⁹	n/a	<i>nistAmo'xko</i> ^{ea} my wife's brother	<i>nistamox'ku</i> ^a my wife's brother	<i>nistamoxko</i> wife's brother
<i>nitóotoyooma</i> my brother-in-law of female	<i>n'-to'-to-yome</i> my brother-in-law	n/a	<i>nĩs'sa</i> my brother-in-law (f)	<i>nĩtaw'tojombp</i> husbands of my sisters	n/a	<i>nito'toyõ'm</i> ^a my sister's husband	<i>nitotoyom.'</i> ^a my distant husband	<i>nitotoyem</i> distant husband
<i>nitóotoohkiimaana</i> my sister-in-law of male	<i>n'-do'-to-ke-man'</i> my sister-in-law	<i>ninĩsa</i> ²⁰ my sister-in-law	n/a	n/a	<i>nitótoxkèman</i> my sister-in-law	<i>nito'toxyēmān</i> my wife's sister	<i>nitoto'xkiman</i> my distant wife	<i>nitotoxkimana</i> distant wife (wife's sister)
my sister-in-law of female	<i>nee-mis'</i> my sister-in-law	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<i>nitóókoxsissta</i> my step-mother	<i>ne-to-tox'-is</i> my step-mother	n/a	<i>nito'oksista</i> my step-mother	n/a	<i>nitóxkoxsissta</i> my step-mother	n/a	n/a	n/a
<i>nitóókonna</i> my step-father	<i>ne-to'-to-mä</i> my step-father	n/a	<i>nitok'unna</i> my step-father	n/a	<i>nitóxkunna</i> my step-father	n/a	n/a	n/a
step-son	<i>n'-do'-ta-ko</i> my step-son	n/a	<i>nitok'okoa</i> my step-son	n/a	<i>nitóxkoxkoa</i> my step-son	<i>nitōxkoxko</i> ^{ea} my stepson	n/a	<i>nitotoxkoa</i> distant son ²¹

¹⁸ the husband of my sister (p. 132); brother of my wife (p.147)

¹⁹ Additional translation: husbands of father's and mother's sisters (for male speaker)

²⁰ Wife of brother-male speaking (p.132)

²¹ Additional translations: son of sister, or a stepson.

Blackfoot terms from F&R (1995)	Morgan (1861, 1862)	Maclean (1890)	Tims (1890)	Wissler (1906)	Uhlenbeck & Van Gulik (1911, 1912)	Michelson (1916)	Hanks & Richardson (1934)	Collier (in Hungry-wolf, 1939)
step-daughter	<i>n'-to'-to-tun</i> my step-daughter	n/a	<i>nito'kotūnna</i> my step-daughter	n/a	<i>nitóχkotanna</i> my step-daughter	<i>nitō'kotA'n̄^α</i> my stepdaughter	n/a	<i>nitototana</i> distant daughter ²²

²² Additional translations: daughter of sister, or a stepdaughter.

Table 5: Comparison of Blackfoot Kinship terminology with anthropological notions²³

Blackfoot terms from F&R (1995)	Morgan (1861, 1862)	Maclean (1890)	Tims (1890)	Wissler (1906)	Uhlenbeck & Van Gulik (1911, 1912)	Michelson (1916)	Hanks & Richardson (1934)	Collier (in Hungry-wolf, 1939)
Siksiká/Kainaa ²⁴	Manitoba/Montana	Kainaa	Blackfeet	Blackfeet	Blackfeet	Blackfeet	Siksiká	Pikanii
<i>niksíssta</i> M, MZ	<i>neex-ist'</i> M	<i>niksíssta</i> M	<i>niksís'ta</i> M	<i>niksǫ'stak</i> M, MZ ♂ eBW , ♂ FB , ♂ FM , ♀ FBW	<i>niksista</i> M	<i>niksi'sta^{εα}</i> M, MZ	<i>niksís'ta</i> M, MZ	<i>niksista</i> M
<i>ninna</i> F	<i>nin</i> F	<i>nina</i> F	<i>nǫn'a</i> F	<i>nǫnna</i> F, ♀MZH,	<i>ninna</i> F	<i>ni'nā^{εα}</i> F	<i>nin.'a</i> F, MZH	<i>ninna</i> F
<i>nitohkiimaana</i> W	<i>ne-to-ke'-man</i> W	<i>nǫtoqkeman</i> W	<i>nitokem'ani</i> W	n/a	<i>nitoχkémán</i> W <i>okǎχkémán</i> W	<i>nitAxkyē'mān</i> W	<i>nitxki.'man</i> W	<i>nitoxkimana</i> W
<i>nippitamma</i> W (elderly)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<i>nitsíssohkiimaana</i> W (youngest)	n/a	n/a	n/a	n/a	<i>nitsisoχkémán</i> W (youngest)	n/a	n/a	n/a
<i>nooma</i> H	<i>nome</i> H	<i>noma</i> H	<i>nom'a</i> H	n/a	<i>nóma²⁵</i> H	<i>nō'mā^{εα}</i> H	<i>nom.'a</i> H	<i>nomā²⁶</i> H
<i>ninaapiima</i> H (old man)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

²³ Abbreviations in Table 5. (m) for male speaker, (f) for female speaker.

²⁴ A place of fieldwork

²⁵ In addition, “a woman talks about her husband as *omáχk* ‘that one.’” A term “*nóma* is much more used.”

²⁶ *ninoma* ‘my husband’ is also mentioned.

Blackfoot terms from F&R (1995)	Morgan (1861, 1862)	Maclean (1890)	Tims (1890)	Wissler (1906)	Uhlenbeck & Van Gulik (1911, 1912)	Michelson (1916)	Hanks & Richardson (1934)	Collier (in Hungry-wolf, 1939)
<i>nitana</i> D	<i>ne-tan'-ä</i> D	<i>nītūna</i> D	<i>nitūn'na</i> D	n/a	<i>nitánna</i> D <i>nitómaḡkotanna</i> eD	<i>nita'n'na^{εα}</i> D	<i>nitan.'a</i> D , ♂ WZD , ♀ ZD , ♀ HyZ	<i>nitana</i> D
<i>nohkówa</i> S	<i>noh''-ko</i> S	<i>noqkoa</i> S	<i>noko'a</i> S	n/a	<i>noḡkóa</i> S	<i>nAxko' εa^{εα}</i> S , ♀ HB	<i>nuxku'a</i> S , ♂ WZS , ♀ ZS , ♀ HyB	<i>noxkoa</i> S
<i>nínssta</i> eZ	<i>nee-mis'-tä</i> eZ	<i>ninīsta</i> eZ	<i>nīn'sta²⁷</i> eZ <i>nī'takem</i> Z	<i>nī'nst</i> ♂ eZ , ♂ FBeD , ♂ MBeD <i>nī'nsta</i> ♀ eZ , ♀ MeB ♀ FBeD	<i>nín(i)sta</i> eZ <i>nitākem</i> ♂ eZ	<i>ni'n^εsta^{εα}</i> eZ , MBD (↑), MZD (↑), FBD (↑), FZ , FZD (↑)	<i>nin'sta</i> eZ , MZD (↑)	<i>ninst</i> eZ
<i>ni'sa</i> eB	<i>neese-sä'</i> eB	<i>neesa</i> eB	<i>ni'īs</i> eB	<i>nī'ssa^x</i> eB , MeB , ♀ FeB , ♂ FeS , ♂ FeD	<i>ni'sa</i> eB , MB , FB	<i>ni' εi s̄a^{εα}</i> eB , MB , MBS (↑), MZS (↑), FB , FBS (↑), FZS (↑)	<i>ni's^a</i> eB , MZS (↑)	<i>nis</i> eB
<i>nississa</i> ♀ yB , ♀ yZ	<i>ne-sis'-sä</i> yZ	<i>nīšisa</i> (f) ♀ yZ <i>nītakim</i> (m) ♂ yZ	<i>nīsīs'sa</i> ♀ yZ <i>nīsīs'</i> ♀ yB	<i>nīssīssa</i> ♀ yB , ♀ yZ , ♂ yCo ¹	<i>nīsīs</i> ♀ yB , ♀ yZ , MMD , MMS	<i>nīsīs'sa^{εα}</i> ♀ yB , ♀ yZ , ♀ yCo	<i>nīsīs.'a</i> ♀ yB , ♀ yZ , ♀ FZ (↓)	<i>nīsīs</i> ♀ yZ , ♀ yB
<i>nisskána</i> ♂ yB , ♂ yZ	<i>nīs-kun'-ä</i> yB	<i>nīskūn</i> yB	<i>nēskūn'</i> ♂ yZ , ♂ yB	<i>nī'skōn</i> ♂ yB , ♂ FyB , ♂ FByCo ¹ , ♂ MByCo ¹	<i>nīskáni</i> ♂ yB , ♂ FBS	<i>nīskA'na^{εα}</i> ♂ yB , ♂ yZ , ♂ yCo , ♂ eBS , ♂ eBD , ♂ eZS , ♂ eZD	<i>nīskən.'a</i> ♂ FZ (↓)	<i>nīskana</i> ♂ yZ , ♂ yB

²⁷ My elder sister, my sister, *nīsīs'sa*, and *neskūn'* are all listed under a single entry "Sister" in the dictionary

Blackfoot terms from F&R (1995)	Morgan (1861, 1862)	Maclean (1890)	Tims (1890)	Wissler (1906)	Uhlenbeck & Van Gulik (1911, 1912)	Michelson (1916)	Hanks & Richardson (1934)	Collier (in Hungry-wolf, 1939)
<i>naaáhsa</i> FF, FM, MF, MM HM, HF, WM WF, FS, FB, HeB	<i>ne-ah'-sä</i> FF, MF	n/a	<i>naai'</i> ; <i>naõx</i> FF, FM, MF, MM	<i>naa^xsa</i> (f) ♀FF, ♀FM, ♀MF, ♀MM, ♀FZ, ♀FZH	<i>naáχsi</i> FF, FM, MF, MM, HM, HF, WM, WF	<i>na^εa'x̄s</i> FF, FM, MF, MM, FFB, FFZ, FMB, FMZ, MFB, MFZ, MMB, MMZ, HF, HM, WF, WM	<i>naa'xs^a</i> MF, MFG, MFGE, MM, MMZ, MMZH, WM, WF, WFG, WFGZ, WMZ, WMZH, etc	<i>naaxs</i> FF, FM, MF, MM
Other grandparent terms	<i>ne-tä-ke-ä'sä</i> FM, MM	n/a	n/a	n/a	n/a	<i>nitsi'n̄a^εaxs</i> FF, MF, HF, WF	n/a	<i>nitsimaaxs</i> FF, MF <i>nitakiaaxs</i> FM, MM
<i>níssoko'sa</i> DS, DD, SD, SS	n/a	<i>n̄isoqkos</i> DS, DD, SD, SS	<i>n̄is'okos</i> DS, DD, SD, SS	n/a	n/a	n/a	n/a	<i>n̄isoxkoa</i> DS, DD, SD, SS
<i>nissotana</i> DD, SD	<i>nee-so'-tan</i> DD, DS, SD, SS	<i>n̄isotúna</i> DD, SD	<i>n̄is'otúnna</i> DD, SD	n/a	n/a	<i>n̄iso^εtan'na^{εα}</i> DD, SD, yBD, yZD	<i>n̄is.tan. ' ^a</i> DD, DS	<i>n̄isotana</i> DD, SD
<i>nissohkowa</i> DS, SS		<i>n̄isoqkoa</i> DS, SS	<i>n̄is'okku'yi</i> DS, SS	n/a	n/a	<i>n̄isoxko^{εα}</i> DS, SS, yBS, yZS	<i>n̄is.xku' ^a</i> DS, SS, yBS, ♂WyBS	<i>n̄isoxko</i> DS, SS
<i>ninaaáhsa</i> HF, WF	<i>ne-tä'-so-ko</i> HF, WF	n/a	n/a	<i>naa^xs</i> WF, WM	see <i>naáχsi</i>	n/a	n/a	n/a
<i>naakiaaahsa</i> HM, WM	<i>ne-tä'-ke-äise</i> HM, WM	n/a	<i>naawx'a</i> HM, WM		see <i>naáχsi</i>	n/a	n/a	n/a

Blackfoot terms from F&R (1995)	Morgan (1861, 1862)	Maclean (1890)	Tims (1890)	Wissler (1906)	Uhlenbeck & Van Gulik (1911, 1912)	Michelson (1916)	Hanks & Richardson (1934)	Collier (in Hungry-wolf, 1939)
<i>nimssa</i> SW	<i>nee-mis'</i> BSW, ♂SSW, ♀ZSW, HZ, ♀BW	n/a	<i>nīm'sa</i> SW	<i>nīmps</i> ♂SW, ♂yBW, ♂yCoW, ♀CoW, ♀BW, ♀MBW	<i>nīmsa</i> SW	<i>ni'ms^εsa^{εα}</i> SW, BW, ♂ZSW, ♀BSW	<i>ni.'mps^a</i> SW, SSW, DSW	<i>nimps</i> SW
<i>nissa</i> DH	<i>nis</i> BDH, SDH	n/a	<i>nīs'</i> DH	n/a	<i>nīs</i> DH	<i>ni'sā^{εα}</i> DH	<i>nis.^a</i> DH, SDH, DDH	<i>nis</i> DH
<i>nisstamowa</i> ♂ZH	<i>nis-tä'-mo</i> ♂ZH	<i>nīstūmo</i> ²⁸ WB or ZH	<i>nīstūmmu'</i> WB, ♂ZH	n/a	<i>nīstāmó</i> WB, ZH	<i>nīstāmo^{εα}</i> ♂ZH	<i>nīstamo'</i> ♂ZH	<i>nīstamoa</i> ♂ZH
<i>nisstamoohkowa</i> WB	<i>nis-tä-moh'-ko</i> WB	<i>nīstūmoqko</i> ²⁹ ZH or WB	n/a	<i>nīstōmmo'wak</i> ♂FZH, ♂MZH, ♂ZH	n/a	<i>nīstāmo'xko^{εα}</i> WB	<i>nīstamox'ku^a</i> WB	<i>nīstamoxko</i> WB
<i>nitóotoyooma</i> HB	<i>n'-to'-to-yome</i> HB, ♀ZH	n/a	<i>nīs'sa</i> HB, ♀ZH	<i>nītaw'tojombp</i> ♀ZH	n/a	<i>nīto'toyō'm^α</i> ♀ZH	<i>nītotoyom.'^a</i> ♀ZH	<i>nītotoyem</i> HB
<i>nitóotoohkiimaana</i> WZ	<i>n'-do'-to-ke-man'</i> WZ, ♂BW	<i>nīnīsa</i> ♂BW	n/a	n/a	<i>nītótoχkèman</i> WS, ♂BW	<i>nīto'toxyēmān</i> WZ	<i>nītoto'xkiman</i> WZ	<i>nītotoxykimana</i> WZ
<i>nitóókoksista</i> FW	<i>ne-to-tox'-is</i> FBW, MZ	n/a	<i>nītok'oksīsta</i> FW	n/a	<i>nītóχkoksista</i> FW	n/a	n/a	n/a
<i>nitóókonna</i> MH	<i>ne-to'-to-mä</i> FB, MZH	n/a	<i>nītok'unna</i> MH	n/a	<i>nītóχkunna</i> MH	n/a	n/a	n/a

