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Possession in Mi'gmaq¹

1.0 Introduction

I came to the study of Mi'gmaq through a field methods course in the fourth year of my undergraduate degree. Mi'gmaq is an Eastern Algonquian language spoken in the extreme north-eastern United States, the Canadian Maritimes, and the Gaspé Peninsula. The data for this paper comes from the collaboration of my class with speakers from Listuguj, a Mi'gmaw community in Québec's Gaspésie Peninsula, on the border with New Brunswick. As such, the claims made in this paper apply to the dialect of Mi'gmaq spoken in Listuguj, which may differ from the variety spoken in other parts of the Gaspésie, Nova Scotia, and other regions. Further, our primary consultant is a McGill University doctoral student, a woman who has been living in Montreal for approximately a decade; despite frequent visits to Listuguj, where she uses Mi'gmaq with family members, the majority of her communication in recent years has been in English or French. Whenever her judgment was uncertain, there is a note of it in the text; the core phenomena discussed here were also discussed with additional speakers, and revised accordingly.

In the past, many marginalizing factors have had a destructive influence on Mi'gmaq—residential schools in particular did serious damage to the language. In reaction to this past, many speakers of Mi'gmaq are now engaged in efforts to preserve and increase the presence of their language in day-to-day life. These speakers are doing a great deal of work to keep the language from diminishing past the damage done to it.

¹ This paper could not have been written without Janine Metallic, my (very patient) primary consultant on the language. I also owe thanks to her mother, Mary Ann Metallic, and her aunt, Janice Vicaire, for their support to Janine and eagerness to help with the project. Lastly, my advisor Jessica Coon has been a wonderful guide through the process of writing this thesis, and I owe her a large thank-you as well.

Mi'gmaq is a language that has not been studied very widely—this paper is an attempt to add to the existing literature in some meaningful way, both for the sake of the speakers working to keep Mi'gmaq relevant and vivacious, and for the sake of linguistic research, which can only benefit from the greater study of more languages. The collaboration of speakers in Listuguj with McGill University linguists allowed this paper to be written; hopefully it will increase the comprehension of patterns and systems behind possession in Mi'gmaq, so that these patterns might aid in the teaching of the language.

1.1 Overview of Mi'gmaq possession

Possession in Mi'gmaq demonstrates particularly interesting linguistic patterns. Cross-linguistically, possession is a relational system which introduces an association or relationship between two elements—a possessor and a possessum.² The nature of this association/relationship is discussed in more detail in §2.1. In Mi'gmaq, there are numerous strategies and limits that come into play in order to express this system. First, there are semantic restrictions on what constitutes a licit possessum—animals, for instance, may not be possessed. Second, alienable and inalienable possession (categories which are described in detail in §2.2) are expressed differently from each other, both in phonology and morphology. These distinctions point to a dissimilarity in the structure of the two types of possession, as described in §3; alienable possessum stems are more syntactically distant from the possessive affix than inalienable possessums are, resulting in these distinctions. Third, within alienable possession, there are two affixes in complementary distribution expressing the same relationship. The first affix, appearing on the possessum, is the same fundamental affix as appears in inalienable paradigms (albeit with phonological differences). The second affix, appearing on the possessor, seems to fill multiple roles within the language—a nominalizer, and as an expression tantamount to "belonging to". This affix is something of an oddity, as it seems to be a quite variable semantic unit, and it requires examination in detail.

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² The term *possessum* will be used to refer to the element that is being possessed. For example, in "Jamie's shoes," the "shoes" are the possessum, and "Jamie" the possessor.

But before we examine the details of Mi'gmaq possession, it is necessary to establish the fundamentals in the area of possessives. This paper is structured in the following manner: §2 describes previous forays into possessive research, and addresses in detail the alienable/inalienable distinction; §3 gives an overview of Mi'gmaq possession, and its subsections delve into the specific mechanics of one of the language's possessive strategies; §4 illustrates the other methods of expressing possession in Mi'gmaq; §5 then portrays Mi'gmaq possession in the wider context of the language, describing its interaction with obviation, and lays out areas for further research; lastly, §6 sums up the results of the previous sections.

2.0 Putting Mi'gmaq possession in context

Section 2.1 addresses the current literature on possession as a whole, and situates Mi'gmaq possession within the existing definitions and conceptions of possession. However, Mi'gmaq instantiates an aspect of possession unfamiliar to English-language speakers, so §2.2 delves into the quality known as "alienability," defining and describing it in a cross-linguistic context.

2.1 <u>Previous research on possession</u>

Possession is a linguistic phenomenon that has been the subject of much controversy—and rightly so, as many sources define it not as a linguistic fundamental, but rather a concept which varies along cultures and with time (cf. Heine 1997, Baron et al 2001, etc.). Though it has been attempted many times, it is difficult to come up with a functional, widely-applicable, yet precise definition of possession. This section describes several authors' attempts to circumscribe possession within generative and functionalist models, and §2.2 lays out the concept of alienability and some of the literature in that field.

A quick glance at English data will illustrate that the concept that is understood as "possession" may take many forms. Further, within these forms, they may sometimes express conceptual material *other* than strict possession of an identifiable being or quality by another being.

- (1) I have a cold.
- (2) This cake belongs to me.
- (3) It is Jamie's cake. / It is his cake.
- (4) This is a friend of Alice's.
- (5) I like to listen to the music of Beethoven.
- (6) You can often see performers on the streets of Montreal.
- (7) I like to eat my mother's cakes.

Of these examples, we may note that very few may be made equivalent to each other. Please note the bizarreness of the following sentences, though they use possessors and possessums that we have seen earlier, and expressions of possession such as the genitive and the verb "belong to" that we have also seen.

- (8) ? This cold belongs to me. cf. (1) and (2)
- (9) ? This is a street of Montreal's. cf. (4) and (6)
- (10) ? I like to eat the cakes of my mother. cf. (5) and (7)

Further, these familiar structures and words that express possession are also employed for other purposes, even within the same language.

- (11) I *have* eaten a lot. cf. (1)
- (12) I would like a *basket of puppies*. cf. (5) (assuming that this is not understood as "I would like the puppies' basket.")
- (13) Did you see that *brick of gold?* cf. (5)
- (14) I hope Jamie doesn't get in trouble for his having voted "no." cf. (3)

And lastly, please note the many possible readings of even simple sentences like (15) and (16). The semantics of both of these sentences are difficult to definitively pin down.

- (15) I have a book.
 - a. The book may belong to me, and be either near me or far from me. "I have a book on that topic (at home/right here)."
 - b. The book may be owned by somebody else, and near to me. "Need something to swat that fly? I have a book (right here)!"
 - c. The book may belong to somebody else and physically in my hands. "I'm ready to leave the store, I have a book (I want to buy)."
- (16) My father's cakes are great.

- a. My father may be a wonderful baker, capable of making good cakes (though we do not speak of a specific set of cakes).
- b. My father may have bought very tasty cakes at a store and have had nothing to do with their creation.
- c. My father may be a good baker who made a specific set of cakes which are tasty.

The linguistic "slipperiness" of possession is not only present in English, but also observable cross-linguistically. No one structure may be said to express possession cross-linguistically, though most (if not every) language has strategies employed to express a possessive relation. This relation is commonly understood as a binary relationship of "closeness" or "control" between two nouns, one of which is a possessor and the other a possessum.

Seiler (1983) refers to possession as "conceptual" and "bio-cultural" because there are no established, identifiable linguistic constructions that express possession wherever they occur. It is not a basic notion, but rather a complex one created with co-operating linguistic forces. As demonstrated above, structures that express possession in given languages frequently also express other meanings in those same languages. Some linguists have gone so far as to claim that there are languages lacking "grammaticalized possession" altogether (cf. Togeby's 2001 work on Danish, cited in Baron et al, 2001). There is no one overtly-identifiable structure or feature that universally expresses possession. Therefore, possession must not be discussed in terms of "what does X structure mean?" because the answer will never be, unequivocally, "possession"; a more fruitful discussion is held in terms of "how do you express X?"

It follows from the current body of cross-linguistic knowledge that possession is primarily a concept and secondarily a grammatical performance (Baron et al 2001). The next question which must be addressed, then, is "what concept does possession express?" Many have introduced key words such as "ownership," "control," "manipulation," and "proximity" into the discussion. It is also central to the discussion that possession is a binary relationship: possessor and possessum are defined as such only in relation to each other. Without one role, the other does not exist. For my purposes here, I will employ the definition provided within the introduction to the 2001 collection on possession edited by Baron et al, where

what is normally called possession is the linguistic expression of the relation between two entities, a possessor and a possessum, such that one, the possessor, is seen as being in some way related to the other, the possessum, as having it near or controlling it. (Herslund and Baron, 2001:2)

The strength of this definition is partially in that it remains permissive—it allows speaker judgments and intuition to retain a role, rather than discounting structures identified as "possessive" by speakers because they are not the imagined prototype. In dealing with a subject as semantically variable as possession, strict definitions may not be the most productive model of thought.

Seiler (2001) sets out to speak about possession in broad terms. The author puts forward the proposal that three distinct levels may be necessary to fully describe and theorize about possession. First is the layman's level—the concept of possession that exists on a non-linguistic, intuitive basis. It is on this level that one identifies "things that mean X," as described earlier. Second is the level most relevant to linguists—this consists of an array of all attested morpho-syntactic techniques that may be employed to express the universal concept of the first level. It is a sort of "menu" that might include the locative case, genitive case, an existential verb, the verb HAVE, and so forth, which are all used to express possession in various languages. Third is the speaker's level—this changes for each individual language and includes the particular, language-specific strategies from the second level's array of techniques. It consists of the particular elements from the second level which express possession in the speaker's usage of the language. This paper is data- and research-based, which means that it utilises instances of speech from this third level; I seek to situate these data within a context of the other conceptual layers, the first being the semantic, "how would you say this" level, and the second being the morpho-syntactic context of possession.

