STUDIES IN INUKTITUT GRAMMAR

by

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Abbreviations used in this dissertation

1 First person

2 Second person

3 Third person

3per Third person

A Actor agreement (or subject agreement)

ABL Ablative case

ABS Absolutive case

AP Antipassive

APT Active participle forming suffix

APP Appositional mood

BEN Benefactive suffix indicating that something was done for someone

BR Bare root

COMP Comparative case

COND Conditional mood marker

DAT Dative case

DECI Declarative intransitive

DECT Declarative transitive

du Dual number agreement

DUB Dubitative mood marker

DS Different subject

EST Established mood marker

GER Gerund-forming suffix

HAB Habitual

HABNOM Habitual nominalization

INDI Indicative intransitive

INDT Indicative transitive

IMP Imperative/optative mood

INT Interrogative mood

ITR Indicates that the meaning of a phonological sequence is only

possible if it is used as an intransitive stem

LOC Locative case

NEG Negation

OBJ Object

OBJθ Objectθ

REL Relative case

PAST Past tense

PPT Passive participle forming suffix

pl Plural

REC Reciprocal suffix

sg Singular

SEC Secondary case

SIM Simulative case

SUBJ Subject

TR Transitive/reflexive

U Undergoer agreement (or object agreement)

VIA Vialis case

Abstract

This dissertation addresses a number of issues about the grammar of Eastern Canadian Inuktitut. Inuktitut is a dialect within the Inuit dialect continuum which is a group of languages/dialects within the Eskimo-Aleut language family. (Eastern Canadian Inuktitut has an ISO 693-3 language code of 'ike'.) Typologically, it is an ergative language that is heavily derivationally polysynthetic with a very free word order. The goals are both descriptive and theoretical. Accurate description is essential since some dialects in this language family will soon go extinct, so it is important to know what types of questions need to be asked. While description may be the primary goal of this dissertation, theoretical issues are addressed in various places. Ergative languages are important to many syntactic theories as are languages with freer word order and polysynthetic languages.

Inuktitut has a wide range of transitivity alternations. While both transitive verbs and intransitive verbs have an argument which must bear absolutive case, the language has different restrictions on two different types of absolutive arguments. Absolutive objects must be given a specific reading, whereas absolutive subjects have no such requirement. Both arguments of a transitive verb have different restrictions with respect to either case or interpretation as compared to the single argument of an intransitive verb. It is argued that something along the lines of the lexical constraints of HPSG can be helpful in capturing the generalizations. Inuktitut also has a very wide range of derivational suffixes, which differ in their restrictions in terms of what the restrictions are on the input of the derivational rules and how the input must be mapped to the output. It will be argued that, in a lexicalist model, transitivity alternations are best captured with the TRANS features [intransitive], [transitive], and [atransitive].

An analysis of possessive constructions is important to this dissertation, since there are a

number of suffixes which ordinarily express a possessive relationship when they are attached to simple noun roots from the lexicon, but which express some other semantic relationship when they are attached to some deverbal nouns, as determined by a very precise set of rules concerning deverbal noun formation. There are also some deverbal nouns which must ordinarily be followed by a possessive suffix, or which may be followed by one of the derivational suffixes which normally express a possessive relation. While the analysis to be adopted is adequate to explain quite a number of grammatical restrictions in Inuktitut, it should also be helpful in generating descriptive questions about other dialects in this language family.

This dissertation also argues that semantic scope alone should be sufficient to explain many restrictions with regards to affix ordering, and the descriptive generalizations are consistent with the assumptions of lexicalist models. It is also argued that non-lexicalist theories have no advantage over lexicalist theories in explaining noun incorporation, where a verbalizing suffix is attached to a noun stem.

Outside of transitivity alternations, this dissertation delves into more depth with regard to a number of grammatical phenomena than has any previous work on other dialects or languages in this language family. A few areas of note are comparative constructions, the derivational processes which are possible with pronouns, the word *atuni*, 'each one', or 'all/both of them', noun stem elision, and the ways the language allows possessor arguments to be expressed in noun incorporation.

Chapter 1: Introduction

Eastern Canadian Inuktitut is part of the Inuit dialect continuum which spreads from northern Alaska to Greenland. (Eastern Canadian Inuktitut has an ISO 693-3 language code of 'ike'.) The Inuit dialect continuum is part of the Eskimo branch of the Eskimo-Aleut language family. The subdialect studied in this dissertation is mostly *Tarramiutut*, spoken in arctic Quebec, along the Ungava Bay. The classification of the Inuit dialects is outlined in Dorais (1990). In particular, the two speakers that I have worked with the most, Joanna Okpik (JO), and Minnie Grey (MG), are from adjacent villages in this region. There are some small dialectical differences between the two villages. I have also done some research with Lynn Morehouse (LM), from the Hudson Bay area, and some with Saila Michael (SM), whose dialect is a mixture between the one spoken in Iqaluit (South Baffin Island) and the one spoken in Coral Harbor (an island in Hudson Bay).

Inuktitut is a polysynthetic language with both head marking and dependent marking. Nouns may be inflected for number and for a possessor, and verbs may be inflected for either one or two verbal arguments. There are ten cases used to mark nouns in Tarramiutut. One of these case forms, comparative case, has not yet been described in any other dialect, subdialect, or language in this language family. More research will be required to determine if it is an innovation of this subdialect or if it has just gone unnoticed in other dialects and subdialects. In many instances, the case given to a noun depends on the argument structure of the verb. In other instances, the case form itself indicates how the noun should be interpreted. For example, locative case always means 'at', 'in', or 'on' a place or time.

Inuktitut is an ergative language. In some sentences, the noun corresponding to the subject in the English translation gets absolutive case, whereas, in other sentences, the absolutive case goes to the object and the subject gets relative case. This is in contrast to nominative/accusative languages such as Latin which always give the same case to the subject, and which always give a different case to the object. Nonetheless, I will argue in section 4.1 that the notions of subject and object are descriptively appropriate for the grammar of Inuktitut.

There is quite a bit of freedom with respect to word order. Indeed, we will see in section 3.1 that word order is so free that one cannot even argue for a Noun Phrase constituent. For this reason, there will be no syntactic trees in this dissertation. The language relies on a rich system of case and agreement to determine the relationship between words. However, Inuktitut is complex at the level of argument structure. Many suffixes can add arguments to a verb, and many suffixes change the case that a verb stem's arguments are assigned. Word formation itself can also be a bit complex, since verb stems are often nominalized and then reverbalized, particularly with the suffixes *-u*, 'be', and *-gi*, 'have'.

The system of verbal inflection is quite elaborate, with at least eight mood conjugations. These include the indicative, declarative, interrogative, imperative/optative, conditional, established, appositional, and dubitative moods. A detailed investigation of how these moods are used is outside the scope of this dissertation. The indicative and declarative moods generally correspond to simple propositions. A number of examples will be given in the established mood, which means 'because', 'when something happened' or 'that', as in 'I know that he/she did something'.

Imperatives are used for commands or to state the speaker's wishes. The conditional mood is used to express 'if', or 'when something will happen'. The interrogative mood is sometimes used for questions, but so are the indicative and established moods.

Dubitative mood is used for embedded questions. Appositional mood appears to be the unmarked mood form used in longer narrative texts. In some constructions, it may be required that one of the verbs be marked in the appositional mood.¹ The use of the moods is described in Dorais (1988, 2010), Spalding (1992), and Mallon and Kublu (1996a, 1996b, 1996c).

This dissertation will attempt to describe the language as a system. A variety of different possibilities will be considered, most of which are inspired either by LFG or HPSG. However, in many cases the analyses will diverge from the standard assumptions of either of these frameworks mainly because the purpose of the theoretical discussions is to try to investigate what range of possible theoretical approaches are or are not possible for the language rather than to try to come up with a single elegant analysis in a single well-established framework. With respect to the Principles and Parameters or minimalist approaches to syntactic theory, the analyses in this dissertation are most compatible with lexicalist approaches, such as the one given by DiSciullo and Williams (1987).

The following terminology will be adopted for Inuktitut morphological processes.

A derivational suffix is a suffix which yields an output which is either a noun stem or a verb stem. Unlike the derivational suffixes of English, most of the derivational suffixes of Inuktitut are fully productive, being added by the speaker as the sentence is uttered.

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¹ See Manga (1996b) for an explanation for why verbs in the appositional mood should not be considered to be infinitival.

² Dryer (2007) has pointed out that there is another pattern in West Greenlandic. In that dialect, the equivalent of (2.1.3c) is also possible. However, a definite reading is not possible for the noun stem onto

Inflectional suffixes are those suffixes that have to occur on every noun, verb, or pronoun, to inflect for case, number, mood, or person. Enclitic endings are those suffixes which occur after the inflectional suffixes but which create an output which does not count as a noun stem or a verb stem. An example is given in 1.1.

(1.1) toronto -liar -sima -ju -nga buffalo -mul -lu MG
Toronto -go.to -PERF -INDI -1sg Buffalo -DAT.sg -LU
'I have gone to Toronto and Buffalo.'

The first word in this example is composed of a noun root followed by two derivational suffixes followed by two inflectional suffixes. The suffix -liag attaches to noun stems to create verb stems meaning 'go to X'. The suffix -sima is a perfective marker, which attaches to verb stems to create verb stems. In this case, it creates a stem meaning 'have gone to X'. The inflectional suffixes -ju and -nga attach to verb stems to create a word which can be placed in the sentence. They indicate that the verb has a first person singular subject and that the verb is in the indicate mood conjugation. The word torontoliarsimajunga means, 'I have gone to Toronto'. In the second word, buffalomullu, the dative singular inflectional suffix -mut is attached to the noun stem buffalo, to yield the word buffalomut, 'to buffalo'. Buffalomut is then followed by the enclitic ending -lu, yielding buffalomullu, which will often be translated into English as 'and to buffalo'. In terms of the terminology used herein, -lu is an enclitic ending because it attaches to words rather than to stems, and the output is a word rather than a stem. Together the two words in (1.1) mean, 'I have gone to Toronto and Buffalo.' The terminological choices follow that of other linguists. However, there is ultimately no claim in this dissertation that there is an important theoretical distinction between the three types of endings.

Chapter 2 will address nouns, verbs, and participles. Participles are deverbal

nouns which can be used in all the same ways that nouns can. Either nouns or verbs can be used as predicates with all the same restrictions, and this includes deverbal nouns. Because the language has a very free word order, there is little evidence for constituents such as noun phrases and verb phrases. For this reason, this dissertation will not adopt a phrase structural analysis that claims that clauses can be headed by either nouns or verbs. Rather, an alternative analysis will be given where verbs are of the lexical category [clausal word], and there are covert derivational rules which convert words of the category [noun] into words of the category [clausal word]. The chapter will also address a restriction that objects must get a specific interpretation when they bear absolutive case. It will be argued that this should be handled with the lexical constraint theory of HPSG. Clausal words of the subcategory transitive clausalword have a constraint that the absolutive argument must be specific. It will also be argued that Inuktitut makes a distinction between [atransitive] and [intransitive] nouns, and this distinction will be very important in the discussion of possessive constructions as well as some of the restrictions on deverbal nouns to be dealt with in Chapter 4. There will also be short discussions of the words *atuni*, 'each', and pronouns.

Chapter 3 will be an overview of the case system used in Inuktitut. In terms of argument structure, dative case marks goals and demoted subjects. Secondary case is used to mark non-canonical objects for which there is no verbal agreement. These non-canonical objects will be referred to as $OBJ\theta s$, a term taken from the LFG literature. For linguists not of the LFG tradition, the term secondary object may be more appropriate. Other cases have a more fixed meaning associated with their use.

Chapter 4 will address reflexivization, antipassivization, and a wide variety of

derivational processes which affect argument structure. Many of the derivational suffixes to be addressed add either one or two arguments or a nominal referent to the stem. In many cases, the subject or object argument of the original verb stem ends up getting deleted from the resulting argument structure. Demotion also occurs in a wide variety of constructions. Because the restrictions on the derivational suffixes are so diverse, the data in Chapter 4 will be consistent with a powerful lexicalist theory which allows essentially any input to be mapped to any output. For practitioners of theories resembling LFG, the so-called antipassive alternation can be analyzed as a lexical phenomenon, with some verbal stems having a subject and an object, and other verb stems having a subject and an OBJ θ . It will be argued that regardless of whether one adopts a theory that is more like LFG or one that is more like HPSG, transitivity alternations are best handled with the TRANS, or 'transitivity', features [transitive] and [intransitive] for verb stems, and the TRANS features [atransitive] and [intransitive] for noun stems. This will allow us to give an account for some relatively difficult grammatical restrictions. For example, why can the agentive nominalizing suffix -ji/ti only nominalize the subject of a transitive stem if it is used in a possessive construction? The claim will not be that the use of TRANS features is desireable but that it is necessary. For that reason, it will be necessary to argue against some other possible theoretical approaches.

Chapter 5 will address a class of verbal stems with adjectival meaning which do not share all of the properties of other verb stems. They cannot be suffixed with many of the derivational suffixes which normally attach to verb stems. This restriction may have come about due to the infrequency of their use as sentential predicates.

Chapter 6 will be a brief discussion of the restrictions on affix ordering. It will be

argued that a semantic account is superior to an account which makes use of a syntactic tree to explain affix ordering. It will also be argued that the standard assumptions of most lexicalist theories are adequate to explain most if not all phenomena related to the ordering of suffixes in Inuktitut.

Chapter 7 will address some of the verbalizing suffixes used in this language.

They allow the creation of words with meanings like, 'he built a house'. In such cases, it is possible to express 'red one', as a separate word to get the meaning 'he built a red house'. The discussion of transitivity alternations from Chapter 4 will be continued in Chapter 7, since there are a number of different transitivity alternations at work with the verbalizing suffixes. It will also be argued that, while a number of non-lexicalist theories have been proposed, none of them offer any advantages over a lexicalist theory. Also to be addressed in this section are post-inflectional verbalizing suffixes which add to nouns which are fully inflected for case.. This provides strong counter-evidence to theories that claim that, universally, inflectional processes which add number or possessor agreement must come after derivational processes which can create noun stems or verb stems.

Coordination constructions will also be addressed in Chapter 7 as they relate to noun incorporation, for which theoretical explanations will be provided which do not make use of syntactic movement.

Finally, there will be two appendices that will address some relatively complicated grammatical phenomena. Appendix 1 will address some data related to comparative constructions. Appendix 2 will address the phenomena of verb stem and noun stem elision, where a verb stem or noun stem is omitted.

Chapter 2: Nouns, Verbs, and Participles

This section will deal with two word classes in Inuktitut, nouns and verbs. Participles are a type of deverbal noun which share all of the same distributional restrictions as nouns. An example of a participle is *nalligigunanga*, which can mean either 'the one which he/she seems to love', or 'he/she seems to love him/her/it', depending on whether it is used as a predicate or an argument. This will be followed by a discussion of the indicative mood paradigm, such that some of the forms appear to be participles, whereas others appear to be verbs. Understanding that some of the forms in the indicative paradigm are either nominal passive participles or nominal active participles will be crucial to understanding the glossing of many of the examples in this dissertation. This will be followed by a discussion of person and number in Inuktitut. Finally, there will be a theoretical discussion of the use of verbs, nouns, or participles as clausal predicates.

Also to be discussed in this section are two of the major case forms, absolutive and relative. Relative case is used to mark nominal possessors or subjects in instances where there is inflection for two verbal arguments. Some of the data in section 2.6 are important to any theory of the grammatical relations of Inuktitut, since they show that neither argument of a verb for which there is transitive inflection is treated the same as the single argument for which there is intransitive inflection. The language's use of nominal predicates will be investigated in depth in this chapter. If a language allows nominal predicates and it has deverbal nouns, one would expect it to allow deverbal nouns as to be used as predicates, and it appears that this must be the correct analysis for some of data to be discussed in this chapter.

There will also be two short sections on the word *atuni*, 'each', and on pronouns. They have been placed at the end for two reasons. First, they have little bearing on the theory of this chapter. Second, placing them earlier might break the continuity which is required to remember information and analyses from section to section. For example, the presence of nominal predicates in the language is introduced in section (2.1), but it is of high importance in sections (2.3), (2.4), (2.5), and (2.6).

2.1. Nouns

In Inuktitut, nouns can be used either as arguments or predicates and they can be inflected for number, the person and number of a possessor, and they can be given case morphology. There are many derivational suffixes in Inuktitut. While some attach to noun stems, others attach to verb stems.

The first example in this section illustrates the use of case morphology to mark arguments. The verbal predicate in (2.1.1) means 'I am looking at'. The glossing of the components of the predicate is not important for the discussion at this point. Importantly, however, the non-actor, the one who is looked at, must be placed in secondary case when this form of the verb is used. In (2.1.1), *angutik*, 'man', has been suffixed with the secondary singular case suffix. Together, the words *angutimik takunnatunga* mean 'I am looking at a man'.

(2.1.1) anguti-mik takunna –tu -nga JO man-SEC.sg look.at -INDI -1sg 'I am looking at a man.'

When nouns are used as predicates, both the subject and the predicate bear the unmarked absolutive case, as shown in (2.1.2). In the absence of case or number suffixation, a noun is absolutive singular.

(2.1.2) Jaani angutik JO John(ABS.sg) man(ABS.sg) 'John is a man.'

Nominal predicates may only be used with a third person subject, as illustrated by (2.1.3a, b, and c). In (2.1.3a), both of the nouns which are indentified are third person absolutive. There is a stylistic dispreference for replacing *Jaani* with a first person absolutive pronoun. According to MG, it is better to use fewer words rather than to use a first person pronoun, as in (2.1.3c). In example (2.1.3c), the suffix -u, 'be', has been added onto the stem *uqausiliriji*,'linguist', to yield *uqausilirijiu*, 'be a/the linguist'.² The other suffixes indicate that this is a verb in the declarative conjugation with a first person subject. The glossing of the components of the verbal suffixes need not concern us here. They will be addressed in section (2.4). It should be noted that (2.1.3b) is perfectly acceptable to JO, but considered to be a bad way of speaking Inuktitut by MG and SM. It should also be noted that, if *uqausiliriji* is used as a predicate without an overt subject, it can, at least usually, only be interpreted as 'he/she is a linguist'. Example (2.1.3c) illustrates how it is possible to say 'I am a/the linguist.'

(2.1.3) a) Jaani uqausiliriji MG John(ABS) linguist(ABS) 'John is a/the linguist.'

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² Dryer (2007) has pointed out that there is another pattern in West Greenlandic. In that dialect, the equivalent of (2.1.3c) is also possible. However, a definite reading is not possible for the noun stem onto which -u is attached. The equivalent of (2.1.3a) is not possible in West Greenlandic. There is another construction which makes use of the particle *tassa*, placed between two nouns, which would be used to say 'John is the linguist', but never 'John is a linguist'. These generalizations have been confirmed by Michael Fortescue in a personal communication. The lack of simple nominal predication of the type described in (2.1.3a) in West Greenlandic results in important differences in the grammars of these two dialects. We will see many cases where deverbal nouns are used as predicates in Inuktitut. This does not appear to occur in West Greenlandic because the dialect lacks the construction in (2.1.3). Dryer (2007) gives an interesting semantic explanation for why there are many languages that follow the pattern of West Greenlandic, and the reader is referred to that article for an explanation. In the case of Inuktitut, the constructions in (2.1.3a) and (2.1.3b) both give the information that someone is a linguist, but they do not give any information about whether or not the individual has been referred to as a linguist before in the preceding discourse.

- (2.1.3) b) ?uvanga uqausilariji MG
 me(ABS) linguist(ABS)
 ?'I am a linguist'
 ?'I am the linguist'
 - c) uqausiliriji -u -vu -nga MG linguist -be -DECI -1sg 'I am a/the linguist.'

A noun in Inuktitut may be inflected for a possessor. This possessor will either be understood pronominally, or it can be expressed as another word bearing relative case. In (2.1.4), *ataata*, 'father', has been suffixed with *-nga*, 'his/her', resulting in *ataatanga*, 'his/her father'. The possessor, 'Mary', is expressed in relative case. *Ataatanga*, 'his/her father', is the predicate in these examples, while *Jaani*, 'John', is the subject. While possessors are normally placed adjacent to the noun which they possess, JO has informed me that this is not a strict requirement, particularly not when the possessed noun is used as a predicate. Thus, both (2.1.4a) and (2.1.4b) are grammatical.

- (2.1.4) a) Jaani Mary-up ataata -nga JO John(ABS.sg) Mary-REL.sg father -his/her.sg 'John is Mary's father.'
 - b) Mary-up Jaani ataata -nga JO Mary-REL.sg John(ABS.sg) father -his/her.sg 'John is Mary's father.'

Many of the derivational suffixes of Inuktitut are sensitive to stem class. Some attach to noun stems only, and some attach to verb stems only. The next example will involve the suffix -apik, 'small or dear'. It attaches to noun stems before nominal inflection is added. In example (2.1.5), it has been attached to angutik, 'man', yielding angutiapik, 'small or dear man'. This has, in turn, been suffixed with the plural suffix. Angutiapiit means 'small or dear men' when used as a referring expression or, 'be small or dear men' when used as a predicate.

(2.1.5) anguti -api -it MG
man -small/dear -pl(ABS)
'small or dear men'
'They are small or dear men.'

It is also possible to attach some demonstrative pronoun to the end of a noun. The demonstrative pronouns that can be used this way are the ones that begin with a vowel. The absolutive singular, dual, or plural forms of *una*, 'this one', and *inna*, 'that one' may all be used either as suffixes or as separate words expressing an absolutive argument. In (2.1.6a), the predicate means, 'I am looking at him/her'. Again, the glossing of the components of the predicate is not important to the discussion at this point. *Angutiguna*, 'this man', expresses the object. In example (2.1.6b), *takulaurtuq* means 'he/she sees someone/something'. When *takulaurtuq* is used as a predicate, that which is seen must be placed in secondary case. Example (2.1.6b) shows that demonstrative suffixes go after case suffixes. The second translation of *angutiguna* in (2.1.7) shows that absolutive nouns ending with a demonstrative pronoun can also be used as predicates.

- (2.1.6) a) angutig -una takunna -ta -ra MG man(ABS.sg) -this look.at -PPT -my.sg 'I am looking at this man.'
 - b) nanur -mig -inna taku -laur -tuq JO bear -SEC.sg -that.one see -PAST -APT 'He saw that bear.'
- (2.1.7) anguti -guna MG man(ABS.sg) -this 'this man' 'This one is a/the man.'

Absolutive nouns bearing a demonstrative suffix can be used as predicates, in which case the demonstrative pronoun corresponds to the subject in the English translation. One such example is given in (2.1.8). More examples of this sort will be

given in section (2.3), which will address deverbal nouns. The presence of nominal predication in this dialect will be very important to understanding the data and the analyses of this chapter.

This section will end with a rather curious example. In (2.1.9), the demonstrative suffix –*inna*, 'that one', is suffixed onto the first person pronoun *uvanga*, 'me'. It is used as a predicate meaning, 'that would be me'. This is not grammatical in the dialect of SM. However, we will see in section 3.1, that *uvanga*, 'me', can be used as a predicate meaning 'belong(s) to me', at least in the dialect of SM.

This dissertation assumes that, in sentences containing nominal predicates, only a single word is treated as the predicate rather than a noun phrase, even though, for other languages, an analysis which treats noun phrases rather than nouns as predicates is clearly motivated. The reason for treating the noun alone as the predicate is that there may be insufficient evidence to conclude that Inuktitut even has noun phrases. When I worked with JO, I collected a large number of examples that are consistent with an analysis that suggests that Inuktitut has no phrase structure whatsoever. However, only a few examples will be given in section 3.1, which addresses the position of a noun's possessor argument with respect to a possessed noun. The reason for giving few examples at this time is that other speakers do not like many of the examples that pertain to unusual word orders that I collected when I worked with JO. However, I am strongly under the

impression that language processing is the major factor in determining whether or not speakers find a given word order acceptable. They do not like garden path sentences or ambiguous sentences, and they prefer sentences that take them less time to parse. In section (3.1), some simple phrase structure rules will be given that show how a language can have such a free word order, though more research would certainly be needed to better evaluate this claim about word order in Inuktitut. A little bit of data regarding this issue will be presented shortly as it relates to the question of whether or not there is reason to believe that Inuktitut allows noun phrases rather than nouns to be used as predicates.

In Inuktitut, it is possible to use multiple nouns bearing the same case to express a single argument, but they do not have to be adjacent, so there is no reason based on adjacency to believe that they ever form a constituent. The word *taika*, 'be over there', used in examples (2.1.10) and (2.1.11), belongs to a closed class of verbs which express location. It is an invariant form that is used with third person subjects, whether they are singular, dual, or plural.³ This closed class will not otherwise be discussed in this dissertation.⁴

- (2.1.10) taika Jaani buffalo -miu SM be.over.there John(ABS) Buffalo -inhabitant of(ABS.sg) 'Over there is John, an inhabitant of Buffalo.'
- (2.1.11) Jaani taika buffalo -miu SM John(ABS) be over there Buffalo -inhabitant of (ABS.sg) 'Over there is John, an inhabitant of Buffalo.'

³ The restriction against first and second person subjects is most likely related to its deictic nature. The word in this class which means 'be over here' is *tagga* and it can be used with a first person pronoun as in *uvanga tagga*. Another way to translate 'I am over here' into Inuktitut is *uvanga taima*. The word *taima* has a variety of uses as discussed in Schneider (1985).

⁴ The word *taika*, used in these examples, can never be used to express an argument.

In both of these examples, both *Jaani* and *buffalomiu*, 'inhabitant of Buffalo', express the single absolutive argument of taika. However, the word order in (2.1.11) shows that they are non-adjacent and, therefore, do not necessarily form a constituent. Given the free word order of the language, there is little reason based on adjacency to think that two nouns expressing the same argument ever form a constituent. There are many linguists that make use of the notion of 'discontinuous constituency' for sentences such as (2.1.11). However, in this dissertation, it will be relatively easy to give an analysis of most Inuktitut sentences without claiming that the language has noun phrases or verb phrases. Furthermore, we will see, in section (3.1), that a theory which allows multiple nouns to express a single argument makes different predictions from theories that allow for 'discontinuous constituents'. In section (3.1), there are some types of data that could be used to argue that a theory which claims that Inuktitut has 'discontinuous constituents' is superior to the analysis to be adopted in that section. In the absence of such counter-evidence, an analysis which makes reference to 'discontinuous constituents' is quite unmotivated and should be rejected. The data in this section are only intended to be sufficient to argue that there is no evidence that Inuktitut allows noun phrases rather than nouns to be used as predicates. Let us now turn to example (2.1.12).

(2.1.12) Jaani uqausiliriji buffalo -miu MG John(ABS) linguist(ABS.sg) Buffalo -inhabitant of(ABS.sg) 'John is a linguist from Buffalo.'

The words *Jaani*, *uqausiliriji*, and *Buffalomiu* all mean, 'John','linguist', and 'inhabitant of Buffalo'. The most fluent translation of this sentence into English is 'John is a linguist from Buffalo'. It might appear tempting to say that *Jaani* is the subject and *uqausiliriji buffalomiu* form a noun phrase predicate. However, this analysis is really

based on the structure of the English translation, which treats 'John' as the subject and 'a linguist from Buffalo' as a predicate. Such an analysis would be unmotivated in Inuktitut for two reasons. First, the language doesn't otherwise provide evidence for the existence of NPs. Second, there is another possible analysis which does not involve positing an NP constituent. It could be that *buffalomiu* (or *uqausiliriji*) is the predicate, and the other two nouns express the absolutive subject of that predicate. A more literal translation for (2.1.12) would be 'John, a linguist, is from Buffalo'. What is awkward in the English translation is not necessarily awkward Inuktitut. I know of no evidence to motivate an analysis that allows for NP predicates in Inuktitut.

2.2. Verbs

Unlike nouns, verbs may not be used as arguments, nor can they take case inflection. They must always be used as predicates. They also differ from nouns with respect to which derivational suffixes can be used.

Inuktitut has an ergative system of case and agreement. A verb may agree in person and number with one or two arguments. When there is agreement for only one argument, that argument may be placed in absolutive case. When there is agreement for two arguments, the subject may be expressed in relative case, and the object may be expressed in absolutive case.

The predicate in (2.2.1), *nalligivanga*, is a verb, meaning 'he/she loves him/her'. The final suffix on *nalligivanga* is *nga*. It shows inflection for two arguments. It is glossed 3sA:3sU, indicating that both arguments are third person singular. The 'A' stands for actor, or the subject. That is the one who loves someone. It corresponds to the subject in the English translation. The 'U' stands for undergoer, or the object. It is the

other argument for which there is agreement, in this case, the one who is loved. In section 4.1, reasons will be given for believing that the words subject and object really are appropriate terms for the arguments in question. Together, the three words mean 'Mary loves John'. *Maryup* bears relative case, since it is the subject. *Jaani* bears absolutive case, since it is the object.

(2.2.1) Mary-up Jaani nalli -gi -va -nga JO Mary-REL.sg John(ABS.sg) love -TR -DECT -3sA:3sU 'Mary loves John.'

Morphologically *nalligivanga* is broken down as follows. The stem *nalligi* means 'love'. An explanation of the use of the suffix -*gi* will have to wait until Chapter 3. Onto it has been attached *va*, which is glossed DECT, for declarative/transitive. This suffix is used in the declarative mood with those forms which inflect for two arguments. It is followed by the agreement suffix.

Example (2.2.2) is an example of a verb which is only inflected for one argument. Actually, there is no third person agreement suffix (unless we analyze the *q* as a third person singular suffix), but the absence of an inflectional suffix indicates that the inflection is third person singular. The predicate *aanniavuq* means 'he/she is sick'. *Vuq* has been glossed DECI for declarative/intransitive. It is used for forms in the declarative mood which only inflect for one argument. In this sentence, the single argument, *Jaani*, is placed in absolutive case.

(2.2.2) Jaani aannia-vuq JO John(ABS.sg) be.sick-DECI(3sg) 'John is sick.'

Verbs cannot be used as a referring expression. Similarly, they cannot be given case marking. The example in (2.2.3) is not a possible word, where a secondary case

suffix has been added onto nalligivanga, 'he/she loves him/her/it'.

The affix -guluk is another diminutive suffix like -apik, which has all the same morphosyntactic restrictions on how and where it can or cannot be used. At least for MG, -guluk can have a pejorative rather than an ameliorative meaning. Except in the imperative/optative mood, the suffix -apik, 'small or dear', can never be added to a verbal stem with the meaning 'small/dear'. The suffixes -apik and -guluk can only be added to nominal or participial stems before the inflectional morphology is added. In (2.2.4a) to (2.2.4c), -guluk has been suffixed between the various components of the verb from example (2.2.1). None of these are possible words. The exception, where adjectival suffixes are attached to stems in the imperative/optative mood, will be discussed in section (4.16).

- (2.2.4) a) **nalli -gi -va -gulu -nga JO love -TR -DECT -small/dear -3sA:3sU *'He/she loves the small one.'
 - b) **nalli -gi -guluk -ka -nga JO love -TR -small/dear -DECT -3sA:3sU *'He/she loves the small one.'

I have done a lot more research with —guluk than —apik because it is more convenient. There is another suffix which is phonologically identical to —apik which can attach to any verb stem. It means 'do something a little bit'. One has to be careful to determine the translation of the sentence when working with —apik, though speakers can clearly differentiate the two meanings. Many of the examples that were originally checked with —guluk have been second checked with —apik because most of the sentences with —guluk are rude. There are no grammatical phenomena in this dissertation that have been investigated with —apik, but which have not also been investigated with either —guluk or —aluk, 'big or terrible'. These latter two suffixes have no phonologically identical counterpart that can attach to verb stems outside of the imperative/optative mood. They have identical restrictions with regards to every phenomenon regarding restrictions on the uses of adjectival suffixes that will be discussed in this dissertation.

Examples (2.2.4) and (2.2.5) show that it is also possible to suffix an absolutive demonstrative pronoun onto a verb. These examples are in the established mood meaning 'because', 'when' in the past, or 'that' as in 'I know that you left'. The 'DS' in the glossing stands for 'different subject' and it is the form that is used when the subject is not topical.

- (2.2.5) ani -mma -n -una MG leave -EST.DS -3sg -this.one 'When this one left.'
- (2.2.6) taku -ga -kku -una MG see -EST -1sgA.3sgU -this.one 'because I see this one.'

The following analysis will be adopted for why verbs can only be used as predicates but nouns can be used as either arguments or as predicates. Inflected verbs will be of the lexical type [clausal word]. There will be a covert derivational rule which converts absolutive nouns from the lexical type [noun] to the lexical type [clausal word] while adding an absolutive argument to the word's argument structure. In other words, nominal predicates belong to the same lexical category as verbs. It will be important to remember that [clausal word] is really a lexical category, and that this dissertation makes few claims about clause structure. Due to the non-configurational nature of Inuktitut syntax, it is not assumed that words of the class 'clausal word' occupy a specific syntactic position, there ultimately being no evidence for clauses containing syntactic positions for words or phrases that take on a specific role in the sentence. However, words of the lexical category [clausal word] take on a role similar to verbs in other languages because

they do end up licensing a clause.

There could, in principle, be other syntactic approaches that could account for the fact that either nouns or verbs can be used as predicates. For example, one could claim that there is a syntactic position within the clause that can be occupied by either a noun or a verb. The analysis of this dissertation will be preferred for the following reason. We will see, in chapter (3.1), that there is so much freedom with respect to word order that it is at least tempting to claim that Inuktitut has only one syntactic construction which allows for the creation of a string of words. On the other hand, there is no question that Inuktitut has a very rich morphology allowing a wide range of input to output mappings. Using morphology rather than syntax to account for the possibility of nominal predicates is more motivated because there is no question that this language has derivational morphology, but very little evidence that it has much complexity whatsoever in its syntactic structure. Some readers have objected to the type of rule given in this dissertation for nominal predicates because it is a null derivation, which therefore leaves no overt phonological evidence. However, an alternative analysis which makes use of syntactic phrase structure would involve attaching words to invisible syntactic nodes, making the analysis in no way more motivated than the analysis giver herein.

2.3. Participles

Participles are formed from verb stems. Like both nouns and verbs, participles can be used as predicates. They can also be used to express arguments, and they share all of the other properties of nouns that were illustrated in section 2.1, except that, when they are used as predicates, the subject must be third person. For this reason, they should be considered a subclass of noun. Understanding that any deverbal noun can be used either

to express an argument or as a predicate will be very important to understanding the remainder of this chapter as well as Chapter 4, in which a wider range of deverbal nouns will be presented.

The first set of examples will involve the participle *nalligigunanga*, which can be used either as a predicate meaning 'he/she seems to love him/her/it', or as a referring expression with the meaning 'the one that he/she seems to love'. Morphologically, nalligigunanga is formed by suffixing -gunaq, 'one which seems', onto the stem nalligi, 'love'. Onto this is attached a possessive suffix which treats the subject of love as the possessor. We will see, in section 3.12, that *-gunaq* belongs to a class of suffixes that can only nominalize the object if they are possessed. In example (2.3.1), the form of the secondary case suffix which is used after possessive suffixes has been suffixed onto nalligigunanga, 'one which he/she seems to love', yielding nalligigunanganik.⁷

'I am looking at the one that John seems to love.'

The predicate in this sentence is *takunnatunga*, 'I am looking at something'. When this predicate is used, the entity which is seen takes secondary case. Recall that the person who seems to love someone is treated like a possessor with this word, since this is the

'He/she seems to love him/her/it.'

⁶ Another word with the same meaning and the same morphosyntactic properties as *nalligigunanga* is given below. -Valuk, 'seem', is attached to nalligi, 'love', to create the verb stem nalligivaluk. From this is formed the passive participle *nalligivaluttaq*, 'one that seems to be loved'. It is then given the possessive suffix -nga, 'his/her'.

A) nalli -gi -valut -ta MG love -TR -seem -PPT -his/her.sg

^{&#}x27;one that he/she seems to love'

⁷ For many of the possessive suffixes, there are different forms depending on the case. The same forms are used for ordinary nouns that are used for possessed participles.

argument that the possessive suffix agrees with, and that possessors can be expressed in relative case. In this sentence, *Jaaniup* bears relative case and it expresses the argument that is being treated like a possessor. The full sentence, *Jaaniup nalligigunanganik takunnatunga*, means 'I am looking at the one that John seems to love'.

Also, like nouns, it is possible to add the adjectival suffix before adding the possessive suffix. The participle in (2.3.2) means either 'The small or dear one that he/she seems to love', or 'He/she seems to love the small or dear one'. If a language allows nouns to have nominal predicates and the language has deverbal nouns, then it should be able to use deverbal nouns as predicates. These two translations are consistent with an analysis that treats *nalligigunaapinga* as a deverbal noun. A more awkward translation of this word when it is used as a predicate might be 'he/she/it is the small/dear one that seems to be loved'. The derivational stages of this word can be understood as follows. The suffix *-gunaq* nominalizes the object of *nalligi*, 'love'. The suffix *-apik* attaches to the noun stem *nallligigunaq*, 'one that seems to be loved'. Addition of a possessive suffix converts the noun stem into a noun meaning 'small or dear one that he/she seems to love'. For the predicative use of *nalligigunanga*, there is a rule that converts words of the lexical type [noun] into words of the lexical type [clausal word], as discussed at the end of the previous section.

(2.3.2) nalli -gi -guna -api -nga MG love -TR -one.that.seems -small/dear -his/her.sg 'The small or dear one that he/she seems to love.' 'He/she seems to love the small or dear one.'

Example (2.3.3) shows that it is also possible to suffix a demonstrative pronoun onto *nalligigunanga*.

(2.3.3) nalli -gi -guna -nga -una MG love- TR -one.that.seems -his/her.sg -this 'this one that he/she seems to love.'

'He/she seems to love this one.'

The next two examples illustrate that, when *nalligigunanga* is used as a predicate, a separate noun bearing absolutive case will be equated with the object of 'love', and a separate noun bearing relative case will be equated with the subject of 'love'. In (2.3.4), *angutiguna*, 'this man', bears absolutive case, and it is equated with the object. In (2.3.5), *Maryup*, 'Mary', bears relative case, and it is equated with the subject.

- (2.3.4) angutig -una nalli-gi -guna -nga MG man(ABS.sg) -this love-TR -one.that.seems -his/her.sg 'He/she seems to love this man.'
- (2.3.5) Mary -up nalli -gi -guna -nga MG Mary -REL.sg love -TR -one.that.seems -his/her.sg 'Mary seems to love him/her.'

Recall, from example (2.1.3), that there is a stylistic dispreference amongst older speakers against nouns being used to predicate first or second person pronouns. With participles, it is completely ungrammatical to use a first or second person absolutive pronoun. Participles include all of the types of deverbal nouns discussed in (4.10) to (4.12). They do not include all agentive nominalizations ending in -ji/ti, to be discussed in section (4.13), at least not when they have a lexicalized meaning such that they belong in the dictionary. For example, *uqausiliriji*, 'linguist', is an agentive nominalization with a specific lexicalized meaning warranting its inclusion in dictionaries. They also do not include all words ending in *-lik*, 'one that has'. The predicate in (2.3.6) and (2.3.7) is a habitual nominalization. The suffix *-suuq* is glossed 'HABNOM' for habitual nominalization. The root is *aangajaa*, 'be drunk'. *Suuq* has been attached to this stem, yielding *aangajaasuuq*, 'one who gets drunk'. In example (2.3.6), it is used as a

predicate. This sentence means 'John gets drunk'. The derivational stages for the predicate in (2.3.6) are as follows. The suffix -suuq attaches to the verb stem aangajaa, 'be drunk', to create aangajaasuuq, 'one that is habitually drunk'. There is then a covert derivational rule that makes it into a singular noun bearing the case feature [absolutive]. There is then another covert derivational rule that converts it from the lexical class [noun] into the lexical class [clausal word], while adding an argument to its argument structure, which must bear the case feature [absolutive].

Example (2.3.7) illustrates that, when habitual nominalizations such as *aangajaasuuq* are used as predicates, the noun bearing absolutive case cannot be first or second person, as illustrated by example (2.3.9), where *Jaani*, 'John', has been replaced by *uvanga*, 'I'.

A grammatical equivalent is given in (2.3.8). The stem aangajaasuuq, 'one that gets drunk', has been reverbalized with -u, 'be', yielding aangajaasuungu, 'be one that gets drunk', or 'get drunk habitually'. It has then been given first person indicative verbal morphology, which will be discussed in the next section. The derivational stages for this word differ from those of the predicate in the preceding two examples as follows. The noun stem aangajaasuuq, 'one that gets drunk', is converted into a verb stem with the suffix -u, 'be'. Verbal inflectional morphology then converts the verb stem into a word of the lexical class [clausal word], where [clausalword] is a subcategory of word.

Words will always have to bear inflectional morphology because the syntactic rules of sentence formation allow words placed in a sentence, but they do not allow lexemes of the class [verb stem] to be placed in the sentence. This truly is a grammatical restriction in the language.

Example (2.3.9) makes use of the predicate *nalligigunanga*, 'one that he/she loves', or 'he/she loves him/her'. This participle has been used as a predicate with a third person absolutive nominal referent in example (2.3.3). The ungrammaticality of example (2.3.9) illustrates that it cannot be used as a predicate with a first person absolutive pronoun.

Since this is a possessed participle, a different strategy is used to make a predicate with a first person object. One such example is given in (2.3.10). The participle forming suffix *-gunaq* has been followed by *-gi*, 'have', creating the stem *nalligigunari*, 'have as one that seems to be loved', or 'seem to love'. In this example, inflection has been given for a third person subject and a first person object in the established mood conjugation.

It should be pointed out that participles make it easy to express the equivalent of a relative clause in English. The verb in example (2.3.11), *takusimaviuk*, 'have you seen', expresses the object, that which is seen, in absolutive case. In this case, two nouns

express the object, *nanuq*, 'bear', and *malisuuq*, a habitual nominalization meaning 'one that follows'. *Uvannik* bears secondary case, and it expresses the one that is followed. With all these words put together, this sentence means 'have you seen the bear that follows me?'

'Have you seen the bear that follows me?'

Table 2.1 summarizes the differences between nouns and verbs, with participles behaving as nouns. The notation 'cc' stands for coordination constructions. First and second person pronouns are never used with verbs in Inuktitut except in coordination constructions, because the verbal suffixes already encode the person and number of the argument in question. S' 'S_I/O_T' agreement refers to the subject agreement of an intransitive verb or the object or undergoer agreement of a transitive verb. It could also be called absolutive agreement, because it corresponds to the argument that would get absolutive case if the agreement were third person.

Table 2.1: Properties of nouns and verbs

	Nouns	Verbs
Use as predicate	Yes	Yes
Use of adjectival suffixes	Yes	No
Use of demonstrative suffixes	Yes	Yes
Used to express an argument	Yes	No
Use of case suffixes	Yes	No
Use of $1^{st}/2^{nd}$ person S_I/O_T agreement	No	Yes
Use with 1 st /2 nd person absolutive pronoun	No	cc

⁸ However, they can be used if the suffix -li is attached to the end. This suffix translates to 'how about X' when it is used in a questions. In other sentences, it seems to have a topic shifting effect that might roughly translate to something like 'with regards to X'.

2.4 Split in the Indicative Paradigm

What initially appears to be an indicative verbal paradigm actually involves a split between forms which are nominal and forms which are verbal. The nominal forms all take third person absolutive arguments. They are participles. The verbal forms have first or second person inflection for either the single argument, if there is inflection for one argument, or the object, if there is agreement for two arguments. Understanding the analysis given in this section as well as the glossing of the morphemes presented will be crucial to understanding the remainder of this dissertation.

Examples (2.4.1) to (2.4.6) will use the tests from section 2.1 to show that some of the forms from the indicative conjugation are nominal. The nominal forms which inflect for two arguments are possessed passive participles. The object is nominalized, and the actor is treated as the possessor. An example of a possessed passive participle used as a predicate is given in (2.4.1).

When *malittanga* is used as a predicate, it means 'he/she is following him/her/it'. In this sentence *Jaaniup*, 'John', bears relative case, and *Mary* bears absolutive case. The sentence means 'John is following Mary'. The case of the arguments cannot be used to distinguish whether this is a verbal or a participial predicate. The cases are what we expect from verbs which inflect for two arguments, or from a participle whose nominal referent is the one that is followed, and which treats the one that is following someone as the possessor. Under this second analysis, the predicate is constructed as follows. From *malik*, 'follow', has been formed the passive participle *malittaq*, 'one which is being

followed'. This does exist as an independent word in the language. Onto *malittaq* has been suffixed *-nga*, the possessive suffix which is used when the noun is singular and the possessor is third person singular. A structurally parallel English translation would be 'his/her one that is being followed'.

Example (2.4.2) illustrates that *malittanga* is indeed a nominal meaning 'one that he/she follows', since it bears case marking and is used to express an argument. In this instance, it bears secondary case, since it expresses the non-actor argument of *takunnatunga*, 'I am looking at', and the non-actor of this verb stem always bears secondary case. The possessor of *malittanganik*, 'one which he/she follows' is equated with the one who follows someone, and is expressed in relative case.

(2.4.2) Jaani-up malit -ta -nga -nik takunna -tu -nga JO John -REL.s follow -PPT -his/her.s -SEC look.at -INDI -1sg 'I am looking at the one who John is following.'

Example (2.4.3) illustrates that *malittanga* passes another test for noun-hood. It is possible to suffix *-guluk*, 'small', before adding the inflectional (possessive) suffix. Based on my fieldwork, *-guluk* is like *-apik*, 'small or dear', from the preceding section in that it can only be attached to noun stems, except in the imperative/optative mood, a use which will not be addressed until Chapter 4.

(2.4.3) Jaani -up Mary malit -ta -gulu -nga JO John -REL.sg Mary(ABS) follow -PPT -small -his/her.s(ABS) 'John is following the small one, Mary.'

Malittagulunga means 'the small one that he/she following' or 'he/she is following the small one'. Example (2.4.3) is identical to (2.4.1) except that *-guluk* has been inserted into the predicate before the possessive morphology has been added.

(2.4.4) malit -ta -nga -una MG follow -PPT -his/her.sg- this.one 'This one that he/she is following.' 'He/she is following this one.'

Other nominal forms in the indicative paradigm are active participles, rather than possessed passive participles. An example is given in (2.4.5). The predicate in this example is *malittuq*, 'one which is following something/someone'. When it is used as a predicate the absolutive argument is the one which is following someone or something. In this example, it is *Jaani*, 'John'. Together *Jaani malittuq* mean 'John is following someone or something'. With *malittuq*, the one which is followed is expressed in secondary case. In this instance, the one that is followed is *nanurnik*, 'bears'. There is nothing about the sentence in (2.4.5) which tells us whether or not the predicate is nominal, since there are many verbal predicates which take an absolutive argument but no relative case-marked arguments.

(2.4.5) Jaani nanur-nik malit -tuq JO John(ABS) bear -SEC.pl follow -APT(ABS.sg) 'John is following some bears.'

The first piece of evidence that *malittuq* is nominal comes from that fact that it can be suffixed with *-guluk*, 'small'. Example (2.4.6) is identical to (2.4.5), except that *-guluk* has been suffixed onto the predicate.

(2.4.6) Jaani nanur -nik malit -tu -guluk JO John(ABS) bear -SEC.pl follow -APT -small(ABS.sg) 'Little John is following bears.'

The second piece of evidence that *malittuq* is nominal comes from the fact that it can be suffixed with case marking and used as a referring expression. In (2.4.7), *malittugulummik*, 'the small or dear one who is following', is given secondary case, since it expresses the non-actor of *takunnatunga*, 'I am looking at'. *Nanurnik*, 'bears', is also

placed in secondary case, since it expresses the non-actor of *malittugulummik*, 'the small or dear one who is following'.

(2.4.7) nanur -nik malit -tu -gulum-mik takunna -tu -nga JO bear -SEC.pl follow -APT-small -SEC.s look.at -INDI -1sg 'I am watching the little one who is following bears.'

It is also possible to attach a demonstrative pronoun onto *malittuq*, as in (2.4.8).

(2.4.8) malit -tur -una MG follow -APT-this

'This one that is following someone or something.'

'This one is following someone or something.'

There will also be numerous examples where verbalizing suffixes which can only attach to noun stems are attached to either active or passive participles in section 4.10, Chapter 6, and section 7.1, proving conclusively that the active participle forming suffix and the passive participle forming suffix create noun stems. Given that the language has a wide range of deverbal nouns, and that they can all use the same suffixes which can attach to noun stems, and they can all be used as predicates with third person absolutive arguments, it is not possible to motivate an analysis of the indicative paradigm which does not treat the third person absolutive forms as deverbal nominal predicates.

Many of the forms in the indicative paradigm are either active participles or possessed passive participles. When used as predicates, the argument bearing absolutive case must be third person. As we saw in section 2.3, this is characteristic of participial predicates.

In the indicative paradigm, there are also forms which resemble the participial forms but which are verbal. Either they inflect for two arguments and the object is first or second person, or they only inflect for one argument, which is first or second person.

Phonologically, it appears that the inflectional suffixes are added either to active or to

passive participles. For example, the indicative form that inflects for a first person subject and a second person object is -jagit/tagit, which could be misanalyzed as-git being attached after the passive participle forming suffix -jaq/taq. However, such an analysis will not be taken. First of all, it is not possible to give first or second person inflection to any of the other deverbal nouns in the language, such as deverbal nouns formed with -gunaq, 'one that seems to be', with the exception of possessor arguments, which may be first or second person. Second, with those forms of the indicative paradigm which are verbal, there appears to be no evidence that a noun stem is created prior to the addition of the inflectional suffixes. It is not possible to add suffixes such as -guluk, 'small', which may only attach to noun stems, before the addition of the inflectional suffixes.

A relatively complex system will be used to label some of the suffixes used in this mood. -Juq/tuq is used when there is only inflection for one argument. Two alternative glossings will be given for -juq/tuq. In previous examples, this phonological sequence has been glossed APT, for active participle. This glossing will be used when the absolutive argument must be third person if it is used as a predicate. When it is followed by first or second agreement suffixes, it will be glossed INDI, for 'indicative intransitive'. Such members of the paradigm are truly verbal. It is not possible to use them as referring expressions, to give them case morphology, or to suffix an adjectival suffix before the inflectional morphology. There will also be two alternative glossings for -jaq/taq. When this phonological sequence is followed by a possessive suffix, it will be glossed PPT, for 'passive participle', as we have seen in previous examples. When it is followed by inflectional suffixes such that the form may not be used with a third person argument

bearing absolutive case, it will be glossed INDT, for 'indicative transitive'.

The next four examples will present some of the verbal forms of the indicative paradigm, as well as some of the rationale behind not using the glossings APT for 'active participle' and PPT for 'passive participle'. In example (2.4.9), the predicate is *malittunga*, 'I am following something/someone'. Onto *malik*, 'follow', has been suffixed *-tuq*, which is glossed INDI, for 'indicative/intransitive' followed by the suffix, *-nga*, which indicates that one of the predicate's arguments is first person singular. The suffix glossed INDI looks like the active participle forming suffix. However, we will see that there is no reason to believe that a deverbal noun is formed at any stage of this predicate's derivation. With this predicate it is possible to express the non-actor in secondary case. In this example *nanurnik*, 'bears', expresses the non-actor.

The predicate *malittunga*, 'I follow', from example (2.4.8), cannot be used as a referring expression, nor can it bear case morphology. In other words, it is a verb rather than a deverbal noun. The ungrammaticality of (2.4.10) illustrates that it is not possible to suffix *-guluk*, 'small', onto *malittuq* before adding a first person singular inflectional suffix. If suffixation of *-tuq* in this example involved forming a noun stem, we would expect this to be grammatical. Thus, not only is *malittunga* a verb at the word level, it also does not appear to involve the formation of a noun stem at any stage of its derivation.

Examples (2.4.11) and (2.4.12) will be examples which make use of the morpheme glossed INDT, for 'indicative transitive'. In example (2.4.11), the predicate is *malittaatit*, 'he/she is following you'. Onto *malik*, 'follow', has been suffixed *-taq*, which is glossed INDT, for 'indicative/intransitive' followed by the inflectional suffixes *-a* and *-tit*, which indicate that there is inflection for two arguments. The actor is third person. The other argument is second person singular. The actor may be expressed as a separate word bearing relative case. In this example the actor is *Jaaniup*, 'John'.

Again, the predicate *malittaatit*, 'He/she is following you', from example (2.4.11), cannot be used as a referring expression, nor can it bear case morphology.

Phonologically, it does appear that the second person singular inflection has been added to a passive participle since the morpheme glossed INDT is phonologically identical to the passive participle forming suffix. However, in this example, *malittaq* does not appear to be a noun stem. The ungrammaticality of (2.4.12) illustrates that it is not possible to suffix *-guluk*, 'small', onto *malittaq* before adding the suffixes *-a-tit*, which indicate that the actor is third person but the non-actor is second person. Again, not only is *malittaatit* a verb at the word level, it also does not appear to involve the formation of a noun stem at any stage of its derivation.

Table 2.2 lists the different properties of the nominal and the verbal forms of the indicative paradigm. It also gives the different glossings for -juq/tuq and -jaq/taq. As

noted earlier, the notation 'cc' stands for coordination constructions. First and second person pronouns are never used with verbs in Inuktitut except in coordination constructions, because the verbal suffixes already encode the person and number of the argument in question. ' S_I/O_T ' agreement refers to the subject agreement of an intransitive verb or the object or undergoer agreement of a transitive verb.

Table 2.2: Split in the indicative paradigm

	Verbal forms	Nominal forms
Glossing of <i>-juq/tuq</i>	INDI	APT
Glossing of <i>-jaq/taq</i>	INDT	PPT
Use as predicate	Yes	Yes
Use of adjectical suffixes	No	Yes
Use of demonstrative suffixes	n/a	Yes
Use as a referring expression	No	Yes
Use of $1^{st}/2^{nd}$ person S_I/O_T agreement	Yes	No
Use of 1 st /2 nd person absolutive pronoun	cc	No

The inflectional forms in the indicative mood resemble the inflectional forms in the declarative mood. The paradigms will not be given because there are more than 80 forms in each. With only one exception, they differ only in terms of the first consonant of the mood marker, with the indicative mood marker beginning with /j/ or /t/ depending on the phonological environment, and the declarative mood marker beginning with /k/, /q/, or /v/, depending on the phonological environment. For example, post-vocalically the indicative form that inflects for a first person singular subject without inflecting for an object is –junga, whereas the declarative form is –vunga. The forms which inflect for a first person subject but a second person object are -jagit and -vagit. The one exception involves the form that is used when there is a third person plural absolutive argument but no relative case-marked argument. In the indicative, either –jut/tut or –juit/tuit are possible; however, only –vut/kut/qut is possible in the declarative conjugation. No

consultant or linguist that the author of this dissertation knows has been able to translate the difference in meaning between declarative and indicative forms. JO has suggested that declaratives are used more in 'stories' than in short exchanges. However, this may not be a reliable assessment of the difference. All of the forms in the declarative mood are verbal, whether or not they are used with third person absolutive arguments. The declarative equivalent of -juq/tuq is -vuq/quq/kuq. It will be glossed DECI, for 'declarative intransitive'. The declarative equivalent of -jaq/taq is -vaq/qaq/kaq. It will be glossed DECT, for 'declarative transitive'.

It should be noted that the different dialects of Inuktitut have different splits in their paradigms. In a closely related dialect in Labrador, there are no first or second person absolutive forms in the indicative paradigm (Dorais 1990, Johns 1993). There are deverbal nominal participles which can only be used with a third person absolutive argument, and there is a declarative conjugation which does have first and second person absolutive agreement as well as third person absolutive agreement. It should also be noted that there is no way to argue that there really are third person absolutive forms in the dialect discussed in this dissertation that only happen to resemble participial deverbal nominal predicates. There would be no way to learn that these forms exist, and the absence of forms in a verbal paradigm would be in no way surprising, because all of the dialects of Inuktitut are missing first person subject interrogative forms, forcing speakers to use declarative, indicative, or established mood forms in their place. However, it may be the case that some speakers do have third person absolutive indicative forms that resemble active participles or possessed passive participles and that others do not. But, there is simply no way to conclude that they all do.