²⁸ the brother of my wife (p.132); husband of my sister (p.147)

²⁹ the husband of my sister (p. 132); brother of my wife (p.147)

Blackfoot terms from F&R (1995)	Morgan (1861, 1862)	Maclean (1890)	Tims (1890)	Wissler (1906)	Uhlenbeck & Van Gulik (1911, 1912)	Michelson (1916)	Hanks & Richardson (1934)	Collier (in Hungry- wolf, 1939)
step-son	<i>n'-do'-ta-ko</i> ♂BS, ♀ZS	n/a	<i>nitok'okoa</i> HS, WS	n/a	<i>nitóχkoχkoa</i> HS, WS	<i>nitōxkoχko^{εα}</i> HS, WS	n/a	<i>nitotoχkoa</i> ZS, HS, WS
step-daughter	<i>n'-to'-to-tun</i> ♂BD, ♀ZD	n/a	<i>nito'kotūnna</i> HD, WD	n/a	<i>nitóχkotanna</i> HD, WD	<i>nitō'kotAḥ^α</i> HD, WD	n/a	<i>nitototana</i> ZD, HD, WD

Chapter Five: Semantic development in contemporary spoken Blackfoot

Chapter five discusses methods of and results from fieldwork which I conducted in 2015-2016 to confirm the contemporary meanings of Blackfoot kinship terms with speakers of the language. As will be shown, changes in Blackfoot society have given rise to changes in the meanings of some of these terms for some speakers.

5.1 Methods

My approach to the study is interdisciplinary: it involves linguistics, lexicography, anthropology and translation studies. The research combines fieldwork, cross-cultural semantic analysis, and examination of existing indigenous dictionaries and general bilingual dictionaries such as bilingual dictionaries at several levels, picture dictionaries, or monolingual learner's dictionaries. In this chapter, I discuss my fieldwork with speakers of Blackfoot.

Ogilvie (2011) discusses that field lexicography is a relatively new study area in linguistics and has been improved in the last twenty years. However, its theories and methods are still underdeveloped. I initially used a method based on what I saw

at a couple of linguistic eliciting sessions at workshops. These elicitation sessions were mainly aimed at collecting syntactic and morphological data. However, I soon realized that direct elicitation did not work for my topic because kinship terms involve personal stories and are therefore more sensitive. The language consultants spoke and explained about their relationships or experiences with their family or relatives. It required me to develop my own original method to conduct fieldwork. Each sub-section in this section discusses an aspect of my fieldwork.

5.1.1 Collecting cultural information

One of the goals of the project is to provide socio-cultural information about Blackfoot kinship roles in addition to the existing translations and definitions of the words in the *Blackfoot Dictionary of Stems, Roots, and Affixes* (2nd ed.) (Frantz & Russell, 1995) (see chapter 1).

Some of the sources discussed in chapter 4 do provide socio-cultural information about Blackfoot kinship roles (Hanks & Richardson, 1950; Wissler, 1906). However, this information is sparse and does not cover the entire Blackfoot kinship system. Therefore, it was important to conduct fieldwork to cover other

terms as well and discover something about the kinship roles in contemporary society. I used the currently available kinship terms from F & R for the interviews.

5.1.2 Research participants and recruitment

The research participants were fluent in Blackfoot and English and were from the Peigan/Piikani, Blackfoot/Siksiká, and Blood/Kainaa reserves. They all live either on their reserve or in urban or rural areas off reserve in Southern Alberta. I had a total of seven participants.

I had already worked with local Blackfoot speakers including Elders from the Lethbridge area since the summer of 2014. Additional consultants were identified with help from my supervisor or by contacting possible participants through Blackfoot classes taught at the University of Lethbridge. Personal contacts were crucial for this type of project, and impersonal types of recruitment such as through posters or media announcements were not appropriate.

The participants were paid an honorarium for each session plus mileage and parking when necessary. The fieldwork was funded by a fieldwork grant from the Jacobs Research Fund at Watcom Museum in Bellingham, Washington, U.S., and the

honorarium and other necessary fees were paid from this grant fund. Interviews were held in Lethbridge, Southern Alberta and surrounding areas.

5.1.3 About the researcher

Before talking more about the fieldwork and its results, it is important to position myself within the research as a participant. As I mentioned in chapter 1, I am from Japan, a society with a population of nearly 127 million (Statistics Bureau of Japan, 2015) which is heavily monolingual and monocultural, but I was raised in Singapore in an environment which may be characterized as a non-Western multilingual and multicultural setting. The presence of the Hijab and the Sikh turban were a part of my life for six years.

I have been in Lethbridge since 2010 and my knowledge of Blackfoot or aboriginal communities in Canada was limited. As an international student, whose initial purpose to stay in Canada is to pursue a post-secondary degree in a predominantly English speaking society, aboriginal topics and issues in Canadian society were not a major priority. It was a typical attitude for international students in Canada. My knowledge of the Blackfoot language was also limited. I acquired

some knowledge about indigenous language from courses which I took with my supervisor and Dr. Frantz, but these courses were limited to grammar and structure of Blackfoot and Plains Cree, and I did not acquire fluency in the spoken language.

5.2 Ethics

My fieldwork follows the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCP2), and in particular Chapter 9 Research Involving the First Nations, Inuit and Métis people of Canada, since the participants were all First Nations individuals. I also completed the TCPS 2 Tutorial: Course on Research Ethics (CORE) in Fall 2014. The ethics protocol for the study was approved by the Human Subject Research Committee (HSRC) at the University of Lethbridge (protocol number #2015-036).

5.2.1 Ethical dilemmas of translation on cross-cultural lexical semantic

I was eager to provide correct cultural and language information when I began fieldwork with my language consultants, particularly since many Western scholars have been criticized for not providing accurate information (see for example Ball & Janyst, 2008). However, soon I realized that the effects of the

Residential school system (briefly discussed in chapter 2) complicated my fieldwork sessions considerably.

One of the speakers said that speakers' right of access to cultural and traditional knowledge has been broken by the Residential school system; therefore, the speaker was not comfortable discussing particular family members' roles in his/her Blackfoot family. As discussed in chapter 2, many Canadian aboriginal children were sent to Residential schools for most of their childhood years. This caused lack of continuous experience with family traditions and customs and lack of knowledge of family roles in aboriginal ways. The TRC report (2015, p. 1) calls this "cultural genocide." Many current Residential school survivors managed to maintain their language and are fluent speakers of Blackfoot, but since they too did not have sustained opportunities to interact with their family, even fluent speakers may not know the meaning of all kinship terms exactly, or be fully familiar with the roles attached to each term. In the course of my fieldwork sessions this became more and more apparent.

I was caught by surprise by the fact that the speakers raised the topic of the Residential school and its effect on their knowledge. It presented a problem, because I was not supposed to discuss sensitive topics in my interviews in order to conform to the approved Ethics protocol. I felt I was limited in pursuing this topic, even when my consultants initiated it. This raised the following questions:

1. How can linguists work on cross-cultural semantic research when the passing of traditional knowledge has been restricted and controlled due to government laws and policies?
2. How can we, as linguists and students, work on cross-cultural semantic research when a sensitive topic is involved?

Studies on ethical issues in linguistics include Czaykowska-Higgins (2009), Debenport (2010), Robinson (2010), Nagy (2000), Rice (2006, 2012), Rieschild (2003), Thieberger and Musgrave (2007), and Wilkins (1992). Major concern discussed in these contributions are 1) the linguist's responsibilities to the speech community and 2) the decolonization of research to become research "with" First Nations, Inuit, and Métis community rather than research "on" them. At the moment,

the methodology for linguistics research involving investigations of the effects of the Residential schools is not deeply discussed yet within the linguistic community.

As for myself, I began to enter into the discussion related to the Residential schools when the language consultants were willing to discuss it in the course of their interview, since all of them raised it. I learned from them that some people do not hesitate to talk about their experiences on the Residential schools. In the end, I managed to find a way to deal with it on the spot each time the topic was brought up by one of my consultants.

5.3 Information about the speakers and fieldwork settings

5.3.1 Speakers

Semi-structured interviews were conducted from 2015 to 2016 with a total of seven fluent Blackfoot speakers (three men and four women). One of the men is from the Siksiká tribe and one of the women is from the Aapátohsipikani (North Piikani) tribe in Canada. The remaining five people are from the Kainaa (Blood) tribe. Two of the men are traditional Elders from Siksiká and Kainaa respectively. All the speakers were in their 50s or 60s. Two of them reside off-reserve (in

Lethbridge) and the rest of the speakers live on their reserve: Morley³⁰, Kainaa, and Aapátohsipikani respectively. I was not able to include a speaker from Aamsskáápipikani (South Piikani) in Montana, U.S. All speakers were raised by their parents or grandparents who were also fluent speakers of Blackfoot; some of them are *kipitáípokaiksi* ‘children raised by elderly persons, generally grandparents’, which would have given them a lot of access to traditional knowledge and language.

Background information on the speakers is provided in Table 6 in section 5.3.6 after a brief description of each of the Blackfoot speakers.

5.3.2 Language fluency

The Blackfoot speakers whom I interviewed were all self-reported fluent speakers. They were all raised by parents or grandparents who were also fluent speakers. A few speakers mentioned that they were not able to speak English before they entered the Residential school or English speaking public schools. Some speakers voluntarily disclosed that they were Residential School survivors. It was an

³⁰ This speaker was born on the Kainaa reserve and raised by grandparents at the Siksiká reserve but now lives in his wife’s community (in Morley).

honour for me to be informed of such sensitive personal information. As explained above in section 5.2.1, I was not allowed to ask about this directly, as my ethics protocol did not allow me to probe potentially upsetting information, but when speakers volunteered such information, it helped me to understand their language background better.

5.3.3 The style of the interviews

For each interview, I provided a complete list of Blackfoot kinship terms as given in F&R (see Appendix A). The goal was to check each term with the speaker, and ask them to say more about the roles of each kin term in their family and community. During the interviews, it became clear that the speakers had much more to say about some terms than about others, and several terms were not addressed at all (the terms that were discussed are indicated with an asterisk * in Appendix A). I noticed in the course of the interviews that the amount of knowledge of Blackfoot kinship terms depends on speakers' individual circumstances and their relationship with their own family; therefore, I was not able to discuss every single term with every speaker. There are two main reasons for this.

First, several Blackfoot kinship terms are gender specific in the sense that only men or women would use them to refer to their kin. Some of the Blackfoot speakers emphasized this as a major difference from English. These terms require a specific gender of the possessor/speaker (Ego), which means that some of them will never normally be said by members of the other gender; for instance, a younger sibling of a male is *isskán* but of a female is *iihsiss*.³¹ In practical terms, this means that a woman would normally not use the term *isskán* and a man would not use the term *iihsiss*. In some cases, speakers were reluctant to discuss the terms that would be used by the opposite gender. Several speakers even mentioned that they were uncertain about opposite gender terms or did not know them at all. For instance, one of the male speakers was not sure about a term only used by female speakers such as *imms* ‘sister-in-law of female’.

The second reason why I was not able to discuss every kin term with some speakers is when the speakers referred to dysfunctional family relationships. For instance, if someone has a difficult relationship with their father’s family, it can be

³¹ Tables 8 and 9 in Chapter 6 demonstrate differences between Blackfoot and English sibling terms.

painful to discuss the terms used to refer to those relatives. Although speakers are always informed that they have the right to refuse to answer a specific question if they are uncomfortable, most of them actually did not address this directly but rather spoke in general terms about their family relationship during interviews. In such cases I sometimes judged that it was better not to speak about certain kin terms. I generally avoided asking about kinship terms that could evoke speakers' negative thoughts or experiences, in accordance with the approved human research ethics protocol.

All interview sessions were recorded with the consent of the speakers, except for one of the sessions in which the interview was not recorded due to a technical defect. The recordings were copied to a USB thumb drive without any modification or editing and passed back to each speaker after the interview, except for one of the speakers whom I was not able to reach. All speakers stated that they prefer to be acknowledged by name rather than being anonymous. I have respected this by using their full names in the discussion below.

5.3.4 Location

The speakers were given the choice to be interviewed either on campus or in their home. Most speakers chose to meet at a meeting room on campus in Lethbridge except the one whose home was 300 km away from the campus. In this case, we met in a meeting room at a hotel in Kananaskis, Alberta that was near to the speaker's home.

5.3.5 Time

Each interview lasted about two hours. The entire time was not devoted to the interview. As per Blackfoot protocol we usually spent about half an hour or more visiting, to get to know each other or to catch up. One of the Elders provided a Blackfoot prayer before we began the interview.