Heine creates a different system in order to encode possession within more basic grammatical features. The author's 1997 work aims to use diachrony and cognitive models to describe and explain predicative possession—that is, possession using "to have" or "to belong to." Linguistic phenomena are set up in the context of event schemas, and it is proposed that each manifestation of predicative possession cross-linguistically may be described as one of eight source schemas. (Heine 1997:47) These schemas are labelled "action, location, companion, genitive, goal, source, topic, and equation." These

schemas are based upon data from many languages, gathered through the published work of other linguists. In the case of Mi'gmaq, as I will later describe, the most productive of Heine's event schemas is the "source" schema, paraphrased as "Y exists from X," where Y is the possessum and X the possessor.

2.2.1 Alienable and inalienable possession

Alienability is a means of differentiating different categories of possession, most frequently using morpho-syntax or morpho-phonology (Payne 1997:104; Nichols & Bickel in the World Atlas of Language Structures Online, etc.). Alienable possession is one subcategory: it generally refers to the possession of an item whose ownership might be switched (like an inanimate object). Alienable possession is contrasted with *in*alienable possession, which refers to an essential relationship that cannot change (like body parts being possessed by/part of their owners, and family members being related to each other). In Mi'gmaq, it is the case that inalienable possession is also obligatory—an inalienable possessum requires additional structure, and cannot exist in a bare form.³ In (17), we see this in a concrete Mi'gmaq example:

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(17.1) n-uj
1-father
"my father"
(17.2) *uj
father
(intended) "a father"
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Some other languages that display distinct grammatical markings for inalienable vs. alienable possession are those related to Mi'gmaq, such as Swampy and Plains Cree (Dobler 2010), Blackfoot (Ritter & Rosen 2010), and Ojibwe (Nichols & Nyholm 1995). However, alienability is not restricted to the Algonquian language family, but rather may be found across the globe. Some of the other languages which have grammaticalized alienability are Lango, an Eastern-Nilotic language (Dobler 2010); Navajo, a Na-Dené

³ Mi'gmaq in particular allows inalienable possessums to appear within complex verbs, without an overt external DP possessor. For instance, "head" is inalienably possessed, but may exist within verbs such as "to have a big head."

language from the American Southwest (Young & Morgan 1987); Warrgamay, a language from the Pama-Nyungan branch of Australian languages (Dixon 2011); and Nivkh, a language isolate from Eastern Russia's Sakhalin peninsula (Dobler 2008).

Assuming that alienability may be represented as a sort of varying conceptual distance between possessor and possessum, then its reflexes also be observed (albeit indirectly) in English. Rosenbach (2002) puts forward that [+/- prototypical] possessive relations are similar to alienability in that they, too, reflect "the conceptual distance between possessor and possessum," with [+prototypical] being closer and [-prototypical] being farther. (Rosenbach 2002:124) Here, [+prototypical] encodes legal possession (ownership) as well as body part and family member relationships. In English, the choice between the s-genitive and the of-genitive may be biased by the [prototypical] aspect of the possessor/possessum relationship, with the 's possessum being more structurally bonded to its possessor than the of possessum—more evidence of this is given in (18) below, examples from Rosenbach (2002).

- (18) Stranding is possible only with of-genitive "They stole (a) the portrait of Johnson / (b) Johnson's portrait. Johnson was the only man they stole (a) the portrait of / (b) * 's portrait." (19) The s-genitive shows an implicit enough relationship that the possessum may be omitted:
 - "The girl's bicycle was green, while the boy's ____ was blue."

"The bicycle of the girl was green, while * of the boy was blue."

Rosenbach found that, in an experimental setting, English speakers selected 's over of with regard first to animacy, then topicality, then the prototypicalness of the possessive relationship. So while it is not the strongest predictor of English genitive expression, the conceptual distance between possessor and possessum does seem to be relevant even when not overtly grammaticalized as alienability.

2.2.2 Previous work concerning in/alienable possession

The distinction between alienable and inalienable is a broadly-studied topic within possession. Some have said it is essentially a feature [±alienable] (Nichols 1988:574); others indicate that it may be more of a situational relation (Diem 1986:229-30); and others still propose that there is some abstract element such as an unpronounced HAVE in

the underlying representation of alienables (Lynch 1973:10). A clear statement of the paradox of describing alienability is given in Seiler (2001), namely that "inalienability" and "alienability" can be *distinguished* but not separated.'

Many attempts have been made to describe the categories of noun which most frequently make up inalienably possessed items. The most common sets of nouns are body parts and kinship terms, as well as parts of wholes. (Heine 1997) However, somewhat similar to the case of grammatical gender, there is no foolproof systematic method to predicting the alienability of a lexical item in a given language. As noted by Nichols,

inalienable possession is not primarily a semantic distinction but the automatic consequence of the closer formal bonding that results in head-marked possession: inalienables typically include kin terms, part/wholes and/or body-parts, nouns which are most likely to occur possessed in discourse, and the formal marking of inalienability simply grammaticalizes that possession (Nichols 1992:121-2)

Following the intuitive semantic definition of alienability as a type of closeness between possessor and possessum, it has been observed that whether "the difference shows itself in the (morpho-)syntax or in the (morpho-)phonology of the possessive constructions, inalienable possessives always display a closer relationship between possessor and possessed." (Dobler 2008:2) Here, closeness indicates (syntactically) fewer intervening nodes between possessor and possessum, and (phonologically) is represented as being within the same phase, as described in Chomsky (1999, 2005).

The syntactic consequences of the bond between inalienable possessum and its possessor are articulated in Haiman (1985a). The argument most relevant to this paper is that conceptual distance corresponds to syntactic distance. Haiman writes that the "conceptual distance is greater when possession is alienable than when it is not," basing this premise on the permanence of the inalienable possession relationship. One of the key goals of this paper is to support Haiman's claim that "inalienable possession will be indicated by the structure in which the linguistic distance between possessor and possessum is *less*," and that for alienable possession this distance will be *more*.

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⁴ Haiman 1985a:130, as quoted in Rosenbach 2002:123.

⁵ Ibid.

Some characteristics of inalienable possession include the fact that it is a closed category and that it marks only attributive possession; here, "attributive possession" signifies possession expressed within a DP ("my book") rather than using a predicate of possession ("I have a book"). (Heine 1997:172) Alienable possession, on the other hand, may be marked by a wider range of strategies—not only attributive, but also predicative patterns are employed in its expression. Alienable possessums remain an open class, as well—Nichols (1988:256) describes its membership as "infinite."

Another characteristic of inalienable possession, one that is quite relevant to the discussion of Mi'gmaq, is that inalienable possession is always head-marked (Heine 1997, Nichols 1988, 1992). This means that the possessive morphology appears on the possessum (the head of the Possessive Phrase, or PossP) rather than on the possessor or elsewhere. Heine (1997) further proposes that diachronic forces act upon this morphology with a semantic bleaching effect. According to his model, once the head-marked morphology is "worn out," a language will introduce new markers of possession. These markers originate in other linguistic paradigms: in the case of Mi'gmaq, we might say that they follow the "source" pattern laid out by Heine, as mentioned in §2.1.

This is to say that Heine (1997) would propose that inalienable possession markers look older simply because they are older. The attributive possessive markers get progressively semantically bleached as time progresses. This forces the language to mark possession with new strategies, frequently predicative ones: these predicative markers may come from eight different prototypes, among these "source," which will be useful for the discussion of the *–ewei* suffix in §4.2.

There have been a number of syntactic models used to discuss the differences between alienable and inalienable possession. This paper draws heavily on Ritter & Rosen (2010) as well as Dobler (2010 and 2008), as these works draw on related languages, or (in the case of Dobler 2008) languages which also head-mark alienable and inalienable possession with distinct phonological realizations. These similarities to Mi'gmaq are positive signs that the models used within these authors' works can productively be adapted to suit Mi'gmaq.

3.0 Form and structure of possession

3.1 <u>Introduction to the realization of Mi'gmaq possession</u>

So far, I have briefly discussed one attribute of Mi'gmaq possession: the status of alienability, which is overtly realised in the grammar. This section focuses on one morpho-syntactic and phonological form of possession in the language—this form applies to both alienable and inalienable possession, and differentiates between the two. This chapter will also present possible analyses for these data, arguing that the differences between alienable and inalienable possession may be attributed to the fact that the two have distinct syntactic structures. The primary distinguishing factor that changes based on alienability is the syntactic distance between the possessor and the possessum: inalienable possessums are closer to their possessors than alienable possessums are to theirs.

The following sections then outline one overt form of possession in Mi'gmaq in detail—the data are presented in §3.2, focusing on the actual appearance of possession in Mi'gmaq as it is spoken by our consultant rather than the proposed linguistic structures behind the data. The following section, §3.3, focuses on the syntactic structures, using evidence from the phonology to support the analysis of "inalienability = closeness." After that, §3.4 gives further morphological evidence in support of this analysis.

Note also that there are other types of possession than discussed in this chapter; those other forms are addressed in §4.

3.2 The affix form of inalienable and alienable possession

The most basic method of expressing possession in Mi'gmaq is the attachment of affixes to the possessum. I refer to this method as "basic" because it is the only strategy of possession to apply to both inalienable and alienable possessums—the other strategies apply exclusively to alienable possessums. In Table 1 below we see the surface forms of both sets of affixes. Overall, the two sets (inalienable and alienable) seem very much the same; the markers of possessor person and number are virtually identical. The first, most immediately apparent difference between the two forms is that the alienable affix set includes a mandatory -m suffix immediately following the stem. A second difference is the presence of a superscript -t- between the prefix and the stem of the alienable

possessums, and that this -t- is lacking from the inalienable possessums. The -t- is superscript because it is not always included in the Listuguj orthography which is used for the majority of this paper; it is, however, included in some other orthographies (see the grammar of Père Pacifique, translated in Hewson & Francis 1990). It is very auditorily salient, and forms part of the phonological support for the premise that alienable possessums are far from their possessors.