The ergative case system can be related to the system of deverbal nouns used in this language from a language processing view. In sentences which contain two absolutive nouns and no verb, the two nouns are equated. The meaning will be the same regardless of which one is treated as a predicate, resulting in no ambiguity. In the case of possessed passive participial predicates, the abolutive argument will be an object. In the case of active participial predicates, the absolutive argument will be a subject. This same case system appears to have been borrowed by verbal predicates, so that the subject of an intransitive verb or the object of a transitive verb will end up getting the same case. A historical analysis has been given by Fortescue (2005).

2.5. More data on person and number in Inuktitut

This section will further investigate the restrictions on the use of first or second person pronouns. There will also be a discussion of whether or not existential constructions are problematic for the theory of number to be adopted in this dissertation. Some finer grammatical points about the uses of deverbal nouns in syntactic constructions will also be addressed. In some cases, the discussions in this section will not be as decisive as the discussions in other sections because some of these topics have proven difficult to research. The phenomena to be addressed in this section are all at least loosely related to either the descriptive or theoretical problems of this chapter.

Some data from sections 2.1 and 2.3 are repeated below. When *uqausiliriji*, 'linguist', is used as a predicate, it is normal to use the third person subject *Jaani*. There is a strong stylistic dispreference amongst the older speakers against replacing *Jaani* with *uvanga*, as in (2.5.1b). According to MG, the reason is that it is better to use one word than two words, as in (2.5.1c), where the stem *uqausiliriji*, 'linguist', is verbalized with

-u, 'be'. In contrast, with participial predicates, the equivalents of (2.5.1a) and (2.5.1c) are also grammatical, but the equivalent of (2.5.1b) is completely ungrammatical, as shown with examples (2.5.1d) to (2.5.1f), which make used of *aangajaasuuq*, 'one that gets drunk'.

- (2.5.1) a) Jaani uqausiliriji MG
 John(ABS) linguist(ABS)

 'John is a/the linguist.'
 - b) ?uvanga uqausilariji MG
 me(ABS) linguist(ABS)
 ?'I am a linguist'
 ?'I am the linguist'
 - c) uqausiliriji-u-vu -nga MG linguist -be-DECI-1sg 'I am a/the linguist.'
 - d) Jaani aangajaa -suuq JO John(ABS.s) be.drunk -HABNOM(ABS.sg) 'John gets drunk.'
 - e) *uvanga aangajaa -suuq JO I(ABS) be.drunk -HABNOM(ABS.sg) *'I get drunk.'
 - f) aangajaa -suu -ngu -ju -nga MG be.drunk -HABNOM -be -INDI -1sg 'I get drunk.'

The first construction to be investigated involves the verb stem *qauji*, 'realize'. In some sentences, it appears to have the meaning 'discover the identity of'. However, I have not done enough research to know what the correct translation is. Two such examples are given in (2.5.2) and (2.5.3). In these sentences *Jaanimik* and *ilinnik* are expressed in secondary case, and the sentences mean 'I realized it was Johnny', or 'I realized it was you'. According to MG, those translations do not really quite capture the meaning. These sentences could be used to describe the event where the narrator wakes

up and notices someone. A more awkward paraphrase would be 'I discover the identity of Johnny', or 'I discovered the identity of you'.

- (2.5.2) Jaani -mik qauji -ju -nga MG John -SEC.sg realize -INDI -1sg 'I realized that it was Johnny.' *'I realized something about Johnny.'
- (2.5.3) ilin -nik qauji -laur -tu -nga MG you -SEC know -PAST -INDI -1sg 'I realized that it was you.'

The nominal nature of participles allows a verb to have an argument which in some cases translates onto English as an entire clause. Sentence (2.5.4a) was given to me as a translation of, 'I realize that John left'. Both *Jaanimik*, 'John', and *anijuvinirmik*, 'one that left', are placed in secondary case in this example. *Anijuvinirmik* is formed as follows. An active participle has been formed from *ani*, 'leave'. *Anijuq* means, 'one who is leaving/left'. The suffix –*viniq*, glossed as 'former', really means 'something that used to be,' and it only attaches to noun stems. *Anijuviniq* means 'one that used to be one that was leaving', or 'one that left'. As in the previous example, these two words both appear to be expressing an argument of *qaujijunga*, 'I realize'. This dissertation will not use phrase structure as an explanation for any grammatical phenomena in Inuktitut. The reason for this is that the word order is too free to motivate the notion of a noun phrase, as will be discussed in section 3.1. Rather, it will be assumed that the syntax has no way to prevent multiple nouns from expressing a single argument, much as was assumed for Walbiri by Hale (1983).

(2.5.4) a) Jaani -mik ani -ju -vinir -mik qauji -ju -nga MG/SM John -SEC.sg leave -APT -former -SEC.sg realize -INDI -1sg 'I realize that John left.'

(2.5.4) b) Jaani -mik ani -si -ju -mik taku -laur -tu -nga MG John -SEC.sg leave -begin -APT-SEC.sg see -PAST-INDI -1sg 'I saw John leaving'

A similar example is given in (2.5.4b). However, in this case, the second word is anisijumik, 'begin to leave', and the verb is takulaurtunga, 'I saw'. Let us first attempt to address the semantic representation of sentence (2.5.4b). Using the terminology of HPSG, nouns which express arguments have an index which shows how what the noun refers to relates to its semantic representation. For example, Jaanimik has the index i as it relates to the semantic relation 'i is named John'. Anijuvinirmik has the index i as it relates to the semantic relation 'j is/was beginning to leave'. Clausal words such as *qaujijunga*, 'saw', have no index since they are not used as arguments. Indeed, the presence or absence of an index is precisely what distinguishes words of the class [noun] from words of the class [clausalword] in this dissertation. The semantic representation of takulaurttunga is something like, 'I saw k'. It has an argument which must bear secondary case, and which must bear the index k. However, in this sentence, there are two nouns which express the argument which must bear the index k. Putting these three words together, we get the following semantic representation: 'I saw k, and k is named John, and k was beginning to leave.' 'I saw John leaving' is a more natural translation of this semantic representation.

Returning now to (2.5.4a), this sentence differs in that the second word's semantic representation can be translated as 'j left', and the clausal word's semantic representation is something like, 'I discover the identity of k'. Again, it has an argument which must bear secondary case, and which must bear the index k. Both the word Jaanimik and anijuvinirmik express this argument. The resulting semantic representation is 'I

discovered the identity of k, and k is named John, and k left.' 'I realize that John left' is a more natural translation of this semantic representation.

Sentence (2.5.5) was given as a translation for 'I realize that John is leaving'. Here, *Jaani anisijuq* appears to be an absolutive argument of *qaujijara*, 'I realize it', or 'that which I discover the identity of'.

(2.5.5) Jaani ani -si -juq qauji -ja -ra MG John(ABS) leave -begin -APT(ABS.sg) realize -PPT -my.sg 'I realize that John is leaving.'

There is a stylistic dispreference against sentences such as (2.5.6a), which is the equivalent to (2.5.4a), except that *Jaanimik* is replaced by the second person pronoun *ilinnik*, 'you'. Example (2.5.6b) also shows that there is a stylistic dispreference against replacing *Jaanimik* from (2.5.4b) with *ilinnik*. It should be noted that JO finds sentence (2.5.6b) to be completely acceptable, and she would say it herself. These sentences are not ungrammatical like sentence (2.5.1e), which made use of a participial predicate.

- (2.5.6) a) ?ilin -nik ani -ju -vinir -mik qauji -ju -nga MG You -SEC leave -APT -former -SEC.sg realize-INDI -1sg ?'I realize that you left.'
 - b) ?ilin -nik ani -si -ju -mik taku -laur -tu -nga MG you.sg -SEC leave-begin -APT -SEC.sg see -PAST -INDI -1sg ?'I saw you leaving.'

According to MG, the reason for the strong stylistic dispreference amongst older speakers against the sentences in (2.5.6) is that it is possible to express the same thing with fewer words. MG gave example (2.5.7a) as a translation to 'I realize that you left'.

⁹ In Inuktitut, there is no constraint against temporal adjuncts such as *ippasaq* from indicating what time an action described by a deverbal noun occurred. One such example is given in A. *Ippasaq* always bears absolutive case when it is used to indicate that something happened yesterday. It is ungrammatical to give it secondary case in this sentence.

A) qauji -rqau ju -nga Jaani -mik ani -ju -vinir -mik ippasaq MC realize -earlier.today -INDI -1sg John -SEC.sg leave -APT -former -SEC.sg yesterday(ABS.sg) 'Earlier today, I realized that John left yesterday.'

It makes use of a verb in the appositional mood conjugation.

- (2.5.7) a) ani -ju -vini -u -til -lu -tit qauji -ju -nga MG leave -AP-former-be-DS-APP -2sg realize -INDI -1sg 'I realize that you left.'
 - b) ani -si -til -lu -tit taku -laur -ta -git MG leave -begin -DS -APP -2sg see -PAST -INDT -1sgA:2sgU "I saw you leaving."
 - c) uvatti -nik uqausiliriji -u -ju -nik nalli -gusut -tuq MG us.pl -SEC.pl linguist -be -APT -SEC.pl love -AP -APT 'He/she loves us, we being linguists.'
 - d) uvatti -nik uqausiliriji -nik nalli -gusut -tuq MG us -SEC.pl linguist -SEC.pl love -AP- APT 'He/she loves us linguists.'

Anijuviniutillutit means 'you left', or 'your having left'. The glossing DS stands for 'different subject', since the subject differs from that of the main verb. The verb stem is formed by reverbalizing anijuviniq, 'one that left', with the verbalizing suffix –u, 'be'. A few people have asked me why the sequence -juviniu is used in (2.5.7), in place of the past tense suffix –laur, which creates verb stems from verb stems. Since this sentence was produced by MG, I cannot be sure. However, based on my current level of understanding of the grammar of Inuktitut, the reason may be as follows. With –laur, there is an implication that the narrator witnessed the event, but there is no such implication with –viniq, 'former'. It would be a bit unusual in any language to say 'I realize that you left' in the context where the narrator witnessed the leaving event. Example (2.5.7b) is the translation given to me for 'I saw you leaving'. It also makes use of the appositional mood. In some sentences, such as this, verbs marked with the appositional mood can be translated into English using the word 'while'. This sentence can be translated as 'I saw you while you were leaving'. However, (2.5.7c) and (2.5.7d)

illustrate that there is no absolute grammatical restriction in the language against nouns being co-referential with a first person plural pronoun, whether or not they are participles. The glossing of the predicate *nalligusuttuq* need not concern us here. It means 'he/she loves someone', and the one that is loved must bear secondary case. In both (2.5.7c) and (2.5.7d), two nouns or pronouns express the secondary case-marked argument of *nalligusuttuq*. However, as stated in section (2.3), when participles are used as predicates, the absolutive argument must be third person, whereas with non-participial predicates, there is only a stylistic dispreference against using first or second person pronouns with non-participial nominal predicates.

Tarramiutut appears to be an evolving dialect, since JO finds many sentences with non-participial nominal predicates used with first or second person pronouns to be stylistically more acceptable than MG does, and MG also claims that it is more characteristic of younger people's speech. The next couple of examples will involve the stem *ivviu*, 'be you', which also avoids equating third person and first or second person entities, but, in this case, it is not a matter of stylistic choice. The verb stem *ivviu* involves suffixing –u, 'be', onto the second person absolutive/relative pronoun.

However, I am treating it as one piece meaning 'be you', because it is not generally possible to add verbalizing suffixes onto pronouns. One of the translations given to me for 'I realized that it was you' is given in (2.5.8). Here, *ivviugianik* expresses that which is realized. This word makes use of the GIAQ-type gerundive construction, which will be addressed in more depth in section 4.14. In the *giaq*-type gerundive construction, if there is a possessive suffix following -*giaq*, then it expresses the subject of the verb stem onto which –*giaq* is attached. There is an optional phonological rule that deletes uvular

nasals after two vowels, but the word *ivviugianik* must have a second person possessor, because -nik is the form of the secondary case marker that comes after possessed nouns or plural or dual nouns. The suffix -mik comes after singular unpossessed nouns. Since it seems quite improbable that this would be a plural noun, it must have a second person possessor. The ' Φ ' shows the location of the morpheme that has been deleted. While the translation is 'I realized that it was you', the verb stem meaning 'it is you' has a second person subject. The meaning of *ivviugianik* is something like 'the state of you being you'. Like other nouns, it is third person.

(2.5.8) Ivviu -gia -\$\phi\$ -nik qauji -laur -tu -nga MG be.you -GIAQ -your.sg -SEC.pl realize -PAST -INDI -1sg 'I realized that it was you.'

However, we will refer to the argument expressed by the deleted second person possessive suffix as a second person subject. The generalization is confirmed by the following two examples. In (2.5.9), there is a second person subject and the word is grammatical. In (2.5.10), an active participle is formed which would mean 'one that is you'. As a predicate, it would mean 'it is you'. The theory of this dissertation would actually predict that (2.5.10) should be impossible. When participles are used as predicates, there is a derivational rule that adds an absolutive argument to the word's argument structure while also adding a semantic restriction that the argument in question must not include either a first or a second person entity. The resulting semantic representation of (2.5.10) would be something like 'one who is neither you nor me is you'.

(2.5.9) ivviu -ju -tit SM be.you -INDI -2sg 'You are you.'
'It is you.'

(2.5.10) *ivviu -juq SM be.you -APT *'It is you.'

Let us now turn to existential constructions. In Inuktitut, there are two suffixes that can either be used in existential constructions or possessive construction. The suffix -qaq attaches to noun stems to make verb stems, whereas -lik attaches to noun stems to make noun stems. An example involving -lik is given in (2.5.11). It can mean 'one that has a house', or, when used as a predicate, it can mean 'he/she has a house', or 'there is a house'. The use of the word atausirmik in this example, which will be addressed in Chapter 4, need not concern us here.

(2.5.11) atausir -mik illu -lik MG one -SEC.sg house -one.that.has 'one that has a house.'
'He/she has a house.'
'There is one house.'

Another example is given in (2.5.12). This example shows that -lik creates noun stems whether the output means 'he/she has a house' or 'there is a house'. -Viniq, 'former' and -u, 'be', can only attach to noun stems. The verb stem illuliviniu means either 'there used to be a house' or 'used to have a house'. It is then placed in the established mood meaning 'because' or 'when' in the past and given third person singular verbal inflection. The DS notation means different subject. It is used when the subject does not refer to a topical entity. Such tests are available to show that any stem referred to as a noun stem in this dissertation is truly a noun stem. However, as we will see, in Chapter 4, some noun stems are reverbalized with -u, 'be', whereas other are reverbalized with -gi, 'have', or -gar, 'have'.

iglu -li -vini -u -ngma -t SM house -one.that.has -former -be -EST.DS -3sg 'because he/she used to have a house.'

At this point, there are at least two possible analyses for the identity of the third person subject in (2.5.12). First, it could be that the subject refers to nothing. Under such an analysis, the subject would be the equivalent of the use of expletive pronouns in English. An example of an expletive pronoun in English is the use of the word it in it seems that John left. Many linguists assume that it refers to nothing in that sentence. Its role is to fulfill the syntactic requirement that the sentence needs to have a subject. If such an analysis were taken, the noun *illulik* from example (2.5.11) would also refer to nothing when it is used to mean 'there is a house'. If this were true, then the noun in question would in no sense be semantically singular, because it does not refer to a single entity. And, this is the reason why existential constructions need to be addressed in this section, since it will be argued that nouns and verbs with singular agreement have a semantic restriction that something must refer to a 'single entity'. This theory will be rejected for the purposes of this dissertation shortly. However, the theory deserves more fleshing out, because this dissertation doesn't provide definitive counter-evidence. When illulik means 'one that has (a) house(s)', it has the index i as it relates to the semantic representation 'i has j, and j is/are house(s).' In the theory that will be rejected shortly, when *illulik* is used in the existential construction, it has the index i as it relates to the semantic representation 'j is/are house(s).' In other words, the index of the deverbal noun illulik does not relate to the word's semantic representation in any way. The word illulik introduces an entity j which is a house, but the word illulik cannot refer to anything because the semantic representation does not give any information about the index of

illulik. In (2.5.12), suffixation of -viniq creates another noun stem with the same index i that is in no way linked to the noun's semantic representation. Semantically, -viniq indicates that the situation described by the noun stem onto which -viniq is attached occurred in the past. It would make no sense for suffixation of -viniq to indicate that the index of the noun stem illulik is something that existed in the past, since the index of that noun stem refers to nothing. Suffixation of -u creates a verb stem with a subject argument which is equated with the index of the noun stem onto which -u is attached. Again, it refers to nothing, because it does not link in any way to the verb stem's semantic representation.

The other possibility, to be adopted herein, is that the subject of *illuliviniungmat*, 'because there used to be a/some house(s)', refers to either the universe or to a place, in which case the correct translation for *illuliviniungmat*, when it is translated as 'because there used to be a house', would be 'because the universe/the place used to have a house'. The *qauji*, 'realize', construction will be used as evidence for this second view. But, first, we need to do more investigation into what the interpretational restrictions are with the *qauji* construction. In (2.5.13), *nirijumit*, 'one that is eating' is used as an argument of *qauji*. Based on the theory that was used to explain (2.5.4), *nirijumit* has the index *i* as it relates to the semantic representation '*i* is eating.' The semantic representation of *qaujijunga* is 'I discover the identity of k', and it has an argument which must bear secondary case, and which must bear the index k. The semantic representation of (2.5.13) should be, 'I discovered the identity of k, and k is eating'. This semantic representation is consistent with the first of the acceptable translations of (2.5.13), but not the unacceptable one. However, it is also not consistent with the second translation. It could be that an

alternative semantic representation for *qaujijunga* is 'I found out about the existence of k'. This second interpretation may correspond to an indefinite interpretation of *nirijumit* such that the sentence means 'I found out about the existence of someone who is eating'. This translation is supported by MG's judgement that one does not necessarily know who is eating when sentence (2.5.13) is uttered. Certainly, more research is required to determine more precisely what the correct semantic representation(s) is/are for the verb stem *qauji*.

(2.5.13) niri -ju -mit qauji -ju -nga SM eat -APT-SEC.sg realize -INDI -1sg 'I found out who is eating' 'I found out that someone is eating.'

*'I found out where he/she was eating'

Let us now return to an analysis of those suffixes that create words that express either a possessive relation or which can be translated into English with the words 'there is/are'. Recall that there are at least two possible explanations. First, it could be that the subject refers to nothing when the words are translated into English as 'there is/are'. Second, it could be that these words always express possession, but that places or areas where something is located can be treated as possessors. The following two sentences suggest that this second analysis should be preferred. While (2.5.14) has been checked with both SM and MG, the phonological form used in the dialect of MG is given.

- (2.5.14) Illu -li -vinir -mik qauji -ju -nga MG/SM house -one.that.has -former -SEC.sg realize -INDI -1sg 'I found out who used to have a house.'

 'I found out where there used to be a house.'

 'I found out where the houses used to be.'

 *'I found out that there used to be a house.'
- In (2.5.14), the last word means 'I discover the identity of something'. One of the possible translations for the first work, *illulivinirmik*, is 'one that used to have a house'.

It expresses the argument of *qaujijunga*, 'I discover the identity of something.' The first translation is unsurprising given the assumptions about semantics that have been made so far. The second and third translations, 'I found out where there used to be a house', and 'I found out where the houses used to be', are a bit surprising since the use of the word 'where' was not possible in the translation of (2.5.13). It seems reasonable to suggest that illulivinirmik can mean either 'the person that used to have a house' or 'the space that contains a house'. In other words, the semantic representation for example (2.5.13), when a location is discovered, corresponds more to the following sentence in English: 'I discovered the identity of the place that has (a/the) house(s).' It should be noted that addition of the word avaani, 'in this general area', to the sentence above, makes the second and third translations easier for the speakers to get when the sentence is used out of context. If avaani is added in the middle of that sentence, 'in that general area' gets added to the end of the English translation. The last translation, 'I found out that there was a house', is not possible. This is to be expected. If one has discovered the identity of the location, then one certainly knows where the house used to be. According to MG, the word *illuliviniq*, from (2.5.14) can either mean, 'the person that has (a) house(s)', or 'the place that used to have houses', but never 'the fact that there used to be houses somewhere'. 10

A similar example making use of the suffix -qaq, 'have', is given in (2.5.15). The stem *illuqar* can mean 'have a house' or 'there is a house', but it remains to be seen if it can also mean 'contain a house'. This example makes use of the suffix -turi, 'think

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 $^{^{10}}$ The suffixes -lik, 'one that has', and -qaq, 'have', both have alternative variants starting with -ta. They are -talik and -taqaq. According to MG, it is better to use -talik when referring to a place. In such case, illulivinirmik becomes illutalivinirmik.

that', which will not be addressed until Chapter 4. What is crucial for our discussion in this chapter is that the word *illuqarturijanganit* is predicted to mean, 'one that he/she believes to have a house', at least in instances where the suffix -qaq is translated with the word 'have'. In other words, the argument that is nominalized corresponds to the subject of the stem *illuqar*. In (2.5.14), *illuqarturijanganit* expresses the argument X of the following translation of *qaujijunga*: 'I discover the identity of X'. The first translation is unsurprising given the semantics that have been assumed for *qaujijunga*. The second translation is consistent with the following semantic representation as it is translated into English: 'I discover the identity of a place that he/she believes to have a house.'

(2.5.15) iglu -qar -turi -ja -nga -nit qauji -ju -nga SM house-have -think.that -PPT -his/her -SEC realize -INDI -1sg 'I found out who he/she thinks has a house.'

'I found out where he/she thinks that there is a house.'

According to SM, the second translation of (2.5.16) below is the most literal of the three possible translations. She claims that the last two are not correct. The first word, *Quartami*, means 'in *Quartaq*'. It bears locative case, which will not be addressed until the next chapter. It should be noted that the last two translations bear the same truth consitions as the first two translations. Her rejecting these translations seems to suggest that she does not believe that such specific areas are necessarily in mind when this sentence is used to mean 'There is/are (a) house(s) in Quartaq.'

¹¹ Both MG and SM have informed me that if predicates like *illulik* are used to indicate that a house is at a place rather than being owned by a person, then either the speaker must have a specific place in mind or, if the speaker does not know the exact area then a locative case-marked expression like *tamaani*, 'in this general area', must be used in the sentence.

Quarta -mi iglu -lik SM
Quartaq -LOC.sg house-one.that.has
'There is/are (a) house(s) in Quartaq.'
'An area has(a) house(s) in Quartaq.'
*'The universe has(a) house(s) in Quartaq.'
*'The world has(a) house(s) in Quartaq.'

The next three examples will investigate weather terms. The verb stem that I have investigated is *pirsiq*. Example (2.5.17) illustrates that when it is made into an active participle and used as a predicate, we get the meaning, 'it is blizzardy'.

(2.5.17) pirs -tuq MG
PIRSIR -APT
'It is blizzardy.'

Example (2.5.18) illustrates that, if it is used as an argument of *qaujijunga*, 'I discover the identity of X', or 'I found out about the existence of X', the sentence means, 'I found out that there is a blizzard', rather than 'I found out where it is blizzardy'. This shows that the subject of the verb stem *pirsiq* cannot be a place. In other words, the correct translation of (2.5.16) is not 'the area has a blizzard'. If the subject of *pirsiq*, 'blizzard', could be a place, then the second translation would be possible for all of the same reasons why 'where' could be used in the translations of (2.5.14) and (2.5.15).

(2.5.18) pirsi -tu -mik qauji -ju -nga MG
PIRSIR -APT-SEC.sg realize -INDI -1sg
'I found out that there is a blizzard.'
*'I found out where it is blizzardy.'

On the other hand, we most likely do not want to claim that the subject of *pirsiq*, 'be blizzardy', refers to nothing. The presence of secondary marking shows that *pirsitumik* expresses an argument of *qaujijunga*. An argument must refer to something. Furthermore, I know of no other construction in Inuktitut where it is ever possible for the active participle forming suffix to nominalize anything other than the subject. It would

be very premature to use example (2.5.18) to argue that the active participle forming suffix ever nominalizes something other than the subject. Unfortunately, this example tells us little about the identity of the subject of the verb stem *pirsir*, since, in example (2.5.13), the translation 'I found out that someone is eating' was possible. This suggests that (2.5.18) could be translated as 'I found out that something is blizzardy', which would tell us nothing about the identity of the subject. It could turn out that the subject of the verb stem *pirsiq*, 'be blizzardy', really refers to a situation where there is a blizzard.

If one wants to say, 'I found out where it is blizzardy', another construction is used. In (2.5.19), the word *nani* means 'at what place', or 'where'. It is constructed by placing the locative suffix, meaning 'at', onto *na*, 'what place'. *Pirsimangaat* is in dubitative mood, which is used to mark embedded questions. Together, *nani* and *pirsimangaat* mean 'where it is blizzardy'. *Qaujijunga* means 'I discover the identity of it' in this example. The entity whose identity is discovered is equated with the state of affairs described by the preceding clause.

(2.5.19) na -ni pirsi -mangaa-t qauji -ju -nga SM what.place -LOC blizzard -DUB -3sg realize -INDI -1sg 'I found out where it is blizzardy.'

Let us now turn to the semantic representation of *illulik*, from example (2.5.11), which can mean 'he/she/it has a house', 'there is a house', or 'one that has a house'. Based on the discussions in this section, the index i of *illulik* would relate to the following semantic representation: 'i has j, and j is/are (a) house(s), and i is a single entity.' The last semantic relation, 'i is a single entity', is added by the covert inflectional rule which converts noun stems into absolutive singular nouns.

There is one piece of data that does not easily fit into the analysis of this section.

There is another suffix -gi which also means 'have'. It is used in example (2.5.20).

'Because it's her/his house in Quaqtaq, I enter it.'

The three words in this sentence *quartami*, *illugimmauk*, and *itikatattara* mean, 'In Quartaq', 'it's his/her house', and either 'I repeatedly enter it' or 'one that I repeatedly enter'. Importantly, the second word in that sentence cannot mean, 'because there is a house'. *Illugimmauk* is constructed as follows. The suffix *-gi* is attached to *illuk*, 'house' to yield *illugi*, 'have a house'. It is then given inflection in the established mood which shows that the subject is not topical and that the subject, the possessor, is third person singular, and the object, the possessed entity, is also third person singular. It appears that there must be some semantic restriction that the subject of verb stems created by suffixing *-gi* cannot refer to a place. This is in contrast to *-lik* and *-qaq*, which do allow the possessor to be either an identifiable or an unspecified place.

2.6 Specificity and Absolutive Objects

The data in this section are very important for any theory about the grammatical relations of Inuktitut. With either verbal or participial predicates, the notations ' S_{I} ', ' A_{T} ', and ' O_{T} ' can be helpful. With verbal predicates which only inflect for one argument, or unpossessed participial predicates, the absolutive argument is the ' S_{I} ' argument, and it corresponds to a subject in the English translation. ' S_{I} ' stands for 'subject when there is intransitive inflection'. When there is verbal inflection for two arguments, the argument corresponding to the subject in the English translation is the ' A_{T} ' argument, for 'actor

^{*&#}x27;There is a specific house in Quartaq that I enter.'

when there is transitive verbal inflection', and the argument corresponding to the object in the English translation is the 'O_T' argument, for 'object when there is transitive inflection'. For possessed participial predicates, the argument treated as the possessor is the 'A_T' argument, whereas the absolutive argument is the 'O_T' argument. In Inuktitut, 'O_T' arguments must be given a specific interpretation, but 'A_T' arguments and 'S_I' arguments do not need to be given a specific interpretation. Also to be addressed in this section are the derivational rules which convert words of the category [noun] into words of the category [clausal word]. These derivational rules were initially alluded to at the end of section 2.2. Some of the characteristics of the subtypes of nouns and clausal words will also be addressed. There will also be a theoretical discussion of the interpretation of arguments that are not overtly expressed by a separate word in the syntax. It will be argued that no syntactic analysis is actually required, which may be an important argument for researchers who prefer to give a minimal syntactic analysis for nonconfigurational languages, though two other possible analyses will be given for those who prefer a syntactic analysis.

The first set of data will make use of deverbal nominal clausal words. In (2.6.1), it must be a 'specific' dog which is seen each day.

(2.6.1) qau -tamaa -t qimmiq taku -qatta -ta -ra JO/MG day -all -pl dog(ABS.sg) see -HAB -PPT -my.sg 'Each day, I see a specific dog.'

*'Each day, I see a dog', (and the sentence doesn't say that it is a 'specific' dog)

Much as is the case with the English translation, the default interpretation out of context is that it is the same dog which is seen each day. However, according to MG, this is not a strict requirement, particularly in the context where the narrator is going out to

look for a different dog each day. If one wants to say, 'each day, I see the same dog', it is necessary to add the word *tannasainnaq* to this sentence, which is the absolutive pronoun *tanna*, 'this one', followed by an adjectival suffix *-sainnaq*, 'same'. *Qimmiq*, 'dog', in this sentence counts as an 'O_T' argument. Nominal predicates bearing a possessive suffix count as transitive clausal words, because there is both a relative case-marked argument and an absolutive case-marked argument, although, trivially, in this example, there is no point in expressing the relative case-marked argument with a separate word because it is first person singular.¹²

Example (2.6.2) also means 'each day I see a dog', but, in this case, 'dog' is expressed in secondary case. It is not treated as a canonical ' O_T ' argument, since there is no verbal object agreement, and it is given secondary rather than absolutive case. It does not have to be a specific dog which is seen each day.

- (2.6.2) Qau -tamaa -t qimmi -mik taku -qatta -tu -nga JO/MG day -all -pl dog -SEC.sg see -HAB -INDI -1sg 'Each day, I see a dog.' (and the sentence doesn't say that it's a 'specific' dog)
- In (2.6.3) there is an 'A_T' argument expressed in relative case. Again, it does not need to refer to a specific man.
- (2.6.3) Qau -tamaa -t anguti -up taku -qatta -ta -nga MG day -all -pl man -REL.sg see -HAB -PPT -his/her.sg 'Each day, a man sees him/her/it.' (and the sentence doesn't say that it is a 'specific' man)

In (2.6.4) and (2.6.6), there is an absolutive 'S_I' argument which corresponds to the nominal referent of an unpossessed active participle. In all three cases, the argument

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¹² The suffix -tamaaq does not appear to be a very productive suffix in this dialect. For most words, - limaaq, 'all', can be used in its place. From the stem anguti, 'man', we can suffix -limaaq followed by the plural suffix to get anguti-limaa-t, 'all the men'. The notion of each can also be expressed with the word atuni, 'each one', to be addressed in section (2.9).

in question does not need to refer to a specific man or rock.

- Qau -tamaa -t angutik uvan -nik taku -qatta -tuq JO/MG day -all -pl man(ABS.sg) me -SEC see -HAB -APT 'Each day, a man sees me.' (and the sentence doesn't say that it is a 'specific' man)
- (2.6.5) qau -tamaa -t ujaraq kata -qatta -tuq MG day -all -pl rock(ABS.sg) fall -HAB -APT 'Each day, a rock falls.', (and the sentence doesn't say that it is a 'specific' rock.)
- (2.6.6) qau -tamaa -t angutik taku -ja -u -qatta -tuq MG day -all -pl man(ABS.sg) see -PPT -be -HAB -APT qarqa -up qaa -nga -ni hill -REL.sg top -its.sg -LOC

'Each day, a man is seen on top of the hill.' (and the sentence doesn't say that it is a 'specific' man)

Takujauqattatuq, 'one that is habitually seen', or 'he/she/it is habitually seen', from example (2.6.6), is a passive. Angutik, 'man', has the same thematic role in this sentence as it does in (2.6.1). In both cases a man is seen. The fact that a 'specific' reading is required in (2.6.1) but not (2.6.5) shows us quite clearly that the language treats absolutive O_T s differently from absolutive ' S_I 's.

In section 4.12, we will see that there is another nominalizing suffix –*suuq*, which can replace the sequences -*qatta-taq* and -*qatta-tuq* in the preceding data set to create habitual noun stems. Working with MG, I have gotten all of the same judgements with respect to specificity when sequences -*qatta-taq* and -*qatta-tuq* from the preceding examples are replaced with –*suuq*. Nominalizations formed with –*suuq* differ from active and passive participles in that they are not part of the indicative or any other paradigm which contains verbal forms.

The interpretational restrictions with verbal predicates are the same as with

participial predicates. As we will see shortly, it is only ' O_T ' arguments which must get a specific reading. There is no such restriction for ' A_T ' arguments or for ' S_I ' arguments or for nouns bearing secondary case. It appears that Inuktitut grammar is very systematically organized to allow participles to be used as predicates with all the same semantic and syntactic restrictions as their verbal counterparts.

Examples (2.6.7) to (2.6.9) make use of verbs conjugated in the established mood. Example (2.6.7) will show that absolutive objects must get a specific reading, while (2.6.8) and (2.6.9) will illustrate that subjects do not need to get a specific reading regardless of whether they get absolutive or relative case. The habitual suffix -qattaq is suffixed onto taku, 'see', yielding takuqattaq, 'see something habitually'. This is then followed by the suffix -ma, which is used in the established mood when the subject is different from the subject of some other verb. It is glossed EST.DS, for 'established, different subject'. It is then given agreement morphology which indicates that there is a third person singular subject and a third person singular object. Qimmiq, 'dog', expresses the object, and it bears absolutive case. It must refer to a specific dog.

(2.6.7) qau -tamaa -t qimmiq taku -qatta -ma -uk MG day -all -pl dog(ABS.sg) see -HAB -EST.DS -3sA:3sU 'Because, each day, I see a specific dog.'

*'Because, each day, I see a dog' (and the sentence doesn't say that it is a 'specific' dog)

The verb in example (2.6.8) differs in that it is only inflected for one argument, the subject. This subject, *qimmiq*, 'dog', is expressed in absolutive case. It does not need to refer to a specific dog. The verb *takuqattamat* allows the argument corresponding to the object in the English translation to be expressed in secondary case. Here, *uvannik*, 'me', bears secondary case, and it expresses the one who was seen.

'Because, each day, a dog sees me.' (and the sentence doesn't say that it is a 'specific' dog)

In example (2.6.9), the relative case-marked subject, *angutiup*, 'man', does not need to be given a specific reading. The verb is constructed as was the verb in (2.6.7). Recall that, when there is inflection for two arguments, the subject gets relative case.

(2.6.9) qau -tamaa -t anguti -up taku -qatta -ma -uk MG day -all -pl man -REL.sg see -HAB -EST.DS -3sA:3sU 'Because, each day, a man sees it.' (and the sentence doesn't say that it is a 'specific' dog)

All of the data that I have collected are consistent with the following generalization. With O_Ts, the correct semantic generalization can be obtained by adding the word 'specific' to the English translation. The sentences in (2.6.10) and (2.6.11) both mean 'each day, I ask John whether he sees a dog'. These sentences make use of the dubitative mood, which is used to mark embedded questions, or, if it is used to mark the only verb in a sentence, it will be translated as 'check and see if'. There is habitual marking on both verbs. In the dialect of SM, there is a requirement that if the main verb is marked with habitual aspect, the embedded question placed in dubitative mood must also be marked with habitual aspect in Inuktitut. In (2.6.10), *qimmirmit*, 'dog', is placed in secondary case, which, in this dialect, ends with a /t/. In (2.6.11), *qimmiq*, 'dog' is treated as an absolutive O_T. The notation 'DS' stands for different subject, since this is the inflectional form that is used when the subject is not topical

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(2.6.10) qau -tamaa -t Jaani apiri -qattaq -ta -ra SM day -all -pl John(ABS) ask -HAB -PPT -my.sg

qimmir-mit taku -qattar -mangaa -t dog -SEC.sg see -HAB -DUB -DS.3sg

'Each day, I ask John whether he/she sees a specific dog.'
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'Each day, I ask John whether he/she sees any dog.'

dog(ABS.sg) see -HAB -DUB -DS.3sgA:3sgU

(2.6.11) qau -tamaa -t Jaani apiri -qattaq -ta -ra SM/MG day -all -pl John(ABS) ask -HAB -PPT -my.sg

*'Each day, I ask John whether he/she sees any dogs.'
'Each day, I ask John whether he/she sees a specific dog'

When I asked what the difference in meaning is between these two sentences, SM explained to me that, in (2.6.10), it can mean, 'each day I asked whether he/she sees any dog', but this is not the case for (2.6.11). Furthermore, in (2.6.11), it can be a different dog which is asked about every day, but it must be that a specific dog is asked about each day. Exactly the same semantic results occur in the English translation if we add the word 'specific'. The sentence in (2.6.11) can be translated as 'each day, I ask John whether he/she sees a specific dog.' It should be noted that in all of the examples that I have checked involving absolutive subjects of verbs which inflect for only one argument, speakers always say that the entity marked with absolutive case does not have to refer to a specific entity. The restriction against using 'any' in the English translation consistently patterns with those arguments referred to as absolutive objects in this dissertation and never with those arguments referred to as absolutive subjects. In (2.6.12a), angutik, 'man', is treated as an absolutive subject, and it can be translated as 'any man'. In (2.6.12b), nanuup, 'polar bear' is a relative case marked subject of a

transitive verb, and it can be treated as any bear(s).

(2.6.12) a) qau -tamaa -t Jaani apiri -qattaq -ta -ra SM day -all -pl John(ABS) ask -HAB -PPT -my.sg

angutik uvan -nik taku -qattar -mangaa -t man(ABS.sg) me -SEC see -HAB -DUB -DS.3sg

'Each day, I ask John whether a specific man sees me.'

'Each day, I ask John whether any man sees me.'

- b) qau -tamaa -t Jaani apiri -qatta -ta -ra MG day -all -pl John(ABS) ask -HAB -PPT -my.sg

 nanu -up taku -qatta -mangaa -gu bear -REL.sg see -HAB -DUB -DS.3sgA:3sgU
 - 'Each day, I ask John whether a specific bear sees him. 'Each day, I ask John whether any bear(s) see(s) him.

In (2.6.13) to (2.6.15), there are three more sentences that conform to the generalization that the restrictions on O_Ts in Inuktitut can be explained if we use the word 'specific' in the English translation. Moreover, SM agrees that the word 'specific' belongs in the translation of these sentences. In (2.6.13) to (2.6.15), the words *nirijatsaq*, and *nirijatsara*, mean 'something that can be eaten', and 'something that I can eat', respectively. Much as in the English translations, it doesn't have to be the same thing that is found each day in any of these sentences. According to SM, another possible translation for (2.6.13), is 'Each day, I find a meal'. It can be a hamburger one day and soup the next day. SM agrees that the word 'specific' does not belong in the translation of (2.6.15), where *nirijatsarmit* bears secondary case, and it is not treated as an O_T. According to SM, it is not necessarily a meal which is found each day in (2.6.15). According to MG, example (2.6.14) makes no sense if *nirijatsara* is replaced with *ujaraq*, 'rock'. I have also found some English speakers who find the sentence 'Each

day, I find a specific rock' to be nonsensical. The analysis of specificity that will be given in this section predicts that the aforementioned Inuktitut sentence should have nearly the same semantic representation as the English sentence 'each day, I find a/the specific rock'.

- (2.6.13) qau -tamaa -t niri -ja -tsaq nani -qattaq -ta -ra SM day -all -pl eat -PPT -potential(ABS.sg) find -HAB -PPT -my.sg 'Each day, I find a specific thing to eat.'
- (2.6.14) qau -tamaa -t niri –ja -tsa -ra SM/MG day-all -pl eat -PPT -potential -my.sg(ABS.sg)

 nani -qattaq -ta -ra

find -HAB -PPT -my

'Each day, I find a specific thing that I will be able to eat.' SM 'Each day I find what I will eat.' MG

(2.6.15) qau -tamaa -t niri -ja -tsar -mit SM/MG day-all -pl eat -PPT -potential -SEC.sg

nani -si -qattaq -tu -nga find -AP -HAB -INDI -1sg

'Each day, I find something that can be eaten.'

The examples above require a bit more of an explanation. *Nirijatsaq*, from examples (2.6.13) and (2.6.16), is formed as follows. The passive participle forming suffix-*jaq* is attached to *niri*, 'eat', to yield *nirijaq*, 'one that is eaten'. The suffix –*tsaq*, 'potential', is then added to yield *nirijatsaq*, 'a potential thing to eat', or 'something that can be eaten'. In (2.6.14), a possessive suffix is added to *nirijatsaq* to yield *nirijatsara*. Here, the possessive suffix shows the person and number of the subject of *niri*, 'eat'. The glossing AP in (2.6.15) stands for 'antipassive'. The use of this suffix need not concern us until later sections.

This language does allow absolutive O_T s to be WH-questioned as in (2.6.16). At

first glance, this may appear to be problematic for an analysis that claims that O_{TS} must get a specific reading. However, the analysis in this dissertation is that the meaning can be explained by adding the word 'specific' into the English translation. Such a sentence would mean 'which specific person did he/she see?' According to SM, at least in her dialect, there really is no difference in meaning between this sentence and an alternative sentence where *kina* is placed in secondary case. But this is not problematic for the analysis of this dissertation because there really is no truth conditional difference between the sentences 'which specific person did he/she see' and 'which person did he/she see'.

It should be noted that I am not the first author to have claimed that the semantic restriction on O_Ts is one of specificity, but I am the first author to have claimed that the restriction is identical to the use of the word 'specific' in English. The fact that speakers insist that 'specific' belongs in the translations of sentences with absolutive objects if they are to be translated as indefinites is not the sole reason for making this claim. As we saw in reference to example (2.6.1), a translation of 'each day, I see a specific dog' is better than a translation of 'each day, I see the same dog', because it doesn't have to be the same dog that is seen each day in the context where the narrator is looking for a different dog each day. On the other hand, I have run into some examples that speakers consider to be nonsensical, such as the sentence that would be translated into English as 'each day, I find a specific rock'. This suggests very strongly that the restriction on absolutive objects represents a true semantic restriction rather than just a statistical tendency to be specific. Third, the possibility of WH-questioning an absolutive object is

also consistent with the claim that there is a semantic restriction on absolutive objects that translates into English with the word 'specific'. It is not consistent with certain other analyses such as one that claims that the narrator must have a specific person or thing in mind when he/she utters an absolutive object. See Manga (1996a,b) for a review of the literature, and for some interesting data about absolutives with WH-possessors.

Another test has been presented by Bittner (1994), which has been used by several authors to argue that absolutive objects have the same semantic restrictions as absolutive subjects, in a related dialect called West Greenlandic. I have not been able to reproduce her results in either English or for absolutive subjects in Inuktitut. According to Bittner, subjects must take wide scope with respect to negation in English. If we say 'one book has not come yet', it cannot mean 'no book has come yet'. Rather, it can only mean that a particular book has not come yet. I do not get the same judgements. That sentence does not tell me that some books have arrived, but it does seem like a potentially misleading way of speaking if one truly does mean that no books have come yet, since that is not the only possible reading. Other sentences seem to be less misleading out of context, particularly if we replace 'one' with 'a/an'. One such example is 'an astronaut has not reached Mars yet'. This seems less misleading because our world knowledge tells us that no astronauts have reached Mars yet. However, if we say 'a runner has not reached the finish line yet', it again seems like a misleading way of saying that no runner has reached the finish line, because there is another possible interpretation for this sentence. These types of sentences can be quite difficult to judge. My findings with respect to these types of sentences have shown that absolutive objects must be specific, but that subjects, whether marked with relative case or absolutive case, do not need to be

specific. This runs counter to the findings of Bittner (1994). However, no negation scope data will be considered in this dissertation, because these sentences are difficult to judge in any language. The data presented in this section have elicited very strong judgements from the speakers that I have worked with, and they show that absolutive objects have a different range of possible interpretations than absolutive subjects. Furthermore, Michael Fortescue has informed me that the same generalizations hold true for West Greenlandic (personal communication).

Wharram (2003) has also noted that what is referred to as an absolutive object in this dissertation can be translated with the word 'particular', but not 'any'. However, he just assumes that Bittner's negation scope test is sufficient evidence that absolutive subjects have the same interpretational restrictions as absolutive objects. Similarly, Falk (2006) has also assumed that this must be true. The data in this dissertation suggests that those theories will most likely need to be reevaluated, as they have been applied to Inuktitut or West Greenlandic.

This language does not make a distinction between definite and indefinite. It is always possible to give a definite reading to any noun in a given construction, but it is never required (and this includes all uses of secondary case to express arguments). For nouns bearing a possessive suffix, there appears to be no requirement that either a specific or a definite reading be given. In (2.6.17a), the noun *qimmiq*, 'dog', bears a possessive suffix. However, if he/she owns more than one dog, it does not have to be the same dog which is seen each day. The word *qimminganik* can be translated as either 'his/her dog' or 'one of his/her dogs', at least in the dialect of SM. This shows that possessed nouns are not definite. The example in (2.6.17b) and (2.6.17c) involve

embedded questions, where use of the word 'any' shows that a given noun does not need to be given a specific reading. In (2.6.17b), *qaujimajaranik* is a possessed passive participle, and one of the possible translations is 'anyone/anything I know', showing that possessed deverbal nouns do not need to get a specific reading when they do not express absolutive object. In (2.6.17c), the possessed noun *qimirquaganik* can mean 'any of my books', showing that possessive suffixes do not confer a specific reading to the noun which they attach to.

- (2.6.17) a) qau -tamaa -t qimmi -nga -nik nani -si- qattaq -tu -nga SM day -all -pl dog -his/her.sg- SEC find -AP -HAB -INDI -1sg 'each day I find his/her dog' 'each day, I find one of his/her dogs' Same or different dog
 - b) qau -tamaa -t Jaani apiri -qatta MG -ta -ra day -all -pl John(ABS) ask -HAB -PPT -my.sg -nik taku -qattar -mangaa -t qaujima -ja -ra know -PPT -my.sg -SEC see -HAB -DUB -DS.3sg 'each day, I ask whether he/she sees anyone/anything I know.'

'each day, I ask whether he/she sees a specific one that I know.'

(2.6.17) c) qau -tamaa -t Jaani apiri -qatta -ta -ra MG day -all -pl John(ABS) ask -HAB -PPT -my.sg

qimirqua -ga -nik taku -qattar -mangaa -t book -my.sg -SEC see -HAB -DUB -DS.3sg

'Each day, I ask John whether he sees any of my books.'

'Each day, I ask John whether he sees a specific book of mine.'

The data in this section are very important to any theory about the grammatical relations of Inuktitut because they show that grammar of this language treats verbs that inflect for two arguments differently from verbs that inflect for one argument. Verbs that inflect for two arguments will be referred to as transitive verbs while those that inflect for one argument will be referred to as intransitive verbs. For transitive verbs, there is a

relative case marked argument as well as an absolutive argument that must get a specific reading. For intransitive verbs, there is an absolutive argument that does not need to get a specific reading. In HPSG, lexical categories have distinct constraints. Inflected verbs belong to two distinct lexical subtypes of clausalwords, transitive clausalword and intransitive clausalword, which differ in their restrictions. For those who are unfamiliar with the type theory of HPSG, the claim is actually quite simple. In English, all finite verbs have a nominative subject, whereas, in Icelandic, the majority of verbs have a nominative subject, but a small group of verbs mark their subjects with another case (Zaenen and Maling 1982, Yip, Maling and Jackendoff 1987). In terms of type theory, we can say that Icelandic allows multiple types of finite verbs that differ in the case of their subjects, but, in English, it is a constraint of finite verbs that the subject must be nominative. All subtypes of finite verbs must have this constraint. In Inuktitut, words of the class clausalword all bear no index and can therefore not express an argument. Clausal words of the subtype [transitive] have a relative case-marked subject and an absolutive case-marked object that must get a specific reading. Clausal words of the subtype [intransitive] have an absolutive subject that does not need to get a specific reading.

Also interesting is the observation that the same restrictions that exist for verbal predicates exist for deverbal nominal predicates. Example (2.6.1) made use of a passive participial predicate bearing a possessive suffix, whereas (2.6.3) made use of an active participial predicate. There is a restriction for deverbal nominal predicates that the absolutive argument must get a specific reading if the deverbal nominal predicate bears a

possessive suffix.¹³

This dissertation will adopt the following analysis. There are null derivations which can convert words of the class [noun] into words of the type [clausalword]. In the case of participial predicates, there are derivational rules that convert a verb stem into a noun stem and then into a noun. There is then a null derivation rule that converts nouns into clausal words. But, there really must be multiple derivational rules that convert nouns into clausal words. For nouns of the subclass [participle], the output of the derivational rule has an absolutive argument that cannot include a first or a second person entity. We also need a way to make absolutive objects specific without making absolutive subjects specific when participial predicates are used. Recall from the discussion of examples (2.6.1) to (2.6.6) that, with participal predicates, the absolutive argument is a subject if there is no possessive suffix on the deverbal nominal predicate, but it is an object if there is a possessive suffix on the deverbal nominal predicate. This contrast can be handled as follows. We can say that nouns may either be of the subtype [intransitive] or of the subtype [atransitive]. Nouns of the subtype [intransitive] bear a possessive suffix and they have a relative case marked argument, whereas there is no possessive suffix on nouns of the subtype [atransitive]. There is one derivational rule that takes [atransitive] participles as the input and has an output which is of the lexical class *intransitive clausalword*, with an absolutive argument but no relative case-marked

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¹³ This dissertation predicts that some simpler examples of nominal predication should have no specificity requirement associated with them. Without the word *qautamaat*, 'each day', or habitual marking, example (2.7.1) would be *nanuq takujara*, where the first word is 'bear' and the second word is 'one that I see'. The theory of this dissertation predicts that either of these two words could be treated as the predicate. If it is interpreted as 'something that I see is a bear', then *nanuq*, 'bear', should not need to get a specific reading. In contrast, with the sentence in (2.7.1), either the *nanuq*, 'bear' is an absolutive object, or the sentence means, 'something that I see every day is a bear', in which case it must be the same bear which is seen each day. Unfortunately, I have not had a chance to check simpler cases of nominal predication or to compare them with corresponding sentences involving verbal predicates.

argument. There is another derivational rule that takes [intransitive] participles with a relative case marked argument as the input, and creates an output of the lexical class *transitive clausalword*. The relative case marked argument of the output is the same as the relative case-marked argument of the input, and there is also an absolutive argument which must get a specific reading. These two separate derivational rules for participial predicates are used to accommodate the fact that the language only has two types of clausal words.

Before giving a detailed semantic analysis of how these derivational rules work, there is another semantic feature of clausal words in Inuktitut that must be addressed. With transitive clausal words, the subject and the object can never be coreferential. If we use the transitive clausal word *takuqattatanga* as a predicate, it can only mean 'he/she/it sees him/her/it', but never 'he/she sees himself/ herself'. A similar restriction exists for [intransitive] nouns. When the [intransitive] deverbal noun *takuqattatanga* is not used as a predicate, it can only mean 'one that he/she/it sees', and never 'one that is seen by himself/herself'. Reflexive constructions will not be addressed until section 4.1.

Let us first begin with an informal HPSG representation of *takuqattatanga* when it is used as an intransitive noun meaning 'one that he/she habitually sees'. It is given in (2.6.18). It has been simplified in some ways so that it can be more easily understood by people who are not familiar with the theory of HPSG. Those parts of the representation that are underlined are properties of all [intransitive] nouns in the language. A noun's index shows how what it refers to is related to its semantic relations. While the index of *takuqattatanga* is *i*, the index of its relative case-marked argument is *j*. The following

¹⁴ Where I have put an 'X', it is standard to place 'NP' for 'noun phrase' in a word's argument structure.

head features are used in the representation in (2.6.18). The feature 'CLASS' is used to distinguish stems from words. The feature 'CAT' distinguishes words of the category [noun] from those of the category [verb]. The feature 'NSCAT' stands for nominal subcategory. It distinguishes participial nouns from nonparticipial nouns. The feature 'TRANS' stands for 'transitivity'. It distinguishes [atransitive] nouns from [intransitive] nouns.

(2.6.18) Representation of takuqattatanga when it means 'one that he/she habitually sees'

Example (2.6.19) gives an informal HPSG representation of *takuqattatanga* when it is used as a transitive clausal word meaning 'he/she habitually sees him/her/it'. Again,

We will see, in section 3.1, that Inuktitut allows for discontinuous noun phrases. The preferred view of the author is that Inuktitut does not have noun phrases. Under this analysis, Inuktitut allows the creation of a string of words. An utterance will be deemed ungrammatical if there is no way to determine the function of one of the words in the sentence.

those parts that are underlined are features of all [transitive] clausal words. In this case, both i and j are equated with the indices of arguments in the word's argument structure list. The semantic relations are the same except for the last two semantic relations that pertain to j.

(2.6.19) Representation of *takuqattatanga* when it means 'he/she habitually sees him/her/it.'

```
CLASS: WORD

CAT: clausalword

TRANS: [transitive]

ARG-ST < X, Y >

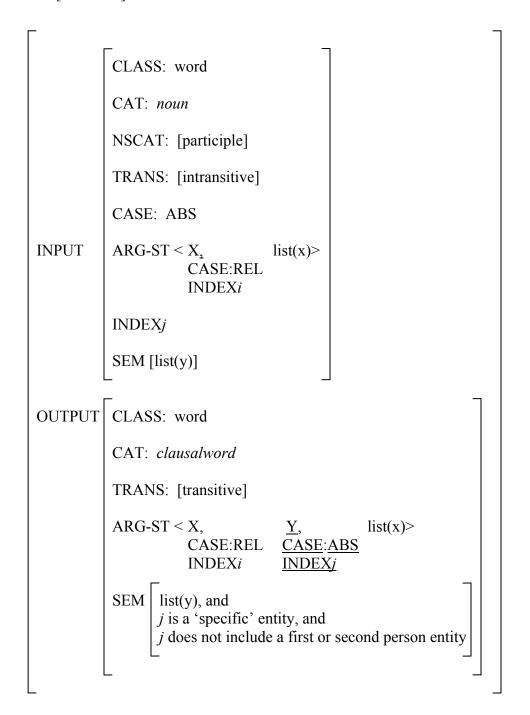
CASE:REL CASE:ABS

INDEXi INDEXj

i habitually sees j, and i does not include a first or second person entity, and j does not include a first or second person entity, and j is a single entity, and j is a single entity, and j is a single entity, and j is a different entity from j, and j is a 'specific' entity
```

The formalism of HPSG allows the derivational rules to map any input to any output. What needs to be determined is how the shape of the output relates to the shape of the input. The shapes of the input and the output for this rule are given in (2.6.20). There are two lists that are mapped from the input to the output. 'List(y)' is the entire contents of the semantic relations of the input. 'List(x)' is the remaining argument structure of the input if it has more than one argument. This part of the rule will be required for deverbal nouns formed from triadic verb stems.

(2.6.20) Input and output to the derivational rule which converts [intransitive] nouns into [transitive] clausal words.



There is another feature of the grammar of Inuktitut that needs to be addressed.

First, if either argument of a transitive clausal word is left unexpressed, then the argument will never be interpreted as meaning 'someone or something'. Third person singular

arguments will be interpreted as 'him/her/it'. This is also true for the single argument of an intransitive verb or the relative case-marked argument of a noun bearing a possessive suffix. The pronouns 'him/her/it' are often referred to as definite pronouns, because the audience should be able to pick out exactly what entity is being referred to either from world knowledge or by looking back into the text to see what entity is topical. Much the same generalization holds for noun phrases marked with the definite article, 'the'. Most likely, the generalization can be understood in terms of the pragmatics of language use, and, for some linguists, this argument might be very important, because it may be that no formal explanation is required to explain the phenomenon in question. When we say 'I saw someone or something' in English, we are indicating to the audience that they should not be able to identify who or what was seen. This is not the case when there is third person subject or object agreement. But, let us take the word takujara, 'I see him/her/it'. Its semantic representation is something like the following: 'i sees j, and i is a first person entity, and i is a single entity, and j is a single entity, and i is a different entity from j, and j does not include either a first person or a second person entity, and j is a 'specific' entity.' When this word is uttered, very little information is actually being given about the object. Furthermore, nowhere does it say that the audience should not be able to use that information to determine what the object really is. It would be misleading to say takujara unless the audience can assume that the information about the object was given in order to help them identify the object. Either it helps them to find a noun in the sentence which expresses the argument, or it helps them to determine who or what is being referred to from the context, using their world knowledge or the preceding discourse. In this latter case, a definite pronoun will be used in the English translation

because that is exactly when definite pronouns are used. ¹⁵ A similar phenomenon occurs in English. When we say, 'I took two things', the use of the word 'things' indicates to the audience that they should not be able to determine what was taken. However, when we say *I took two*, there is no indication that the audience cannot determine what is taken. Just as in Inuktitut, English speakers will assume that they can use context to determine what was taken, since they have not been told that they cannot. However, the object in this sentence is semantically underspecified, since it doesn't say what was taken, only that two of them were taken. It would simply be misleading to say 'I took two' if the audience were unable to determine what was taken.