For the first four speakers, we had several sessions on different days; these intense sessions helped me to understand overall Blackfoot culture, especially the ways in which society was structured in the past and how their relationships used to function. For the later three speakers, we had just a single session, as I began to focus on particular lexical items.

5.3.6 Brief description of Blackfoot consultants

Annabelle Chatsis

Annabelle is one of a few speakers who speaks Old Blackfoot. I knew of her from articles which she had co-authored with Dr. Mizuki Miyashita at the University of Montana, and my supervisor informed me that she worked at First Nations, Métis, and Inuit Student Services at the University of Lethbridge when I worked with her. She was an instructor of Blackfoot language courses at the University of Montana before she returned to Lethbridge.

Francis First Charger (Elder)

Francis is a Blackfoot Elder from the Blood tribe. He sits in the Elders room at the University of Lethbridge during the academic year and gives guidance to students and staff. I knew him through Dr. Beaulieu for my Independent Studies in the summer 2015. He is one of the founding members of the Blackfoot Tribe Agricultural Project (<http://www.btap.ca>) which has been working with Sumitomo Cooperation of Japan to export Timothy hay for more than two decades (https://www.facebook.com/btap1991/?ref=page_internal). He has visited Japan

three times and found that Blackfoot and Japanese cultures have many things in common.

Natalie Creighton

Natalie has a strong passion for maintaining the Blackfoot language and shows a strong interest in Blackfoot revitalization. I first met her at the Blackfoot Language Symposium in March 2016 through my supervisor and worked with her four times. She loves talking Blackfoot to *óssotani* 'her granddaughter' and enjoys watching the process of her language acquisition.

Louise-Marie Crop Eared Wolf

Louise-Marie completed her BA in Native American Studies at the University of Lethbridge and is currently working towards a Bachelor of Education degree at the University. She was my supervisor's Independent Study' student in Summer 2016 and I knew her through my supervisor. She is interested in developing better ways to teach the Blackfoot language to children after she completes the BEd program.

Shirlee Crow Shoe (Elder)

Shirlee is an Elder from the Piikanii tribe. I knew her through my supervisor and met her in June 2016. She has been teaching Blackfoot and has developed Blackfoot teaching materials for over three decades. She has been deeply involved as a Blackfoot language consultant for several projects as well. A list of the projects which she has been involved is available on the Blackfoot Language Resources and Digital Dictionary Project website (<http://blackfoot.atlas-ling.ca/contributors/shirlee-crow-shoe>).

Rod Scout (Elder)

Rod was born on the Blood Reserve in 1959, but moved to the Siksiká reserve when he was 18 months old to live with his grandparents and stayed there until they passed away when Rod was 17 years old. His grandparents followed and kept a traditional way of living and Blackfoot was the only language spoken at the home as his grandmother did not speak English. Rod has been heavily involved in the Blackfoot culture all his life. He was a past member of the Sacred societies and owned sacred bundles. He currently resides with his wife of 35 years in Morley,

Alberta. I met him in Dr. Frantz's Blackfoot grammar class. I learned Blackfoot history from him and some similarities between Blackfoot and Japanese cultures as well.

William Singer

William is an artist and Blackfoot researcher. Born in 1964, he resides on the Blood Reserve and provided the wonderful Blackfoot face illustrations for Blackfoot family trees which are included in chapter 6 of this thesis and in a forthcoming article (Mizumoto & Genee, forthcoming). I first did not plan to interview him as I felt I had already asked him for too many things for the illustrations. However, I had a shortage of male speakers for my interviews so I approached him. He kindly agreed to be interviewed, and his help enriches my research data.

Table 6: Information of Blackfoot consultant (at the time of interviews)

	Name	Tribe	Sex	Birth Year	Occupation	Place of current residence	Interview Date(s)	Interview Time
1	Annabelle Chatsis	Kainaa	F	n/a	Administrative assistant	Lethbridge	Nov 04,13,19 2015	5h30m
2	Francis First Charger (Elder)	Kainaa	M	1953	Business owner/ Consultant	The Blood Indian Reserve	June 12, 2015; July 5, 2016	1h18m
3	Natalie Creighton	Kainaa	F	1962	Blackfoot language and culture consultant	Blood Tribe (Bull Horn)	March 21, 22; April 7; May 19 2016	4h38m
4	Shirlee Crow Shoe (Elder)	Piikani	F	1954	Language educator	Brocket (Pikani Reserve)	June 17, 2016	1h13m
5	Louise-Marie Crop Eared Wolf	Kainaa	F	n/a	Student	Lethbridge	May 4 & 9, 2016	2h41m
6	Rod Scout (Elder)	Kainaa Siksiká	M	1959	Business owner	Morley Reserve	Sep 25, 2015; March 31, 2016	3h15m
7	William Singer	Kainaa	M	1964	Artist/ Entrepreneur	The Blood Indian Reserve	July 8, 2016	1h05m

5.4 Results from interviews with Blackfoot speakers

As discussed in chapter 1 and 4, most Blackfoot kinship terms do not have one-to-one matches in English. In addition, the interviews with Blackfoot speakers revealed that the Blackfoot terms themselves seem to be unstable in terms of what they mean for different speakers. Several terms are used to refer to different family members by different speakers in ways that were surprising until the context in which this variation occurs was considered. I discuss this variation in lexical semantics in the discussion section 5.5.

5.4.1. *niksíssta* (stem: *iksísst*) ‘my mother’ [M], ‘my (maternal) aunt’ [MZ]

All speakers agreed that *niksíssta* means ‘my mother’. However, the correct way to refer to ‘my (maternal) aunt’ depends on the speaker. For instance, Annabelle stated that *niksíssta* refers to the mother’s sister due to her role in disciplining her sister’s children. Shirlee said that *niksíssta* is just a general reference term and refers to aunts on both the mother’s and father’s side. Francis said he had heard people in Blackfoot communities use *niksíssta* as ‘my aunt’, but he said it depends on

their personal relationship. On the other hand, William said *niksíssta* is used only for mother and not for aunt.

5.4.2 *nínna* (stem: *inn*) ‘my father’ [F]

All speakers agreed that *nínna* means ‘my father’. In addition to ‘my father’, Rod uses this term also for his close uncles, and sometimes he uses it as a term of respect for older males since Blackfoot is an age graded society. Shirlee added that *nínna* can also refer to grandfather when people want to use a gender specific term for their grandparent (see *naaáhs* for further discussion of terms for grandparents).

5.4.3 *nitána* (stem: *itan*) ‘my daughter’ [D]

All speakers agreed that *nitána* means ‘my daughter’. But the term is also used for other relatives. For instance, Rod used it for his niece. Natalie agreed that it could be used for a niece, but added that it depends on the speaker because other people refer to their niece as *nissotana* ‘my granddaughter’ or *nississa* ‘younger sibling of female’ or *nisskána* ‘younger sibling of a male’. On the other hand, Annabelle refers to her niece with the English phrase ‘my sister’s daughter’ as Blackfoot does not have a term that matches exactly the English word *niece*.

5.4.4 *nohkówa* (stem: *ohkó*) ‘my son’ [S]

All speakers agreed that *nohkówa* means ‘my son’. But the term also could be used to refer to other relatives; for instance, Rod uses it for his nephew. However, Annabelle simply refers her nephew as ‘my sister’s son’.

5.4.5 *nóko’sa* (stem: *oko’s*) ‘my child’ [D,S]

I had an opportunity to discuss this term with Annabelle, Louise-Marie, Natalie, and William, and they all agreed that *nóko’sa* means ‘my child’.

5.4.6 *nitohkíímaana* (stem: *ohkiimaan*) ‘my wife’ [W] & *nippitááma* (stem: *ippitaam*) ‘my wife, my elderly woman’ [W]

According to the speakers, *nitohkíímaana* and *nippitááma* were recognized as meaning ‘my wife’ in the Blackfoot community, but the terms were used and interpreted in different ways.

Annabelle said *nitohkíímaana* is the “proper” way to refer to ‘my wife’. Rod said he refers to his wife as *nippitááma* ‘my old woman’, and added that it is a term of respect. Natalie also said that *nippitááma* is the proper way to refer to ‘my wife’. Shirlee and Louise-Marie mentioned that *nitohkíímaana* was a New Blackfoot term

and that *nippitááma* is an “Old Blackfoot” term. Shirlee said that *nippitááma* is a formal term, and that sons and grandsons can also use that term to identify their (grand)mother as ‘my old lady’. William explained that there are generational differences for its usage; *nitohkíímaana* is used by people in his age (in early 50s), whereas older people might say *nippitááma*. He added that he might be wrong but *nippitááma* sounded to him like a bit of an old word. On the other hand, Francis said that *nippitááma* is appropriate to use and that *nitohkíímaana* implies having a sexual relationship between the speaker and a woman. Francis explained that he heard both terms when he was young, but someone corrected him when he used *nitohkíímaana*.

Annabelle, Shirlee and William mentioned during the interviews that there is a special term for the first wife, the so-called “sit beside wife” *ito'topii* (*ito't-opii* ‘beside-sit’), who is the one who takes care of her husband. This is because, in the past, a husband had several wives, and the wife who sits beside her husband was considered the wife closest to her husband (Bullchild, 1985).

5.4.7 *nóoma* (stem: *oom*) ‘my husband’ [H] & *nináápiima* (stem: *inaapiim*) ‘my old man’ [H]

There are two terms to be recognized as ‘husband’ in Blackfoot communities. Annabelle, Rod, Natalie, Francis, and William said that *nináápiima* is the proper way to refer to a husband. Rod explained that *nináápiima* is a term of respect to refer to a woman’s male partner, and Francis said that *nóoma* is a derogatory term.

Shirlee said *nináápiima* is Old Blackfoot and *nóoma* is New Blackfoot, and people currently use *nóoma* rather than *nináápiima*. On the other hand, Louise-Marie said *nóoma* is Old Blackfoot and *nináápiima* is New Blackfoot.

5.4.8 *ní’sa* (stem: *i’s*) ‘my older brother’ [eB]

All speakers agreed that *ní’sa* means ‘my older brother.’ However, this term encompasses other (older male) relatives as well. For instance, Rod also used it for his uncles who were young enough to be called brother rather than father (younger than his father but older than himself). Natalie also used this term for her male cousins, and William used it for his older male relatives. On the other hand, Francis

and Shirlee referred to their uncles this way since they (the uncles) are older. In addition, Francis used it for other older male relatives.

5.4.9 *nínssta* (stem: *ínsst*) ‘my older sister’ [eZ]

All speakers agreed that *nínssta* means ‘my older sister’. Francis said the term also refers to an older female or aunt. Moreover, Natalie said *nínssta* could also be used for a female cousin.

5.4.10 *nissíssa* (stem: *ihsiss*) ‘my younger sibling (of female)’ [♀yB, ♀yZ]

I checked this word with Rod and all female speakers. Everyone agreed that the term is used for younger siblings of a female. In addition, Rod added that it can be used for younger relatives. Natalie also said it could be used for cousins. Louise-Marie stated that she was not sure whether the term could refer to a female’s younger brother since she does not have a younger brother.

5.4.11 *nisskána* (stem: *isskán*) ‘my younger sibling (of male)’ [♂yB, ♂yZ]

Most speakers agreed that *nisskána* means ‘younger sibling of male’. Rod mentioned that it also includes other younger relatives; it can also mean ‘cousin’ for Natalie. Francis also refers to his nephews with this word because they are young,

just like younger siblings. Moreover, William said that people use this word to refer to someone close to a speaker, like a nephew and younger relatives. He also heard that some people of an Elders group refer to themselves as *nisskána*.

Louise-Marie said that *nisskána* implies 'friendship' or 'friend', which is used only for male speakers. She did not know its original meaning.

5.4.12 *naaáhsa* (stem: *aaáhs*) 'elder relation (my grandparent [FF, FM, MF, MM], my parent-in-law [HF, HM, WF, WM], my paternal aunt or uncle [FB, FZ], husband's older brother [HeB], etc.)'

The term *naaáhsa* is often translated as 'my grandparent', but in fact can refer to all elderly people who are older than the speaker. The speakers I interviewed agreed that *naaáhsa* refers to grandparents, and it is known by most speakers according to Shirlee. In addition, Annabelle used it to refer to her aunt, and Rod used it also for Elders and in-laws. Francis used it for his in-laws in addition to his grandparents. William described how people used the term in different generations. For instance, *naaáhsa* 'my grandfather' could refer to grandparents, aunts, uncles, and Elders.

5.4.13 *níssotana* (stem: *issotan*) ‘my granddaughter’ [DD, DS]

I discussed this term with Shirlee, Louise-Marie, and Natalie. Shirlee said it could be used for niece in addition to granddaughter. Natalie remembered that her brother used it for his niece; however, she explained “everyone says things different ways and they say *nitana* ‘my daughter’ or *nissotana*.” Natalie herself used to be called *nissotana* by her aunt.

5.4.14 *níssohkowa* (stem: *issohko*) ‘my grandson’ [DS, SS]

I talked about this term with Shirlee, Louise-Marie, and Natalie. In addition to its original meaning (‘my grandson’), Shirlee uses it to refer to her nephew as well.

5.4.15 *nitáákiaahsa* (stem: *aakiaahs*) ‘my mother-in-law’ [HM, WM]

I had an opportunity to discuss this term with Shirlee, Natalie, Francis, and William. In addition to its use for ‘mother-in-law’, Shirlee mentioned the term could be used for ‘grandmother’ and Francis said it is also used for ‘woman-in-law’ in general.

5.4.16 *nímssa* (stem: *imss*) ‘my daughter-in-law, my sister-in-law (of female)

[SW, HW, HZ, BW]

The speakers agreed *nímssa* means ‘my daughter-in-law’. The speakers said it can also mean ‘sister-in-law-of-female’. This is interesting because there is no separate word for this term in F&R.

