Slavey Jargon
and the Presence of French Loanwords in Northern Athabascan

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1.0 Introduction

The term Slavey Jargon identifies both the body of French loanwords in Northern Athabascan languages and a trade pidgin once spoken in Northwestern Canada.[1] The Northern Athabascan languages each contain anywhere from zero to over 75 French loanwords, documented in an appendix attached to this manuscript. Their origin lies in the wave of French Canadian fur traders who traveled Alaska and Canada in the 19th and early 20th centuries and formed a contact language with the natives. French also entered the Northern Athabascan lexicon through French Catholic missionaries who came to Alaska in the mid-19th century. It is thought that the trade pidgin Slavey Jargon was the intermediate donor language for the body of French loans that exists in many Northern Athabascan languages.

1.1 Statement of intent

I intend this thesis to serve as a repository for all available information on Slavey Jargon, both the pidgin and the group of French loans. Much of the information I came across in my research was tied up in unpublished manuscripts, larger articles on related topics, letters, and handwritten notes. A large number of texts on Slavey Jargon include the comment that more research on the subject is needed. In my paper and the adjoining data chart, explained in section 2.0, I have attempted to compile the forms of French loanwords in Northern Athabascan, aspects of their phonology that have been of interest

to linguists, and information on the history of the contact language that brought them to Alaskan and Canadian speakers.

I begin with an explanation of the data featured in the appendix and a summary of what information it contains. I then present background information on lexical borrowing in general and tie those facts into how borrowing operates in Slavey Jargon. I also review the tendency of Athabascan not to borrow lexical items. Next, I go over the process by which lexical items from Slavey Jargon diffused into Athabascan languages, describe the origins and components of Slavey Jargon, and present documentation of the trade pidgin as it has appeared in numerous sources.

I then move on to a description of the French loanwords as they currently exist the in Athabascan languages. I explain into which semantic fields these loans fall, and I describe the significance of their morphology in the different languages under discussion, with a focus on the IV- prefix that marks almost all of them.

Next, I give an overview of the phonology of the French loans. I begin with a presentation of the phonemic inventories of French and of several Athabascan languages, then move on to summarize various phonological changes that have taken place between French and individual Athabascan languages through Slavey Jargon. Some of these changes are difficult to explain fully. My discussion includes commentary on the phonetic realization of the French glide segment [we], oral and nasal vowels, the French /r/, and voiced and unvoiced consonants. I present a hypothesis on the double origin of the French loanwords with the gloss 'money' in Northern Athabascan. I also discuss Krauss (1983)'s hypothesis on phonological correpondence between specific languages

and how that may have contributed to their differing outputs for the same French loanword.

The final segment of my paper presents an article by Jean-François Prunet on French loans in Carrier. The origin of these items differs significantly from those found in other Athabascan languages because Carrier's loans came directly from French rather than diffusing through the intermediary donor language Slavey Jargon. Prunet offers several methods of proof for this interpretation. He also addresses phonological phenomena in Carrier by analyzing how Carrier nativizes French loanwords and proper names.

I conclude with a summary of my thesis and a call for further study, especially in the areas of history and phonological analysis.

1.2 Note on research conducted

It was regrettable but unavoidable that circumstances prevented me from writing this thesis in the place where I began it: at the Alaska Native Language Center in Fairbanks. As an intern at the ANLC in the summer of 2003, I spent two weeks enrolled in a conversation course for Gwich'in, an Athabascan language spoken by about 300 people in Alaska, Yukon Territory and the Northwest Territories (Krauss 1997). My instructor, Kathy Sikorski, noted in class that words beginning with /l/ in Gwich'in indicated that they had come into the languages from French and pointed out similarities between these borrowed words and their French sources. As an student of French for 10 years, this interested me, but I thought nothing of researching the topic further until I spoke to Michael Krauss, director of the ANLC and professor emeritus at the University

of Alaska Fairbanks. He suggested that I investigate Slavey Jargon and showed me a collection of materials of the topic in the ANLC archive.

From these materials, in addition to books I obtained on my own and Athabascan resources lent to me by my thesis adviser, Ted Fernald, I was able to glean the information presented in the paper below. Because of my distance from the ANLC archive and from Alaska native language experts, however, I was unable to obtain many facts I would have liked to include. I do not, for example, have keys to the orthography of the 12 languages I discuss. I also could not track down phonemic inventories for all of them. I was unable to investigate whether French loanwords existed in languages not featured in the data of Krauss (1983), such as Dena'ina and Upper Kuskokwim. In addition, I would have liked to obtain more detailed information on the contact between speakers of French and speakers of native Alaskan and Canadian languages.

1.3 Identification of abbreviations

In this paper, I will refer to languages using the following abbreviations: Eng. (English), Fr. (French), Ca. (Carrier), At. (Ahtna), Tx. (Tanacross), Ut. (Upper Tanana), Nt. (Northern Tutchone), Hn. (Han), Gw. (Gwich'in), Hr. (Hare), Bl. (Bearlake), Sl. (Slave), Dg. (Dogrib), Ds. (Dene Sųłiné[2]) and Cj. (Chinook Jargon).

1.4 Note on orthography

In keeping with convention, all forms are written in the orthography of the Athabascan language under discussion, except for Carrier, whose forms are written in the

International Phonetic Alphabet. This is because my main source of information for Carrier, an article by Jean-François Prunet, used the IPA.

A few notes on Athabascan orthographic conventions: Nasality of vowels is marked with nasal hooks (as in *ǫ*), except in Northern Tutchone and Upper Tanana, where it is marked by *n* after the vowel. Grave and acute accent marks indicate high or low tone. A pair of the same vowel shows vowel length. A barred l [ɬ] is unvoiced. The symbol ' can signify a glottal stop, but it can also signify an ejective consonant if it appears after a stop.

2.0 Explanation and summary of appendix (data chart)

I obtained the majority of the data presented in the attached chart from Michael Krauss's 1983 manuscript "Slavey Jargon: Diffusion of French in Northern Athabascan." I gathered additional data for Northern Tutchone, Gwich'in, Hare, Bearlake, Slave and Dene Sųłiné from the eight sources listed in the chart's references.

Carrier was not included in the data chart that accompanied Krauss's manuscript. Most Carrier forms come from Prunet (1990: 497–499), and a few are from an additional source whose title and author I could not identify. Another note must be made with regard to Carrier: Although this paper explains how French came into many Northern Athabascan languages through Slavey Jargon, Prunet (1990) proves that, in the case of Carrier, there was no intermediary pidgin through which French loanwords diffused; the

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[2] The Dene Sųłiné community has chosen this name over the former label Chipewyan, so I have used it in all references in this paper.

items came directly from French speakers (see 9.0 Origins of French loanwords in Carrier).

The chart reveals the following numbers: 77 French loanwords in Carrier, 67 in Hare, 39 in Bearlake, 32 in Slave, 35 in Gwich'in, 21 in Dene Sųłiné, 19 in Han, 13 in Dogrib, 7 in Northern Tutchone, 4 in Tanacross, 4 in Upper Tanana, and 3 in Ahtna (only in Mentasta, the uppermost dialect). There are also two French loans in Koyukon, which is not featured on the chart. These counts are approximate, since the origin of some items on the chart is of debatable origin.

I have followed Krauss's lead in leaving blank the boxes on the chart where no word for the item, native or borrowed, occurs in the sources consulted. Blank spaces do not necessarily mean the language does not have a word for the item; it may just mean that word was not listed in the source of information for that language. Krauss points out, for example, that it is very likely that Han has a word of French origin for 'box' (Fr. *la caisse*), even if it is not listed in the Han dictionary.

Letters indicate that the language has a word for the item whose origin is either Athabascan ('A') or Russian ('R'). Multiple entries for one loanword signify that it has varying pronunciations due to dialect variation.

Several entries contain multiples glosses for the same item. This is because, in many cases, the meaning of the loan has alternations among the languages. Fr. *le coton*, for example, has produced Hn. *läwdǫǫ* 'cloth,' Gw. *lagwàdoo* 'material,' Hr. *ligodǫ* 'cotton' and Dg. *ligodǫ* 'cotton.' I have not indicated which gloss goes with which language for each item because this thesis emphasizes phonology and morphology, not

semantics, and because it is a common process for a loanword to have a sense that deviates somewhat from the sense of the source word in the donor language.

In some cases, an entry appears with an affix in parentheses, as in Dg. *lame(kǫ')* 'church.' This means the loan item occurs as a stem within the larger word.

3.0 Lexical borrowing and its role in Slavey Jargon

Lexical borrowing takes place when people come into contact with speakers of another language and incorporate items from it into their own. Though it is possible for languages to borrow all kinds of features — grammatical processes, sounds, roots and affixes, for example — nouns are the category in which languages most readily borrow.

It is uncommon for speakers to borrow basic vocabulary, i.e., words that refer to fundamental components of people and their environment, from languages they come into contact with. For this reason, one does not find French loans in Athabascan words for kinship, body parts, geographic features and verbs describing day-to-day activites. Functional words in a language's syntax are also uncommonly borrowed, e.g., determiners, prepositions, and inflectional and derivational morphemes.

Often, borrowed words label items or ideas that have no corresponding native word in the borrowing language. This is certainly the case in Northern Athabascan, where most borrowed items are names of trade goods (see section 5.0, Semantic fields of French loanwords).

Loanword phonology is of interest to linguists because of the multiplicity of sound changes that occur from the donor language to the borrowing language and because of the array of motivations for these changes. The output of a word once

speakers have borrowed and nativized it — that is, assimilated it to their language's structure — is often based upon a principled change. Principled changes are those that one can explain by looking at the phonological systems of the languages involved. If a certain phoneme in a loanword does not exist in the borrowing language, the language replaces it with a similar phoneme. The same process takes place if a phoneme does not occur in certain syllabic positions in the borrowing language, even if the language does include that phoneme elsewhere (Hock and Joseph 1996: 257–259).

Sometimes, however, arbitrary sound changes take place. When French and German borrow English words containing the dental fricative [θ], for example, the dental fricative comes out as [s] in the standard versions of French and German, as [t] in some non-standard varieties, and as [f] in still other varieties (Hock and Joseph 1996: 260). Each of the sounds [s], [t] and [f] has features both similar and dissimilar to [θ], and exactly which sound each dialect of French or German selects to replace [θ] is arbitrary.

Many loanwords in the accompanying data chart show differences from their French sources that appear to be arbitrary. Take, for example, Fr. *le thé* [lǝte] 'tea.' The word-final phoneme in the French pronunciation is [e]. In Carrier, the word is pronounced *lʌdi* — even though another French loanword in Carrier, *lelwe* 'king' from Fr. *le roi* [lǝʁwe] 'king,' has word-final [e] in the Carrier form. Tanacross has Tx. *ldiil* 'tea,' where [iːl] replaces the French [e], even though the language has native words ending in [e], such as *tthee* 'rock. In Northern Tutchone, the loanword for 'tea' is *ledyát*, but another loanword *lezé'* 'money,' from Fr. *les sous*, ends in [eʔ], which is much closer to [e] than [yat] is. In Hare, 'tea' is *ledí*, though another loan *lejié'* 'box,' from Fr. *la*

caisse, has the word-final [eʔ]. In this case, the vowel shift from [e] in Fr. *le thé* to [i] in Hr. *ledi* is not a great leap — certainly, [e] and [i] are more similar than the [e] and [yat] of Northern Tutchone — but it would make the most sense if the borrowing languages simply retained in their loanwords all the phonological features they shared with the donor languages.

Loanwords do not always simply move from the donor language into the borrowing language, however. Often, intermediary languages play a role. In the case of Northern Athabascan, it is recognized that French loans came into the Alaskan and Canadian languages through the trade language Slavey Jargon as well as through some French Canadian speakers directly. Most people who used Slavey Jargon spoke native languages other than French. For that reason, we can assume that the speakers nativized the French vocabulary present in Slavey Jargon to the sound system of their own language before passing those French words on to Alaskan and Canadian natives, who then assimilated the once-French words to their own languages' phonological systems.

Changes like the ones described above raise questions about diffusion. If one knew for sure that Nt. *ledyát* had come into Northern Tutchone from direct contact with French Canadian trappers, for example, the sound change [e] → [at] would be hard to explain. But since Northern Tutchone speakers may have first encountered French lexical items in conversations with Slavey Jargon–speaking Gwich'in, Han or Slavey people, who could have in turn picked up French words from talking to Crees or Eskimos rather than French Canadians themselves, the phonological systems of many languages must be considered.

3.1 Lexical borrowing in Athabascan

Athabascan languages are, in general, resistant to lexical borrowing. Young and Morgan have the following to say about borrowing in Navajo, an Athabascan language spoken in the southcentral United States:

"Despite several centuries of contact between the Navajo and other linguistic groups, and despite widespread cultural borrowing across that same span of time, the number of loan words that has entered the Navajo language, historically, has been very small. Navajo has generally preferred to coin new words from its own internal elements rather than borrow necessary terms, and the relative handful of words that have entered the language from the outside have been nouns primarily — in fact, we do not have a single example of a verb that has entered the language as the result of linguistic borrowing, inflected by analogy with a Navajo model" (Young and Morgan 1987: 7).

As in Navajo, no verbs have entered the Northern Athabascan lexicon, and evidence that the languages resist borrowing lies in the fact that the vast majority of their words are native. That said, other languages have contributed some lexical items to Northern Athabascan. French is most certainly not the only donor language for lexical borrowing in the languages considered in this paper. A corpus of loans have come into Northern Athabascan from Eskimo and other Athabascan languages. Toward the East,

Ahtna and Tanacross feature numerous Russian loanwords, and all Athabascan languages contain words borrowed from English.