However, there are other ways to capture the generalization for those who want a more formal explanation, depending on the framework one adopts. In LFG, we can say that the arguments in question must be represented at F-structure. In the case where there is no overt argument in the clause, PRO is part of the F-structure representation of the clause.

The theory of HPSG does not make use of PRO or F-structure. An analysis very similar to that adopted by Sag and Miller (2003) for French clitic pronouns could be assumed. HPSG has a COMPs list in addition to an argument structure list. In some languages there is also a SUBJ. However, this dissertation will make no claim that the grammatical equivalent to subjects in English exists in Inuktitut. When an argument is expressed overtly, the argument in question is placed both on the argument structure list and on the COMPs list, with the same index and the same case specification. When it is not expressed overtly, the argument in question is present on the word's argument

¹⁵ However, this is not the case with the existential constructions discussed in section 2.5 because speakers of this language know that the possessor in these constructions often refers to an unspecified area.

structure list, but not on its COMPs list. There are presumably covert derivational rules that remove arguments from a clausal word's COMPs list. When either an absolutive or a relative case-marked argument is removed from a clausal word's COMPS list, the word's list of semantic restrictions is altered. For example, in (2.6.19), the semantic representation given for takuqattatanga, when it is used as a clausal word, was 'i habitually sees j, and i does not include a first person entity, and j does not include a first person entity, and i is a different entity from j, and j is a 'specific' entity'. This clausal word would have an absolutive argument with the index j on its COMPs list. There is an optional derivational rule that applies to clausal words that would remove the absolutive argument while adding the semantic restriction 'j is a definite entity'. When arguments marked with cases other than absolutive or relative case are removed from a word's COMPs list, no such semantic restriction is added. While this is a possible analysis, it is not consistent with the phrase structure rules of section 3.1, which will allow Inuktitut to create a string of words without reference to a COMPs list. This dissertation will not ultimately assume that anything like a COMPs list is required to explain Inuktitut morphosyntax.

However, there is yet another way that one could handle the requirement that absolutive and relative case-marked arguments must get a definite reading when left unexpressed which does not make use of a COMPs list. Under this alternative view, nouns and noun stems may be either definite or indefinite. Indefinite noun stems add some semantic relation to a sentence's semantic representation. Without this semantic relation, the default interpretation must be definite. As in Sag, Wasow, and Bender (2003), the semantic relation might be 'exist', because indefinite nouns tell the audience

about an entity whose existence they might not know about. If an absolutive or a relative case-marked argument is left unexpressed, then the 'exist' semantic relation has not been added to the sentence's semantic representation as it relates to the argument in question. It must, therefore, be given a definite interpretation. For arguments bearing other cases, there is no such interpretational restriction. We can claim that there are null derivations that allow these other arguments to be made indefinite (by adding the 'exist' semantic relation) without requiring an indefinite noun to be expressed in the syntax. However, as stated above, the phenomenon in question can be understood in terms of the pragmatics of language use, and that explanation most likely makes any other formal analysis unnecessary

Another analysis of deverbal nominal predicates has been given by Woodbury for a closely related language called Yup'ik. Under his analysis, clauses can be either nominal, in which case they are headed by a noun, or verbal, in which case they are headed by a verb. His analysis would need to be modified in some way to tackle the specificity data in this section, if the data are the same for deverbal nominal predicates in Yup'ik.

Verbal predicates undergo different derivational stages than nominal or deverbal nominal predicates. In terms of the theory of this dissertation, for transitive verbs, the suffixes which inflect for person and number of both the subject and the object also add the semantic relation that the object must get a specific interpretation. There is also a semantic relation for all transitive verbal predicates, which is translated as 'i is a different entity from j' (2.6.19). While I have not had the chance to do enough research to show that this is the case, this dissertation assumes that this semantic relation is also added by

the verbal inflectional morphology. In the case of [intransitive] deverbal nominal predicates with a possessive suffix, this semantic relation is added by the possessive suffix.

The restriction that objects of transitive verbs must be specific may be related to how the construction is most often used. In section 4.1, there will be a discussion of the tendency for objects of transitive verbs to refer back to an entity which was mentioned earlier in the text.

Finally, I would like to justify the way the words 'subject' and 'object' are used in this dissertation. First of all, there needs to be some easy way to say that there is a semantic restriction in Inuktitut such that absolutive objects must get a specific reading but there is no such restriction for absolutive subjects. We could invent another term for the relative case-marked argument of a transitive verb, or we could call it the relative case-marked subject of a transitive clausal word. This latter terminology will not lead us to descriptive difficulties in this dissertation because we will end up needing to make reference to whether a verb stem is transitive or intransitive throughout Chapter 4.

The data and analyses of this section are most consistent with those of Dryer (2006) and Falk (1998), who do not assume that ergative languages' grammars treat absolutive subjects the same as absolutive objects. It is inconsistent with most (but not necessarily all) other theories of ergative languages that have been presented to date.

2.7. Intransitive Noun Stems

The analysis in this section will be very important to understanding some of the analyses of Chapter 4. In that chapter, we will see that some deverbal nouns have a complicated set of grammatical restrictions associated with them that can be understood

in light of the analysis to be presented shortly. We have seen quite a number of examples where possessive suffixes show the person and number of a subject of a deverbal noun. We have also seen some cases where they really do show the person and number of a possessor. Two such examples are repeated below. In (2.7.1), the morpheme -nga, glossed 'his/her.sg', shows that there is a relative case-marked argument which is third person singular, and which expresses the subject of the verb stem nalligi, 'love'. In (2.7.2), the morpheme -nga, glossed 'his/her/sg', shows that there is a relative case-marked argument which is third person singular, and which expresses the possessor of ataata, 'father'.

- (2.7.1) Jaani -up nalli-gi -guna -nga -nik JO
 John -REL.sg love-TR -one.that.seems -his/her.sg -SEC

 takunna -tu -nga
 look.at -INDI -1sg
 - 'I am looking at the one that John seems to love.'
- (2.7.2) a) Jaani Mary-up ataata -nga JO John(ABS.sg) Mary-REL.sg father -his/her.sg 'John is Mary's father.'
 - b) Mary-up Jaani ataata -nga JO Mary-REL.sg John(ABS.sg) father -his/her.sg 'John is Mary's father.'

The analysis to be adopted is that possessive suffixes attach to [intransitive] nouns. Nouns of the subtype [intransitive] all have a subject argument. The derivational rule that attaches —gunaq to nalligi in (2.7.1) creates a noun stem with a subject argument which is identified with the subject of the verb stem nalligi, 'love'. Examples such as (2.7.1) show that when a possessive suffix is added, the semantic relation of the relative case-marked argument is determined by the noun stem onto which the possessive suffix

is attached, and there will be many other examples of deverbal nouns in Chapter 4 that will illustrate this point. The theory of this dissertation will be that the identity of the relative case-marked argument is always a property of the noun stem onto which the possessive suffix is attached, whether or not the argument in question is a semantic argument.

Noun stems in the lexicon are [atransitive]. There is a covert derivational rule which converts [atransitive] noun stems into [intransitive] noun stems with a subject corresponding to the possessor of a possessive relationship. The [atransitive] noun stem ataata has the index i as it relates to the semantic relations [i is a father]. After the derivational rule in question is applied to create an intransitive stem, the output has index i as it relates to the semantic relations [i] has i, and i is a father]. An argument is added to the stem's argument structure that must bear the index j.

In Chapter 4, it will be argued that some deverbal nominal stems are [atransitive] whereas others are [intransitive]. There is no grammatical restriction against applying the derivational rule that adds a possessor argument to a noun stem's argument structure to [atransitive] deverbal noun stems. One example of a possessive suffix added to a deverbal noun where it expresses a possessor is given in (2.7.3). In this example, -nga, 'his/her', is added to the stem *qukirsisiti*, 'one that shoots well'. It expresses a possessor. This grammatical but unusual word means, 'his/her person who shoots well'.

The analysis of this section will have additional advantages in Chapter 4, where we will see that there are other suffixes which can attach to [intransitive] noun stems.

In some cases, the subject of the intransitive noun stem will be a possessor, and in other cases it will not be, but, for any stem, the range of possible semantic roles of its subject argument will be the same regardless of which suffix has been added to the [intransitive] noun stem.

Becore concluding this section, I would like to clarify the uses of the terms [atransitive], [intransitive], and [transitive] as they are used in this dissertation. A stem is [atransitive] if it has no arguments for which there can be agreement. A stem is [intransitive] if it has one argument for which there can be agreement. In the case of [intransitive] nouns, agreement comes in the form of a possessive suffix. In the case of [intransitive] verbs, agreement comes in the form of agreement suffixes that inflect for only one argument. In the case of [transitive] verbs, agreement comes in the form of agreement suffixes that inflect for only one argument.

The TRANS features cannot be derived by counting the number of arguments in a word's argument structure list, since there is no requirement of Inuktitut grammar that it has to make agreement possible for all arguments. Example (2.4.7) is repeated below to illustrate this point. In this example *malittugulummik*, 'small one which is following', expresses an argument of *takunnatunga*, 'I am watching'. *Malittugulummik* is an [atransitive] noun because it bears no possessive suffix. However, it does have a secondary case-marked argument *nanurnik*, 'bears', who are the ones that are followed. There is no principle of Inuktitut grammar that states that a noun with the feature [atransitive] cannot have any arguments. However, there is a restriction that [atransitive] nouns can bear no possessive suffix.

(2.4.7) nanur -nik malit -tu -gulum-mik takunna -tu -nga JO bear -SEC.pl follow -APT -small -SEC.s look.at -INDI -1sg 'I am watching the little one who is following bears.'

The TRANS features of this dissertation should ultimately be viewed as a language-particular way that Inuktitut organizes its grammar. They are treated as features because they cannot be derived from some other property of noun stems or verb stems precisely because it is possible for verb stems and noun stems to have arguments for which there is no agreement.

2.8. Absence of Binding Data

Binding is one area in which the data of my dissertation are deficient. In HPSG, argument structures are ordered lists. Manning (1996) has argued that some binding data in Inuktitut can be explained by claiming that subjects always come before objects in a verb's argument structure list. None of the data in this dissertation can be used to argue that either subjects come before objects or that objects come before subjects in a word's argument structure list. Manning (1996) considers two types of binding data to make this claim. The first involves the possessive suffix -mi, 'his/her/its own'. It has been claimed in the literature that subjects can bind objects but not vice versa (Bobaljik 1993). Below, I will present evidence that this is not true in this dialect. The second type of evidence involves interclausal binding and the anaphore, imminik/imminut/imminit, 'oneself'. Manning argues that the antecedent for binding must be a subject and that this is evidence that subjects are the first element on a verb's argument structure list. However, *imminik/imminut/imminit* is unusual in that the antecedent must be animate. It would not be too surprising if it turned out that the restriction on what is a possible antecedent for binding is also dependent on the semantic role of the antecedent. I have not personally

done much investigation on the restrictions associated with interclausal binding because the speakers that I have worked with find the sentences hard to judge.

In modern *Tarramiutut*, the possessive suffix meaning 'his/her/its own' is not used in absolutive case. The absolutive case form has most likely been lost because it resembled the locative plural suffix, leading to confusion. However, other dialects do have an absolutive possessive suffix meaning 'his/her/its own'. Sentences (2.8.1) through (2.8.4) illustrate that *-mi*, 'his/her/its own' needs to have a third person antecedent. They also show that MG was not considering the possibility of an extraclausal third person antecedent on the day that she judged these sentences. (2.8.2) and (2.8.4) are ungrammatical because the other argument in the clause is first person singular.

- (2.8.1) ataata -mi -ta Jaani nalli -gi -ja -nga MG father -his/her.own -REL John(ABS) love -TR -PPT -his/her 'His own father loves John.'
- (2.8.2) *ataata -mi -ta nalli -gi -ja -a -nga MG father -his/her.own -REL love-TR -INDT -3sgA -1sgU *'His own father loves me.'
- (2.8.3) Jaani ataata -mi -nik nalli -gusut -tuq MG John(ABS) father -his/her.own-SEC love -AP -APT 'John loves his own father.'
- (2.8.4) *ataata -mi -nik nalli -gusut -tu -nga MG father -his/her.own -SEC love -AP -INDI -1sg *'I love his own father.'

In (2.8.1), ataatamita, 'his/her own father', is the subject of a transitive clausal word, while the antecedent is an absolutive object. In (2.8.3), ataataminik, 'his or her own father' is a secondary case-marked argument, and its antecedent is an absolutive subject. I have not been able to find a single ungrammatical sentence that suggests that binding with the suffix -mi, 'his/her/its own', is ever sensitive to argument structure.

2.9. Atuni 'each one'

This section will address the restrictions on the use of *atuni*, 'each one', or 'all of them'. It is a bit unusual in that it can be absolutive singular, absolutive plural, or relative plural, but it cannot be relative singular. The data is presented primarily to help in the description of Inuktitut. The data will not be important for giving a grammatical analysis of any other phenomena in this dissertation. In example (2.9.1), it is coreferential with the absolutive singular argument *arnaq*, 'woman' (in other words, *atuni*, 'each one', must bear the same index as *arnaq*, 'woman').

(2.9.1) atuni arnaq nasarsima-juq MG
ATUNI woman(ABS.sg) wear.hat -APT(ABS.sg)
'Each woman is wearing a hat.'

In (2.9.2), it modifies the absolutive plural noun *arnait*. It should be noted that the morphological forms of absolutive plurals are always the same as the morphological forms for relative plurals. The same is true of the dual forms. However, if one replaces a non-singular absolutive or relative case-marked noun with a coordination construction involving multiple singular nouns, it is easy to determine that the language really does make a syntactic distinction between absolutive and relative plural. An argument must be absolutive plural or relative plural if the corresponding sentence with a singular argument treats it as either absolutive or relative singular. The case patterns in this language are well known, and *arnait* must certainly be absolutive in example (2.9.2).

(2.9.2) atuni arna -it nasarsima-ju -t MG ATUNI woman -pl.ABS wear.hat -APT-ABS.pl 'Each woman is wearing a hat.'

In (2.9.3), it expresses an argument that is relative plural.

(2.9.3)MG atuni anguti -it taku -ia -tit -a ATUNI man -pl.REL see -INDT -3sgA -2sgU 'Each man sees you.'

In (2.9.4), there is a relative singular subject, arnaup, and atuni cannot function as if it were co-referent with it. Furthermore, MG informs me that these two words can never mean 'each woman' in any sentence. In this example *atuni* is absolutive plural. ¹⁶

(2.9.4)atuni arna -up atur -ta -ngit MG -his/her/their.pl ATUNI woman -REL.sg use -PPT 'The woman uses each.'

It is not possible to add any case suffixes to atuni to make it into another case. Examples (2.9.5) and (2.9.6) show that *atuni* cannot be secondary singular or plural, because it cannot be co-referential with the secondary singular noun arnamik or the secondary plural noun *angutinik*. The sentence in (2.9.6) originally differed from its current form in an important way. The first two words were in the opposite word order MG was asked whether the second translation was possible, and she said that it was not. She gave the first translation as the correct translation for that sentence, but then she changed the sentence, because she prefers the word order in (2.9.6).

MG (2.9.5)atuni arna -mik taku -juq ATUNI woman -SEC.sg -APT(ABS.sg) see 'each one sees a woman.' *'he/she sees each woman.'

¹⁶ My data set is deficient in that I have no good examples of *atuni* as an absolutive singular object. The sentence below differs from (2.9.4) only in that the object is singular. MG does not say that it is ungrammatical, but she prefers (2.9.4). More research should be done on this issue. If there turns out to be a restriction against atuni being used as an absolutive singular object, then it could be related to specificity.

MG ?atuni arna -up atur -ta ATUNI woman -REL.sg use -PPT -his/her/its.sg 'The woman uses each one.'

(2.9.6) atuni arnaq anguti -nik taku -juq MG
ATUNI woman(ABS.sg) man -SEC.pl see -APT(ABS.sg)
'Each woman sees men.'
*'A woman sees each man.'

When *atuni* is plural, the correct translation is probably, 'all of them', since all of them is plural in English. When *atuni* is singular, the correct translation is probably 'each one' or 'every one'. *Atuni* indicates that what is being said about the one absolutive argument discussed in the sentence can be applied to all relevant entities. Example (2.9.7) shows that it can also translate into English with the word 'both', in which case it most likely really means 'all of them'. The words *angutik* and *arnalu* together mean 'a man and a woman'. The various uses of the suffix *-lu* will not be addressed until section 7.3. The speaker left out any articles in the translation of this sentence.

(2.9.7) atuni angutik arna -lu malit -tu -uk MG ATUNI man(ABS.sg) woman(ABS.sg) -LU follow -APT -du(ABS) 'Both man and woman are following.'

2.10. Pronouns

Inuktitut also has pronouns. As with the previous section, the goals of this section are primarily descriptive. However, the data in this section will be relevant to one of the theoretical discussions in section (7.2). The case endings used for demonstrative pronouns differ from those used with nouns. With the predicate in (2.10.1), *takulaurtuq*, that which is seen must be placed in secondary case. In this case, the demonstrative pronoun *uuminga* expresses that which is seen.

(2.10.1) uu -minga taku -laur -tuq JO this.one -SEC.sg see -PAST -APT 'He saw this one.'

As with nouns, it is possible to attach a demonstrative pronoun to the end of a pronoun. Example (2.10.2) attaches a demonstrative onto *uuminga*, 'this one', from

example A. It can be used interchangeably with *uuminga* from the prefious example, but the *-inna* is really a further clarification. If someone said the sentence in (2.10.1), but they were wrong about which of the people or things in the vicinity were seen, someone else could respond with *uumingainna*, while pointing to another thing in the vicinity.

Most suffixes which can be attached to nouns cannot be attached to pronouns. Examples (2.10.3) and(2.1-.4) illustrate that *-siur*, 'look for', and *-liuq*, 'build', cannot attach to *una*, 'this one', or *uvanga*, 'me'. This is in contrast to (2.10.5), where *-siuq* is attached to a noun stem and the word is grammatical.

- (2.10.3) *una -liur -tuq MG this.one -build -APT *'I am building this one.'
- (2.10.4) *uvanga -siur -tuq MG me -look.for -APT *'he/she is looking for me.'
- (2.10.5) Jaani -siur -tu -nga JO John -look.for -INDI -1sg 'I am looking for John.'

In contrast, adjectival suffixes can be attached to the end of demonstrative pronouns, but when they are they come after the case marking. This is in contrast to nouns which place adjectival suffixes between the noun stem and the case and number inflection. An example of an adjectival suffixed to a noun before secondary case marking is given in (2.10.6).

Examples (2.10.7) is an example of a demonstrative with adjectival suffix.

(2.10.7) uu -minga -apig -inna MG this.one -SEC.sg -small/dear -that 'this small or nice one.'

Examples (2.10.8) and (2.10.9) illustrate that adjectival suffixes can also be attached to either absolutive singular or secondary singular second person pronouns, which follow a different declension pattern from demonstrative pronouns.

- (2.10.8) ivvi -apik MG you.sg -small/dear 'you dear one.'
- (2.10.9) ilin -ni -apik MG you.sg -SEC -small/dear 'You small dear one.'

With plural demonstrative pronouns, there are a somewhat surprising set of restrictions. The contrast between (2.10.10a) and (2.10.10b) shows that the plural suffix -it is required when an adjectival suffix is attached to a pronoun which is absolutive or relative plural.

- (2.10.10) a) *taikkua -raapik MG those(REL/ABS) -small/dear *'those small/dear ones'
 - b) taikkua -raapi -it MG those(REL/ABS) -small/dear -pl 'those small/dear ones'
 - c) ukua -raalu -uk MG these(REL/ABS) -big/terrible -du 'These two big or terrible ones.'
 - d) ukua -raapi -in -ikkua MG these(REL/ABS) -small/dear -pl -those(pl) 'It's these nice ones.'
 - e) *ukua -raapig -ikkua MG these(REL/ABS) -small/dear -those(pl) *'It's these nice ones.'

This suffix -it is the same phonologically as the suffix used to mark absolutive or relative case marked nouns. I have also found that the word in (2.10.10b) can be used either as an absolutive pronoun or as a relative pronoun. In (2.10.10c), the absolutive or relative dual suffix is used. It is not clear whether the suffix -raaluk attaches to a singular or a dual pronoun in (2.10.10c), because the dual pronoun only differs from the plural pronoun in that it ends with a /k/. The suffixes -apik and -aluk always delete the suffix of the stem onto which they attach, and they will insert the phonemes /ra/ only if it is needed to prevent a sequence of three vowels. Examples (2.10.10d) and (2.10.10e) show us that the plural suffix is still required after an adjectival suffix when a demonstrative suffix is used. The translation given by MG is presumably the translation for when this word is used as a clausal word. Note that the word in (2.10.10d) is phonologically identical to a word meaning 'They are daughter-in-laws'.

In contrast, for the second person plural pronoun, the plural suffix -it cannot be used as illustrated by the contrast between (2.10.11a) and (2.10.11b).

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(2.10.11) a)*ilitsi -api -it
you(pl) -small/dear -pl
*'you small/dear ones'
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b) ilitsi -apik you(pl) -small/dear 'you small/dear ones'

It appears that for demonstrative pronouns bearing cases other than absolutive or relative, the –*it* suffix is not used. However, I have only checked one set of examples that shows this. They are given in (2.10.12) and (2.10.13). Ultimately, all dual and plural pronouns need to be checked for whether they need a plural or a dual suffix if an adjectival suffix is used. It may turn out that it is only the absolutive/relative dual and plural pronouns that

require it. It could also turn out that it only occurs with those pronouns that would otherwise loose the phonological distinction between dual and plural when the adjectival suffix is added.

- (2.10.12) *uku -ninga -api -it MG these -SEC.pl -small/dear -pl *'These small or dear ones.'
- (2.10.13) uku -ninga -apik MG these-SEC.pl -small/dear 'these small or dear ones.'

The following two examples show that demonstrative suffixes must come after adjectival suffixes.

- (2.10.14) uku -ninga -alug -ikkua MG these-SEC.pl -big -those 'These big ones'
- (2.10.15) *uku-ninga -ikkua -raaluk MG these-SEC.pl -those -big *'These big ones'

Suffixation of *-apik* onto a demonstrative pronoun does not create a noun stem. While (2.10.16) shows that the output of suffixing *-apik* onto a noun stem is a noun stem, (2.10.17) and (2.10.18a) both involve adding *-siuq* onto a demonstrative pronoun that ends with an adjectival modifier and they are both ungrammatical. (2.10.18b) and (2.10.18c) show that the *-siuq* also cannot attach to a demonstrative pronoun without an adjectival suffix or without any case marking.

- (2.10.16) nanu -alut -siu -tu -nga MG bear -big/terrible -look.for -INDI -1sg 'I am looking for a big bear.'
- (2.10.17) *una -apit -siu -tuq MG this(ABS)-small/dear -look.for -APT *'he/she is looking for this one.'

- (2.10.18) a) *uu -minga -apit -siu -tuq MG this.one -SEC.sg -small/dear -look for -APT *'he/she is looking for this dear one.'
 - b) *uu -minga -siur -tuq MG this.one -SEC.sg -look.for -APT *'he/she is looking for this dear one.'
 - c) *uu -siur -tuq MG this.one -look.for -APT *'he/she is looking for this dear one.'

In earlier sections, it was pointed out that it is possible to suffix those demonstratives which begin with a vowel onto the end of a verb or a noun. We will see that this is not exactly true. The demonstrative pronoun *unaapik*, 'this small or dear one', in example (2.10.19), is grammatical.

(2.10.19) una -apik MG this.one(ABS)-small/dear 'This nice/small one'

The constrast between (2.10.20a) to (2.10.22a) with (2.10.12b) to (2.10.22b) shows that —una, but not unaapik, can attach to the end of simple nouns, verbs and deverbal nouns. Unaapik cannot attach to the end of deverbal nouns either, as illustrated by the ungrammaticality of (2.10.22b). This is unsurprising since there is no reason to think that deverbal nouns belong to a separate lexical class from nouns. Malisuuq is a deverbal noun meaning, 'one that habitually follows'.

- (2.10.20) a) ani -mma -n -una MG leave -EST.DS -3sg -this.one 'when this nice/small one left'
- (2.10.20) b) *ani -mma -n -una -apik MG leave -EST.DS -3sg -this.one -small/dear *'when this nice/small one left'

- (2.10.21) a) angutig -una MG man(ABS.sg) -this.one 'this man' 'this one is a man.'
 - b) *angutig -una -apik MG
 'man(ABS.sg) -this.one -small/dear
 *'this small/dear man.'
- (2.10.22) a) mali -suur -una MG follow -HABNOM -this.one 'This one follows someone.'
- (2.10.22) b) *mali -suur -una -apik MG follow -HABNOM -this.one-small/dear *'This small/dear one follows someone.'

At least in the dialect of MG, we do not want to say that any demonstrative pronoun can attach to the end of a noun, verb, or pronoun. Rather, the following suffixes which resemble demonstrative pronouns and which have the same meaning as demonstrative pronouns are used: -una, 'this one', -ukuak, 'these two', -ukua, 'these three or more', -inna, 'that one', -ikkuak, 'those two', and-ikkua, 'those three or more'. These suffixes are historically derived from the pronouns that they resemble.

The dialect of SM lacks these suffixes. They cannot be placed at the end of nouns, verbs, or pronouns. However, her dialect is very much like that of MG when it comes to the use of adjectival suffixes on pronouns. In (2.10.23a), -kuluk, 'small or dear', is attached to inna, 'that one', to yield innakuluk, 'that dear one'. In (2.10.23b), -aluk, 'that big or bad one', is attached to ikkua, 'those ones', in which case it is followed by the plural suffix -it.

(2.10.23) a) inna -kuluk this.one -small/dear 'this dear one' (2.10.23) b) ikkua -raalu -it those.ones -big/darned -pl 'those darned ones'

The tests from this section seem to suggest that *atuni*, from the previous section, is not a pronoun. It is not possible to attach an adjectival suffix to the end of *atuni*, as in (2.10.24a) and (2.10.24b).

On the other hand it is possible to attach the demonstrative suffix –*ikkua*, yielding *atuniikkua*. However, suffixation of -*ikkua* is not specific to pronouns. MG gave the following example. The glossing AP stands for 'antipassive', but it need not concern us here. When *tigusilaurtut* is used as a clausal word, the ones who take something get absolutive case, and that which is taken bears secondary case.

(2.10.25) atuni -ikkua tigu -si -laur -tu -t iqalum-mik MG ATUNI -those(pl) take -AP -PAST- APT -pl fish -SEC.sg 'They each took a fish.'

2.11. Final Remarks on Chapter 2

This chapter has been an introduction to the major lexical classes of Inuktitut. However, it is far from exhaustive on the topic. Many words belong to none of these groups. For example, niangaarli means, 'I wish I had it/some', but there is no morphological reason to suggest that it is a noun or a verb. It cannot be conjugated or given the suffix -u, 'be', which attaches to noun stems. However, as is the case with most if not all words in the language, it is possible to use the enclitic endings such as

-guuq, which is used for reported speech, or -ttauq, 'too'. MG translates niangaarliguuq as 'he/she says *niangaarli*', and she translates *niangaarlitauq* as 'I also say *niangaarli*'. Some of the analyses and grammatical phenomena from this chapter will be crucial to understanding the remainder of this dissertation. The glossing APT and PPT for 'active participle' and 'passive participle' will be used throughout this dissertation, as discussed in section (2.4). The possibility of using any deverbal noun as a predicate, as discussed in section (2.3), will be crucial to understanding some of the data in Chapter 4. The analysis of [intransitive] versus [atransitive] nouns will also be very important to understanding that chapter. The specificity data from section (2.6) was used to argue that Inuktitut has two types of clausal words, because both arguments of a transitive clausal word are treated differently from the single argument of an intransitive clausal word. For a transitive clausal word, the subject must take relative case and the object must be both absolutive and specific. For an intransitive clausal word, the subject is absolutive but there is no requirement that it be specific. In Chapter 4, this analysis will be extended to verb stems, which can also be either [transitive] or [intransitive], but it is important to note that some of the strongest evidence that a distinction between transitive and intransitive is important to the grammar of Inuktitut comes from the data presented in section (2.6).

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¹⁷ There will be more discussion of the uses of -guuq in Chapter 6. It can be used to introduce heresay or for direct quotations. Only the latter interpretation is possible if the meaning of the word onto which -guuq is attached makes reference to a first person entity.

Chapter 3: Cases

This chapter will be an overview of nine of the ten cases used in Inuktitut. These are relative, absolutive, secondary, dative, locative, ablative, vialis, simulative, and comparative cases. The tenth case, vocative case, will not be discussed in any depth. The uses of relative case, and some of the uses of absolutive case, have already been presented in Chapter 2. Relative case is used to express possessors as well as the subject of transitive clausal words. Nominal predicates bear absolutive case. For transitive clausal words, the object gets absolutive case. For intransitive clausalwords, the subject gets absolutive case. The other cases are not used to mark nouns for which there is person and number agreement on another word in the sentence. While most of the uses of these cases will be touched on briefly in this section, there will be a more detailed investigation of their use in Chapters 4 and 7.

3.1 Relative case

Since most of the uses of relative case have already been presented in Chapter 2, this section will be quite short. A few points will be made about word order. When relative case is used to express an argument of a predicate, the noun bearing relative case may be placed either before or after the predicate, and, importantly, it is possible to place other arguments bearing other cases between the argument bearing relative case and the predicate. In Chapter 2, examples were given where an argument bearing absolutive case was placed between the argument bearing relative case and the predicate. When a noun bearing relative case is used to express a possessor it may either precede or follow the noun which is possessed. Usually, with referring expressions, the possessor is placed in a position which is adjacent to the possessed noun. However, Inuktitut has a very free

word order. It can be very difficult to get accurate judgements on just what is or is not a possible word order in this language. Some word orders are more common than others. Some sentences sound better to JO on one day than they do on another day. In the end, she has insisted that the word order in (3.1.1) is acceptable. However, it is by no means common. In this sentence, the predicate is *ingirqajuq*, 'he/she preceded'. The person who preceded, *Suusi*, is placed in absolutive case. The endpoint of movement, *illunganut*, 'to his/her house', bears dative case. This word bears a possessive suffix, *-nga*, which indicates that the object possessed is singular, and the possessor is third person singular. The possessor, *Maryup*, is expressed as a separate word bearing relative case. In this sentence, the possessor and the possessed noun are not adjacent. Another argument of the predicate intervenes.

(3.1.1) Mary -up Suusi illu -nga -nut JO
Mary -REL.sg Sue(ABS) house -his/her.sg -DAT

inirra -juq
procede -APT(ABS.sg)

'Sue went to Mary's house.'

Example (3.1.1) should be contrasted with example (3.1.2). While the word order in (3.1.1) is presumably quite rare, the word order in (3.1.2b) is much more readily accepted. The most acceptable free word order sentences seem to involve instances where two nouns bearing secondary, dative, ablative, locative, vialis, or simulative case express the same argument. While the 'best' word orders place the two nouns adjacent, alternative word orders are readily accepted by all of the speakers that I have worked with. In (3.1.2a) and (34.1.2b), the predicate means 'I built something'. The entity which is built bears secondary case. Here, two nouns, meaning 'red one' and 'house', are

used to express the entity which was built.

- (3.1.2) a) aupartu -mik illu-mik sana -laur -tu -nga MG red.one -SEC.sg house-SEC.sg build -PAST -INDI -1sg 'I built a red house.'
 - b) illu -mik sana -laur -tu -nga aupartu -mik MG house-SEC.sg build -PAST -INDI -1sg red.one -SEC.sg 'I built a red house.'

Sentence (3.1.3) makes use of the suffix -lu which is used in coordination constructions. An analysis of this construction will not be given until section 7.3. There is no requirement that the two nouns that are being coordinated have to be adjacent when this suffix is used. The verb *takulaurtunga* means 'I saw', and it places that which is seen in secondary case. In this sentence, both *illumik* and *tupirmik* bear secondary case. They are non-adjacent, and the suffix -lu indicates that the two nouns are coordinated. However, the reader is reminded that the term 'coordination construction' does not imply a specific syntactic analysis, at least not as it is generally used in descriptive grammars.

(3.1.3) illu -mik taku laur -tu nga tupir -mi -lu MG house -SECsg sg see -PAST -INDI -1sg tent -SEC.sg -LU 'I saw a house and a tent.'

Sentence (3.1.4) is similar to (3.1.2b) in that it has two secondary case-marked nouns which express the same argument and which are non-adjacent. However, a bit of explanation is required to show why it means what it does. The semantic representation for *takulaurtunga* is 'I saw k', where k must be identified with the index of the secondary case-marked argument. The noun *nanurmik* has the index i as it relates to the semantic representation 'i is a/the bear'. The noun *malittanganik* means 'one that he/she is/was following'. It has the index j as it relates to the semantic representation 'm is/was following j'. For this word, m must be identified with a relative case-marked argument.

Jaaniup bears relative case and it bears the index n as it relates to the semantic representation 'n is named John'. Putting these words together, we get the semantic representation 'I saw k, and k is a/the bear, and n was following k, and n is named John'. A more natural translation into English is 'I saw the bear that John was following'.

'I saw the bear that John was following.'

One of the strongest predictions that this dissertation can make is that, if a language allows the equivalent of (3.1.3), and it has either subject nominalizations or object nominalizations, then it should allow the equivalent of (3.1.4) as well as sentence (2.5.4b), which made use of an active participle. If a language allows an argument to be expressed with a deverbal noun but it lacks noun phrases, or if it allows an argument to be expressed with a noun phrase containing only a deverbal noun, and it allows multiple nouns or noun phrases to express a single argument, then it should have no way to rule out a noun and a deverbal noun expressing the same argument, because the phrase structure generating mechanism would allow the placement of both nouns, one of which is deverbal, into the sentence. For the same reason, it should be possible for one of the nouns to be a proper noun, as in (2.5.4b). The same predictions appear to be made by Hale's theory for nonconfigurational languages (Hale 1983), since his theory is nearly the same as that of this dissertation.

Other possible theories for sentence (3.1.2b) make different predictions. For example one could claim that the underlying structure of the sentence has the same

phrase structure as the English translation, *I built a red house*, but the words get rearranged in some fashion. Such a theory would not make the strong prediction that such a language must allow the equivalent of (3.1.4) if it has object nominalization. It would also predict that it would be possible to drop the word *aupartumik*, 'red one', but not *illumik*, 'house', because such an analysis would allow *aupartumik* to be an adjective which requires a head noun to be in the underlying phrase structure. The author knows of no language that allows for (3.1.2b), where both *illumik* and *aupartumik* must bear the same case to show what argument they refer to, but which does not allow either the equivalent of *aupartumik*, red one, or *illumik*, 'house', to be dropped.

While MG does not say that the word order in sentence (3.1.5) is ungrammatical, this is certainly not considered to be the nicest way to translate 'I am looking at the one who eats caribou meat'. In sentence (3.1.5), the first two words mean 'because I am watching the one who is eating'. *Qaujimagakku* is placed in the established mood meaning 'because' or 'when' in the past. It means 'because I know him/her/it'. If one decides at the end of the sentence to specify what the person is eating, one can add the word *tuttuvinirmik*, 'one that used to be a caribou', in secondary case. *Tuttuvinirmik* expresses an argument of *nirijuq* even though the two words are not adjacent. The reason why MG prefers to place *tuttuvinirmik* at the beginning of this sentence is most likely

 $^{^{18}}$ No such prediction is made about possessors in all languages with so-called discontinuous constituents. In Inuktitut, it is not possible to drop a possessed noun and leave the possessor, as illustrated by the ungrammaticality of A.

A) *Jaani -up taku -laur -tu -nga John -REL.sg see -PAST-INDI -1sg *'I saw John's'

This is because the language treats relative case marked nouns as arguments. In chapter 4, we will see that deverbal nouns bearing a possessive suffix can assign a variety of thematic roles to their relative casemarked arguments. A relative case-marked noun can only be used if it expresses an argument of another word in the sentence, or, as we will see shortly, relative case-marked nouns can also be used as predicates.

related to language processing. A sentence is easier to process if a noun is placed closer to the word of which it expresses an argument.

(3.1.5) niri -juq takunna -ra -kku tuttu -vinir -mik MG eat -APT(ABS.sg) watch -EST -1sgA:3sgU caribou -former -SEC.sg 'I am looking at the one who is eating caribou meat.'

It is ultimately difficult to determine what word orders the syntactic rules of this language do or do not allow speakers to create, because there appears to be a continuum of acceptability, and those word orders that are considered to be more awkward seem to be precisely the ones that one would predict to be more difficult to process. In light of these considerations, I personally see no way to argue that noun phrases even exist in Inuktitut based on the data that I have collected. We can simply say that there are two secondary case-marked nouns in (3.1.2a) that are adjacent to each other in (3.1.2a), but not in (3.1.2b). A possible phrase structure generating rule will be given below, which does not make reference to a noun phrase constituent. A large corpus of text data would be required to know the true frequencies of the different possible word orders.

With JO, I also collected some data which suggested that there is no evidence of a clausal constituent in Inuktitut. However, the data will not be presented because other speakers have found these word orders to be confusing. One of the sentences had the following structure, where each word is translated as follows into English: 'John', 'to Mary', 'while he was sleeping', 'the money', 'I gave it'. However, other speakers have found this sentence to be too confusing. Part of the confusion might come from the fact that the word expressing 'to Mary' can also mean 'for Mary'. More research with other sentences and other speakers is required.¹⁹

¹⁹ While less convincing, another similar piece of data was collected during the elicitation of sentence

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For the purposes of this dissertation, it will be assumed that Inuktitut allows for the creation of a string of words. Using a formulation similar to that given by Hale (1983) for Walbiri, we can say that there is one phrase structure rule in Inukitut: S→W*, which states that a sentence can be composed of any number of words. A sentence will be deemed ungrammatical if the audience cannot determine the role of one of the words in the sentence. Words of the lexical class 'clausal word' take on a similar role to verbs in other languages, because they do not express an argument of another word. This is because they bear no index. This analysis is preferred over one that makes use of complex phrase structure, because case-marking and morphological rules alone will be able to explain the grammatical restrictions in Inuktitut, and there is very little evidence for a more complex phrase structure, since the word orders that are usually deemed to be not the best word orders would be expected to be difficult to process.

Relative case is also used to mark an argument of *mitsaanut/mitsaani*. While the dative case marked form of this word, *mitsaanut*, can be used to mean 'about', the locative case marked form, *mitsaani*, means 'in the vicinity'. An example which makes use of *mitsaanut* is given in (3.1.6). It can presumably be placed in some other cases. While the form of the case marker that is used is the same form that is used after possessive suffixes, the stem *mitsaa* is invariant. It can be used with any relative case marked noun or pronoun regardless of the person and number of its argument.

(3.1.6) uqaa -vu -nga qimmi -up mitsaa -nut speak-DECI -1sg dog -REL.sg vicinity -DAT 'I am talking about the dog.'

(2.7.11), which meant 'each day, I ask John whether he sees a specific dog'. SM finds this sentence confusing if the word *Jaani*, 'John' is omitted, because it sounds too much like the dog is being asked a question. According to SM, the confusion persists even if *qimmiq*, 'dog', is placed at the end of the sentence, after *apiriqattamangaagu*, 'whether he/she/it sees him/her/it'.

There are many other noun stems in the language that have a similar use to *mitsaa*, except they make use of a possessive suffix. One example was given in (2.7.6). It is repeated below as example (3.1.7). Here, *qaa*, 'area on top', is given a possessive suffix and then given locative case marking, yielding *qaangani*, 'at the area on top of it'. Because there is a possessive suffix, *qaqqaup*, 'hill' can be expressed as a separate word bearing relative case.

'Each day, a man is seen on top of the hill.' (and the sentence doesn't say that it is a 'specific' man)

If we were to speak of the area on top of me, we would change the possessive suffix to one with first person inflection. In contrast, with *mitsaanut*, the first person relative case pronoun *uvanga* must be used.

Relative case can also be used to create predicates meaning 'belong to'. In the dialect of SM, *kia* is the relative case-marked form of 'who'. In (3.1.8), *ukua*, 'these', is suffixed onto the end of *kia* to create the predicate *kiangukua*, 'who do these belong to?' In (3.1.8), the predicate is *Jaaniup*, the relative case marked form of *Jaani*, 'John', and the subject is *ukua*, 'these ones'. Together, these two words mean 'these belong to John', or 'these are John's'. First and second person pronouns do not make a distinction between absolutive and relative case. However, it seems reasonable to suggest that the first person pronoun, *uvanga*, expresses relative case in (3.1.10), where it means 'belong(s) to me'.

- (3.1.8) kia -ngukua SM who.REL.sg -these 'Who do these belong to?'
- (3.1.9) ukua Jaani-up SM these(ABS) John-REL.sg 'These are John's.'
- (3.1.10) uvanga taikkua SM me.REL those.ones (ABS) 'Those are mine.'

Table 3.1 summarizes the uses of relative case in this language.

Table 3.1. The uses of relative case

possessors when there is a possessive suffix the actor when there is agreement for two arguments the argument of *mitsaa*predicates meaning 'belong to'

3.2 Absolutive case

This section will only briefly address one other use of absolutive case which was not mentioned in Chapter 1. Absolutive case can also be used to mark some temporal expressions. An example of this is given in (3.2.1). Here, *qautamaat* is an absolutive plural noun meaning 'all days'. The predicate is somewhat morphologically complex. For the sake of brevity, a detailed explanation of how it is formed will not be given. It has habitual aspect, and it means 'I go to the store.'

Another example is given in (3.2.2). The second two words in this sentence are *Jaani*, 'John', and *taanisiqativinira*, 'my former dancing companion', or 'one that I danced with'. Together these words mean 'I danced with John'. *Ippasaq*, 'yesterday',

bears absolutive case, and it indicates when the activity occurred.²⁰

JO (3.2.2)Jaani ippasaq yesterday(ABS.sg) John(ABS.sg) taanisi -qati -vini -ra dance -companion -former my.sg(ABS.sg)

'I danced with John yesterday.'

At one point, I was asked how such a word can end up having the same semantic representation as 'I danced with him/her/it'. For those who are interested in a very tersely given analysis, the semantic representation can be derived as follows. *Taanisi*, 'dance', describes the situation k. Suffixation of *-qatik* creates a noun stem which describes the situation j, as it relates to the semantic relation, 'do k with i. The variable i is equated with the index of the noun stem created by suffixing -qatik. Suffixation of -viniq creates a noun stem which describes a different situation, which is one where the situation described by the stem onto which -viniq is attached has occurred earlier. Suffixation of -ga adds the semantic relations that the person who is danced with is a single entity. It also adds semantic relations that indicate that the subject is both first person and singular. Finally, the covert derivational rule described in section (2.7) is used to convert taanisiqativinira into a word of the class [clausal word], which bears no index, and which has a third person singular absolutive argument.

Inuktitut has no comitative case. In other words, there is no case marking which indicates that something is done with another person. Example (A) illustrates that secondary case and dative case cannot be used to mean 'with someone'. The predicate is taanisilaurtunga, 'I danced'. By itself, it is grammatical. If either Jaanimik or Jaanimut, the secondary and dative forms of Jaani, 'John', are added to this sentence, it is ungrammatical. These forms cannot be used as adjuncts meaning 'with John'.

/*Jaani -mut) taanisi -laur -tu A) (*Jaani -mik JO (*John -SEC.sg /*John -DAT.sg) dance -PAST-INDI -1sg 'I danced (*with John).'

The verbal predicate, taanisilaurtunga, 'I danced', is constructed as follows. Onto taanisi, 'dance', has been suffixed the past tense suffix, -lauq. This is the verbal version of -viniq, 'former'. While -viniq attaches to noun stems to form noun stems, -laur attaches to verb stems to create verb stems. On to taanisilaur, 'danced', has been suffixed -tuq, which indicates that this is part of the indicative conjugation, and it is one of the forms that is only inflected for a single argument. This has been followed by first person singular inflection.

None of the uses of secondary case ever translate into English with the word 'with'. Apparent counter-examples involve verbs that translate into English with the word 'with'. One such verb stem is ugauti, 'speak with', which follows the same pattern as ugaa, 'speak about', to be discussed in section 3.4. Dative case can be used to mark instruments. However, this is the only instance where I know it to translate into English with the word 'with'. West Greenlandic differs from Inuktitut in that what I refer to as secondary case is used to mark instruments. However, according to Michael Fortescue (personal communication), there are no other insances where secondary case is used that translate into English with the word 'with'.

²⁰ Example (3.2.2) illustrates one of the common ways of indicating that an activity was done with someone. Since the companion has been nominalized in taanisigativinira, 'one that I danced with', this argument bears absolutive case when taanisiqativinira is used as a predicate. The predicate has been constructed as follows. Onto taanisi, 'dance', has been suffixed -qatik, 'companion', to yield the participle, taanisiqatik, 'dancing companion'. Onto taanisiqatik, 'dancing companion', has been attached viniq, 'former', or 'one that use to be X', to yield *taanisigativinig*, 'former dancing companion'. -Viniq, 'former', is a suffix which only attaches to noun stems. Its meaning as a marker of past tense is clearest when it is attached to deverbal nouns. Onto taanisiqativiniq has been attached ga/ra, 'my single possession', to yield taanisigativinira, 'my former dancing companion', or 'one that I danced with'.

Unlike West Greenlandic (Sadock 2003), absolutive case is not used when someone's name is given. Examples (3.2.3) to (3.2.4) will make use of the predicate *atiqartunga*, which is structurally parallel to 'I have a name'. Onto *atiq*, 'name', has been attached *qar*, 'have', yielding *atiqar*, 'have a name'. This has been suffixed by *-tuq*, which, in this case, is glossed 'INDI', for 'indicative intransitive'. It is followed by first person agreement morphology. It is not possible to place the name in absolutive case. Only secondary case is possible.²¹

- (3.2.3) *Ati -qar -tu -nga maasiu MG name -have -INDI -1sg Matthew(ABS)
 'My name is Matthew.'
- (3.2.4) Ati -qar -tu -nga maasiu -mik MG name -have -INDI -1sg Matthew -SEC.sg 'My name is Matthew.'

Table 3.2 summarizes the uses of absolutive case in this language.

Table 3.2. Uses of Absolutive Case

the nominal referent of a nominal predicate the single argument when there is verbal inflection for one argument the undergoer when there is verbal inflection for two arguments temporal expressions such as *ippasaq*, 'yesterday', and *qautamaat*, 'each day'

3.3 Secondary Case

Secondary case has a number of uses. It is often used to mark verbal arguments in constructions where an argument in question does not trigger agreement. It occurs in

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Another common way of saying what someone's name is involves suffixing -u, 'be', onto a proper noun. One such example is given in (A). It was given to me as a translation of 'I think that his name is John'. It involves suffixing -u, 'be', onto Jaani, to yield the stem Jaaniu, 'be named John'. Suffixation of -juri, 'think that X', creates a stem meaning 'think that someone is named John'. We can argue that the noun stem Jaani describes a situation that can be translated as 'be named John'. Suffixation of -u creates a verb stem which describes the same situation that is described by Jaani. With the noun stem Jaani, the index is the one who is named John. The verb stem Jaaniu has a subject that is the one who is named John.

A) Jaani -u -juri -ja -ra
John -be-think -PPT -my.sg
'I think that he is named John.'

the antipassive construction, antipassivized causative constructions, reflexive constructions, and it marks the theme of some verbs for 'to give'. For one verb stem for 'to give', it can mark the recipient. It is sometimes used to mark benefactors when there is an applicative suffix on the verb. Secondary case is also used for temporal expressions meaning 'for' or 'in' a certain length of time, as well as for manner adverbial expressions, such as *sukaittumik*, 'slowly'. These last two uses appear to be the only instances where secondary case is used to mark adjuncts.

For many semantically dyadic verbs, there are two stems, the antipassive and the transitive/reflexive stem. The distribution of these stems will be discussed in much more depth in Chapter 4. When the antipassive stem is used, the non-actor is always given secondary case. Transitive/reflexive stems may also place an argument in secondary case, but only in reflexive constructions, where the two arguments are equated. Reflexive constructions will not be introduced until Chapter 4. For other dyadic verbs, the antipassive stem is the same as the transitive/reflexive stem.

In this section, the antipassive construction will only be dealt with briefly. A more in-depth discussion of this construction will occur in section 4.1. For a more formal analysis of the alternation, we will also have to wait for that section. Examples (3.3.1) and (3.3.2) will make use of two verb stems meaning 'shoot'. The stem *qukir* in (3.3.1) is a transitive/reflexive stem, though the final uvular consonant has been deleted. Here, it is used as a transitive stem. The stem *qukii* in (3.3.2) is one of the two possible antipassive stems meaning 'shoot'. The second /i/ is glossed 'AP', for antipassive, since this is an antipassive suffix. When antipassive stems are used, there is an argument which is expressed in secondary case. In (3.3.2), it is the one that is shot.

- (3.3.1)Jaani -up tuttu auki -it -laur -ta -ngit John -REL caribou -pl(ABS) shoot(TR) -PAST-PPT -his/her.pl(ABS) 'John shot the caribou.'
- (3.3.2)Jaani tuttu -nik quki -i -laur -tuq JO John(ABS) caribou -SEC.pl shoot -AP-PAST-APT(ABS.sg) 'John shot the caribou.'

The predicates in these examples are the participal equivalents of verbal forms which agree with two arguments in (3.3.1) and with verbal forms which agree with one argument in (3.3.2). We will see, in Chapter 4, that the active participle forming suffix -juq/tuq can only nominalize the subject of an intransitive stem, while the passive participle forming suffix -jaq/taq can only nominalize the object of a transitive stem. Antipassive stems behave as intransitive stems.²² What is important to understand at this point is that they nominalize the object of a transitive stem. Because *qukilaurtuq*, from example (3.3.2), is a subject nominalization, it means 'someone that shot something' when it is not used as a predicate. Because *qukilaurgangit*, from example (3.3.2), is an object nominalization, it means 'ones that he/she shot' when it is not used as a predicate. In (3.3.1), the case of the arguments is not surprising. As discussed in Chapter 2, possessed nominal predicates are transitive clausal words with the same case marking as verbal clausal words. Since the subject of qukir, 'shoot', is Jaaniup, 'John', and qukilaurtangit, 'ones that he/she shot', is a transitive clausal word, Jaaniup bears relative case. The other argument gets absolutive case, though it is not evident in this example, since tuttuit, 'caribou', is both the relative plural and the absolutive plural form. In example (3.3.2), it is the subject, the one that shoots something, that gets absolutive case when qukiilaurtuq, 'someone that shot something' is used as a predicate. The same

²² After the discussion of *suuq*-type nominalizations in section 4.12, we will also see that passive participles are really not used passively when they are possessed as in example (3.3.1).

would be the case with verbal predicates formed from the same antipassive verb stem.

Before continuing, it should be noted that, for many verbs in Inuktitut, there is a single stem that can be used either in place of the transitive stem *qukiq*, 'shoot', as it is used in example (3.3.1), or in the place of the antipassive stem *qukii*, 'shoot', as it it used in example (3.3.2). For these verbs, we can say that the transitive stem is the same phonologically as the antipassive stem.

Secondary case marking is also used for triadic verbs meaning 'give'. A number of stems exist meaning 'give' in this dialect. *Aittuq, aittutigi,* and *aak* are suffixed with agreement morphology which agrees with two arguments. The verbal morphology agrees with the actor, the one that gives something away, as well as either the theme, the entity which is given away, or the recipient. When verbal morphology is attached to *aittuq*, the verbal morphology agrees with the recipient, and the recipient gets absolutive case.²³ The predicate in (3.3.3), *aittulaurtanga*, is a participial equivalent to a verb form that inflects for two arguments. When it is not used as a predicate, it means 'one that John

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This verb stem appears to have repetitive aspect, since it cannot be used with a singular theme, as illustrated by the ungrammaticality of example (B), which differs from (A) only in the number of the theme.

What appears to be the antipassive version of this verb stem is given in (C).

Another verb stem exists in the language with the same case and agreement properties as *aittuq*. It is *aittutuq*, 'dole out'. As in example (3.3.3), the theme is placed in secondary case and the recipient is nominalized. When *aittutulaurtaka* is not used as a predicate, it means 'ones that I doled the books out to'.

A) qimirqua -nik aittutu -laur -ta -ka MG book -SEC.pl AITTUTUQ -PAST-PPT-my.pl 'I doled the books out to them.'

A) qimirqua -nik aittutu -laur -ta -ka MG book -SEC.pl AITTUTUQ -PAST-PPT-my.pl 'I doled the books out to them.'

B) *Qimirqua -mik aittutu -laur -ta -ka MG book -SEC.s AITTUTUQ -PAST-PPT-my.pl *'I doled out a book to them.'

C) aittutui -laur -tu -nga
AITTUTUI -PAST-INDI -1sg
'I doled out to people.'

gave something to'. When it is used as a predicate, it means 'he/she gave something to him/her.' When the verb stem *aittuq* is used, the theme is always placed in secondary case, as in (3.3.3).

(3.3.3) Jaani-up Mary patta-mik aittu -laur -ta -nga JO John-REL Mary(ABS) ball -SEC.sg AITTUQ -PAST-PPT -his/her.sg 'John gave Mary the ball.'

Secondary case is not used with *aittutigi* or *aak*. When these verb stems are suffixed with agreement morphology that agrees with two arguments, the undergoer agreement indicates the person and number of the theme, the entity which is given away. The recipient must be placed in dative case.

There are two verb stems for 'give' in the language which function similarly to antipassives in that only active rather than passive participles can be formed. It is the subject which gets placed in absolutive case. Similarly, in the non-participial verbal conjugations, there is agreement only for the subject, which gets placed in absolutive case. These stems are *aittui* and *aatsi*. For both of these stems, the theme is placed in secondary case, as in examples (3.3.4) and (3.3.5). Example (3.3.4) illustrates that, for *aittui*, the recipient may be placed in either secondary or dative case. Example (3.3.5) illustrates that, for *aatsi*, the recipient may only be placed in dative case.

(3.3.4) Jaani qimirqua -mik aittui -laur -tuq JO John(ABS.sg) book -SEC.sg AITTUI -PAST -APT(ABS.sg)

Mary -mik /Mary -mut Mary -SEC.sg /Mary -DAT.sg

'John gave the book to Mary.'

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According to Schneider's dictionary, there are two other stems for 'give', listed under the entry *pilippaa*. The stems are *pilik* and *pilitsi* (Schneider 1985). The first one is used like *aittuq*. The second one is like *aittui* in that it places the recipient in secondary case.

(3.3.5) Jaani qimirqua -mik aatsi -laur -tuq JO John(ABS.sg) book -SEC.sg AATSI -PAST -APT(ABS.sg)

Mary -mut /*Mary mik Mary -DAT.sg/*Mary SEC.sg

'John gave the book to Mary.'

There is another verb stem in the language which always places goals in secondary case. It is given in (3.3.6). *Upai*, 'go to', appears to be the antipassive version of *upak*, which is used in example (3.3.7). There is another verb stem in the language, *ai*, which also means 'go to', which places the goal in dative case. An example making use of this verb stem is given in (3.3.8).

- (3.3.6) illu -mik /*illu-mut upa -i -juq MG house -SEC.sg /*house-DAT.sg go.to -AP-APT 'He/she is going to the house.'
- (3.3.7) illug -inna upat -ta -nga MG house -this.one go.to -PPT -his/her.sg 'He/she is going to this house.'
- (3.3.8) illu -mut ai -juq MG house -DAT.sg go.to -APT 'He/she went to the house.'