Francis and William agreed that *nímssa* means ‘my daughter-in-law’. Rod said it also refers to ‘sister-in-law’, and in his case that includes the sister-in-law of a male speaker as well. For instance, Rod’s brother also calls his (Rod’s) wife *nímssa*. Shirlee and Louise-Marie also said *nímssa* refers to both ‘daughter-in-law’ and ‘sister-in-law of female’. Natalie explained “it’s a common thing for father, mother, brother, and sister to call our brother’s wife *nimssa*” in addition to ‘my daughter-in-law’.

5.4.17 *níssa* (stem: *iss*) ‘my son-in-law’ [DH]

I discussed this term with Rod, Louise-Marie, Natalie, and Francis. They agreed with its meaning. Natalie mentioned that *níssa* is a proper way to refer to ‘my son-in-law’.

5.4.18 *nisstamowa* (stem: *isstamo*) ‘my brother-in-law (of male) (i.e. sister’s husband)’ [ZH]

The speakers agreed that *nisstamowa* is used as a general term to refer to ‘my brother-in-law’. However, there are slightly different meanings for a few speakers. Rod said the term also refers to his wife’s brother in addition to his sister’s husband. Francis said it refers to ‘older brother-in-law’. Moreover, William said it also refers to ‘son-in-law’. Finally, Natalie mentioned that she had heard male speakers used it as ‘brother-in-law’.

5.4.19 *nisstamóóhkowa* (stem: *isstamoohko*) ‘my brother-in-law (of male) (i.e. wife’s brother)’ [WB]

The term *isstamoohko* was perceived differently by the speakers. Rod said he had heard someone use it, but he was not clear about it. However, he believed it meant something like ‘my wife’s younger brother’. Shirlee said it means ‘my younger brother-in-law’, due to the presence of the noun stem *ohko* ‘son’ in the term. Francis also mentioned it is ‘my younger brother-in-law’ and it soundslike my son, ‘son-in-

law'. Natalie explained that it sounds like a 'son-in-law', also due to *ohko* 'son'.

Louise-Marie said she heard it before from other speakers in her community.

5.4.20 *nitóótoyooma* (stem: *ootoyoom*) 'my brother-in-law (of female) (i.e. husband's brother)' [HB]

I was only able to discuss this term with the female speakers (Shirlee, Louise-Marie, and Natalie) as it is only used by females. All of them knew the term. Shirlee said it means 'my distant husband'. However, Louise-Marie said it is 'my sister's husband'.

5.4.21 *nitóótoohkiimaana* (stem: *ootoohkiimaan*) 'my sister-in-law (of male) (i.e. wife's sister)' [WZ]

The speakers knew *nitóótoohkiimaana* refers to 'my sister-in-law of male'. In addition, Rod, Shirlee, and Francis recognized its literal meaning as "my distant wife." Shirlee expanded her explanation to "he (*nitóótoyooma*) calls me it. My distant wife."

5.4.22 *nitókoksissta* (stem: *okoksisst*) ‘my step-mother’ [FW] & *nitókónna*

(stem: *okonn*) ‘my step-father’ [MH]

These terms seem to consist of an element *ok(o)*- followed by the stem for mother and father. We do not know what the meaning of *ok(o)*- is. Terms referring to step family were known by some speakers I interviewed. For instance, Rod and Natalie used it only when it is in a question since it is considered “out of respect” to refer a step-family in the Blackfoot community. Francis explained that his older brother called Francis’ grandkids *nitóókoko’sa* ‘step-grandchild’. However, the term ‘step-’ is not common in Blackfoot.

5.4.23 *níkso’kowa* (stem: *ikso’kowa*) ‘my relative’

The speakers used this term depending on how close they were to the specified person, and there do not appear to be any particular rules governing its use.

- Rod: He uses the term to refer to some of his aunts, uncles, and cousins. For him, it depends on intimacy because these people are also referred to as father or brother etc.

- Natalie: She refers to cousins and relatives with this term.
- Francis: He uses the term to refer to a woman's relative (another term is *nínssta*). For him, it also refers to cousins and relatives whom he hardly sees.
- William: He uses the term for some of his cousins. However, if he was close to his cousins, then he uses *nisskána* 'my younger sibling'.

5.4.24 *kipitáípokaa* 'favorite child, child raised by elderly persons' [DD, DS, SD, SS]

Blackfoot has a tradition that grandparents raise their favorite grandchild, and there is a specific term for this: *kipitáípokaa* 'child raised by elderly persons, usually grandparents'. I asked a few speakers whether the term is still in use.

Rod said he himself was *kipitáípokaa* 'a person who was raised by an old person' and was also *miní'pokaa* 'a spoiled child'. Natalie said that she sometimes called her granddaughter *kipitáípokaa*; it meant 'grandparent's child', and she did not use *miní'pokaa*, but *níssotana* 'my granddaughter' and *kipitáípokaa* are used for a first grandchild. Shirlee knew the term and its meaning, but she was not sure whether this tradition is still practiced.

5.4.25 *nitákkaawa* (stem: *itákkaa*) ‘my friend’

A few speakers mentioned the term *itákkaa* ‘friend’ in different contexts.

Francis and Natalie said the term is used for people of the same age. In addition, Francis, Louise-Marie, and Natalie said the term is used in the sacred societies. For instance, the term also could be used for a spiritual brother in a society even if there is a 20 years’ age difference between two people, according to Francis. Moreover, William has seen some Elders use the term to refer a person whom they do not know well because Blackfoot community values inclusion, and many Blackfoot people would refer to people as *nitákkaawa* ‘my friend’ even if they did not know them well.

5.4.26 Vocatives

Vocatives are terms of address. In English, for instance, a mother is often addressed as “mom” by her children. Blackfoot has the vocative terms *na’á* ‘mother’, *kóókonaa* ‘daughter’, *tsíki* ‘son’. A vocative term for “father” does not appear in F&R. What follows is the speakers’ discussion of these terms.

The term *na'á* is used to address their mother. Louise-Marie used it to address her mother and grandmother. Natalie said that she asked her granddaughter to address her as a *na'á*. In addition, she mentioned during the interview that 'mom' is used more since there are now more English speakers in the communities.

Tsíki 'son' is used in different ways. Rod uses it to address a person directly, and Shirlee thinks it may be a reference to a younger male. William said that in addition to his son, he also addressed some of his son's friends this way, or a person (boy or girl) whom a speaker doesn't know; for instance, "*tsiki!* Let's do it."

Rod said he used *kóókonaá* to address his daughter. Natalie used it for her granddaughter as well. Louise-Marie explained that the term is appropriate only when used by speakers of a certain age, and is reserved for addressing an unmarried girl/woman (from teens to mid-twenties). On the other hand, Louise-Marie said she never called her daughter *kóókonaá* because she (Louise-Marie) is not of an age category (elderly woman like grandmother) where it would be appropriate to use the term.

The way to address a father differs according to speakers. Annabelle said *papa*. Francis used the term *tata*. Natalie and Shirlee also heard people use *tata* and Shirlee heard *papa* as well. On the other hand, William simply addresses his father by his name.³²

5.5 Discussion and conclusion

This chapter presents the results of the interviews with seven Blackfoot speakers. It revealed that there is some interesting variation in the meaning of some of the kinship terms. The results show that some terms are stable, but that others have been affected by processes of semantic change and, arguably, influence from English terms. In this section, I focus on two Blackfoot kin terms which appear to demonstrate several distinct processes of semantic change. The first term is *iksísst*, which represents both overextension and underextension of use; the second term is a pair of 'spouse' terms that present pejoration.

³² William added after he read the draft of this chapter that he used to address his father as "dad," and he switched to his father's name when he got older.

The first term is *iksísst*. It means ‘my mother/my (maternal) aunt’ according to F&R (1995). However, the term now has three different meanings. For some speakers, it now applies to both maternal and paternal aunts, and for others it simply refers to “mother” only, and not to any aunts at all. The second meaning represents overextension and the third meaning represents underextension of the term (see for example Bowerman, 1978; Wałaszewska, 2011). Overextension is used when people interpret a term more broadly; in this case, *iksísst* not only refers to mother and maternal aunt, but also refers to paternal aunt. This has likely happened under the influence of the meaning of the English word *aunt*, which refers to both maternal and paternal aunts. On the other hand, underextension is used when people use a term in a more restricted sense, for instance, when *iksísst* refers only to “mother” and no longer to “maternal aunt”. Again, this likely means that the term is influenced by the conventional meaning of the English word *mother*.

The second Blackfoot kinship terms to be discussed are the terms for ‘spouse’. The results from the interviews show that there is pejoration in both terms: *ohkiimaan* and *oom*. Pejoration means that a term acquires a negative meaning or

connotation from an original positive or neutral one (Finkbeiner, Meibauer, & Wiese, 2016). In this case, the Blackfoot terms for spouse *nitohkíímaana* 'my wife' and *nóoma* 'my husband' are considered. The terms have been in use for a long time as shown in Table 4 in chapter 4. However, they have become derogatory for some speakers, and people in some Blackfoot communities therefore avoid them and use alternative terms: *nippitááma* 'my wife, my elderly wife' and *nináápiima* 'my old man' as opposed to *nitohkíímaana* and *nóoma*. This is a very interesting change. It does not apply to all speakers, as is shown for instance by the use of *ohkiimaan* in a recently published book with stories from Lena Russell, a fluent speaker of Kainaa Blackfoot who is now in her eighties (Russell & Genee 2014). She uses the term *otohkíímaana* 'his wife' (p. 12) in one of the stories in a completely neutral context. The term *ippitaam* is not used.

This chapter has provided the results of interviews with Blackfoot speakers and discusses two terms that show significant changes from the way people used them in the past. In the next chapter, I will discuss some possible ways to represent Blackfoot kinship terms in the digital dictionary.

Chapter Six: How can we improve the translation of Blackfoot kinship terms in the dictionary?

One of the challenges for dictionaries of endangered languages is that it is often not possible to publish different versions for different types of users, as I discuss in section 3.2. We must therefore consider carefully how to produce a dictionary accessible to all level of users, regardless of their age. It should be accessible to all speakers, learners, and teachers. Definitions and explanations in the dictionary should not be too complicated to understand for younger users to understand, but neither should they simplified to the point that they omit necessary information. The question is what is the best way to represent Blackfoot kinship terms in a dictionary in such a way that all users can be accommodated? There are several possible solutions in order to meet all levels of dictionary users. I discuss three of these solutions in this chapter.

6.1 Solution 1

Some kinship terms are internally complex: they consist of more than one morpheme. These morphemes have meanings that allows us to see a more literal

translation which is a more direct reflection of the meaning of the Blackfoot word than its idiomatic English translation. For instance, *ootoyoom* ‘brother-in-law of female’ consists of *ooto* ‘distance’ and *oom* ‘husband’ and it literally means “distant husband.” It would be useful to add these “literal translations” into the dictionary, so that the original meaning of the word could be more transparent. The new digital dictionary already has a field where such literal translations can be added. For example, one of the words for ‘tractor’ literally means “it makes a chugging sound,” as seen in a screenshot of the entry below:



Figure 8: Screenshot from the online dictionary for *áipakkohtamm* (Kainaa dialect) including the literal translation ‘it makes a chugging sound’

Blackfoot kinship terms for which such a literal translation is available could have it added in the same way, including the ones given in table 7 below.

Table 7: Morpheme-by-morpheme analysis

Blackfoot term	Morpheme division	Morpheme glosses	Current translation
aakiaaahs	aakíí-aaáhs	woman-elder_relation	mother-in-law
inaaáhs	inn-aaáhs	father-elder_relation	father-in-law
íssoko's	iss-oko's	young-child	grandchild
issotan	iss-itan	young-daughter	granddaughter
issohko	iss-ohko	young-son	grandson
issohkiimaan	iss-ohkiimaan	young-wife	youngest wife
i'sohkiimaan	i's-ohkiimaan	least ³³ -wife	least favored wife
isstamoohko	isstamo-ohko	brother_in_law_of_male-son	brother-in-law of male (wife's brother)
ootoohkiimaan	ooto-ohkiimaan	distant-wife	sister-in-law of male (wife's sister)
ootoyoom	ooto-oom	distant-husband	brother-in-law of female (husband's brother)
okoksisst	ooko-iksísst	? -mother	step-mother
okonn	ooko-inn	? -father	step-father
kipitáípokaa	kipitáaakii-pookáá	old woman-child	child raised by elderly person

³³ This meaning was provided by Blackfoot consultant Rod Scout. It is not provided in F & R (1995).

Here are screenshots from the online dictionary showing as an example the entry *ootoyoom* 'brother-in-law of female', whose the literal translation of which is 'distant husband'. The screenshots below demonstrate the entry before and after the addition of the literal translation.



Figure 9: Screenshot from the online dictionary for *ootoyoom*: BEFORE addition of the literal translation 'distant husband'

Figure 10 below demonstrates the entry after addition of the literal translation. The literal translation 'distant husband' is indicated as 'lit. "distant husband."'.