(20)

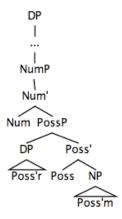
Table 1. (Generalized) alienable and inalienable possessive affixes				
Person, number of possessor	Inalienable	Alienable		
1 singular	'n-STEM	'n ^t -STEM-m		
1 plural exclusive	'n-STEM-inen	'n ^t -STEM-m-inen		
1 plural inclusive (1 st person and 2 nd person)	'g-STEM-inu	'g ^t -STEM-m-inu		
2 singular	'g-STEM	'g ^t -STEM-m		
2 plural	'g-STEM-uow	'g ^t -STEM-m-uow		
3 singular	ug-STEM-(l)	$\mathbf{ug^t}$ -STEM- \mathbf{m} - (l)		
3 plural	ug-STEM-ua-(l)	$\mathbf{ug^t}$ -STEM-m-uow- (l)		

One more element of this table must be explained: in the third persons, both singular and plural, there is a parenthetical word-final -*l*. This is representative of a phenomenon called obviation. Obviation, simply put, is a method of differentiating between third persons. Its presence in a language creates a "closer to discourse participant" third person (often called proximate) which contrasts with a "further from discourse participant" third person (often called obviate). (Payne 1997: 212) Mi'gmaq is a language that marks obviation overtly, as is the case with most (if not all) Algonquian languages. Though an in-depth discussion of obviation is beyond the scope of this paper, there is a good introduction to obviation in another Algonquian language, Cree, in Wolfhart (1996: 400). For our purposes, the most salient facts are that it manifests as a suffixal -*l* (with some phonological variation) on singular, animate nouns. In the case of possession, in all circumstances where a singular, animate possessum is marked with a third person, animate possessor, the possessum receives obviation. Obviation will be discussed more specifically in §5.1.

3.3 Structure of possession: a brief summary

As discussed in §2.1, the concept of possession takes many forms cross-linguistically. Accordingly, there is no one agreed-upon form representing the syntax of possession. This section utilizes models similar to those found in Ritter and Rosen (2011), and Dobler (2008, 2010). These require possession to be integrated as part of the possessum-DP; this is a structure which is very usable in Algonquian languages in general, and applies well to Mi'gmaq. In (21) below is a tree outlining a general possible structure which will be expanded upon. Note that the role of a PossP is to add a possessor to the nominal below, which is the possessum; it establishes a relationship between possessor and possessum.





Note also that in Mi'gmaq the possessor is not in complementary distribution with a determiner, as in English. In English, we see "my sister" and "this sister" in complementary distribution ("this my sister" for instance, is ungrammatical). From that, we conclude that the role of possessor may be tied to the role of determiners in English. The story is different in Mi'gmaq, as phrases such as *ula nemis* "this my older sister" are perfectly grammatical. In the following sections, I assume that possessor DPs may cooccur with determiners, though it is not a crucial part of the discussion.

3.3.1 The role of phases in discussing morpho-syntax: Dobler, Ritter and Rosen

Phases as introduced by Chomsky (1999) are a useful tool in discussing morphosyntax. The general concept is that when the syntactic structure of a linguistic utterance is

sent to Spell-Out, it occurs not as a single unit, but cyclically and in sections. This analysis allows one to theorize certain phonological differences as being due to syntactic differences, as syntactic structure may determine which sections of a word get sent to Spell-Out together, thereby triggering different phonological rules than a similar phonological environment with altered syntax might.

This analysis, wherein phase boundaries indicate distinct syntactic structures, is used by Dobler (2008). That paper examines several languages which overtly distinguish based on alienability, and the author assumes firstly that there is a phase boundary between D and its complement, and secondly that inalienable possessums overtly move to D (while alienable ones move into Num). This results in an interposing phase between the possessor and possessum in the case (and only in the case) of alienable possession. My analysis of Mi'gmaq will employ phases in a similar way, also assuming that they may help indicate a distinction between alienable and inalienable possession; however, I do not assume movement of the possessums as a central part of my proposal.

In a later work, Dobler (2010) addresses some examples from another Algonquian language, Cree. Her earlier analysis holds, but the morphemes at stake in Cree look very similar to their cognates in Mi'gmaq. Dobler's (2010) question is one of vowel hiatus resolution, which in Cree takes the following form:

(22) The first person possessive prefix *ni*- becomes *nit*- when preceding a vowel-initial alienable possessum. The same *ni*- becomes *n*- when preceding a vowel-initial inalienable possessum.

This pattern of n- vs. n(i)t- is nearly identical in Mi'gmaq, though there is no vowel remaining in either form. Dobler's method of attributing surface phonological differences to differing phonological phases and different syntax is useful to our discussion of Mi'gmaq.

Somewhat similarly, Ritter & Rosen (2011) are concerned with another Algonquian language, Blackfoot. In Blackfoot, possessed DPs and intransitive clauses have strict (and very morphologically visible) syntactic parallels. For instance, possessors and intransitive verb subjects follow the same restrictions (must be agentive); additionally, the morphology marking possession by a person and a verb done by the same person is identical. The authors discuss the syntactic head ν , which select external

arguments and syntactically license in/direct objects. Analogical reasoning then determines that there is some similar head in possessive DPs, which they refer to as n, and that this head selects possessors depending on the nature of the possessum, and its own nature. Essentially, their conception of different "flavours" of n is the tool that is the most useful in this paper's discussion of Mi'gmaq.

In the following sections, I return to Mi'gmaq data specifically. First, the details and phonology of inalienable and alienable possession are discussed, with an eye to the by-phase nature of syntactic derivation, and the consequences of phases on this analysis. Next, this paper discusses at least three different types of n (as per Ritter & Rosen 2011) that combine with roots to develop nPs within the larger structure of a DP. One of these types, in below, even has an overt manifestation: the suffix -m which appears on alienably possessed nouns seems to be an indicator of a certain "flavour" of n.

3.3.2 Inalienable possession – details and phonology

Section 2.2 briefly discussed inalienable possession, and how roots which are inalienably possessed require possessors. In (23) below, we again see that in order for an inalienable root to be grammatical, it requires additional structure. This structure may be a possessor, as in (23.2), although it also may be incorporated within a verb-type predicate as in (23.3). Some languages also have a productive piece of morphology which may "alienate" an inalienable root, turning it from a specific instance into the general form, but this alienator is less common in modern Mi'gmaq. There was a prefix *m*- which served that function, but our consultant, as well as her mother and aunt all said that "Nobody really uses it," and indeed it never appeared in their data. It does survive in some frozen forms, though, and (23.4) is one of them.

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(23.1) * tun
mouth
(intended) "a mouth" in general
(23.2) 'n-tun
1-mouth
"my mouth"
(23.3) maq-tun-at
big-mouth-V?
"she/he has a big mouth"
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(23.4) m-pisun

alien.-medicine

"medicine" in general

note: *pisun* in isolation is ungrammatical, indicating that it is ordinarily inalienably possessed.

As is typical for languages which overtly distinguish alienable and inalienable possession, two general semantic categories categorized as "inalienable" in Mi'gmaq are body parts and family members.⁶ Below in (24) is the (animate) possessum "daughter," with all possible combinations of persons and plurals. The generalized pattern is then stated in (25).

(24)

Table 2. Paradigm for ntus "my daughter" (animate)				
Possessor	Singular Possessum	Plural Possessum		
1 sg	'n-tus "my daughter"	'n-tus-g "my daughters"		
1 pl excl	'n-tus-inen "our daughter"	'n-tus-in-aq "our daughters"		
1 pl incl (1sg + 2sg)	'g-tus-inu "the daughter of you and me"	'g-tus-in-aq "the daughters of you and me"		
2 sg	' g -tus "your daughter"	'g-tus-g "your daughters"		
2 pl	'g -tus- uow "your daughter"	'g -tus- u-aq "your daughters"		
3 sg	ug -tus- <i>l</i> "his/her daughter"	ug -tus- g "his/her daughters"		
3 pl	ug -tus- ua- <i>l</i> "their daughter"	ug -tus- ua "their daughters"		

(25) General template of inalienable possession

At least: [possessor person] + [possessum]

ex: ['n] + [tus] "my daughter"

At most: [possessor person]+[possessum]+[possessor pl.]+[possessum pl.] ex: ['n] + [tus] + [in] + [aq] "our daughters"

⁶ As with all rules of thumb, there are some exceptions to this prediction. For instance, the words "friend," and "eyeglasses" pattern (surprisingly) with the inalienable, while "husband" and "wife" pattern with alienable possessums. However, the body part and family member categories do generally hold.

This table requires further explanation. Firstly, Mi'gmaq differentiates based upon gender: animate or inanimate. This distinction reacts in a predictable way to possession and pluralisation, so no great amount of attention will be paid to it specifically. Furthermore, it was difficult to elicit many forms of inanimate possessums, particularly for the inalienable section. This was because family members (roughly half of all inalienable possessums) are animate, and though some body parts are inanimate (such as "head"), the bizarreness of attempting to elicit "our head" or "her heads" rendered the task of making a table such as (24) very difficult.

Secondly, which has already been discussed briefly but deserves another reminder, there are obviation markers on two of the forms in (24). The suffixal -*l* appearing on "his/her daughter" and "their daughter" is the indicator of obviation. It doesn't appear on the plural forms because Mi'gmaq obviation generally does not mark plurals.