In (3.3.7), *upattanga* is a passive participle meaning 'one that he/she is going to'. As will be discussed in section 3.11, the passive participle forming suffix can only nominalize the object of a transitive verb stem. When used as a predicate, it is equivalent to a verbal form that inflects for two arguments. The absolutive case marking in (3.3.7) shows that *illuginna*, 'this house', is treated the same way asobjects of other transitive clausal words. In Chapter 4, it will be argued that [transitive] verb stems also have subjects and objects, and that the verb stem *upak* must have an object which corresponds to the area gone to for it to be possible to nominalize the area gone to with the passive

participle forming suffix. Matthew Dryer (personal communication) has pointed out to me that having a verb stem meaning 'go to' which treats the area gone to as an object is quite unusual cross-linguistically. The reason for its existence in Inuktitut seems to be that the language has no way of nominalizing dative case-marked arguments. The language needs a verb stem meaning 'go to' which treats the area gone to as an object in order for it to be possible to say the equivalent of 'the place that he/she is going to'. The use of secondary case in (3.3.6) is not entirely surprising because *upai* appears to be the antipassive equivalent of *upak*, from example (3.3.7). In the antipassive, secondary case is generally used to mark the argument which would be treated as the object in the corresponding transitive clause which makes use of a transitive stem and has both a relative case marked argument and an absolutive argument. However, arguments that express the endpoint of movement are usually placed in dative case, as in (3.3.8).

Another construction where secondary case is used is in benefactives. There are basically two types of benefactive constructions in Inuktitut. The simpler construction does not involve adding an applicative suffix onto the verb stem. The benefactor is added in dative case without any change in the case or agreement with respect to the other verbal arguments. The other type of benefactive construction does involve the suffixation of an applicative suffix, -gutji, which allows a number of different possibilities with respect to case and agreement.

The *-gutji* construction will be briefly introduced with examples (3.3.9) and (3.3.10). We will see, in section 4.4, that *-gutji* can only attach to intransitive stems. In the following two examples, it is attached to *qukii*, the antipassive stem for shoot. The non-actor argument of this verb stem is given secondary case. In (3.3.9) and (3.3.10),

-gutji has been added onto the antipassive stem, qukii, 'shoot'. The non-actor argument of qukii is tuttumik, 'caribou', and it is placed in secondary case in both of these examples.

(3.3.9) Jaani tuttu -mik quki -i -gutji -laur -ta -ra JO John(ABS) caribou -SEC.sg shoot -AP -BEN -PAST-PPT -my.sg 'I shot the caribou for John.'

Verbs stems formed by suffixing -gutji may be suffixed either with morphology that gives case to two arguments, or with morphology that gives case to only one argument. The predicate in (3.3.9) has been constructed as follows. The benefactive suffix -gutji has been suffixed onto qukii, the antipassive verb stem for 'shoot'. Since 'caribou' is the non-actor argument of qukii, 'shoot', and this is an antipassive verb stem, 'caribou' gets secondary case. Onto qukiigutji, 'shoot something for someone', has been added the past tense suffix, -lauq. From this has been formed a passive participle, which has been suffixed with a possessive suffix. The passive participle nominalizes the benefactor. Thus, qukiigutjilaurtara means, 'the one that I shot something for'. If this were a verbal predicate, the verbal agreement would indicate the person and number of the recipient. The recipient is placed in absolutive case.

Example (3.3.10) illustrates the other option. In this case, there is only agreement for one argument, the actor of *qukii*, 'shoot'.

'I shot a caribou for John.'

For the predicate in (3.3.9), the last two suffixes were a passive participle forming suffix,

followed by a suffix which indicates both the number of the inflected noun and the person and number of a possessor. In (3.3.10), the last two suffixes are glossed 'INDI', and '1sg'. This is the form in the indicative conjugation which agrees with only one argument, and that argument is first person singular. The single argument for which there is agreement is the actor of *qukii*, 'shoot'. This example illustrates that the benefactor can be placed in secondary case when there is only agreement for a subject argument. My consultant deems the use of dative case to be ungrammatical to mark the benefactor when the applicative suffix is used, but necessary when it is not used.

Another type of construction which makes use of secondary case will be referred to as the *tit*-causative construction. A number of suffixes fit into this class, including *-tit(si)*, 'cause', *-qu(ji)*, 'ask, want, or tell', *-juri(tsi)/-turi(tsi)*, 'believe that', and *-niraq/nirai*, 'claim that'. For each of these suffixes there are two forms, the transitive/reflexive form and the antipassive form. The suffix *-niraq/nirai*, 'claim that', will be used to illustrate the basics of the syntactic alternation. In both of the examples, *-niraq* or *-nirai* will be suffixed onto one of the antipassive stems for 'shoot', *qukii*, which will create stems meaning 'claim that someone shot something'. In both cases, the entity which is shot will be placed in secondary case. This is expected, since the one that is shot is the non-actor of *qukii*, and *qukii* is an antipassive stem. Examples (3.3.11) and (3.3.12) differ in a number of respects. Table 3.3 will be helpful in discussing the differences.

JO

(3.3.11) Mary-up Jaani tutu -mik
Mary-REL.sg John(ABS) caribou -SEC.sg

quki -i -nirar -ta -nga shoot -AP-declare -PPT -his/her.sg

'Mary claimed that John shot the caribou.'

(3.3.12) Mary tuttu -mik quki -i -nira -i -juq Jaani -mik JO Mary(ABS) caribou -SEC.sg shoot -AP -declare -AP -APT John -SEC.sg 'Mary claimed that John shot the caribou.'

Table 3.3: Differences between example (3.3.11) and (3.3.12)

	-niraq/nira-i	APT/PPT	argument nominalized	case/shooter	case/declarer
3.3.11	-niraq	PPT	shooter	ABS	REL
3.3.12	-nira-i	APT	declarer	SEC	ABS

First, the form of *-niraq/nirai*, 'declare', differs between the two examples. In (3.3.11) the transitive/reflexive form *-niraq* is used, whereas, in (3.3.12) the antipassive version *-nirai* is used. The type of nominalization differs between the two examples. In example (3.3.11), which makes use of *-niraq*, the transitive/reflexive version of *-niraq/nirai*, 'declare', a possessed passive participle is formed. The nominal referent of the passive participle is actually a semantic argument of the stem *qukii*, 'shoot'. It refers to the one who shot something. The semantic argument introduced by the suffix *-niraq*, 'declare', the one which makes a declaration, is treated as the possessor. Consistent with the other examples of case and agreement which we have seen, when *qukiiniralaurtanga*, 'one that he/she claims to have shot something', is used as a predicate, the nominalized argument gets absolutive case, and the argument treated like a possessor gets relative case. In this example it is the person who made the declaration that gets treated as the possessor, and it is the one who shot something which is nominalized. A verbal equivalent to the predicate in (3.3.11) would make use of a verbal suffix which agrees

with two arguments. The actor agreement would be with the argument which declares something, and the undergoer, or object agreement would be with the argument which shoots something.

In (3.3.12), the antipassive version of *-niraq/nira-i* is used. In this example, the shooter is placed in secondary case. An active rather than a passive participle is formed, and it is the declarer that is nominalized. *Qukiiniraijuq* means 'one that claims that someone shot something'. When *qukiiniraijuq* is used as a predicate, it is the declarer that gets absolutive case. A verbal equivalent to the predicate in (3.3.11) would make use of a verbal suffix which agrees with just one argument, the one that makes a declaration.

The contrast between (3.3.10) and (3.3.11) is exactly the pattern of alternation which occurs with simple transitive verbs. The one who shoots something, the actor of *qukii*, 'shoot', has a similar status to the non-actor of simple transitive verbs. It gets secondary case only in the antipassive construction. Table 3.1 is repeated below to show how similar the contrast between (3.3.10) and (3.3.11) is to the contrast between (3.3.1) and (3.3.2). Those two examples involved the alternation between the transitive and the antipassive versions of *qukir/quki-i*, 'shoot', whereas (3.3.11) and (3.3.12) involved the stems *qukiinirai* and *qukiiniraq*, the transitive and antipassive forms of 'claim that someone shot something'.

Table 3.3: Differences between example (3.3.11) and (3.3.12)

	-niraq/nira-i	APT/PPT	argument nominalized	case/shooter	case/declarer
3.3.11	-niraq	PPT	shooter	ABS	REL
3.3.12	-nira-i	APT	declarer	SEC	ABS

Table 3.4: Differences between example (3.3.1) and (3.3.2)

	qukir/quki-i	APT/PPT	argument nominalized	case/shot one	case/shooter
3.3.1	qukiq	PPT	shot.one	ABS	REL
3.3.2	guki-I	APT	shooter	SEC	ABS

Examples (3.3.1) and (3.3.2) make use of the same morphology as (3.3.11) and (3.3.12). These tables are the same except that the declarer in (3.3.11) and (3.3.12) is treated the same as the shooter in (3.3.1) and (3.3.2), and the shooter in (3.3.11) and (3.3.12) is treated the same as the shot one in (3.3.1) and (3.3.2). At this point the word actor and undergoer may be helpful. For underived transitive verb roots, the actor is the argument which would be treated as the subject in the English translation. The undergoer is the other argument. In Table 3.3, the actor introduced by *-niraq/nira-i*, 'declare', is the declarer, and it appears to have the same grammatical function or functions as as the actor introduced by *qukiq/quki-i*, 'shoot', the shooter, in Table 3.4. However, in Table 3.3 the actor of *quki-i*, 'shoot', the stem onto which *-niraq/nira-i is attached*, appears to have the same grammatical function or functions as the undergoer of *qukiq/quki-i*, 'shoot', the shot one, in Table 3.4.

Another use of secondary case concerns temporal expressions meaning 'for' or 'in' a certain length of time, depending on whether it is attached to a telic or an atelic verb. In (3.3.13), 'five minutes' has been given secondary case. It is used with the atelic verb, *pisulaurtunga*, 'I walked'. In this case, it means 'for 5 minutes'.

(3.3.13) 5 minutes -mik pisu -laur -tu -nga JO 5 minutes -SEC walk -PAST -INDI -1sg 'I walked for 5 minutes.'

In (3.3.14), it is used with a telic verb, 'I built something'. In this case, it means 'in 5 minutes'.

(3.3.14) 5 minutes -mik sana -laur -tu -nga JO 5 minutes -SEC build -PAST -INDI -1sg 'I made it in five minutes.'

Finally, secondary case is also used to mark words that translate into English as adverbs. One such example is given in (3.3.15). The word *sukaittumik* translates to 'slowly' in the English translation. The secondary case marker is added onto *sukaittuq*, 'slow one'.

(3.3.15) sukait -tu -mik pisu -laur -tu -nga JO be.slow -APT-SEC.sg walk -PAST-INDI -1sg 'Ì walked slowly.'

Many authors have claimed that secondary case is an 'oblique' case. This is a term which means many different things to many different authors. Empirically, it is different from absolutive and relative case in two respects. Unlike absolutive case, it is not used to express arguments for which there is agreement morphology on another word in the sentence. Morphologically, secondary case is different from absolutive case, in that, when there is a possessive suffix, there is always a separate case suffix which follows the possessive suffix. One of the more common reasons for labeling a case as an oblique case is that it translates into English as a prepositional phrase. For example, nouns marked with dative case are often translated as 'for', 'to', 'by', or 'with'. This is also true for nouns marked with ablative, simulative, vialis, or locative case. However, for secondary case, this is usually not the case. The primary exception appears to be with

the use of secondary case to mark 'for' or 'in' a certain amount of time. The uses of secondary case in benefactives, and for the recipient with one of the verb stems for 'give', are not really exceptions, since English does have equivalent sentences which do not make use of prepositions, such as 'I baked John a cake', or 'I gave John a book'.

At first glance, example (3.3.16) would seem to suggest that one of the uses of secondary case is to mean 'about', in 'to speak about'. Under such an analysis, the predicate *uqaalaurtunga* means 'I spoke', and *Jaanimik* means 'about John'.

However, there is good reason to believe that the verb *uqaalaurtunga* itself actually means 'speak about', and that this is just an instance of secondary case marking on the non-actor argument in an antipassive construction. Recall that for many verbs there is only one verb stem which is used in both environments where antipassive stems are used and in environments where transitive/reflexive stems were used. Example (3.3.17) will illustrate that *uqaa* can also be used as a transitive/reflexive stem.

In example (3.3.17), 'John' is placed in absolutive rather than secondary case, but the sentence still means 'I talked about John'. It would be much better to attribute the 'about' in 'speak about John' to the verb stem *uqaa* than to the cases given to 'John' in these examples. Thus, there appears to be little if any evidence that secondary case marking can mean 'about'.

The case and agreement in (3.3.17) is typical of what occurs when

transitive/reflexive stems are used to form participial predicates when there is no reflexive reading. After the suffixation of the past tense suffix -lauq, a passive participle forming suffix is added, which, in this case, nominalizes the one who is talked about. This is then followed by a possessive suffix. The predicate in this sentence, uqaalaurtara, means 'the one which I spoke about'. As discussed in Chapter 2 possessed passive participial predicates are equivalent to verbal forms which inflect for two arguments. It is not surprising that the non-actor, the one who is spoken about, is placed in absolutive case in this sentence.

In this dissertation, secondary case will be treated as a case which is primarily used to mark non-canonical objects, although this analysis should not be extended to adverbs or temporal expressions meaning 'for' or 'in' an amount of time. In LFG, OBJs, or 'objects', are contrasted with OBJθs, or 'objectθs', which are similar to objects but which are treated somehow differently from other objects in a language. For example, in the sentence, 'I gave John a book', it is tempting to say that there are two objects.

However, for many speakers of English, it is possible to make 'John' into a subject in the passive, but not 'a book'. Since 'a book' does not behave like other objects in the language, it is labeled as an OBJθ. This annotation will be given to secondary casemarked benefactors in *-gutji* constructions, the non-actor in antipassive constructions, and to any verbal argument for a verb stem meaning 'to give', if it bears secondary case. In many cases, parallel examples were given where the argument in question went on to get absolutive case. In such cases, the argument will be treated as an OBJ rather than an OBJθ.

The notation $OBJ\theta$ implies that the argument is somehow thematically restricted.

One example that raises a question about the semantic restrictions on OBJ θ s is example (3.3.12), which meant 'Mary claimed that John shot the caribou', and which treated both John and the caribou as OBJ θ s. It is clear that 'John' takes the role of a subject in this sentence, but less clear how it takes the role of an object. This dissertation makes no claim that arguments referred to as OBJ θ s are thematically restricted. Dryer (1986) has argued that what I am referring to as OBJ θ s should be treated as secondary objects. Before meeting each other, we had both come up with the same analysis that Inuktitut can have clauses with secondary objects but no primary objects. OBJ θ is a convenient notation for secondary objects.

In terms of HPSG, it is simply a property of some verb stems that one or more arguments must bear secondary case. Arguments which are treated as objects in the LFG framework are presumably caseless in HPSG. They can either be assigned absolutive case when appropriate verbal morphology is added, or it can be nominalized, though we will see, in Chapter 4, that there are other ways in which suffixes can affect the final case assignment given to objects.

The uses of Secondary Case are summarized in Table 3.5.

Table 3.5. Uses of secondary case

non-actor in antipassives

benefactor with applicative suffix -gutji

the subject of the verb stem onto which an antipassive version of a *tit*-causative suffix is added

the theme with some verbs for 'to give'

the recipient with one of the verb stems for 'to give'

adverbs such as 'slowly'

'for' or 'in' an amount of time

3.4 Dative Case

Dative case has a variety of functions. It can express the endpoint of movement, and it can mark recipients of triadic verbs of giving as well as benefactors in a variety of constructions. With *itiq*, 'enter', dative case, but not secondary case, can be used to mark the area entered. Dative case is also used to mark instruments as well as demoted subjects. In constructions where demotion has occurred, the argument in question is usually left semantically unspecified, in which case it is understood as 'people' or 'things'. However, it may be expressed in dative case. This occurs to the actor in passive nominalizations, as well as with the actor when the suffix *-tsau*, 'should be X'ed' is added. It also occurs with a class of nominalizations which I will refer to as *vik*-type nominalizations, which nominalize something that is not an argument of the verb stem, as well as in a construction which will be called the *naq*-causative construction. The suffixes which follow this pattern are *-naq*, 'cause people or things to', and *-guminaq*, 'make people want to'. In this construction, the demoted argument which is usually understood as 'people', or 'things', can be expressed in dative case.

In example (3.4.1), the noun marked with dative case is the endpoint of movement. The predicate *ingirqalaurtuq* means 'to precede'. The dative case-marked noun *illumut*, 'to the house', indicates the endpoint of movement. Dative case can almost always be used to indicate an endpoint of movement except with those verbs that treat the endpoint of movement as an OBJ or an OBJ θ . However, one example where it was ungrammatical to use dative case to mark the endpoint of movement was given in (3.3.6). With the antipassive stem *upa-i*, 'go to', the endpoint of movement can only be placed in secondary case.

The use of dative case is widespread enough that, in many cases, it should be treated as an adjunct. In terms of HPSG, a dative case-marked endpoint of movement can be added to any clausal word's argument structure, along with an associated movement towards semantic relation, so long as movement towards an endpoint is not already inherent to the clausal word's semantic representation. Because movement towards is already inherently part of the meaning of *upa-i*, 'go to', it would be semantically redundant to add the movement towards semantic relation to the clausal word's semantic representation a second time.

Verbs of giving vary with regards to what case their arguments get. For some verbs, the recipient either must be or is optionally placed in dative case. This is not the case with *aittuq*, with which the recipient is treated as an object, as discussed in the previous section, in reference to example (3.3.3). For two of the verb stems, *aak* and *aittutigi*, the theme is treated as an object and the recipient is placed in dative case. The

recipient cannot be placed in secondary case. In both (3.4.2) and (3.4.3), the predicate is inflected for both a subject and an object.

- (3.4.2) qimirqua Jaani -mut /*Jaani -mik aa -laur -ta -ra JO book(ABS.sg) John -DAT.sg/*Jaani -SEC.sg AAK -PAST -PPT -my.sg 'I gave the book to John.'
- (3.4.3) qimirqua Jaani-mut /*Jaani-mik JO book(ABS.sg) John-DAT.sg /*Jaani -SEC.sg

aittutigi -laur -ta -ra JO AITTUTIGI -PAST -PPT -my.sg(ABS)

For both *aittui* and *aatsi*, there is only agreement for a subject argument. Both place the theme in secondary case. For *aittui*, the recipient can be placed in either secondary or dative case, but for *aatsi*, the recipient may only be placed in dative case. Examples illustrating the uses of *aittui* and *aatsi* were given in (3.3.4) and (3.3.5). These examples are repeated in footnote 14.²⁵ The use of dative case to mark recipients seems to reflect the fact that recipients are an endpoint of movement.

In Inuktitut, it is possible to express benefactors with or without the applicative suffix -gutji. When the applicative suffix is not used, the benefactor may be expressed in dative case, but it definitely cannot be expressed in secondary case. An example of this situation is given in (3.4.4). The first two words in this sentence, *illuk sanalaurtara*, mean 'I built the house'. It is possible to add a noun marked with dative case to indicate who the house was built for.

(3.3.4) Jaani qimirqua -mik aittui -laur -tuq Mary-mik /Mary-mut JO John(ABS.sg)book -SEC.sg AITTUI -PAST-APT(ABS.sg) Mary-SEC.sg /Mary-DAT.sg 'John gave the book to Mary.'

_

^{&#}x27;I gave the book to John.'

²⁵These examples are repeated from section (3.3), since they are mentioned again in this section.

^(3.3.5) Jaani qimirqua -mik aatsi -laur -tuq Mary-mut /*Mary-mik JO John(ABS.sg)book -SEC.sg AATSI -PAST -APT(ABS.sg) Mary-DAT.sg /*Mary-SEC.sg 'John gave the book to Mary.'

(3.4.4) illuk sana -laur -ta -ra Jaani-mut /*Jaani-mik JO house(ABS.sg) build -PAST -PPT -my.sg John-DAT.sg /*John -SEC.sg 'I built the house for John.'

The possibilities with regards to case when the applicative suffix -gutji is used were given in examples (3.3.6) and (3.3.7), in the section on secondary case. Dative case is not used to mark benefactors when the applicative suffix is used. When -gutji is used, the benefactor is either treated as an OBJ θ , in which case it gets secondary case, or as an OBJ. In terms of LFG, when dative case is used to mark benefactors, it is a clausal adjunct. When the applicative suffix is used, the benefactor is treated as a verbal argument. In terms of HPSG, there is an optional covert derivational process which adds a benefactor to a verb's argument structure, which is specified to take dative case. In contrast, -gutji adds either a caseless argument or an argument which is specified to take secondary case to a verb stem's argument structure.

Dative case is also used with the verb *itiq*, 'enter'. Example (3.4.5) illustrates the range of case possibilities which are possible with *itiq*, 'enter', when it is treated as an intransitive verb stem.

(3.4.5) illu -mut /*illu -mik iti -laur -tu -nga JO house -DAT.sg /*house -SEC.sg enter -PAST -INDI -1sg 'I entered the house.'

Onto *itiq* has been attached the past-tense suffix *-lauq*. This is followed by the indicative mood marker which is used with intransitive stems. It has then been suffixed with agreement for a first person singular argument. The predicate *itilaurtunga* means 'I entered'. To say 'I entered the house', 'house' is placed in dative case. It cannot be given secondary case.

There is another possibility with *itiq*, 'enter'. It may be treated as a transitive

stem with an object, as in (3.4.6).

(3.4.6) illuk iti -laur -ta -ra JO house(ABS.sg) enter -PAST -PPT -my.s(ABS)

'I entered the house.'

In (3.4.6), a passive participle is formed, followed by a possessive suffix which indicates the person and number of the possessor as well as the number of the possessed noun. The element which is nominalized and for which there is number agreement is the place which is entered. When *itilaurtara*, 'the one which I entered', is used as a predicate, the place entered bears absolutive case.

There are many verb stems in the language which allow both the equivalent of (3.4.5) and the the equivalent of (3.4.6). For verbs which undergo this alternation, the non-actor argument is almost always placed in secondary rather than dative case when the type of inflection given in (3.4.5) is used. For these verbs, the non-actor is treated as either an OBJ θ or an OBJ. The alternation between (3.4.5) and (3.4.6) is quite unusual for this reason. With *itiq*, the use of dative case seems to be related to the fact that there is motion towards the area entered. When the argument in question is given dative case, it is given the case which is normally given to goals. With itiq, it appears that the nonactor can be treated as either an OBJ or it can be given dative case, but not it cannot be treated as an OBJ θ . This is in contrast to (3.3.6) and (3.3.7), which showed that the stems *upak* and *upai* 'go to' treat the area gone to as an OBJ and an OBJθ. Morphologically, upak and upai differ in that there is an antipassive suffix with upai but none with *upak*. My consultants have informed me that there is no stem meaning enter which involves the addition of an antipassive suffix and placing the area entered in secondary case. According to Dryer (personal communication), example (3.4.6) is more unusual than (3.4.5) from a cross-linguistic perspective. Most languages do not treat the area entered as an object, though English, French, and Inuktitut are exceptions to this generalization.

Dative case is used to mark instruments in Inuktitut, as in (3.4.7), below.²⁶ In example (3.4.7a), the predicate, *sanalaurtara*, means 'I built it'. The noun marked with dative case, *savimmut*, 'knife', indicates the instrument which was used to build it. In (3.4.7b), the predicate, *takurqaujara*, means 'I saw it'. *Qirngutinnut*, 'binoculars', is marked with dative case, and it denotes an instrument that was used to aid in seeing.

- (3.4.7) a) savim-mut sana -laur -ta -ra JO knife-DAT.sg build-PAST-PPT-my.sg(ABS) 'I made it with a knife.'
 - b) qirngutin -nut taku -rqau -ja -ra MG binocular -DAT.pl see -earlier-PPT -my.sg 'I saw it with the binoculars.'

There are a number of constructions which give subjects a demoted status in Inuktitut. In these constructions, the argument is usually left unspecified with the meaning 'people' or 'things'. These constructions allow the demoted argument to be expressed in dative case, even though it is usually omitted. Such instances of argument demotion occur in the passive, with the suffix *-tsau*, 'should be X'ed', the *naq*-causative construction, and with some deverbal nouns in the absence of possessive morphology.

Example (3.4.8) shows an instance of the passive construction.

²⁶ As is the case with English, some verbs in Inuktitut allow instruments to be treated as the subject. One such example is given below.

A) savi -up nakat -ta -nga tuki -mut MG knife -REL.sg cut -PPT-his/her.sg directional.axis/bearings/meaning- DAT.sg 'The knife cut it along its length.'

Passivization in Inuktitut involves the formation of a deverbal noun, which is then reverbalized. The passive participle forming suffix, -jaq, has been added onto the stem taku, 'see', to get takujaq 'one which is seen'. This has then been reverbalized with u, 'be', to get 'be one which is seen', or 'be seen'. The predicate takujaulaurtunga means 'I was seen'. Normally the agent is left unspecified. But this example illustrates that it can be expressed in dative case.

Example (3.4.9) makes use of the suffix -tsau, 'can/should be X'ed'. It is added to the stem, qukir, 'shoot', to get qukitsau, 'can or should be shot'. Again, the agent is usually left unspecified in this construction, but this example illustrates that it can be expressed in dative case.

(3.4.9) tuttuk quki -tsau -juq (Jaani -mut) JO caribou(ABS) shoot(TR) -can/should.be.X'ed -APT (John -DAT.sg) 'The caribou should be shot (by John).'

Similarly, dative case can also be used in the *naq*-causative construction. This construction makes use of the affixes *-naq*, 'cause people or things to', and *-guminaq*, 'make people want to'. The suffix *-guminaq* is really a phonological variation of *-gumanaq*, which is composed of *-guma*, 'want', followed by *-naq*, 'cause people or things to'. In example (3.4.10), *-naq* has been attached to the verb stem *irqai*, 'remember', to yield *irqainaq*, 'make people remember'. *Irqai* is an antipassive verb stem, so, predictably, its non-actor argument is placed in secondary case. While the demoted argument is usually omitted in the *naq*-causative construction, it can be expressed in dative case, as illustrated by (3.4.10).

(3.4.10) Mary-mik irqa -i -nar -tuq (Jaani -mut) JO Mary-SEC.sg remember -AP-NAQ -APT(ABS.sg) (John -DAT.sg) 'It makes people(/John) remember Mary.'

Dative case is also used to express the demoted argument associated with some deverbal nouns, including passive nominalizations. In fact, the example of passivization given in (3.4.8) makes use of a passive participle which has then been reverbalized with -u, 'be'. Another class of deverbal nouns which make use of demotion will be referred to as the *vik*-type nominalizations. These are all deverbal nouns which nominalize an element which is not an argument of the verb-stem. They include -*vik*, 'place/time of', -*utik*, 'reason or device for', -*usiq*, 'way of', and -*qatik*, 'companion for'.

Example (3.4.11) illustrates this phenomenon with a *vik*-type nominalization. The word *qukiiviviniq*, 'the place where something was shot', is formed as follows. *-vik*, 'place or time', has been added to the antipassive stem *qukii*, 'shoot something', yielding *qukiivik*, 'place where something is shot'. This has then been suffixed with *-viniq*, 'former', yielding 'place where something was shot'. Unsurprisingly, *tuttunik*, 'caribou', the non-actor argument of *qukii*, 'shoot', is placed in secondary case, since this is an antipassive verb stem. The actor, i.e., the one who did the shooting, is demoted. It is usually left unspecified. A good translation of *tuttunik qukiiviviniq*, in the absence of a dative noun to express the actor, is 'the place where caribou were shot'. However, (3.4.11) illustrates that it is possible to express the actor in dative case.

(3.4.11) tutu -nik quki -i -vi -viniq (Jaani -mut) JO caribou -SEC.pl shoot -AP -place/time -former(ABS.sg) (John -DAT.sg) takunna-ta -ra look.at -PPT-my.s(ABS)

'I am looking at the place where caribou were shot (by John).'

Vat another use of detive ages is to areato nominal clauses magning the

Yet another use of dative case is to create nominal clauses meaning 'because of'.

An example of this type of construction is given in (3.4.12).

(3.4.12) pirsi -ni -vinir -mut MG blizzard -GER -former -DAT.sg 'because it blizzarded.'

Onto 'blizzard', *pirsiq*, has been suffixed the gerund-forming suffix *-niq*, followed by *-viniq*, 'former', followed by the singular dative case marker.

In summary, dative case has a wide range of functions. It marks goals with verbs of movement, some verbs of giving, and with the verb *itiq*, 'enter'. It also marks adjuncts in a wide variety of constructions. This includes demoted subject, benefactors when there is no applicative suffix, instruments, and clauses meaning 'because'.

In terms of argument structure representations which make reference to argument structure relations such as SUBJ and OBJ, dative case-marked goals will be annotated as Goal θ . Goal θ is presumably a grammatical function that is thematically restricted to endpoints of movement, if it is to be treated as a grammatical function. Goalθs gets the same (dative) case marking that is given to adjuncts that express endpoints of movement. Demoted subjects will be annotated 'by-P', for 'by-phrase', since they seem to be equivalent to by-phrases in English. The notation is not intended to suggest anything about the phrase structure of Inuktitut, because the word order of Inuktitut is very free. The notation is only used because the author has been unable to come up with a better notation. The nouns in question always get dative case. Note, however, that there will be a number of examples of by-phrases in Inuktitut where the equivalent does not exist in English, because, given the right construction, it is possible to demote the subject of either an intransitive or a transitive verb. It should be pointed out that there is really little advantage to the notations Goal θ and 'by-P' over a notation that simply specifies that an argument in question gets dative case, as would be done in HPSG. It exists in this

dissertation primarily to help the reader identify which semantic role dative case is being used for in a word's argument structure. The other reason for the notation is that, when investigating a language's grammar, one should not assume that a language treats all dative arguments the same. For example, it might be possible for a language to allow Goal Θ s to be nominalized but not by-Ps, and Chapter 4, which deals with these types of questions, is where these notations will be used the most. However, now that the investigations of Chapter 4 are complete, I know of no instance where the grammar treats different types of dative or secondary case-marked arguments differently. Because the notations Goal Θ and 'by-P' served primarily an investigative and a descriptive purpose in this dissertation, little concern has been given to whether or not they are theoretically desireable distinctions, particularly since, in the end, it makes no difference.

By-phrases differ from OBJ θ s in that by-phrases are usually left semantically unspecified but OBJ θ s are not. The difference in use is most likely related to the fact that there is a semantic restriction on OBJs that they must get a specific reading.

The uses of dative case are summarized in table 3.6.

Table 3.6. Uses of Dative Case

to X'

recipients with some verbs for 'to give' demoted arguments in a variety of constructions 'with' an instrument benefactors in the absence of the applicative suffix -gutji 'because of' area entered with *itiq*, 'enter'

3.5 Ablative Case

The more theoretical portions of this dissertation will not give an in-depth investigation of the uses of ablative, locative, simulative, or vialis case, because their use is quite straightforward. The only way in which these cases will be relevant to later

chapters is that locative, simulative, and vialis case can all be used in post-inflectional noun incorporation. Ablative case can be used to mean 'from X' or 'than X' in a comparative construction.

Examples (3.5.1) to (3.5.3) all make use of ablative case to to express sources, with the translation 'from X'. The predicate in (3.5.1), *beertaartunga*, 'I got a beer' is an instance of noun incorporation. *-taar*, 'get', or 'receive', has been suffixed onto *beer* to yield *beertaar*, 'get a beer'.

- (3.5.1) beer -taar -tu -nga Jaani -mit JO beer -get -INDI -1sg Johnny -ABL 'I got a beer from John.'
- (3.5.2) Jaani -mit tigu -laur -ta -ra MG John -ABL.sg take -PAST -PPT -my.sg 'I took it from John.'
- (3.5.3) Kangirsu -mit inirra -laur -tu -nga Quarta -mut MG Kangirsuk -ABL.sg procede-PAST-INDI-1sg Quartaq-DAT.sg 'I proceded from Kangirsuk to Quartaq.'

Another possible use for ablative case involves comparative constructions, in which case, it means 'than X'. This use will be addressed in section 3.9 which will discuss another case, comparative case, that can also be used to mean 'than X' in comparisons.

Table 3.7. Uses of Ablative Case

'from'

'than X' in comparative constructions

3.6 Locative case

Locative case is used with adjuncts to mean 'in', 'at', or 'on'. Post-inflectional noun incorporation is also possible for nouns marked with locative case, yielding verb stems meaning 'be located at'. An example of a locative case-marked adjunct is given in

(3.6.1). In this example, the locative case suffix has been added to *Quartaq*, to get *Quartami*, 'in Quartaq'.²⁷

There appears to be at least one other use of locative case to mark adjuncts. The locative case marker can be added onto gerunds to get the meaning 'before' or 'after'. For example, when it is added to *anirqaaninga*, 'his/her first leaving', we get *anirqaaningani*, 'after he/she left'. The two relevant examples are given in (3.6.2a) and (3.6.2b), below.

- (3.6.2) a) ani -rqaa -ni -nga JO leave -first -GER -his/her.sg(ABS) 'his/her first leaving'
 - b) ani -rqaa -ni -nga -ni niri -laur -tu -nga JO leave -first -GER -his/her.sg -LOC eat -PAST -INDI -1sg 'I ate after he/she left.'

Alternatively, when locative case marking is added to the gerund *aninnginira*, 'my not first leaving', we get *aninnginirani*, 'in my not leaving', or 'before I left'. The example is given in (3.6.3). The locative suffix itself does not mean 'before', rather it indicates that, at the time in question, the action has not occurred. Locative case consistently appears to indicate either 'at a place', or 'at the time that something has or has not occurred'. However, I will argue, in section 4.14, that this is really a verbal conjugation rather than a locative case marked deverbal noun, because the subject must be placed in absolutive, rather than relative case.

²⁷ The use of secondary case to mark 500-nik in this example will be addressed in Chapter 7. -lik, 'one that has', attaches to nouns, creating nouns meaning 'one that has X'. The noun which is created also has an OBJ θ s which describes that which is had. When nouns ending with -lik are used as predicates, they can take on either the meaning 'he, she, or it has X', or the meaning 'there is/are X'.

(3.6.3) ani -nngi -ni -ra -ni niri -laur -tu -nga MG leave -NEG -GER -my.sg -LOC eat -PAST -INDI -1sg 'I ate before I left.'

The uses of locative case are summarized in table 3.8.

Table 3.8. Uses of Locative Case

'at' a location expressions meaning 'before' or 'after'

3.7 Vialis Case

Vialis case has a number of uses. It is used to mean 'through or across' an area, or 'by means of' a vehicle. It can also be used to mean 'in' a body part, as in 'I injected myself in the arm'. Finally it can be used in temporal expressions, meaning 'at a certain time of day'. Nouns marked with vialis case can also undergo post-inflectional noun incorporation, yielding verb stems which mean 'to cross, or go though', or 'to go by means of'.

In the first example, vialis case marking is used to express an adjunct meaning 'through'. In (3.7.1), the vialis case-marked noun, *tupingagut*, means 'through his/her tent', since it bears a possessive suffix followed by vialis case-marking. The relative case marking on *Jaaniup* indicates that 'Johnny' is the possessor. Together, these two words mean 'through John's tent'.

(3.7.1) Jaani -up tupi -nga -gut pisu -laur -tu -nga JO John -REL.sg tent -his/her.sg -VIA walk -PAST -INDI -1sg 'I walked through John's tent.'

With some verbs, it is optional to put the area traversed in secondary or vialis case. One such example is given in (3.7.2). According to Schneider (1985), there is another way that the verb stem *majuq* can be used which does not place the area traversed in either vialis or secondary case. His entry for *majurpaa* illustrates that it can be given

inflection for both a subject and an object, in which case that which is climbed will be placed in absolutive case.

The next example will be used to illustrate the use of vialis case to indicate a means for transportation. In (3.7.3), the vialis case marking in *nunakkuujuukkut* indicates that 'car' is the means for transportation. The predicate in this sentence is formed as follows. The word for store is *niuvirvik*. It is formed by suffixing the nominalizing suffix -*vik* onto *niuviq*, 'trade'. The word for store is literally, 'place for trading'. Onto *niuvirvik* has been suffixed -*liaq*, 'go to', yielding *niuvirviliaq*, 'go to the store'.

(3.7.3) nunakkuujuu -kkut niuvir -vi -lia -laur -tu -nga JO car -VIA.sg trade -place/time -go.to -PAST -INDI -1sg 'I went to the store by car.'

In (3.7.4), a vialis case-marker is added to a body part, to indicate what body part an action is done to. This sentence means 'I injected myself in the arm'. The predicate *kapilaurtunga* means, 'I injected myself'. As we will see in Chapter 4, there is a reflexive reading when suffixes which normally attach to intransitive or antipassive stems are added to transitive/reflexive stems. Such is the case with the predicate *kapilaurtunga*. *Kapi* is a transitive/reflexive stem, and it is suffixed with verbal inflection which only agrees with one argument. *Talikkut* is the vialis form of 'arm'. In this sentence, it indicates where on the body the narrator injected him/herself.

(3.7.4) tali -kkut kapi -laur -tu -nga JO arm -VIA.sg inject -PAST -INDI -1sg 'I injected myself in the arm.'

Vialis case can also be used with times of the day to mean 'at' that time, or

'during' that time. In (3.7.5), vialis case-marking has been added to *unnuk*, 'night', to get *unnukut*, 'during the night', or 'at night'. When added to *Jaanimik takusuungujunga*, 'I see John', it means 'I see John at night'.

(3.7.5) unnu -kut Jaani -mik taku -suu -ngu -ju -nga JO night -VIA.sg Johnny -SEC.sg see -HABNOM -be -INDI -1sg 'I see John at night.'

The predicate in this example represents a very common construction in Inuktitut. *Taku*, 'see', has been nominalized with *suuq*, to yield the habitual nominalization *takusuuq*, 'one that sees'. In this case, *taku* functions as an antipassive verb stem, treating the one who was seen, 'Jaanimik', as an OBJ\theta. In order to allow the argument in question to be first or second person, the stem is reverbalized with *(ng)u*, 'be', in this case yielding *takusuungu*. An overly litteral translation of *takusuungu* might be 'be one that sees habitually', though a simpler translation would be 'see habitually'. This is then followed by the indicative mood marker, which is then followed by first person agreement. The word, *takusuungujunga* means 'I see (habitually)'.

The uses of vialis case are summarized in Table 3.9.

Table 3.9: Uses of Vialis Case

'through'

'across'

'by means of' a vehicle

'in' a body part

temporal expressions such as *unnukut*, 'at night'

3.8 Simulative Case

Simulative case means 'like' or 'as'. Nouns marked with simulative case can also be verbalized to get the meaning 'do what X does'. In example (3.8.1), *Ittutut*, 'like an old man' has simulative case.

(3.8.1) ittu -tut pisut -tuq JO old.man -SIM.sg walk -APT(ABS.sg) 'He walks like an old man.'

Another example of simulative case being used to mean 'like' or 'as' is given in (3.8.2).

(3.8.2) Inut -ti -tut uqa -runna -gallaapit -tu -nga JO Inuk -pl -SIM speak-be.able -little.bit -INDI -1sg 'I can speak a little Inuktitut.'

The simulative plural form of *Inuk*, which can mean either 'person', or 'someone Inuit' is *Inuttitut*, the name of the language that is the subject of this dissertation. Literally, it means 'as the Inuit'. In (3.8.2), it is used with a verb meaning, 'I can speak a little bit'. Together, these two words mean, 'I can speak a little bit like the Inuit', or 'I speak a little Inuktitut'. The verb stem has been formed as follows. *-Gunnaq*, 'be able to', is suffixed onto *uqaq*, 'speak', to get *uqarunnaq*, 'be able to speak'. Onto this has been suffixed *-gallaapik*, 'a little bit', to get *uqarunnarallaapik*, 'be able to speak a little bit'.

Example (3.8.3) illustrates that simulative case can be used in the semantic equivalent of English comparative constructions.²⁸

(3.8.3) Jaani -tut sukka -tigi -ju -nga JO John -SIM be.fast -TIGI -INDI -1sg 'I am as fast as John.'

The predicate in this sentence means 'I am as fast'. The addition of the simulative case-marked noun, *Jaanitut*, 'as John' changes this sentence to 'I am as fast as Johnny'. The verb stem in comparative constructions is formed by adding *-tigi*, 'be/do as much X' onto a verb stem. In this example, *sukatigi*, 'be as fast', has been formed by suffixing *tigi* onto *sukak*, 'be fast'.

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²⁸ In both the dialects of SM and MG, there is another form for *Jaanitut*. It is *Jaanititut*. While it appears to be a simulative plural form, it clearly is not plural in this case.

Table 3.10. Use of Simlative Case

'like/as X' in comparative constructions

3.9 Comparative case

Comparative case is used in comparisons such as 'I love John more than Sue'. The case suffix takes the form —minit when the noun is singular and unpossessed. Elsewhere, it takes the form —ninit. Two examples are given below. Comparative constructions involve the formation of a deverbal noun. The deverbal noun means 'one that is more X'. In (3.9.1) and (3.9.2), —nirsaq, 'one that is more', is suffixed onto nalligusuk, 'love', yielding nalligusunnisaq, 'one that loves someone more'. When it is used as a predicate, the one who loves someone is placed in absolutive case. Whenever the verb stem nalligusuk is used, the one who is loved is placed in secondary case.

Together the three words Jaani nalligusunnisaq Suusimik mean 'John loves Sue more'. The comparative case—marked nouns Maryminit and ataataganinit add the meaning 'than Mary' or 'than my father' to the sentence.

- (3.9.1) Jaani nalli -gusun -nisaq Suusi -mik Mary -minit MG John(ABS) love -AP -one.that.is.more Sue -SEC.sg Mary -COMP.sg 'John loves Sue more than he loves Mary.'
- (3.9.2) Jaani nalli -gusun -nisaq Suusi -mik
 John(ABS) love -AP -one.that.is.more Sue -SEC.sg

 ataata -ga -ninit
 father -my.sg -COMP

'John loves Sue more than he loves my father.'

The comparative suffix for singular demonstrative pronouns is *-mannganit*.

Based on my limited research on this topic, the comparative and ablative forms are the same for first and second person pronouns. This will be addressed in the appendix on comparative constructions. The suffix *-ninit* cannot be used with first and second person

pronouns.

I have collected quite a number of examples with JO and MG where they permit the use of ablative case for comparisons. One such example is given in (3.9.3). In (3.9.3), -nirsaq, 'one that is more', is suffixed onto sukak, 'be fast', yielding sukannisaq, 'one that is faster'. In (3.5.4), it is used as a predicate, meaning 'he or she is faster'. Together with Jaani, Jaani sukannisaq means 'John is faster'. In the dialect of JO, it would appear that the phrase meaning 'than Mary' may be placed in either ablative or secondary, but not in dative, case.

(3.9.3) Jaani sukan-nisaq JO John(ABS) be.fast-one.that.is.more(ABS.sg)

Mary-mit /*Mary-mut /Mary-mik Mary-ABL.sg/*Mary-DAT.sg/Mary-SEC.sg

'John is faster than Mary.'

With demonstratives, even JO prefers ablative case. For demonstrative pronouns, the secondary and ablative suffixes are *-minga* and *-manngat*, respectively, rather than *-mik* and *-mit*, which are used for nouns. It appears that the final /t/ is starting to be replaced by /k/ for the ablative suffix that attaches to nouns, making ablative nouns indistinguishable from secondary case-marked nouns for younger speakers from Quartaq, but the distinction between ablative case and secondary case is still made with demonstrative pronouns.

MG also prefers the use of ablative case over comparative case in some sentences. One such example is given in (3.9.4). She claims that there is no reason to use the comparative case forms *tatsumannganit illuminit* in this sentence.

(3.9.4) aupar -nisaq tatsu -manngat illu -mit MG be.red -one.that.is.more this.one -ABL.sg house -ABL.sg 'It is redder than this house.'

However, there is an important difference between example (3.9.4) and examples (3.9.1) and (3.9.2). In (3.9.4), a comparison is made between that which is nominalized by *-nirsaq* and the argument bearing ablative case, since *auparnisaq* means 'one that is more red'. However, example (3.9.1) was given as a translation of 'John loves Sue more than he loves Mary'. The deverbal nominal predicate, *nalligusunnisaq*, from that example means 'one that loves more'. The comparative case-marked noun in that example is not being compared to the one who loves someone, but rather to the one that is loved.

The distinction is confirmed by the following two examples. With *nalligusunnisaq*, it is the one that loves someone that is nominalized. When the ablative marked form *tatsumanngat* is used, a comparison can only be made with the one who loves someone. When the comparative case-marked form *tatsumannganit* is used, comparison can be with either the one who loves someone or the one who is loved.

- (3.9.5) nalli -gusun -nisaq tatsu -manngat MG love -AP -one.that.is.more this.one -ABL.sg 'He/she loves more than this one (does).'

 *'He/she loves someone more than he/she loves this one.'
- (3.9.6) nalli -gusun -nisaq tatsu -mannganit MG love -AP -one.that.is.more this.one -COMP.sg 'He/she loves someone more than this one does.'

 'He/she loves someone more than he/she loves this one.'

The suffix *-nirsaq* belongs to a class of nominalizing suffixes which will be referred to as SUUQ-type nominalizations, to be addressed in section 4.12. In that section, more restrictions on the use of ablative case in comparisons will be addressed.

Uses of comparative case will not be addressed in that section. In Appendix 1, which is on comparative constructions, there are a number of examples which make use of comparative case.

Comparative case is restricted to comparative constructions. It differs from ablative case in that it cannot be used to express sources. The clausal word *beertaanga*, in example (3.9.7), makes use of the suffix *-taaq*, which will be addressed in section 4.16. It means, 'one that is received'. It attaches to *beer* in this example to yield *beertaaq*, 'beer that is received'. When the possessive suffix *-nga* is added, the word means 'beer that he/she received'. When this word is used as a clausal word, it means 'he/she received the beer'. The contrast between (3.9.7a) and (3.9.7b) shows that the ablative case-marked noun *Jaanimit* can be added to show who the beer was received from, but that comparative case cannot be used in this context.

- (3.9.7) a) beer-taa -nga Jaani -mit MG beer-one.that.is.received -his/her.sg John -ABL.sg 'He/she received the beer from John.'
 - b) *beer-taa -nga Jaani -minit MG beer-one.that.is.received -his/her.s John -COMP.sg 'He/she received the beer from John.'

More research should be done on the uses of comparative case in this dialect, since I have not had the chance to ask whether it is ever possible to use comparative case in sentences that do not contain the suffix *-nirsaq*, 'one that is more X'.

Table 3.11. Use of Comparative Case 'than X' in comparative constructions

3.10 Summary

The uses of the cases in Inuktitut are summarized in Table 3.12 at the end of this chapter. It should be noted that while absolutive and relative case express arguments for

which there is agreement on a predicate or possessive agreement on another noun in the sentence, this is not true for any of the other cases. Ablative, locative, vialis, simulative, and comparative case are all quite restricted in their use, with specific meanings associated with most of their uses. Secondary case and dative case have a larger range of uses. There is also a tenth case, vocative case, that is not addressed in this dissertation. It is used when calling out to someone by name. Many of the uses of dative case are to express either adjuncts or goals. In contrast, most of the uses of secondary case are to express verbal arguments, with only a few exceptions.

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²⁹ Phonologically, the final consonant is deleted if there is one. If the resulting stem ends with a single vowel, it is lengthened. A /k is added at the end of the word.

Table 3.12 The Case System of Inuktitut

Absolutive the nominal referent of a nominal predicate

the single argument when there is verbal inflection for one argument

the object when there is verbal inflection for two arguments

temporal expressions such as ippasaq, 'yesterday', and qautamaat, 'each

day'

Relative possessors when there is a possessive suffix

the actor when there is agreement for two arguments

the argument of mitsaa-

predicates meaning 'belong to'

Secondary non-actor in antipassives

benefactor with applicative suffix -gutji

an argument of the verb stem in antipassivized tit-causatives

the theme with some verbs for 'to give'

the recipient with one of the verb stems for 'give'

adverbs such as 'slowly'

than X in comparative constructions 'for' or 'in' an amount of time

Dative 'to X'

recipients with some verbs for 'to give'

demoted arguments in a variety of constructions

'with' an instrument

benefactors in the absence of the applicative suffix -gutji

'because of'

area entered with itiq, 'enter'

Ablative 'from'

'than X' in comparative constructions

Locative 'at' a location

expressions meaning before or after

Vialis 'through'

'across'

'by means of' a vehicle

'in' a body part

temporal expressions such as unnukut, 'at night'

Simulative 'like/as' Comparative 'than'

Vocative used when calling out to someone by name

Chapter 4. Verb Stems and Derivational Processes

This chapter will involve an in-depth investigation of the antipassive construction as well as reflexive constructions, and the distribution of transitive and intransitive verb stems in a wide variety of constructions. It will be argued that Inuktitut makes a grammatical distinction between [transitive] and [intransitive] stems, and we will see that there is an incredible diversity amongst the derivational suffixes in this language in terms of the restrictions on whether they can attach to [transitive] stems or [intransitive] stems, and how the input gets mapped to the output. The data of this chapter are consistent with a powerful lexicalist theory that allows essentially any input to be mapped to any output. In the discussions of nominalizing suffixes, there will also be a discussion of [atransitive] versus [intransitive] noun stems, as presented in section (2.7), and to be expanded upon in section (4.2). The grammatical distinction will be very important to understanding the data in sections (4.10) to (4.14). The phenomena in those sections will represent some of the most grammatically complicated transitivity alternations in Inuktitut.

Some of the initial reactions that I have gotten to an analysis which uses TRANS features and multiple derivational rules to explain transitivity alternations were negative. My claim is not that the analysis is desireable, but rather that it is necessary and that other analyses seem unmotivated. To illustrate this, a number of different theoretical possibilities will be presented and some will be rejected.

Section (4.1) will address reflexive constructions and the antipassive construction. For reflexive constructions, the following general type of rule will be adopted: $\langle SUBJ, OBJ, Iist(x) \rangle \rightarrow \langle SUBJ_i OBJ\theta_i, Iist(x) \rangle$. This rule indicates that, when an argument structure contains a subject and an object, in addition to any other number of elements,

represented by the 'list(x)', the object can be made coreferential with the subject, in which case the object is changed into an OBJ θ . The reason for adopting this analysis is that OBJ θ s bear secondary case, and it is possible to use a pronoun marked with secondary case in reflexive constructions. This is only one version of the theory that will be given, one that assumes that SUBJ, OBJ, and OBJ θ s are grammatical primitives throughout a words' derivation. Another version that will be adopted, which is more along the lines of HPSG, is that verb stems with the grammatical feature [transitive] can be turned into verb stems with the feature [intransitive], in which case, the first two elements of the verb stem's argument structure list (corresponding to what practioners of LFG would call the SUBJ and the OBJ) are made coreferential, and secondary case is assigned to the second element of the verb stem's argument structure list.

However, a similar analysis will not be pursued for the so-called antipassive alternation. There is no productive derivational rule which can take a transitive stem as the input, and create a non-reflexive intransitive output with a SUBJ and an OBJ0. Or, to put this in terms of the HPSG analysis of this dissertation, there is no productive derivational rule which takes a stem with the grammatical feature [transitive] and converts it into a stem with the grammatical feature [intransitive], while assigning secondary case to one of the arguments of the verb stem. Within the synchronic grammar, the lexicon contains both transitive stems, and corresponding intransitive stems with an argument that is lexically specified to get secondary case. In other words, some verb stems have objects, whereas others have OBJ0s. There is simply no productive morphological rule which adds an antipassive suffix while changing an OBJ into an OBJ0. This dissertation will not attempt to give any analysis of nonproductive

derivational processes beyond claiming that both the derived and the underived form must be part of the mental lexicon. In contrast, it is assumed that fully productive derivational processes are mental rules that one makes use of when producing a sentence. Also to be addressed in this section is a restriction that OBJs must get a specific interpretation whereas there appears to be no semantic restriction for OBJ θ s.

This will be followed by an investigation of a number of different derivational processes, for which there will be an introductory discussion in section (4.2). The derivational processes of Inuktitut can affect subjects and objects in a number of different ways. They either get assigned case, nominalized, demoted, or removed from the word's argument structure. In contrast, there are no derivational processes that affect OBJ θ s or dative case-marked goals or *by*-phrases. Another way of stating the generalization is that, once an argument is treated as an OBJ θ , it will always be treated as an OBJ θ (and the same applies to dative arguments). Antipassive verb stems are intransitive in that there is only one argument whose realization can be affected by further morphosyntactic processes. Note that this use of the term intransitive may be misleading, since there are many nominative/accusative languages with verb stems which are considered transitive, but which only allow morphosyntactic operations to affect the status of one of the arguments. The terms transitive and intransitive are used in this dissertation out of tradition and for convenience.

4.1 Overview of Verbal Stems and the Antipassive Alternation

There are two basic tests for whether a verb root or a verb stem behaves as an antipassive or a transitive/reflexive stem. First, antipassive stems cannot be used with inflection which inflects for two arguments, but transitive/reflexive stems can be. In this

respect, antipassive stems behave like semantically intransitive stems. Second, an antipassive stem can be used with verbal inflection which inflects for only one argument without a reflexive reading. The non-actor argument is placed in secondary case. In contrast, a transitive/reflexive stem can only be used with verbal inflection which inflects for only one argument with a reflexive reading. After using these tests to establish whether a verb stem is antipassive or transitive/reflexive, it is then possible to use the verb stems to investigate the properties of the various derivational suffixes in the language, as will be done in the remainder of Chapter 4.

The first set of examples involves the two stems for 'stab' or 'inject', *kapi*, and *kapii*. In (4.1.1), the transitive/reflexive stem, *kapi*, is used. In this example, there is verbal agreement for two nouns. The actor is placed in relative case, and the undergoer is placed in absolutive case. The predicate in this example is verbal, rather than participial. It belongs to the declarative conjugation, as indicated by the glossing of the morpheme *va*, as DECT, for 'declarative transitive'.

(4.1.1) Jaani kapi -va nga aanniasiurti -up JO John(ABS) stab/inject(TR) -DECT -3sgA:3sgu nurse -REL.sg 'The nurse gave John an injection.'

Example (4.1.2) is similar to example (4.1.1), except that the antipassive stem has been used in place of the transitive/reflexive stem. Use of the antipassive stem is ungrammatical in this context.

(4.1.2) *Jaani kapi -i -va -nga aanniasiurti -up JO John(ABS) inject-AP -DECT-3sgA:3sgU nurse -REL.sg *'The nurse gave John an injection.'

Examples (4.1.3) and (4.1.4) will make use of verbal morphology which only agrees with one argument placed onto the transitive/reflexive stem. In example (4.1.3),

we see that there is a reflexive reading with or without *imminik*, 'self'.³⁰

Example (4.1.4) illustrates that it is not possible to replace *imminik*, 'self', with a noun which is different from the actor, when the transitive/reflexive stem is used with verbal agreement which only inflects for one argument.

Example (4.1.4) can, however, be made grammatical, by replacing the transitive/reflexive stem with the antipassive stem, as in (4.1.5).

For the most part, the antipassive stem is in complementary distribution with the transitive/reflexive stem, since it is not generally used reflexively. Example (4.1.6a) below means 'The nurse injected someone all by himself/herself'. This is in contrast to example (4.1.3), where the transitive/reflexive stem was used, and there was a reflexive

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Another word for *imminik* in this dialect is *namminiq*. *Namminiq* does not appear to have regular case marking. Secondary case marking is used with first or second person pronouns as well as with *imminik* in reflexive constructions in this dialect. This dissertation does not attempt to give an in-depth analysis of binding, However, there are some phenomena that do require an explanation. The contrast between examples A and B shows that it is not possible to give *Jaani* the same case that is given to the reflexive pronoun. A standard analysis would make reference to condition C, and the ordering of elements on a word's argument structure list, or it would make reference to grammatical relations such as SUBJ, OBJ, and OBJθ. Another possible analysis is that the secondary case-marked argument in a reflexive construction must bear a form feature such as [anaphor]. This would prevent *Jaanimik* from expressing the secondary case-marked argument of *nalligijuq*.

A) immi -nik nalli -gi -juq Jaani self -SEC love -TR -APT John(ABS) 'John loves himself.'

B) *immi -nik nalli -gi -juq Jaani-mik self -SEC love -TR -APT John-SEC 'John loves himself.'

reading even without *imminik*, 'self'. However, example (4.1.6) shows that, when a first person pronoun is used, and the verb stem is antipassive, a reflexive reading is possible. JO and SM have given me the same judgements for (4.1.6b). There appears to be no restriction against a reflexive reading with antipassive stems. There is simply no pronoun to mark a third person reflexive relationship that can't also mean 'all by himself/herself'.

- (4.1.6) a) aanniasiurti immi -nik kapi -i -vuq JO nurse(ABS.sg) self -SEC inject-AP -DECI(3sg)
 The nurse gave someone an injection all by himself/herself'.
 - b) uvan -nik nagli -gusuk -tu -nga me -SEC love -AP -INDI -1sg 'I love myself.'