4.0 Slavey Jargon as a trade language

Athabascans, Crees, Eskimos, and European traders and explorers spoke the pidgin Slavey Jargon, also known as Broken Slavey, in the Mackenzie River District of the present-day Northwest Territories in Canada (Bakker 1996: 318–319). It developed as a contact jargon associated with the fur trade that took place along the Athabasca, Mackenzie and Yukon rivers (Slobodin 1981: 529). Slavey Jargon is not the same as Jargon Loucheux, which people spoke along the Yukon River, a tributary of the Mackenzie. The formation of the pidgins may have arisen after 1860, when the Gwich'in Athabascans became important intermediaries in trade around Peel River (Bakker and Grant 1996: 1137).

4.1 Diffusion of loans

The point of origin for Slavey Jargon appears to be the Hare-Bearlake area in the western Northwest Territories of Canada (Krauss 1983: 1). Of the approximately 90 loanwords, only 15 or so are not attested in Hare or Bearlake. The number of French loans decreases in the Southeast direction, with 21 loans in Dene Sųłiné and just 13 in Dogrib. Three French loanwords have reached Mentasta, the northernmost dialect of Ahtna, spoken in Southeast Alaska. There are two loans in Koyukon, spoken in central Alaska, and one in Tanana, spoken east of Koyukon country. The highest number of French loans, 77, occur in Carrier, but this language cannot be compared to the others

under discussion here, because there was no intermediary donor language for Carrier; Prunet (1990) proves that the loans came directly from French.

4.2 Elements of Slavey Jargon

Some travelers did not distinguish between the two pidgins Slavey Jargon and Jargon Loucheux (Bakker 1996: 317), but 19th-century French missionary Émile Petitot writes that the main difference lay in the English, Dene Sųłiné and Gwich'in (Loucheux) elements that existed in Jargon Loucheux but not Slavey Jargon (Petitot 1889: 292–293). Petitot, who wrote numerous ethnographic and linguistic works, claims that Slavey Jargon contained only "French, Cree and Dènè Slave elements." Catherin McClellan, however, describes the jargon as "basic pidginized Athapaskan with words from French, English, Chipewyan, Slavey and Cree" (McClellan 1996: 378–401 in Bakker 1996: 318). And Robert McDonald concurs in an 1863 letter that Slavey Jargon included both English and Gwich'in:

(1) "[Broken Slavé] is a language which has that name perhaps from the preponderance of Slave words in it; but it is composed of English, French, Cree, and Loucheux, besides Slavé. It is a most extraordinary language in its way: the number of words in it are very limited. It is used by the officers and servants of the [Hudson's Bay] Company in their ordinary intercourse with the Indians, and it serves very well for common purposes. Most of the young men among the Indians speak it" (McDonald, 1863).

4.3 Documentation of Slavey Jargon

It seems that the trade pidgin Slavey Jargon is now extinct, and there is no information about its current status (Bakker 1996: 317–320). Slobodin (1981: 514–532) asserts that it has been obsolete among the Gwich'in since the 1930s. In fact, few facts are available about the pidgin at all, as no texts exist in the language. (This contrasts with the record of Chinook Jargon, another northern Canadian trade language, for which there are up to a hundred teaching aids, periodicals, religious works and other texts [Bakker 1996: 318].) There are, however, several references to Slavey Jargon in travel writing from the late 19th century and early 20th century. Petitot (1889: 292) transcribes an utterance of Slavey Jargon:

(2)   "Allons *Rakpé* l'a dit: *ey dindjié*, il faut le f... [foutre] à l'eau, le chien *kkétintchô*. Notre Père, le Révérend M..., n'est pas loin d'ici. *Ey bettaoderha illè*. Allons, vous autres, *djugu*, c'est le moment. *Anl'a nipaâ*."

          "Let's go, the chief said: This man, we have to throw him into the water, it's a dog. Our father, Reverend M..., is not far away. This one is not needed. Let's go, you guys, this is the moment. Let's kill him all together."   (translation by Peter Bakker, after Petitot's French)

The italicized words are Athabascan, which the exception of *nipaâ*, which is from the Cree *nipaha* 'Kill him!' The predominance of French vocabulary may be attributable to the fact that Petitot's writing is French (Bakker 1996: 319).

Another traveler, Frederick Whymper, says of the Upper Yukon in 1868 that "as in other places, so here, there is a general jargon called 'broken slavee,' used for purposes of intercourse" (Whymper 1868: 226, in Bakker 1996: 317). In a reference work published in 1870, William H. Dall says of his Yukon area travels, "The usual mode of communication between the whites of this locality is a jargon somewhat like Chinook, known by the name of 'Broken Slavé.' The basis of this jargon, which includes many modified French and English words, is the dialect of Liard River" (Dall 1870: 106, in Bakker 1996: 318). Though Dall claims that the pidgin was a mode of communication for whites, German traveler Kurt Faber makes reference to a boat traveling down the Peel River in 1903 and 1904, full of "Kiowas, Crees, Chipewyans and Slaves" who communicate via "a sort of Esperanto from bits and pieces of English and French" (Faber 1916: 314, in Bakker 1996: 318).

According to one account, a French priest named Séguin who was residing with members of a Gwich'in tribe claimed that a rival English priest was offering the people tobacco so that they would pray with him rather than Séguin. The latter asserted that he had overheard the following sentence uttered from one chief to another in Slavey Jargon (Mishler 1988: 7):

(3) *"Tchézjekudjin, pagin i séni* l'aime todi, *kûka ts'édezjie séni* l'aime lan."

"The English priest I don't like at all, but I love tobacco very much."

(translation by Séguin)

Sandy Roberts has compiled a list of expressions used in Slavey (1973), using the Trager-Smith system of transcription:

(4)　　1. *yuw sleyviy kombrah?* 'Do you understand Slavey?'

kombrah from Fr. *comprends*, 'understand,' *yuw* from Eng. *you*

2. *daewdiy* 'no'

from Ds. *dáúdí* or *dódí* 'nothing'

3. *deynuw č'iylak sleyviy kombrah?* 'Does that boy understand Slavey?'

č'iylak 'young man' appears to be of Athabascan origin but

Roberts has not encountered it in Gwich'in

4. *gunahfow iytsahkoy niyzow?* 'You got a good wife?'

niyzow from Gw. *nizįį*, 'he/she/it's good'

5. *lahbahrtis minahtah.* 'I'm going back up river.'

lahbahr 'boat' and *tis* 'river' from Dene Sųłiné

6. *nitł'ahahdəhuw?* 'When you going back?'

7. *vahldəmos finiy.* 'No more Sunday. Six o'clock.' ['Sundown?']

finiy from Fr. *fini*, 'done'

8. *č'iylahkwah niyzow daewdiy.* 'That young man is no good.'

kwah from Gw. *kwaa*, 'no, not'

9. *se lakwey lahfol*. 'This person is foolish.'

    se from Fr. *c'est*, 'it's'; *lahfol* from Fr. *la folle*[3], 'the crazy

    person f.'

10. *yuw sahlahbriy!* 'You're trash!' (an insult)

    sahlahbriy from Fr. *saloperie*, 'junk'

11. *sahgriy mowjiy!* insult

    sahgriy from Fr. *sacré*, 'holy'

5.0 Semantic fields of French loanwords

I will now return the discussion to Slavey Jargon as a body of French loanwords rather than as a pidgin. Almost all French loans in Northern Athabascan are nouns. Most of them identify imported food, clothing, tools and religious terms (Prunet 1990: 484–502). A quick look at the data reveals that 'tea' is the most common, borrowed from French by all 13 languages represented in the data chart. Forms representing various products — Fr. *le sel* 'salt,' *la clef* 'key,' *le café* 'coffee,' *les cartes* 'cards,' *le coton* 'cotton' — follow, and the remainder of the words are by and large other trade goods.

A borrowed form for Fr. *sucre* 'sugar' is attested in 10 languages, but some of these may have come from English rather than French, especially the *súga* found in Bearlake, Slave and Dogrib, the three dialects of Slavey. See further discussion of the origin of 'sugar' in section 6.3, Loanwords lacking 1V-prefix, below.

Religious vocabulary also composes a notable semantic category within the French loans, particularly in Carrier. Two of the terms, Fr. *la messe* 'mass' and Fr. *le*

pape 'pope,' are notably Catholic in nature, and more words related to Catholicism appear in Carrier, including Ca. *lʌbenidas* 'penance' from Fr. *la pénitance,* Ca. *lʌsable* 'rosary' from Fr. *le chapelet,* and Ca. *lʌmistel* 'rosary' from Fr. *la mystère.* A handful of terms for measures also occur, such as Ha. *libú* and *libú'* 'mile' from Fr. *le bout.* Ha. *limíl,* Bl. *lamíl,* Sl. *limíl* and Ds. *lami* 'a thousand,' from Fr. *le mil,* also occur. Finally, there are some words for authority figures in Hare, such as Hr. *lísaldá* and *lísaldą́* 'soldier' from Fr. *le soldat* and Hr. *lígobi̧, lígobę́, légobę́* 'Hudson's Bay Company' from Fr. *la compagnie* 'the company.'

6.0 Morphology of French loans

A significant portion of Krauss (1983) is dedicated to analyzing the morphology and phonology of the French loanwords. In the following sections on these two aspects of Slavey Jargon, I present Krauss's work and incorporate material and analyses I have come up on my own.

6.1 Categories of French loans

Almost all Northern Athabascan loans from French are nouns, generally names of trade goods (see section 5.0, Semantic fields of French loanwords, above). There is one adjective, however, from Fr. *fin* 'fine,' that has assimilated as an enclitic meaning 'fancy' into Han and Gwich'in as *-fą̧ą̧.* The Gwich'in Junior Dictionary lists *fą̧ą̧* as an independent word, and Krauss (1983, 6) gives the sample sentence *fą̧ą̧ nàazhii* 'he's

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[3] Roberts links *lahfol* to the French *le fou,* 'crazy person m.,' but the feminine *la folle* seems more likely.

dressed up fine.' But Gwich'in also has hybrid loanwords Gw. *łeefạạ* or *tłeefạạ* 'perfume' as well as *łùhgạįfạạ* 'cookies' and *ik fạạ* 'fancy or dress clothes.' Han includes Hn. *łèwgạyyfạạ* 'cookies' and Hn. *dafạạ 'ek* 'shirt of mixed colors.'

Another adjective, *lafoo* 'silly,' exists in Gwich'in. It is stated in several sources that this derives from the French *le fou* [ləfu] 'crazy person m.,' but *la folle* [lɑfol] 'crazy person f.' has a closer sound correspondence to the Gwich'in form and thus seems like a more likely source. There are two curses, Fr. *saloperie* 'rubbish' or 'you rascal,' and Fr. *merde*, which occur in which both occur in Han and Gwich'in. The word *merci* 'thank you' occurs in eight languages. This includes Koyukon, an Athabascan language spoken in Western Alaska whose body of French loan comprises just two words, *baasee'* 'thank you' and *'emeedet* 'at noon,' from the French *à midi*.

6.2 Function of lV- prefix

The prefix lV-, where 'V' is one of several possible vowels, marks nearly every borrowed French noun, which means one can identify the bulk of French loans in any Northern Athabascan language simply by looking for the prefix.

In some Athabascan languages, such as Gwich'in, /l/ appears rarely in the language outside of French borrowed terms. The lV- prefix is a remnant of the definite determiner that can precede all French nouns. The determiners Fr. *le* [lə] (m. sg.), Fr. *la* [lɑ] (f. sg.) and Fr. *les* [lɛ] (plu., either gender) surface in various phonetic forms in Athabascan, and they can either have a morphological function or simply mark the word as borrowed from French through Slavey Jargon.

In Gwich'in, the vowel in the lV- prefix is determined entirely by vowel harmony. The prefix is realized as either *la-* or *li-*; it carries no information about the gender or number of the noun. Gwich'in words containing *a* and *o* receive the *la-* prefix, as in Gw. *lagàhfii* 'coffee' and Gw. *lagòshroo* 'pig,' while words with *i* and *e* have the *li-* prefix, as in Gw. *lìdii* 'tea' and Gw. *lìgeevàr* 'pepper.' There are no known French loans in Gwich'in that contain *u*, but patterns of vowel harmony in Gwich'in indicate that these words would take a *la-* prefix if they did exist, since the vowels *a*, *o* and *u* appear in Gwich'in words together. The lV- prefix in Gwich'in serves as a definitive marker of French origin.

In Carrier, the number distinction signified by the lV- prefixes remains, though gender marking has disappeared (see section 9.1, lV- prefix as proof of origin). There is also number variation across languages, as in *la caisse* 'box,' which appears as Hr. *lejié'*, Bl. *lijéé*, Sl. *lajeh*, Dg. *lajè* and Ds. *lagís*. Those forms with the *la-* prefix may indicate that the form borrowed was singular, Fr. *la caisse* [lɑkɛs], while those with the *le-* prefix show that the plural form Fr. *les caisses* [lɛkɛs] may have been the source, due to the close phonetic correpondence between the vowels [e] and [ɛ]. Words with the *li-* prefix clearly do not have an exact correspondence with either *la-* or *le-*, but [i] is phonetically closer to [e], indicating that there was a plural morpheme in the source form.

6.3 Loanwords lacking lV-prefix

Krauss asserts that the lV- prefix is such a definitive mark of a Slavey Jargon word origin that speakers of Hare and Slave have extended it to a loan of English derivation, Sl. *lamesh, limesh* 'matches.' But Rice (1989: 201) simply attributes this loan

to Fr. *la mèche* 'wick, fuse.' And there are plenty of English loans in Gwich'in, Carrier, Hare and other languages that have no IV- prefix, such as Gw. *friiban* 'frying pan,' *tuuvit* '25 cents' (from Eng. *two bits*), *saloojik* 'slapjack' and *seelik* 'silk.' Carrier contains *čaymʌn* 'Chinaman,' *gʷadaʔ* 'quarter,' *sdo* 'stove,' *sugah* 'sugar' and *tubids* 'two bits,' and Hare has *mili* 'milk.'