Thirdly, the table in (24) gives only one root. However, as the root-initial segment varies, there is some phonological variation visible in the third person. In (21), it is stated that the person-marking prefix for the third person is ug-. There is some variation within that form, observable mainly when used with vowel-initial possessums. This variation is demonstrated in (26) below. The main form of the variation is a reduction of the third person prefix from ug- to w-. This is part of a fairly common process within Mi'gmaq, the deletion of interposing consonants between two similar vowels (McGill University, LING 415 class notes, 2011). The deletion of the stem-initial /e/ from "his/her older sister" is also predictable by similar rules. When the initial vowel is /u/, the /w/ prefix reduces even further, becoming optional in order to accommodate for the articulatory and perceptual difficulty of having two adjacent segments as similar as /w/ and /u/.

-

⁷ For further reading on this subject, the Mi'gmaq Online Grammar would be a good place to start, but it is still a work in progress. Eventually information on pluralization and other matters will be available at http://wiki.migmaq.org.

(26)

Table 3. Vowel-initial stems with singular possessors				
Possessor	-unji "head"	-emis "older sister"	-itap "(male) friend"	
1 sg	n-unji "my head"	n-emis "my older sister"	n-itap "my friend"	
2 sg	g-unji "your head"	g-emis "your older sister"	g-itap "your friend"	
3 sg	(w)-unji "his/her head"	ug-mis- <i>l</i> "his/her older sister"	w-itap- <i>al</i> "his/her friend"	

Lastly, there is a curious phenomenon observable in Mi'gmaq, most easily visible with the inalienable possessive affixes. This phenomenon basically consists of a very clear correlation between Mi'gmaq pronouns and the corresponding possessive affixes for person and number, especially in the first person. As in (27) below, the first person plural pronouns are "ninen" and "ginu," and the possessive affixes for the first persons plural are "'n-STEM-inen" and "'g-STEM-inu"—the pronouns are essentially identical to the affixes. This paper will not examine the peculiarity in detail, though, as it delves into the question of whether Mi'gmaq pronouns are morphologically complex and strays quite far from the specific description of possession in Mi'gmaq.

(27)

Table 4. Pronouns and inalienable affixes				
Person and number	Pronoun	Possessive affixes		
1 sg	ni'n	'n-STEM		
1 pl excl	ninen	'n-STEM-inen		
1 pl incl (1sg + 2sg)	ginu	'g-STEM-inu		
2 sg	gi'l	'g-STEM		
2 pl	gilew	'g-STEM-uow		
3 sg	negm	ug-STEM-l		
3 pl	negmow	ug-STEM-ua-l		

3.3.3 Alienable possession – details and phonology

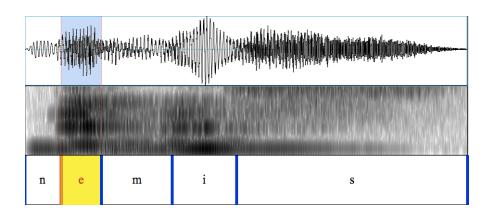
One method of encoding alienable possession in Mi'gmaq is the use of possessum-attaching affixes which greatly resemble the inalienable ones. However, as mentioned earlier, these affixes are not identical. The table in (28) on the following page

highlights the differences in affixes, using only a first person singular possessor. As before, it is apparent that the affixes vary based on alienability in a systematic and predictable way. The spectrograms in (29) show the difference in the articulation of a near-minimal pair. Using Praat, the segment immediately following the canonical first-person prefix was isolated: in (29.1), that segment is the stem-initial vowel e, but in (29.2) the interposing -t- is clearly visible.

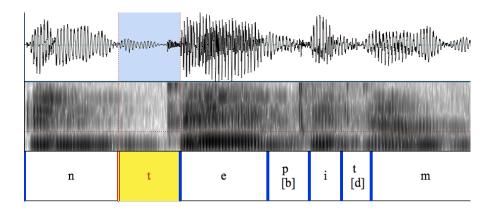
(28)

Table 5. Contrasts in similar phonological environments					
Inalienable possessums		Alienable possessums			
Stem X & meaning "my X" "my Xs"			Word X & meaning	"my X"	"my Xs"
-unji <i>head</i>	n -unji	n -unji- l	uow pot	'n ^t -uow-m	'n ^t -uow-m-l
-emis older sister	n -emis	n-emis-g	e'pit woman (wife)	'n^t -e'pit- m	[too strange to pluralize]
-tojm <i>toe</i>	' n -tojm	'n-tojm-l	twopeti window	' n ^t -twopeti- m	' n ^t -twopeti- m-l
-pign hand	' n ^(t) -pign	' n ^(t) -pign- n	ptauti <i>table</i>	' n ^t -ptauti- m	' n ^t -ptauti- m-l
-a'qi <i>flesh</i>	n -a'qi	[mass noun, no plural]	a'gu'sn <i>hat</i>	' n ^t -a'gu'sn-(m)	' n ^t -a'gu'sn -m-l
-gweji'j <i>little sister</i>	' n ^(t) -gweji'j	' n ^(t) -gweji'j- g	ga'qan <i>door</i>	' n ^t -ga'qan-(m)	'n ^t -ga'qan-m-l

(29.1) Wave-form and spectrogram of inalienable possessum"my older sister," *nemis*, with the stem-initial vowel selected.



(29.2) Wave-form and spectrogram of alienable possessum "my wife," n'-e'pit-m, with the interposing -t- selected.



However, the data in (28) also show some variation. First, on the inalienable side, there are two words (for "hand" and "little sister") which seem to optionally have the same -t- as appears on the alienable side. This is explainable using phonology: both of these stems are stop-initial, beginning with a labial and a velar stop respectively. When moving from articulating one segment to another, the tendency is to change first manner, and then place. This means that sometimes when going from an alveolar nasal to a labial or velar stop, an intermediate alveolar stop may be produced. However, it is important to note two things: first, that the inalienable -t- is not mandatory as the alienable -t- is, and may disappear in monitored speech; second, that in the alveolar stop-initial forms for "toe" vs. "table," the contrast in presence of -t- remains. Even in an environment where it is articulatorily difficult to produce /t/ such as [n_d], the speaker still commonly pronounced it.

There is a second optional element in the table above. The alienable possessums "hat" and "door" end in alveolar nasals, and the suffixal -*m* is marked as optional after these nasals in the singular form. It is logical that the second of two adjacent nasals may be dropped, due to the difficulty in clearly articulating both a length (of nasal) and place (of articulation) difference in these cases. However, the plural form is interesting in that the -*m* seems to lose its optionality. I hypothesize that the -m- is permissible if it is syllabified separately from the word-final nasal. As the plural form is always longer than the singular form by one syllable, the nucleus of which is the plural suffix -*l*, this gives a syllable for which the -*m* might function as an onset, and thereby distance itself from the

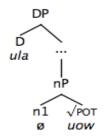
/n/ which was rendering its articulation difficult.

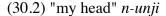
Due to the fact that there is a difference in the inalienable and alienable prefixes marking the exact same person, we might assume that Mi'gmaq phonology treats possessums differently depending upon alienability. As per Dobler's (2008) and (2010) analyses, I propose that the source of this difference is based upon where the phase boundaries are drawn. The historical form of the possessive prefixes included the *-t-* in all circumstances (Conor Quinn personal communication, 2012). As such, I believe that with inalienable possessums, when the *-t-* is not present, that is due to its deletion (rather than assuming that the presence of the *-t-* is due to insertion before alienable possessums). But regardless of whether it is inserted or deleted, the process resulting in the *-t-*'s presence occurs if and only if the possessor is separated by a phase from the possessum nP.

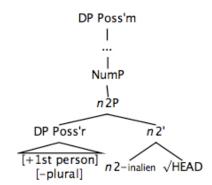
The two trees in (30) suggest that the boundary of this phase is immediately above the *first nP* formed by the root and the n^0 —this ensures that the possessor DP is sent to Spell-Out at the same time as the stem only in (30.2). As the possessor marking and the stem are spelled out concurrently, the interposing -t- does not appear, making n-unji, "my head." In (30.3), however, the phase containing the possessor DP is sent to Spell-Out after the stem goes. This means that the two are not at Spell-Out at the same time as each other, allowing the interposing -t- to appear in this environment, making ' n^t -uow-m, "my pot."

To account for the differences in how the possessors adjoin to the roots (as a sister to n' with inalienables, and as a sister to nP with alienables), I posit different types of n0. These different "flavours" of n hypothesis is drawn from Ritter and Rosen's (2010) analysis of Blackfoot, as mentioned in §3.3.1. In (30.1) below, I show the type of n which results in a free-standing, unpossessed nominal such as "this pot." This is referred to as n1. In (30.2) below is what I call n2, resulting in an inalienably possessed word such as "my head." Lastly, in (30.3) is n3, which results in an alienably possessed word such as "my pot." Note that in this example, "pot" is a possible free-standing word, and as such n3 selects a full n1P.

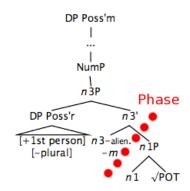
(30.1) "this pot" *ula uow*







(30.3) "my pot" $'n^t$ -uow-m



The crucial differences between n2 and n3 are that n2 demands a possessor DP in its specifier before making a full phrase, and that n3 selects n1P (already a full alienable NP on its own right) and introduces a possessor DP in its specifier. It is my assumption that a phase occurs between n1P and n3P. Additionally, n3 has an overtly-pronounced segment that attests to its existence: the suffixal -m that appears only on alienable possessums. This suffix, along with the phonological differences between alienable and inalienable prefixes, is taken as strong evidence in favour of the structures proposed in (30).