Antipassive stems are like semantically intransitive verbs in that they can only be inflected for one argument. The contrast between (4.1.7) and (4.1.8) illustrates that *aannia*, 'be sick', can only be used if it is inflected for only one argument.

- (4.1.7) Jaani aannia -vuq JO John(ABS) be.sick -DECI(3sg) 'John is sick.'
- (4.1.8) *aannia -va -ra JO
 be.sick -DECT -1sg:3sg
 *'I am sick with it.'

Table 4.1 is an overview of the verb stems discussed in this section. All purpose stems are verb roots which can be used either as transitive/reflexive stems or as antipassive stems. The 'BR', or 'bare root', notation will be very restricted in its use. There are some roots in the language that can never be followed directly by most suffixes which can normally attach to verb stems. The one example in table (4.1) is nalli(C), which can only ever be followed by -naq, 'cause', or the antipassive suffix -gusuk, or the transitive verb stem forming suffix -gi. *Quvia* is similar in that it can be followed by -gi, in which

case the stem is transitive/reflexive, or by –*suk*, in which case the stem is antipassive. However, the 'BR' notation is not used with *quvia*, because *quvia* is also listed as an all pupose stem, which means that it can be used either as if it were an antipassive stem or as if it were a transitive/reflexive stem, without addition of a transitive/reflexive verb forming suffix, or an antipassive suffix.

Table 4.1 Verb stems discussed in this section

Semantically intransitive stems *katak* 'fall(ITR)' *aannia* 'be.sick'

Transitive/reflexive stems qukir 'shoot(TR)' kapi 'stab/inject(TR)'

katak 'drop(TR)' quvia-gi 'be.happy.with-TR' nalli-gi 'love-TR' irsi-gi 'be.frightened.of-TR',

anirrau-ti 'bring.home-TR'

Antipassive stems *quki-i* 'shoot-AP' *qukir-ni* 'shoot-AP'

kapi-i 'stab/inject-AP' kata-i 'drop-AP'

kuni-i 'kiss-AP' quvia-suk 'be.happy.with-AP' nalli-gusuk 'love-AP' irsi 'be.frightened.of(AP)',

angirqau-ji 'bring.home-AP

All purpose stems taku 'see' sana 'build' malik 'follow' kunik 'kiss'

quvia 'be.happy.with'

Bare roots nalli(C) 'love (BR)'

The alternation between transitive/reflexive stems and antipassive stems is highly lexical. For 'shoot', there are two antipassive stems, *qukii*, and *qukirni*, and one transitive/reflexive stem, *qukir*. For the all purpose stems *taku*, 'see', *sana*, 'build', and *malik*, 'follow', there is one stem that can be used either as a transitive/reflexive stem or as an antipassive stem. For 'kiss', there are two options in the antipassive, *kunik* and *kunii*. One of these stems, *kunik*, can also be used as a transitive/reflexive stem. There is also considerable phonological variation in terms of the relationship between antipassive and transitive/reflexive stems. For any given stem, a learner must determine whether it is

used as a transitive/reflexive stem, an antipassive stem, or both. It seems reasonable to suggest, for instance, that there are three lexical entries for kunik/kunii, 'kiss'. One is *kunii*, and it has a SUBJ and an OBJ θ . Another, *kunik*, also has a SUBJ and an OBJ θ . Yet another, also pronounced *kunik*, has a SUBJ and an OBJ. To the best of my knowledge, this analysis of the antipassive alternation is unlike any other in the theoretical syntactic literature. In some sense, it is most similar to the theory given by Kalmár (1979), since he also argues that transitive constructions and antipassive constructions are in no way transformationally derived from one another. Other theories of the antipassive alternation will not be reviewed. They differ from the analysis of this dissertation in that they fail to acknowledge that antipassive stems must exist as separate lexical entries. They also have no way to prevent an antipassive suffix (either overt or covert) from attaching to itiq, 'enter', yielding an intransitive stem with a secondary casemarked argument, but no such stem exists. As discussed in section 3.4, itiq can have a SUBJ and an OBJ or a SUBJ and a Goalθ. Since reflexivization is possible with any transitive/reflexive stem, so long as it is semantically plausible, the following general type of rule will be assumed for the reflexive construction, as explained at the beginning of this chapter: $\langle SUBJ, OBJ, ... \rangle \rightarrow \langle SUBJ_i OBJ\theta_i, ... \rangle$ Other possible ways of handling transitive and intransitive stems, which do not make use of the grammatical primitives SUBJ and OBJ, will be addressed later in this section.

Some further explanation is required about the glossing of the verb stems in Table 4.1. When there is an identifiable antipassive suffix, it will be glossed 'AP'. There is at

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³¹ In terms of HPSG, a transitive stem has two caseless arguments. Reflexivization is a covert morphological process where the two caseless arguments are given the same semantic index, so that they must refer to the same entity. At the same time, the second argument in the argument structure list is specified to get secondary case.

least one verb mentioned in table 4.1 where there is no antipassive suffix, but for which the transitive/reflexive equivalent takes a transitive/reflexive forming suffix. This verb is irsi/irsigi, 'be frightened of'. When the antipassive version irsi is used, the notation (AP) should be placed in parentheses to indicate that *irsi* is an antipassive stem which exists in the lexicon, even though there is no antipassive suffix. For transitive/reflexive stems, the notation 'TR' will be placed in parentheses, unless the suffixes -gi or -ti are used, which will be glossed 'TR'. In cases where a single phonological form can be used as either an antipassive or a transitive/reflexive stem, no notation will be given, since examples using such stems are of little value in helping us to determine what suffixes can or cannot be added to transitive/reflexive or antipassive stems. Only examples involving stems which can only be either transitive/reflexive or antipassive are helpful for this type of research. In cases where the use of a specific stem tells us nothing about the language's grammar, there is no point in using any notation which makes reference to what type of verb stem is being used. Along a similar vein, the bare root notation, '(BR)', is only used with those stems that can be used to tell us what the restrictions are on what suffixes can or cannot be added to bare roots. There will also be no notation to indicate a semantically intransitive stem, with one exception. Katak can be used either as a transitive stem meaning 'drop' or an intransitive stem meaning 'fall'. When katak means 'fall', the notation (ITR) will be used to indicate that the meaning of this stem shows that it is intransitive in the environment that it is used.

Example (4.1.9) to (4.1.17) will show the data that was used to make the conclusions that were made in table 4.1 about the verb stems *kunik/kunii*, 'kiss', *taku* 'see', and *katak* 'drop something', or 'fall'. In (4.1.9) to (4.1.12), the tests are given for

'kiss', of which there are two stems, *kunik*, and *kunii*. *Kunii* is an antipassive stem, but *kunik* is an all-purpose stem, since it can be used in any environment without a reflexive interpretation. Examples (4.1.9) and (4.1.10) illustrate that, when there is verbal inflection for two arguments, *kunik* can be used, but *kunii* cannot be. At this point, we know that *kunii* is not a transitive/reflexive stem. We do not know whether or not *kunik* is strictly a transitive/reflexive stem or an all-purpose stem, since we do not know if it has the same restrictions as other transitive/reflexive stems.

Example (4.1.11) illustrates that *kunii* can be used in constructions which only inflect for one argument. In this case, the actor is placed in absolutive case but the non-actor is placed in secondary case. Together, examples (4.1.10) and (4.1.11) reveal that this is an antipassive verb stem. The non-actor argument must be expressed in secondary case, and there can only be inflection for the actor. There never has to be a reflexive reading.

Example (4.1.12) illustrates that *kunik* can also be used interchangeably with *kunii*, from the previous example. Again, there is only inflection for one argument, and the undergoer is placed in secondary case. The fact that a reflexive reading is not required illustrates that *kunik* is not being used as a transitive/reflexive stem in this

example. However, example (4.1.9) illustrates that it can be a transitive/reflexive stem.

There is no restriction against all purpose stems being used reflexively. This has not been checked with *kunik* due to the semantic implausibility of kissing oneself. *Taku*, 'see', is another verb stem which allows the equivalent of both (4.1.11) and (4.1.12). Examples (4.1.13) and (4.1.14) will be used to show that a reflexive reading is indeed possible with these verbs when the verbal inflection only agrees with one argument. A secondary case-marked pronoun must be used to indicate that the sentence is reflexive. If the subject is first or second person, then a first or second person pronoun can be used to indicate reflexivity, as in (4.1.13).

It is also possible to use *imminik*, 'self', regardless of the person of the subject. However, *imminik* is ambiguous. It can either indicate reflexivity or it can mean something like 'all by oneself' or 'by one's own accord'. In example (4.1.14), the reflexive reading is evident, but, out of context, a reflexive reading is not at all evident without *tarqatuuuti-mi*, 'in the mirror'.³² It is not clear what the semantic contribution is of *imminik* when there is no reflexive reading and the verb is *takuvuq*, 'he/she sees'.

(4.1.14) immi-nik taku-vuq tarqatuuti -mi JO self-SEC see -DECI(3sg) mirror -LOC.sg 'He/she sees him/herself in the mirror.'

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³² It might also be that *imminik* can never mean 'self', referring back to the subject of *taku*, 'see', because the subject of *taku* is not a volitional thematic role. In section (4.13), we will see that the agentive nominalizing suffix –*ji/ti*, which is thematically restricted, cannot be attached to *taku*, most likely because the subject of this verb stem does not express a volitional thematic role.

The remainder of this section will address the verb stem *katak*, 'fall', or 'drop something'. Recall that the meaning of *katak* depends on the environment in which it is used. It can either be a semantically intransitive verb meaning 'fall', or a transitive/reflexive stem, meaning 'drop'. There is also an antipassive stem, *katai*, which also means 'drop'.

The difference in meaning between (4.1.15) and (4.1.16) will be used to illustrate that the semantically intransitive use of *katak*, 'fall', follows the same restriction which is observed for other semantically intransitive verbs. It can only be inflected with suffixes which express one argument.

These examples will also illustrate that, when *katak* is used to mean 'drop', it follows restrictions which are typical of transitive/reflexive stems. In (4.1.15), *katak* is suffixed with a declarative suffix which only agrees with one argument. In this example, it must mean 'fall'. The notation (ITR) in example (4.1.15) indicates that this meaning only occurs when this stem is used in an environment where intransitive stems can be used.

In (4.1.16), *katak* is suffixed by declarative inflectional morphology which agrees with two arguments. In this case, it must mean 'drop something'. The notation (TR), for 'transitive/reflexive', will be used when *katak* means 'drop'. With other transitive/reflexive stems, a reflexive reading is possible when the verb is only inflected

for one argument. However, a reflexive reading is untenable with this verb. The fact that *katak* cannot be used to mean 'drop something' when it is inflected for only one argument demonstrates that *katak* is a transitive stem when it means 'drop something'.³³

Example (4.1.17) illustrates that there is also an antipassive stem for 'drop something', *katai*. It is suffixed with morphology which only inflects for one argument, even though it is semantically transitive. The non-actor argument is placed in secondary case.

(4.1.17) ujarar-mik kata -i -vuq JO rock-SEC.sg drop -AP-DECI(3sg) 'He/she dropped a rock.'

Before turning to the differences in the use and interpretation of the antipassive alternation, some of the argument structures for some of the verbs from Chapter 3 should be given. For itiq, 'enter', there are two lexical entries, one with a SUBJ and an OBJ, the other with a SUBJ and a Goal θ . The two relevant examples are repeated in (4.1.18) and (4.1.19). In (4.1.18), the area entered is treated as a Goal θ , because it gets dative case. The enterer is treated as the subject because there is intransitive verbal agreement for the enterer. In contrast, in (4.1.19), itiq is a transitive verb stem with a subject and an object because the passive participle forming suffix -jaq/taq can only attach to transitive verb stems.

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³³ There is at least one other verb stem in the language that functions like *katak*. It is *nakat*, 'cut something', or 'break in half'. Two examples of its use are given below. See Nagai (2008) for a more in depth discussion of this phenomenon in a closely related dialect, Inupiaq.

A) savi-up naka -tsautigi-gunna-ta -nga tuki -mut MG knife-REL.sg cut(TR)-quickly-be.able-PPT-his/her.sg direction.something.is pointing-DAT.sg 'The knife can easily cut it lengthwise.'

B) nakat -tuq SM break.in half(ITR)-APT 'It breaks in half.'

- (4.1.18) a) illu -mut /*illu -mik iti -laur -tu -nga JO house -DAT.sg /*house -SEC.sg enter -PAST -INDI -1sg 'I entered the house.'
 - b) $itiq_1 < SUBJ(enterer)$, Goal $\theta(area\ entered) >$
- (4.1.19) a) illuk iti -laur -ta -ra JO house(ABS.sg) enter -PAST -PPT -my.s(ABS) 'I entered the house.'
 - b) *itiq*₂ <SUBJ(enterer), OBJ(area entered)>

Aittui, 'give', places the theme in secondary case, but the goal may be placed in either secondary or dative case. The relevant example is repeated in (4.1.20). The secondary case marking on *qimirquamik*, 'book', shows that it is an OBJ θ . The two alternate case markings on *Marymik/Marymut* show that it can either be an OBJ θ or a Goal θ . For this verb, there are two lexical entries, given in (4.1.20b), and (4.1.20c).

- (4.1.20) a) Jaani qimirqua -mik aittui -laur -tuq JO John(ABS.sg) book -SEC.sg AITTUI -PAST -APT(ABS.sg)

 Mary -mik /Mary -mut Mary -SEC.sg /Mary -DAT.sg
 - 'John gave the book to Mary.'
 - b) $aittui_1 < SUBJ(giver)$, OBJ θ (theme), OBJ θ (recipient)>
 - c) $aittui_2 < SUBJ(giver)$, $OBJ\theta$ (theme), $Goal\theta$ (recipient)>

Since *aatsi* can only place the recipient in dative case and the theme in secondary case, it has a single lexical entry corresponding to the second possibility for *aittui*. The relevant example is repeated in (4.1.21).

(4.1.21) a) Jaani qimirqua -mik aatsi -laur -tuq JO John(ABS.sg) book -SEC.sg AATSI -PAST -APT(ABS.sg)

Mary -mut /*Mary mik Mary -DAT.sg/*Mary SEC.sg

'John gave the book to Mary.'

(4.1.21) b) aatsi \leq SUBJ(giver), OBJ θ (theme), Goal θ (recipient) \geq

For *aak* and *aittutigi*, there is a SUBJ and OBJ and a Goal θ . In (4.1.22) and (4.1.23), the recipient gets dative case, showing that it is treated as a Goal θ . The use of the passive participle forming suffix, -jaq/taq, shows that these stems are transitive stems, with a subject and an object, because that suffix can only attach to transitive stems. In this dissertation, the term object is used for those arguments of transitive clausal words which must be both absolutive and which must get a specific reading. The absolutive case marking on the theme (4.1.22) and (4.1.23) illustrates that the theme is treated as the object in these examples.

- (4.1.22) a) qimirqua Jaani -mut /*Jaani -mik aa -laur -ta -ra JO book(ABS.sg) John -DAT.sg/*Jaani -SEC.sg AAK -PAST -PPT -my.sg 'I gave the book to John.'
 - b) aak < SUBJ(giver), OBJ (theme), Goalθ (recipient)>
- (4.1.23) a) qimirqua Jaani-mut /*Jaani-mik JO book(ABS.sg) John-DAT.sg /*Jaani -SEC.sg

aittutigi -laur -ta -ra JO AITTUTIGI -PAST -PPT -my.sg(ABS)

b) aittutigi <SUBJ(giver), OBJ (theme), Goalθ (recipient)>

For *aittuq*, there is a SUBJ and an OBJ and an OBJ θ . The absolutive case marking on *Mary* in (4.1.24) shows that the recipient is treated as an object in this example, since *aittulaurtanga* is a transitive clausal word. The secondary case marking on *pattamik*, 'ball', shows that the theme is treated as an OBJ θ with this verb stem.

(4.1.24) a) Jaani-up Mary patta-mik aittu -laur -ta -nga JO John-REL Mary(ABS) ball -SEC.sg AITTUQ -PAST-PPT -his/her.sg 'John gave Mary the ball.'

^{&#}x27;I gave the book to John.'

(4.1.24) b) aittuq \leq SUBJ(giver), OBJ (recipient), OBJ θ (theme) \geq

At this point, the justification for the use of the terms subject, object, OBJ θ , and Goalo, should be addressed. While the use of these grammatical primitives is not the only possibility to be discussed in this dissertation, these terms are at least helpful, though they do have some drawbacks. In Chapter 2, we saw that the grammar of Inuktitut treats transitive clausal words differently from intransitive clausal words. Transitive clausal words have an absolutive argument that must be given a specific interpretation and relative case marked argument that has no restriction. In contrast, intransitive clausal words have an argument marked with absolutive case that differs from the absolutive argument of transitive clausal words in that it does not need to be given a specific interpretation. Because the restrictions in terms of case and interpretation of the single argument of an intransitive clausal word are different from that of either argument of a transitive verb, it might seem appropriate to use three different terms, one for the relative case-marked argument of a transitive clausal word, another term for the absolutive argument of a transitive verb, and another for the absolutive argument for an intransitive clausal word. However, we still need something like the lexical constraint theory to capture the fact that only two types of clausal words are allowed in Inuktitut. For example, there are presumably no clausal words with an absolutive argument that must get a specific reading but no relative case-marked argument. The subclass features [transitive] and [intransitive] are needed to describe the two types of clausal word which are allowed by the grammar of Inuktitut. Since we must have a theory that treats transitive and intransitive verbs differently, we do not need a different set of terms for the arguments of transitive and intransitive clausal words. We can indeed claim, for

example, that the subject of an intransitive stem gets a different case from the subject of a transitive clausal word, and this is how the terminology is used in this dissertation. With transitive clausal words, the argument which gets relative case is referred to herein as the subject, and the argument which gets absolutive case is referred to as the object. For intransitive verbs, the word 'subject' is preferred over 'object' for the absolutive argument for two reasons. First, there needs to be some easy way to say that there is a restriction that absolutive objects must get a specific reading but no such restriction exists for absolutive subjects, and this is also an argument against treating 'absolutive' and 'ergative' as grammatical relations in Inuktitut. If we referred to the single argument of an intransitive clausal word as an object rather than a subject, this generalization would be more difficult to state. Second, the absolutive argument of an intransitive clausal word created from an antipassive stem corresponds to the subject of the corresponding transitive clausal word which is formed from a transitive verb stem, and this alternation occurs more commonly than the other type of alternation that occurs between the intransitive use of *katak*, meaning 'fall', where the single argument is the one that falls, and the transitive use of *katak*, meaning 'drop', where the object is the one that falls.

Those arguments which are referred to herein as objects refer to the same group of entities that can be treated as OBJ0s by antipassive verb stems. However, because there is an interpretational restriction that absolutive objects must get a specific reading, these should be treated as two distinct grammatical relations, if we are to adopt a notion of 'grammatical relations' to discuss the grammar of Inuktitut. There might also be reason to believe that Goal0s belong to a separate grammatical relation because they are restricted in meaning differently from the other three grammatical relations. This

analysis of the grammatical relations of Inuktitut is very much the same as that given by Grimshaw and Mester (1986), except that what I treat as an OBJ θ , they treat as an oblique object, and the grammatical relations referred to as by-Ps, they refer to as oblique subjects. It is ultimately quite difficult to argue about grammatical relations in Inuktitut. While there is a reasonably good argument that 'absolutive' is not a grammatical relation in Inuktitut, it is ultimately quite difficult to determine whether the language really has a subject grammatical relation. Inuktitut is neither evidence for nor evidence against a claim that the notion of subject is universal. Similarly, there isn't ultimately much evidence that OBJ θ , Goal θ , or by-P represent distinct grammatical relations, but, for investigative purposes, it was assumed that the grammar might treat them differently. However, I know of no evidence that the grammar really does treat them differently.

An HPSG analysis will not make use of any of these terms. Rather, an alternative possibility will be investigated which does not make use of grammatical functions such as subject and object. However, for many of the derivational processes to be addressed in this chapter, we will still need some way for the grammar to be able to refer to the arguments in question. To get rid of grammatical functions, we can make use of the ordered argument structure list that is assumed in HPSG, as well as the TRANS features [intransitive] and [transitive]. Those arguments referred to as subjects are the first argument in a verb stem's argument structure list. Those referred to as objects are the second element in a verb's argument structure list. Transitive verbs and intransitive verbs differ with respect to the case of the first element in their argument structure list. They also differ as to whether or not the second element in their argument structure list gets a specific interpretation. Those arguments referred to as OBJθs or Goalθs are simply

arguments that are specified to get secondary or dative case respectively under an HPSG analysis. The second element in an intransitive stem's argument structure list ends up being treated differently from the object of a transitive verb stem with respect to a wide range of derivational and inflectional processes because the grammar treats transitive and intransitive stems differently. It should be noted that the decision to place the subject of a transitive stem before the object rather than the other way around is also ultimately arbitrary, particularly since the grammar treats transitive and intransitive stems differently.

All of the examples in this section so far have involved verbal agreement morphology attached directly onto the verb stems. Participles are most often used in the place of declarative verb forms. The same judgements always apply for participial predicates and their declarative counterparts. The remaining examples in this section will make use of participles, but they could instead be placed in the declarative mood.

While the data from section 2.6 showed that there is a restriction that objects must get a specific reading, there is no restriction against OBJ θ s getting a specific reading. The speakers agree that a definite interpretation using the word 'the' is possible for nouns marked with secondary case. Furthermore, proper nouns and pronouns are often placed in secondary case in the antipassive, indicating that OBJ θ s can be definite.³⁴ Example (4.1.25) also illustrates that they can be both definite and endophoric, meaning that they can refer back to an entity which was introduced earlier in a text.

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³⁴ As reviewed in Johns (2006), the Western dialects may differ in this regard. It would not be too surprising if the western dialects differ with respect to other tests for definiteness discussed in this section.

(4.1.25) Quaqta -mi atausir -mik illu -lik
Quaqtaq -LOC.sg one -SEC.sg house -one.which.has
ammalu atausir mik tupi -lik.
and one -SEC.sg tent -one.which.has

'In Quaqtaq, there is one house and there is one tent'.

Jaani illu -mik sana -laur -tuq Jaani(ABS.sg) house -SEC.sg build -PAST -APT(ABS.sg)

'John built the house (possibly the only one in Quaqtaq).'

Both MG and JO have informed me that the most natural interpretation for this sequence of sentences, out of context, is that John built the one house that is in *Quaqtaq*. Thus, *illumik*, 'house', can be endophoric, since it can refer back to something introduced in the previous discourse. Since, *illumik* bears secondary case, it is an OBJ0.³⁵

For the purpose of this dissertation, it will be assumed that objects must get a specific reading, but that there is no interpretational restriction for subjects or OBJθs. It should be noted, though, that there is a tendency for objects to be endophoric and for OBJθs to be exophoric in texts. In other words, objects tend to refer to entities mentioned earlier in a text, whereas OBJθs tend to refer to entities which are newly introduced into the text. This is precisely what Kalmár (1979) found in his analysis of

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In the literature, there are two claims about the interpretation of nouns marked with secondary case in the antipassive that are incorrect, at least for this dialect. Van Geenhoven (2002) claims that they are existentially quantified, which incorrectly rules out pronouns and proper nouns as well as example (4.1.18). Johns (2001) has argued that nouns marked with secondary case can be interpreted as partitives. However, the example she gives makes use of the word *niqimik*, 'meat', which is a mass noun. The fact that it can mean 'some meat' does not mean that any secondary case marked noun can be interpreted as a partitive. Example (A) shows that count nouns cannot get a partitive interpretation in the antipassive, while example (B) shows the correct partitive construction that is used in Inuktitut.

⁽A) illu -mik sana -laur -tu -nga JO house-SEC.sg build -PAST-INDI -1sg 'I built a house.'

*'I built part of a/the house.'

⁽B) illu -up ila -nga -nik sana -laur -tu -nga JO house -REL.sg part -his/her/its.sg -SEC build -PAST -INDI -1sg 'I build part of the/a house.'

texts. He also notes that the noun bearing secondary case can be a proper noun. In English, a pronoun is often used when an entity has been frequently referred to in the preceding discourse, whereas a proper noun is generally used when an entity has not been referred to recently. The situation is quite similar in Inuktitut. In Inuktitut, when the antipassive is not used, the object will be understood pronominally in the absence of a noun bearing absolutive case to express the object. For instance, for third person undergoer agreement, the translation of the argument in question will be 'him', 'her', or, 'it', in the absence of a noun bearing absolutive case, rather than 'someone' or 'something'. Consistently, Berge (1997) and Kalmár (1979) have also noted a tendency the transitive construction to be used when the object is topical and endophoric, as opposed to the antipassive, which is generally not used in this context.

At this point, some of the possible explanations for the use of transitive and intransitive verbal inflection should be addressed. The discussion in the remainder of this section will be important to understanding the theoretical possibilities addressed throughout this chapter. It will be assumed that there are two sets of inflectional suffixes, one which assigns absolute case to the subject, as well as specifying person and number, the other which assigns relative case to the subject and absolutive case to the object, while at the same time specifying person and number of both the subject and the object, and giving a specific reading to the object. In other words, lexical rules which add inflectional morphology to a verb stem change the case specification that the arguments must have. However, within the HPSG framework, we could just as easily claim that verb stems can only come in two types, one which assigns absolutive case to a subject argument, and another which assigns relative case to the subject and absolutive case to

the object. This is not too different from the claims of chapter 2.6 that clausal words can only come in two types with their case assigning properties. There are three reasons for making this assumption. First, it makes the falsifiable prediction that there should be no idiosyncratic verb stems which make use of either transitive or intransitive verbal morphology but which give non-cannonical case-marking to either arguments for which there is inflection. The second reason has to do with noun incorporation, to be discussed in Chapter 7. We will see that, in bare noun incorporation, a verbalizing suffix attaches to a noun stem which cannot bear a possessive suffix, and that the word created cannot have a relative case-marked argument in its argument structure. The analysis of section 2.7 states that a noun stem with a possessor argument is [intransitive]. If inflectional morphology does not assign case, then our theory would state that those verbalizing processes that do not allow a possessor to be expressed necessarily attach to [atransitive] noun stems. Alternatively, if we claim that possessive suffixes do assign case, then we will need more empirical evidence to determine what the restrictions are with respect to whether a suffix can attach to [intransitive] or [atransitive] stems. For future investigative purposes on this and other dialects, a theory which might, in principle, allow any suffix to attach to either [intransitive] or [atransitive] noun stems seems preferable since it leads to more questions. If nominal inflectional morphology assigns case, then it only seems reasonable to give the same analysis for verbal morphology. The third reason is that it seems desireable to give a more unified analysis of case marking in Inuktitut. We will see, in sections 4.4 and 4.6, that when one encounters derivational suffixes like -naq and -titsi, one finds out that there is a dative (in the case of -naq) or a secondary (in the case of *-titsi*) case-marked argument in the word's argument structure, and that this

argument corresponds to one of the arguments onto which these suffixes are attached. Few would disagree that the lexical rules which add these suffixes alter the case specifications of one of the arguments of the verb stem onto which they are attached. By a similar token, when an inflectional suffix is added, that is also when the audience finds out what case the arguments in question will get. One cannot be certain before that, for if a transitive verb stem is passivized, its subject will get dative rather than relative case. There appears to be no language internal reason to claim that lexical rules that add derivational suffixes can give a case specification to an argument but those that add inflectional suffixes cannot. Theories which claim that the lexical rules associated with inflectional suffixes are different in what they can or cannot do generally make the assumption that inflectional suffixes can only come after and never before derivational suffixes in any languages. All such theories will need to be rejected or modified, because, as we will see in section 7.3, it is possible to reverbalize a noun after it has been given number and/or possessor inflection. There is simply no language internal motivation to claim that inflectional suffixes are different from derivational suffixes. They differ in that derivational suffixes will create noun stems or verb stems, and inflectional suffixes will create words. However, in the end, in the absence of counterevidence, there may be little reason to argue about whether or not case is assigned by inflectional morphology in this language. If verbs were lexically idiosyncratic with respect to what cases their subjects and objects got, then we would know for sure.

The question arises as to how we can ensure that intransitive verbal inflection is only placed on intransitive stems and transitive inflection is only placed on transitive stems. One possible explanation, which will end up being rejected, involves a somewhat

Chomskian approach to case theory. We can claim that a transitive stem has two arguments with a null, or illicit, case specification, and an intransitive stem has only one argument with a null case specification. We could use the feature [illicit] for this illicit or null case specification. If intransitive inflection were placed on a transitive stem, we would end up creating a verb with an argument whose case specification was never changed from [illicit] to another case specification such as [absolutive] or [relative]. Our analysis could be that Inuktitut grammar has a constraint against words which have arguments with an [illicit] specification. Along a similar vein, we can claim that transitive verbal inflection can only be added to stems which have two arguments with [illicit] case specifications.

There is an alternative approach that does not require us to posit that there is a constraint against words with arguments with an [illicit] case specification, nor does it require transitive verbal inflection to be sensitive to whether or not any of the verb stem's arguments have an [illicit] case specification. Indeed, we can get rid of [illicit] case specifications entirely. As assumed in section 2.6, we can claim that Inuktitut grammar recognizes two distinct types of verb stems, [transitive] and [intransitive]. This will be referred to as the TRANS, or 'transitivity' specification of the stem. There is one set of inflectional suffixes that will only attach to intransitive stems, and another set that will only attach to transitive verb stems. This TRANS feature is an arbitrary language specific syntactic feature that is used to organize the grammar of Inuktitut. It cannot be related directly to the number of arguments in a verb stem's argument structure list, since antipassive stems have the same number of arguments as their corresponding transitive stems. This theory will be quite important in the discussions of the various derivational

processes to be addressed in this chapter.

4.2 Verb Stems in Other Environments

This section will be an overview of the derivational suffixes in the language and the restrictions that they place on whether they attach to a transitive or an intransitive verb stem. Following this section will be a number of sections that go into much greater depth about the different classes of derivational suffixes. Some of the discussions in this section will be very important to understanding those later sections. There has been considerable controversy about ergative languages. One common view is that, since the object of a transitive verb gets the same case as the subject of an intransitive verb, the object of a transitive verb actually has the same grammatical status as the subject of nominative/accusative languages, because nominative/accusative languages always give the same case to the subject. No such analysis will be adopted in this dissertation. It would be Eurocentric to assume that either case or thematic role can be used as the sole basis for claiming that an entity is or is not the syntactic equivalent to the subject in English, since Inuktitut syntax hardly resembles that of English.

In this chapter, we will see that the derivational processes of Inuktitut are quite diverse. While some suffixes can only attach to intransitive stems, other suffixes can only attach to transitive stems. Other suffixes treat transitive stems differently from intransitive stems. To avoid confusion, a derivational process will be said to be 'accusative'-oriented if it treats the subject of a transitive verb the same as the subject of an intransitive verb. A phenomenon will be labeled 'ergative' if it treats the object of a transitive verb the same as the subject of an intransitive verb. In fact, as we will see shortly, both such patterns are observed.

Van Valin and LaPolla (1997) and Manning (1996) have given analyses which attempt to deal with the existence of both 'accusative' and 'ergative' phenomena in a single language. However, only Manning's theory will be addressed herein, because it is more compatible with the lexicalist assumptions of this dissertation. In his theory, what I am referring to as the 'subject' corresponds to the first element of a word's argument structure. A phenomenon which is 'accusative' affects the first element of a verb's argument structure regardless of whether the stem is transitive or antipassive. His theory also makes use of a PIV, which corresponds to specifiers in other languages. The PIV is equated either with the first element, or the subject, of an intransitive verb, or to the second element, or the object, of a transitive verb. Under his theory, an 'ergative' phenomenon makes reference to the PIV regardless of whether the PIV corresponds to the first or second element of a verb's argument structure. While both an example of an 'accusative' phenomenon and an example of an 'ergative' phenomenon will be presented shortly, the problem with adopting his approach to explain derivational phenomena in this language is that it treats these two types of derivational processes as more important than others, when the correct generalization about this language is that the derivational processes can treat [intransitive] and [transitive] stems differently in a variety of different ways. After presenting two phenomena which are either 'accusative' or 'ergative', another phenomenon will be presented which also treats transitive stems differently from intransitive stems but which do not fit either pattern. This will be followed by a brief introduction to nominalizing suffixes, which also follow a diversity of different patterns. There will then be a discussion for why Manning's theory is not adopted in this dissertation.

The first set of examples will involve the suffix -guma, 'want'. It will be addressed in more detail in section (4.3). In (4.2.1), the verb stem is an antipassive. As is always the case with antipassive stems, the OBJ θ gets placed in secondary case. The subject of the intransitive stem, kapii, 'stab/inject', is equated with the 'wanter'.

(4.2.1) aaniasiurti Piita -mik kapi -i -guma -juq JO nurse(ABS) Peter -SEC.sg inject -AP -want -APT(ABS.sg) 'The nurse wants to give Peter an injection.'

In (4.2.2), -guma, 'want', has been attached to the transitive stem 'kapi', which also means 'inject'. Again, the 'wanter' is equated with the subject of kapi, the argument which corresponds to the one who does the injection, and which would bear relative case if transitive morphology were placed directly onto kapi.

(4.2.2) Piita kapi -guma -ja -nga aanniasiurti -up JO Peter(ABS.sg) inject(TR) -want -PPT -his.sg nurse -REL.sg 'The nurse wants to give Peter an injection.'

Based on these examples, suffixation of *-guma*, 'want', appears to be an 'accusative' phenomenon, since the subject of a transitive verb stem is treated the same way as the subject of an intransitive verb stem. In section (4.3), more evidence will be presented to show that the semantic representation of the word created by suffixing *-guma* is sensitive to the argument structure of the verb stem onto which *-guma* is attached, following an accusative alignment pattern. In terms of Manning's theory, the one who wants something is always equated with the first element of the argument of the verb stem onto which *-guma* is attached.

The next two examples will involve argument modifiers which can only be attached to verb stems if the verbs are placed in the imperative/optative mood. Unlike the previous two examples, it follows an ergative pattern. The phenomenon will be

addressed in more depth in section (4.17). The two examples to be discussed also involve another derivational process. The suffixation of -qu, or the antipassive version -quji, 'ask/tell/want someone to do something', follows the pattern of the tit-causative construction, to be addressed in section (4.4). In order to understand the examples in (4.2.3) and (4.2.4), we need to know whether the stems aniqu, from example (4.2.3) and aniquji, from examples (4.2.3) and (4.2.4), are transitive and intransitive, and what the argument structures of these verb stems are. Aniqu, 'ask someone to leave', from example (4.2.3), should be treated as a transitive stem. If this stem were suffixed with verbal morphology which agrees with two third person arguments, the one who asks someone to do something would bear relative case, as do other subjects of transitive verbs in the language, and the one who leaves would bear absolutive case. In example (4.2.3), the argument modifier -apik is attached to aniqu and it modifies the object, the one who leaves.

The stem *aniquji*, from example (4.2.4), also means 'ask someone to leave'. However, it is an intransitive stem, since it can only be given intransitive verbal inflection. When it is given third person verbal inflection, the one who tells someone to do something bears absolutive case. The one who is told to do something is treated as an OBJ0, rather than as an OBJ, since it can only be given secondary case with this verb stem. We see that example (4.2.4) differs from example (4.2.3) in that the subject of an intransitive stem is modified by *-apik*, 'small', or 'dear', in (4.2.4), rather than the object of a transitive stem in (4.2.3). The suffix *-apik* follows an 'ergative' pattern since it treats

the subject of an intransitive verb stem the same way it treats the object of a transitive verb stem. More evidence will be given, in section (4.17), that this is the correct generalization.

In terms of Manning's theory, we could say that *-apik* modifies the PIV, whether it attaches to a transitive or an intransitive stem, since, with intransitive verbs, the PIV is equated to the argument that I have been calling the subject, and, with transitive verbs, the PIV is equated to the argument that I have been calling the object.

However, we will see shortly that there are other derivational processes that follow completely different patterns from the ones discussed in reference to examples (4.2.1) to (4.2.4). The correct generalization about Inuktitut grammar appears to be that it allows transitive and intransitive stems to be treated differently. The problem with applying Manning's theory to the derivational morphology of Inuktitut is that it is biased in that it assumes that 'accusative' and 'ergative' patterns are in some way more important or central to Inuktitut grammar than other derivational patterns that exist within the language. The underlying claim appears to be that it is a property of verb stems that they can be used as the input for either 'accusative' or 'ergative' derivational processes. However, a more in depth investigation of the derivational processes of Inuktitut will reveal that a more correct generalization is that the derivational suffixes can treat transitive and intransitive stems differently in seemingly idiosyncratic ways.

The next two examples will make use of the naq-causative construction, to be addressed in more depth in section (4.6). Examples (4.2.5) and (4.2.6) differ in that -naq,

is attached to the transitive stem irqaq, 'remember', in (4.2.6). The difference is that the agent of causation introduced by the suffixation of -naq is identified with the object when -naq is attached to a transitive stem, but it is not equated with any of the verb stem's arguments when it is attached to intransitive stems. The first two translations of (4.2.6), where -naq is attached to a transitive stem, are nearly identical in meaning. The first one shows most clearly that the agent of causation is equated with the object of the transitive stem irqaq, 'remember'. The two translations for (4.2.5) illustrate that only a different translation is possible, one which does not involve equating the agent of causation with any of arguments of the verb stem onto which -naq is attached. The third translation for example (4.2.6) is similar to that of example (4.2.5) in that the agent of causation introduced by -naq is not equated with any of the arguments of the stem onto which -naq is attached. However, in this third reading, the stem irqaq, 'remember', is reflexive, and reflexives behave like intransitive stems.

- (4.2.5) Jaani irqa -i -na -laur -tuq JO John(ABS.sg) remember-AP -NAQ -PAST -APT(ABS.sg) 'John made people remember something.'
 *'John was memorable.'
- (4.2.6) Jaani irqa -na -laur -tuq JO
 John(ABS.sg) remember(TR) -NAQ -PAST -APT(ABS.sg)

 'John caused people to remember him (John).'

 'John was memorable.'

 'John caused people to remember themselves.'

The suffixation of *-naq* treats transitive and intransitive stems differently, since it is sensitive to the presence or absence of an object argument. However, Manning's theory does little to explain why argument sharing only occurs with objects of transitive stems. The theory to be adopted herein will make use of multiple derivational rules which are sensitive to either [intransitive] or [transitive] verb stems. Another suffix which

Manning's theory does little to explain is *—guminaaq*, 'I wish I could'. Data in section 4.18 will be used to argue that, in the dialect of SM, the output to suffixing *—guminaaq* to a transitive verb stem is really a noun stem meaning 'one that I wish I could', but the output of suffixing *—guminaaq* to an intransitive stem is of the type [clausal word].

The next set of examples involves the agentive nominalizing suffix —*ji/ti*. This suffix appears to be semantically restricted such that it can only nominalize subject arguments which have an agentive role, since JO has been unable to produce any sentences where it nominalizes a passivized verb stem. When it is attached to intransitive stems, it is usually, but not always, used with the meaning 'do something as a profession' in modern Inuktitut. One such example is given in (4.2.7). The stem *ilinniatitsi*, 'teach', makes use of the *tit*-causative construction, which will not be addressed in detail until section (4.4). For the purposes of this introductory section, it is an intransitive stem. It can only be given intransitive verbal inflection which agrees with the one who teaches something. In (4.2.7), the subject of this intransitive stem is nominalized.

An example where -ji/ti is attached to a transitive stem is given in (4.2.8). In this example, -ji/ti is attached to the transitive stem nalligi, 'love'. Nalligiji is then followed by a possessive suffix which agrees with a first person singular argument. This first person argument is equated with the object of nalligi, 'love', the original verb stem onto which-ji/ti was attached.

However, there is an important difference between the noun stems *nalligiji* and *ilinniatitsiji* from the previous two examples. In particular, the noun stem *nalligiji* cannot be used as an independent word, as illustrated by the ungrammaticality of (4.2.9). Unfortunately, I have not had an opportunity to check whether or not this really can be used as a word meaning 'one who loves oneself as a profession'. If such an interpretation were possible, it would involve suffixing -ji/ti onto an intransitive stem because reflexivization is an intransitivizing process.

For the purposes of the current discussion, we can classify deverbal noun stems into two groups. Type A deverbal noun stems can be used as independent words, whereas type B deverbal noun stems cannot be. However, the use of a possessive suffix is not the only possibility for type B deverbal nouns. Another option is given in (4.2.10). In this example, -qar is attached onto nalligiji, the type B deverbal noun stem from examples (4.2.8) and (4.2.9). As is the case of possessive suffixes, when -qar is attached to ordinary noun stems from the lexicon, it indicates a possessive relationship. It is normally translated as 'have', and the subject of the verb stem which is created is the possessor. However, when -qar is attached to nalligiji, the subject of the verb stem which is created is equated with the object of nalligi, 'love', as in example (4.2.10), where -qar has been added onto nalligiji prior to suffixing verbal morphology for a first person argument, with the translation, 'someone loves me'.

At this point, it may be helpful to discuss how such examples can be treated theoretically before returning to a discussion of what deverbal nouns show us about the diversity of the derivational processes of Inuktitut. Understanding the discussion that follows will be very important to understanding the discussions of nominalizing suffixes that will start in section 4.10. The analysis will be that nouns bearing possessive suffixes are of the type [intransitive] whereas nouns without a possessive suffix are of the type [atransitive]. Most importantly for the analysis of this dissertation, possessive suffixes can only be added to noun stems of the type [intransitive], and inflectional processes which only show inflection for number - including the covert inflectional process which derives absolutive singular nouns from noun stems - may only take [atransitive] noun stems as their input. Thus, we can rule out example (4.2.9), where *nalligiji* is used as an independent word, by claiming that the noun stem *nalligiji* is [intransitive]. At this point, it is helpful to reiterate the analysis of nominal possession from Chapter 2. Noun stems in the lexicon are [atransitive]. There is an optional covert derivational process which converts [atransitive] nouns into [intransitive] nouns, while at the same time adding a possessive relation to a noun's semantic relations, and adding a semantic possessor to a noun's argument structure list. For convenience, this argument will be referred to as the subject. The deverbal noun stem *nalligiji* is also [intransitive], but its subject argument is not part of a possessive relation. Rather, it is identified with the object of the verb stem nalligi, 'love', from which the deverbal noun, nalligiji, was formed. In the analysis of this chapter, there will be four types of suffixes which can be attached to [intransitive] nouns. All of them appear to express a possessive relationship when they are attached to noun roots from the the lexicon. However, under the analysis of this dissertation, they do not have a possessive relationship as part of their meaning. Rather, they attach to [intransitive] noun stems with a subject argument. Possessive suffixes indicate the person and number of the subject argument, while assigning relative case. -Qar, from example (4.2.10), creates an intransitive verb stem which equates its subject with the subject of the noun stem onto which -qar is attached. In sections (4.10) to (4.12), we will see that there is another similar suffix, -gi, which differs from -qar, in that it creates transitive rather than intransitive stems. There is also the suffix -lik, which switches the nominal referent of an [intransitive] noun to be identified with the subject. This suffix will be addressed in sections (4.10) and (4.12) and (4.13).

Let us now return to the discussion of nominalizing suffixes as it relates to the diversity of transitivity alternations in Inuktitut. Examples (4.2.8) to (4.2.10) illustrated that –*ji/ti* always nominalizes the subject. It either attaches to [intransitive] verb stems to create [atransitive] nouns or it attaches to [transitive] verb stems to create [intransitive] noun stems with a subject argument which is equated with the object of the original verb stem onto which –*ji/ti* was attached. A number of other possible patterns are observed with other nominalizing suffixes in this language. For example, the active participle, as well as –*siti*, 'one that does/is X well', both to be discussed in section (4.11) can only ever attach to [intransitive] verb stems, in which case they nominalizes the subject. Another class of nominalizations, to be addressed in section (4.12), which will be referred to as *suuq*-type nominalizations, nominalize either the subject of an intransitive stem or the object (rather than the subject) of a transitive stem. In the dialect of SM, there is some variation amongst suffixes in this class. When the habitual nominalizing suffix –*suuq* attaches to [transitive] stems, the output is [intransitive]. However, with –*nirpaaq*.

'one that is most', the output can be either [intransitive] or [atransitive]. Unlike *suuq*-type nominalizations, the passive participle forming suffix and *–jarnaaq/garnaaq*, 'one that is usually Xed or pleasant to X', can only attach to [transitive] stems. They also nominalize objects, but the output can be either [intransitive] or [atransitive].

The correct generalization about derivational morphology in Inuktitut is that derivational suffixes can treat intransitive and transitive stems differently in a variety of different ways. For any given suffix or class of suffixes, one simply has to learn whether it can attach to transitive or intransitive stems or both as well as what the options are for mapping the input to the output in each case. Because so many patterns are observed, we may wish to claim that some suffixes are added using multiple derivational rules, some of which take [transitive] verb stems as their input, others which take [intransitive] stems as their input. While Manning's theory could be used to explain why verb stems can be used as the input for two different patterns, it would be far more reasonable to claim that the transitivity alternations observed are properties of the suffixes rather than a property of verb stems. This is also motivated by the fact that there appear to be two types of clausal words in Inuktitut, [transitive], and [intransitive]. As discussed in Chapter 2, neither argument of transitive clausal words is treated the same as the absolutive argument of an intransitive clausal word. An analysis which makes use of multiple derivational rules which can refer to the features [transitive] or [intransitive] will be adopted in this dissertation for the reasons given above.

Manning's theory actually can allow for multiple derivational rules for a single suffix which treats intransitive stems differently from transitive stems. For those that require a transitive stem for the input, there is a constraint that the input must have its

PIV equated with the second element in the verb's argument structure. The result is that his theory makes no predictions that a theory which makes use of TRANS features does not make. Indeed, there is really no way to deduce that anything like Manning's PIV exists in the mental representation of speakers of Inuktitut. Because there is reason to believe that the derivational processes can specify whether their input is a transitive or an intransitive stem, and that a single suffix can make use of multiple derivational rules for any given transitivity alternation, it is possible to capture the alternation using two or more different derivational rules that refer to whether the input is [intransitive] or [transitive]. Because an analysis which makes use of multiple derivational rules is possible, we have no reason to argue for anything like a PIV as a way to capture a transitivity alternation. Furthermore, the notion of PIV does not make any testable predictions in a language which otherwise allows [intransitive] and [transitive] verb stems to be treated differently. It would also be pointless to suggest that the notion of PIV helps in language acquisition. For any given suffix or class of suffixes, one simply has to learn whether it can attach to [intransitive] stems or [transitive] stems, and how the input maps to the output. This is equivalent to learning multiple derivational rules. In summary, in a language that allows [intransitive] and [transitive] stems to be treated differently, it is neither helpful nor motivated to argue for a PIV to get a transitivity alternation, because an analysis which makes use of multiple derivational rules is always possible. This chapter will provide a lot of evidence that the derivational rules can indeed be sensitive to whether the input is an [intransitive] or a [transitive] verb stem.

The theory of this dissertation also has a number of advantages over that of Manning. We can use type theory to account for why [transitive] verbs have an argument

that must get a specific reading, but intransitive verbs do not. Furthermore, TRANS features will be very helpful to explaining the restrictions on [intransitive] nouns.

Understanding the arguments made in this section will be very important to understanding some parts of this chapter, since later subsections will refer back to these arguments.

If we are to adopt the theory of LFG, which treats subjects and objects as grammatical primitives, the TRANS feature can be related to what grammatical relations a stem has. A [transitive] verb stem has a SUBJ and an OBJ, whereas an intransitive verb only has a SUBJ. Similarly, [intransitive] and [atransitive] noun stems differ in the presence or absence of a SUBJ. Adopting TRANS features into the LFG framework is helpful in explaining the restrictions on argument modifying suffixes in the imperative/optative mood. Recall that these suffixes modify either the SUBJ of an intransitive verb stem or the OBJ of a transitive verb stem. TRANS features are helpful in preventing these suffixes from modifying the SUBJ of a transitive stem, by allowing us to claim that only an [intransitive] stem can be used as the input when these suffixes are used as subject modifiers. All of the phenomena in this chapter related to transitivity restrictions are easily captured with TRANS features. In some cases, alternative possible explanations will be given for some of the transitivity alternations addressed in this chapter, mainly to show that the construction cannot really be used as an argument for TRANS features. However, once we adopt TRANS features as an explanation for the pattern observed with argument modifiers in the imperative/optative mood, most of these alternative possible explanations will be null and void.

For TRANS features to be adopted into HPSG, we most likely need to claim that

the features represent an arbitrary language specific way of organizing the language's grammar, since, as discussed in section 4.1, transitivity cannot be related to the number of elements in a stem's argument structure list, since antipassive stems have the same number of arguments as their corresponding transitive stem. Much the same assumption has been made for Hindi by Poornima and Koenig (2009). The underlying claim is that the antipassive alternation would not even be possible in this language without a TRANS feature. Furthermore, the presence of a TRANS feature allows for a wide variety of different transitivity alternations with respect to the derivational suffixes. This may be another remarkable feature of the grammar of Inuktitut. It is also unbiased, since it does not, in principle, claim that some patterns of transitity alternation are more important to capture formally or more basic to the grammar of Inuktitut than others. Furthermore, the theory will also allow for an easy explanation for the restrictions on [intransitive] deverbal nouns, which is another set of restrictions that is quite unusual crosslinguistically. Finally, as we saw in Chapter 2, the type theory of HPSG can be used to explain both the cases assigned to the arguments of transitive and intransitive verbs, as well as the requirement that objects of transitive verbs must be specific, but that there is no such requirement for subjects of either transitive or intransitive verb stems. This is also presumably quite unusual cross-linguistically, though similar findings may be expected in other languages with an antipassive alternation.

In HPSG, argument structure lists are ordered. After adopting an analysis which makes use of TRANS features, there will actually be little evidence that argument structure lists are ordered in Inuktitut. It will be arbitrarily assumed that those arguments referred to as subjects are the first element in a verb's argument structure list, and

arguments referred to as objects are the second element in a verb's argument structure. A result of this assumption will be that a single derivational rule will be possible for 'accusative' alternations but not for 'ergative' patterns. This is is merely the result of a somewhat arbitrary decision. It is not an attempt to be biased towards claiming that it is more important to try to capture some derivational processes with a single derivational rule than others.

Another possible analysis within HPSG will be considered in this section which does not make use of TRANS features. The theory is that intransitive verb stems have one argument with a null or [illicit] case specification. This must be the first element in a verb stem's argument structure. Transitive verbs have two arguments with null or [illicit] case specifications. The argument structures for intransitive and transitive verb stems are given in (4.2.11a) and (4.2.11b), where 'list(x)' stands for the remaining arguments of the verb stems, none of which have the case specification [illicit].

The element corresponding to the subject is in the first position of the verb stem's argument structure, and the element corresponding to the object is in the second position of the verb stem's argument structure. Arguments with null or [illicit] case specifications need to be assigned another case specification by morphological suffixation, since there is a constraint that words with arguments with a null or [illicit] case specification are deemed ungrammatical. While this theory will be able to explain some of the restrictions in this chapter, it will ultimately need to be rejected. Indeed, we have already discussed

two phenomena which the theory fails to capture. It is unable to prevent argument modifying suffixes from modifying the subject of a transitive stem, since they can modify the subject of an intransitive stem (whether or not the intransitive stem has any additional arguments), and that argument would be in the first person of the verb stem's argument structure list. This is a product of the arbitrary decision to place subjects as the first element in a word's argument structure list. However, we would run onto the same problem with 'accusative' alternations if we put objects before subjects on the argument structure list. The theory will also run into problems with deverbal nouns. For instance, it has no way to account for why the equivalent of example (4.2.8), repeated below, is not possible with the active participle forming suffix or with –siti, 'one that is/does X well'.

Let us first address how the theory would account for example (4.2.8). The verb stem nalligi, 'love', has two arguments with an [illicit] case specification, the first one corresponding with the subject, the second one corresponding to the object. Suffixation of -ji identifies the nominal referent of the output with the first element of the input's argument structure. The first element of the input's argument structure gets deleted so that the second argument of the input, the one who is loved, becomes the only argument in the output's argument structure. Finally, addition of the possessive suffix assigns case to the remaining argument corresponding to the one who is loved. This theory has no way to prevent the same derivation from occurring either with the active participle forming suffix, -juq/tuq, or with -siti, 'one that is/does X well', which can only ever nominalize the subject of an [intransitive] stem.

The derivational rules of HPSG, as presented in Sag, Wasow, and Bender (2003), are very powerful, since they allow any input to be mapped to any output. Because of this, we only need to know the shape of the input and the shape of the output. I will be giving a simplified annotation to help discuss the shapes of the inputs and outputs. For many linguists, the powerfulness of lexicalist approaches makes them uninteresting because they make few predictions, and they don't open the door for much theoretical debate in most languages. However, we will see that the derivational processes are quite diverse in terms of their uses and restrictions. While it would be quite impressive if someone could come up with a non-lexicalist analysis that is able to account for all of the derivational processes in this chapter as well as those discussed in Chapter 7, it does not seem unreasonable to adopt a theory which is as powerful as the derivational rules of HPSG. Inuktitut is a typologically interesting language in that the derivational processes are so diverse that it asks the question of whether any non-lexicalist theory is powerful enough to account for the range of restrictions which are observed, though this is ultimately a question of personal judgement.

Section 4.3 will address suffixes such a -guma, 'want'. These suffixes, briefly presented earlier in this section, do not change a word's argument structure. They add a semantic argument which is equated with the subject of the original verb stem onto which the suffix is attached. In the *tit*-causative construction, addressed in section 4.4, a subject is added to a word's argument structure. These suffixes can only ever attach to intransitive stems. The original subject of the intransitive stem onto which the causative suffix is attached is either treated as the OBJ of a transitive stem or an OBJ θ . Section 4.5 will address the applicative suffix -gutji. It adds either an OBJ or an OBJ θ to the verb's

argument structure. It can only attach to intransitive stems, even when it introduces an OBJ θ to the verb's argument structure. Section 4.6 will address the *naq*-causative construction. It is one of the more interesting transitivity alternations in this language, and it has been briefly introduced earlier in this section. The suffix *-naq* demotes the subject of either a transitive or intransitive stem so that it can optionally be expressed in dative case. The agent of causation introduced by *-naq* is equated with the object if *-naq* is attached to a transitive stem. It is never equated with an OBJ θ or a Goal θ .

Section 4.7 will address the suffix -tsau, 'can or should be X'ed'. This suffix behaves much like a passive construction, and it can only attach to transitive stems. The output is an intransitive stem which equates its subject with the object of the stem onto which -tsau is attached. The original subject of the stem onto which -tsau is attached is demoted so that it can optionally be expressed in dative case. Section 4.8 will address -giakit, 'can X with ease'. It can be used as a suffix which attaches to either transitive or intransitive stems without affecting argument structure. It can also be used in nearly the same way as -tsau. However, this use of -giakit differs from -tsau in that it is not possible express the original subject of the stem onto which -giakit is attached in dative case. The original subject argument is deleted rather than demoted. There is also a surprising example in this section where it appears that a non-argument is made into a subject. Section 4.9 will address the reciprocal suffix, which can only attach to transitive stems, in which case, it creates a reciprocal relationship between the original subject and object. The output is an intransitive stem.

Section 4.10 to 4.13 will address participles as well as derivational suffixes which can attach to [intransitive] noun stems, as well as the suffix -u, 'be', which can only

attach to [atransitive] noun stems. -vik type nominalizations, to be addressed in section (4.10), nominalize something that is neither the subject or the object, or even a part of the verb stem's argument structure. For example, -vik itself nominalizes the place or time that something occurred. These suffixes can only attach to intransitive stems. The output can either be [intransitive] with a subject argument which is equated with the original subject argument of the verb stem, or [atransitive], in which case the original subject of the verb stem is treated as a by-P. Section 4.11 will address active and passive participles. Active participles can only nominalize the subject of an intransitive stem, while passive participles can only nominalize the object of a transitive stem. Passive participles can either be [intransitive] or [atransitive]. When they are [atransitive], the original subject of the verb stem is demoted so that it can optionally be expressed in dative case. When they are [intransitive], the subject is equated with the original subject of the verb stem. Section 4.12 will address *suuq*-type nominalizations. They can nominalize either the subject of an intransitive verb stem or the object of a transitive verb stem. In the latter case, the output is usually an [intransitive] deverbal noun with a subject that is equated with the original subject of the verb stem. However, in the dialect of SM, -nirpaaq, 'one that is/does X the most', can create either [atransitive] or [intransitive] noun stems when it attaches to [transitive] verb stems. Section 4.13 will address the agentive nominalizing suffix, -ji/ti. It nominalizes the subject of either a [transitive] or an [intransitive] stem. When it attaches to [transitive] stems, the output is an [intransitive] noun stem, which equates its subject with the original object of the verb stem.