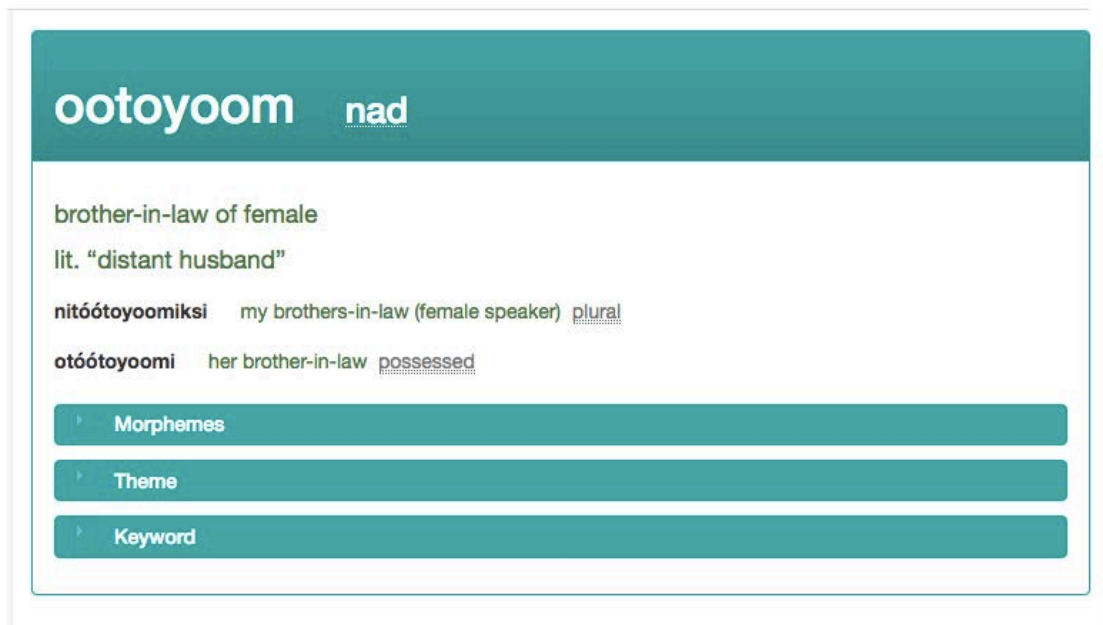


Figure 10: Screenshot from the online dictionary for *ootoyoom*: AFTER addition of the literal translation 'distant husband'

As demonstrated in Figure 10, a literal translation, where present, occurs just below the English meaning of *ootoyoom*. Users of the dictionary are able to see both the idiomatic translation and the literal translation at the same time.

6.2 Solution 2

The second solution is to use a Blackfoot family tree, if possible with face illustrations to make it more visually attractive especially for younger users. This is useful for all terms, both simplex and complex. It helps younger dictionary users and those learning Blackfoot as a second language to comprehend kinship relations by visualizing them, as is done in many other picture dictionaries (see for example

Heinle, 2014; Paizee, 2007; Parnwell & Yellowhair, 1989; Shapiro & Adelson-Goldstein, 1999). It makes it easier for the user to visualize or conceptualize meanings and helps avoid misinterpretation and misunderstanding. This works especially well for kin terms that do not have one-on-one translation in the target language, such as Blackfoot sibling terms.

Some examples are given in Figures 11, 12, and 13 below. Figures 11 and 12 are Blackfoot family trees with Blackfoot kinship terms for immediate family members from a woman's and a man's perspectives (Ego=female and Ego=male).³⁴ Separate trees with different gender Ego are needed to account for different terms for younger siblings for male and female Ego. The kinship chart in Figure 13 does not include face illustrations but extends to grandparents, in-laws, and grandchildren.

³⁴ The face illustrations are provided by a local Blackfoot artist, William Singer III/Api'soomaahka.

Blackfoot kinship terms from woman's point of view

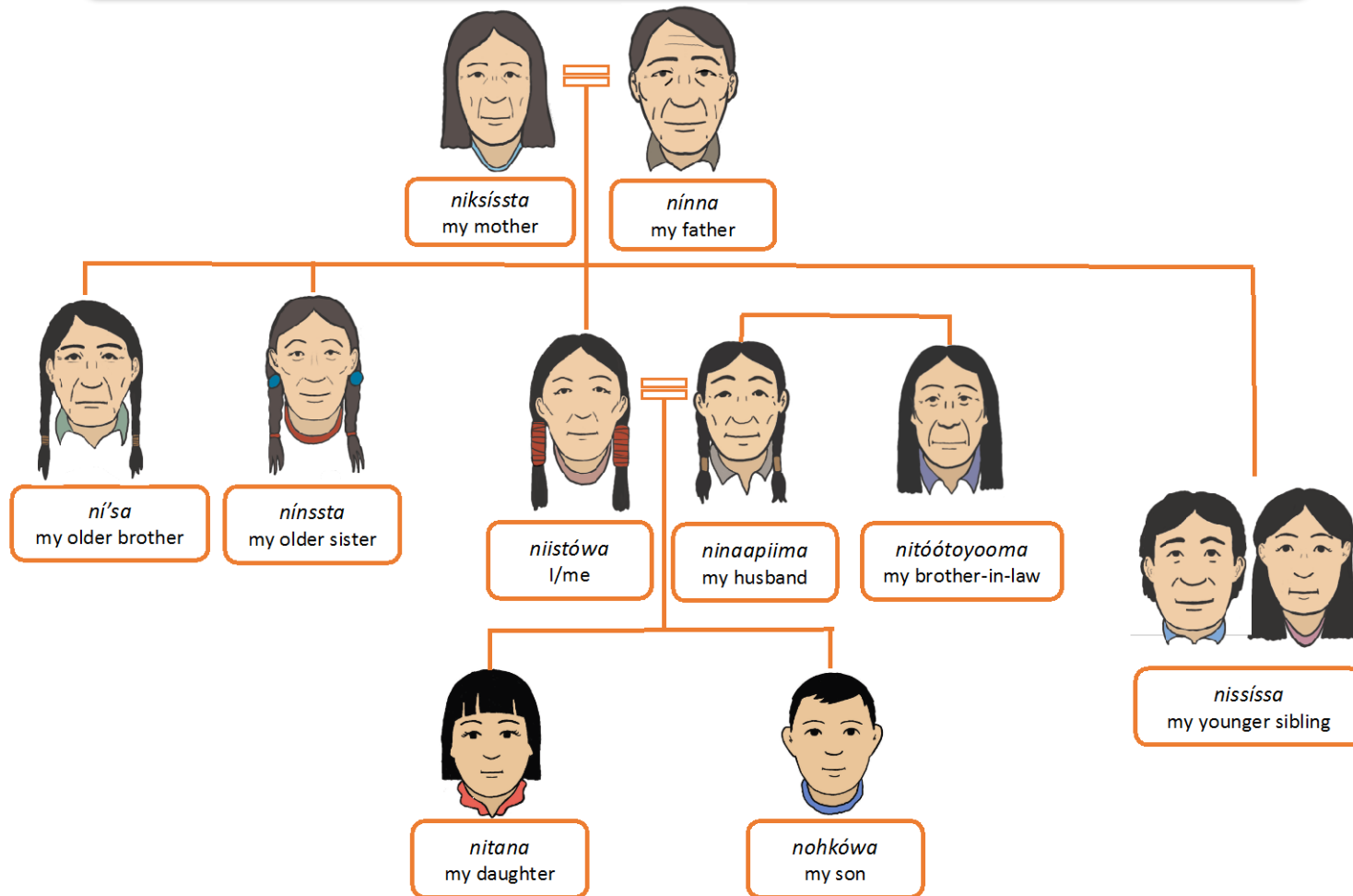


Figure 11: Blackfoot family tree and kinship terms from woman's point of view (Ego=female)

Blackfoot kinship terms from man's point of view

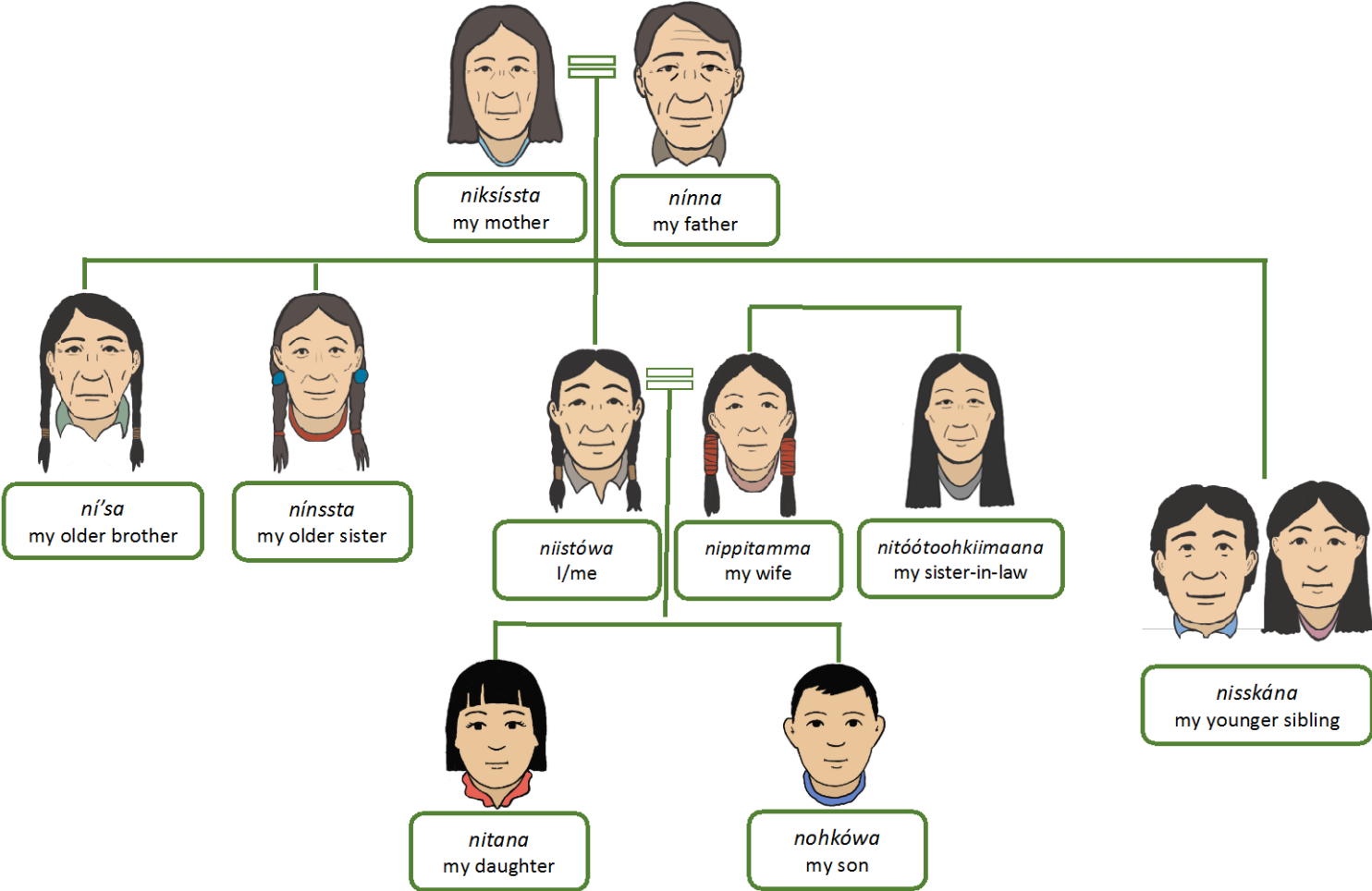


Figure 12: Blackfoot family tree and kinship terms from man's point of view (Ego=male)

Blackfoot kinship terms (male's perspective)

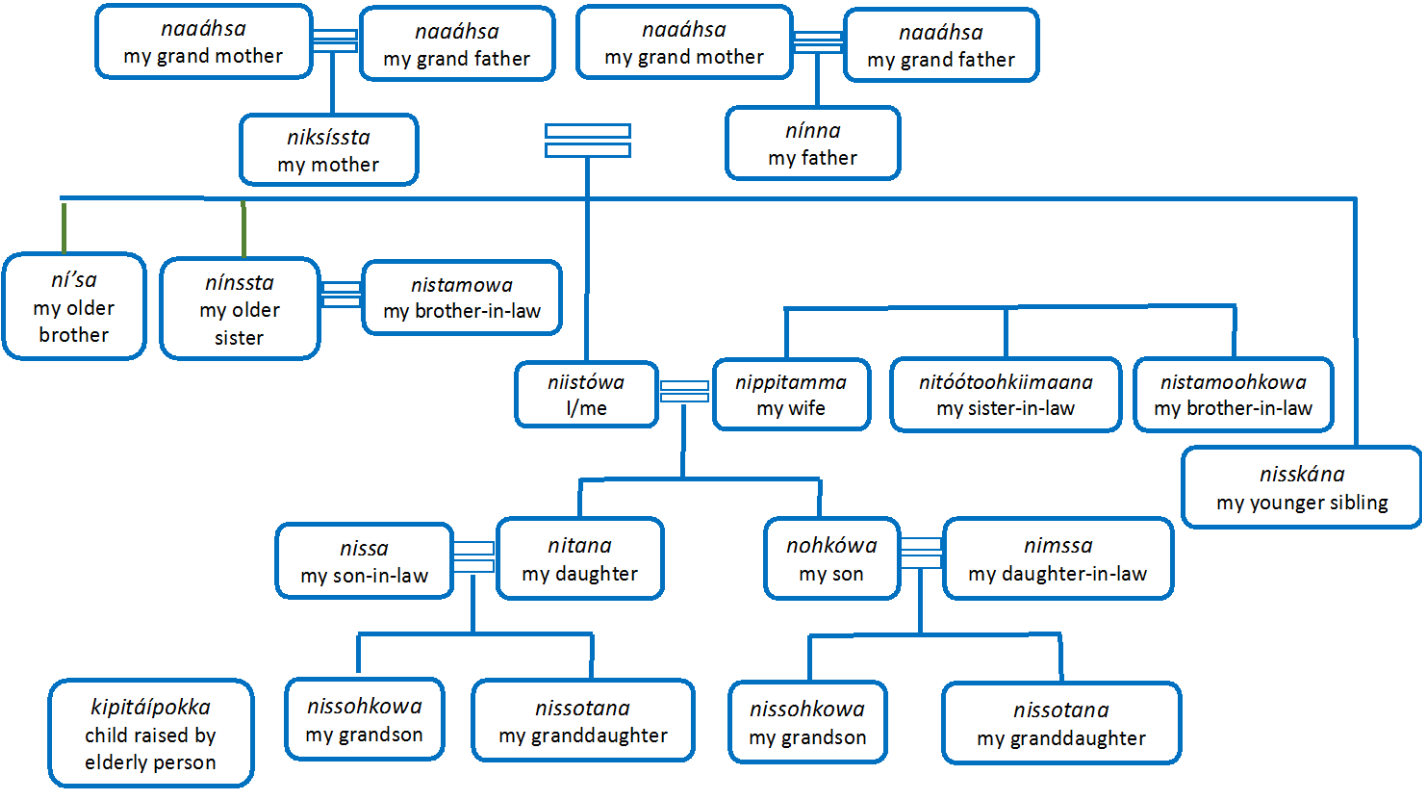


Figure 13: An extended family tree of Blackfoot kinship terms (Ego=male)

The next few pages show screenshots for *ihsiss* 'younger sibling of female'

from the online dictionary before and after the addition of family trees.