3.4 Additional morphological evidence for this structure

Modification of nouns in Mi'gmaq may happen in one of two ways. The first is by the use of an adjectival predicate as in (31) below. These adjectival predicates look identical, no matter the alienability of the possessum.

```
(31.1) n<sup>t</sup>-ptauti-m wijupeg
1 - table -POSS which.is.wet.inanim
"my table which is wet" or "my wet table"
(31.2) n<sup>t</sup>-pign wijupeg
1-hand which.is.wet.inanim
"my hand which is wet" or "my wet hand"
```

The second, less common method of modification is by affixation of a modifying prefix on the noun. Using this prefix-form modifier, there is a clear asymmetry between alienable and inalienable possessums. Unfortunately, for the following examples I couldn't find a pair of words differing in alienability modified by the exact same prefix. Because of this, the data in (32) below is modified by different prefixes, both with the meaning "great" or "superior."

In (32.1) there is an alienable possessum ("priest") being modified by the prefix 'gji-. In (32.2) is an inalienable possessum ("grandchild") being modified by the prefix pitui-. The position of the possessive affix relative to the modifying prefix crucially changes depending on alienability. With the inalienable possessum, the possessive affix is immediately adjacent to the possessum; with the alienable possessum, the modifier 'gji comes between the possessum and the possessive affix. The data in (33) show that this cannot be due to some sort of "habitual ranking of modifier affixes," as the internal order in (33) has 'gji and pitui in the reverse order to how they appear in the possessums below. All of this information seems to indicate some sort of immediacy requirement that differs depending on alienability--possessive affixes for alienable possessums may be more distant than possessive affixes for inalienable possessums.

- (32.1) **'nt**-'*gji*-pa'tlia's-m-inu 1-great-priest-POSS-poss'r.pl "our bishop" (32.2) *pitui*-**g**-uji'j great-2sg-grandchild "your (sg) great-grandchild"
- (33) 'gji-pitui-ptnnaqan great-great-hundred "a million"

Given the model wherein there are multiple types of n, the data from these modifiers would support the proposed trees in (30). Assuming that the modifier prefixes appear as specifiers to nP, the following bracketings may apply:

(34.1)
$$\left[_{nP} ' nt - \left[_{nP} ' gji - \left[_{n3} pa'tlia's - m \right] \dots \right] \right]$$

(34.2) $\left[_{nP} pitui \left[_{n3} g - uji'j \right] \right]$

3.5 What we can learn from Mi'gmaq affix-form possession

What this chapter has illustrated is that alienability changes the syntactic structure of a possessum, a hypothesis which is supported by both morphological and phonological evidence. This syntactic difference is also supported indirectly by the fact that there is more of an intuitive semantic closeness between inalienable possessums and their possessors than exists between alienable possessums and their possessors. It is important that inalienable possessums are defined in relation to their possessors, and that the relationship between possessum and possessor is fundamental and unchangeable. It contrasts strongly with the relationship between alienable possessum and possessor, which is temporary and malleable. There is strong evidence in the syntax, phonology, morphology, and semantics all supporting some type of "closeness" between inalienable possessums and possessors.

4.0 <u>Alternative methods to express possession</u>

Inalienable possession may only be expressed using the affix form of possession discussed in §3. However, when it comes to alienable possession, there are multiple methods a speaker may use to express a possessor/possessum relationship. Section 4.1 addresses the use of the verb "to have," which is referred to below as "predicative possession." Again, this is possession of the type "I have a car" or "this car belongs to me," and does not include "my car," which is classified as attributive possession. The second other method of expressing possession is ambiguous between attributive and predicative. It consists of the use of a possessor-attaching suffix *-ewei* and will be discussed in detail in §4.2.

4.1 Predicative possession and the verb "to have"

The first additional method by which alienable possession is expressed in Mi'gmaq is the use of a verbal predicate similar to English "have." This verb conjugates as do all verbs in Mi'gmaq, according to the person of the subject, the time frame in which the verb comes to pass (be it tense, aspect, or mood), the presence or absence of negation, as well as the animacy and number of all the verb's arguments. I do not include all possible conjugations for reasons of conciseness—an abbreviated version, varying only animacy and number of the possessum, is found in (35) below. Note that in the table, "baby" is alienably possessed; the sentences could be situations where one is holding a baby for someone else, and does not have the connotation of the baby being one's offspring. Furthermore, the interpretation of the verb *geggun*- is not strictly limited to ownership. Somewhat similarly to English "have," it can also vary depending on context, and may be interpreted as "have near me," "have as my possession," and other such readings. I do not attempt to make a full list of such readings, and it is an area that may be worth further elaboration in another paper.

(35)

Table 6. Paradigm for 'have,' with a 1 sg subject/possessor				
Possessum Animacy Singular Possessum Plural Possessum				
wigatign, book	inanimate	geggunm wigatign "I have a book."	geggunman wigatignn "I have (multiple) books."	
putail, bottle	animate, non-living	geggung putai "I have a bottle."	geggungig putailg "I have (multiple) bottles."	
mijua'ji'j, baby*	animate	geggung mijua'ji'j "I have a baby."	geggungig mijua'ji'jg "I have (multiple) babies."	

It is also worth noting that this verb requires an animate possessor, as it seems to imply an active agency at play, a decision to have something rather than a descriptive process. To clarify, in (36) below we see that to express the descriptive English phrase "the house *has* three windows," a Mi'gmaq speaker would not use the verb "to have" but rather an existential and a locative—somewhat equivalent to "there are three windows on the house."

(36) nesisgl twopeti-l etegl wenjiguom-g 3.inan.pl window-s be.pl.inan. house-location "There are three windows on the house."

4.2 The possessor-selecting suffix –ewei

Another option for expressing alienable possession is the use of the possessor-selecting suffix *-ewei*. This suffix is in complementary distribution with the possessum-selecting affixes discussed in §3, and their incompatibility to appear together will later be attributed to a ban on redundancy. Inglis (1986, 1988) describes *-ewei* as a complex morpheme, consisting of *ew* and *ei* as separate suffixes. The first, *-ew*, is described as "a morphological marker which indicates a change in grammatical status [such as making a] verb from [a] noun." (Inglis 1986:34) The second, *-ei*, the author leaves more vague. It might suffice to describe it as agreement with the possessum, as it has several surface forms, as shown in (37) below, depending upon the number and animacy of possessum.⁸ Beyond these forms, it is also common to see it appear as only the suffix *-ei*, without *-ew*. However, my work so frequently grouped them together that for this paper I shall effectively treat *-ew* and *-ei* as one morpheme.

(37)

Table 7. Forms of <i>-ewei</i> as appearing on a first person singular possessor						
("my") in the present tense						
	Animate possessum Inanimate possessum					
mpgsn "shoe" wigatign "book"						
Singular possessum	ni'n- eweil mpgsn	ni'n-ewei wigatign				
Plural (3+) possessum	ni'n-ewege'g mpgsn-g	ni'n-eweil wigatign-n				

This suffix is very interesting in that it has a very broad range of meaning and usage—within possession, it covers both predicative and attributive possession. Both meanings "the book belongs to me" as well as "my book" may be expressed by the same Mi'gmaq sentence, as shown in (38). Which interpretation is understood depends on context.

(38.1) Piel-ewei wigatign
Piel-POSS book
"Piel's book" or "The book belongs to Piel."

⁸ Additionally, the morpheme also changes depending on the "currentness" of the relationship: "my old moccasins" *ni'newe'gi'g ma'gnn*, for instance, would use a different form than "my current moccasins" *ni'neweil ma'gnn*. Hopefully I will be able to examine this distinction in more detail sometime in the near future; I did not know about it in time to investigate in more depth for this paper.

```
(38.2) Nemitu Piel-ewei wigatign.
1sg.see.it(inan) Piel-POSS book.
"I see Piel's book."
```

This same suffix is also used to form the question "who does this belong to?" though one may also use the affix-form to convey an interrogative meaning. The whword "whose" is created using the interrogative person pronoun *wen*, "who," and the appropriate *-ewei* suffix as determine by possessum animacy and number. An example is found below, with *-ewei* modified to agree with the possessum in animacy and number:

```
(39) wen-eweg putai-l?
who-POSS bottle-pl
"Whose bottles are these?"
```

It is not completely clear at what level this suffix attaches to the possessor, and this was not a key line of inquiry for this paper. It is capable of selecting a simple noun phrase as in (40.1). Judging based on the data in (40.2) and (40.3), it seems to be the case that that it is not a clitic that can attach to a phrase containing an adjectival predicate, and requires an alternative pronoun outside of that phrase.

```
(40.1) jinm-ewei twopeti
man-POSS window
"the man's window" or "the window belongs to the man"
(40.2) ala misgilg jinm negm-ewei twopeti
DEM who.is.big man 3ps-POSS window
"this big man's window" or "this man who is big, his window"
(40.3) * ala misgilg jinm-ewei twopeti
DEM who.is.big man-POSS window
(intended) "this big man's window"
```

As a final note on how *-ewei* is used within possession, it is also the suffix which forms possessive pronouns. The table in (40) gives a list of these pronouns, assuming a singular inanimate possessum. Possessive pronouns are used in the same manner as

⁹ In order to ask a question with the affix-form, one might use the wh-word "who" wen, and the third-person indicating affixes ug-, resulting in "whose book do you see?" being wen ugt-wigatign-m nemitat? Our consultant indicated a slight preference for -ewei when forming these types of questions, which led to including interrogatives in this section rather than addressing them with affix-form information.

demonstrated in (40.2) above—they may take an external co-referent, "the big man" in (40.2), or function in isolation as in (42) below.