Section 4.14 will address gerunds. Gerunds can only be formed from intransitive

stems. They either delete the subject from a word's argument structure, in which case it cannot be expressed with a separate word bearing dative case, or they can express the subject with a possessive suffix. When the possessive suffix is used, the subject can be expressed as a separate word sometimes in absolutive case, sometimes in relative case, and sometimes in the same case that is given to the gerund. Section 4.15 will address *nikumuuq* constructions. These are reverbalized noun stems with dative case marking, meaning 'because of'. They can be reverbalized to create either transitive or intransitive stems. The arguments of the resulting verb stem are identical to those of the verb stem that was initially nominalized.

Section 4.16 will address the suffixes —*liaq*, and —*taaq*, which attach to noun stems, with the meanings 'one that is received', or 'one that is built', respectively.

Because they are attached to noun stems, they should arguably be part of Chapter 7.

However, they are addressed in Chapter 4 because of their similarities to participles. The stems created by suffixing —*liaq* and —*taaq* can either be [intransitive] or [atransitive].

When the output is [intransitive], the output has a SUBJ corresponding to 'the one who builds something', or 'the one who receives something'. When the output is [atransitive], the corresponding argument is treated as a *by*-P, optionally being expressed in dative case.

Section 4.17 will address the use of argument modifiers in the imperative/optative mood. Either the subject of an [intransitive] verb stem or the object of a [transitive] verb is modified. Section 4.18 will address the suffix —guminaaq, 'I wish I could'. In the dialect of MG, it either attaches to [intransitive] verb stems to create [intransitive] verbs with a first person singular subject, or it attaches to [transitive] verb stems to create

[transitive] verbs with a first person singular subject and a third person object. In the dialect of SM, it either attaches to [intransitive] verb stems to create [intransitive] verbs with a first person singular subject, or it attaches to [transitive] verb stems to create deverbal noun stems with the meaning 'one that I wish I could'. Section 4.19 will address the suffix -tigi, 'be/do as much as'. It adds a simulative case marked argument which is either compared with the subject of an intransitive stem or the object of a transitive stem onto which -tigi is attached.

4.3 -Guma, 'want', and related suffixes

There are many suffixes in Inuktitut which attach to a verb stem to create another verb stem without changing the transitivity. These include the tense, aspect, and adverbial suffixes, as well as a class which will be referred to as guma-type control suffixes. This class of affixes includes -guma, 'want', -giursaq, 'learn', -gasuk, -gasuaq, both of which mean 'try', and *-jartuq*, 'go for the purpose of X'. One has to look at the meaning of the outputs of adding these suffixes to see why these suffixes follow an accusative pattern of transitivity alternation. Examples (4.3.1) to (4.3.3) will involve guma, 'want'. When -guma attaches to an intransitive stem, the single semantic argument introduced by -guma, 'want', is equated with the subject of the intransitive verb stem. In examples (4.3.1), (4.3.2), and (4.3.3), -guma is attached respectively to a semantically intransitive, antipassive, and passive verb stem. In all of these cases, the single semantic argument of 'want' is equated with the single argument of the intransitive stem onto which -guma has been attached. -Guma is then followed by the active participle forming suffix, -juq. This is the participial equivalent to declarative morphology which only agrees with one argument, in this case, third person singular. In

all of these examples, the single argument of 'want', which is equated with the single argument of the verb stem, gets absolutive case. In (4.3.1), the intransitive verb stem is *ani*, 'leave'.

In (4.3.2), the verb stem is an antipassive. As is always the case with antipassive stems, the OBJ θ gets placed in secondary case. The remaining argument of *kapii*, 'stab/inject', is equated with the single argument of *-guma*, 'want', and it is placed in absolutive case.

(4.3.2) aaniasiurti Piita -mik kapi -i -guma -juq JO nurse(ABS) Peter -SEC.sg inject -AP -want -APT(ABS.sg) 'The nurse wants to give Peter an injection.'

In (4.3.3), -guma, 'want', has been attached to the passivized stem, kapijau, 'be given an injection'. As in English, the single argument of -guma is identified with the one who gets the injection.

'Peter wants to be injected by the nurse.'

In passivization, a passive participle is formed with the nominalizing suffix -jaq. This is then reverbalized with u, 'be'. The original subject of the verb stem is usually omitted, but it can be expressed in dative case, as in (4.3.3). This example shows that, as in English, the original object is treated as a subject in the passive construction, at least with respect to guma-type control suffixes.

In (4.3.4), -guma has been attached to a transitive/reflexive stem. Again, the single argument of 'want' is equated with the argument which corresponds to the subject in the English translation.

(4.3.4) Piita kapi -guma -ja -nga aanniasiurti -up JO Peter(ABS.sg) inject(TR) -want -PPT -his.sg nurse -REL.sg 'The nurse wants to give Peter an injection.'

When -guma is attached to transitive/reflexive stems, it creates transitive/reflexive stems. In this example, the noun corresponding to the semantic subjects of -guma, 'want', and kapi, 'inject', gets relative case, and the object of kapi gets absolutive case. These are exactly the same cases that we would get if kapi were followed directly by -janga.

Example (4.3.5) makes use of the same stem *kapiguma*, 'want to inject'. However, in this example, it is followed by the active participle forming suffix, which can only attach to intransitive stems. As is the case with other transitive/reflexive stems in the language, a reflexive reading is required.

(4.3.5) kapi -guma -juq JO inject-want -APT(ABS.sg)
'He/she wants to give himself/herself an injection.'
*'He/she wants to give someone else an injection.'

In terms of HPSG, -guma adds a semantic restriction, the one who wants something, to the verb's semantics. If we claim that the argument corresponding to the subject in the English translation is the first element in a word's argument structure, then the one who wants something is equated with the index of the first argument in the verb's argument structure. Suffixation of –guma does nothing to change the argument structure of the verb stem. It only changes the semantic relations associated with the arguments of the verb stems.

If we adopt a theory where transitivity is treated as a feature of verb stems, then any derivational process which does not alter a word's argument structure maps the TRANS specification of the stem in the input to the TRANS feature of the output.

Another syntactic phenomenon which can be handled very well by mapping syntactic features of the input onto the output will be presented in section 4.17.

4.4 *Tit*-causatives

This class of affixes only attaches to intransitive stems. However, depending on one's theoretical assumptions, it is not necessarily the strongest evidence in this chapter that something like a TRANS feature is required to allow the derivational processes to treat transitive stems and intransitive stems differently. This class of suffixes includes -tit(si), 'cause', -juri(tsi), 'believe', -qu(ji), 'want someone to do something, ask someone to do something, or tell someone to do something', and -nirag/nirai, 'declare/claim'. For each of the aforementioned affixes, there is both a version which creates non-reflexive intransitive stems and a version which creates transitive/reflexive stems in the dialects of JO and MG. For example, if *-niraq*, 'declare/claim', is attached to an intransitive stem, it creates a transitive/reflexive stem. If -nirai is used in the place of -nirag, it creates a nonreflexive intransitive stem. The alternation between stems ending with *-niraq* and stems ending with -nirai is essentially an antipassive alternation. The examples in this section will make use of *-nirag/nirai*, but the same generalizations apply to other suffixes in this class. In all three of these examples, -nirag or -nirai has been attached to katak, which can mean either 'drop' or 'fall'. In all three of these examples, katak can only mean 'fall', indicating that -niraq and -nirai, 'claim/declare', can only attach to intransitive stems. In (4.4.1), *katak* has been suffixed with *-nira-i*. The morpheme *-i* has been

glossed 'AP' for antipassive, since this is essentially an antipassive stem.

(4.4.1) Suusi katan -nira -i -juq (ujarar -mik) JO Suusi(ABS.sg) fall(ITR) -declare -AP -APT(ABS.sg) (rock -SEC.sg) 'Sue claimed that something (the rock) fell.'

*'Sue claimed that someone dropped something.'

This cannot be interpreted as a reflexive, and it has an argument which can only be placed in secondary case. The argument which must get secondary case is equated with the single argument of *katak*, 'fall'. *Katannirai*, 'claim that something has fallen', has been suffixed with the active participle forming suffix -*juq*, which is the participial equivalent of a declarative verb form which only inflects for one argument. The one who claimed that something fell, in this case *Suusi*, is placed in absolutive case. This is the same pattern which is observed with other intransitive stems.

The suffix *-nirai* can only be used to create intransitive stems, as illustrated by the ungrammaticality of (4.4.2). This example is particularly interesting because it shows that the object of the transitive stem *katak* cannot be made into an object of the stem *katannirai*.

(4.4.2) *katan -nira -i -ja -nga MG fall/drop-declare -AP-PPT -his/her.sg
*'he/she claims that he/she fell.'
*'He/she claims that someone dropped it.'

Examples (4.4.3) and (4.4.4) will be used to show that, when *-niraq* is used instead of *-nirai*, a transitive/reflexive stem is created. These examples use either the verb stem *ijukkaniraq*, 'declare that someone/oneself fell', or the stem *katanniraq*, 'declare that something fell'. The two verb roots *ijukka* and *katak* differ in that the entity which fell is animate with *ijukka*, but it has to be inanimate with *katak*. In (4.4.3), an active participle is formed from *ijukkaniraq*. In this example, *ijukka* is used instead of

katak because the subject of katak can only be inanimate. In this case, a reflexive reading is required, as is the case when other transitive reflexive stems are made into active participles. The subject of -niraq, 'declare', is equated with the single argument of ijukka, 'fall'.

(4.4.3) ijukka -niraq -tuq SM fall -declare -APT 'he/she claimed to have fallen down'

In (3.4.4), *katanniraq* has been suffixed by a passive participle forming suffix, followed by possessive morphology.

(4.4.4) ujaraq katan -nirar -ta -nga Suusi -up JO rock(ABS.sg) fall(ITR) -declare -PPT -his/her.sg(ABS) Suusi -REL.sg 'Sue claimed that the rock had fallen.'

The suffixes —ta-nga can only be added to transitive/reflexive stems without a reflexive reading. When these suffixes are placed on other transitive/reflexive stems, the subject gets relative case and the object gets absolutive case. Example (4.4.4) illustrates that, with stems formed by suffixing -niraq, 'declare', the subject of —niraq has a similar status to the subject of a simple transitive stem in that it gets relative case. It also shows that the single argument of the intransitive stem onto which -niraq is attached, in this case katak, 'fall', has a similar status to the object of transitive/reflexive stems.

Examples (4.4.1) to (4.4.4) have all involved suffixation of *-niraq* or *-nirai*, 'declare', onto the stem *katak*. The fact that *katak* can mean 'fall' but not 'drop' in these environments indicates that only an intransitive stem is permitted, since *katak* means 'fall' when it is used in environments which only allow intransitive stems, and 'drop something' when it is used in environments which only allow transitive stems. The remaining examples will show that other types of intransitive stems can be suffixed with

-niraq. In all cases the subject of the stem onto which -niraq is attached behaves like an object. And, in all cases, the subject of the verb stem onto which -nirai is attached gets secondary case. Example (4.4.5) makes use of the antipassive stem for 'drop', katai. The meaning 'X claimed that Y dropped something' does appear to be possible as long as the syntactic restriction that -niraq can only be attached to an intransitive stem is met.

(4.4.5) Jaani kata -i -nirar -ta -nga Suusi -up JO John(ABS) drop -AP -declare -PPT -his/her.sg(ABS) Suusi -REL.sg 'Sue claimed that John dropped something.'

Examples (4.4.6), (4.4.7), and (4.4.8) illustrate that *-niraq/nirai* cannot be attached to a transitive/reflexive stem without a reflexive reading. *-Niraq*, in (4.4.6), or *-nirai*, as in (4.4.7), has been attached to the transitive/reflexive stem, *kapi*, and a reflexive reading is required.

- (4.4.6) kapi -nira -laur -ta -nga JO inject(TR) -declare(TR) -PAST -PPT -his/her.sg(ABS) 'he/she declared that he/she(someone else) gave himself/herself (not someone else) an injection.'
- (4.4.7) kapi -nira -i -laur -tuq JO inject(TR) -declare -AP-PAST -APT(ABS.sg) 'He/she thinks that someone gave himself/herself (not someone else) an injection.'

Example (4.4.8) illustrates the same phenomenon with another transitive/reflexive stem, *nalligi*, 'love'. In this example, both the stem, *nalligi*, 'love', and the suffix -*niraq*, 'claim', get a reflexive reading, since -*niraq* creates transitive/reflexive stems, and active participles can only be formed from intransitive stems.

(4.4.8) immi -nik nalli -gi -nirar -tuq JO self -SEC love -TR -declare -APT(ABS.sg) 'He/she claims to love himself/herself'.

Examples (4.4.9) and (4.4.10) illustrate that the derived subject of a passivized

verb stem is treated much the same way as the subject of other intransitive stems, when -niraq or -nirai are suffixed.

(4.4.9) tuttu -mik qukir -ta -u -nira -i -juq JO caribou-SEC.sg shoot(TR)-PPT -be -declare -AP -APT(ABS.sg)

Jaani -mut John -DAT.sg

'He/she claimed that a caribou was shot by John.'

(4.4.10) tuttuk qukir -ta -u -nirar -ta -nga JO caribou(ABS.sg) shoot(TR)-PPT -be -declare(TR)-PPT-his/her.sg(ABS)

Jaani -mut John -DAT.sg

'He/she claimed that the caribou was shot by John.'

In (4.4.9), when *-nirai* is added to *qukirtau*, 'be shot', the noun expressing the subject of *qukirtau* gets secondary case. In (4.4.10), where *-niraq* is suffixed onto *qukirtau*, and it is then given suffixes which normally place an object in absolutive case, the noun expressing the subject of 'be shot' gets absolutive case.

The morphosyntactic behaviour of *-niraq* can be understood as in (4.4.11). The input has a subject as well any other number of arguments, annotated as list(x). The output has a subject, the one who declares something, and an object which bears the same index as the subject of the input, meaning that it relates to the verb stem's semantic restrictions in the same way as the subject in the input.

- (4.4.11) a) INPUT \leq SUBJ(i), list(x) \geq
 - b) OUTPUT<SUBJ, OBJ(i), list(x)>

For the antipassive version of 'claim', -nirai, just replace OBJ with OBJ θ . (4.4.12) is the equivalent of (4.4.11) for -nirai.

(4.4.12) a) INPUT \leq SUBJ(i), list(x) \geq

b) OUTPUT \leq SUBJ, OBJ θ (i), list(x) \geq

In HPSG, another approach would most likely be preferred. Both -nirag and -nirai add a single argument onto the verb stem's argument structure. If we adopt an approach where subjects precede objects, it counts as the subject because it ends up being the first element in the word's argument structure. When *-niraq* is used, the original subject of the verb stem onto which -niraq is attached becomes the object of the verb stem which is created, because it is now in second position in the argument of the verb stem which has been created. -Nirai differs from -nirag in that it gives secondary case specification to the argument which was originally the first argument in the argument structure of the stem onto which -nirai was attached. Notations such as those given in (4.4.11) and (4.4.12) will be given throughout this chapter. They are intended to be helpful for those who wish to translate the analyses into other frameworks which might either have grammatical functions such as subject or object but which might not have ordered argument structure lists, or which might have ordered argument structure lists but which might lack grammatical functions such as subject and object. No claim is made that it is either necessary or desireable for a theory to have both a set of grammatical relations such as subject and object as well as ordered argument structure lists.

We still need a constraint to rule out example (4.4.2), repeated below, where -nirai is attached to a transitive stem to create a transitive stem. If this example were grammatical, it would involve suffixing nirai onto a transitive stem. -Nirai would turn katak's subject argument, the one who drops something, into an OBJ θ . However, the object, the one that falls, remains an OBJ. -Nirai also adds a SUBJ, the one who makes a

claim. *Katannirai* would then be a transitive stem with a SUBJ and an OBJ, and it would be possible to add the suffixes *–janga*, which only attach to transitive stems.

This is not a problem for the theory of this dissertation, because the theory makes use of TRANS features, and we can easily say that the derivational processes can only take intransitive stems as the input.³⁶ However, the next two paragraphs will illustrate that there could, in principle, be another way to explain the restriction either in a theory which treats subjects and objects as grammatical primitives, or in a theory of HPSG that makes use of [illicit] case specifications to rule out ungrammatical words.

Let us first consider the possibilities in a theory which treats subjects and objects as grammatical primitives. Using the rule which derives (4.4.12b) from (4.4.12a), the resulting argument structure should be $\langle SUBJ, OBJ \rangle$, if *-nirai* attached to a transitive stem. If we adopt from HPSG the notion that argument structures must be ordered, then we can claim that this is ruled out because an OBJ must be the second element in a word's argument structure list.

In HPSG theory which makes use of [illicit] case specifications to rule out ungrammatical words, (4.4.2) presents little difficulty. If *-nirai* were attached to a transitive stem, the declarer would end up as the first element in the resulting argument

attached.

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³⁶ Quite a different pattern is observed in General Central Yup'ik and West Greenlandic (Jacobson 1995, Bittner 1997). These suffixes can attach to either transitive or intransitive stem. When they attach to a transitive stem, the subject of the verb stem which they attach to gets dative case. West Greenlandic also has a passive construction. Demoted subjects get ablative rather than dative case. The object or the OBJθ of the verb stem that is created is equated with either the object of a transitive verb stem onto which the causative suffix is attached, or the subject of an intransitive verb stem onto which the causative suffix is

structure, the second element would be assigned secondary case, and the third would still have an [illicit] case specification. If our theory is that transitive morphology can only attach to a verb stem if the second element has an [illicit] case specification, then transitive morphology could not attach to such a verb stem. If we claim that words with caseless arguments are illicit in Inuktitut, then we correctly derive the generalization that these suffixes can only attach to intransitive stems. We could argue that this language has no way to assign case to the third element in a verb stem's argument structure list.

There is one suffix which arguably belongs in the same category as *tit*-causatives in this language, but for which there is no antipassive equivalent. It is *-gi*, 'find something to be X'. It should be noted that in the related dialect of West Greenlandic, there is an antipassive version for *-gi*. It is *-ginnig* (Michael Fortescue, personal communication). It appears to be fully productive, and it attaches to stems with an adjectival meaning.

- (4.4.13) suka -gi -ja -ra MG be.fast -GI -PPT -my.sg(ABS) 'I find it to be fast.'
- (4.4.14) mama -ri -ja -ra MG be.yummy -GI -PPT -my.sg(ABS) 'I find it to be tasty.'

This suffix shows that there is an advantage to not adopting the following rule for the antipassive alternation: $OBJ \rightarrow OBJ\theta$, where the phonological form of the antipassive suffix varies depending on some feature associated with the stem to which it is attached. Such a rule might predict that any transitive/reflexive stem can be antipassivized, with the default realization of the antipassive morpheme being a null suffix. The analysis stated above would not explain why there is no antipassive version for stems suffixed with -gi,

'find something to be X'. The same can be said for the suffix –*juri*, 'think that', in the dialect of SM. In that dialect, there is no antipassive version for this suffix, though there is one, *-juritsi*, in the dialects of MG and JO.³⁷ The corresponding suffix in West Greenlandic is *-suri/sugi*, and the dialect also has an atipassive version *-surinnig/suginnig* (Michael Fortescue, personal communication). Similarly, it would fail to explain why there is no antipassive verb stem for *itiq*, 'enter', which places the area entered in secondary case. The data for this verb stem were presented in section (3.4).

In Chapter 5, we will see that verb stems with an adjectival meaning can be split into two or more classes based on what derivational suffixes they can take. While *mamaq*, 'be tasty', from example (4.4.14), behaves like ordinary verb stems, *sukak*, 'fast', from example (4.4.13), does not. -*Gi* can freely attach to any stem with an adjectival meaning, regardless of what class it belongs to.

The final two examples will make use of the verb stem *illuqar*, which can mean either 'there is/are (a) house(s)' or 'have (a) house(s)'. It can be used in the *tit*-causative construction with either meaning. The morpheme –*qar* is glossed as 'have' in both examples (4.4.15) and (4.4.16) even though it does not always mean that. In both of these examples, the stem *illuqar* can mean either 'there is/are (a) house(s)', or 'he/she has the house(s)'.

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³⁷ It also cannot be used reflexively in the dialect of SM, though it can in the dialect of JO. For SM, A is grammatical but B is ungrammatical. This seems to suggest that whether or not the reflexive rule can be applied to a stem is ultimately lexically determined.

A) *(uvan -nik) aangajaa -luar -turi -ju -nga SM me -SEC be.drunk -too.much -think -INDI -1sg *'I think that I am too drunk.'

B) aangajaa -luar -turi -ja -ra SM be.drunk -too.much -think -PPT -my.sg 'I think that he/she is too drunk.'

- (4.4.15) illu -qar -turi -ja -ra SM house-have -think(TR) -PPT -my.sg 'I think that he/she has a house.'

 'I think that there is a house.'
- (4.4.16) illu -qa -qu -ji -ju -nga SM house -have -want-AP -INDI -1sg 'I want there to be a house.'

 'I want him/her to have a house'.

In terms of the theory of this dissertation, when *illuqaq* means 'there is/are (a) house(s)', it has a subject argument that is in no way linked to the semantic relations of the verb stem. This dissertation also claims that the output of suffixing -turi, 'think that', creates a stem with an object that is equated with the subject of the input. In other words, the object in (4.4.15) refers to nothing, when the second translation is intended. Similarly, suffixation of -quji, the antipassive version of -qu, 'want or tell someone to do something', creates a stem with an OBJ θ which is equated with the subject of the input. There is an OBJ θ which refers to nothing in (4.14.16) when the first translation is intended. These data show that there is no reason to think that the grammatical relations referred to with the notations OBJ and OBJ θ are restricted to specific thematic roles in Inuktitut, because the arguments in question take on no thematic role in these sentences.

4.5 Benefactives

This section will address the benefactive suffix *-gutji/rutji*. It creates stems meaning 'do X for someone'. It can create either transitive or intransitive stems, but it can attach only to intransitive stems. However, compared to the last section, it does not represent a stronger piece of evidence that TRANS features are required to allow the language to have a wide range of transitivity alternations.

Suffixation of -gutji onto an antipassive stem creates a stem with three semantic

arguments. For example, when -gutji is added to qukii, the antipassive stem for 'shoot', we get qukiigutji, 'shoot something for someone'. The derived verb stem has an actor, the person who does the shooting, a benefactor, the person for whom the shooting is done, and the argument which is the non-actor argument of qukii, 'shoot'. While the non-actor of 'shoot' can only be placed in secondary case, there are a number of possibilities for the actor and the benefactor. If a transitive stem is created, the benefactor is treated as the object of the verb stem created by the suffixation of -gutji. If an intransitive stem is created, the benefactor is treated as an OBJ θ .

Examples (4.5.1) and (4.5.2) will be used to illustrate that *-gutji* can be attached to an antipassive stem, but not to a transitive/reflexive stem, at least not with the same meaning. In (4.5.1), *-gutji* has been attached to the antipassive stem *qukii*, 'shoot', yielding the stem *qukiigutji*, 'shoot something for someone'. Example (4.5.2) is minimally different from (4.5.1) except that, in this case, *-gutji* is attached to the transitive/reflexive stem for 'shoot', *qukiq*. This word is not acceptable, or at least it cannot have the same meaning as the word in (4.5.1). This example illustrates that *-gutji* can only attach to intransitive stems.

As is always the case with antipassives, the OBJ θ of the antipassive verb stem onto which *-gutji* is attached must be placed in secondary case. In (4.5.3), *-gutji* has been suffixed onto the antipassive stem *qukii*, and the OBJ θ is placed in secondary case.

(4.5.3) tuttu -mik quki -i -gutji -laur -ta -ra JO caribou -SEC.sg shoot -AP -BEN-PAST -PPT -my.sg(ABS) 'I shot the caribou for him/her.'

Example (4.5.4) is the same as example (4.5.3), except that it makes use of the other antipassive stem for 'shoot'. This illustrates that (4.5.3) has been analyzed correctly morphologically. In particular, it shows that it is not the case that *-igutji* attaches to the transitive/reflexive stem, *qukiq*, in example (4.5.3).

(4.5.4) tuttu -mik qukir -ni -gutji -laur -ta -ra JO caribou -SEC.sg shoot -AP -BEN -PAST -PPT -my.sg(ABS) 'I shot the caribou for him/her.'

The predicate in these examples, *qukiigutjilaurtara* or *qukirnigutjilaurtara*, is a possessed passive participle. When possessed passive participles are used as predicates, the subject is treated like a possessor. In this case, the actor is first person singular, since this possessive suffix means 'my'. The object of the verb stem may be placed in absolutive case.

Example (4.5.5) illustrates that only the benefactor may be treated as the object when -gutji is used to create transitive stems. When the suffixes -tara are attached to a transitive stem, and the word created is used as predicate, the absolutive argument corresponds to the object of the verb stem onto which -tara is attached. Tuttuk, 'caribou', bears absolutive case, and it can only express a benefactor. It cannot be understood as an argument of qukir, 'shoot'.

(4.5.5) tuttuk quki -i -gutji -laur -ta -ra JO caribou(ABS.sg) shoot -AP -BEN -PAST -PPT -my.sg(ABS) 'I shot something for the caribou(Tuttuk).'

*'I shot the caribou for him/her.'

Suffixation of *-gutji* can also create intransitive stems. As with the other examples we have seen, the subject is identified with the subject of the verb stem onto

which -*gutji* is attached. The benefactor is placed in secondary, but not in dative case, which is the case used to mark benefactors if there is no applicative suffix, as illustrated by example (4.5.6). In this example, an active participle is formed from *qukiigutjilaur*, 'shoot something for someone'. Active participles can only be created from intransitive stems, and, when used as predicates, the single argument of the intransitive stem gets absolutive case.

(4.5.6) Mary tuttu -mik quki -i -gutji-laur -tuq JO
Mary(ABS) caribou-SEC.sg shoot -AP-BEN-PAST-APT(ABS.sg)

Jaani -mik /*Jaani -mut
John -SEC.sg /John -DAT.sg

'Mary shot the caribou for John.'

The suffix -gutji, 'do X for someone', introduces a semantic relation with three semantic arguments: a doer, which is identified with the subject of the verb stem onto which -gutji is attached, a benefactor, and a situational argument, which is identified with the situation described by the verb stem onto which -gutji is attached. The morphosyntactic behavior of -gutji can be understood as in (4.5.7) and (4.5.8). The input has a subject as well as any number of arguments, annotated as list(x). The output has a subject and either an object or an OBJ θ , as well as the other arguments, annotated as 'list(x)'. The subject of the output bears the same index as the subject of the input. For a theory that makes use of TRANS features, it is also essential that the input for both rules must bear the feature [intransitive]. The output must bear the feature [transitive] in (4.5.7) but [intransitive] in (4.5.8), because the presence or absence of an argument referred to as an OBJ in this dissertation is formally handled by TRANS features in a theory that uses these features to handle transitivity alternations.

- (4.5.7) a) INPUT $\langle SUBJ(i), list(x) \rangle$
 - b) OUTPUT \leq SUBJ(i), OBJ, list(x) \geq
- (4.5.8) a) INPUT $\langle SUBJ(i), list(x) \rangle$
 - b) OUTPUT \leq SUBJ(i), OBJ θ , list(x) \geq

As was the case with *tit*-causatives, there needs to be an explanation for why -gutji can only attach to intransitive stems, even when the benefactor which it introduces bears secondary case, as was illustrated by the unacceptability of (4.5.2). The range of possible explanations are very much the same as those that were given in the previous section for why -nirai can only attach to transitive stems. Again, a theory which makes use of TRANS features has no difficulty in this regard. The derivational processes would only take intransitive stems as the input. The rest of the theoretical discussion that was given in the previous section will not be repeated here, since the other possibilities will not end up being adopted in this dissertation. For the curious reader, the data from this section cannot be used to argue that TRANS features are necessary in a theory which treats subjects and objects as grammatical primitives. If -gutji were attached to a transitive stem, one could, in principle, claim that the rule associated with deriving (4.5.8b) from (4.5.8a) would result in the creation of a word with the ordered argument structure $\langle SUBJ, OBJ\theta, OBJ \rangle$, where the object of the resulting verb stem corresponds to the object of the verb stem onto which -gutji was attached. This is very much the same arrangement as seen in the previous section. For this reason, that discussion applies here as well.

The remaining text in this section will address some verbalizing suffixes like *-liuq*, 'build', and *-siuq*, 'look for', which may optionally have a benefactor argument which is

treated as either an OBJ or an OBJ θ . In (4.5.9), the benefactor, *Jaani*, bears absolutive case, and it is treated as an object since it has been nominalized by the passive participle. JO, MG, and SM have all informed me that the predicate *illuliulaurtara* can only mean 'I built a/the house for him/her', and never, 'I built the house'. *Aupartunik*, 'red ones', functions as an OBJ θ in this example, expressing that which is built. Other proposals in the literature for explaining why the noun root *illuk*, 'house', and the argument *aupartunik*, 'red ones', refer to the same entities will be discussed in Chapter 7.

(4.5.9) Jaani aupar -tu -nik illu -liu -laur -ta -ra JO John(ABS) be.red -APT-SEC.pl house -build -PAST-PPT -my.sg 'I built some red houses for John.'

In (4.5.10), the benefactor is not treated as an OBJ. When it gets secondary case, it is presumably an OBJ θ . The other option is to express it in dative case. In this case, we do not need to claim that -liuq creates a verb stem with a dative benefactor argument, because it is always possible to express a benefactor in dative case when there is not already a benefactor in the verb's argument structure. There is presumably a covert derivational rule which can add a benefactor argument to any verb's argument structure list. In terms of the theory presented in this dissertation, there are three lexical entries for -liuq: one without a benefactor in the argument structure, one which treats a benefactor as an OBJ, and another which treats the benefactor as an OBJ θ .

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³⁸ A similar alternation is possible with -iq, -ir-ni, 'remove'. It is essentially an antipassive alternation. The possessor of the incorporated noun is treated as an object when -iq is used, but as an OBJθ when -ir-ni is used. In (A), the possessor, Jaani, bears absolutive case, and it is treated as an object since it has been nominalized by the passive participle. Whereas, in (B), where -ir-ni is used instead of -iq, the possessor gets secondary case.

⁽A) Jaani nasa -i -laur -ta -ra MG John(ABS) hat -remove -PAST-PPT-my.sg(ABS) 'I removed John's hat.'

'I built a red house for John.'

Verb roots from the lexicon do not allow the same options for the treatment of benefactors. This includes verb roots like *sana*, 'build', which also means 'build'. It differs from *-liuq*, 'build', in that it is a root rather than an affix. With lexical verb roots, a benefactor can only be expressed in dative case, unless the applicative suffix, *-gutji*, is added, as described in this section.³⁹

4.6 Naq-causatives

Naq-causatives differ from tit-causatives in that they can attach either to transitive or to intransitive stems, in which case the meaning is different. The affixes belonging to this class include -naq, 'cause people or things to', and -guminaq, 'make people want to', or 'be desireable to'. The suffix-guminaq is a phonological variant of -guma, 'want' followed by -naq, 'cause people to'. With -naq, the agent of causation has some property which causes something to happen. There need be no intent or volitionality associated with the agent of causation. While this suffix most likely represents evidence that multiple derivational rules are a good way to capture some of the transitivity alternations that occur in Inuktitut, it is not necessarily the strongest evidence that

³⁹ MG has stated a dispreference for using dative case to express benefactors. She prefers the use of secondary case in examples such as (4.5.10) and she prefers the use of the applicative suffix *-gutji* with lexical verb roots.

⁽B) nasa-ir -ni -laur -tu -nga Jaani -mik MG hat -remove -AP-PAST -INDI -1sg John -SEC.sg

^{&#}x27;I removed John's hat.'

⁴⁰ It differs from the suffix *-guminaaq*, 'I wish I could', to be discussed in section 4.18, in the length of vowel in the last syllable. The suffix *-guminaq* creates verb stems, whereas *-guminaaq* creates either verbs or noun stems depending on the dialect.

TRANS features are required to allow for a wide range of transitivity alternations, depending on one's theoretical assumptions.

Suffixation of -naq always produces intransitive stems.⁴¹ It is never possible to follow -naq by a passive participle forming suffix or verbal morphology which agrees with two arguments. This is illustrated by the ungrammaticality of example (4.6.1), where a passive participle is formed from *irqanar*, 'be memorable'.

(4.6.1) *irqa -nar -ta -nga remember(TR) -NAQ -PPT -his/her.sg *'It makes people remember him/her/it.'

Examples (4.6.2) and (4.6.3) illustrate the semantic difference between instances where -*naq* is added to a transitive/reflexive stem and instances where -*naq* is added to an intransitive stem.

- (4.6.2) Jaani irqa -na -laur -tuq JO/MG John(ABS.sg) remember(TR) -NAQ -PAST -APT(ABS.sg) 'John caused people to remember him (John).'
 'John was memorable.'
 'John caused people to remember themselves.'
- (4.6.3) Jaani irqa -i -na -laur -tuq JO/MG John(ABS.sg) remember-AP-NAQ -PAST-APT(ABS.sg) 'John made people remember something.'
 *'John was memorable.'

In (4.6.2), -naq, 'cause people to', is attached to the transitive/reflexive stem *irqaq*, 'remember'. The resulting stem, *irqanaq*, means either 'X causes people to

Example B illustrates that *-gi* can also be attached to *guminaq*, 'make people want to', to create stems meaning 'condsider something desirable to'.

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⁴¹ It is, however, possible to suffix -*gi*, 'find something to be' onto *irqanaq*, 'be memorable', to create a transitive stem, as in example A.

A) irqa -na -ri -ja -nga remember(TR) -NAQ -GI -PPT-his/her.sg

^{&#}x27;He/she finds it to be memorable.'

B) taku -gumina -ri -ja -nga see -cause.to.want.to -GI -PPT -his/her.sg 'he/she considers it to be something desirable to see.'

remember X', which is logically equivalent to 'be memorable', or 'cause people to remember themselves'. The agent of causation introduced by -naq is equated with the object of the transitive/reflexive stem irqaq, except in the case where irqaq is interpreted as a reflexive and therefore intransitive stem. When -naq is attached to an intransitive stem, the single argument introduced by -naq is not equated with either of the arguments of the stem onto which it is attached. The predicate in (4.6.3) differs from the predicate in (4.6.2) in that -naq, 'make people or things do X', has been attached to irqai, the antipassive form of remember, in (4.6.3), rather than the transitive/reflexive stem, irqaq, which was used in example (4.6.2). In this example, the agent of causation, introduced by -naq, cannot be equated with the OBJ θ of irqai, 'remember'.

Unsurprisingly, when -naq, 'make people X', is attached to an antipassive stem, the non-actor argument of the antipassive verb stem can be expressed in secondary case, as in (4.6.4). The predicate *irqainalaurtuq*, 'make people remember something', is the same in this sentence as in (4.6.3). In all of the examples, the causative agent introduced by -naq, 'cause people to', is expressed in absolutive case. The non-actor argument of the antipassivized verb stem is expressed in secondary case in this example.

'The picture made people remember Mary.'

The ungrammaticality of examples (4.6.5) and (4.6.6) reflects the fact that it is generally not possible to express an argument in secondary case when the transitive/reflexive stem is used instead of the antipassive stem. These examples show

that this is true whether or not the noun bearing secondary case is coreferential with the subject introduced by the causative suffix.

*'The picture makes people remember Mary.'

(4.6.6) (*uvan-nik) irqa -nar -tu -nga MG (me-SEC) remember(TR) -NAQ -INDI -1sg 'I am memorable'.

'I make people remember me.'

The one unsurprising exception to this generalization is when the verb stem onto which -naq attaches is given a reflexive interpretation. When the verb stem used in a naq-causative construction gets a reflexive reading, the agent of causation introduced by -naq, 'make people X', is not equated with any arguments of the verb stem, as in (4.6.7). Again, reflexive stems pattern with antipassive stems in this regard.

In the *naq*-causative construction, the subject of the verb stem onto which -*naq* attaches has a demoted status. It is usually left semantically unspecified, but it may be expressed in dative case. The next three examples will be used to illustrate the full case arrays that are possible when -*naq* is added to semantically intransitive, transitive/reflexive, or antipassive stems.

Example (4.6.8) illustrates that, when -naq is added to a semantically intransitive stem, the single argument of the intransitive stem can be expressed in dative case. When -naq is added onto aannia, 'be sick', it creates a verb stem meaning, 'make people or

things sick'. The subject of the verb stem *aannia*, 'be sick', is expressed in dative case.

In (4.6.9), -naq has been added to the transitive/reflexive stem nalligitsiaq, 'love someone a lot', to yield nalligitsianaq, 'X makes someone love X a lot', or 'be very loveable'.

(4.6.9) Jaani nalli -gi -tsia -nar -tuq Mary -mut JO John(ABS) love -TR -well -NAQ -APT(ABS.sg) Mary -DAT.sg 'John_i makes Mary love him_i a lot.'

Another way of translating this verb stem would be 'X causes people to love X a lot'. In other words, the agent of causation is equated with the non-actor argument of *nalligitsiaq*, the transitive/reflexive stem meaning 'love someone a lot'. This example shows that the subject of 'love' can be expressed in dative case, even though it is usually omitted.

The predicate in (4.6.10) is minimally different from (4.6.9) in that it is formed from the antipassive stem *nalligusuk*, 'love'.⁴²

Jaani -mik Mary -mut John -SEC.sg Mary -DAT.sg

'God makes Mary love John.'

In this example, the OBJ θ of *nalligusuk*, 'love', is not equated with the agent of causation introduced by -*naq*, 'cause'. As is always the case with antipassive stems, it is placed in

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⁴² I do not know if (4.6.9) is an unusual sentence because *Guuti*, 'god' is the subject. It was elicited to show that *nalligusutsianartuq* has a subject. In many cases, the agent of causation introduced by *-naq* when it attaches to an antipassive stem is understood to be a situation. If *Guuti* is dropped out of (4.6.10), it can most likely mean 'The situation makes Mary love John'.

secondary case. The agent of causation, in this case *guuti*, 'god', is placed in absolutive case. As in example (4.6.9), the actor of the predicate meaning 'love someone a lot' is placed in dative case.

Verb stems for 'to give' provide further evidence that the agent of causation introduced by -naq can only be made coreferential with an OBJ, though the examples that I have collected are a bit unusual in their meaning. Example (4.6.11) illustrates that when aittuq, which treats the recipient as the object, is suffixed by -guminaq, 'cause to want', the agent of causation introduced by -naq can only be treated as the recipient, unless the verb stem, aittuq, 'give to', is treated as an intransitive reflexive.

(4.6.11) Jaani aittu -ruminar -tuq
'John(ABS.sg) AITTUQ -cause.to.want.to -APT(ABS.sg)
'John_i makes people want to give HIM_i stuff'.

*'John makes people want to give HIM away.'

*'John makes people want to give stuff to someone.'
'John makes people want to give stuff to themselves.'

Examples (4.6.12) and (4.6.13) illustrate that, with *aittutigi*, which treats the theme as the object, the agent of causation introduced by *-naq* can only be treated as the theme, unless the verb stem *aittutigi* is treated as an intransitive reflexive.

- (4.6.12) ujaraq aittutigi -guminar -tuq JO rock(ABS.sg) AITTUTIGI cause.to.want.to -IND(ABS.sg) 'The rock makes people want to give it away.'
- (4.6.13) Jaani aittutigi -guminar -tuq JO
 John(ABS.sg) AITTUTIGI cause.to.want.to -IND(ABS.sg)

 'John makes people want to give HIM away.'

 *'John makes people want to give HIM stuff.'

 *'John makes people want to give stuff to someone.'

 'John makes people want to give themselves away.'

(4.6.14) makes use of *aittui*, which treats the theme as an OBJ θ , and the recipient as either a Goal θ or an OBJ θ . The agent of causation introduced by -naq cannot be

treated as either the theme or the recipient in this example, suggesting that argument sharing isn't possible with either Goal0s or OBJ0s in the *naq*-causative construction.⁴³

(4.6.14) Jaani aittui -guminar -tuq JO
John(ABS.sg) AITTUI -cause.to.want.to -IND(ABS.sg)

'John makes people want to give stuff to someone.'

*'John; makes people want to give him; away.'

*'John; makes people want to give him; stuff.'

The data in this section may provide evidence for the subject/object alignment system in Inuktitut. -Naq can attach to either transitive or intransitive stems. The single argument of an intransitive stem is treated the same way as the subject of a transitive stem. In both cases, the argument in question is demoted to by-phrase status.

For cases where *-naq* attaches to a stem with no object, the morphosyntactic process can be understood as in (4.6.15). *-naq* adds a subject onto the word's argument structure. The original subject is demoted in a similar way to by-phrases in English.

$$(4.6.15)$$
 a) INPUT $\langle SUBJ(i), list(x) \rangle$

b) OUTPUT
$$\leq$$
SUBJ, by-P (i), list(x) \geq

If there is an object in the stem to which -naq attaches, the subject introduced by -naq bears the same index as the object of the input, as in (4.6.16).

$$(4.6.16)$$
 a) INPUT \leq SUBJ(i),OBJ(j), list(x) \geq

b) OUTPUT
$$\leq$$
SUBJ(j), by-P (i), list(x) \geq

It differs from (4.6.15) in that the subject introduced by *-naq* is identified with the object. The object is subsequently deleted from the resulting argument structure. This argument sharing is obligatory if there is an object.

There should be some theory for why this argument sharing is obligatory when

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⁴³ Many of the translations given in this section contain the word 'people' when there is no dative noun in the sentence. Given the right context, the argument in question can also be understood to be the narrator.

-naq attaches to transitive stems. The easiest solution is to claim that there are two derivational rules. One of them attaches -naq to a stem which is [transitive], and it equates the agent of causation with the object of the stem onto which -naq is attached. The other attaches -naq onto stems which are of the subclass [intransitive], and it does not equate the agent of causation with an argument of the verb stem onto which -naq is attached. This is the perspective taken by this dissertation. Given the diversity of transitivity alternations in the language, the grammar minimally needs to allow transitive and intransitive stems to be treated differently, but there appears to be little other reason to make a theory which would restrict what types of transitivity alternations are or are not possible in the language.

However, there are other ways in which we can prevent -naq from attaching to a transitive stem without argument sharing. If the rule in (4.6.15) is applied to a transitive stem, the first argument of the output would be a subject, the agent of causation introduced by suffixing -naq. This would be followed by a by-P, or, in HPSG, an argument marked with dative case. The argument in question would correspond to the subject of the original stem onto which -naq was attached. This, in turn, would be followed by the argument corresponding to the object of the transitive stem onto which -naq was attached. If we are to adopt a theory which makes use of [illicit] case specifications to rule out ungrammatical words, then we can claim that Inuktitut has no way to assign case to the third element in a verb stem's argument structure list, making it impossible to attach -naq onto transitive stems. A theory which treats subjects and objects as grammatical primitives can also claim that argument structures are ordered lists, and that objects cannot occur in third position.

Let us now turn to the restriction that argument sharing is only possible when -naq attaches to transitive stems. For LFG, the restriction can be handled quite easily, because objects are grammatical primitives. Argument sharing is only possible with objects, and never OBJ θ s. Since subject and object are not grammatical primitives in HPSG, we would need some way to ensure that, when there is argument sharing, -naq can only attach to transitive stems. This is very easy if we make use of the TRANS features [transitive] and [intransitive].

For a theory which makes use of [illicit] case specifications to explain why transitive verbal morphology can only attach to transitive stems, we can claim that, when there is argument sharing with -naq, it can only attach to verb stems with an argument structure whose second element has an [illicit] case specification.

For verbs of emotion which take the transitive/reflexive suffix -gi, it is possible to omit the transitive/reflexive suffix before adding -naq. An example is given in (4.6.17). As with other transitive stems, the subject is demoted and the object of the root is equated with the agent of causation.

(4.6.17) Jaani nalli -nar -tuq Mary -mut JO John(ABS.sg) love(BR) -NAQ -APT(ABS.sg) Mary -DAT.sg 'John is loveable to Mary'.

*'John makes Mary love herself.'

In this example, nalli(k) is glossed as a bare root because it can only be followed by -naq, an antipassive suffix or a transitive/reflexive suffix. Example (4.6.18) shows that it is not possible to suffix -tsiaq, 'well', before adding -naq.

If the bare root in example (4.6.17) is replaced with the transitive/reflexive stem, *nalligi*,

the same interpretation is possible, but it can also be given the following reflexive interpretation: 'John makes people love themselves' It appears that reflexivization is not possible with bare roots.

The reason for this is most likely that reflexivization can only apply to verb stems and that bare roots require the suffixation of either -naq or the transitive/reflexive suffix -gi to be made into verb stems. The true function of the transitive/reflexive morpheme gi may be to convert stems of the class [bareroot] into verbal stems. We could claim that, in the lexicon, there are two entries for 'love', a verbal antipassive root with a SUBJ and an OBJ θ , and a bare root with a SUBJ and an OBJ.

4.7 Tsau and nir/jarniq/garniq

One affix which can only attach to transitive stems is -tsau, 'should be X'ed'. However, the data from this section are most likely not particularly strong evidence that TRANS features are required to capture a wide range of transitivity alternations in a single language, depending on one's theoretical assumptions. Much as in passives, suffixation of -tsau creates intransitive stems from transitive ones. The actor of the verb stem onto which -tsau is attached is usually left unspecified, but it may be expressed in dative case. The single argument of the verb stem created by the suffixation of -tsau is the same as the object argument of the verb stem onto which -tsau is attached. An example is given in (4.7.1).

(4.7.1) tuttuk quki -tsau -juq (Jaani -mut) JO caribou(ABS.sg) shoot(TR) -TSAU -APT(ABS.sg) (John -DAT.sg) 'The caribou can/should be shot (by John).'

In the example, -tsau, 'can/should be X'ed', is attached to the transitive/reflexive stem

⁴⁴ JO informs me that she would always prefer to use a bare root rather than the transitive/reflexive stem when it is possible to use the bare root.

qukir, 'shoot', yielding qukitsau, 'should be shot'. The actor of qukir, 'shoot', is expressed in dative case. An active participle qukitsaujuq, 'one that should be shot', is then formed from the stem qukitsau, 'should be shot'. This active participle is used as a predicate. As with other sentences where an active participle is used as a predicate, the single argument of the intransitive stem from which the active participle is formed is placed in absolutive case. This absolutive noun, tuttuk, 'caribou', is equated with the object of qukir, 'shoot'. Thus, when tsau, 'should be X'ed', is attached to a verb stem, its single argument is equated to the object argument of that verb stem.

Example (4.7.2) illustrates that *-tsau* cannot be attached to an antipassive stem.

Unsurprisingly, it can never attach to an intransitive stem.

The morphosyntactic behavior of *-tsau* can be understood as in (4.7.3). The subject of the output bears the same index as the object of the input. The subject of the input is demoted.

For a theory which treats subject and object as grammatical primitives, there is no difficulty in restricting *-tsau* so that it can only be attached to transitive stems, since the subject in the output must be equated with an object from the input. A theory which makes use of TRANS features can claim that *-tsau* can only be suffixed onto stems which are [transitive]. A theory which makes use of [illicit] case specifications to ensure that transitive verbal agreeme can only attach to transitive stems can claim that *-tsau* can only

attach to stems if the second element in the argument structure has an [illicit] case specification, since such a theory would differentiate transitive and intransitive stems based on whether or not there is a second argument with an [illicit] case specification.

There is another suffix with very much the same morphosyntactic properties, -nir/jarnir/garnir (the post uvular, postvocalic, and postvelar forms, respectively), meaning 'be pleasant to'. Example (4.7.4a) illustrates that it can attach to *taku*, 'see', which can be used either as a transitive or an antipassive stem. Suffixation of -jarniq can only create intransitive stems, as illustrated by the ungrammaticality of (4.7.4b), where a passive participle is formed from *takujarniq*, 'be pleasant to see'.

- (4.7.4) a) taku -jarni -tuq MG see -be.pleasant -APT 'He/she/it is pleasant to see.'
 - b) *taku -jarni -ta -nga MG see -be.pleasant -PPT -his/her.sg 'He/she finds him/her pleasant to see.'

Examples (4.7.5) and (4.7.6) illustrate that it cannot attach to intransitive stems, since the passive stem *takujau*, 'be seen', can only ever be used with intransitive inflection, as is the case with *ani*, 'leave'.

- (4.7.5) *taku -ja -u -jarni -tuq MG see -PPT -be -be.pleasant -APT *'He/she is pleasant to see.'
- (4.7.6) *ani -jarni -tuq MG leave -be.pleasant -APT *'It (the house, perhaps) is pleasant to leave.'

Example (4.7.7) illustrates that it is possible to express the subject of 'see', the one who sees something, in dative case when *jarniq*, 'be pleasant', is suffixed onto *taku*, 'see'.

(4.7.7) Jaani -mut taku -jarni -tuq MG John- DAT.sg see -be.pleasant -APT 'For John, it is pleasant to see.'

Examples (4.7.7) to (4.7.10) make use of the post-uvular form of *nir/jarnir/garnir*, *nir*, attached to *tusar*, 'hear'. (4.7.8) shows that *-nir* can only be used to create intransitive stems, since an active participle can be formed from *tusarniq*, 'be pleasant to hear', as in (4.7.8a) but a passive participle cannot be, as in (4.7.8b). (4.7.9) shows that it is also possible to express the subject of the stem *tusaq*, 'hear', the one who hears something, in dative case, when *-nir* is attached to *tusar*.

- (4.7.8) a) tusar(TR) -ni -tuq MG hear -be/pleasant -APT 'It is pleasant to hear.'
 - b) *tusar -ni -ta -nga MG hear(TR) -be.pleasant -PPT -his/her.sg *'he/she finds it pleasant to hear.
- (4.7.9) Jaani-mut tusar -ni -tuq MG John-DAT.sg hear(TR) -be/pleasant -APT 'For John, it is pleasant to hear.'

Another option is to use the suffix -gi, 'consider', or 'find something to be, as in (4.7.10). When -gi is attached to tusarniq, 'be pleasant to hear', in (4.7.10), we get tusarniri, 'find something to be pleasant to hear'. I have not checked whether or not it is still possible to use a dative case marked first person pronoun in this example, because that would be redundant, and difficult to judge for that reason.

(4.7.10) tusar -ni -ri -ja -ra hear -be.pleasant -GI -PPT -my.sg 'I find it pleasant to hear.'

MG has given some surprising forms for 'find something pleasant to X'. There appears to be a nominalizing suffix *-jarnaaq/garnaaq*, meaning 'something which is pleasant to

X'. -Jarnaaq is attached to stems ending with a vowel and -garnaaq is attached to stems ending with a velar consonant. She has offered no such form for stems ending with uvular consonants. The data will be presented in section (4.11), which will address active and passive participles, since -jarnaaq/garnaaq behaves as a passive participle forming suffix. -Nir/jarniq/garniq appears to have all the same restrictions as -tsau. It only attaches to transitive stems. The object of the stem onto which these suffixes attach becomes the subject. The original subject may optionally be expressed in dative case, but it is usually omitted.

4.8 Giakit

Suffixation of -giakit creates stems with the meaning 'can X with ease'. Multiple options are available with this suffix. First, much as is the case with guma-type control suffixes, the output can have the same argument structure as the input. Second, it can behave a bit like the suffixes described in the preceding section, attaching to transitive stems, creating intransitive stems whose subject is identified with the object of the input. However, when -giakit is used this way, it is not possible to express the original subject of the stem onto which -giakit is attached in dative case. It differs from the suffixes of the preceding section in this respect. Third, we will see that there is at least one example which violates either of the forementioned generalizations. The data in this section do not provide stronger evidence that TRANS features are required to capture the wide range of transitivity alternations that occur in Inuktitut compared to the data of the previous section.

In example (4.8.1), -giakit is attached to an antipassive stem for 'shoot'. This

⁴⁵ *Qukirnigiakittuq* can only mean, 'he/she can shoot something with ease'. It can never mean, 'it is easy

example shows that the subject introduced by *-giakit* can be identified with the SUBJ of the original verb stem, but not with an OBJ θ .

(4.8.1) Jaani qukir -ni -giakit -tuq MG
John(ABS) shoot -AP -can.with.ease -APT
'John can shoot with ease.'
*'John can be shot with ease.'

As with other *Guma*-type control constructions, it is possible to add *-giakit* to a transitive stem to create a transitive stem. One such example is given in (4.8.2). The suffixes, *-ta-ngit*, are used when the subject is third person and the object is third person plural.

(4.8.2) quki -riakit -ta -ngit MG shoot(TR) -can.with.ease -PPT -his/her/their.pl 'He/she/they can shoot them with ease'.

In example (4.8.3), -*giakit* is attached to a transitive stem to form an intransitive stem with a SUBJ that is identified with the OBJ of the transitive stem onto which –*giakit* is attached.⁴⁶

(4.8.3) Jaani quki -riakit -tuq MG
John(ABS) shoot(TR)-can.with.ease-APT
'John can be shot with ease.'

*'John can shoot with ease.'

The original subject of the stem onto which *-giakit* is attached is deleted rather than demoted from the argument structure when the subject introduced by *-giakit* is identified with the object of the stem onto which it is attached. The ungrammaticality of

to

to shoot something'.

A similar example is given below. Here, -gi, 'consider' is attached to *tukisigiakit*, 'can be understood with ease', to yield *tukisigiakigi*, 'consider something easy to understand'. In this example, the subject of *tukisigiakit*, 'can be understood with ease', is identified with the object of *tukisi*, 'understand'.

A) tukisi -giaki -gi -ja -ra understand- can.with.ease -GI -PPT-my.sg

^{&#}x27;I consider it easy to understand.'

(4.8.4) shows that the subject of *qukir*, 'shoot' cannot be expressed in dative case with the predicate from (4.8.3).

(4.8.4) *Tuttuk Jaani-mut quki -riakit -tuq MG caribou(ABS.sg) John-DAT.s shoot(TR) -can.with.ease -APT *'The caribou can easily be shot by John.'

However, it is possible to express the original subject of *qukir*, 'shoot', in dative case if the verb stem is passivized before suffixing *-giakit*, since passive constructions do allow the original subject to be expressed in dative case. One such example is given in (4.8.5).⁴⁷

(4.8.5) tuttuk Jaani -mut qukir -ta -u -giakit -tuq MG caribou(ABS.sg) John -DAT.sg shoot -PPT -be -can.with.ease -APT 'The caribou is easy for John to shoot.'

The next set of examples will show that, with the verb stems *aittuq* and *aittui*, which both mean 'give', it is not possible for the subject introduced by *-giakit* to be identified with an argument that is treated as a Goalθ. In (4.8.6a) and (4.8.6b), *-giakit* has been suffixed onto *aatsi* and *aittui*.

- (4.8.6) a) aittui -giakit -tuq MG
 AITTUI -can.with ease -APT
 'he/she can give stuff away with ease.'
 *'he/she can easily be given stuff.'
 - b) aatsi-giakit-tuq MG
 AATSI-can.with.ease-APT
 'he/she can give stuff away with ease.'
 *'he/she can easily be given stuff.'

Aatsi only allows the recipient to be placed in dative case, and aittui optionally allows the

attached. The construction in (4.8.5) also tells us that there is a demoted subject, which indicates that a noun bearing dative case is more likely to be a demoted subject than a benefactor.

From a functionalist perspective, we can say that (4.8.4) is deemed ungrammatical because that construction is never used. The reason for this is most likely because the construction in (4.8.5) would be less ambiguous in many cases. If *qukir* were replaced with an all purpose stem, the construction in (4.8.5) is unambiguous as to whether the subject is the subject or the object of the stem onto which *-giakit* is

recipient to be placed in dative case. In neither case can the subject introduced by *-giakit* be identified with the Goal θ .

However, (4.8.7) shows that the illicit interpretation is possible with *aittuq*, which treats the recipient as the object.

(4.8.7) aittu -riakit -tuq MG
AITTUQ -can.with.ease-APT
'he/she can easily be given stuff.'