The only two nouns unmarked by the IV- prefix for all the Athabascan languages under discusssion are Fr. *le sucre* 'sugar' and Fr. *torchon* 'dishrag,' with several more for Carrier. The word for 'sugar,' however, may have come from English into some Athabascan languages. Despite the debatable origin of some of the forms, I have included all of them in the data chart. The source language of 'sugar,' a French loan found in 10 out of the 11 languages considered here, is contestable and depends on the history of the word in each language. The lack of a IV- prefix gives credibility to the suggestion that the word entered the Northern Athabascan languages through English, not French. Jean-François Prunet states definitively that the word for 'sugar' in Carrier came from English. In addition, the sound of the Northern Athabascan forms is closer to Eng. *sugar* than to Fr. *sucré*, especially if the source pronunciation in Eng. *sugar* had no word-final [ɹ]. Unexpectedly, none of the forms have word-intial [ʃ] as they do in the possible English source. Fr. *le sucre* 'sugar' or English *sugar* emerges as Tx. *tsu̧ga̧yy*, Ut. *tso̧o̧ga̧iy̧*, Nt. *sáwga* and *syáwa*, Hn. *songa̧yy*, Gw. *sunga̧ii̧*, Hr. *súhga*, Dg. *sìga*, and Bl., Sl. and Ds. *súga*. But Krauss (1983, 6) points out that the mention of French-derived forms for 'sugar' in Petitot (1876) means Hr. *súhga* and Ds. *súga* must have come from French.

These reflections on the possible origins of 'sugar,' however, do not shed light on why the forms of Fr. *torchon* 'dishrag' lack the IV- prefix.

As an additional note, Krauss (1983, 6) points out that, in Tanacross, Upper Tanana, Han and Gwich'in, "Alaskan forms part folk-etymology -*gǫyy* 'dry,' " with nasalization and affrication of su- in Tx. *tsųgǫyy* and Ut. *tsǫǫgǫiy*.

6.4 Gwich'in suffix *lęįi*

Gwich'in has a plural suffix *lęįi* 'many,' used in words like *gwinlęįi* 'many times,' that sounds strikingly similar to the French plural determiner *les* that can precede nouns. There is a difference in vowel quality, as Fr. *les* [lɛ] is an oral monophthong while Gw. *lęįi* [lẽĩ] is a nasal diphthong, but the sound correspondence is close. Still, Gwich'in only has 35 French loans, and the addition of morphemes through borrowing usually only occurs when the borrowing is heavy (Hock and Joseph, 1996, 255). Gwich'in has another plural suffix *nǫįi*.

6.5 Absence of French indefinite determiners

One occurrence worth noting is that French speakers just as often employ the indefinite determiners *du* (masc. sing.), *de la* (fem. sing.) and *des* (plu., either gender), glossed as 'a' or 'some,' but these are reflected nowhere in the borrowed forms.

7.0 Phonology of French loans

The forms of French loans in Northern Athabascan have undergone numerous phonological changes, many of them inconsistent, others explainable. In the sections on phonology below, I present the phonemic inventories of French and of several Northern Athabascan languages. I then describe various phonological transformations that have produced the forms of French loanwords heard in Athabascan speech today and offer analyses for some of those transformations.

7.1 Phonemic inventories of French and Northern Athabascan

My efforts to track down information about the phonetics of the French dialect spoken in northwestern Canada in the 19th century and even the phonetics of modern-day French Canadian were unsuccessful, so I present instead a vowel and consonant inventory for Standard French (Tranel 1987: 4), assuming that it is fairly close to that of Canadian French. The characters are in the International Phonetic Alphabet, because the French orthographic characters do not have a one-to-one correspondence with the phonemes of the language.

French vowels—i, e, ɛ, a, y, ø, œ, u, o, ɔ, ɑ, ɛ̃, œ̃, ɑ̃, õ

French consonants—p, t, k, b, d, g, m, n, ɲ, f, s, ʃ, v, z, ʒ, l, ʁ

French glides—j, ɥ, w

Since there is some phonetic variation across the Northern Athabascan languages, I present as representatives of this body of languages the phonemic inventories of three

languages, Gwich'in (Peter 1993: ii), Northern Tutchone (Ritter 1976) and Hare (Rice 1978: 5–6). These are written in the orthographic system of each language, since Northern Athabascan spelling systems are linked closely enough to the phonetics of each language to be useful in understanding their sound systems.

Gw. vowels— i, u, e, o, a, ĩ, ũ, ẽ, õ, ã

Gw. consonants— t, t' (ejective), tł, tł', tth, tth', ts', tz, tr, tr', th, ch, ch', k, k', d, dl, dh

> (voiced *th*), ddh (voiced *tth*), dz, dr, j, g, gh, m, n, nh (voiceless *n*), f (found only in loans), s, shr, sh, v, z, zhr, zh, l, ł, r, rh, kh, ' (glottal stop)

Gw. glides—y, h

Nt. vowels— i, u, e, o, a, ĩ, ũ, ẽ, õ, ã

> Nt. consonants—t, t', tl, tl', th, tth, tth', ts, ts', tr, t'r, ch, ch', k, k', kr, k'r, kw, kw', d, dl, dh, ddh, dz, dr, j, g, gr, gw, m, n, mr, nr, s, sh, shr, kh, khr, khw, z, zh, zr, gh, ghr, ghw, ł, łr, l, lr, tl'r, '

Nt. glides—y, h

Hr. vowels—i, u, e, o, a, ĩ, ẽ, õ, ã

Hr. consonants—t, t', tl', ts', ch', k, k', b, d, dl, dz, j, g, gh, gw, m, n, f, s, sh, z, zh, l, ł, r

Hr. glides—y, h, w, w'

7.2 Phonetic realizations of French [we]

The pronunciation of the French *oi* [we] in Athabascan ranges from [ue] to [i] to [e]. The expected pronunciation would be [we], as French Canadians say [we] where European French speakers say [wɑ]. *La soie* 'silk,' for example, is pronounced [lɑswe] in Canadian French. The same item is *laswe* in Gwich'in, *lasué* in one Hare form and *lahsue* or *lasué* in Slave. But Fr. *le poivre* 'pepper,' which would be pronounced [lʌpwevʁ] in French Canadian, is realized as Hn. *lëgovär* and Gw. *ligeevàr*, with [o] and [e] replacing the [wɑ] sound and no [we] to be found. For Fr. *la poêle* 'frying pan,' which is pronouned [lɑpwel] in French, some of the Athabascan forms are Hr. *lebíl* and *líbilí*, Bl. *lígwilí*, Sl. *libé*, and Ds. *labél* and *labóyl*, which show [i], [e], [ɛ] and [oy] emerging for [we].

7.3 Phonetic realizations of French [y]

The French rounded high front vowel [y] is most often realized in Athabascan as [u]. Two out of the five forms of Fr. *le ruban* [ləʁybã]'ribbon' have [u], Hr. *lérubą̀* and Sl. *lirubą̀*. Both forms of Fr. *la cuillère* show [u]: Hr. *léjuyé'* and Bl. *líshuyéé*. But there are inconsistencies across the board. In Fr. *le ruban* 'ribbon,' for example, the Athabascan forms comprise Gw. *larabá*, Hr. *lérubá*, Bl. *lílibá*, and Sl. *libą̀* and *lirubą̀*, showing three alternatives, [a], [u] and [i], for the French [y]. Six out of 10 forms of *sucre* 'sugar' do show [u]. They are Tx. *tsų̀gɑyy*, Gw. *sungą̀įį*, Hr. *súhga*, and Bl., Sl. and

Ds. *súga*. But it is possible that this is due to these loans having an English source (see section 6.3, Loanwords lacking IV-prefix).

7.4 Oral and nasal vowels

Nasalization and denasalization of vowels is another set of processes that shows variation across the data. French and the Athabascan languages both have oral and nasal vowels, but they are realized unpredictably in the French loans.

Standard French features the following vowels (Tranel 1987: 4)

oral—i, e, ɛ, a, y, ø, œ, u, o, ɔ, ɑ

nasal—ɛ̃, œ̃, ɑ̃, õ

As representatives of the sound systems of Northern Athabascan languages in general, I have listed the vowel inventories (not including diphthongs or geminates) for four of the languages. For the sake of consistency, I have used the International Phonetic Alphabet here instead of each language's orthography. (The main difference is that Northern Tutchone indicates a nasal vowel with *Vn* rather than a tilda above the vowel.)

Northern Tutchone (Ritter 1976):   Hare (Rice 1978: 5–6):

    oral—i, u, e, o, a   oral—i, u, e, o, a

    nasal—ĩ, ũ, ẽ, õ, ã   nasal—ĩ, ẽ, õ, ã

Gwich'in (Peter 1993: ii):

    oral—i, u, e, o, a

    nasal—ĩ, ũ, ẽ, õ, ã

Dogrib (Coleman 1976: 9):

    oral—i, e, o, a

    nasal—ĩ, ẽ, õ, ã

Fr. *l'argent* 'money' has a nasal vowel in the second syllable [laʁʒɑ̃], but the two Athabascan words for money that derive from this French word (as opposed to the set that derive from Fr. *les sous* 'money), have oral vowels. These two forms are Hn. *lëzraa* and Gw. *làraa*. This is a surprising change, since French and Athabascan both feature [ɑ̃].

One Athabascan form of Fr. *le cochon* [kœʃõ)] 'pig,' which has a nasal vowel in the second syllable, retained the French nasality, in Hr. *lígoshǫ*. The others replaced it with an oral vowel: Hn. *lëgëshuu*, Gw. *lagòhshroo*, Bl. *lígoshó* and Sl. *lígoshó*. This, too, is unexpected, since the donor language and borrowing language both include [õ].

The pronunciations of Fr. *torchon* [toʁʃõ)] 'dishrag,' which, like Fr. *le cochon* 'pig,' has [õ] in the second syllable, are even more complicated. One form has a nasalized second vowel like the French, Bl. *doshǫ*. One has two nasal vowels, Hr. *dǫshǫ'*. One has a nasalized first vowel and a denasalized second vowel, Sl. *tǫsho*. And two have only oral vowels, Hn. *dähsroo* and Gw. *dohshroo*.

A similar situation presents itself in the case of *les uns* [lɛzœ̃] 'ones, ace.' Athabascan does not contain the vowel [œ] in oral or nasal form, but every Athabascan language that features the 'ones, ace' loanword shows the same vowel [a] in the second syllable. In Hr., Bl., Sl. *lizá'*, the second syllable is nasalized as in the original French

pronunciation. In Dg. *lizà* and Ds. *lás*, there is no nasalization. An explanation, however, may be that these loans came from a difference source word, Fr. *l'as* 'ace' (Rice 1989: 201).

Finally, forms of Fr. *la clef* [lɑkle] 'key,' which has an oral vowel, remained oral in five Athabascan languages: Ca. *lʌgli*, Hn. *lĕdlii*, Gw. *lədli* (one dialect), Bl. *le(e)dlú*, and Sl. *ladli* and *ledlú*. Three forms show nasality in the second syllable: Ut. *lidlin*, Nt. *dédlín'* and Gw. *lìdlįi* (another dialect). The vowel [e] in the original French does occur as a nasalized vowel in Athabascan, and so do [u] and [i], the two vowels that emerge in the Athabascan forms of Fr. *la clef* 'key.' It is difficult to find a principled explanation for this inconsistency.

7.5 Phonetic realizations of French /r/

One principled sound change is the disappearance or alteration of the French /r/, which is the uvular fricative [ʁ]. Athabascan forms of French loans containing [ʁ] have often undergone lenition, where the [ʁ] becomes [h] or is simply dropped. Fr. *la cuillère* 'spoon' is realized as Hr. *léjuyé'* and Bl. *líshuyéé*, with no /r/ at all in the surface form.

In a few cases, [h] appears, as in Gw. *lavàshrdu*, which is one form of Fr. *le marteau* 'hammer.' The occurrence of [h] also takes place in two forms of Fr. *le torchon* 'dishrag' (Hn. *dähsroo* and Gw. *dohshroo*) and in four forms of Fr. *merci* 'thank you' (Hn. *mä̀hsi'*, Gw. *mà̀hsì'*, Hr. *mà̀hsi* and Sl. *mahsi*).

In most cases, however, the French [ʁ] surfaces as the Athabascan /r/, a retroflex [ɻ]. *Le baril* 'keg, barrel. washtub,' for example, is realized as Ca. *lʌbari*, Hn. *lëbä̀zrii*,

Gw. *làbarii* and Hr., Bl. and Sl. *líbarí*, all of which contain [ɹ]. The same sound emerges

in Fr. *le ruban* 'ribbon,' which has resulted in the pronunciations Gw. *larabá*, Hr. *lérubą́*

and Sl. *lírubą́*.

But, in many cases where the /r/ does emerge, the form undergoes either

epenthesis or deletion of another sound near the /r/. There is [z]-insertion, for example, in

the Han forms of *le baril* 'keg,' *lëbäzrii* and *lëbäzrell*. In Fr. *saloperie* 'junk, you rascal!,'

the vowel between before /r/ disappears, producing the forms Hn. *säläbrii* and Gw.

selàbrii and *selèbrii*. In Fr. *le poivre* 'pepper,' vowel insertion breaks up the consonant

cluster /vr/. The loan is realized as Hn. *lëgovär* and Gw. *ligeevàr*.