(41)

Table 8. Possessive pronouns, assuming singular inanimate possessums						
Number \ Person First exclusive First inclusive Second Third						
singular	ni'n-ewei	N/A	gi'l-ewei	negm-ewei		
plural ninen-ewei ginu-ewei gilew-ewei negmow-ewei						

(42) ni'n-ewei wigatign 1sg-POSS book "my book" or "the book belongs to me"

Outside of possession, the same -ewei suffix also functions as a nominalizer of sorts, and according to our consultant has connotations of "provenance from a source," or even a vague notion of "associated with." This second reading is at play in the word gesig-ewei, "associated with winter," which may be used to describe, for instance, a heavy coat or other clothing to be worn in cold weather. The first reading, of "source" corresponds to Heine's (1997) historical account, wherein possessive affixes undergo semantic bleaching over time. Inalienable possessums are resistant to misinterpretation (due to semantic properties) but alienable ones become ambiguous. To combat this ambiguity, alternative markings of alienable possession are introduced—explaining the multiple options of Mi'gmaq alienable possession, while inalienable possessums have only one way to be encoded. In this model, the bleaching of the affix-form would eventually result in the language incorporating possessive readings to morphology that was not originally possessive. In this case, a nominalizer became a piece of possessive morphology. The fact that it was a nominalizer corresponding to "source" is one of the options introduced in Heine (1997:64), though it is predicted (counter to what we see in Mi'gmaq) to be "virtually irrelevant" to predicative possession.

Here, I provide some examples of *-ewei*'s other usages, though as they do not relate directly to possession, I will not attempt to investigate in further depth. The data in (43.1) show the suffix's function as a nominalizer. The data in (43.2) use the abbreviated version of the suffix, *-ei* rather than *-ewei*, but as this suffix was described earlier as contributing to the possessive reading of *-ewei*, I included these data as well. In (43.2) we see that the suffix indicates "made of"—perhaps it is no coincidence that the English

equivalent uses the genitive, a possessive structure in our language. I shall leave this line of inquiry open for future work.

(43.1) A set of nominalizer examples na'gu'set-ewei sun-POSS? "watch" or "clock" atnamg-ewei checkers-POSS? "checker game" gesig-ewei winter-POSS? "associated with winter" egsitpu'g-watalmg-ewei morning- eating-POSS? "breakfast food"

(43.2) A set of "made of" examples ptauti gumu'j-ei table wood-POSS? "a table made of wood"

gasawoq-ei metal-POSS? "made of metal"

4.3 Ban on redundancy

Seeing as there are several strategies for possession, it is essential to discuss them as they relate to each other. The relationship is simple on the surface: these forms may not be used in conjunction with each other. As seen in (44), the attempt to use both possessum- and possessor-attaching affixes simultaneously results in ungrammaticality, even in the context where one might want to convey an emphatic meaning (a better candidate for showing this emphasis is to use a plain pronoun, as seen in (44.3). It seems that attributive possessive forms may simply not be used simultaneously, a rule which applies to both alienable (44.1) and inalienable (44.2) possessums.

```
(intended) "my table" emphatically

(44.2) *ni'n-ewei n-emis

1sg-POSS 1-older.sister

(intended) "my big sister" emphatically

(44.3) ni'n nt-ptauti-m // ni'n n-emis

1sg 1-table-POSS // 1sg 1-older.sister

"my table" // "my big sister"

note: these forms were slightly strange to the speaker, but could still conceivably be uttered, unlike (44.1-2).
```

Additionally, (45) shows that these attributive possessive forms may appear in the same environments—there may be a stylistic difference between (45.1) and (45.2), but our consultant could not say what that difference was for certain.

```
(45.3) waqamatuap 'nt-ptauti-m clean.1sg.inan.sg.past 1-table-POSS "I cleaned/tidied my table."
(45.2) waqamatuap ni'n-ewei ptauti clean.1sg.inan.sg.past 1sg-POSS table "I cleaned/tidied my table."
```

Further, there is also a ban on using predicative and attributive possession at the same time. (46) below demonstrates the ungrammaticality of using the predicate "to have" with *-ewei* possession, and (47) does so for affix-form possession. It is possible that this ungrammaticality is due to a general restriction on redundancy. A more syntactically interesting area to explore is that there may be a limit to the number of POSS segments licensable by a given possessive relationship, within a certain syntactic domain (say, a predicate and its arguments). This restriction on POSS segments would necessitate that the verb "to have" also be marked +POSS, and that this marking would be visible to the other possible venues for POSS-marking in a sentence. This paper will not go into further detail on the matter, though there is more that could be said about this possibility if given more data.

```
(46) *geggunm ni'n-ewei ptauti-m
have.1>3.inan.sg 1sg-POSS table-POSS
(intended) "I have my table."
```

(47.1) *geggunm n^t-ptauti-m have.1>3.inan.sg 1-table-POSS (intended) "I have my book." (47.2) *geggung n-emis have.1>3.anim.sg 1-older.sister (intended) "I have an older sister."

Note that for some of these examples, there are ways to talk around the ungrammaticality. For instance, there are certain advantages to being able to express that one has siblings, as attempted in (43). In order to avoid the ungrammatical "I have my [sibling]s," there is a Mi'gmaq verb translating to "having grown up with ..." which would be used in its place. That is, instead of the English-style construction "I have siblings," one would more naturally say, "I grew up with these people," and perhaps list their siblings' names. Likewise there are verbs for "to be/have a father/mother," "to be/have a son/daughter," and other family relations.¹⁰

5.0 Additional areas to explore

Inevitably, the scope of this paper is limited by time and other factors. This chapter briefly introduces some of the elements of Mi'gmaq possession that I began exploring, but have not yet had the opportunity to fully flesh out. First, I address some limitations of Mi'gmaq possession, followed by a section on how obviation and possession relate to each other. Lastly, I bring up some data from Mi'gmaq verb endings that suggest Mi'gmaq possession may involve further syntactic movement, along the lines of possessor-raising.

5.1 Limitations on Mi'gmaq possession

Mi'gmaq possession has a feature that may seem somewhat strange to English speakers: there are semantic limits in place which govern which items are "possessable." So far, we have explored the circumstance of inalienable possession, where certain nouns are obligatorily possessed; this seems to be a flip side of that alternation, where certain other nouns seem to be inexpressible as possessums. Even though our consultant's mother initially proposed that, "the only thing you cannot own is the wind (ugju'sn)," when we

¹⁰ Interestingly, two of the members of the Christian Holy Trinity, in English "the Father and the Son" were translated by missionaries into Mi'gmaq as "the God who has a son, and the God who has a father." (Hewson & Francis 1990:197)

discussed this in more detail, there indeed were restrictions in place on the "possessable." Note that for the upcoming discussion, the relationship of possession is not necessarily one of ownership; to refer to something as "our river" does not then mean that the river belongs to the people in question, but serves rather as a reference point. This relates to the discussion in §2.1, where possession was described in terms of a mutually understood closeness or salience between the possessum and possessor. The strict definition of "ownership" is less useful than the more permissive one of "closeness."

Before looking in-depth at possessive expressions that are disallowed in Mi'gmaq, first it is important to cover some that *are* permissible. Possession may cover a range of relationships and possible possessums, such as using landmarks for a point of reference (as in 48.1), discussing intangibles (as in 48.2), and discussing concepts that one may not claim ownership over (as in 48.3). It is also culturally inappropriate to claim ownership over the land, but there is a term to express just that (as in 48.4).

```
(48.1) 'g<sup>t</sup> -sipu-m-inu
1/2-river-POSS-pl
"our incl. river"
ie: our community is on the Restigouche river, so this is our river
(48.2) 'n<sup>t</sup> -lugowaqan-m
1-work-POSS
"my work"
(48.3) 'n<sup>t</sup>-nisgam-m
1-lord-POSS
"my god/lord"
(48.4) 'n<sup>t</sup>-maqamig-m
1-land-POSS
"my land"
```

In earlier sections, we have also seen that the possession of both animate and inanimate forms is acceptable. However, there is one section of animate nouns where attributive possession is not permitted: animals. There are two inalienably possessed nouns meaning "a possessed animal," neither of which match the words meaning any individual animal in isolation. These nouns' interpretations encompass several animals, including "dog," "moose," and "horse." Each of these animals in turn has its own noun in isolation, as shown below, but in a possessed form they seem to all use the same form.

The precise type of animal being possessed is not immediately apparent, and must be derived from context.

The first two of the following examples were drawn from the Mikmaq Online Talking Dictionary (www.mikmaqonline.org), and confirmed grammatical by our consultant. In each set of three phrases, there is a word denoting an animal, an ungrammatical possessed form of that word, and a sentence containing the first word ug-tue'm-l used in place of the ungrammatical possessed animal. Each ungrammatical possessed form is a hypothetical form created by myself and rejected by the consultant. In creating them, I assumed that the potential possessum in question was alienable, given that it is possible for these words to appear in isolation.

```
(49.1) lmu'j (nmu'j, in some dialects)
     "dog"
(49.2) * ug^t - lmu'j - m - 1
        3 - dog - POSS - obv
       (intended) "his/her dog"
(49.3) 'Lpa'tuj gi'gaj-inmi-gimatl
                                              ug-tue'm-l wela'gwe'g.
     Boy forcefully-toward.home-send.3>3 3-animal-obv last.night
    The (little) boy forcefully sent his dog home last night.
(50.1) tesipo
     "horse"
(50.2) * ug^t - tesipo - m - 1^{11}
       3 - horse - POSS - obv
      (intended) "his/her horse"
(50.3) Tuma mgumie'jo'tlatl ug-tue'm-l.
     Tom shoe.3>3
                            3-animal-oby
     Tom shoes his horse.
(51.1) tiam
     "moose"
(51.2) * ug^t - tiam - m - 1
        3 - moose - POSS - obv
       (intended) "his/her moose"
```

¹¹ This is the judgment our consultant had. However, in the Mikmaq Online Dictionary (www.mikmaqonline.org) this word is used in the sentence "the old man peddles **his horse**," *gisigu alangualatl ugte'sipowml*, so it is possible that this restriction is more dialectal than this section reports.