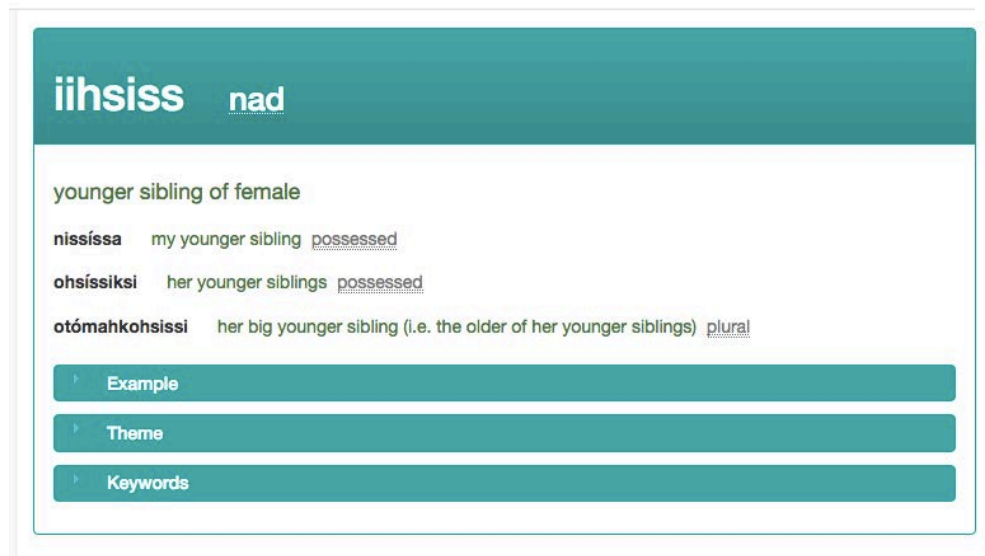


Figure 14: Screenshot from the online dictionary for *ihsiss*: BEFORE addition of a family tree

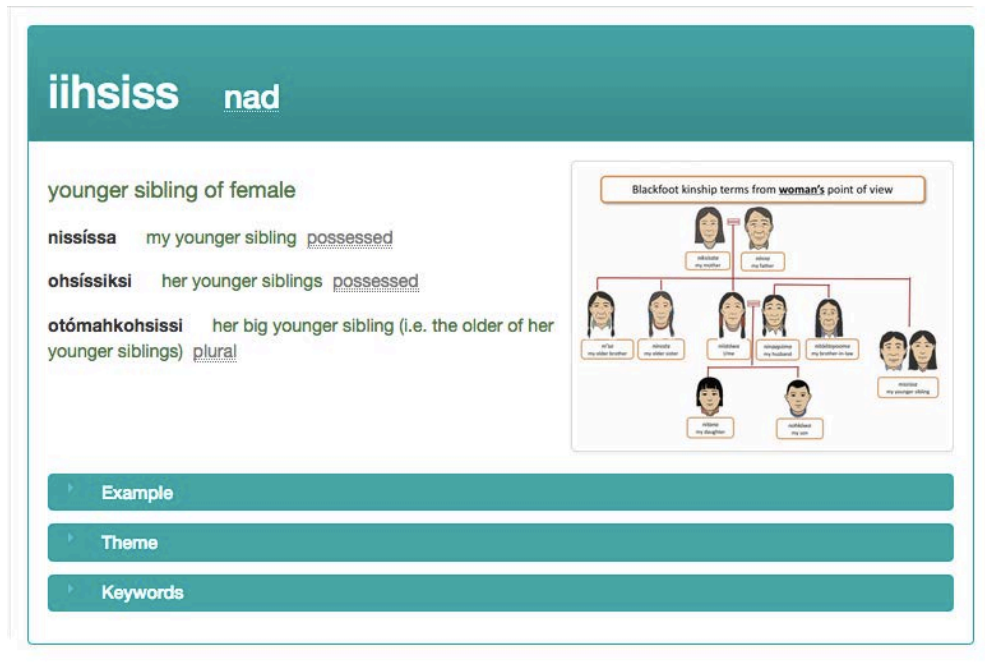


Figure 15: Screenshot from the online dictionary for *ihsiss*: AFTER addition of family tree

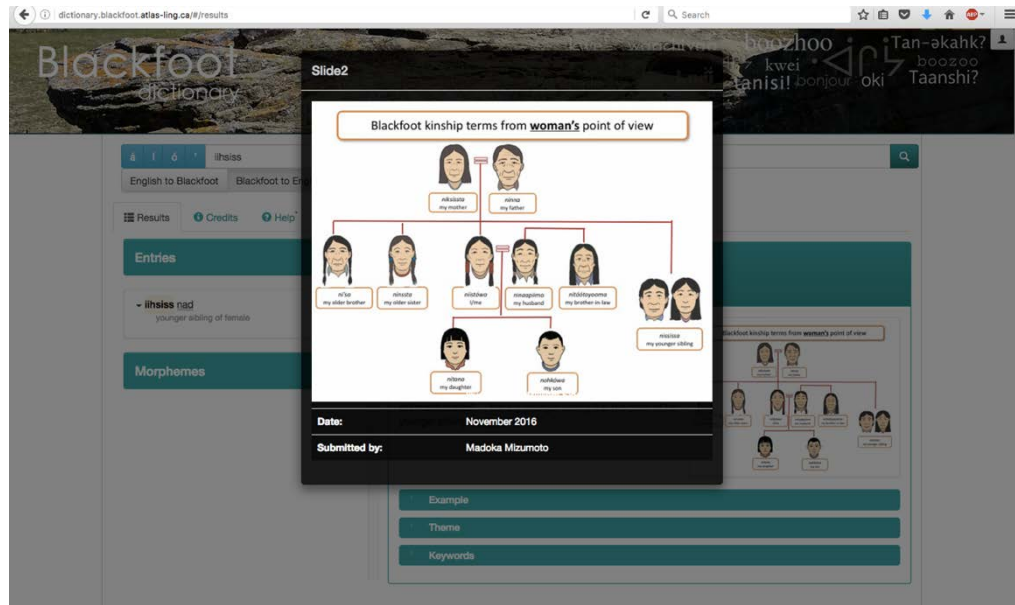


Figure 16: Screenshot from the online dictionary for *ihsiss*: Pop-up of family tree

6.3 Solution 3

The third solution is to provide tables showing the componential analysis of the terms. This would be appropriate for users who already have a basic knowledge of Blackfoot kinship terms through the family trees suggested in Solution 2, or for users with some basic understanding of semantic analysis.

Componential analysis is a way of analyzing the meaning of lexical items by means of semantic features which are assigned a value sign (plus, minus, and zero). This allows for a systematic comparison of similarities and differences between words within the same semantic group or category (Trask, 1999). An example here

is given for Blackfoot sibling terms. Blackfoot and English sibling terms differ from each other in several respects. English sibling terms distinguish only the gender of the noun itself (labelled “possessum” in the table below). Relative age and gender of the possessor (Ego) are not distinguished, as shown in Table 8 below.

Table 8: Table of English sibling terms

<i>English</i>	<i>Possessor</i>				<i>Possessum</i>			
	<i>age</i>		<i>gender</i>		<i>age</i>		<i>gender</i>	
	O	Y	M	F	O	Y	M	F
(my) sister	√	√	√	√	√	√		√
(my) brother	√	√	√	√	√	√	√	

In Blackfoot, sibling terms distinguish gender and relative age of both possessor (Ego) and possessum (referent) as shown in Table 8. It is obvious at first glance that the Blackfoot kinship terms differ from the English one. For the older sibling terms *ínsst* and *i's*, gender of possessum matters, while gender of possessor matters for the younger sibling terms *iihsiss* and *isskán*.

Table 9: Table of Blackfoot sibling terms

<i>Blackfoot</i>	<i>English translations</i>	<i>Possessor</i>				<i>Possessum</i>			
		<i>age</i>		<i>gender</i>		<i>age</i>		<i>gender</i>	
		O	Y	M	F	O	Y	M	F
(n-)ínsst(-a)	(my) older sister (of male or female)	/	√	√	√	√	/	/	√
(n-)i's(-a)	(my) older brother (of male or female)	/	√	√	√	√	/	√	/
(n-)jiihsiss(-a)	(my) younger sibling of female	√	/	/	√	/	√	√	√
(n-)isskán(-a)	(my) younger sibling of male	√	/	√	/	/	√	√	√

Comparison of the two tables make it clear that Blackfoot sibling terms and English sibling term have significant semantic differences. Blackfoot sibling terms make more distinctions than English terms. Blackfoot language learners not only need to memorize the terms, but also are required to understand the semantic concepts expressed by the sibling terms in addition to other Blackfoot kinship terms.

Componential analysis may not be suitable for general users of the dictionary, but it may be suitable for the users who are interested in studying further analysis of Blackfoot kinship terms or for academic.

6.4 Conclusion

This chapter suggests some ways in which Blackfoot kinship terms can be represented in a practical way in an online dictionary. The first solution is to include Blackfoot morpheme divisions and glosses along with literal translations in the dictionary. The second is to represent Blackfoot kinship terms in the form of a family tree, with or without face illustrations. The third one is to provide tables to show the componential analysis of the distinct terms, to highlight the structural semantic distinctions between the two systems. This triple approach allows us to serve several goals and types of users at the same time in a situation in which it is not possible to publish separate dictionaries for different types of users, as discussed in chapter 2. The next chapter discusses some issues which I encountered during the fieldwork and concludes with suggestions of further studies.

Chapter Seven: Discussion and Conclusion

7.1 Discussion

The thesis asks the following three questions:

1. What is the best way to translate Blackfoot kinship terms in a Blackfoot - English bilingual dictionary?
2. What alternative ways are there to represent cultural information relating to Blackfoot kinship terms in the bilingual dictionary?
3. How can we generalize the solutions for the representation of kinship terms to other parts of the dictionary?

In order to obtain current socio-cultural meanings of Blackfoot kinship terms, I conducted fieldwork and interviewed seven fluent Blackfoot speakers from three Canadian Blackfoot tribes: the Kainaa, the Aapátóhsipikani (Piikani), and the Siksiká. The results of the interviews are discussed in chapter 5.

As discussed in section 3.2, one of the major challenges of a Blackfoot-English bilingual dictionary is to find a way to present information that is accessible for all user levels and ages. Due to limitations of funding, time, and available speakers for

endangered language dictionaries (as opposed to major language bilingual dictionaries such as English-French or English-Spanish), it is usually not possible to make separate dictionaries for each type of user. After considering a variety of different dictionaries, including dictionaries for endangered and non-endangered languages for different language levels and ages, and different types of dictionaries such as thematic and picture dictionaries in chapter 2, chapter 6 has proposed three possible solutions for how to represent Blackfoot kinship terms in an online dictionary.

The first solution is a response to the first thesis question; it suggests including literal translations of Blackfoot kinship terms such as *ootohkiimaan* 'brother-in-law of female; lit. distant-wife'. This allows dictionary users to see the original meanings of the words. The second solution is to create culturally appropriate family trees, and this is a response to the second thesis question. The family trees with Blackfoot face illustrations provide a quick visual aid to help with the understanding of kinship terms, which is particularly suitable for younger users. The third solution is to provide componential analysis of the terms; this is also a

response to the second thesis question. It works to give insight into terms closely which express distinctions that differ from those that determine the English system, such as Blackfoot sibling terms.

Some solutions regarding the third thesis question are already incorporated in both the print and the digital dictionary. For instance, literal translations are already included in many other lexical items such as *sipisttoo* 'owl; lit. night announcer'. This, however, requires more discussion.

7.2 Unanticipated results from the fieldwork

I conducted fieldwork to obtain information on current socio-cultural meanings of Blackfoot kinship terms. I believed that the current meanings of the kinship terms were as in F & R, since it is usually assumed that kinship terms are “a relatively stable subset of the lexicon” (Borges, 2013, p.2) and are less affected by language shift. However, it turned out that Blackfoot kinship terms have in fact been significantly affected by language shift.

We saw in section 5.4 that some Blackfoot kinship terms have undergone semantic shift, and I discussed two significant cases relating to the Blackfoot term

for mother/mother's aunt (*iksísst*) and of the terms used for male and female spouses terms *ohkiimaan* 'wife' and *oom* 'husband'. The results of the interviews demonstrate that *iksísst* has undergone both overextension and underextension, depending on the speaker, and that *ohkiimaan* and *oom* have, for some speakers at least, undergone pejoration and have been replaced by *ippitaam* 'wife, elderly woman' and *inaapiim* 'old man'.

7.2.1 Lessons from the fieldwork

Semantic shift in Blackfoot kinship terms is not the only unanticipated outcome from the fieldwork. I also did not anticipate that unique individual circumstances affect knowledge of Blackfoot kinship terms. For instance, a couple of the speakers brought up during the interviews that difficulties in the relationship with their own family members was a reason for being unsure about some Blackfoot kinship terms. Moreover, some speakers mentioned they did not know these terms because they did not have such a person in their own life; if a speaker does not have a *nínssta* 'my older sister' in a family, then sometimes the speaker is not familiar with the term. In addition, one of our language consultants, William, mentioned that

it was hard to remember some terms due to lack of fluent speakers around him. He did not have an opportunity to speak Blackfoot regularly since his wife does not speak Blackfoot; he often speaks English at home rather than Blackfoot. The situation which William faces is the same for the other speakers whose partners do not speak Blackfoot. Other causes of limited knowledge of the meaning of the kin terms could be found in European colonization and the Residential School system, as most of the speakers mentioned when they discovered that their understanding of the meanings of the Blackfoot kinship terms is no longer the same as in F &R.

It is also important to mention that generational differences affect the result.