There are also several cases of lateral replacement, where [ʁ] is realized as [l]. Fr.

le ruban 'ribbon' emerges as Bl. *lílibá*, and Fr. *les cartes* 'cards' emerges as Hn.

lëgäldäh, though all its forms of Fr. *les cartes* and Fr. *le ruban* retain an /r/.

7.6 Emergence of [h]

The sound [h] also emerges in forms that had no [ʁ] in the original French, such

as Hr. *lé(h)silí* 'salt' and Gw. *lagàhfii* 'coffee'. This may be to justify the succeeding

intervocalic voiceless fricative. Further examples are the Gwich'in forms *dohshroo*

'dishrag,' *lagàhfii* 'coffee' and *lagòhshroo* 'pig.' But the [h] also appears in place of the

French [ʁ] in cases where an intervocalic voiceless fricative does not follow, as in Bl.

límahdú 'hammer,' from Fr. *le marteau*, or in Hr. *lígahdú*, one of the Hare forms for *les*

cartouches 'rope, bullet.'

7.7 Voiced and unvoiced consonants

In general, voiceless stops in French words emerge as similar voiced stops in Athabascan; [p, t, k] become [b, d, g]. In the Athabascan forms for *les cartes* 'cards,' for example, all but one have [g] in place of a French [k]: Ca. sg. *lʌgar*, Ca. pl. *ligar*, Hn. *lëgäldäh*, Gw. *làga(a)r*, Hr. *lígarí* and *ligár*, Bl. *ligá*, and Sl. *lígar(i)* and *lika*. Similarly, most forms for *la poêle* 'frying pan' show [b] instead of [p], but one form shows [gw]. They are Hr. *lebíl*, *lébelí* and *líbilí*, Bl. *lígwilí* and *lígwilé*, Sl. *libé* and *labe*, and Ds. *labél* and *labóyl*. But there is unpredictable variation. In Bearlake, for example, *les cartes* 'cards' is *ligá*, but *le café* 'coffee' is *líkafí*. In Slave, the opposite process occurs: *le café* is realized as *ligafi*, but *les cartes* is *lika*.

7.8 Phonetic realization of word-final consonants

Final consonants in French loans are patchily deleted or replaced with various other consonants. In Fr. *le sel* 'salt,' for example, four variants occur: retention of the word-final [l] in Ca. *lisel*, Tx. *lsel*, Gw. *lisil*, Hr. *lesíl*, Bl. *lisél* and *nisél* and Sl. *lisél*; deletion in Nt. *lesyá'*; conversion to [w] in Hn. *lëseww*; and the addition of a vowel [i] in Hr. *lé(h)silí* and Sl. *liselí*.

7.9 Phonetic realization of French [kl]

One change that is entirely expected is variation on the French input [kl], since this sound pair does not occur in the phonology of the Athabascan languages. It makes

sense, then, that Fr. *la clef* 'key' emerges as Ca. *ʌgli*, At. *ldleni*, Ut. *lidlin*, Nt. *dédlín'*,

Hn. *lëdlii*, Gw. *lidlįi* and * lədlí*, Bl. *le(e)dlú*, and Sl. *ladli* and *ledlú*.

7.10 Note on Fr. l'argent 'money'

In the case of 'money,' all the available literature attributes it to the French word

l'argent [lɑʁʒɑ̃], which is used in standard French today. This makes sense for the

borrowed forms Hn. *lëzraa* and Gw. *làraa*, which bear some phonetic resemblence to Fr.

l'argent. But the Athabascan forms At. *lzaasi*, Tx. *lsaaz*, Ut. *lesuu* and Nt. *lezé'* indicate

that Fr. *les sous* [lɛsu], the French colloquial word for 'money,' was probably the source

for these forms.

8.0 Explanations of phonological changes

There are numerous explanations for some, but not all, of these phonological

changes. Many, naturally, are due to the phonology of the borrowing language. Others

may be a result of the dialect of French spoken by people from varying geographic areas

and social classes. In addition, because the Athabascan speakers borrowed many words

not directly from French speakers but from neighboring tribes who spoke Slavey Jargon,

many forms were probably already altered to fit the phonology of the intermediate

language. There is also the phenomenon of phonological correspondence, whereby a

word with a certain sound structure changes to fit similar forms from another language.

Krauss gives the example of Ds. *bes* and Dg. *be* 'knife.' He speculates that Dogrib

speakers may have borrowed *lames*, which is Dene Sųłiné's French loanword for 'mass,' as *lame*, in imitation of the correspondence between *bes* and *be*.

8.1 Palatalization of [t] and [d]

Those familiar with Canadian French might note that, in one loanword, /k/ before a front vowel undergoes palatalization, a phenomenon that occurs in Canada but not in standard French. Fr. *La cuillère* 'spoon' is Hr. *léjuyé'* and Bl. *líshuyéé*. This is in line with Canadian French pronunciation, as Canadians do palatalize [t] and [d] before the front vowels [i] and [y]. However, palatalization of [k] also occurs before the mid front vowel [ɛ] in *la caisse* 'box,' pronounced [lakɛs] in French. The forms are Gw. *lìgishr* and *lagis*, Hr. *lejié'*, Bl. *lijéé*, Sl. *lajeh*, Dg. *lajè* and Ds. *lagís*. In the case of Fr. *la caisse*, it is possible that Athabascan speakers were imitating the palatalization pattern of the French but applying it to a new environment. But, since there are no other instances of a [kɛ] sequence in Athabascan loans from French, it is impossible to tell whether Athabascan speakers would have palatalized the [k] in the same environment elsewhere. No other French loanwords in Athabascan contain a palatalized [k].

8.2 /ar-er/ variation

Two words that contain the phonological segment /me/ in Standard French come up with /mɑ/ in Northern Athabascan. One of these is Fr. *merci* 'thank you,' attested in seven languages as Ca. *masi*, Nt. *masi'*, Hn. *màhsi'*, Gw. *màhsì'*, Hr. *ma(h)si*, Bl. *mási(-cho)* and Sl. *mási(-cho)* and *mahsi*. The other is Fr. *merde*, a curse, attested in two

languges as Hn. *lämärr* and Gw. *làmaar* and *lamaashr*. In the case of both Fr. *merci* and Fr. *merde*, the /me/ segment is followed by /r/, but this /r/ does not show up in any of the Athabascan forms for Fr. *merci* — it is either replaced by [h] or deleted altogether — and it is dealt with through the insertion of an epenthetic [ʃ] in Gw. *lamaashr*.

More notable is the shift from a half-closed front vowel [e] in Standard French to an open back vowel [ɑ] in every one of these forms. Krauss (1983, 10) says the following on the subject: "Note further French e̱ > Athabaskan a̱ in merci and merde, the latter perhaps explained by the recognized French variant marde, the former not." This would indicate that Athabascan speakers might have imitated the [mɑr] segment in Fr. *marde* when they assimilated the loan Fr. *merci*. For such an imitation to occur, Fr. *merci* would have to have entered Northern Athabascan after Fr. *merde, marde*, or Athabascan would have to have borrowed the two items at around the same time.

But Petitot (1876) lists *marci djiiño* for Loucheux (Gwich'in) as well as *marsi ádessi* for Peaux de Lièvre (Hare) and Montagnais (Algonquin, not an Athabascan language). It is not clear whether Fr. *merde, marde* was already present in Athabascan at this time. If not, it would indicate that Athabascan speakers simply borrowed Fr. *merci* and *merde* with the [mɑr] pronunciation of French Canadian at that time. Indeed, in a 1983 letter to Michael Krauss, Keren Rice writes, "It might be worth checking the influence of Canadian French where e̱ is often pronounced as a̱ — e.g. mère → mar. This could be the reason for máhsi rather than mesi or the like."

9.0 Origins of French loanwords in Carrier

The only article I came across that was dedicated entirely to examining specific phenomena of French loanword assimilation in an Athabascan language was "The Origin and Interpretation of French Loans in Carrier," written by Jean-François Prunet in 1990. Because I found his analyses fascinating and because I feel they should function as a starting point for further research on French loans in Carrier and other Athabascan languages — especially since Prunet uses loanword phonology to better understand the sound system of native Carrier words — I have dedicated a significant portion of my thesis to presenting the information contained in Prunet's article.

9.1 lV- prefix as proof of origin

A language that features about 80 French loans and nearly as many proper names is Carrier (Prunet 1990: 484–502). It is an Athabascan language currently spoken by about 1,500 people in north central British Columbia (Ethnologue 2003). In his 1990 article, Prunet raises the possibility that the loans diffused through Chinook Jargon, a trade pidgin from the Pacific Northwest that included some French loans, into Carrier. He then refutes that argument, offering a "direct borrowing hypothesis" and several means of evidence that Carrier speakers borrowed the loans directly from French.

The French definite determiners *lə*, *la* and *lɛ* can precede nouns in French. *Lə* and *la* are the singular definite determiners for masculine and feminine nouns, respectively, while *lɛ* is the plural definite determiner for nouns of either gender. The majority of French loans in Carrier have retained a prefix of lV- that does perform a morphological function, unlike the word-initial lV- found in French loans of other Northern Athabascan

languages. (Those lV- segments are not morphemes but rather remnants of a French grammatical pattern; they have come to function as markers of European loanwords.) But, unlike in the original French, the determiners in Carrier ignore gender. There is one determiner for singular nouns, *lʌ-*, and another for plural nouns, *li-*.

Chinook Jargon, on the other hand, did the opposite: It included both the French masculine singular determiner *lə* and the plural *lɛ* as Cj. *le-* (or *li-*, according to Thomason 1983: 836), and Fr. *la* remained Cj. *la-*. From this pattern, Prunet developed a "test of origin" to determine whether French loans in Carrier could have diffused through Chinook Jargon or whether they necessarily came directly from French. A large majority of French nouns in Carrier begin with *lʌ-*, which does not exist in Chinook Jargon, so they must have come from French.

There are a few singular French words in Carrier that do begin with the Cj. prefix *li-*. It would be plausible that these were borrowed from the jargon and given a number assignment in Carrier that differed from the original French but for the fact that they are not attested in that language.

9.2 /r/ variation and proper names as proof of origin

A second method of proof comes from the fact that the /r/ found in French (and English) words was either deleted or converted to /l/ in Chinook Jargon. Many French loans in Carrier, however, do feature the /r/ of the original French words. Any loanword with /r/, therefore, is evidence of direct borrowing. The same logic applies to certain French words whose /f/ sounds became /p/ in Chinook Jargon but which do contain the original /f/ in Carrier.

In addition, Carrier has incorporated nearly 70 French proper names, such as Melya (from Amélia), Badis (Baptiste) and ElizΛbeg (from Élisabeth). In general, speakers are unlikely to borrow proper names from trade languages. The names, therefore, must have entered Carrier through Canadian French, not Chinook Jargon, because, presumably, Carrier would not have borrowed the names at all if they had come from a trade language.

Finally, about 67 English loans exist in Chinook Jargon (Hale 1870: 7), but there are only about five in Carrier. If there had been a period of frequent borrowing into Carrier from Chinook Jargon, Carrier would have had no way to select the French words. There do exist some French loans in Carrier that could have come from Chinook Jargon, containing neither an /r/ nor a *lΛ-* prefix, but the above evidence makes the occurrence of such borrowing unlikely.

10.0 Phonology of French loanwords in Carrier

Prunet analyzes three aspects of the phonology of French loanwords in Carrier to reveal traits of Carrier phonology not easily discerened from examining native words only. First, he argues that hiatus-breaking — the occurrence of a consonant that serves to separate two adjacent vowels — is a result of obligatory syllabic branching rather than adjacent nuclei, as Adrien-Gabriel Morice has claimed (1938, 294 in Prunet 1990: 492) . It is clear from native Carrier words that VV sequences are not permitted, but there are few examples from Carrier morphology that shed light on how or why. Prunet does offer one example:

(5) *xΛna-i* 'animal' ('that which breathes') → *xΛnayi, xΛnay*

In this case, a glide *y* separates the two adjacent vowels. The Carrier forms of French proper names show more of the same:

(6)

French word	pronunciation	Carrier form	gloss
Léo, Léon	*leo, leɔ̃*	*lejo*	male name
Noé	*noe*	*nʌwe*	'Noah'
Noël	*nɔɛl*	*nʌwel*	'Christmas'
Léonie	*leɔni*	*lejoni*	female name
Moïse	*moiz*	*mojiz*	'Moses'
Bethléem	*bɛtleɛm*	*betlejem*	'Bethlehem'

10.1 Explanation of glide insertion

In French names with two adjacent mid vowels, a glide arises in the onset of the second syllable, and it takes on the backness and roundness features of the first vowel, as in *lejo*. In the case of two adjacent vowels with different heights, the glide takes on the backness and roundness features of the second vowel, as in *mojiz*.

The existence of medial glides that break up vowel clusters is due to a general constraint on obligatory onsets, Prunet says. Word-initial /i/ in Carrier is usually pronounced [yi], yielding [yintso] from /inᶴo/ 'you (sg.) are crying,' for example, or [yitˢo] from /iDtso/ 'we (dual) are crying.' Word-initial *u* usually emerges as [wu] or [ɣu], as in [wuzʌl] and [ɣuzʌl] from /u- zʌl/ 'his soul.' For words beginning with ʌ, a "light" prothetic with place of variation varying from the larynx [h] to the uvula [χ]

precedes the ʌ, as in /ʌʦo/ 'he is crying' → /ʌsso/ (by assimilation) → /hʌsso/. In *ndo* 'upward,' the *n* can be syllabic or non-syllabic; if it is non-syllabic, the word is pronounced [*hʌndo*]. The same two prothetics appear before words beginning with /a/: /a/ 'yes' is pronounced [*ha*], /at'en/ 'approximately' is realized as [*ha'ten*], and /ait'oh/ 'it cannot' is said [*hayt'ɔh*]. (No known Carrier words begin with *e* or *o*.) To unify the occurrence of word-initial glides, Prunet analyzes the appearance of *h* and *χ* before *a* and ʌ as vowel spreading onto an obligatory onset position in the same way as he does *y* before *i* and *w* and *y* before *u*. Spreading of vowel features onto obligatory onsets occurs in both directions. /dlo-ʌntisin/ 'he will smile' is pronounced as both [*dlowʌntisin*] and [*dlohʌntisin*], where the epenthetic takes on the backness and roundness features of either ʌ or *w*.