(51.3) A'sagaqap pematejimapem **ug-tue'm-l.**¹² encounter.past.3>3 dragging/hauling.away 3-animal-obv I ran into someone hauling away his/her (dead or alive) moose.

Examining these examples, it is inferrable that the root meaning "animal" is the portion of the word ugtue'ml without possessive or obviative morphology. Once we have discounted the final, obviative-marking -l from the root, and turn to the prefixes, we run into some ambiguity. Unfortunately, the word's morphology is such that it is potentially preceded by either the prefix ug- (as I originally transcribed) or the prefix ug^t -. Both are ungrammatical in isolation, as seen in (52) below, and as such the root "possessed animal" is labelled as inalienably possessed.

```
(52.1) * ue'm
(intended) "animal"
(52.2) * tue'm
(intended) "animal"
```

There is a second option for animal possession, *nti* "my pet," though this one is less attested in the dictionary and not used by our consultant. Our consultant attributed its definition more directly to "dog," or perhaps "pet" with somewhat less of ambiguity than found in the stem discussed above. However, it remains a less common form in our consultant's idiolect, and is therefore discussed in little detail here. Note also that, as per (53.2), this word is inalienably possessed, and requires a possessor to be grammatical.

```
(53.1) ug-ti-l
3-dog-obv
"his/her dog"
(53.2) *ti
(intended) "pet"
```

And since we have so far examined multiple types of possession, it is essential to also examine the grammaticality of possessing animals with these other forms. The next example is another type of attributive possession, using the suffix *-ewei*. Earlier, we noted that *-ewei* may sometimes be interpreted as predicative possession equivalent to "belongs"

¹² Thanks to Janice Vicaire for this example!

to," here it patterns with the other attributive form of possession. Specifically, as seen in (54.1) below, it is ungrammatical to possess an animal using *-ewei*. However, as the possessable animal stems *-ti* and *-tue* 'm are both inalienably possessed, there is also no way to employ these with *-ewei* form possession, as using *-ewei* simultaneously with affix-form possession is universally banned, as demonstrated in (54.2).

```
(54.1) *negm-ewei lmu'j
3.sg-POSS dog
(intended) "his dog" or "the dog belongs to him"
(54.2) *negm-ewei (ug-ti-l / ug-tue'm-l)
3.sg-POSS (3-animal-obv / 3-animal-obv
(intended) "his dog" or "the dog belongs to him"
```

This restriction seems to hold only for attributive possession: there are alternative methods of expressing possession available in case one wishes to express very specifically the type of animal being owned. It is possible to express certain relationships using the verb "to have" that would otherwise be illicit if the affix-form was employed. For instance, "I have a dog" is completely grammatical if you express it using the verb form, as seen below.

```
(55.1) Geggung lmu'j.
have.1>3.anim dog
"I have a dog."
(55.2) Wen geggunatl lmu'j-1?
who have.3>3anim dog-obv
"Who has a dog?"
```

So far, we have examined the restrictions on possessums in detail; restrictions on possessors is a topic this paper will not delve into too deeply. However, so far we have examined only prototypical possessors such as human beings, but it is also possible in Mi'gmaq (at least in some circumstances) to have non-agentive, grammatically inanimate possessors. The data in (56.1) below demonstrate that these non-prototypical possessors may employ at least a variation on *-ewei* possession, though they do not seem to be able to use affix-form. Our consultant was unwilling to give a version using the "to have" form, as it is impossible in Mi'gmaq to have a non-agentive/non-animate subject with the verb "to have."

(56.1) Tepaqan-ei ga'qan stoqonamu'g.
car-POSS door to.be.green
"The car's door is green."
(56.2) * Tepaqan ugt-ga'qan-m stoqonamu'g.
car 3-door-POSS to.be.green
(intended) "The car's door is green."

Overall, the limitations on possession seem most severe in terms of possessing animals. As with most linguistic areas where certain forms are restricted there is always a periphrastic, another method of expressing the same meaning using grammatical forms, here with the two words for "possessed animal." As such, the ban on attributive possession of animals is not an inconvenience, but simply another feature which makes Mi'gmaq possession a distinctive and complex matter.

5.2 Obviation and possession

Obviation, as introduced earlier, is a feature of Algonquian languages which effectively creates another option for "person," making the full system "first person, second person, third person proximate, and third person obviate." A proximate noun is more immediate to the discourse participants, while an obviated noun has a more distant relation. Obviation appears almost exclusively in sentences with two animate third person arguments—there are discursive situations where a person may be established as obviate for the duration of a story, for instance, but these sorts of situations are unlikely to occur in the environment of an elicitation. As such, in the following sentences the first and second person rarely appear, as they never trigger obviation. Also, only grammatically animate nouns are obviated in Mi'gmaq. If a noun is inanimate, it does not trigger obviation, as seen in (57.1). Similarly, it seems that only singular nouns trigger obviation, and as shown in (58), even two singular nouns conjoined together seem to count as plural, insofar as assignment of obviation goes.

(57.1) Mali nemitoq wigatign.

Mali see.3>3.sg book

"Mali sees a book"
(57.2) Mali nemiatl putai-l.

Mali see.3>3.sg bottle-obv

"Mali sees a bottle" (note: "bottle" is categorized as animate)

- (58.1) Lance nemiatl Sa'n-al. Lance see.3>3sg John-obv. "Lance sees John."
- (58.2) Lance nemiajig Sa'n aq Jani'n. Lance see.3>3pl John and Janine. "Lance sees John and Janine."

Turning to possession, at first obviation seems quite simple. When we have a first or second person possessor, the possessum is not in need of obviation (that is to say, the object is proximate). With a third person possessor and a singular, animate possessum, the possessum is obviated. This is the simplest environment requiring obviation, demonstrated in (59) below.

(59) ug^t-putai-*l* 3-bottle-*obv* "his/her bottle"

Taylor (1989) articulates a helpful thought in relation to this discussion, though the author did not have obviation in mind. Possessive constructions (and the concept of "possession" in general) is articulated to serve a discursive purpose. The inclusion of the possessor serves "to facilitate identification of the [possessum], by mention of a reference point entity that is cognitively accessible." (Taylor 1989:288) This concept of a "cognitively accessible" noun is precisely what obviation conveys. Subjects of verbs and possessors pattern together in terms of not being obviated themselves, but prompting it in the verb's object or the possessum, respectively. It follows that when a verb's object is also a possessed noun, the marking of obviation becomes somewhat complex.

5.2.1 Possessive expressions as objects of verbs

There are two main factors to take into account while looking at obviation and possession: first, there are two methods of encoding attributive possession (affix-form and -ewei suffix); second, there are two options for the alienability of the possessum. It seems more prudent to examine the -ewei suffix data, as within affix-form all third person, animate, singular possessed nouns encode obviation as a rule, and it would be difficult to tease apart possession-motivated obviation from verbal-object-motivated obviation. The

results below are incomplete, but offer a beginning to a more detailed examination of possession and obviation.

The data in (60) show the result of using a possessive expression as the object of a verb. First is (60.1), where the object is "the boy's apple" expressed using *-ewei* form possession. The word "boy" is animate, and "apple" inanimate, and neither is obviated. (60.2) shows another circumstance with an inanimate possessum, this time using affixform possession. Again, the possessum is not obviated; this data support that inanimate nouns truly are never obviated, and for the remainder of this discussion I examine only animate nouns.

```
(60.1) Mali magwtgp lpa'tuj-ewei wenju'su'n.

Mali eat.past.3>3poss boy-POSS apple
"Mary ate the boy's apple."

(60.2) Mali getuapetg ugt-alsutmaqan-m. 13

Mali seek.help.from3>3poss 3-religion-POSS
"Mary seeks help from her prayers/religion."
```

The data in (61) again show the results of possessums as objects of verbs, this time using the animate possessum "shirt." Here, I avoid inalienably possessed nouns, as they do not allow a contrast to be made between affix and *-ewei* possession; (61.1) is affix form, (61.2) is *-ewei* form. As might be expected of an animate possessum of a third person possessor, or the animate object of a transitive verb, the object "his shirt" in (61.1) is obviated. More curiously, the possessor is also obviated—this may be support for the observations in §5.3, where I discuss the possibility that the possessor is also an argument of the verb. Moving on, (61.2) also shows interesting results. Obviation is not obligatorily marked with *-ewei* the way it is with affix-form possession, so the only reason for its presence is as the object of the verb. As we can see, the object in (61.2) is obviated, due solely to its role as the object of a verb. However, it is less easy to tell whether the possessor is obviated (the way it seems to be in 61.1) because of the obligatory agreement with the possessum. An animate, singular possessum makes its possessor's suffix *-eweil*, obscuring the possibility that the obviative *-l* is also present.

¹³ This data is from the Mikmaq Online Dictionary (www.mikmaqonline.org)

- (61.1) Mali nemituapn ji'nm-ul ug^t-atlai-m-l. ¹⁴ Mali see.past.3>3poss man-obv 3-shirt-POSS-obv "Mary saw the man's shirt."
- (61.2) Mali nemituapn Frank-eweil atlai-m-l.
 Mali see.past.3>3poss Frank-POSS.anim.sg shirt-POSS-obv
 "Mary saw Frank's shirt."

From the data above, we might assume that the domain for obviation consistently includes the verb's object, and in the case that this object is a possessed nominal then both possessor and possessum are within the scope of obviation. Possession interacts with this only in that obviation is not generally required for *-ewei* possession, but that lack of obviation is overcome when the possessum is the object of a verb, because the motivation for this obviation comes from the possessum's role in argument structure. However, a more detailed analysis is in order before making any strong claims.