It is well known from sociolinguistic studies that language differs among genders, generations, and regions (Labov, 2001). It has been more than two decades since Frantz and Russell's dictionary was published. The consultants who worked with Frantz and Russell belonged to a different generation than my consultants. The Blackfoot speakers who worked with Frantz and Russell were likely born between the 1920s and the 1940s, while the Blackfoot speakers with whom I worked were

born in the 1950s and 1960s, meaning they were at least one generation younger than Frantz and Russell's consultants.

This is not a unique circumstance for Blackfoot. Aoki (2002) discusses a similar situation of semantic change coming from his work with the Nez Perce tribe in Washington, Idaho and Oregon. The tribal council complained to Aoki about mistranslation of lexical items for the Nez Perce dictionary more than 30 years after his fieldwork. Aoki assumes that the members of tribal council are at least one generation younger than the people with whom Aoki worked. He argues that linguistic change has occurred between the generations and the younger people are not aware of these changes.

For any future research in this area it is important to keep in mind that the effects of European colonization, the Residential school system, and unique individual family circumstances influence the language

7.3 Further studies

I suggest two directions for future studies. The first suggestion is that younger generations from Blackfoot communities ask their Elders about the socio-

cultural meanings of Blackfoot kinship terms. This is an appropriate way to acquire information as many Elders are keen on passing their culture and tradition on to younger people, as is evident for instance from a series of well-attended Blackfoot Language symposia annually held in Lethbridge, most recently on March 3-4 and October 5-7, 2016

Another future study is historical sociolinguistic and anthropological research on Blackfoot kinship terms. The current project uncovered some aspects of language shift and an unintended outcome from my fieldwork. The main purpose of my thesis was obtaining cultural information in order to provide enriched translations for a Blackfoot-English bilingual dictionary. The information on semantic change which emerged from the interviews is not enough to analyze whether language change has actually occurred and if so, why. I have data from only seven Blackfoot language consultants and the distribution of Blackfoot dialects is not balanced. We need more speakers to examine a possible semantic shift in Blackfoot kinship terms. The terms have not been studied since Frantz and Russell conducted their fieldwork. This will be an opportunity to see language shift between

generations and among the four Blackfoot tribes by comparing the most recent data by Frantz and Russell (1995).

7.4 Conclusion

This project has investigated ways to translate and represent Blackfoot kinship terms in a Blackfoot-English bilingual dictionary. Three solutions are given in order to meet all user levels and age groups: literal translations, family trees, and componential analysis. These solutions are, however, just a beginning, and there is a lot of space for improvement. The project needs feedback from the Blackfoot community to be reflected in the new dictionary. Only when the voices of the speech community are reflected in the dictionary, can be said that the dictionary truly serves the Blackfoot community and that the research works “with” the community.

References

A. Dictionaries

- Frantz, D. G., & Russell, N. J. (1995). *Blackfoot Dictionary of Stems, Roots, and Affixes* (2nd ed.). Toronto: University of Toronto Press.
- The Heinle picture dictionary. (2014). Independence, KY: National Geographic Learning.
- Junker, M.-O. (2016). *The Algonquian Linguistic Atlas*. <http://www.atlas-ling.ca/>
- Junker, M.-O. & MacKenzie, M. (2016). *Dictionnaire français-innu* (vol.1 & 2). Uashat, QC: Les Éditions Tshakapesh.
- Kari, J. (2007). *Dena'ina topical dictionary*. Fairbanks: Alaska Native Language Center.
- MacKenzie, M. & Mailhot, J. (2016). *English-Innu dictionary* (2013 edition). Sheshatshiu, Canada: Mamu Tshishkutamashutau.
- MacKenzie, M. & Mailhot, J. (2016). *Inuu-English dictionary* (2013 edition). Sheshatshiu, Canada: Mamu Tshishkutamashutau.
- MacLean, E. A. (2014). *Iñupiatun Uqaluit Taniktun Sivuninit: Iñupiaq to English dictionary*. Fairbanks, AK: University of Alaska Press.
- Paizee, D. (2007). *Oxford first bilingual dictionary: IsiZulu and English*. Goodwood, South Africa: Oxford University Press Southern Africa.
- Parnwell, E.C., and Yellowhair, M. (1989). *The new Oxford picture dictionary: English/Navajo edition*. Oxford: Oxford University Press.
- Rude, N. (2014). *Umatilla dictionary: A project of the Confederated Tribes of the Umatilla Indian Reservation and Noel Rude*. Seattle: Confederated Tribes of the Umatilla Indian Reservation in association with University of Washington Press.
- Shapiro, N., & Adelson-Goldstein, J. (1999). *The Oxford picture dictionary: Canadian edition*. Oxford: Oxford University Press.
- The Squamish Nation Education Department. (2011). *Skwxwú7mesh sníchim - Xwelíten sníchim: Squamish - English dictionary*. North Vancouver and Seattle:

Squamish Nation Education Department in association with University of Washington Press.

Tims, J. W. (1889). *Grammar and Dictionary of the Blackfoot language in the Dominion of Canada. For the use of missionaries, school-teachers and others.* Retrieved from https://archive.org/details/cihm_30658

Uhlenbeck, C. C. & van Gulik, R. H. (1930). *An English-Blackfoot vocabulary: Based on material from the Southern Peigans.* Retrieved from <http://peel.library.ualberta.ca/bibliography/5517.html>

Uhlenbeck, C. C. & van Gulik, R. H. (1934). *A Blackfoot-English vocabulary: Based on material from the Southern Peigans.* Retrieved from <http://peel.library.ualberta.ca/bibliography/5817.htm>

Visitor, L., Junker, M.-O., & Neacappo, M. (Eds). (2013). *Eastern James Bay Cree Thematic Dictionary* (Northern Dialect). Chisasibi: Cree School Board.

Visitor, L., Junker, M.-O., & Neacappo, M. (Eds). (2013). *Eastern James Bay Cree Thematic Dictionary* (Southern Dialect). Chisasibi: Cree School Board.

B. Other literatures

Aoki, H. (2002). Writing a Nez Perce dictionary. In W. Frawley, K. C. Hill, & P. Munro (Eds.), *Making dictionaries: Preserving indigenous languages of the America* (pp. 285-311). Berkeley, CA: University of California Press.

Archive Society of Alberta. (n.d.). *Lucien Mason Hanks fonds.* Retrieved from <http://www.albertaonrecord.ca/lucien-mason-hanks-fonds>

Atkins, B.T.S., & Randell, M. (2008). *The Oxford guide to practical Lexicography.* Oxford: Oxford University Press.

Ball, J. & Janyst, P. (2008). Enacting research ethics in partnerships with Indigenous communities in Canada: "Do it in a good way." *Journal of Empirical Research on Human Research Ethics: An International Journal*, 3(2), p.33-51.

Bartholomew, D. A., & Schoenhals, L. C. (1983). *Bilingual dictionaries for indigenous languages.* Retrieved from <http://www-01.sil.org/mexico/ling/E007b-BilingualDictionaries.pdf>.

Begay, W. R. (2013). *Mobile Apps and indigenous language learning: New developments in the field of indigenous language revitalization* (Master's thesis). Retrieved from <http://hdl.handle.net/10150/293746>

- BNC Consortium. (n.d.). British National Corpus. Retrieved from <http://www.natcorp.ox.ac.uk>
- Borges, R. (2013). Linguistic archaeology, kinship terms, and language contact in Suriname. *Anthropological Linguistics*, 55(1), 1-35.
- Bowerman, M. (1978). Systematizing semantic knowledge: Changes over time in the child's organization of word meaning. *Child Development*, 49(4), p. 977-987.
- Brownstone, A. (2008). Reverend John Maclean and the Bloods. *American Indian magazine: Summer 2008*, p. 44-57 Retrieved from https://www.rom.on.ca/sites/default/files/publication/pdf/brownstone_macleanblood20081.pdf
- Buchler, I. R., & Selby, H. A. (1968). *Kinship and social organization: An introduction to theory and method*. New York, NY: The Macmillan Company.
- Bullchild, P. (1985). *The sun came down: The history of the World as my Blackfeet Elders told it*. Lincoln, NE: University of Nebraska Press.
- Cablitz, G. H. (2011). Documenting cultural knowledge in dictionaries of endangered languages. *International Journal of Lexicography*, 24(4), 446-462. doi:10.1093/ijl/ecr017.
- Chan, S.W. (2004). Dictionaries and translators. In S. W. Chan (Ed). *Translation and bilingual dictionaries* (pp. 1-3). Tübingen: Max Niemeyer Verlag.
- Cooper, J. M. (1939). Truman Michelson. *American Anthropologist* 41, p. 281-285.
- Czaykowska-Higgins, E. (2009). Research models, community engagement, and linguistic fieldwork: Reflection on working within Canadian indigenous communities. *Language Documentation & Conversation*, 3(1), 15-50.
- Davies, M. (2015). Corpus of Contemporary American English. Retrieved from <http://corpus.byu.edu/coca>
- Debenport, E. (2010). The potential complexity of "universal ownership": Cultural property, textual circulation, and linguistic fieldwork. *Language & Communication*, 30(3), 204-210. doi:10.1016/j.langcom.2009.11.001
- Enfield, N. J. (2002). *Ethnosyntax: Explorations in grammar and culture*. Oxford: Oxford University Press.
- Finkbeiner, R., Meibauer, J., & Wiese, H. (Eds.) (2016). *Pejoration*. Amsterdam: John Benjamins.

- First Nations Studies Program. (2009). *Government policy: The Residential school system*. Retrieved from <http://indigenousfoundations.arts.ubc.ca/home/government-policy/the-residential-school-system.html>.
- Foley, W. A. (1997). *Anthropological linguistics: An introduction*. Malden, MA: Blackwell.
- Fortes, M. (1969). *Kinship and the social order: The legacy of Lewis Henry Morgan*. Chicago: Aldine.
- Fox, R. (1967). *Kinship and marriage: An Anthropological perspective*. Harmondsworth: Penguin Books.
- Frantz, D. G. (n.d.). *The Blackfoot language*. Retrieved from <http://people.uleth.ca/~frantz/blkft.html>
- Genee, I. (2015). *A digital dictionary for the Blackfoot language* [Brochure]. Lethbridge, AB: Author.
- Genee, I., & Hinrichs, J. P. (2008). Introduction. *Canadian Journal of Netherlandic Studies*, 29(2), 1-10. Retrieved from http://caans-acaen.ca/Journal/issues_online/issue_XXIX_ii_2008/Introduction.pdf
- Genee, I & Heavy Shield Russel, L. (2006). *The Blackfoot language: Current position and future prospects*. Invited plenary lecture to 38th Algonquian Conference, University of British Columbia, Vancouver, October 27-29.
- Glenbow Museum. (n.d.). *Archdeacon J. W. Tims family fonds*. Retrieved from <http://www.glenbow.org/collections/search/findingAids/archhtm/tims.cfm>
- Goodenough, W. (1951). *Property, kin and community on Truk*. New Haven, CT: Yale University Press.
- Goodenough, W. H. (1956). Residence rules. *Southwestern Journal of Anthropology*, 12(1), 22-37.
- Grenoble, L. (2011). On thin ice: language, culture and environment in the Arctic. *Language Documentation and Description*, 9, 14-34.
- Hanks, L. M., & Richardson, J. (1945). Observations on Northern Blackfoot kinship. In I. Hallowell (Ed.), *Monographs of the American ethnological society* (Vol. 9, pp. 1-39).

- Hanks, L. M., & Hanks, J. R. (1950). *Tribe under trust: A study of the Blackfoot reserve of Alberta*. Toronto: University of Toronto Press.
- The Hans Rausing Endangered Languages Project. (2013). *Endangered language*. Retrieved from <http://www.hrelp.org/languages/index.html>
- Heavy Shields Russell, L. & Genee, I. (2014). *Ákaiṣinikssiistsi: Blackfoot Stories of Old*. Regina: University of Regina Press.
- Hungry-Wolf, A. (2006). *The Blackfoot papers: Pikunni history and culture* (vol.1). Skookumchuck, B.C.: The Good Medicine Cultural Foundation.
- Hungry Wolf, B. (1980). *The ways of my grandmothers*. New York: Quill.
- Ilson, R. (2013). The explanatory technique of translation. *International Journal of Lexicography*, 26(3), 386-393. doi: 10.1093/ijl/ect020.
- The Indigenous Peoples' Health Research Centre. (2005). *Kwayask itôtamowin: Indigenous research ethics*. Retrieved from http://iphrc.ca/pub/documents/IPHRC_ACADRE_Ethics_Report_final.pdf.
- de Josselin de Jong, J. P. B. (1912). Social organization of the Southern Peigans. *Internationales Archiv für Ethnographie*, 20, 191-197.
- Junker, M.-O. & Torkornoo, D. (2012). *Online language games for endangered languages: jeux.tshakapesh.ca, www.eastcree.org/lessons*. Paper presented at EDULEARN 12: International Conference on Education and New Learning Technologies. Barcelona, Spain. Valencia: IATED.
- Keyes, C. F. (1992). Lucien Mason Hanks (1910-1988). Crossroads: An Interdisciplinary. *Journal of Southeast Asian Studies*, 7(1), 1-5.
- Kronenfeld, D. B. (2015). Culture and kinship language. In F. Sharifan (Ed), *The Routledge handbook of language and culture*, p154-169. London: Routledge.
- Labov, W, (2001). *Principle of linguistic change: Social factors* (Vol. 2). Malden, MA: Blackwell.
- Leach, E. (1958). Concerning Trobriand clans and the kinship category 'Tabu'. In J. Goody (Ed.), *The development cycle of domestic groups*, (pp. 120-145). Cambridge: Cambridge University press.
- Lévi-Strauss, C. (1969). *The elementary structures of kinship*. Boston, MA: Beacon Press.