Prunet points out that *i/y* and *u/w* alternations are common among the languages of the world. Though rare, alternations of *a* and a low glide do exist in Axininca Campa, Nupe, Tigre and Mandarin Chinese. He also concedes that hiatus-breaking in Carrier and other languages may be unrelated to the appearance of syllable-intial glides rather than a phenomenon of syllable structure constraints.

10.2 Paragoge in English and Spanish loans

Glottal paragoge following word-final *a* is next addressed in Prunet's article. Carrier allows vowels in word-final position, so a change in vowel-final foreign words is

not expected, barring adjustments of vowel quality. But five English and Spanish loans

undergo paragoge, where [ʔ] and [h] attach to [a] in word-final position:

(7)

original word	Carrier form	gloss
quarter	*gʷadaʔ*	'quarter'
Sarah	*selaʔ*	female name
Lisa	*layzah*	female name
sugar	*sugah*	'sugar'
manta (Sp.)	*mandah*	'canvas'

If the English speakers in Canada at the time of the loanword diffusion did not

pronounce word-final [r], all the words in the table above end in *a*. They also all have

first-syllable stress, as expected with these bisyllabic English and Spanish words. French,

like Carrier, has a word-final stress pattern. Prunet proposes that the final stressless *a* was

reduced to schwa, becoming ill formed in Carrier, which does not have schwa-final

words. The final *h* and *ʔ* function to close off the syllable, and the four English words

adopt word-final sress, though the Spanish loan keeps word-intial stress. Prunet mentions

parenthetically that the loans might have had a schwa in word-final position in the source

form, as well. This seems like a more likely explanation, as the four English examples, at

least, do end in schwa rather than *a*.

10.3 Deletion of nasal vowels in French loans

Finally, Prunet comments on the modification of nasal segments in some French loans of Carrier. Both *m* and *n* exist in Carrier, and in onset and coda positions, so no change from the French is expected. However, some changes are apparent:

(8)

French word	pronunciation	Carrier form	gloss
le ministre	ləminis(t(r))	lʌbinis	'Protestant'
la cheminée	laʃəmine	lʌsuni	'fireplace'
la communion	lakɔmynjɔ̃)	lʌgomeyo	'communion'
Chinaman (Eng.)	tʃajnʌmʌn	tʃajmʌn	'Chinaman'
Dominique	dominik	domineg, doneg	male name

In the first word *lʌbinis* 'Protestant,' the bilabial *m* is denasalized, yielding the bilabial stop *b*. In every other example, a syllable containing a nasal consonant is deleted. All of these words have two adjacent nasal-initial syllables, and they are the only French loans in Carrier with such a feature. In those words above that undergo nasal segment deletion, it is the second nasal syllable that disappears. In all other French loans that include nasal segments, no deletion of syllables occurs. Prunet proposes that Carrier has a constraint against nasal sequences. The Obligatory Contour Principle, which prevents sequences of identical segments, is a likely rationale, he says.

11. 0 Conclusion

Slavey Jargon the trade pidgin gave rise to Slavey Jargon the body of French loans. Through contact with European trappers and, later, missionaries, Athabascans in Alaska and Canada as well as Crees and Eskimos produced a contact language that included French words. These loanwords eventually diffused into 13 languages that range from Koyukon in central Alaska to Slave and Hare in the western Northwest Territories. Hare, which acquired the most French loans from Slavey Jargon, appears to be the point of origin for the diffusion.

The exposure of Athabascan speakers to the pidgin resulted in a body of French loanwords that primarily label trade goods, with some religious terms and words for authority figures. This segment of the Northern Athabascan lexicon is notable because of these languages' general resistance to borrowing.

The lV- prefix on almost all French loans has varying functions that depend on the particular language. These functions range from marking number in Carrier to assimilating to rules of vowel harmony in Gwich'in. In every language considered here, lV- serves as a definitive marker of origin [+Slavey Jargon]. It is unclear why Slavey Jargon speakers would have adopted only the definite determiner lV- from French when French speakers in fact use the indefinite determiners *du, des* and *de la* just as often in speech.

Phonologically, the nativization of words from Slavey Jargon into Athabascan languages has been complicated and sometimes unpredictable. Some deviations from Standard French that readers may be familiar with, such as palatalization of /t/ and /d/ and the conversion of /er/ to /ar/, are a simple result of the Canadian dialect of French that

was spoken at the time of contact. Others, such as the realization of French /kl/ as Athabascan /dl/, is due to the phonetic differences among the languages. At least one of them, Ds. *bes* and Dg. *be* 'knife,' can be explained through a phonological correspondence between the two languages in question. Perhaps a closer look at this phenomenon would reveal reasons for the slight variations among the same word in many different Athabascan languages. But many sound transformations — vowel changes in particular — seem unprincipled.

At least one in-depth formal study of French loans in an Athabascan language has been published in an academic journal. Jean-François Prunet's analysis of the origin and phonology of French loanwords in Carrier is detailed above.

11.1 Call for further research

This thesis has drawn together much of the existing literature on Slavey Jargon, both the contact language and the body of French loanwords. It has assembled a corpus of data compiled from numerous sources, and it has presented most of the linguistic analysis that has been made available on the subject. But fully understanding the history of Slavey Jargon requires much more study. Most of the available information on contact between Athabascans and whites makes reference to English-speaking Europeans who established outposts in Alaska and Canada, so it is unclear why Athabascans would not have used English words for the trade goods whose names they borrowed from Slavey Jargon. The same need for further study applies to the phonological changes that have produced the French loanwords that exist in modern Athabascan speech.

References

Bakker, Peter. 1996. "Broken Slavey and Jargon Loucheux: A First Exploration." In
     Trends in Linguistics: Studies and Monographs 88. New York: Mouton de Gruyter.
     317–320.
—— and Anthony P. Grant. 1996. "Interethnic Communication in Canada, Alaska and
     Adjacent Areas." In Language Contact in the Arctic: Northern Pidgins and Contact
     Languages. Trends in Linguistics: Studies and Monographs 88. Edited by Ernst
     Hakon Jahr and Ingvild Broch. Berlin, New York: Mouton de Gruyter. 1135–1140.
Coleman, Phyllis. 1976. Dogrib Phonology. Ann Arbor: University Micofilms
     International. 9.
Cook, Eung-Do. 1991. Athapaskan. In Oxford International Encyclopedia of Linguistics,
     vol. 1, 122–128. Oxford: University Press.
Dall, William H. 1870. Alaska and its resources. Boston: Lee and Shepard. P. 106.
     Citation from Bakker 1996: 318.
Faber, Kurt. 1916. Unter Eskimos and Walfischfängern, Eismeerfahrten eines jungen
     Deustchen. Stuttgart: Verlag Robert Lutz. 314. Translated from the German by Peter
     Bakker. Citation from Bakker 1996: 318.
Haas, Mary. 1968. Notes on a Chipewyan Dialect. International Journal of American
     Linguistics 34.3.165–175. Forms are in Yellowknife dialect.
Hale, Horatio Emmons. 1890. An International Idiom: A Manual of the Oregon Trade
     Language, or "Chinook Jargon." London: Whittaker &Co. 7.
Hock, Hans Henrich and Brian D. Joseph. 1996. Language History, Language Change,
     and Language Relationship: An Introduction to Historical and Comparative
     Linguistics. Trends in Linguistics: Studies and Monographs 93. Edited by Werner
     Winter. New York: Mouton de Gruyter. 255–260.
Jetté, Jules and Eliza Jones. 2000. Koyukon Athabascan Dictionary. Edited by James
     Kari. Fairbanks: Alaska Native Language Center, University of Alaska Fairbanks.
Kari, James, ed. 1990. Ahtna Athabascan Dictionary. Fairbanks: Alaska Native Language
     Center, University of Alaska Fairbanks.
Krauss, Michael. 1983. Slavey Jargon: Diffusion of French in Northern Athabascan.
     Fairbanks: Alaska Native Language Center, University of Alaska Fairbanks.
——. 1997. The indigenous languages of the north: A report on their present state.
     Northern Minority Languages: Problems of Survival, ed. by Hiroshi Shoji & Juha
     Janhunen, 1-34. (Senri Ethological Studies 44.) Osaka, Japan: National Museum of
     Ethnology.
McClellan, Catherin. 1981. "Intercultural relations and cultural change in the Cordillera."
     In Subarctic (Handbook of North American Indians 6). Edited by June Helm.
     Washington: Smithsonian Institution. 378–401. Citation from Bakker 1996: 318.
McDonald, Robert. 1863. Excerpt of letter to Church Missionary Society. Rupert's Land
     Provincial Archives, Winnipeg.
Mishler, Craig. 1988. Missionaries in Collision: Anglicans and Oblates Among the
     Gwich'in, 1861–65. Juneau. 7. Paper presented to Alaska Anthropological
     Association, Fairbanks.

Peter, Katherine. 1993. Gwich'in Junior Dictionary. Dinjii Zhuh Ginjik Nagwan Tr'iłtsąįį. Fairbanks: Alaska Native Language Center, University of Alaska Fairbanks.

Pétitot, Émile. 1889. Quinze ans sous le cercle polaire. Mackenzie, Anderson, Youkon. Paris: E. Dentu. 292–293.

———. 1876. Dictionnaire de la langue Dènè-Dindjié: Dialectes Montagnais ou Chippewayan, Peaux de Lièvre et Loucheux … Paris: E. Leroux: San Francisco: A.L. Bancroft.

Prunet, Jean-François. 1990. The Origin and Interpretation of French Loans in Carrier. *International Journal of American Linguistics* 56.4: 484–502.

Rice, Keren D. Hare Dictionary. 1978. Ottawa: Northern Social Research Division, Department of Indian and Northern Affairs.

———. 1983. Personal correspondence to Michael Krauss.

———. 1989. A Grammar of Slave. New York: Mouton de Gruyter. 199–205.

Ritter, John. 1976. Mayo Indian Language Noun Dictionary. Whitehorse, Yukon: Yukon Native Language Centre.

———, Tommy McGinty and Johnson Edwards. 1977. The Selkirk Indian Language Noun Dictionary. Whitehorse. Yukon: Yukon Native Language Centre.

Slobodin, Richard. 1981. "Kutchin." In Subarctic (Handbook of North American Indians 6). Edited by June Helm. Washington: Smithsonian Institution. 514–532, 529. Citation from Bakker 1996: 318.

Thomason, Sarah G. 1983. Chinook Jargon in areal and historical context. *Language* 59: 820–70. In Prunet 1990: 486.

Tranel, Bernard. 1987. The Sounds of French. New York: Cambridge University Press. 4.

Wilhelm, Andrea Luise. 1992. Noun Incorporation in Northern Athapaskan. Calgary, Alberta: University of Calgary Linguistics Department. 16.

Whymper, Frederick. 1868. Travel and adventure in the territory of Alaska. New York: Harper and Bros. Pg. 226. Citation from Bakker 1996: 317.

August 2003. Ethnologue: Languages of the World, 14th Edition. Retrieved from http://www.ethnologue.com/show_language.asp?code=CAR.

Young, Robert W. and William Morgan Sr. 1991. The Navajo Language: A Grammar and Colloquial Dictionary. University of New Mexico Press: Albuquerque. 7.

References

Bakker, Peter. 1996. "Broken Slavey and Jargon Loucheux: A First Exploration." In Trends in Linguistics: Studies and Monographs 88. New York: Mouton de Gruyter. 317–320.

—— and Anthony P. Grant. 1996. "Interethnic Communication in Canada, Alaska and Adjacent Areas." In Language Contact in the Arctic: Northern Pidgins and Contact Languages. Trends in Linguistics: Studies and Monographs 88. Edited by Ernst Hakon Jahr and Ingvild Broch. Berlin, New York: Mouton de Gruyter. 1135–1140.

Coleman, Phyllis. 1976. Dogrib Phonology. Ann Arbor: University Micofilms International. 9.

Cook, Eung-Do. 1991. Athapaskan. In Oxford International Encyclopedia of Linguistics, vol. 1, 122–128. Oxford: University Press.

Dall, William H. 1870. Alaska and its resources. Boston: Lee and Shepard. P. 106. Citation from Bakker 1996: 318.

Faber, Kurt. 1916. Unter Eskimos and Walfischfängern, Eismeerfahrten eines jungen Deustchen. Stuttgart: Verlag Robert Lutz. 314. Translated from the German by Peter Bakker. Citation from Bakker 1996: 318.

Haas, Mary. 1968. Notes on a Chipewyan Dialect. International Journal of American Linguistics 34.3.165–175. Forms are in Yellowknife dialect.

Hale, Horatio Emmons. 1890. An International Idiom: A Manual of the Oregon Trade Language, or "Chinook Jargon." London: Whittaker &Co. 7.

Hock, Hans Henrich and Brian D. Joseph. 1996. Language History, Language Change, and Language Relationship: An Introduction to Historical and Comparative Linguistics. Trends in Linguistics: Studies and Monographs 93. Edited by Werner Winter. New York: Mouton de Gruyter. 255–260.

Jetté, Jules and Eliza Jones. 2000. Koyukon Athabascan Dictionary. Edited by James Kari. Fairbanks: Alaska Native Language Center, University of Alaska Fairbanks.