While it appears that neither Goal0s nor OBJ0s can be made into the SUBJ when -giakit is attached to a verb stem, I have found at least one example where the subject of a verb stem introduced by suffixing -giakit is not restricted to being identified with subjects or objects. The next set of examples to be discussed involve the verb root ani, 'leave'. Examples (4.8.8) and (4.8.9) show that ani is a syntactically intransitive verb root, since it is not possible to form a passive participle.

- (4.8.8) *ani -ja -ra MG leave -PPT -my.sg *'I left it (the place).'
- (4.8.9) *illuk ani -ja -u -juq MG house(ABS.sg) leave -PPT -be -APT *'The house is left.'

There are at least two ways to say he is leaving the house in Inuktitut. In (4.8.10), the 'house' is placed in ablative case.

(4.8.10) illu-mit ani -juq MG house-ABL.sg leave -APT 'He is leaving the house.'

In (4.8.11), the area left is made into an argument by first nominalizing *ani* with -*vik*, 'time or place of', yielding *anivik*, 'time/place of leaving'. It is then reverbalized with -*gi*, 'have', forming the stem *anivigi*, 'have as a place that was left'.

(4.8.11) illuk ani -vi -gi -rqau -ja -ra MG house(ABS.sg) leave -place -have -earlier-PPT -my.sg 'I left the house.'

When *-giakit* is suffixed onto *ani*, 'leave', the subject of the derived verb stem, *anigiakit*, may be identified either with the subject of *ani*, as in (4.8.12), or the place that is left, as in (4.8.13).⁴⁸

- (4.8.12) Jaani ani -giakit -tuq MG John(ABS) leave -can.with ease -APT 'John can leave with ease.'
- (4.8.13) illuk ani -giakit -tuq MG house(ABS.s) leave -can.with ease -APT 'The house can be left with ease.'

In the case of *ani*, we have two options. We can either claim that the subject of the output formed by suffixing *-giakit* can be identified with a source argument in the input, or that the place which is left is not a syntactic argument of *-giakit*. Under the second analysis, when 'the house' is in ablative case, the noun bearing ablative case is an

I have been given quite a surprising translation of 'it is easy to speak Inuktitut'. The first word is a *giaq*-type gerund, a construction which will be discussed in section 4.13. The glossing of the components of this word need not concern us here. It means 'speaking Inuktitut'. The second word means, 'it is easy to do'. It is surprising because *inuttituuriamik*, 'speaking Inuktitut', appears to bear secondary case. *Pijariakit* may be a verb stem with an OBJθ and a meaningless subject. However, it might also be that *inuttituuriamik* is really an absolutive subject that only appears to bear secondary case. According to MG, it is possible to replace *inuttituuriamik* with *inuttituuriaq* in example B with no change in meaning. *Inuttituuriaq* is known to the author to be an absolutive form. The suffix *-giamik* may simply be an alternative phonological variant of *-giaq*.

B) inut -ti-tu -u ria -mik pijariakit -tuq MG Inuk -pl-SIM -UQ -GIAQ-SEC.sg easy.to.do -APT 'It is easy to speak Inuktitut.'

It may turn out that the phenomenon in (4.8.13) is restricted to places, or it may be a lexical ideosyncracy that belongs in the dictionary. It is difficult to test this phenomenon with instruments, because so many verbs allow instruments to be treated as subjects.

⁴⁸ I have not been able to find any other examples that work this way. Example A shows that it is not possible to attach *-giakit* onto *uqaq*, 'speak', to form a verb meaning 'easy to speak'. *Uqaq* does not treat that which is spoken as a n object. To nominalize that which is said, the suffix *-usiq*, 'way' or 'means of', is used. *Inuttituurusiq* means the Inuit language. It involves post-inflectional noun incorporation, which will not be discussed until chapter 7.

A) * inut -ti -tu -u -rusiq uqa -riakit -tuq MG inuk -pl -SIM -uq -way/means.of speak -can with ease- APT * 'It is easy to speak Inuktitut.'

adjunct which indicates that there is motion away from the house. This second option will be taken. While much more research is required, it may turn out that, when *-giakit* introduces an argument which is distinct from either the subject or the object of the verb stem onto which *-giakit* is attached, this argument is restricted in meaning to entities that the language would never treat as a an object of a lexical verb root. Such a restriction would be unsurprising, since it would be less ambiguous to use a transitive lexical verb root which treats the entity in question as an object if one is available. It may also turn out that the stem *anigiakit*, from example (4.8.13), is a part of the lexicon of Inuktitut, and that the suffix *-giakit* does not really work that way. *Anigiakit* may represent a truncated form, where the suffixes *-vi* and *-gi*, from example (4.8.11), have been deleted.

The morphosyntactic properties of *-giakit* can be understood as in (4.8.14) to (4.8.16).

- (4.8.14) a) INPUT <list(x) >
 - b) OUTPUT<list(x)>
- (4.8.15) a) INPUT \leq Subj(i), list(x) \geq
 - b) OUTPUT<Subj(j),list(x)>
- (4.8.16) a) INPUT \leq Subj, OBJ(i), list(x) \geq
 - b) OUTPUT<Subj(i), list(x)>

In (4.8.14), -giakit is functioning like a guma-type control suffix. The argument structure is not changed. The option in (4.8.14) is used when -giakit is attached to a verb stem which has been passivized, as in (4.8.5), where -giakit is attached to qukirtau, 'be shot'. Qukirtau has a subject, which is the one that gets shot, as well as a demoted or oblique subject, corresponding to the one that shoots someone or something. (4.8.15)

changes the identity of the subject to a new entity. This rule would apply in example (4.8.13), if this turns out to be a productive use of the suffix *–giakit*. In (4.8.16), the subject of the output is identified with the object of the input. This rule applies in (4.8.3) and (4.8.7).

In Inuktitut, subjects are treated differently from objects. The data in this section, as well as the rules in (4.8.14) to (4.8.16), allow subjects of either transitive or intransitive verbs to be deleted. Objects are never deleted. Again, the subject/object alignment system appears to be quite important in understanding how Inuktitut grammar is organized, regardless of what formal syntactic analysis is adopted to account for these constructions.

An HPSG analysis would have to explain why the rule in (4.8.16) allows the subject of the verb created by suffixing *-giakit* to be equated only with the object, but not with arguments which LFG-type representations of this dissertation would treat as either a Goal θ or an OBJ θ . Either the input for (4.8.16) bears the feature [transitive], or the second argument of the input must bear an [illicit] case specification.

4.9 Reciprocals

Reciprocals are formed by adding *(r)uti* onto a transitive stem. The suffix -qattauti appears to be a phonological variant of this suffix. All of the same theoretical mechanisms that were possible to ensure that the input for the derivational rules of the previous two sections has to be transitive can also be used to explain the restrictions on the use of these suffixes. These suffixes are fully productive in Inuktitut. The situation is different in the related dialect of West Greenlandic. Fortescue (2007) argues that verb stems that use the reciprocal suffix belong in the dictionary in that dialect because the

suffix is no longer productive. A reciprocal relationship is established between the subject and the object, and the object is deleted from the word's argument structure.

Examples (4.9.1) to (4.9.4) illustrate that the reciprocal suffix can be attached to transitive/reflexive stems, but not to antipassive stems.⁴⁹

- (4.9.1) nalli -gi -uti -ju -uk MG love -TR -REC-APT -du 'They love each other.'
- (4.9.2) *nalli -gusu-uti -ju -uk MG love -AP -REC-APT-du *'They love each other.'
- (4.9.3) irqa -uti -ju -uk MG remember(TR) -REC -APT-du 'They remember each other.'
- (4.9.4) *irqa -i -ruti -ju -uk MG remember-AP-REC -APT-du *'They remember each other.'

A) mali -kata -uti -ju -uk MG follow -repeatedly -REC -APT -du

'They are following each other repeatedly.'

B) mali -uti -katat -tu -uk MG follow -REC - repeatedly -APT -du

'They are following each other repeatedly.'

- (C) and (D) suggest that it can be placed before or after *-gunnaq*, 'be able'. It is not surprising because these suffixes do not change the argument structure of the stems which they attach to.
- C) Taku -uti -gunna -tu -uk MG see -REC -be.able -APT -du 'They are able to see each other.'
- D) Taku -gunna -uti -ju -uk MG see -be.able -REC -APT -du 'They are able to see each other.'

Some of the words that I have collected suggest that there is a bit of freedom with respect to the placement of the reciprocal suffix. (A) and (B) show that it can be placed before or after the repetitive suffix, -katak. However, MG informs me that there is a subtle difference in meaning between these two examples. In B, there are repeated events where both people are following each other at the same time. For example, they might follow each other around in a circle and then stop and then start up again repeatedly. This is not necessarily the case with A. In the A example, the scenario described for B is possible, but it is also possible that the first person follows the second person and then the second person follows the first person. The difference seems to be related to the fact that in A, the reciprocal suffix is attached to a stem meaning 'follow repeatedly', whereas in B it is attached to a stem meaning 'follow', which does not have repetitive aspect, and therefore refers to a single event. These examples will be discussed in more depth in Chapter 6.

Example (4.9.5) shows that the reciprocal suffix can be used with *-niraq*, 'claim', in the *tit*-causative construction to establish a reciprocal relationship between the subject and the object. In this construction, the object of the stem created by the suffix of *-niraq* has been identified with the original subject of the verb stem onto which *-niraq* was attached.

(4.9.5) aangajaa -suu -ngu -nira -uti -ju -uk MG be.drunk -HABNOM -be -claim -REC-APT -du 'They each claim that the other gets drunk.'

With verb stems for 'to give', a reciprocal relationship can only be established between the subject and the object, never between the subject and a Goal θ argument. Of all of the verb stems for 'to give', only those which treat the recipient as the OBJ may be used to mean 'give stuff to each other' in the reciprocal construction. These are *aittuq*, and *aittutuq*, in examples (4.9.6) and (4.9.7).

- (4.9.6) aittu -uti -suu -k MG
 AITTUQ -REC -HABNOM -du
 'They give stuff to each other.'
- (4.9.7) aittutu -uti -suu -k MG
 AITTUTUQ -REC -HABNOM -du
 'They give stuff to each other.'

This meaning is not possible with aak and aittutigi, which treat the theme as the object. Examples (4.9.8) and (4.9.9) show that it is ungrammatical to attach the reciprocal suffix onto aatsi or aittui, both of which have no object. Aatsi always treats the recipient as a Goal θ , whereas aittui can treat the recipient either as a Goal θ or as an OBJ θ .

(4.9.8) *aittui -ruti -suu -k MG
AITTUI -REC -HABNOM -du
*'They give stuff to each other.'

The morphosyntactic properties of reciprocalization can be understood as in (4.9.10). The subject and object are identified with each other, in a reciprocal relationship. The object is subsequently deleted from the word's argument structure.

(4.9.10) a)
$$<$$
SUBJ_i, OBJ_i,...> b) $<$ SUBJ, ϕ , ...>

For an HPSG analysis, we need to ensure that *-uti* can only attach to transitive stems, in which case a reciprocal relationship is created between the first two arguments of a transitive stem. Numerous possibilities exist. First, we can claim that the second element of the stem onto which *-uti* is attached must have a null or [illicit] case specification. Second, we can claim that verb stems come in two subtypes, [transitive] and [intransitive], and that the input must be [transitive]. This latter approach is the analysis of this dissertation.

I have run across some examples where a reciprocal relationship can be inferred from the context, making the use of the reciprocal suffix optional. A more literal translation of (4.9.11) is 'it is also true that we will see each other a day or more later.

Sentence (4.9.12) can mean the same thing as sentence (4.9.11) in the right context.

- (4.9.11) taku-uti -laa -ri -ju -gut SM see -REC -tomorrow.or.later -too -INDI -1pl 'We will see each other again at a later date.'
- (4.9.12) taku -laa -ri -ju -gut SM see -tomorrow.or.later -too -INDI -1pl 'We will see each other again at a later date.'

Examples (4.19.13) and (4.19.14) illustrate that a reciprocal reading is

possible with both the all-purpose stem *kunik*, 'kiss', and with the antipassive stem *kunii* without the use of the reciprocal suffix. It is also possible to use the verb stem *kuniu*, 'kiss a lot', with a reflexive reading.

- (4.9.13) kuni -laur -tu -uk MG kiss -PAST -INDI -du 'They kissed (each other).'
- (4.9.14) kuni i laur tu -uk kiss -AP -PAST -APT -du 'They kissed each other.'

I have collected a few examples that show that a reciprocal reading is not possible in reflexive constructions. More research should be done to determine whether this really is a correct generalization. Example (4.9.15) is probably a bit of an unusual example since there is no repetitive suffix. It might mean that they kicked each other at the same time. It involves the suffixation of *-uti* onto a transitive/reflexive stem to create an intransitive stem. MG has informed me that a receiprocal reading is not possible in any context if the suffix *-uti* is dropped out of this word. Such a word would necessarily be reflexive, because *tukir* is a translitive/reflexive stem and the active participle forming suffix only attaches to intransitive stems. Reflexivization would be required to make the verb stem intransitive.

(4.9.15) tuki -uti -laur -tu -uk kick -REC -PAST-APT -du 'They kicked each other.'

In (4.9.16), an antipassive stem is used and a reciprocal reading is possible in the right context.

(4.9.16) qimmi -it kii -si -kata -laur -tu -t dog -ABS.pl bite -AP -repeatedly -PAST -APT -pl 'The dogs bit (each other or something else).'

In (4.8.17), a reciprocal reading is required, since there is a reciprocal suffix. The dialect of SM is like that of MG, in that there is an alternative phonological form of the repetitive suffix, *-qattauti*. *Kiikataqattautilaurtut* has the same meaning as (4.9.17).

Example (4.9.18) is a reflexive construction, since *kii* is a transitive/reflexive stem and active participles can only be formed from intransitive stems. Reflexivization is required to make the stem intransitive. The translations show that only a reflexive and not a reciprocal reading is possible.

According to Fortescue (2007), in the related dialect of West Greenlandic, it is a lexical property of some verb stems that they can be used either with or without a reciprocal meaning. More research would be required to see if this is also true in Inutktitut. It could also be that a reflexive reading is easier with some intransitive stems than with others because of their meaning.

4.10 *Vik*-type nominalizations

Vik-type nominalizations nominalize something which is arguably not a syntactic argument of the verb stem onto which they attach. While they only attach to intransitive stems, they are not one of the stronger pieces of evidence that TRANS features are necessary to capture the wide range of transitivity alternations that occurs in this language, particularly not in comparison to the data to be discussed in the sections that follow. A number of nominalizing suffixes fit into the class of vik-nominalizations. This

group includes -vik, 'place or time of, 50 -utik, 'device for, or reason for', -usiq, 'way, or means of', -qatik, 'companion for'. We will see in section (4.13) that gerunds, which are sometimes used like English gerunds, ending with -ing, have different morphosyntactic restrictions. This section will also give analyses for the verbalizing suffixes -u, 'be', -gi, 'have', and -lik 'one that has'. Understanding these suffixes will be very important to understanding the next several sections of this chapter. In this section, as well as in a number of sections to follow, understanding the analysis of [atransitive] versus [intransitive] nouns, as presented in sections 2.7 and 4.2, in reference to examples (4.2.7) to (4.2.10), will be quite important. This section will end with a discussion of nonproductive deverbal nouns in the lexicon. The data involving the noun stem *aittutuutit*, 'things that are given out repeatedly', will be strong evidence that the subject of an [intransitive] stem does not have to be a possessor, but that suffixes that normally express a possessive relation only seem to do so because there is a null derivation that makes [atransitive] nouns [intransitive], while adding a semantic possessor to a noun stem's argument structure list.

Examples (4.10.1) and (4.10.2) illustrate that *vik*-type nominalizations can only attach to intransitive stems, since a reflexive reading is required with the stem *kapuq*, 'stab', or 'inject'. Since reflexivization is a covert process which creates intransitive

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One surprising use of *-vik* is given below. I do not know if this is a common way of speaking, but MG informs me that it can mean that something is found out FROM John. However, a more literal interpretation would be more like 'John is a place where a realization is made'. *Qaujijauvik* functions as a nominal predicate meaning 'place where something is realized'. It predicates *Jaani*, 'John'. *Qaujijauvik* is constructed as follows. The passive participle forming suffix *-jaq* is added onto *qauji* to get *qaujijaq*, 'that which is realized'. It is then reverbalized with *-u*, 'be', to get *qaujijau*, 'be realized'. *-Vik* is then added to the end, yielding *qaujijauvik*, 'place where something is realized'.

A) Qauji -ja -u -vik Jaani realize -PPT-be -place.of Johnny(ABS) 'Something is learned from John.'

stems from transitive stems, the requirement that transitive/reflexive stems must take a reflexive reading when they are suffixed with *-vik* indicates that *-vik* can only attach to intransitive stems.

- (4.10.1) aanniasiurti-up kapur -vi -vini -nga JO nurse -REL.sg inject(TR) -place/time -former -his/her.sg(ABS) 'It is where the nurse gave himself/herself an injection.'
- (4.10.2) kapur -vi -viniq (aanniasiurti -mut) JO inject(TR) -place/time -former(ABS.sg) (nurse -DAT.sg) 'It is where people (the nurse) gave themselves/himself/herself an injection.'

These examples also illustrate two of the options for expressing the subject of the verb stem onto which *-vik* is attached. It can be expressed pronominally with a possessive suffix, in which case it is also possible to express the argument with a separate word bearing relative case, as in (4.10.1). It can also be omitted or expressed in dative case, as in (4.10.2). The restriction that *vik*-type nominalizations can only be formed from intransitive stems seems to come from the fact that there is no way to assign case to an object.

Examples (4.10.3) and (4.10.4) illustrate that, when an antipassive stem is used, the OBJ θ can be expressed in secondary case, as is always the case with OBJ θ s.

- (4.10.3) aanniasiurti-up Jaani -mik JO nurse -REL.sg John -SEC.sg
 - kapu -i -vi -vini -nga inject-AP -place/time -former -his/her.sg(ABS)

'It is where the nurse gave John an injection.'

(4.10.4) Jaani -mik kapu -i -vi -viniq aanniasiurti-mut JO John -SEC.sg inject-AP -place/time -former(ABS.sg) nurse -DAT.sg 'It is where John was given an injection by the nurse.'

Examples (4.10.5) and (4.10.6) illustrate that *vik*-type nominalizations can also be given case morphology and used as referring expressions, as is the case with other participles in the language. The predicate in this example is given interrogative inflection. It means, 'are you able to see?'

- (4.10.5) (Jaani -mut) ijukka -vi -vinir -mik MG (John -DAT.sg) fall -place/time -former -SEC.sg taku -gunna -qit? see -be.able -INT.2sg
 - 'Can you see the place where someone (John) fell?'
- (4.10.6) Jaani -up ijukka -vi -vini-nga -nik MG John -REL.sg fall(ITR) -place/time -former-his/her.sg -SEC taku -gunna -qit? see -be.able -INT.2sg

'Can you see the place where John fell?'

Vik-type nominalizations can be reverbalized with either -u, 'be', or -gi, 'have'. Neither of these suffixes add any meaning to the stem which they are attached to. We will see, in section 4.12, that -gi attaches to [intransitive] noun stems with a subject. In contrast -u attaches to [atransitive] noun stems without a subject argument. The suffix -gi is glossed as 'have' only because it appears to mean 'have' when it attaches to noun roots from the lexicon. However, the possessive relation really comes from a covert derivational process which adds a possessive semantic relation to a noun root's semantics while converting the noun stem from an [atransitive] noun into an [intransitive] noun, while adding a subject argument, corresponding to the possessor, to the noun stem's argument structure, as described in section 2.7. We have already seen the use of -gi in example (4.8.11) repeated below as (4.10.7). The effect of using -vik followed by -gi is

that a transitive verb stem is created which treats the area left as an object. Without these suffixes, the area left can only be expressed in ablative case, and the verb stem *ani*, 'leave', can only be intransitive, as discussed in section 4.8. An example using -*u* is given in (4.10.8).

- (4.10.7) illuk ani -vi -gi -rqau -ja -ra MG house(ABS.sg) leave -place -have -earlier-PPT -my.sg 'I left the house.'
- (4.10.8) (Jaani -mut) titirar-vi -u -laur -tu -nga MG (John -DAT.sg) write-place/time -be -PAST -INDI -1sg 'Someone (John) wrote on me.'

When the stem is reverbalized with -gi, a transitive stem is created. The subject of this verb stem is equated with the original subject of the verb stem onto which -vik was attached. The object is equated with the nominal referent of the vik-nominalization.

When the stem is reverbalized with -u, an intransitive stem is created. The subject is equated with the nominal referent of the vik-nominalization. The original subject of the verb stem onto which -vik was added must be demoted in this context.

We will see, in section (4.13), that -lik, 'one that has', is another suffix that attaches to [intransitive] noun stems. As with other suffixes which attach to [intransitive] noun stems, possession is not really part of this suffix's meaning. The nominal referent of the output is identified with the subject of the [intransitive] noun stem which it attaches to. An example of -lik being attached to a vik-type nominalization is given in

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The frequently used sequence *qatau* should be analyzed as *qatik*, 'companion', followed by -u, 'be'. The /i/ changes to an /a/. Examples (A) and (B) show that the original subject of the verb stem that *qatau* is attached to may be omitted or expressed in dative case.

A) taanisi -qata -u -laur -tu -nga MG dance -companion -be-PAST-INDI -1sg 'I joined the dance.'

^{&#}x27;I danced along with others.'

B) Jaani -mut taanisi -qata -u -laur -tu -nga MG John -DAT.sg dance -companion -be -PAST-INDI -1sg 'John danced with me.'

(4.10.9). The predicate *taanisiqatilik* means 'one who has a dancing companion', or 'he/she is dancing with someone'. *-Qati*, 'companion for', is attached to *taanisi*, 'dance', yielding *taanisiqati*, 'dancing companion'. Suffixation of *-lik* creates a noun stem whose nominal referent is equated with the subject of the original verb stem *taanisi*, 'dance', yielding *taanisiqatilik*, 'one who dances with someone' or 'he/she dances with someone'. Noun stems created by the suffixation of *-lik* have an OBJθ which is equated with the noun stem onto which *-lik* is attached. In this case, the OBJθ, *uvannik*, 'me', is equated with *taanisiqati*, 'dancing companion'. Together these two words mean, 'he/she is dancing with me.'

(4.10.9) uvan -nik taanisi -qati -lik MG me -SEC dance -companion -one.that.has 'he/she is dancing with me.'

In cases where demotion occurs, the morphosyntactic properties of *vik*-type nominalizations can be understood as in (4.10.10). The suffixation of *-vik* creates a stem with a nominal referent, R, which is not identified with any of the verb stem's arguments.⁵³ The R notation follows the tradition of DiSciullo and Williams. It

The following two examples suggest that -*vik* cannot nominalize a Goalθ or an incorporated noun. *Itiq*, 'enter', can treat the area entered as a Goalθ, but -*vik* cannot nominalize the area entered. -*Liaq*, 'go to', attaches to a noun stem which denotes the area which is gone to. Again, -*vik* cannot nominalize the area which is gone to.

A) itir -vik MG enter -place/time 'entrance'

^{*&#}x27;the place entered'

B) illu -liar -vik MG house-go.to-time/place

^{&#}x27;The path to the house'

^{*&#}x27;The house which someone is going to'

The suffix -vik is unable to nominalize locations when the location is incorporated, as illustrated by the unacceptability of example (C). This word cannot mean 'the house where I was located'. This is an example of post-inflectional noun incorporation, to be discussed in chapter 6. 'House' has been given locative case, and then it has been reverbalized with -ik, 'be located'. -Vik cannot be added to the stem -illumiik, 'be located at a/the house,' to create a stem meaning 'the house where someone is located'. There appears to be a general restriction with vik-type nominalizations that the nominal referent which is

corresponds to the noun's index in HPSG. The subject of the verb stem in the input is treated like a by-phrase in the output.

However, this demotion is optional. In cases where the deverbal noun created bears a possessive suffix or the deverbal noun stem is followed by -gi, 'have', -qar, 'have', or -lik, 'one that has', the subject of the verb stem is not demoted. The reason for making this claim is that there are some deverbal noun stems in the language which must be followed by one of the aforementioned suffixes. We have already seen one such stem, nalligiji, 'one that loves', in reference to examples (4.2.8) to (4.2.10). The theory of this dissertation is that such noun stems are of the type [intransitive], and they have a subject argument. -Vik type nominalizations differ from these other derivational processes in that they allow the option of subject demotion, in which case the output is [atransitive]. Such [atransitive] noun stems can be converted into [atransitive] nouns by adding suffixes which inflect for number only, with no possessor agreement.

In terms of the theory given in Chapter 2, the possessive suffix -nga, 'his/her singular', does not really add possession to a noun's meaning. Rather, it attaches to intransitive noun stems, and it assigns relative case to the first element in the word's argument structure, and it adds the semantic information that both the possessor and the possessed noun are third person singular. It only appears to sometimes introduce a

introduced by suffixing -vik cannot be part of the semantics of the stem onto which -vik is attached. It may also stem from a restriction that -vik may never nominalize an argument of a verb stem, since we will see, in Chapter 7, that it is possible to use a separate word which further describes the location which is part of this verb stem's semantics.

C) *illu -mi -i -vi -vini -ra MG house -LOC.sg-be.at -place-former -my.sg(ABS) *'The house where I was located.'

possessor to a noun's argument structure because there is a covert derivational rule which creates [intransitive] nouns from [atransitive] nouns while adding a possessor to a noun's argument structure. However, with [intransitive] deverbal noun stems, the first element in the word's argument structure often corresponds to an argument of the verb stem. The possessive suffix -nga adds the semantic relations that the SUBJ does not include a first or second person entity, and that it refers to a single entity. It also adds the specification that the SUBJ must get relative case.

The suffixation of -u, 'be', can be understood as in (4.10.11). The subject introduced by -u, 'be', is identified with the nominal referent (or index) of the stem onto which it attaches, as in (4.10.11a). The argument structure of the noun stem onto which -u is attached is represented with the list(x) notation in both the input and the output.

$$(4.10.11)$$
 a) INPUT R(i), $<$ list(x)>

b) OUTPUT
$$\leq$$
SUBJ(i), list(x) \geq

(4.10.12) attempts to capture the suffixation of -gi, 'have'. The input has a nominal referent (or index), a subject, and any other number of arguments, annotated as 'list(x)'. The output has a subject which is identified with the subject of the input, and an object which is identified with the nominal referent of the input, as well as the other arguments of the input.

$$(4.10.12)$$
 a) INPUT R(i), $\langle SUBJ(j), list(x) \rangle$

(4.10.13) attempts to capture the suffixation of *-lik*, 'one that has', which attaches to noun stems to form noun stems with a different meaning. Again, the input has a nominal referent (or index), a subject, and any other number of arguments, annotated as

'list(x)'. The nominal referent (or index) of the output is equated with the subject of the input. The output also has an OBJ θ which is equated with the nominal referent of the input. None of the suffixes -u, 'be', -gi, 'have', or -lik, 'one that has', adds anything to the meaning of the stem onto which they attach. These analyses are all very easily adapted into HPSG.

(4.10.13) a) INPUT R(i), $\langle SUBJ(j), list(x) \rangle$

b) OUTPUT R(j), $\langle OBJ\theta(i)$, $list(x) \rangle$

A further point to make about *vik*-type nominalizing suffixes is that the output created by attaching these suffixes can but need not have habitual aspect. The following two examples will show that *-usiq*, 'means or way', can create outputs which do not need to be interpreted with habitual aspect. When *-usiq* attaches to *uqaq*, 'say', the output means 'that which is said (by someone)'. In (4.10.14a), there is a possessor and the subject of *uqausiq* is placed in relative case. In (4.10.14b), there is a dative *by*-P. In both sentences, the translation does not have habitual aspect.⁵⁴ In contrast, in example (4.10.14c), where the word *qautamaat*, 'each day', has been added, we see that a habitual reading is possible. Example (4.10.14b) makes use of the suffix *-qatik*, 'companion', and we see that, with the addition of *qautamaat*, 'each day', a habitual reading is possible. There have been other examples involving *-qatik* where the translation has shown that a habitual reading is not necessary, such as (4.10.9) and (3.2.2). However, it is most likely only ultimately necessary to determine if it is possible to get a non-habitual reading with

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⁵⁴ While eliciting these sentences, I discovered that Inuktitut has a distinct suffix for 'regularly', which is different from the habitual suffix –*qattaq*. More research would be required to determine if this is actually a sequence of suffixes.

A) Jaani -mut taku -ja -u -likitappa -tu -nga MG John -DAT.sg see -PPT-be -regularly -INDI -1sg

^{&#}x27;I am regularly seen by John.'

any given suffix in *Tarramiutut*, since example (4.10.14e) suggests that a habitual reading is always possible when *qautamaat*, 'each day', is added to the sentence. According to JO, (4.10.14e) and (4.10.14f) do not differ in meaning, even though a habitual suffix has been added in (4.10.14f) but not (4.10.14e). Habitual marking might ultimately be optional in Inuktitut. However, it is most likely recommended to use some sort of habitual nominalizing suffix if there is no word in the sentence that conveys that the sentence is habitual.

piu -tsa -tu -nga like -AP -INDI -1sg

'I like what John said.'

b) (Jaani -mut) uqa -usi -vinir -mik MG (Jaani -DAT.sg) say -USIQ -former -SEC.sg

piu -tsa -tu -nga like -AP -INDI -1sg

'I like what was said (by John).'

- c) tainna qau -tamaa -t uqa -usi -nga Jaani -up MG/JO that day -all -pl say -USIQ -his/her.sg John -REL.sg 'John says that every day.'
- d) taanisi -qati -ga qau -tamaa -t MG/JO dance -companion-my.sg day -all -pl 'I dance with him/her every day.'
- e) qau -tamaa -t tiiviir -tu -nga JO day -all -pl watch.television -INDI -1sg 'I watch television every day.'
- f) qau -tamaa -t tiiviir qatta -tu -nga JO day -all -pl watch.television HAB -INDI -1sg 'I watch television every day.'

The remainder of this section will address ideas for future descriptive research with unproductive nominalizing processes which are arguably part of the lexicon. In Schneider's dictionary (1985), there are two entries where *–uti* attaches to transitive verb stems for 'give', both of which normally treat the recipient as the object, but the theme is nominalized. These entries are *aittuuti*, 'gift', and *aittutuutit*, 'things given several times'. I suspect that this is not a very productive morphological process. Example (4.10.15) shows that the noun stem *aittutuuti* can have a dative *by*-P. However, this is a confusing way of speaking because it can also have a dative Goalθ.

Example (4.10.16a) shows that it can also have a SUBJ, since a possessive suffix is added and the relative case-marked argument refers to the one who gives something out. Example (4.10.16b) also shows that it can have a SUBJ, because –qaq attaches to [intransitive] noun stems.

- (4.10.16) a) Jaani -up aittutuuti -vini -ngit JO
 John -REL.sg AITTUUTI -former -his/her.pl
 'John doled them out.'
 - b) qimirqua -nik aittutuuti -qa -laur -tu -nga JO book -SEC.pl AITTUUTI -have -PAST -INDI -1sg 'I doled out some things.'

This suffix was discussed in section 4.2. A more detailed analysis of -qaq will be given in the next section. The output of suffixing -qaq has a SUBJ which is equated with the SUBJ onto which -qaq is attached. It also has a secondary case-marked argument which is equated with the incorporated noun stem. In this case, qimirquanik, 'books', are the things that are doled out. There might be no antipassive stem for aittutuq, 'dole out',

in the dialect of MG, since she always changes the examples to ones that start with the stem *aittutuutiqaq*. In the dialect of JO, *aittutui* is the antipassive stem.

Inuktitut also has another less productive suffix, —sauti, that attaches to verb stems. Sometimes, it appears to be an instrumental nominalization. Other times, it appears to nominalize something else. According to SM, one simply has to learn the words which make use of this suffix. A number of examples are given below. The data show that, at least in some case, there is an argument which sometimes corresponds to the subject of the verb stem onto which —sauti is attached, which can be treated either as a possessor or expressed in dative case. Example (4.10.20), where the the subject of *urquu*, 'be warm', is expressed in dative case, is far more convincing than examples (4.10.17), and (4.10.19). In these other two examples, it is not clear if saviup, 'knife', and qukiutiup, 'gun', really represent arguments of the noun stem onto which —sauti is attached, or, if, instead, they are semantically treated as possessors.

- (4.10.17) savi -up ippik -sauti -nga SM knife -REL.sg be.hard -SAUTI -its.sg 'the knife's sharpener.'
- (4.10.18) qukiq -sauti SM shoot -SAUTI 'a target for shooting'
- (4.10.19) qukiuti -up qukiq -sauti -nga SM gun -REL.sg shoot(TR)-SAUTI -its.sg 'the gun's target.
- (4.10.20) (uvan -nut) uqquu -sauti SM me -DAT be.warm -SAUTI 'device that warms people/(me) up.'
 'It warms people/things (me) up.'
- (4.10.21) tippak -sauti SM be.smelly -SAUTI 'perfume'

Finally, a number of ungrammatical examples are given below, showing that the suffix is not productive.

When checking the argument structure of noun stems from the lexicon, at least two examples need to be elicited. One example should be used to check to see if it can have a dative by-P. Another should be used to check to see if it has a SUBJ. It is not the case that all noun stems with a dative by-P can also have a SUBJ. One example that shows this is given in (4.10.26). The example in (4.10.26a) makes use of the suffix – tsau, 'can/should be Xed', from section 4.7. After the suffixation of –tsau. the word is nominalized with an active participle forming suffix. Example (4.10.26a) shows that the output has a dative case-marked by-P. Example (4.10.26b) shows that it is not possible to suffix –qaq to create a stem with a subject who is identified with the dative argument from (4.10.26a). While MG does not accept this word, based on my work with JO on similar examples, it would mean, 'I own someone/something that should be followed' In all examples that I have checked with JO where -qaq is attached to an active participle, the word 'have' belongs in the English translation, or it is interpreted as an existential

construction, as discussed in section 2.5.55

b) *mali -tsau -ju -qar -tu -nga MG follow can/should -APT -have-INDI -1sg *'I should follow him/her.'

4.11 Active and Passive Participles

Some readers have found the terminology 'active and passive participles' to be confusing in the earlier versions of this dissertation. Active and passive participles nominalize the single argument of an intransitive verb or the object of a transitive verb, respectively. While it might be tempting to rename them as subject nominalizations and object nominalizations, there are other suffixes in the language which nominalize either the subjects or objects. The terminology is not intended to make a claim about active versus passive voice, but rather simply to give a distinctive name for the suffixes in question. It is also the standard terminology that is used in the discussion of these suffixes as they occur in Inuit dialects. As we saw in Chapter 2, they play an important role in the indicative paradigm. With passive participles, the original subject of the verb stem may be demoted or treated as a possessor, much as is the case with *vik*-type nominalizations. Understanding the analysis of [atransitive] versus [intransitive] nouns,

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⁵⁵ On one day, MG did accept the following word as a grammatical translation for 'I have something that should be eaten.' On another day, she found it to be very ungrammatical. It is to be contrasted with B, which she finds completely acceptable with either translation given.

A) niri-ja -u -ju -tsa -qar -tu -nga eat -PPT-be -APT -potential -have -INDI -1sg 'I have something that should be eaten.'

B) niri-ja -tsa -qar -tu -nga eat -PPT-potential -have -INDI -1sg 'There is something that I should eat' 'I have something that should be eaten.'

as presented in section 2.7 and in 4.2, in reference to examples (4.2.7) to (4.2.10), will be quite important to understanding this section. Some of the stronger arguments that TRANS features are necessary to capture the grammatical restrictions in Inuktitut will be given in this section.

Examples (4.11.1) and (4.11.2) will make use of the verb stem *katak*. In (4.11.1), the active participle, *katattuq*, is formed from *katak*, while, in (4.11.2), the passive participle, *katattaq*, is formed.

- (4.11.1) katat -tuq JO
 fall(ITR) -APT(ABS.sg)

 'the one that fell'

 *'the one that was dropped'

 *'the one that dropped something'
- (4.11.2) katat -taq JO
 drop(TR) -PPT(ABS.sg)
 'the one that was dropped'
 *'the one that fell'
 *'the one that dropped something'

These two words differ in meaning. When an active participle is formed, we get *katattuq*, 'one that fell'. It cannot mean either 'one that was dropped', or 'one that dropped something'. This illustrates that active participles can only be formed from intransitive stems. The passive participle in (4.11.2) can only mean 'the one that was dropped'. It cannot mean 'the one that fell', or 'the one that dropped something', indicating that it cannot nominalize the single argument of an intransitive stem, nor can it nominalize the actor of a transitive stem.

In examples (4.11.1) and (4.11.2), the nominalized argument has a similar semantic role. It is the entity that falls. Thus, the restrictions on the uses of the active and passive participle forming suffixes appear to be related to the syntactic features

[transitive] and [intransitive] rather than to the semantic roles of the arguments,

Examples (4.11.3) to (4.11.5) will make the same point using different verb stems. Examples (4.11.3) and (4.11.4) make use of the stem *qukitsau*, 'can be shot'. It has been formed by suffixing *-tsau*, 'can/should be X'ed', onto *qukir*, 'shoot'.

- (4.11.3) (Jaani -mut) quki -tsau -ju -mik taku -ju -nga JO (John -DAT.sg) shoot(TR) -TSAU -APT-SEC.sg see -INDI -1sg 'I see one that can be shot (by John).'
- (4.11.4) *Quki -tsau -jaq JO *shoot(TR) -TSAU -PPT(ABS.sg) *'One that can be shot.'

Recall that- *tsau* functions much like a passive construction. It creates intransitive stems with a subject that is equated with the original object of the stem onto which *-tsau* is attached. (4.11.3) shows that this subject can be nominalized with an active participle. (4.11.4) shows that it is not possible to form passive participles from verb stems created by the suffixation of *-tsau*. Again, this is because of the restriction that passive participles can only nominalize objects, and *-tsau* creates a stem with no object.

Example (4.11.5) illustrates that a passive nominalization can nominalize 'the one that is shot', provided it is treated as an object of a transitive stem, in this case *qukir*, 'shoot'.

(4.11.5) uqausiliriji -mut qukir-ta -mik taku -laur -tu -nga JO linguist -DAT.sg shoot-PPT -SEC.sg see -PAST-INDI -1sg 'I saw the one that the linguist shot.'

Example (4.11.5) also shows that, as with *vik*-type nominalization, it is possible to express the original subject of the verb stem onto which *qukir* is attached in dative case. Examples (4.11.6) and (4.11.7) illustrate two other options available to express the subject in *vik*-type nominalizations are also available for passive nominalizations. In

(4.11.6), there is a possessive suffix on the past participle and the subject is expressed in relative case. In (4.11.7), the passive participle is reverbalized with -gi, 'have', creating a verb stem with a subject and object which are identical to the original subject and object of the verb stem which was nominalized. In section (4.12), we will see that both of these options are available to [intransitive] noun stems. [Intransitive] noun stems are stems that must be followed by a possessive suffix, -gi, 'have', -qar, 'have', or -lik, 'one that has'

'I saw the one that the linguist shot.'

Another suffix, -qar, 'have' can also attach to passive participles, creating an intransitive verb stem whose subject is identified with the subject of the transitive stem which was nominalised by the passive participle forming suffix. We will see, in section 4.13, that this is another suffix that can attach to [intransitive] noun stems. Two such examples are given in (4.11.8A) and (4.11.8B). In (4.11.8a), -jaq is atattached to qaujima, 'know', yielding qaujimajaq, 'that which is known.' This passive participle is then suffixed with -qar, yielding qaujimajaqar, which means 'know something', because the stem's subject is equated with the original subject of the verb stem that was nominalised by -jaq/taq. This intransitive stem is then negated and then given first person indicative intransitive verbal inflection. The word qaujimajaqanngitunga means 'I don't know anyone or anything'. In (4.11.8b), a passive participle nalligijaq is formed

from *nalligi*, 'love'. Suffixation of *-qar*, 'have', yields *nalligijaqar*, 'love someone'. It has then been given first person intransitive indicative verbal inflection.

There are a few other suffixes that function in much the same ways as either active or passive participle forming suffixes. MG has given some surprising forms for 'find something pleasant to X'. There is a nominalizing suffix -jarnaaq/garnaaq, meaning 'something which is pleasant to X'. -Jarnaaq is attached to stems ending with a vowel and -garnaaq is attached to stems ending with a velar consonant. She has offered no such form for stems ending with uvular consonants. For stems ending in uvular consonants, the construction discussed in reference to (4.7.10) is used. Two examples of -jarnaaq/garnaaq followed by a possessive suffix are given in (4.11.9). As discussed in section (2.3), all participial deverbal nouns can be used as predicates with third person absolutive arguments, as is the case with these two examples.

- (4.11.9) a) niri -jarnaa -ra MG eat -JARNAAQ -my.sg 'I find it pleasant to eat.'
 - b) kuni -garnaa -ra MG kiss -GARNAAQ -my.sg 'I find him/her pleasant to kiss.'

This suffix appears to have all of the same restrictions as the passive participle forming suffix -jaq/taq. Based on the translations that she has given me, it can mean either 'one that is usually X'ed' or 'one that is usually X'ed with pleasure'. Example

(4.11.10) shows that it cannot be added to an intransitive stem. Example (4.11.11) shows that it nominalizes the object. The subject may be expressed in dative case, as in (4.11.12), or it may be treated as a possessor, as in (4.11.13).

- (4.11.10) *kuni-i -jarnaaq MG kiss -AP-JARNAAQ *'one that is pleasant to kiss.'
- (4.11.11) kuni(TR) -garnaaq MG kiss -GARNAAQ 'one that is usually kissed.'
- (4.11.12) Jaani -mut kuni -garnaaq MG John -DAT.sg kiss -GARNAAQ 'John usually kisses him/her.'
- (4.11.13) Jaani -up kuni -garnaa -nga MG Johnny -REL.sg kiss -GARNAAQ -his/her.sg 'Johnny usually likes to kiss him/her.' 'One that is usually kissed by Johnny.'

However, this suffix differs from the passive participle forming suffix in that it adds semantic restrictions to the stem which it is attached to. For some translations, either the SUBJ or the argument that is treated like a by-phrase in the output is a desirer who desires the state of affairs described by the verb stem and but who is also equated with the SUBJ of the verb stem onto which *-garnaag/jarnaag* is attached.

Based on the very limited research that I have done, the nominalizing suffix -miik, 'boy is it ever', is like the active participle forming suffix in that it can only be added to intransitive stems, and it nominalizes the subject. However, the restriction appears to have a semantic basis. This suffix might only attach to verb stems which describe properties. MG does allow the suffix to follow -guminaq, 'make people want', or 'be desireable', but she does not allow it to be placed onto nalligusuk, the antipassive stem for 'love'.

The suffix –*siti*, 'one that does something well', also appears to have the same restrictions as active participle forming suffixes. In (4.11.14) to (4.11.16), it is attached to the intransitive stems *inuttituur*, 'do as the Inuit', or 'speak Inuktitut', *qukirsi*, 'shoot', and *nalligijau*, 'be loved', respectively. The morphological derivation of *inuttituur* will be explained in section 7.2. The morphological derivation of *nalligijau*, 'be loved', is as follows. A passive participle is formed from the transitive stem, *nalligi*, 'love', to yield *nalligijaq*, 'one that is loved'. It is then reverbalized with –*u*, 'be' to yield *nalligijau*, 'be loved'. Addition of –*sitik*, which ends with a /k/ in the dialect of MG, yields *nalligijausitik*, 'one that is usually loved a lot'. The suffix –*siti* appears to add habituality as well as the meaning generally translated as 'well'. In both cases, the single argument of an intransitive stem is nominalized. The translation of words such as that in (4.11.15), suggests that -*siti* has habituality as part of its meaning.

- (4.11.14) inut -ti -tu -ur -siti SM inuk -pl -SIM -UQ -one.that.does well. 'He/she is very good at speaking Inuktitut.'
- (4.11.15) qukir-si-siti SM shoot-AP-one.that does well. 'one that is good at shooting. 'He/she is very good at shooting.'
- (4.11.16) nalli -gi -ja -u -sitik MG love -TR -PPT -be -one.that is well 'one that is usually loved a lot.'

It should be noted that (4.11.16) is not grammatical in the dialect of SM. In her dialect, it appears that *-siti* is like the agentive nominalizing suffix, to be discussed in (4.13), in that it can only nominalize agentive thematic roles.

The following two properties are shared by –*siti* and the active participle forming suffix, -*juq/tuq*. They can only ever attach to intransitive stems. If they are attached to

transitive/reflexive stems, the verb stem must be interpreted as a reflexive. Second, if a possessive suffix is added, the possessor cannot be construed as a verbal argument. It can only be construed as an entity that owns the possessed noun.

SM has deemed example (4.11.17a) to be unacceptable, and she has verified that the translation given is not acceptable. However, I have not had the chance to make sure that it is not really a grammatical word with the unusual translation, 'his/her one that shoots itself well', which would be predicted based on the other research that I have done with these suffixes. It is never possible for -siti to attach to a transitive verb stem. I have checked quite a number of examples, and SM and MG both insist that the language's grammar simply does not work that way. It is a grammatical rather than a semantic restriction. The contrast between (4.11.17b) and (4.11.17c) also illustrates that -siti can attach to taku, 'see', if it is not followed by a possessive suffix. Taku can either function as a transitive/reflexive or an intransitive stem. However, the correct generalization with -siti is that it cannot create stems with a subject argument which is equated with one of the arguments of the verb stem onto which it is attached. As discussed in reference to example (2.8.3), in some cases, it is indeed possible to add a possessive suffix onto a deverbal noun stem formed by suffixing -siti. However, in that case, the subject is treated as a semantic possessor rather than as a verbal argument.

- (4.11.17) a) *qukir -siti -nga SM shoot(TR) -SITI -his/her.sg *'He/she shoots it well.'
 - b) Jaani taku -siti SM John(ABS) see -SITI 'John sees well.'

(4.11.17) c) *Jaani taku -siti -nga SM
John see -SITI -his/her.sg
*'John sees him/her well.'
'he/she sees John well.'

There are two other classes of nominalizing suffixes that do allow non-reflexive deverbal noun stems to be formed from transitive verb stems, but only if they are followed by a possessive suffix, -gi, 'have', -qar, 'have', or -lik, 'one that has'. They will be discussed in the following two sections, and they differ from active participles and -siti in this regard. The presence of nominalizing suffixes that can only attach to intransitive stems illustrates that derivational processes can distinguish between [intransitive] and [transitive] inputs. As discussed in section (4.2), this is ultimately supportive of analyses which make use of multiple derivational rules to account for transitivity alternations. Since any given transitivity alternation can ultimately be handled by claiming that there are two derivational rules which specify whether the input is [intransitive] or [transitive], it is not ultimately possible to motivate anything like a PIV to handle a transitivity alternation. Some speakers may simply make use of multiple derivational rules to get the pattern.

Active nominalizations can be understood as in (4.11.18). The suffixation of -juq/tuq creates a stem with a nominal referent which is identified with the subject of the verb stem to which it attaches.

Passive nominalizations can be understood as in (4.11.19) and (4.11.20). The suffixation of *-jaq/taq* creates a stem with a nominal referent which is identified with the object of the verb stem to which it attaches, as in (4.11.9). The output also has a dative

case-marked by-P that corresponds to the subject of the input.

The data from the next two sections on *suuq*-type nominalizations and active nominalizations will be used to argue that, when participles are used in possessive constructions, the subject is not demoted. (4.11.20) is minimally different from (4.11.19) in that the subject is not demoted. This alternative option is used when passive participles are used in possessive constructions.

(4.11.20) a)
$$INPUT < SUBJ(j),OBJ(i), list(x)>$$

Before addressing the morphosyntactic properties of -qar, it is necessary to address another property of this suffix which is not shown by examples (4.11.19) and (4.11.20). With verb stems formed by suffixing -qar, it is always possible to express a separate word in secondary case which is coreferential with the incorporated noun, whether -qar is attached to a lexical noun root or a deverbal noun, much as is the case with -lik, 'one that has', from example (4.10.9).

In (4.11.21), -qar is added to *illuk*, 'house', to create the stem *illuqar*,'have a house/houses'. In the theory of this dissertation, -qar never adds a possessive semantic relation to a word's argument structure. The possessive relation comes from a covert derivational rule which converts atransitive nouns to intransitive nouns, while adding a possessive relation to a noun stem's semantics, and adding a subject argument,

corresponding to the possessor, to a noun stem's argument structure list. -Qar attaches to intransitive nouns, and the subject argument of the verb stem created is identified with the subject of the intransitive noun stem onto which -qar is attached. The presence of the word *taitsuminga*, 'that one', in example (4.11.20), illustrates that the suffixation of -qar creates noun stems with an OBJ θ which is equated with the noun stem onto which -qar is attached.

The morphosyntactic properties of -qar can understood as in (4.11.22). The noun stem in the input has a nominal referent, a subject, and any number of other arguments, represented by list(x). The output has a SUBJ which is equated with the SUBJ of the input. It also has an OBJ θ which is equated with the nominal referent of the input. (4.11.22) a) INPUT R(i) <SUBJ(j), list(x)>

b) OUTPUT
$$\leq$$
SUBJ(j), OBJ θ (i), list(x) \geq

None of the possible theories discussed in this dissertation have difficulty explaining why passive participles can only be formed from transitive stems. The input for the derivational rule that forms deverbal nouns either requires the second element in the stem's argument structure to have a null or [illicit] case specification, to be an object, or the stem must be of the subclass [transitive].

A theory which makes use of null or [illicit] case specifications to explain the uses of transitive and intransitive verbal inflection runs into difficulties with active nominalizations. The theory would state that transitive verbal inflection can only attach to stems whose second element has an [illicit] case specification, and it changes the case specification of two arguments. Intransitive morphology assigns case to only one argument. If it were attached to a transitive stem, one of the arguments would retain an

[illicit] case specification. Such a word would be ruled out because there is a constraint against words with arguments with an [illicit] case specification. Only stems can have arguments with an [illicit] case specification, not words. However, this theory would not explain the ungrammaticality of (4.11.23).

If this form were grammatical, it would involve first creating an active nominalization of a transitive stem. This would nominalize one of the transitive verb stem's arguments, removing it from the argument structure of the deverbal nominal stem in the output. The stem *malittuq* in this example would have a nominal referent and a single argument in its argument structure with an [illicit] case specification. Suffixation of -u, 'be', would then add another argument with an [illicit] case specification to the stem's argument structure. This argument would be equated with the nominal referent of the noun stem *malittuq*. The output, *malittuu*, would have two arguments with an [illicit] case specification. Suffixation of transitive verbal morphology would change the case specifications of both of the arguments, creating a grammatical word.

A theory which makes use of TRANS features has little difficulty explainin the restriction. The derivational rule which creates active participles can only take an [intransitive] stem as its input. Furthermore, -u, 'be', can only attach to noun stems which are of the subclass [atransitive]. This will prevent -u from ever creating a transitive stem, which is descriptively accurate.

Another piece of data from this section is problematic for a theory which makes use of null or [illicit] case specifications to explain the uses of transitive and intransitive

verbal inflection. This is the inability for active participles or *-siti*, 'one that is/does X well', to nominalize an argument of a transitive stem even when the nominalizing suffix is followed by a possessive suffix. The relevant example is repeated below.

This is in contrast to the agentive nominalising suffix -ji which can nominalise the subject of a transitive verb if it is followed by a possessive suffix, as shown by example (4.2.8), repeated below as (4.11.25).

Let us first address how a theory which makes use of [illicit] case specifications would account for example (4.11.17). The verb stem, *nalligi*, 'love', has two arguments with an [illicit] case specification, the first one corresponding with the subject, the second one corresponding to the object. Suffixation of *–ji* identifies the nominal referent of the output with the first element of the input's argument structure. The first element of the input's argument structure gets deleted so that the second argument of the input, the one who is loved, becomes the only argument in the output's argument structure. Finally, addition of the possessive suffix assigns case to the remaining argument corresponding to the one who is loved. This theory has no way to prevent the same derivation from occurring with *–siti* in example (4.11.24).

4.12 Suuq-type Nominalizations

This section will be a discussion of some grammatical restrictions that are somewhat tricky, as they apply to a number of nominalising suffixes in the language.

One of the most important theoretical discussions in this chapter will also occur in this section. Included in this class are the habitual nominalizing suffix -suuq, -gunaq, 'one which seems to', -gialik, 'one which needs to', and -jutsaq⁵⁶, 'one which should', the comparative nominalizing suffix, -nirsaq, and the superlative nominalizing suffix, -nirpaaq. As with the previous two sections, understanding the analysis of [atransitive] versus [intransitive] nouns, as presented in section 2.7 and in section 4.2, in reference to examples (4.2.7) to (4.2.10), will be quite important to understanding this section. There will also be some typologically interesting data regarding the restrictions on comparative constructions when the nominalizing suffix -nirsaq, 'one that is more', is used, since the author does not know of any other languages with a similar set of grammatical restrictions on comparative constructions.

These suffixes can nominalize either the subject of an intransitive stem or the object of a transitive stem, as illustrated by examples (4.12.1) and (4.12.2).

'I gave it to the one who kicks the rock.'

-

^{&#}x27;I gave it to the one that John kicks.'

For MG, 'should' is expressed by first adding either the active participle forming suffix -*juq/tuq* onto an intransitive stem, or the passive participle forming suffix- *jaq/taq* onto a transitive stem. This is followed by the adjectival suffix -*tsaq*, 'one that will or should'. JO also allows these forms, but she also allows -*jutsaq/tutsaq* to be added to transitive stems, but only if it is used in a possessive construction. MG does not allow this.

In both of these examples, the predicate is *aalaurtara*, 'I gave it to someone', or 'one that I gave something to'. The goal argument is placed in dative case. In (4.12.1), *tukiisuumut*, 'to the one that kicks something', functions much as an active nominalization, since the single argument of an intransitive antipassive stem is nominalized. *Ujararmik*, 'rock', bears secondary case in this example because it expresses the OBJ0 of the antipassive stem *tukii*, 'kick'. In (4.12.2), *tukisuunganut*, 'to the one that he/she kicks', is an object nominalization. It is very similar to passive nominalizations, since it nominalizes the object, it is formed from a transitive verb stem, and the subject of the transitive verb stem is treated like a noun's possessor. The possessive suffix assigns relative case to , *Jaaniup*, and it also indicates the person and number of *Jaaniup*.

Transitive triadic verbs also allow the object to be nominalized in *suuq*-type nominalizations. An example is given in (4.12.3) below. *Aittuq* is a verb stem for 'give' which treats the recipient as an object, and the theme as an OBJ0. The plural possessive suffix indicates that the entity which was nominalized, the recipient, is plural. The secondary case marking on *qimirquanik*, 'books', indicates that "books" are the entities which are given away. This is an example of a deverbal noun being converted into a clausal word as discussed in sections (2.3), (2.4), and (2.6).

(4.12.3) qimirrua -nik aittu -suu -kka book -SEC.pl give -HABNOM -my.pl 'I give them books.

Example (4.12.4) illustrates that it is possible to add an adjectival suffix onto *suuq*-type nominalizations, in which case it modifies the nominal referent of the deverbal noun. Again, this is another example of an object nominalization.

(4.12.4) quki -suu -raalu- kka JO shoot(TR)-HABNOM -big -my.pl(ABS) 'The big ones which I shoot.'
'I shoot the big ones.'

However, in other ways, *suuq*-type nominalizations behave differently from passive participles, described in the previous section. Example (4.12.5) is equivalent to one of the uses of passive participles, where the subject is demoted to *by*-phrase status when the object is nominalized, and the deverbal noun which is created is used as a predicate. If this demotion were possible, *tukisuuq* would mean 'one that gets kicked', and *Jaanimut* would express the demoted subject, which is the one that kicks something. In this example *tukisuuq*, 'one that gets kicked' would be used as a predicate of *ujaraq*, 'rock', indicating that it is the rock that gets kicked. The sentence would mean, 'the rock gets kicked by John'.

(4.12.5) *ujaraq tuki-suuq Jaani-mut JO rock(ABS.sg) kick(TR)-HABNOM(ABS.sg) John-DAT.sg *'The rock gets kicked by John.'