- Lewis, M. P., Simons, G. F., & Feeling, C. D. (2015). Statistical summaries: Summary by language status. *Ethnologue: Languages of the world*. 18. Retrieved from <http://www.ethnologue.com/statistics/status>
- Lounsbury, F. G. (1965). Another view of the Trobriand kinship categories. In E. Hammel (Ed.), *Formal semantic analysis*, (pp.142-185). Washington: American Anthropological Association.
- Lounsbury, F. G. (1969). A formal account of the Omaha- and Crow-type kinship terminologies. In S. Tyler (Ed.), *Cognitive anthropology: Readings*, (pp.212-255). New York: Holt, Rinehart and Winston.
- Massone, M. I. & Johnson, R. E. (1991). Kinship terms in Argentine sign language. *Sign Language Studies* 73(1), 347-360. doi: 10.1353/sls.1991.0028.
- McKinney, C. V. (2000). *Globe-trotting in Sandals: A field guide to cultural research*. Dallas, TX: SIL International.
- Michelson, T. (1916). Notes on the Piegan system of consanguinity. In F. W. Hodge & E. Leary (Eds.), *Holmes anniversary volume: Anthropological essays presented to William Henry Holmes in honor of his seventieth birthday, December 1, 1916*. Washington D. C.: J.W. Bryan.
- Miyashita, M., & Chatsis, A. (2015). Respecting dialectal variations in a Blackfoot language class. In J. Reyhner, J. Martin, L. Lockard, & W. S. Gilbert (Eds.), *Honoring our Elders: Cultural appropriate approaches for teaching indigenous students* (pp. 109-116). Flagstaff, AZ: Northern Arizona University.
- Mizumoto, M. & Genee, I. (forthcoming). *Blackfoot sibling terms: The representation of culturally specific meanings in a Blackfoot-English bilingual dictionary*. Proceeding of the 47th Algonquian Conference, Winnipeg, MB. October 2015.
- Montgomery-Anderson, B. (2008). Citing verbs in Polysynthetic languages: The case of the Cherokee-English dictionary. *Southwest Journal of Linguistics*, 27(1), 53-75.
- Morgan, L. H. (1868). *System of consanguinity and affinity of the human family*. Washington D.C.: Smithsonian Institution.
- Mosel, U. (2004). Dictionary making in endangered speech community. *Language Documentation and Description* 2, 39-54.
- Mosel, U. (2011). Lexicography in endangered language communities. In P. Austin & J. Sallabank (Eds.), *The Cambridge handbook of endangered languages* (pp. 337-353). Cambridge: Cambridge University Press.

- Murdock, G. P. (1949). *Social structure*. New York: The Macmillan Company.
- Mufwene, S. S. (2002). Colonisation, globalization, and the future of languages in the twenty-first century. *International Journal on Multicultural Societies*, 4(2), 162-193. Retrieved from www.unesco.org/shs/ijms/vol4/issue2/art2
- Nagy, N. (2000). What I didn't know about working in an endangered language community: Some fieldwork issues. *International Journal of the Sociology of Language* 144, 143-160.
- Needham, R. (1971). Remarks on the analysis of kinship and marriage. In R. Needham (Ed.), *Rethinking kinship and marriage*, (pp. 1-34). London: Tavistock.
- Norris, M. J. (2007). *Aboriginal languages in Canada: Emerging trends and perspectives on second language acquisition*. Canadian Social Trends 11-008. Ottawa, Canada: Department of Statistic Canada.
- Ogilvie, S. (2011). Linguistics, lexicography, and the revitalization of endangered languages. *International Journal of Lexicography*, 24(4), 389-404. doi: 10.1093/ijl/ecr019.
- Omaha kinship. (n.d.) In *Wikipedia*. Retrieved January 1, 2017, from https://en.wikipedia.org/wiki/Omaha_kinship
- Pericliev, V., & Valdés-Pérez, R. E. (1998). Automatic componential analysis of kinship semantics with a proposed structural solution to the problem of multiple models. *Anthropological Linguistics*, 40(2), 272-317. doi:10.2307/30028629.
- Pulte, W., & Feeling, D. (2002). Morphology in Cherokee lexicography: The Cherokee-English dictionary. In W. Frawley, K. C. Hill, & P. Munro (Eds.), *Making dictionaries: Preserving indigenous languages of the Americas* (pp. 60-69). Berkeley, CA: University of California Press.
- Qian, Y. & Piao, S. (2009). The development of a semantic annotation scheme for Chinese kinship. *Corpora*, 4(2), 189-208. doi: 10.3366/E1749503209000306
- Radcliffe-Brown, A. (1924). The mother's brother in South Africa. *South African Journal of Science*, 21,542-555.
- Radcliffe-Brown, A. R. (1950). *African systems of kinship and marriage*. London: Oxford University Press.

- Rau, D. V., Yang, M-C., Chang, H-H. A., & Dong, M-N. (2009). Online dictionary and ontology building for Austronesian languages in Taiwan. *Language Documentation & Conversation*, 3(2), 192-212.
- Rice, K. (2006). Ethical Issues In Linguistic Fieldwork: An Overview. *Journal of Academic Ethics*, 4, 123-155. doi: 10.1007/s10805-006-9016-2
- Rice, K. (2012). The linguist's responsibilities to the community of speakers: Community-based research. In L. A. Grenoble & N. L. Furbee (Eds.), *Language Documentation: Practice and Values* (pp. 25-36). Amsterdam: John Benjamins.
- Rice, K., & Saxon, L. (2002). Issues of standardization and community in Aboriginal language lexicography. In W. Frawley, K. C. Hill, & P. Munro (Eds.), *Making dictionaries: Preserving indigenous languages of the Americas* (pp. 125-154). Berkeley, CA: University of California Press.
- Rieschild, V. R. (2003). Origami in a Hurricane: Current Challenges to Linguistic Research. *Australian Journal of Linguistics*, 23(1), 71.
- Rivers, W. H. R. (1968). *Kinship and social organization*. London: The Athlone Press.
- Robinson, D. (2008). *Becoming a translator: An introduction to the theory and practice of translation*. London: Routledge.
- Robinson, L. C. (2010). Informed consent among analog people in a digital world. *Language & Communication*, 30(3), 186-191. doi: 10.1016/j.langcom.2009.11.002
- Sapir, E. (1929). The status of linguistics as a science. *Language*, 5(4), 207-214. doi: 10.2307/409588.
- Sapir, E. (1949). *Selected writings of Edward Sapir in language, culture and personality*. Berkeley, CA: University of California Press.
- Sayas, M. C. (2004). Translating across cultures in a multilingual dictionary. In S. W. Chan (Ed.), *Translation and bilingual dictionaries* (pp. 129-140). Tübingen: Max Niemeyer Verlag.
- Schneider, D. (1984). *A critique of the study of kinship*. Ann Arbor, MI: University of Michigan Press.
- Schwimmer, B. (2001, January). Systematic kinship terminology. Retrieved from umanitoba.ca/faculties/arts/anthropology/tutor/kinterms/termsys.html

- SIL International. (n.d.-a). *Language Status*. Ethnologue: Languages of the world. Retrieved from <http://www.ethnologue.com/about/language-status>
- SIL International. (n.d.-b). *Sociolinguistics: Endangered language*. Retrieved from <http://www.sil.org/sociolinguistics/endangered-languages>
- Simons, G. F., & Lewis, M. P. (2013). The world's languages in crisis: A 20-year update. In E. Mihás, B. Perley, G. Rei-Doval, & K. Wheatley (Eds.), *Responses to language endangerment. In honor of Mickey Noonan*. (pp. 3-19). Amsterdam: John Benjamins.
- Silver, S., & Miller, W. R. (1997). *American Indian languages: Cultural and social contexts*. Tucson, AZ: The University of Arizona Press.
- Spier, L. (1915). Blackfoot Relationship Terms. *American Anthropologist*, 17(3), 603-607.
- Statistics Bureau of Japan. (2015). *The population of Japan*. Ministry of Internal Affairs and Communication. Retrieved from <http://www.stat.go.jp/english/index.htm>
- Statistics Canada. (2011). *Census in Brief: Aboriginal languages in Canada*. Statistic Canada, Catalogue no. 93-314-X2011003. Ottawa, Canada: Department of Statistic Canada
- Statistics Canada. (2013). *2011 Census of Population*. Statistics Canada, Catalogue no. 98-314-XCB2011042. Ottawa, Canada: Department of Statistic Canada.
- Strathy Language Unit. (n.d.). Strathy Corpus of Canadian English. Retrieved from <http://www.queensu.ca/strathy/corpus>
- Stephens, M., & Boyce, M. (2011). Finding a balance: Customary legal terms in a modern Māori legal dictionary. *International Journal of Lexicography*, 24(4), 432-445. doi: 10.1093/ijl/ecr021.
- Sugimura, K., & Mizokami, Z. (2012). Personal identity in Japan. In S. J. Schwartz (Ed.), *Identity around the world. New direction for child and adolescent development*, 138, 123-143. doi:10.1002/cad.20025
- Svensén, B. (1993). *Practical lexicography: Principles and methods of dictionary-making*. Oxford: Oxford University Press.
- Taylor, A. (1969). *A Grammar of Blackfoot*. Retrieved from <http://www.escholarship.org/uc/item/1nx6d3n1>

- Thieberger, N., & Musgrave, S. (2007). Documentary linguistics and ethical issues. *Language documentation and Description*, 4, 26-36.
- Thomason, S.G. (2015). *Endangered languages: An introduction*. Cambridge: Cambridge University Press.
- Trask, R. L. (1999). *Key concepts in language and linguistics*. London: Routledge
- Trautmann, T. R. & Whiteley, P. M. (Eds) (2012). *Crow-Omaha: New light on a classic problem of kinship analysis*. Tucson, AZ: The University of Arizona Press.
- Triandis, H. C. (1995). *Individualism and collectivism*. Boulder, CO: Westview Press.
- Truth and Reconciliation Commission of Canada. (2015-a). *Honouring the truth, reconciling for the future: Summary of the final report of the Truth and Reconciliation Commission of Canada*. Retrieved from http://www.trc.ca/websites/trcinstitution/File/2015/Honouring_the_Truth_Reconciling_for_the_Future_July_23_2015.pdf.
- Truth and Reconciliation Commission of Canada. (2015-b). *The survivors speak: A report of the Truth and Reconciliation Commission of Canada*. Retrieved from http://www.trc.ca/websites/trcinstitution/File/2015/Findings/Survivors_Speak_2015_05_30_web_o.pdf
- Tseng, H. T. Y. (2004). Rendering Chinese culture-specific vocabulary into English: Predicaments and prospects. In S. W. Chan (Ed.), *Translation and bilingual dictionaries* (pp. 169-176). Tübingen: Max Niemeyer Verlag.
- Uhlenbeck, C.C. (1913). *Flexion of substantives in Blackfoot: A preliminary sketch*. Amsterdam: Johannes Müller.
- Wałaszewska, E. (2011). Broadening and narrowing in lexical development: How relevance theory can account for children's overextensions and underextensions. *Journal of Pragmatics*, 43(1), p. 314-326.
- Whorf, B. L. (1939/1956). The relation of habitual thought and behavior to language. In J. B. Carroll (Ed.), *Language, thought, and reality: Selected writings of Benjamin Lee Whorf* (pp. 134-159). Cambridge, MA: M.I.T. Press.
- Whorf, B. L. (1940). Science and linguistics. In J. B. Carroll (Ed.), *Language, Thought, and Reality: Selected Writings of Benjamin Lee Whorf* (pp. 207-219). Cambridge, MA: The Technology Press of MIT.
- Wilkins, D. (1992). Linguistic research under aboriginal control: A personal account of fieldwork in Central Australia. *Australian Journal of Linguistics*, 12, 171-200.

Wong, E.K.C., & Wan, R. (2004). Towards “a Greek-Chinese lexicon of the Greek New Testament” – a cross-cultural endeavor? In S.W. Chan (Ed.), *Translation and bilingual dictionaries* (pp.157-167). Tübingen: Max Niemeyer Verlag.

Zhao, Y., & Huang, J. (2004). The paradox of cultural translation: How to treat cultural information in bilingual dictionaries. In S. W. Chan (Ed.), *Translation and bilingual dictionaries* (pp. 177-186). Tübingen: Max Niemeyer Verlag.

Appendix A: A list of Blackfoot kinship terminology for fieldwork (Frantz & Russell, 1995)

English translation	Blackfoot stems	Blackfoot singular form with 1SG Possessor
mother*	iksísst	niksíssta
father*	inn	nínna
wife*	ohkiimaan	nitohkíimaana
wife (elderly wife)*	ippitaam	nippitáama
wife (youngest wife)	issohkiimaan	nitsíssohkiimaana
wife (least favored wife)	i'sohkiimaan	ni'sohkiimaana
husband*	oom	nóoma
husband (old man)*	inaapiim	nináápiima
daughter*	itan	nitána
son*	ohkó	nohkówa
child*	oko's	nóko'sa
older sister*	ínsst	nínssta
older brother*	i's	ní'sa
younger sibling of female*	iihsiss	nissíssa
younger sibling of male*	isskán	nisskána
grandparent*	aaáhs	naaáhsa
grandchild*	íssoko's	níssoko'sa
granddaughter*	issotan	níssotana
grandson*	issohko	níssohkowa
maternal aunt*	iksísst	niksíssta
maternal uncle*	aaáhs	naaáhsa
paternal uncle*	aaáhs	naaáhsa

paternal aunt*	aaáhs	naaáhsa
niece	n/a	n/a
nephew	isahkínaim	nisahkínaima
father-in-law	inaaáhs	nitsínaaáhsa
mother-in-law*	aakiaaahs	nitáákiaaahsa
daughter-in-law*	imss	nímssa
son-in-law/husband's younger brother*	iss	níssa
brother-in-law of male*	isstamo	nisstamowa
brother-in-law of male*	isstamoohko	nisstamóóhkowa
brother-in-law of female*	ootoyoom	nitóótoyooma
sister-in-law of male*	ootoohkiimaan	nitóótoohkiimaana
sister-in-law of female	n/a	n/a
step-mother*	ookoksisst	nitóókoksissta
step-father*	ookonn	nitóókónna