Kari, James, ed. 1990. Ahtna Athabascan Dictionary. Fairbanks: Alaska Native Language Center, University of Alaska Fairbanks.

Krauss, Michael. 1983. Slavey Jargon: Diffusion of French in Northern Athabascan. Fairbanks: Alaska Native Language Center, University of Alaska Fairbanks.

——. 1997. The indigenous languages of the north: A report on their present state. Northern Minority Languages: Problems of Survival, ed. by Hiroshi Shoji & Juha Janhunen, 1-34. (Senri Ethological Studies 44.) Osaka, Japan: National Museum of Ethnology.

McClellan, Catherin. 1981. "Intercultural relations and cultural change in the Cordillera." In Subarctic (Handbook of North American Indians 6). Edited by June Helm. Washington: Smithsonian Institution. 378–401. Citation from Bakker 1996: 318.

McDonald, Robert. 1863. Excerpt of letter to Church Missionary Society. Rupert's Land Provincial Archives, Winnipeg.

Mishler, Craig. 1988. Missionaries in Collision: Anglicans and Oblates Among the Gwich'in, 1861–65. Juneau. 7. Paper presented to Alaska Anthropological Association, Fairbanks.

Peter, Katherine. 1993. Gwich'in Junior Dictionary. Dinjii Zhuh Ginjik Nagwan Tr'iłtsąįį. Fairbanks: Alaska Native Language Center, University of Alaska Fairbanks.

Pétitot, Émile. 1889. Quinze ans sous le cercle polaire. Mackenzie, Anderson, Youkon. Paris: E. Dentu. 292–293.

——. 1876. Dictionnaire de la langue Dènè-Dindjié: Dialectes Montagnais ou Chippewayan, Peaux de Lièvre et Loucheux ... Paris: E. Leroux: San Francisco: A.L. Bancroft.

Prunet, Jean-François. 1990. The Origin and Interpretation of French Loans in Carrier. *International Journal of American Linguistics* 56.4: 484–502.

Rice, Keren D. Hare Dictionary. 1978. Ottawa: Northern Social Research Division, Department of Indian and Northern Affairs.

——. 1983. Personal correspondence to Michael Krauss.

——. 1989. A Grammar of Slave. New York: Mouton de Gruyter. 199–205.

Ritter, John. 1976. Mayo Indian Language Noun Dictionary. Whitehorse, Yukon: Yukon Native Language Centre.

——, Tommy McGinty and Johnson Edwards. 1977. The Selkirk Indian Language Noun Dictionary. Whitehorse. Yukon: Yukon Native Language Centre.

Slobodin, Richard. 1981. "Kutchin." In Subarctic (Handbook of North American Indians 6). Edited by June Helm. Washington: Smithsonian Institution. 514–532, 529. Citation from Bakker 1996: 318.

Thomason, Sarah G. 1983. Chinook Jargon in areal and historical context. *Language* 59: 820–70. In Prunet 1990: 486.

Tranel, Bernard. 1987. The Sounds of French. New York: Cambridge University Press. 4.

Wilhelm, Andrea Luise. 1992. Noun Incorporation in Northern Athapaskan. Calgary, Alberta: University of Calgary Linguistics Department. 16.

Whymper, Frederick. 1868. Travel and adventure in the territory of Alaska. New York: Harper and Bros. Pg. 226. Citation from Bakker 1996: 317.

August 2003. Ethnologue: Languages of the World, 14th Edition. Retrieved from http://www.ethnologue.com/show_language.asp?code=CAR.

Young, Robert W. and William Morgan Sr. 1991. The Navajo Language: A Grammar and Colloquial Dictionary. University of New Mexico Press: Albuquerque. 7.

A denotes Athabascan form
R denotes borrowed Russian form
E denotes borrowed English form

French word	gloss	Carrier	Athna (Mentasta)	Tana-cross	Upper Tanana	Northern Tutchone	Han	Gwich'in	Hare	Bearlake	Slave	Dogrib	Dene Sułiné
e thé	tea	ladi	'eldii	ldii	lidii	eji	leji	lidii / lidii	lidi	lidi	ledi	ledi	ledi / lidi
e sel	salt	lisel	A	lsel		lesya' losya'	leseww	lisil	lesil le(h)sili lisili	lisél nisél	li(h)seli lisél	A	A
'argent es sous	money, coin		lzaasi	lsaaz	lesuu	leze'	lezraa	laraa azhaa	A	A	A	A	A
a clef	key	lagli lekle	ldeni	ldii	lidlin	dedlin'	ledii	lidii ledli lidlii	ledlu (blend with 'nail') ledlu	ladli ledlu	ladli ledlu	A	A
e café	coffee	lagafi	R	R			lekafeyy lekafeii	lagahfii	ligafi'	likafi	ligafi ligawhi	legafi	likafi legafe
e sucre ['Eng. may be source for some]	sugar	E	R	tsugayy	tsoogaiy	sawga syawa suga	songayy	sungaii	suhga	suga	suga	siga	suga suga
a/les carte(s)	cards, card game	lagar (s.) ligar (pl.)	R	R			legaldah	laga(a)r	ligari ligar	liga	lika ligar(i)	A	A
e coton	cotton, cloth, material						lawdoo	lagwadoo	ligodo	ligodo	ligodo	ligodo	A
e cochon	pig		R				legeshuu	lagohshroo lagooshoo lagushu	ligosho	ligosho	ligosho	A	A
e châle	shawl	lasal					leshell	lishel, lishil, lishyal	lishali lihshali			lisha	lisyal
a caisse	(wooden) box							ligishr lagis	lejie'	lijee	lajeh	laje	lagis
e poivre	pepper		A, R				legovar	ligeevar, lageevir	A	A	A	A	A
e torchon	(dish)towel, denim, heavy material,	A, R			A		dahsroo	dohshroo	dosho	dosho	tosho		A

French word	gloss	Carrier	Athna (Mentasta)	Tana-cross	Upper Tanana	Northern Tutchone	Han	Gwich'in	Hare	Bearlake	Slave	Dogrib	Dene Sułiné
	canvas												
e baril	keg, barrel, washtub	lʌbari					lēbâzrii, lēbâzrell	lábâarii, líbárii	líbarí	líbaré, líbarí, lúbarí	líbarí	líbarí	líbarí
nerci	thank you	masi		A	A	masi'	māhsi'	mā(h)si	mási (-cho)		mási (-cho) mahsi		
saloperie	junk, 'you rascal!'					A	sälâbrii, selêbrii	selâbrii, selêbrii					
e chocolat	chocolate, hot cocoa						shêgwêl äh(chü')		leshekolé				
'in	fancy				A		-fàä, -fę̀ę̀	-fàa, -fa̧a̧					
e marteau	hammer					A		lavashrdu u	liimardú, limahdú	líimahdú	A		A
a merde	curse						lâmàrr	lámaar, lamaashr					
a flanelle	flannel	lʌfinel						lífinil	lífinl				lífanél (tsʼiaz)
e clou	nail	laglu							ledlú (blend with 'key')				
a messe	mass, church	lʌmes							lamé	lamée	lamé	lame (kǫ̀ʼ)	lamés
e mil	thousand				A	A	A		lími	lamí	límí	lami	lamí
a laine	wool, yarn, cotton								lálenf, lalén				lalén
'indienne	calico, material, cotton		layan			liyen			léyeni, leyeni				lεyén (yúé)
a poêle	frying pan		R	A		A	A	A	lébil(í), lébelí, líbilí	lígwilí, lígwilé	líbé, labe		labél, labóyl
'essuie-mains	towel	lʌsuma							líisimâ, lésimâ	lésimâ	lasimo, lésimâ		lisumé
a soie	silk, nylon, embroidery	lʌswe						lǝswe	lasúwé, lasué	lasué	lahsue, lasué	lasi	A
es uns, l'as	ones, ace			A	A	A	A		lízá'	lízá'	lízá'	lìzà	lás
e pot	pot, jug, cup	lʌbod			A	A		labó'	libó	libó, lubó, nibó	libó	libò	A
es bas	stocking, socks			A		A	A	A	líbá		A	lìbà	A

French word	gloss	Carrier	Athna (Mentasta)	Tana-cross	Upper Tanana	Northern Tutchone	Han	Gwich'in	Hare	Bearlake	Slave	Dogrib	Dene Sųłiné
a table	table	lʌdab		A	A	A	A	A	ladáw ladám	ledá	ladá ladáw	ladá	A
e pape	pope	lʌbab							libáp	libúb libáp	libáp		lapáp
es patates, a pétaque	potatoes	lʌbʌdag lematak		A									libad
e ruban	ribbon			A	A	A	A	lérebá	lérubą́	lílibá	líbą́ lírubą́		A
a farine	flour			A	A	A	A	A	lí(h)farí	líífaré líífarí lúfarí	líífarí		A
a carriole	(carriole of) sled, carry-all			A	A	A	?	legarii	ligariyolí		lekaezhoh likariǫ́		
e capitaine	captain						A	A		ligábeden	A		A
Jésus	Jesus							Jizhú	yezú'	Yeezú	A		A
e char	carriage, vehicle, wheelbarrow, wagon, truck						A	A	líhsharí	líshari líshare líshareé	A likarió	A	A
es ciseaux	scissors						A	A	A	A	A		A
e canard	(large) tea kettle							leganàr	líganarí	líganaré	líganarí		A
a bêche	spade, shovel								lebés lebésh	líbeé	A		labé
a lessive	lye						A	A	léjuyé'	lélisí	A		A
a cuillère	spoon						A	A	lésuzú ésezú lisuzú	lísizú líisuzú lúsuzú	A		A
es cloches	bells	laglos							legulú légolú ligolú		lagáluu		A
e fil	thread						A	A	léfili, lefíl	A	A		A
e balai	broom						A	A	lébelí	A	A		A
e pavillon	flag								libábiyǫ́é	líbabeyǫ́e	líbabiyó		A
e fouet	whip						A	A	lehwé'		A		A
e riz	rice				E	E	E	A	lerí	A	A		A
a chaise	chair			A	A	A	A	A	leshé	A	A		A
a cheminée	chimney	lasuni		A	A	A	A	léshuní	léshuní	léshuní	léshuní	A	A

French word	gloss	Carrier	Athna (Mentasta)	Tana-cross	Upper Tanana	Northern Tutchone	Han	Gwich'in	Hare	Bearlake	Slave	Dogrib	Dene Sųłiné
e bateau	boat, scow, barge					A			líba(t)hdú	A	A	A	A
es bretelles	suspenders				A	A	A	lasini	líbadíí	líbadíí	líbadíí	A	A
e bout	end, mile						A		líbú' / líbú			A	A
a bouteille	(whiskey) bottle	lʌbuday						A	líbudéį / líbudé	A	A	A	A
'échafaud	scaffold, cache, rack, stage							A	líshafú / líchʼahfí	líchʼahfí	líchʼahfí	A	A
es oignons	onions	lizanyo					A	A	lidzayǫ	A	A	A	A
a fourchette	fork			A	A	A	A	A	lífushéʼ / líxushéʼ	A	A	A	A
a câble	cable, heavy rope, part of bullet			A		A	A	A	lígám / lígámí / lígámí	lígámí	lígámí	A	A
es cartouches	rope, (part of) bullet			A		A		A	lígardú / lígahdú	A		A	A
a carabine	carbine, rifle							A	lígarabiní / lígarabiní				A
a compagnie	Hudson's Bay Company							A	lígobį / lígobę / légobę	A	A		A
e soldat	soldier, police officer	saldan				A		A	lísaldá / lísaldáʼ	A	A	A	A
e chapeau	hat							A	líshabú / líjabú		líshabú		lesǎbǫ
es sauvages	uncivilized people							A	lísawá	lísawá	lísawá	A	A
a chandelle	candle	le canděl					A	A	líchandél	A	A	A	A
es matches	matches								lamesh / liménésh	limésh	limésh		
es moulures	rickrack, trimming								liméri				
e pique	spade												libík'
e carreau	diamond												lígaró
e trèfle	club												lidréf
e fou, la	silly							láfoo					

French word	gloss	Carrier	Athna (Mentasta)	Tana-cross	Upper Tanana	Northern Tutchone	Han	Gwich'in	Hare	Bearlake	Slave	Dogrib	Dene Sųłiné
'olle	buttons							lavadoo					
es boutons	curse							sadàn					
Satan	curse						sedänn	sàgrìi					
sacrée								làmaar					
nerde								lavàsdaa					
e festin	feast							lejàlgit					
a jaquette	coat												
'anneau	(nose) ring					lényu		làmó					
e balai	broom								lébelí				
e dé (à coudre)	thimble					letth'ó'é' detth'ó'é'			ladr'ǫ				
e couvert	cover								-léguwé'				
e carreau	diamond (in cards), square								garú				

Additional forms in Carrier

French	gloss	Carrier
apôtre	apostle	ʔabod-n
caillé	sour milk	gayi
catholique	Catholic	gadʌleg
dimanche	Sunday	dimos(dᶻin)
Fizigap	name of first rifle	bizikab
Jour de Pâques	Easter Day	zu(l)dʌbag
l'assiette	plate	lʌsyed
la barge	boat	lʌbaz
la carotte	carrot	lʌgarad
la communion	communion	lʌgomeyo
l'eucharistie	Eucharistie	lʌkarisdi
l'épingle	pin	lěněpik
les évisses	screw	lězěbis
la faux	scythe	lʌfu
la fourche	pitchfork	lʌfus
la jupe	skirt, petticoat	lezuk
la meule	haystack	lʌmilo
		lʌbiyos
la Pâques	Easter	lʌbag
la pénitence	penance	lʌbenidas
la tasse	cup	lʌdas
la tente	tent	lʌdan
la toussaint	All Saints' Day	lʌdusa
la voile	sail	lʌwel
l'autel	altar	ludel
la bacon	bacon	lʌbegin
la carême	Lent	lʌgarem
le carré	log	lʌgari
la catéchisme	catechism day	lʌgadisis-dᶻin

French	gloss	Carrier
le chapelet	rosary	lʌsable
le coq	cock	lʌgog
le diable	hooligan	lʌjab
l'église	church	lʌgliz
le lait	milk	lʌled, lelě
le lit	bed	lili
le mariage	marriage	lʌmaryas
le ministre	Protestant	lʌbinis
le mystère	rosary	lʌmistel
le(s) pain(s)	bread loaf	liba, lʌba
le péché	sin	lʌbeši
le poison	poison	lʌbezo
le prêtre	priest	lʌbred
le roi	king	lʌlwe
le wagon	wagon	lʌwagin
les anges	angels	lʌzas
les gants	gloves	liga-bad
les images	holy picture(s)	lʌizimas
les juifs	Jew/king	lezwif
les semaines	week(s)	lisman
lundi	Monday	landi
médaille	medal	madal
Noël	Christmas	nʌwel
pistolet	revolver	basdʌle
vendredi	Friday	wandʌrdi
samedi	Saturday	sʌmdi
tuque	woolen hat	jug

References

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Northern Tutchone. Ritter, John T., Tommy McGinty and Johnson Edwards. The Selkirk Indian Language Noun Dictionary. Whitehorse, Yukon Territory. Dept. of Education. 1977.