5.2.2 Possessums as possessors: recursive possession in Mi'gmaq

One characteristic of possession is its ability to be recursive; it is possible to have, for instance, "the boy's dog," but it is also possible to have "the boy's dog's bowl's contents," though admittedly the second would be limited to a very specific environment. Accordingly, I began to investigate the area of recursive possession in Mi'gmaq, focusing on affix-form possession. This section focuses on the data that I have collected so far.

Obviation is the key area of interest when looking at recursive Mi'gmaq possession. The data in (62) below shows an unexpected distinction in how obviation is marked: it seems to also depend on alienability. (62.1) contains the possessum "(male) friend," which is inalienably possessed and has obviative marking as a matter of course. (62.2), however, uses the alienable possessum "bottle," which does not seem to require obviation despite the fact that it is animate. So the pattern that we see below suggests that, while the alienable possessor/possessum "husband" is obviated, its possessum does not require obviation (unless it is an integral part of the word as with *witapal*). This is quite a

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¹⁴ Thanks to Mary Ann Metallic for both of these examples.

surprising result: there is no reason to predict that obviation is related to alienability, as these data suggest, and demands more investigation in the future.

(62.1) ug^t-ji'nmu-m-l w-itap-al 3-man-POSS-obv 3-friend-obv "Her husband's friend" (62.2) ug^t-ji'nmu-m-l ug^t-putai-m 3-man-POSS-obv 3-bottle-POSS "Her husband's bottle"

5.3 The possibility of possessor-raising

While examining the intersection of object-motivated obviation and possessum-motivated obviation, an interesting fact came to light. In certain verbs, the verbal suffix seems to change if the object of the verb is a possessive expression. Our consultant explained this suffix as appearing in environments where the subject is "not acting directly upon the object, but having to go *through* somebody to get to the object." Her usage of this suffix seems to vary depending on whether affix-form or *-ewei* suffixation is used. In (63.1) below, the "go through" verb ending (in bold) is used with the affix form; however, (63.2) uses *-ewei* to express possession, and the special verb ending does not appear.

- (63.1) Mali gisi-malqut**muaj** ug^t-ji'nmu'-m-*l* ug^t-wenju'su'n-m. Mali finished-eat.3>**3poss** 3-man-POSS-obv 3-apple-POSS Mary ate her husband's apple.
- (63.2) Mali gisi-malqutg ug-ji'nmu'-m-uei wenju'su'n. Mali finished-eat.3>3 3-man-POSS₁-POSS₂ apple "Mary ate her husband's apple."

Another compelling piece of evidence in this distinction may be seen in (64) below. In (64.1), the ending used is the more common one; in this reading, the object is not possessed, but simply refers to a style of shirt. However, in (64.2) where the object *is* possessed, the ending used is different.

(64.1) Mali nemi**apn** ji'nm-uei atlai.
Mali see.past.3>3 man-POSS shirt
"Mary saw a man's (style of) shirt."
(64.2) Mali nemi**tuapn** ji'nm-uei atlai
Mali see.past.3>3poss man-POSS shirt
Mary saw the (specific) man's shirt.

This may be related to possessor-raising, discussed in depth in Payne & Barshi (1999), as the verb shows different morphology when its object is a possessed nominal; this circumstance necessitates that the object DP also contain a possessor. When the object of a verb is a possessed nominal, it may be the case that the possessor is acting as an argument of the verb, and is raised from its position within the possessum DP to get a special status. However, I lack the time to fully explore the suitability of possessor-raising as an explanation for this *-ua-* ending, and hope to conduct further research on this matter.

6.0 **Summary**

The Mi'gmaq language has an extremely rich possession system, enhanced by the presence of alienability as an overt feature of the language. Section 3 expounded upon the idea that alienability is best expressed in terms of "closeness" both syntactically and semantically. The evidence from Mi'gmaq phonology and morphology are instrumental in advancing this analysis, and they seem to support it quite well. Section 4 surveyed other methods of expressing possessive relationships in Mi'gmaq, and hypothesised that the use of *-ewei* may be explicable through a diachronic model like that proposed in Heine (1997). Lastly, §5 introduced several interesting ways in which possession interacts with other elements of Mi'gmaq, and posed some questions that may be resolved with further research.

As seen in §5 particularly, there is a great deal of linguistic work yet to be done on the Mi'gmaq language. It is my hope that this paper has begun exploring this corner of the language's grammar, and that this exploration has contributed toward the understanding of alienability. It is my further hope that the questions raised concerning obviation and the limitations of possession will be investigated in more depth, and that linguistic research on Mi'gmaq will result in interesting answers to these puzzles.

Bibliography

- Baron, I., M. Herslund & F. Sørensen, eds. 2001. *Dimensions of Possession*. Philadelphia: John Benjamins Publishing Company.
- Boersma, P. & D. Weenik. 2007. Praat: doing phonetics by computer (Version 5.2.23). Retrieved May 1st, 2011.
- Chomsky, Noam. 1999. Derivation by phase. *MIT Occasional Papers in Linguistics* 18. Cambridge (Massachusetts): MIT.
- Chomsky, Noam. 2005. On phases. Ms., MIT.
- Deal, Amy Rose. 2011. Possessor-raising. Master's thesis, Harvard University. Accessed through http://ling.auf.net/lingBuzz/001371
- Diem, Werner. 1986. "Alienable und inalienable Possession im Semitischen," in Zeitschrift der Deutschen Morgenländischen Gesellschaft. Vol. 136, No. 2 pp. 227-291.
- Dixon, R. M. W. 2011. *The Languages of Australia*. Cambridge (United Kingdom): Cambridge University Press.
- Dobler, Eva. 2008. The Morpho-Phonology of (In)alienable Possession. Proceedings of the 2008 annual conference of the Canadian Linguistic Association. Accessed through http://homes.chass.utoronto.ca/~cla-acl/actes2008/CLA2008_Dobler.pdf
- Dobler, Eva. 2010. Morpho-Phonological Edge Effects and their Implications. Working paper associated with the McGill Syntactic Interfaces Research Group.
- Haiman, Anette. 1985. Genitive Variation in English. Berlin: Walter De Gruyter.
- Heine, Bernd. (1997) Possession: cognitive sources, forces, and grammaticalization. Cambridge (United Kingdom): Cambridge University Press.
- Hewson, J. & B. Francis (translators). 1990. The Micmac Grammar of Father Pacifique. J. D. Nichols, ed., *Algonquian and Iroquoian Linguistics*, Memoir 7. Winnipeg: Algonquian and Iroquoian Linguistics.
- Inglis, Stephanie. 1986. The Fundamentals of Micmac Word Formation. Master's thesis from the Department of Linguistics at the Memorial University of Newfoundland.
- Inglis, Stephanie. 1988. The Micmac morpheme -ew-. Papers of the 19th Algonquian Conference, ed. by William Cowan, pp. 99-102. Ottawa: Carleton University.
- Lynch, J. 1973. Verbal Aspects of Possession in Melanesian Languages. *Oceanic Linguistics*, Vol. 12, No. 1/2, Papers of the First International Conference on Comparative Austronesian Linguistics, 1974: Oceanic (Summer Winter, 1973), pp. 69-102. Honolulu: University of Hawai'i Press.
- Mikmaq Online Dictionary. www.mikmaqonline.org
- Mi'gmaq Online Grammar (forthcoming). Accessible through http://wiki.migmaq.org Nichols, Johanna. 1988. On alienable and inalienable possession - In honor of Mary Haas. Berlin: Mouton de Gruyter.
- Nichols, Johanna. 1992. *Linguistic Diversity in Space and Time*. Chicago: University of Chicago Press.
- Nichols, J. D. & B. Bickel. World Atlas of Language Structures, Chapter 59: Possessive Classification. Accessed through http://wals.info/chapter/59

- Nichols, J. D. & E. Nyholm. 1995. *A Concise Dictionary of Minnesota Ojibwe*. Minneapolis: University of Minnesota Press.
- Payne, D. & I. Barshi, eds. 1999. *External Possession*. Philadelphia: John Benjamins Publishing Company.
- Payne, Thomas. 1997. Describing morphosyntax: a guide for field linguists. Cambridge (United Kingdom): Cambridge University Press.
- Ritter, E. & S. T. Rosen. (2010) "Possessors as Arguments: Evidence from Blackfoot." Paper presented at 42nd Algonquian Conference, Memorial University, St. John's, Newfoundland
- Rosenbach, Anette. 2002. Genitive Variation in English: Conceptual Factors in Synchronic and Diachronic Studies. Berlin, New York: Mouton de Gruyter. Accessed through http://books.google.ca/books?id=gBegIwquwRYC&printsec=frontcover#v=onepage&q&f=false
- Seiler, Hansjakob. 1983. Possession as an Operational Dimension of Language. Tübingen: Gunter Narr Verlag.
- Seiler, Hansjakob. 2001. "The operational basis of possession: A dimensional approach revisited," in *Dimensions of Possession*, Baron, I., M. Herslund, F. Sørensen, eds. Philadelphia: John Benjamins Publishing Company.
- Wolfart, H. C. 1996. Sketch of Cree, an Algonquian Language. Ives Goddard, ed., Languages, 390-439. William C. Sturtevant, gen. ed., Handbook of North American Indians, vol. 17. Washington, D.C.: Smithsonian Institution. Accessed through http://imp.lss.wisc.edu/~jrvalent/BackUps/NLIP_Year_4_2008_bu13jul08/attach ments/wolfart-hb-cree_sketc.pdf
- Young, R. W. & W. Morgan. 1987. *The Navajo Language: A Grammar and Colloquial Dictionary*. Albuquerque: University of New Mexico Press.

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