Han: Ritter, John T. Han Gwich'in Athabaskan Noun Dictionary. Fairbanks: University of Alaska. Alaska Native Language Center. ms. 1980. Paul 1978 (?)

Gwich'in: Notes from Katherine Peter of Fort Yukon and Moses Gabriel of Chalkyitsik.

Hare: Rice, Keren. Hare Dictionary. Ottawa: Department of Indian and Northern Affairs. Northern Social Research Division. 1978. 23–186.

Beartake: Bloomquist, Charles. Slavey Topical Dictionary (Ft. Franklin Dialect), n.d. (ca. 1977).

Slave: Monus, Vic and Stanlet Isaiah. Slavey Topical Dictionary. Summer Institute of Linguistics. 1977.

Dogrib: Ackroyd, Lynda and Wanda Szostak, Preliminary Noun Dictionary of Dogrib, n.p. 1977.

Dene Sułiné: Elford, Leon W. and Marjorie Elford, English-Chipewyan Dictionary, Northern Canada Evangelical Mission, Prince Albert, Saskatchewan. 1981.

Additional data comes from the following works:

Carrier: Prunet, Jean-François. The Origin and Interpretation of French Loans in Carrier. International Journal of American Linguistics 56.4: Oct. 1990. 484–502.

Gwich'in: Peter, Katherine.1993. Gwich'in Junior Dictionary: Dinjii Zhuh Ginjik Nagwan Tr'iłtsaii. Fairbanks: Alaska Native Language Center, University of Alaska Fairbanks.

Hare, Beartake, Slave: Rice, Keren. 1989. A Grammar of Slave. New York: Mouton de Gruyter. 199–205.

Hare: Rice, Keren D. Hare Dictionary. 1978. Ottawa: Northern Social Research Division, Department of Indian and Northern Affairs.

Northern Tutchone: Ritter, John. 1976. Mayo Indian Language Noun Dictionary. Whitehorse, Yukon: Yukon Native Language Centre.

Ritter, John, Tommy McGinty and Johnson Edwards. 1977. The Selkirk Indian Language Noun Dictionary. Whitehorse. Yukon: Yukon Native Language Centre.

Dene Sułiné: Haas, Mary. 1968. Notes on a Chipewyan Dialect. International Journal of American Linguistics 34.3.165–175. Forms are in Yellowknife dialect.

Unknown source retrieved from Alaska Native Language Center archive in July 2003. 499–500.

'rench loan words in Northern Athabascan

A denotes Athabascan form
R denotes borrowed Russian form
E denotes borrowed English form

French word	gloss	Carrier	Athna (Mentasta)	Tana-cross	Upper Tanana	Northern Tutchone	Han	Gwich'in	Hare	Bearlake	Slave	Dogrib	Dene Sųłiné
e thé	tea	lıdi	'eldiil	lıdiil	lıdiil	ledyät	lejii	lıdit / lıdįį	ledi	lıdi	ledi	ledi	ledí / lıdí
e sel	salt	lısel	A	lsel	A	lısil	lëseww	lesíl / lé(h)silį / lıselí	lisél / nisél	lí(h)selí / lısél	A	A	A
'argent / es sous	money, coin		lzaasi	lsaaz	lezé'	lëzraa	läraa / lazhaa	A	A	A	A	A	A
a clef	key	lagli / leklě	ldleni	lıdlin	dédlin'	lëdlii		lıdlii / ldlí / lıdlíi	ledlú (blend with 'nail')	ladli / ledlú		A	A
e sucre	sugar 'Eng. may be source for some)	E	R	tsugayy	tsoogaiy	sáwga / syáwa / súga	songäyy	sungäii	súhga	súga	súga	síga	súga
e café	coffee	lagafi	R	R		lëkäfeyy / lëkäfeii	lagähfii	ligafi'	likafi	ligafi / ligawhí	lěgafi	lěgafi / legafě	lıkafi / legafě
a/les carte(s)	cards, card game	lagar (s.) / ligar (pl.)	R			lëgäldäh	läga(a)r	ligarí / ligär	ligá	lika / ligar(í)	A	A	A
e coton	cotton, cloth, material					läwdǫǫ	lagwädoo	ligodǫ̀	ligodǫ̀	ligodǫ̀	ligodǫ̀	A	A
e cochon	pig		R			lëgëshuu	lagǫshshoo / lagooshoo / lagushu	ligoshǫ̀	ligoshó	ligoshó	ligoshó	A	A
e châle	shawl	lasal				lëshell	lishèl, lishìl, lishyal	lìshalí / lihshalí				lishà	lisyàl
a caisse	(wooden) box							ligishr / legis	lejié'	lijéé	lajeh	lajè	lagís
e poivre	pepper		A, R			lëgovär	ligeevàr, lageevir	A	A	A	A		A
e torchon	(dish)towel, denim, heavy material,				A		dähsroo	dohshroo	dǫ́shǫ́	doshǫ̀	tǫsho		A

French word	gloss	Carrier	Athna (Mentasta)	Tana-cross	Upper Tanana	Northern Tutchone	Han	Gwich'in	Hare	Bearlake	Slave	Dogrib	Dene Sųłiné
e baril	canvas keg, barrel, washtub	ləbari					ləbâzrii ləbàzrell	ləbàarii ləbàrii	ləbarí	ləbaré líbarí lúbarí	ləbarí	ləbàrì	ləbari
nerci	thank you	masi			A	masi'	màhsi' màhsį'	mà(h)si	mâ(h)si (-cho)	màsi (-cho) mahsi	màsi (-cho) mahsi		
saloperie	junk, 'you rascal!'				A		shègwël äh(chü')	leshekolé					
e chocolat	chocolate, hot cocoa						sälàbrii selèbrii	selàbrii, selèbrii					
in	fancy						-fàä -fàą	-fàa -fàą					
e marteau	hammer					A		lavàshdu u	límardú límahdú	límahdú	A		A
a merde	curse						lámärr	làmaar, lamaashr					
a flanelle	flannel	ləfinel						lífinil	lífinil				lífranél (ts'iaz)
e clou	nail	ləglu						ledíu (blend with 'key')					
a messe	mass, church	ləmes						lamé	lamé	laméé	lamé	lame (kǫ')	lamés
e mil	thousand						A		límí	límíl	límíl		lamí
a laine	wool, yarn, cotton						A		làlení lalén			A	lalén
'indienne	calico, material, cotton	ləyan						lìyen	léyení, leyeni	léyení ligwilé			lɛyén (yúɛ́)
a poêle	frying pan		R	A		A	A	A	ləbíí(í) lébèlí líbílí	lígwìlí lígwílé	líbé labe	labɛ́l labóyl	labɛ́l labóyl
'essuie-nains	towel	ləsuma							lísimâ lésimâ	lésimâ	lasimo lésimâ		lísumɛ̨
a soie	silk, nylon, embroidery	ləswe							lasúwé lasué	lasué	lahsue lasué	lasì	A
es uns, l'as	ones, ace				A	A	A		lizá'	lizá'	lizá'	lizà	lás
e pot	pot, jug, cup	ləbod			A	A	A		libó	libó lubó nibó	libó	libò	A
es bas	stocking, socks			A		A	A		libá			libà	A

French word	gloss	Carrier	Athna (Mentasta)	Tana-cross	Upper Tanana	Northern Tutchone	Han	Gwich'in	Hare	Bearlake	Slave	Dogrib	Dene Sųłiné
a table	table	ladab		A	A	A	A	A	ladáw, ladám	ledá	ladá, ladáw	ladà	A
e pape	pope	labab							libáp	libúb, libáp	libúb, libáp		lapàp
es patates / a pétaque	potatoes	labʌdag lematak			A	A							libad
e ruban	ribbon					A	A	lérabá	lérubą́	lílibá	líbą́, lirubą̀	A	A
a farine	flour			A	A	A	A	A	li(h)farí	lífaré, lífarí, lúfarí	lífarí, lífarį̀	A	A
a carriole	(carriole of) sled, carry-all			A	A	A	?	legaril	ligariyolį́				A	A
	carriage, vehicle, wheelbarrow, wagon, truck										lekaezhoh, likariǫ		
e capitaine	captain								ligábeden				
Jésus	Jésus							Jizhú	yezú	Yeezú	A		
e char	char						A	A	líhsharí	lishari, lisharé, lisharéé	A, likarįǫ	A	A
e canard	(large) tea kettle						A	legenàr	líganarí	líganaré	ligánarí	A	A
es ciseaux	scissors						A	A	lésuzú, lésezú, lisuzú	lísizú, lisuzú, lúsuzú	A	A	A
a cuillère	spoon						A	A	léluyéé'	líshuyéé	A	A	A
a lessive	lye									lélísí		A	A
a bêche	spade, shovel								lebés, lebésh	libéé	A	A	labé
e pavillon	flag								libábiyǫę́	libabeyón	libábiyó	A	A
e balai	broom						A	A	lébelí		A	A	A
e fil	thread						A	A	léfilí, lefíl		A	A	A
es cloches	bells	laglos						lagáluu	légulú, légolú, lígolú				A
e fouet	whip								léhwé'			A	A
e riz	rice		E	E	E	E		lerí			A	A
a chaise	chair		A	A	A	A	A	leshé			A	A
a cheminée	chimney	lasuni		A	A	A	léshuní	léshuní			A	A

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e bateau	boat, scow, barge					A		lasini	líba(h)dú	A	A	A	
es bretelles	suspenders				A		A		A				A
e bout	end, mile				A		A	ibú' / ibú	líbadíl	líbadíl			A
a bouteille	(whiskey) bottle	labuday						A	líbudél / líbudé	líbudę	A	A	A
'échafaud	scaffold, cache, rack, stage							A	líshafú / lích'ahfí	lích'ahfí	lích'ahfí		A
es oignons	onions	lizanyo				A		A	lídzayǫ́	A	A	A	A
a fourchette	fork			A	A	A	A	A	lífushé' / líxushé'	A	A	A	A
es cartouches	rope, (part of) bullet			A		A		A	lígardú / lígahdú	A		A	A
a câble	cable, heavy rope, part of bullet							A	lígám / lígâmí / lígamí	lígâmí	lígâmí		
a carabine	carbine, rifle								lígarabíní / lígarabiní				A
a compagnie	Hudson's Bay Company								lígobį / lígobę / légobę		A		
e soldat	soldier, police officer	saldan				A		A	lísaldá / lísaldá'	A	A	A	A
e chapeau	hat							A	líshabú / líjabú	A	líshabú	A	lešab ǫ́
es sauvages	uncivilized people							A	lísawá	lísawá	lísawá		A
a chandelle	candle	le canděi					A	A	líchandél		A	A	A
es matches	matches								lamesh / limésh	límésh	limésh		
es noulures	rickrack, trimming								límerí				
e pique	spade												líbik'
e carreau	diamond												lígaró
e trèfle	club												lídréf
e fou, la	silly							láfoo					

French word	gloss	Carrier	Athna (Mentasta)	Tana-cross	Upper Tanana	Northern Tutchone	Han	Gwich'in	Hare	Bearlake	Slave	Dogrib	Dene Sųłiné
'olle													
es boutons	buttons							lavadoo					
Satan	curse							sadän					
sacrée	curse						sedänn	sägrii					
nerde	curse							lämaar					
e festin	feast												
a jaquette	coat							lavàsdaa					
'anneau	(nose) ring					lényu		lejaigit	lamó				
e balai	broom								lébelí				
e dé (à coudre)	thimble					letth'ó'é' detth'ó'é'			ladı'ǫ				
e couvert	cover								-léguwé'				
e carreau	diamond (in cards), square								garú				

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French	gloss	Carrier
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le coq	cock	lʌgog
le diable	hooligan	lʌjab
l'église	church	lʌgliz
le lait	milk	lʌlied, lelê
le lit	bed	lili
le mariage	marriage	lʌmaryas
le ministre	Protestant	lʌbinis
le mystère	rosary	lʌnistel
le(s) pain(s)	bread loaf	liba, lʌba
le péché	sin	lʌbesî
le poison	poison	lʌbezo
le prêtre	priest	lʌbred
le roi	king	lʌlwe
le wagon	wagon	lʌwagin
les anges	angels	lʌzas
les gants	gloves	liga-bad
les images	holy picture(s)	lʌizimas
les juifs	Jew/king	lezwif
les semaines	week(s)	lisman
lundi	Monday	landi
médaille	medal	madal
Noël	Christmas	nʌwel
pistolet	revolver	basdʌle
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Northern Tutchone. Ritter, John T., Tommy McGinty and Johnson Edwards. The Selkirk Indian Language Noun Dictionary. Whitehorse, Yukon Territory. Dept. of Education. 1977.

Han: Ritter, John T. Han Gwich'in Athabaskan Noun Dictionary. Fairbanks: University of Alaska. Alaska Native Language Center. ms. 1980. Paul 1978 (?)

Gwich'in: Notes from Katherine Peter of Fort Yukon and Moses Gabriel of Chalkyitsik.

Hare: Rice, Keren. Hare Dictionary. Ottawa: Department of Indian and Northern Affairs. Northern Social Research Division. 1978. 23–186.

Bearlake: Bloomquist, Charles. Slavey Topical Dictionary (Ft. Franklin Dialect), n.d. (ca. 1977).

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Additional data comes from the following works:

Carrier: Prunet, Jean-François. The Origin and Interpretation of French Loans in Carrier. International Journal of American Linguistics 56.4: Oct. 1990. 484–502.

Gwich'in: Peter, Katherine.1993. Gwich'in Junior Dictionary: Dinjii Zhuh Ginjik Nagwan Tr'iłtsąįį. Fairbanks: Alaska Native Language Center, University of Alaska Fairbanks.

Hare, Bearlake, Slave: Rice, Keren. 1989. A Grammar of Slave. New York: Mouton de Gruyter. 199–205.

Hare: Rice, Keren D. Hare Dictionary. 1978. Ottawa: Northern Social Research Division, Department of Indian and Northern Affairs.

Northern Tutchone: Ritter, John. 1976. Mayo Indian Language Noun Dictionary. Whitehorse, Yukon: Yukon Native Language Centre.

Ritter, John, Tommy McGinty and Johnson Edwards. 1977. The Selkirk Indian Language Noun Dictionary. Whitehorse. Yukon: Yukon Native Language Centre.

Dene Sųłiné: Haas, Mary. 1968. Notes on a Chipewyan Dialect. International Journal of American Linguistics 34.3.165–175. Forms are in Yellowknife dialect.

Unknown source retrieved from Alaska Native Language Center archive in July 2003. 499–500.

References

Bakker, Peter. 1996. "Broken Slavey and Jargon Loucheux: A First Exploration." In Trends in Linguistics: Studies and Monographs 88. New York: Mouton de Gruyter. 317–320.

—— and Anthony P. Grant. 1996. "Interethnic Communication in Canada, Alaska and Adjacent Areas." In Language Contact in the Arctic: Northern Pidgins and Contact Languages. Trends in Linguistics: Studies and Monographs 88. Edited by Ernst Hakon Jahr and Ingvild Broch. Berlin, New York: Mouton de Gruyter. 1135–1140.

Coleman, Phyllis. 1976. Dogrib Phonology. Ann Arbor: University Micofilms International. 9.

Cook, Eung-Do. 1991. Athapaskan. In Oxford International Encyclopedia of Linguistics, vol. 1, 122–128. Oxford: University Press.

Dall, William H. 1870. Alaska and its resources. Boston: Lee and Shepard. P. 106. Citation from Bakker 1996: 318.

Faber, Kurt. 1916. Unter Eskimos and Walfischfängern, Eismeerfahrten eines jungen Deustchen. Stuttgart: Verlag Robert Lutz. 314. Translated from the German by Peter Bakker. Citation from Bakker 1996: 318.

Haas, Mary. 1968. Notes on a Chipewyan Dialect. International Journal of American Linguistics 34.3.165–175. Forms are in Yellowknife dialect.

Hale, Horatio Emmons. 1890. An International Idiom: A Manual of the Oregon Trade Language, or "Chinook Jargon." London: Whittaker &Co. 7.

Hock, Hans Henrich and Brian D. Joseph. 1996. Language History, Language Change, and Language Relationship: An Introduction to Historical and Comparative Linguistics. Trends in Linguistics: Studies and Monographs 93. Edited by Werner Winter. New York: Mouton de Gruyter. 255–260.

Jetté, Jules and Eliza Jones. 2000. Koyukon Athabascan Dictionary. Edited by James Kari. Fairbanks: Alaska Native Language Center, University of Alaska Fairbanks.

Kari, James, ed. 1990. Ahtna Athabascan Dictionary. Fairbanks: Alaska Native Language Center, University of Alaska Fairbanks.

Krauss, Michael. 1983. Slavey Jargon: Diffusion of French in Northern Athabascan. Fairbanks: Alaska Native Language Center, University of Alaska Fairbanks.

——. 1997. The indigenous languages of the north: A report on their present state. Northern Minority Languages: Problems of Survival, ed. by Hiroshi Shoji & Juha Janhunen, 1-34. (Senri Ethological Studies 44.) Osaka, Japan: National Museum of Ethnology.

McClellan, Catherin. 1981. "Intercultural relations and cultural change in the Cordillera." In Subarctic (Handbook of North American Indians 6). Edited by June Helm. Washington: Smithsonian Institution. 378–401. Citation from Bakker 1996: 318.

McDonald, Robert. 1863. Excerpt of letter to Church Missionary Society. Rupert's Land Provincial Archives, Winnipeg.

Mishler, Craig. 1988. Missionaries in Collision: Anglicans and Oblates Among the Gwich'in, 1861–65. Juneau. 7. Paper presented to Alaska Anthropological Association, Fairbanks.

Peter, Katherine. 1993. Gwich'in Junior Dictionary. Dinjii Zhuh Ginjik Nagwan Tr'iłtsąįį. Fairbanks: Alaska Native Language Center, University of Alaska Fairbanks.

Pétitot, Émile. 1889. Quinze ans sous le cercle polaire. Mackenzie, Anderson, Youkon. Paris: E. Dentu. 292–293.

——. 1876. Dictionnaire de la langue Dènè-Dindjié: Dialectes Montagnais ou Chippewayan, Peaux de Lièvre et Loucheux … Paris: E. Leroux: San Francisco: A.L. Bancroft.

Prunet, Jean-François. 1990. The Origin and Interpretation of French Loans in Carrier. *International Journal of American Linguistics* 56.4: 484–502.

Rice, Keren D. Hare Dictionary. 1978. Ottawa: Northern Social Research Division, Department of Indian and Northern Affairs.

——. 1983. Personal correspondence to Michael Krauss.

——. 1989. A Grammar of Slave. New York: Mouton de Gruyter. 199–205.

Ritter, John. 1976. Mayo Indian Language Noun Dictionary. Whitehorse, Yukon: Yukon Native Language Centre.

——, Tommy McGinty and Johnson Edwards. 1977. The Selkirk Indian Language Noun Dictionary. Whitehorse. Yukon: Yukon Native Language Centre.

Slobodin, Richard. 1981. "Kutchin." In Subarctic (Handbook of North American Indians 6). Edited by June Helm. Washington: Smithsonian Institution. 514–532, 529. Citation from Bakker 1996: 318.

Thomason, Sarah G. 1983. Chinook Jargon in areal and historical context. *Language* 59: 820–70. In Prunet 1990: 486.

Tranel, Bernard. 1987. The Sounds of French. New York: Cambridge University Press. 4.

Wilhelm, Andrea Luise. 1992. Noun Incorporation in Northern Athapaskan. Calgary, Alberta: University of Calgary Linguistics Department. 16.

Whymper, Frederick. 1868. Travel and adventure in the territory of Alaska. New York: Harper and Bros. Pg. 226. Citation from Bakker 1996: 317.

August 2003. Ethnologue: Languages of the World, 14th Edition. Retrieved from http://www.ethnologue.com/show_language.asp?code=CAR.

Young, Robert W. and William Morgan Sr. 1991. The Navajo Language: A Grammar and Colloquial Dictionary. University of New Mexico Press: Albuquerque. 7.

References

Bakker, Peter. 1996. "Broken Slavey and Jargon Loucheux: A First Exploration." In
   Trends in Linguistics: Studies and Monographs 88. New York: Mouton de Gruyter.
   317–320.
—— and Anthony P. Grant. 1996. "Interethnic Communication in Canada, Alaska and
   Adjacent Areas." In Language Contact in the Arctic: Northern Pidgins and Contact
   Languages. Trends in Linguistics: Studies and Monographs 88. Edited by Ernst
   Hakon Jahr and Ingvild Broch. Berlin, New York: Mouton de Gruyter. 1135–1140.
Coleman, Phyllis. 1976. Dogrib Phonology. Ann Arbor: University Micofilms
   International. 9.
Cook, Eung-Do. 1991. Athapaskan. In Oxford International Encyclopedia of Linguistics,
   vol. 1, 122–128. Oxford: University Press.
Dall, William H. 1870. Alaska and its resources. Boston: Lee and Shepard. P. 106.
   Citation from Bakker 1996: 318.
Faber, Kurt. 1916. Unter Eskimos and Walfischfängern, Eismeerfahrten eines jungen
   Deustchen. Stuttgart: Verlag Robert Lutz. 314. Translated from the German by Peter
   Bakker. Citation from Bakker 1996: 318.
Haas, Mary. 1968. Notes on a Chipewyan Dialect. International Journal of American
   Linguistics 34.3.165–175. Forms are in Yellowknife dialect.
Hale, Horatio Emmons. 1890. An International Idiom: A Manual of the Oregon Trade
   Language, or "Chinook Jargon." London: Whittaker &Co. 7.
Hock, Hans Henrich and Brian D. Joseph. 1996. Language History, Language Change,
   and Language Relationship: An Introduction to Historical and Comparative
   Linguistics. Trends in Linguistics: Studies and Monographs 93. Edited by Werner
   Winter. New York: Mouton de Gruyter. 255–260.
Jetté, Jules and Eliza Jones. 2000. Koyukon Athabascan Dictionary. Edited by James
   Kari. Fairbanks: Alaska Native Language Center, University of Alaska Fairbanks.
Kari, James, ed. 1990. Ahtna Athabascan Dictionary. Fairbanks: Alaska Native Language
   Center, University of Alaska Fairbanks.
Krauss, Michael. 1983. Slavey Jargon: Diffusion of French in Northern Athabascan.
   Fairbanks: Alaska Native Language Center, University of Alaska Fairbanks.
——. 1997. The indigenous languages of the north: A report on their present state.
   Northern Minority Languages: Problems of Survival, ed. by Hiroshi Shoji & Juha
   Janhunen, 1-34. (Senri Ethological Studies 44.) Osaka, Japan: National Museum of
   Ethnology.
McClellan, Catherin. 1981. "Intercultural relations and cultural change in the Cordillera."
   In Subarctic (Handbook of North American Indians 6). Edited by June Helm.
   Washington: Smithsonian Institution. 378–401. Citation from Bakker 1996: 318.
McDonald, Robert. 1863. Excerpt of letter to Church Missionary Society. Rupert's Land
   Provincial Archives, Winnipeg.
Mishler, Craig. 1988. Missionaries in Collision: Anglicans and Oblates Among the
   Gwich'in, 1861–65. Juneau. 7. Paper presented to Alaska Anthropological
   Association, Fairbanks.

Peter, Katherine. 1993. Gwich'in Junior Dictionary. Dinjii Zhuh Ginjik Nagwan Tr'iłtsąįi. Fairbanks: Alaska Native Language Center, University of Alaska Fairbanks.

Pétitot, Émile. 1889. Quinze ans sous le cercle polaire. Mackenzie, Anderson, Youkon. Paris: E. Dentu. 292–293.

——. 1876. Dictionnaire de la langue Dènè-Dindjié: Dialectes Montagnais ou Chippewayan, Peaux de Lièvre et Loucheux … Paris: E. Leroux: San Francisco: A.L. Bancroft.

Prunet, Jean-François. 1990. The Origin and Interpretation of French Loans in Carrier. *International Journal of American Linguistics* 56.4: 484–502.

Rice, Keren D. Hare Dictionary. 1978. Ottawa: Northern Social Research Division, Department of Indian and Northern Affairs.

——. 1983. Personal correspondence to Michael Krauss.

——. 1989. A Grammar of Slave. New York: Mouton de Gruyter. 199–205.

Ritter, John. 1976. Mayo Indian Language Noun Dictionary. Whitehorse, Yukon: Yukon Native Language Centre.

——, Tommy McGinty and Johnson Edwards. 1977. The Selkirk Indian Language Noun Dictionary. Whitehorse. Yukon: Yukon Native Language Centre.

Slobodin, Richard. 1981. "Kutchin." In Subarctic (Handbook of North American Indians 6). Edited by June Helm. Washington: Smithsonian Institution. 514–532, 529. Citation from Bakker 1996: 318.

Thomason, Sarah G. 1983. Chinook Jargon in areal and historical context. *Language* 59: 820–70. In Prunet 1990: 486.

Tranel, Bernard. 1987. The Sounds of French. New York: Cambridge University Press. 4.

Wilhelm, Andrea Luise. 1992. Noun Incorporation in Northern Athapaskan. Calgary, Alberta: University of Calgary Linguistics Department. 16.

Whymper, Frederick. 1868. Travel and adventure in the territory of Alaska. New York: Harper and Bros. Pg. 226. Citation from Bakker 1996: 317.

August 2003. Ethnologue: Languages of the World, 14th Edition. Retrieved from http://www.ethnologue.com/show_language.asp?code=CAR.

Young, Robert W. and William Morgan Sr. 1991. The Navajo Language: A Grammar and Colloquial Dictionary. University of New Mexico Press: Albuquerque. 7.