Example (4.12.6) is a grammatical way to say 'the rock gets kicked by John'. In this example, a passive participle is formed from *tukir*, 'shoot'. The subject of *tukiq*, *Jaanimut*, is treated like a *by*-phrase and given dative case. *Tukirtaq*, 'one that is kicked', is then reverbalized with -u, 'be', and then this intransitive stem is nominalized by -*suuq*. In (4.12.6), *tukirtausuuq*, 'one that gets shot', is used as a predicate of *ujaraq*, 'rock'. Together, these three words mean 'the rock gets kicked by John.'

(4.12.6) ujaraq tukir -ta -u -suuq Jaani -mut JO rock(ABS.sg) kick(TR) -PPT -be -HABNOM(ABS.sg) John -DAT.sg 'The rock gets kicked by John.'

The next several examples will be used to argue the following points. When -suuq attaches to [intransitive] verb stems, nominalizing the subject, the output is an

[atransitive] noun stem. When *-suuq* attaches to a [transitive] verb stem the output is an [intransitive] noun stem.

(4.12.7) tuki -suu -mut aa -laur -ta -ra JO kick -HABNOM -DAT.sg give-PAST -PPT -my.sg 'I gave it to the one who kicks himself/herself.'

*'I gave it to someone who gets kicked.'

*'I gave it to someone who kicks someone else.'

Example (4.12.7) is like example (4.12.2) except that there is no possessive suffix following -*suuq*. While example (4.12.2) is indeed an object nominalization, in (4.12.7), a reflexive reading is required, indicating that -*suuq* can only attach to [intransitive] stems when it is followed by -*mut*, and then used as a word. In terms of the theory of this dissertation, nominal inflectional morphology that inflects for the number of the noun stem which it attaches to, but which does not show person or number agreement for a SUBJ argument, can only attach to [atransitive] stems. Under this theory, the ungrammatical translations of (4.12.7) are ungrammatical because it is not possible for -*suuq* to create an [atransitive] noun stem from a [transitive] verb stem.

Example (4.12.8) also shows that [atransitive] noun stems can only be created by adding -suuq if -suuq is attached to an [intransitive] verb stem. It is important to recall, from the discussions of examples (4.2.7) to (4.2.10), that inflectional morphology that only indicates the number and the case of the noun which it is attached to without giving any inflection for a possessor/subject argument can only be attached to [atransitive] stems. The null derivation which creates absolutive singular nouns from noun stems would only apply to noun stems which are [atransitive]. Since *katasuuq* is absolutive singular, we can conclude that the output of suffixing -suuq in this example is [atransitive]. Since *katak* means 'fall' only when it is intransitive, it must be that, when

the output of suffixing -suuq is [atransitive], the input must be an [intransitive] verb stem.

(4.12.8) kata -suuq JO
fall(ITR) -HABNOM(ABS.sg)

'The one that falls'

*'the one that gets dropped'

*'the one that drops something'

Possessive suffixes are not the only suffixes which can attach to [intransitive] nouns. In examples (4.7.8) to (4.7.9) another [intransitive] noun stem was discussed, nalligiji, one who loves someone'. It involved producing an agentive nominalization from a transitive stem. While nalligiji cannot be used as a word, it could be if it were followed by either a possessive suffix or -qar, 'have'.

The next three examples will make use of the suffix -gi, 'have'. Suuq-type nominalizations can nominalize the object when they are reverbalised with -gi, showing that -gi is like -qar in that it can attach to [intransitive] noun stems.

- (4.12.9) tuki -suu -ri -gunnai -ta -ra JO kick(TR) -HABNOM -GI -no.longer -PPT -my.sg(ABS) 'I no longer kick it.'
- (4.12.10) mali -suu -gulu-gi -gunnai -ta -ra JO follow -HABNOM -little-GI -no.longer -PPT -my.sg(ABS) 'I no longer follow the little one.'
- (4.12.11) ujaraq tuki -suu -gulu-gi -gunnai -ta -ra JO rock(ABS.sg) kick(TR) -HABNOM -little -GI -no.longer -PPT -my.sg 'I no longer kick the little rock.'

Recall from section (4.10) that -gi creates transitive stems which equate the subject with the subject of the noun stem onto which -gi is added, and which equates the object with the nominal referent of the noun stem onto which -gi is attached. If we can determine the identity of the object of the stem created by the suffixation of -gi, then we know what argument has been nominalized by -suuq. All of these examples make use of

possessed passive participial predicates which nominalize the object. The entity which is nominalized by the passive participle forming suffix corresponds to the one that is kicked or followed in these examples, illustrating that the suffixation of *-suuq* produces object nominalizations in these examples. Furthermore, the use of *-guluk* in (4.12.10) and (4.12.11) shows that it is the object of the stem onto which *-suuq* is attached which gets nominalized in these examples, since the one that is small is either the thing that is kicked or the one that is followed.

One important construction in the language that follows the pattern of *suuq*-type nominalizations involves the suffix *-nirsaq*. In (4.12.12), the stem *nalligusunnisaq* must be a subject nominalization, because *-nirsaq* has been attached to an antipassive stem. The subject of *nalligusuk* is the one that loves someone and this is what is compared to the argument bearing ablative case. *Nalligusunnisaq* has been reverbalized with *-u*, 'be'. *-U* is used to verbalize [atransitive] noun stems without a subject argument. It has then been given inflection for a third person singular subject, and it is placed in the established mood with the meaning 'because'. Crucially, the entity which is nominalised by *nalligusunnisaq*, 'one that loves someone', is the entity which is compared with the ablative argument *Jaanimit*, as discussed in section 3.9.

(4.12.12) nalli -gusun -nisa -u -ga -mi Jaani -mit MG love -AP -one.that.is.more -be -EST -3sg John -ABL.sg 'Because he/she loves someone more than John does.'

*'Because he/she loves someone more than he/she loves John.'

In (4.12.13), *nalliginirsaq* is formed from a transitive stem. It is then suffixed with a possessive marker. The translations illustrate that it is an object nominalization. *Jaanimit* is compared with the nominal referent of *nalliginirsara*, which is the one that is loved, the original object of *nalligi*, 'love'. Based on all of the data that I have looked at,

the correct generalization is that, with *-nirsaq*, the argument marked with ablative case are always compared with the entity which is nominalised

(4.12.13) Jaani -mit nalli -gi -nirsa -ra MG
John -ABL.sg love -TR-one.that.is.more -my.sg
'I love him/her more than I love John.'
'One that I love more than I loveJohn.'
*'I love him/her more than John does.'
*'one that I love more than John does'

Example (4.12.14) differs from example (4.12.12) in that *nalliginirsaq* is formed from a transitive stem, much as in (4.12.13). It is then reverbalized with -*gi*, 'have', rather than -*u*, 'be'. In this case, the argument bearing ablative case is compared with the one that is loved, the object of the transitive stem *nalligi*. This illustrates that it is the object of *nalligi*, 'love', that gets nominalized in this sentence word. *Nalliginirsari* has then been given inflection for a third person singular subject, and a third person singular object. The subject, *Maryup*, is placed in relative case because it is the subject of a verb which inflects for two arguments.

Because of the restriction that the argument bearing ablative case can only be identified with the nominal referent of the stem created by adding *-nirsaq*, if one wants to say 'I go to this house more often than this house', it is necessary to use a verb stem which treats the area gone to as an object, as in example (4.12.15).

^{&#}x27;Because Mary loves him/her more than she loves John.'

^{*&#}x27;Because Mary loves him/her more than John does.'

(4.12.15) tanna illuk MG this.one(ABS) house(ABS.sg)

> upa -suu -ri -nirsa -ra go.to -HABNOM -GI -one.that.is.more -my.sg

tatsu -manngat illu -mit MG this.one -ABL.sg house -ABL.sg

'I go to this house more often than this house.'

The predicate *upasuurinirsara* is formed as follows. As discussed in example (3.3.7), *upak*, 'go to', is a transitive stem with a subject that goes somewhere, and an object which denotes the area gone to. It has first been suffixed with the habitualizing suffix *-suuq*, followed by *-gi*. The output *upasuuri*, 'habitually go to', has the same argument structure as *upak*, 'go to', since the object has been nominalized and then turned back into an object, while the subject has remained a subject throughout the process of adding *-suuq* and then reverbalising with *-gi*. This transitive stem then undergoes an object nominalization, and the subject, the one who goes somewhere, is expressed with a possessive suffix. *Upasuurinirsara* means 'one that I go to more often'. Because *upasuurinirsara* is used as a predicate, the absolutive argument corresponds to the nominal referent of *upasuurinirsara*. Because the place gone to is the object which is nominalized by *-nirsaq* in this example, the ablative case marked argument is compared with the place that is gone to.

The options available to *suuq*-type nominalizations can be understood as in (4.12.16) and (4.12.17). These are identical to the options which are available to active participles and to passive participles when the subject is not demoted. The nominal referent of the *suuq*-type nominalization is identified with either the subject or the object of the input, as in (4.12.16) and (4.12.17). Similar types of rules to explain the suffixes

-u, 'be', -gi, 'have', and -lik, 'one that has', were given in section (4.10).

(4.12.16) a) $\langle SUBJ(i), list(x) \rangle$

- b) R(i), $\langle list(x) \rangle$
- (4.12.17) a) INPUT \leq SUBJ(j),OBJ(i) list(x) \geq
 - b) OUTPUT R(i), $\langle SUBJ(j)$, $list(x) \rangle$

At this point, it should be noted that there is some inter-speaker or dialectical variation with some of the *suuq*-type nominalizations. With JO, the habitual nominalizing -suuq, -gunaq, 'one which seems to', -gialik, 'one which needs to', and -jutsaq, 'one that should', all have exactly the restrictions on use that I have described. MG shares the same judgements for -suuq, -gunaq, and -gialik, though -jutsaq doesn't really exist in her dialect, and SM shares the same judgements for -suuq, though I have not had the chance to check her judgements for the other aforementioned suffixes. The areas where there is some interspeaker variation involve the comparative suffix -nirsaq, and the superlative suffix *-nirpaaq*. With example (4.12.18), SM does not know whether a reflexive reading is required if the reflexive pronoun *imminik*, 'self', is left out of the sentence. This example involves attaching *-nirsaq* onto a transitive stem, and treating the output as an [atransitive] noun stem, since the covert derivational rule which derives absolutive singular nouns from noun stems only applies to [atransitive] nouns. The situation might be the same in the dialect of MG, since she claims that *nalliginirsaq* can be used in sentences meaning 'he/she loves himself/herself more than someone else does', but one has to add the word *imminik*, 'self', suggesting that it might be unknown in her dialect whether or not a reflexive reading is required for this word, since it is never used without imminik.

(4.12.18) nalli -gi -nirsaq SM love -TR -one.that.is.more ??'one that is loved more' ??'one that loves himself/herself more'

However, SM is sure that a reflexive reading is not required in (4.12.19), where -lik, 'one that has', is attached to the stem nalliginirsaq. In section (4.13), evidence will be presented that *-lik* attaches to [intransitive] noun stems. The analysis for *-lik* was given in (4.10). The index of the output is identified with the index of the subject of the input, in this case, the one that loves someone. While it is glossed as 'one that has', it does not add a possessive relation to a word's semantic structure. It only appears to indicate possession in some cases because there is a covert derivational rule which converts nouns of the type [atransitive] into nouns of the type [intransitive] while adding a possessive semantic relation as well as a subject argument corresponding to a possessor to a noun's argument structure list. The issue surrounding the confusion about example (4.12.18a) appears to be that SM is not sure if there is a derivational rule where -nirsag can attach to a [transitive] verb stem, where the output is [atransitive], though example (4.12.18a) shows that she is sure that there is a derivational rule where *-nirsag* can attach to a transitive stem where the output is [intransitive]. Example (4.12.19b) is from the dialect of MG. The translations show that when *-nirsag* is followed by *-lik*, it functions as an object nominalization.⁵⁷

(4.12.19) a) Jaani -mit nalli -gi -nirsa -lik SM John -ABL.sg love -TR -one.that.is..more -one.that.has 'He/she loves someone more than John.'

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⁵⁷ If *tatsuminga* from example (4.12.19b) is repaced with the comparative case-marked form *tatsumannganit*, both of the translations become acceptable.

(4.12.19) b) Suusi taitsu -minga nalli -gi -nirsa -lik Sue(ABS) that.one -SEC.sg love -TR -one.that.is.more-one.that.has tatsu -manngat this.one -ABL.sg

'Suusi loves that one more than she loves this one.'

Even more striking is the dialectical variation surrounding the superlative suffix -nirpaaq. MG's assessment of (4.12.20), where -nirpaaq is added to the transitive stem nalligi, is that she does not know what it means. However, for SM, the sentence clearly means 'Sue is loved the most.' Again, for MG, the problem is most likely that she does not know whether a reflexive reading is required for this sentence in her dialect. In other words, SM does have a derivational rule that allows -nirpaaq to nominalize the object of a transitive stem while creating an output which is [atransitive], but MG is not sure if such a rule does or does not exist in her dialect.

(4.12.20) suusi nalli -gi -nirpaaq MG
Sue(ABS) love -TR -one.that.is.most
??'Sue is loved the most'
??'Sue loves herself the most'

However, for MG, two other derivational rules clearly are acceptable for this suffix. As with –*suuq*, it can either nominalize the subject of an intransitive verb, in which case the output is [atransitive], or it can nominalize the object of a transitive verb, in which case the output is [intransitive], with a subject argument corresponding with the subject of the verb stem onto which –*nirpaaq*, 'one that is more', was attached. Examples (4.12.21a) and (4.12.21b) illustrate that –*nirpaaq*, 'one that is more' can nominalise the subject of an intransitive verb in which case the output is [atransitive]. In (4.12.20a) it is attached to an antipassive stem with an OBJθ corresponding to the one that is loved. The equivalent of

^{*&#}x27;Suusi loves that one more than this one does.'

(4.12.20a) is also grammatical in the dialect of SM. In (4.12.21b), it is attached to a passivized stem with a dative case-marked argument corresponding to the one that loves someone. In both cases, the deverbal nouns are used as predicates, and the absolutive argument corresponds to the entity which was nominalised. And, in both cases, the entity which is nominalized corresponds to the single argument of the intransitive verb stems onto which *-nirpaaq* was attached. Note that the translations of these sentences illustrate that the entity which is nominalised is the one that does the most loving.

- (4.12.21) a) Suusi Mary-mik nalli -gusun -nipaaq MG Sue(ABS) Mary-SEC.sg love -AP -one.that.is.most 'Sue is the one that loves Mary the most.'
- (4.12.21) b) Mary Suusi-mut nalli -gi -ja -u -nirpaaq MG Mary(ABS) Sue -DAT love -TR-PPT -be- one.that.is.most 'Sue loves Mary more than she loves anyone else.'

Examples (4.12.22) to (4.12.24) illustrate that MG does allow *-nirpaaq* to attach to transitive stems, nominalizing the object, if the output is followed by a suffix which attaches to [intransitive] noun stems. The suffixes in question are the possessive suffix in (4.12.22), and -lik, 'one that has', in (4.12.23) and (4.12.24).⁵⁸ The translations given for examples (4.12.22) and (4.12.23) illustrate that the argument corresponding to the object

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⁵⁸ Example (4.12.24) does bear on one of the questions raised in section 2.6. For transitive clausal words, there is a semantic relation that was translated as 'i is a different entity from j'. It was assumed that this semantic restriction is added either by [transitive] verbal inflectional morphology or by [intransitive] nominal inflectional morphology. However, up to this point, another possible analysis has been possible. In particular, it could be that the semantic restriction is a property of [transitive] verb stems, and it is removed by the covert derivational rule that converts [transitive] stems into [intransitive] stems with a reflexive reading. However, (4.12.24) is inconsistent with such an analysis. Under the analysis of this dissertation, -lik attaches to [intransitive] noun stems. The strongest evidence for this claim will come from section (4.13). Similarly, under the analysis of this dissertation, suffixation of a *suuq*-type nominalizing suffix can only create an [intransitive] output if the input is [transitive]. Therefore, the stem nalligi must be [transitive]. It is not an [intransitive] reflexive stem. However, this sentence has a reflexive reading, whereby the original subject and object of the verb stem *nalligi* are equated. There appears to be no other stage in this words derivation where the reflexive rule could be applied, suggesting that a theory where the reflexive rule is required to remove the semantic restriction 'i is a different entity from j' should be rejected. It appears to be preferable to claim that the semantic relation in question is added by inflectional morphology that attaches to [intransitive] noun stems or to [transitive] verb stems.

of *nalligi*, 'love', is the one who is loved the most in these examples.

- (4.12.22) Suusi Jaani -up nalli -g -nirpaa -nga MG Sue(ABS) John -REL.sg love -TR -one.that.is.most -his/her.sg 'John loves Sue the most.'
- (4.12.23) Suusi Mary-mik nalli -gi -nirpaa -lik MG Sue(ABS) Mary-SEC.sg love -TR -one.that.is.most -one.that.has 'Sue loves Mary more than anyone else does.
- (4.12.24) immi -nik nalli -gi -nirpaa -lik MG self -SEC love -TR -one.that.is.most -one.that.has 'He/she loves himself/herself more than anyone else does.'

A few further points should be made to help understand these examples. The predicate in (4.12.22) is an object nominalization with a relative case-marked subject. Since it is used as a predicate, the absolutive argument corresponds to the nominal referent of the predicate, which corresponds to the object of the transitive verb stem nalligi, 'love'. Examples (4.12.23) and (4.12.24) make use of the suffix -lik, which was described in section (4.10). The noun stem created has an OBJ θ which is identified with the noun stem onto which -lik is attached. The OBJ θ s in these two examples are Marymik, 'Mary' and imminik, 'self'. They are equated with the one who is loved showing that the stem *nalliginirpaaq* functions as an object nominalization in these examples. Suffixation of *-lik* also creates a stem whose nominal referent is equated with the subject of the noun stem onto which -lik is attached. In other words, the nominal referent of noun stems created by suffixing -lik is the same as that which would get relative case if a possessive suffix were added to the stem. Since *nalliginirpaalik* is used as a predicate in (4.12.23), the absolutive argument is equated with its nominal index. Since Suusi is the one who does the loving in this example, we see that the index of nalliginirpaalik corresponds to the subject of nalligi, 'love'. This also shows that the

subject of the stem *nalliginirpaaq* is the same as the subject of *nalligi*, 'love'.

Before turning to the next set of suffixes, another point should be made about the verbalizing suffixes -gi, 'have' and -u, 'be'. The suffix -u can never be used to create a transitive stem in Inuktitut. One instantiation of this generalization is illustrated by the contrast between (4.12.25) and (4.12.26). In (4.12.18), -gi is attached to an object nominalization to create a transitive stem. (4.12.19) illustrates that it is ungrammatical to replace -gi with -u.

- (4.12.25) nalli -gi -nirsa -ri -ja -git Jaani -mit MG love -TR -one.that is more -GI -INDT -1sgA:2sgU John -ABL.sg 'I love you more than I love John.'

 *'I love you more than John does'
- (4.12.26) *nalli-gi -nirsa -u -ja -git MG love -TR -one.that is more -be -INDT -1sgA:2sgU *'I love you more than someone.'

At first glance, examples (4.12.27) may appear to be an exception to the generalization that -u can never be used to create transitive stems in Inuktitut. We would expect (4.12.28), where -u is replaced by -gi, to be grammatical, but (4.12.27) should not be. However, both are grammatical.

- (4.12.27) mali -suu -ngu -ja -git MG follow -HABNOM -be -INDT -1sgA:2sgU 'I follow you.'
- (4.12.28) mali -suu -ri -ja -git MG follow -HABNOM -GI -INDT -1sgA:2sgU 'I follow you.'

However, the sequence *suugu* in (4.12.27) should probably be analyzed as a single suffix which creates verb stems from verb stems. Examples (4.12.29) and

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⁵⁹ The second translation on (4.12.25) becomes possible if one replaces *Jaanimit* with the comparative case-marked form *Jaani-minit*.

(4.12.30) illustrate that it is not possible to add an adjectival suffix between *suu* and *ngu* when a stem with transitive verbal morphology is created, but it is possible when a stem with intransitive morphology is created.

- (4.12.29) *mali -suu -raapi -u -ja -git MG follow -HABNOM -dear/small -be -INDT -1sgA:2sgU *'I follow you, dear one.'
- (4.12.30) mali -suu -raapi -u -ga -mi MG follow -HABNOM -dear/little -be -EST -3sg 'because the dear one follows someone/something.'

In contrast, example (4.12.31) illustrates that it is possible to place an adjectival suffix between *-suuq* and *-gi* when a transitive stem is created.

These data are consistent with the following analysis. The suffix *-suuq* can either create [atransitive] noun stems from [intransitive] verb stems, or it can create [intransitive] noun stems from [transitive] verb stems. -U can only attach to [atransitive] noun stems to create [intransitive] verb stems. The language also possesses a separate morpheme, -suungu which attaches to verb stems to create verb stems while inheriting the TRANS feature of the stem onto which -suungu is attached.

At this point, it may be helpful to reiterate the ways in which a theory which makes use of a TRANS feature can account for the restrictions on *-suuq* type nominalizations. There are two derivational rules involving the suffixation of *-suuq*. One of these rules creates noun stems which are [atransitive] from verb stems which are [intransitive]. This involves nominalization of the subject of an intransitive verb stem. The other rule creates noun stems which are [intransitive] from verb stems which are

[transitive]. This involves the nominalization of the object of a transitive stem. These stems can either be reverbalized or they can be given nominal inflection. If nominal inflection is given to a stem which is [intransitive], a possessive suffix is used, and the subject is assigned relative case. Otherwise, there is only number inflection. The suffixes -gi, 'have', and -lik, 'one that has', attach to [intransitive] noun stems, whereas -u, 'be', attaches to [atransitive] noun stems, with the morphosyntactic input to output mappings discussed in section (4.10).

In this dissertation, an analysis which makes use of multiple derivational rules is preferred to one that tries to capture the ergative pattern exhibited by these suffixes with a single derivational rule for a number of reasons. As discussed in Chapter 2, the theory of HPSG would most likely attempt to address the restriction that absolutive objects of transitive verbs must get a specific reading using type theory. It is a property of all clausal words of the type [transitive] that the second element in the verb's argument structure must get a specific reading. In the theory of LFG, which could capture the generalization by claiming that OBJs must be specific, something along the lines of the type theory of HPSG might still be helpful to explain why subjects of transitive verbs get relative case but subjects of intransitive verbs do not. If our theory already allows the grammar to treat transitive verbs differently from intransitive verbs, then there is little motivation for creating an additional theory to explain the existence of either 'ergative' oriented or 'accusative' oriented patterns in the language, unless there is some reason to believe that these are the only types of transitivity alternations that exist in the language, or that the language does not allow multiple derivational rules to be associated with any of its suffixes. However, based on the overview in section (4.2), the correct

generalization appears to be that quite a wide variety of different restrictions and transitivity alternations exist with the different derivational suffixes of this language. A theory which makes use of multiple derivational rules will be assumed for reasons discussed in that section.

The analysis presented herein, which distinguishes [atransitive] and [intransitive] noun stems, as presented in section (2.7) and in the discussion of examples (4.2.7) to (4.2.10), has the advantage that it can account for the restrictions on which derivational and inflectional suffixes can attach to which noun stems. While the passive participle forming suffix can create noun stems which are either [atransitive] or [intransitive], the derivational rule which adds *-suuq* to a transitive stem can only create [intransitive] noun stems. For passive participles, on the other hand, there are two derivational rules which create either [atransitive] or [intransitive] outputs. The theory also has the advantage that it allows the speaker variation that is observed with *-nirpaaq* and *-nirsaq*, as discussed earlier in this section.

The patterns which are observed with either *-suuq* or active and passive participles are not too surprising from a functionalist standpoint. In both cases, ambiguity with repect to whether the subject or the object is nominalized is avoided. Passive participles always nominalize the object of a transitive stem, and there is never a

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⁶⁰ There is a possible objection to the theory that I have presented. While I have given a single derivational rule for *guma*-type control suffixes in section 4.3, whether they attach to intransitive or transitive stems, I give 2 derivational rules for the ergative pattern associated with *suuq*-type nominalizations and the use of adjectival suffixes in section 4.16. At a certain level, I do agree with the objection, but it should be pointed out that there is yet another empirical reason to think that it is not unreasonable to adopt an analysis in which there are two derivational rules for *suuq*-type nominalizations. With active and passive participles, the alternation between subject nominalizations and possessed subject nominalizations do require us to make use of two different derivational rules, because the phonological forms of active and passive participles are different. On the other hand, there are no subject control suffixes that treat intransitive stems differently from transitive stems.

reflexive reading. Active participles always nominalize the subject. With *suuq*-type nominalizations, one can examine the suffixes that are attached after *-suuq* to determine whether it is a subject nominalization or an object nominalization. The inability for *suuq* to create an [atransitive] output from a [transitive] stem appears to be related to a need for words to be unambiguous. If *-suuq* could create an [atransitive] output from a [transitive] stem, then we would not know whether it is the subject or the object which is nominalized when *-suuq* attaches to either a transitive/reflexive or an all purpose stem.

As discussed in Chapter 2, the ergative case system itself can also be related to the system of deverbal nouns used in this language from a language processing view. If there are two absolutive nouns in a sentence, and no verb, then the two nouns can be equated. Whichever noun is chosen as the nominal predicate, the meaning of the sentence will be the same. After choosing which one will be the predicate, one can then easily determine if the argument in question is a subject, in which case, it does not need to get a specific reading, or an object, in which case it must get a specific reading.

The data in this section are problematic for a theory which makes use of a null or [illicit] case specification to rule out the possibility of adding –*suuq* to a transitive stem while nominalizing the subject rather than the object. The theoretical problem was discussed in reference to active nominalizations which can also never be formed from transitive stems. The discussion was given in the previous section in reference to examples (4.11.16) and (4.11.17). Similarly, the ungrammaticality of (4.12.26) would be problematic for all the same reasons that (4.11.12) is. Those reasons were given in the previous section in reference to that example.

The restrictions on *suuq*-type nominalizations can be understood in two different

ways. When they nominalize the object, they create a noun stem with a subject. We can claim that this subject needs to be assigned case, since words with caseless arguments are presumably illicit in Inuktitut. The restriction that *suuq*-type nominalizations can only nominalize the object when they are used in a possessive construction is the strongest evidence in this dissertation that there is a constraint against words with caseless arguments in Inuktitut. However, there is another way to explain the restriction on *suuq*-type nominalizations, to be addressed at the end of this section.

Manning's theory (1996) is not adopted in this dissertation for reasons overviewed in section (4.2). In Manning's theory, the PIV, or pivot, is equated with either the first argument of an intransitive stem or the second element of a transitive stem. We could in priciple claim that *suuq*-type nominalizations nominalize the PIV. However, in Manning's theory, we most likely still need two separate derivational rules for suffixes such as *-suuq*: one which deletes the first element of a verb's argument structure when the PIV is equated with the first element, and another which deletes the second element when the PIV is equated with the second element.⁶¹

4.13 Agentive nominalizations

This suffix was discussed in reference to examples (4.2.7) to (4.2.10). Those examples will be repeated below, and will be followed by a discussion of some of the other grammatical options with this suffix, and the analysis given in reference to those

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⁶¹ Alternatively, we could argue that arguments that are nominalized are not deleted from a noun stem's argument structure list, but, rather, they belong to a phonologically covert category such as PRO, from the principles and parameters approach. Or, we could modify Manning's theory so that objects come before subjects in a word's argument structure, and –*suuq* nominalizes the first element in a verb stem's argument structure list. Under this alternative theory, subject oriented phenomena could be handled with a PIV which is equated with the first element of an intransitive verb's argument structure or the second argument of a transitive verb's argument structure. This would allow us a single derivational rule for *-suuq* where the first element of a verb's argument structure is always nominalized. In this dissertation, it is assumed that the ability to capture the use of a group of suffixes with a single derivational rule is not sufficient evidence to motivate a theory.

examples will also be important to understanding this section. When it attaches to an intransitive stem, it often means 'one that does something as a profession'. Two examples of its use are given in (4.13.1a) and (4.13.1b). This suffix differs from the active participle forming suffix -juq/tuq, however, in that it can only be used to nominalize certain agentive roles. Unlike -juq/tuq, which can always be placed onto passive stems, or stems formed with -tsau, 'can/should be X'ed', JO has not been able to produce any examples where such verb stems can be nominalized with -ji/ti.⁶²

- (4.13.1) a) ilinnia-tit -si -ji (Schneider 1985) learn -cause -AP-JI 'teacher'
 - b) nalli -gusuk -ti SM love -AP -JI 'He/she always loves everyone.'

An example where —*ji/ti* is attached to a transitive stem is given in (4.13.2). In this example, -*ji/ti* is attached to the transitive stem *nalligi*, 'love'. *Nalligiji* is then followed by a possessive suffix which agrees with a first person singular argument. This first person argument is equated with the object of *nalligi*, 'love', the original verb stem onto which-*ji/ti* was attached.

However, there is an important difference between the noun stems *nalligiji* and

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⁶² It would be very interesting to see just what range of verb stems can be nominalized by this suffix, but I have not had a chance. But, moreover, it is very interesting that nominalizing suffixes can be sensitive to the thematic role of the argument that is nominalized. If nominalizing suffixes can be, then it should also be possible for transitive verb stems in the lexicon to have a similar semantic restriction. Most informally, we could say that the index *i* of the subject argument relates to the semantic relation '*i* takes on the actor or the author thematic role with respect to *s*', where *s* is the situation described by the verb root. For an indepth discussion of the actor and author thematic roles, see Frawley (1992). Likewise, antipassive roots in the lexicon seem to have the same thematic restrictions for their subject argument. We could claim that antipassive stems are really a subtype of [intransitive] roots which must have at least two arguments in their argument structure and for which the subject argument must take on the actor or the author thematic role.

ilinniatitsiji from the previous two examples. In particular, the noun stem *nalligiji* cannot be used as an independent word, as illustrated by the ungrammaticality of (4.13.3). Unfortunately, I have not had enough opportunity to check whether or not this really can be used as a word meaning 'one who loves oneself as a profession'. If such an interpretation were possible, it would involve suffixing -ji/ti onto an intransitive stem because reflexivization is an intransitivizing process.

In terms of the theory of this dissertation, the stem *nalligiji*, from the previous two examples, is [intransitive]. Noun stems which are [intransitive] cannot be given nominal inflection which indicates number without showing agreement for a relative case-marked subject argument. The covert derivational rule which creates absolutive singular nouns from noun stems is included within the group of derivational processes which can only take [atransitive] nouns as their inputs.

There are other suffixes in the language that can attach to [intransitive] noun stems. In example (4.13.4), -qar is attached onto nalligiji, the [intransitive] noun stem from examples (4.13.2) and (4.13.3). As is the case of possessive suffixes, when -qar is attached to ordinary noun stems from the lexicon, it indicates a possessive relationship. It is normally translated as 'have', and the subject of the verb stem which is created is the possessor. However, when -qar is attached to nalligiji, the subject of the verb stem which is created is equated with the object of nalligi, 'love', as in example (4.13.4), where -qar has been added onto nalligiji, prior to suffixing verbal morphology for a first person argument, with the translation 'someone loves me'.

(4.13.4) nalli -gi -ji-qar -tu -nga MG love -TR -JI-have -INDI -1sg 'Someone loves me.'

Example (4.13.5) makes use of *-lik*, 'one that has', another suffix which attaches to [intransitive] noun stems. In this example, the entity which was originally the object of *nalligi*, 'love', becomes the nominal referent of *nalligijilik*, 'one that someone loves'. Since *nalligijilik* is used as a predicate, the absolutive argument is the one that someone loves.⁶³

(4.13.5) Jaani nalli -gi -ji -lik MG John love -TR -JI -one.that.has 'Someone loves John.'

More research needs to be done on the semantic restrictions associated with the suffix -ji/ti. The contrast between (4.13.6a) and (4.13.6b) shows that it is possible to attach –ji followed by a possessive suffix onto the stem uqausiliriji but not onto the stem taku, 'see'. The verb stem uqausiliri will be addressed in more depth in section 7.1. It can either be an intransitive stem meaning 'work on a language' or it can be a transitive stem meaning 'work on X's language', where X is treated as the object. In this example, uquasiliri is a transitive verb stem. The difference in grammaticality between (4.13.6a) and (4.13.6b) is most likely related to the fact that the subject of uqausiliri takes on a volitional role but the subject of taku does not. Another point to be made is that the translations of (4.13.7b) and (4.13.7c) show that the habitual nominalizing suffix can but

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Examples such as (4.13.5) suggest that What this dissertation refers to as OBJ θ s are not thematically restricted in Inuktitut. As disussed in section 4.10, *-lik* creates stems with a secondary case-marked argument which is equated with the noun stem onto which *-lik* is attached. For example (4.13.5), it should in principle be possible to add the secondary case marked noun *Marymik* to get the meaning, 'Mary loves John'. SM finds that sentence to be too complicated, but, assuming that it really is grammatical, the entity which this dissertation has called an OBJ θ would end up being equated with the subject of *nalligi*, 'love'.

need not have habitual aspect.⁶⁴

- (4.13.6) a) *Joanna taku -ji -ga MG/JO Joanna see -JI -my.sg *'Joanna sees me.'
 - b) Joanna uqausi liri -ji -ga MG
 Joanna language -work.with -JI -my.sg

 'Joanna is working on my language (possibly this one time only).'

 'Joanna works on my language (habitually).'
 - c) ani -tit -si -ji -u -laur -tuq JO leave -cause -AP -JI-be -PAST -APT 'He/she was a/the bouncer.'

 'He/she took on the role of a bouncer (possibly just a single time).

Example (4.13.6c) is constructed as follows. The intransitive verb stem *anititsi* makes use of the *tit*-causative construction, and it means 'cause to leave'. Adding the agentive nominalizing suffix -ji creates a noun stem which can be translated as 'bouncer'. However, in this example, it can mean 'one who takes on the role of a bouncer a single time'. It has then been reverbalized with -u, 'be', and then put in the past tense with the suffix -laur. It has then been made into an active participle. Based on my limited research, it appears that the agentive nominalizing suffix indicates that the entity which is nominalized acts purposefully and intentionally to take on the role of a/the person who does the activity described by the verb. According to MG, a word cannot end with -gunna-ti in Inuktitut, which is the suffix -gunnaq, 'be able to', followed by the agentive nominalizing suffix. This is not surprising, since one has to actually do something to take

⁶⁴One should be careful with the use of possessive suffixes on the noun stem *uqausiliriji*. When *-ji* attaches to *uqausiliri* and *uqausiliri* is an intransitive verb stem, the output, *uquausiliriji*, can be translated as 'linguist'. This can be made into an [intransitive] noun stem with a possessor argument. Sentence (A) can mean 'the Avataq Cultural Institute's linguist'. However, the same analysis that is possible for (4.13.6b) is also possible for this sentence, in which case, it means 'the one that works on Avataq's language'.

A) avata -up uqausi -liri -ji -nga

Avataq -REL.sg language -work.with -JI -his/her.sg

^{&#}x27;The one that works on Avataq's language.'

^{&#}x27;The Avataq cultural institute's linguist.'

on a certain role within the community or in somone's life, rather than to simply be capable of doing something. In many cases, the context will dictate that the verb stem should be given a habitual interpretation, but this meaning is not necessarily conveyed by the agentive nominalizing suffix.

The morphosyntactic properties of -ji/ti, when it attaches to [intransitive] verb stems, can be understood as in (4.13.6). The input has a subject and any number of other arguments, represented by the list(x) notation. The nominal referent of the output is equated with the subject of the input. This is the same as the option which is available to active participles or to *suuq*-type nominalizations when they are formed from [intransitive] verb stems.

$$(4.13.6)$$
 a) INPUT \leq SUBJ(i), list(x) \geq

b) OUTPUT
$$R(i) < list(x) >$$

The morphosyntactic properties of -ji/ti, when it attaches to [transitive] verb stems, can be understood as in (4.13.7). The input has a subject and an object and any number of other arguments, represented by the list(x) notation. The nominal referent of the output is equated with the subject of the input. The output is [intransitive] and it has a subject argument which is equated with the object of the input.

(4.13.7) a) INPUT
$$\leq$$
SUBJ(i), OBJ(j), list(x) \geq

b) OUTPUT
$$R(i) \leq SUBJ(j)$$
, $list(x) \geq$

The morphosyntactic properties of possessive suffixes as well as -lik, 'one that has', and -qar, 'have', have been explained in reference to examples (4.10.11), (4.10.14), and (4.11.21). None of these suffixes add a possessive relation to a word's semantics. However, as discussed in section (2.6), there is a covert derivational rule which

[atransitive] nouns into [intransitive] nouns while adding a possessive relation as well as a subject argument corresponding to the possessor to a noun's argument structure. As a result of this derivational rule, those suffixes which attach to [intransitive] nouns can attach to possessed noun stems which treat their possessor as a subject argument.

Table (4.2) addresses some of the diversity seen with the nominalizing suffixes from section (4.10) to (4.13). If it is not possible to add a certain nominalizing suffix to a noun stem, then the notation 'No' is used in Table (4.2). In cases where the output can be an [atransitive] noun stem, the notation [ATR] is used. As discussed in section (4.2), [atransitive] stems differ from [intransitive] stems in that they can be given inflection which does not show the person and number of a possessor. Also, as discussed in (4.12), the suffi -u, 'be', can only be attached to [atransitive] stems. The notation [ITR] is used in cases where the output can be [intransitive], allowing the suffixation of a possessive suffix or the suffixes -gi, -qaq, and -lik, as discussed in sections (4.10) to (4.12). In cases where a subject is nominalized the superscript notation '5' is used. In cases where an object is nominalised, the superscript notation '0' is used.

Table 4.2: Restrictions of a number of different nominalizing suffixes as they relate to attaching to [transitive] or [intransitive] verb stems.

	Intransitive input	Transitive input
Vik-type	[ATR],[ITR]	No
Active participles and -siti	[ATR] ^s	No
Passive participles	No	[ATR]°,[ITR]°
-suuq	[ATR] s	[ITR] °
-nirpaaq in the dialect of SM	[ATR] s	[ATR]°,[ITR]°
Agentive nominalizations	[ATR] s	[ITR] s

It is clear that the derivational processes of Inuktitut can treat [intransitive] and [transitive] verbs differently, and that the distinction between [intransitive] versus [atransitive] noun stems is important to the grammar of Inuktitut. The level of diversity in the patterns observed with these suffixes is what one would expect if many of the suffixes make use of multiple derivational rules. Once one accepts the use of multiple derivational rules, there is little way to motivate theories such as that of Manning (1996), which would attempt to use a single derivational rule to account for ergative phenomena.

A number of grammatical features of these constructions are not addressed in Table 4.X. In cases where the output is [intransitive], the output has a subject argument. In the case of *vik*-type nominalizations, passive participles, and *suuq*-type nominalizations, this subject argument corresponds to the subject of the verb stem which gets nominalised. In the case of agentive nominalizations formed from transitive stems, the subject of the output corresponds to the object of the transitive verb stem which undergoes nominalization. In cases where there is an [atransitive] output, where the subject is not nominalized, the subject of the original verb stem gets demoted so that it may optionally be expressed in dative case. This occurs with *vik*-type nominalizations and passive participles. We will see that gerunds, to be addressed in the next section, differ from *vik*-type nominalizations in that the subject of an intransitive stem gets deleted from the argument structure rather than demoted or assigned dative case.

4.14 Gerunds

At first glance, gerunds may appear to belong to the class of *vik*-type nominalizations, though we will see that there are some important differences. The

gerund forming suffixes are -niq and -niku.⁶⁵ -Niq is used in constructions meaning 'before', or 'after'. Both -niq and -niku can be found in constructions meaning 'because of'. For some of the sentences meaning 'because of', MG has a strong preference for one over the other, but I have not been able to figure out what the difference is between niq and niku. The suffixes -niq and -giaq can also be used in other constructions which are similar to the use of English gerunds ending in -ing. In this section, it will be argued that some of the uses of -niq and -niku do not really involve forming deverbal noun stems.

Rather, they represent verbal conjugations that only appear to make use of nominalizing suffixes. We will also see that there is an important difference between the suffixes -giaq and -niq in terms of the case given to the subject when they are followed by a possessive suffix. When -niq is used to form deverbal nouns with a use similar to words ending with -ing in English, and the suffix -niq is followed by a possessive suffix, the possessor/subject must get relative case. This is what occurs with all of the other deverbal nouns in the language. With -giaq, there is a second option, whereby one is

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Occasionally, one encounters non-productive uses of -niku, as in example C. In such cases, -niq can be used to get the meaning that one would expect if -niku were used productively with the stem in question, as in D.

'I brought home someone who had left.'

'left-overs'
D) niri -niq MG
Eat -NIQ

'One who ate.'

I attempted to investigate whether or not these are actually *suuq*-type nominalizations by asking if it is possible to say *irqa-ni-nga* or *irqa-niku-nga*, where *-niq* or *-niku* is attached the transitive/reflexive stem for 'remember', and then followd by *-nga*, 'his/her/its single one'. However, MG's response was that she did not know if these suffixes could be used this way in her dialect.

Both -*niq* and -*niku* can be also be used to nominalize the subject with the meaning, 'one that did something in the past'. Two such examples are given below.

A) ani -nir -mik anirrau -ji -rqau -vu -nga MG leave -NIQ -SEC.sg bring.home -AP -earlier -INDI -1sg

B) ani -niku -mik anirrau -ji -rqau -vu -nga MG leave -NIKU-SEC.sg bring.home -AP -earlier -INDI -1sg 'I brought home someone who had left.'

allowed to place the possessor/subject in the same case that is given to the gerund formed with the suffix *-giaq*.

In examples (4.14.1) to (4.14.4), -niku is glossed 'NIKU', and -niq is glossed GER, for 'gerund'.

- (4.14.1) pirsi -niku -nga -nut MG blizzard -NIKU -its.sg -DAT 'because it is blizzarding'
- (4.14.2) pirsi -niku -mut MG blizzard -NIKU -DAT.sg 'because it is blizzarding'
- (4.14.3) pirsi -ni -vinir -mut MG blizzard -GER -former -DAT.sg 'because it blizzarded'
- (4.14.4) ani -nngi -ni -ra -ni niri -laur -tu -nga MG leave -NEG -GER -my.sg -LOC eat -PAST -INDI -1sg 'I ate before I left.'

In (4.14.1) to (4.14.3), the gerunds are placed in dative case, with the meaning, 'because'. In (4.14.4), it appears that a negated gerund is placed in locative case, with the meaning, 'before'. There is a possessive suffix expressing the subject in (4.14.1) and (4.14.4), but not in the other two examples. In (4.14.3), the suffix *-viniq*, 'former', is added to the gerund. This is a suffix which attaches to nominal rather than verbal stems.

However, there are two important differences between gerunds and *vik*-type nominalizations. First, when a possessive suffix is used to express the subject of a gerund pronominally, the subject is sometimes expressed as a separate word in absolutive case. This is never possible with *vik*-type nominalizations. Other times, it is expressed in relative case, as is always the case with possessed *vik*-type nominalizations. Second, it is never possible to express the subject of a gerund in dative case. (4.14.5) to (4.14.8)

illustrate that, in this dialect, absolutive case is used instead of relative case for subjects of gerunds bearing a possessive suffix, when the gerund is placed in locative or dative case, with the meaning 'after', 'before', or 'because'. My analysis will be that these are really intransitive verbal conjugations. For each example, it is acceptable to express the subject of the gerund in absolutive case, but not in relative case. In (4.14.5), there is a locative case-marked gerund with the meaning 'before he/she left'.

'I ate before John left.'

*'I ate before John left.'

In (4.14.6), there is a locative case-marked gerund with the meaning 'before he/she realizes'.

Suusi qauji -nngi -ni -nga -ni Sue(ABS) realize -NEG -GER -his/her.sg -LOC

'Lets leave before Sue finds out.'

Suusi -up qauji -nngi -ni -nga -ni Sue -REL.sg realize -NEG -GER -his/her.sg -LOC

*'Lets leave before Sue finds out.'

The stem *qaujinngit*, 'not realize', can normally be given either transitive or intransitive verbal inflection, which would allow the subject to be expressed in either relative or absolutive case. But, in this construction, only absolutive case is possible. The morpheme *-lir* is glossed LIR in this example, because I can think of no better glossing. It is not clear what it adds to the meaning when it is used in the imperative/optative mood. *Anilirta* is a first person plural optative form meaning 'let's leave'.

In (4.14.7), there is a dative case-marked gerund formed with *niku*, with the meaning 'because he/she wants to see well or better'.

Suusi taku -tsia -ruma -niku -nga -nut Sue(ABS) see -well -want -NIKU -his/her.sg -DAT

'I switched on the lights as Sue wanted to see better.'

Suusi-up taku -tsia -ruma -niku -nga -nut Sue -REL.sg see -well -want -NIKU -his/her.sg -DAT

'I switched on the lights as Sue wanted to see better.'

Again, the stem *takutsiaruma*, 'want to see better', can normally be given either transitive or intransitive verbal inflection, which would allow the subject to be expressed in either relative or absolutive case. But, in this construction, only absolutive case is possible.

The gerund in (4.14.8) is minimally different from the one used in (4.14.7) in that it is formed with *-niq* instead of *-niku*. Again, the same restriction applies.

(4.14.8) a) qanilligia -rqau -ju -gut MG go.closer -earlier-INDI-1pl

Suusi taku -tsia -ruma -ni -nga -nut Sue(ABS) see -well -want -GER -his/her.sg -DAT

'We went closer as Sue wanted to see better.'

(4.14.8) b) qanilligia -rqau -ju -gut MG go.closer -earlier-INDI-1pl

> Suusi-up taku -tsia -ruma -ni -nga -nut Sue -REL.sg see -well -want -GER-his/her.sg-DAT

*'We went closer as Sue wanted to see better.'

However, when possessed gerunds formed with -*niq* are used as arguments, the subject must be placed in relative case. In (4.14.9), the gerund *katanninganik*, 'it's falling', expresses an OBJ θ of *takunnaq*, 'watch'. In this case, the subject must be placed in relative case.

(4.14.9) a) qangattajuu -p katan -ni -nga -nik MG airplane -REL.sg fall(ITR) -GER-its.sg -SEC

takunna -qau -vu -gut watch- earlier -DECI -1pl

'We witnessed the plane falling'.

b) *qangattajuuq katan -ni -nga -nik MG airplane(ABS.sg) fall(ITR) -GER -its.sg -SEC

takunna -qau -vu -gut watch- ealrier -DECI -1pl

*'We witnessed the plane falling'.

Example (4.14.10) illustrates that it is not grammatical to leave off the possessive

suffix and place the subject of a gerund in dative case.

I also asked MG if the following two words can ever be placed in a sentence, with the meaning, 'John's leaving', and she said that it is not ever possible. One construction where one might expect this to be possible was given in (4.14.9). One might expect it to be possible to replace *qangattajuup katanninganik* with *Jaanimut aninirmik*, but her judgement of (4.14.11) suggests that this is not the case.

At this point, I have only given two examples of unpossessed gerunds, examples (4.14.3) and (4.14.2), both of which bear dative case and mean 'because of'. It remains to be shown whether unpossessed gerunds can be used as arguments. One such example is given in (4.14.12). Here *taanisiniq* means 'dancing', and it expresses the object *aliagijara*, 'I enjoy it'.

Unpossessed gerunds can be understood as in (4.14.13). The gerund forming suffix gives a nominal referent to the stem, which denotes the situation described by the verb stem. It is not equated with an argument. Rather, in terms of HPSG, the index of the output is equated with the situation described by the verb stem which is nominalized.

The subject of the verb stem is deleted, as in (4.14.13b).

$$(4.14.13)$$
 a) \leq SUBJ, list(x) \geq

b)
$$R$$
, $< list(x) >$

This deletion of the subject is optional. The other option is to add a possessive suffix which assigns relative case. The other uses of gerunds, where it appears that a possessive suffix assigns absolutive case, should be treated as deficient verbal paradigms that only allow the creation of intransitive verbs.

It should be noted that gerunds can only be formed from intransitive stems, except when they are used in the construction to be addressed in the next section.⁶⁶ This is illustrated by the following examples, where *katak* must mean fall instead of 'drop something'. In terms of the theory of this dissertation, only example (4.14.14) is a true case of a gerund. The other examples all represent deficient verbal conjugations, Example (4.14.17) also illustrates that use of a what would appear to be a locative casemarked gerund can also mean 'while' with some verb stems.

- (4.14.14)MG katan -ni -nga fall(ITR)-GER -his/her.sg 'Its falling.' *'his/her dropping something'
- MG (4.14.15)katan -ni -nga -nut fall(ITR) -GER -his/her.sg -DAT 'because it fell' 'because he/she dropped something'

 $^{^{66}}$ The restrictions on the use of gerunds in Inuktitut differ from the restrictions of the use of gerunds in West Greenlandic. In that dialect, it is possible to form a gerund from a transitive stem, in which case the subject of the verb stem from which the gerund is formed is treated as a demoted subject. Demoted subjects get ablative case in that dialect. The object of the transitive stem can be treated as the gerund's possessor (Bittner 1993).

- (4.14.16) katan -niku -nga -nut MG fall(ITR) -NIKU -his/her.sg -DAT 'because it fell' 'because he/she dropped something'
- (4.14.17) katan -ni -nga -ni MG fall(ITR)-GER -its.sg -LOC 'while it drops'

This restriction is unsurprising given that there appears to be no way to assign case to an object with gerunds.

There is yet another type of gerund in Inuktitut grammar, which, at first glance, appears to be used just like -*niq*, which has been glossed GER, for 'gerund', in this dissertation. It will be referred to as the *giaq*-type gerundive construction. The main predicate in (4.14.18) and (4.14.20) is *qaujijunga*, 'I realize'.

(4.14.18) Jaani -mik ataata -u -gia -nga -nik MG John -SEC.sg father -be -GIAQ -his/her.sg -SEC

qauji -ju -nga realize -INDI -1sg

'I realize that John is a father.'

- (4.14.19) anaana -u -gia -r -nik qauji -ju -nga MG mother -be-GIAQ -your.sg -SEC realize -INDI -1sg 'I realize that you are a mother.'
- (4.14.20) Jaani ataata -u -gia -nga qauji -ja -ra MG John(ABS) father -be -GIAQ -his/her.sg realize -PPT my.sg 'I realize that John is a father.'

The gerunds in examples (4.14.18) and (4.14.19) are *ataataugianganik* and *anaanaugiarnik*, meaning 'his being a father', and 'your being a mother'. The gerunds appear to express an OBJ0 of *qauji*, 'realize', in these examples, because they bear secondary case. In (4.14.120), the gerund *ataataugianga*, 'his being a father', bears

absolutive case, and it expresses the nominalized object of *qaujijara*, 'I have a realization about it'. Sentences (4.14.14) and (4.14.16) illustrate that the subject of the gerund can be expressed as a separate word bearing the same case as the gerund. It is surprising that the subjects of the gerunds do not bear relative case in these examples. The subject of a gerund formed with *-giaq* can indeed also be expressed in relative case, as illustrated by example (4.14.18).

'I realize that John is a father.'

The next two examples illustrate that when -*niq* is used in the place of -*giaq*, the subject can only be expressed in relative case. MG accepts the equivalent of (4.14.21), where the subject is expressed in relative case, as illustrated by (4.14.22), below, where -*giaq* has been replaced with -*niq*.

'I realize that John is a father.'

The ungrammaticality of (4.14.23) illustrates that it is not possible to place the subject of a gerund formed with -*niq* in secondary case when the gerund itself gets secondary case. (4.14.23) is identical to (4.14.18) except that -*giaq* has been replaced with -*niq*. While (4.14.18) is grammatical, (4.14.23) is not.

'I realize that John is a father.'

In terms of HPSG, we can claim that there is an optional post-inflectional lexical rule which can change the case of the subject from relative case to match the case of the gerund itself. This rule can only be applied to nouns of the subclass [giaq-type gerund] after they have been given case inflection. This can be treated as a NSSCAT, or noun stem subcategory feature. Or we could call it 'giaqqativity'. Nouns and noun stems can have the features [+giaq-type gerund] or [-giaq-type gerund].

The reason for claiming that there is a post-inflectional lexical rule is that noun stems presumably do not have case. However, inflected nouns, bearing case suffixes, do have this head feature. Any rule which equates the case of the subject of a *giaq*-type gerund with the case of the head noun would have to occur after the rules which add inflectional morphology while converting noun stems into nouns.

At this point, all the examples of *giaq*-type gerunds construction have involved [intransitive] nouns bearing a possessive suffix. *Giaq*-type gerunds can also be [atransitive], as in (4.14.24). Here the subject is *ataataugiaq*, 'being a father', and the predicate is *alianartuq*, 'it is fun'. The predicate is formed by suffixing –*naq*, 'cause', onto the bare root *alia*, 'enjoy', yielding *alianaq*, 'be enjoyable'. It has then been made into an active participle, and it is used as a predicate meaning 'it is fun'.

Gerunds formed with -*giaq* appear to be quite limited in their use, as MG rejects the equivalents of (4.14.5), (4.14.7), and (4.14.9), if *niq* is replaced with -*giaq*. More research certainly needs to be done to understand the restrictions on when the *giaq*-type gerundive construction can be used. However, the ungrammaticality of example (4.14.25) may suggest that it has something to do with the meaning of the verb stem to which the gerund is attached. (4.14.25) is similar to (4.14.18) except that it is ungrammatical and the stem *ataatau*, 'be a father', has been replaced by *anisi*, 'start to leave'. This is not an acceptable way to say 'I realize that John is leaving'. (All of the examples that MG has accepted which make use of *-giaq* involve attaching *-giaq* to a stative verb stem, though I have not done nearly enough research to make conclusions about what the true restrictions are with this suffix.)

'I realize that John is leaving.'

One final grammatical point should be made about gerunds in Inuktitut. Unlike English, when gerunds have a plural possessor, the gerund must be plural in number rather than singular. In example (4.14.26), the subject is *tammativiniugiangit*, 'their having been lost'. It bears the inflectional suffix *-ngit*, which is used when the possessor is third person and the possessed entity is plural. The predicate is *nalunanngitut*, 'they are easy to know about', or, more literally, 'they(i) do not have a property such that they cause people not to know about them(i)'.

'It is easy to know that they got lost.'

The word *tammatuviniugiangit* is constructed as follows. An active participle is formed from *tammaq*, 'be lost'. This is then suffixed with *-viniq*, "former", yielding *tammatuviniq*, 'one that was lost in the past'. This is then reverbalized with *-u*, yielding *tammatuviniu*, 'be one that has gotten lost', or 'used to be lost'. In (4.14.23), *-giaq* is followed by a plural possessive suffix meaning 'their'. *Tammatuviniugiangit* can be translated as 'their having gotten lost'. The predicate in this example is *nalunanngitut*. A literal translation would be 'they(i) don't cause one not to know about them(i)'. However, a few points should be made about the semantics of this predicate. *-Naq* appears to describe properties. So a better translation might be, 'they(i) do not have the property that they cause people not to know about them(i)'. This is an instance where the subject of the predicate onto which *-naq* is attached is equated with the object of the verb

4.15 Nikumuuq Constructions

It is possible to reverbalize gerunds marked with dative case formed with *-niku*, yielding a stem meaning, 'it is because'.⁶⁷ The data in this section will be different from other instances that we have seen of deverbal noun stems being reverbalized. The phenomena in question are of empirical interest because they appear to represent the

stem onto which -nag is attached. The suffix -nag was introduced in section 4.6.

The sequence *nikumut* can be replaced by *-mut*, which resembles the dative singular suffix, except that it attaches directly onto verb stems and it deletes a preceding consonant rather than nasalizing it. It should be treated as a distinct suffix from the dative singular case suffix. Words ending with *-mut*, 'because of', can also be reverbalized with *-uq*, creating the sequence *muuq*, which has the same meaning as *nikumuuq*.

single case where a noun stem can be transitive. An initial morphological analysis will be rejected because it will run into theoretical difficulties. Under the first analysis, the reverbalizing suffix is -uq, and it is glossed UQ. (4.15.1) and (4.15.2) illustrate that either a transitive or an intransitive stem can be created with this construction, since active participles are formed from intransitive stems, and passive participles are formed from transitive stems.

- (4.15.1) taku -niku -vinir -mu -u -quur -tuq MG see -NIKU -former -DAT.sg -UQ -probably -APT 'It is probably because he/she saw something (in the past).'
- (4.15.2) taku -niku -vinir -mu -u -quur -ta -nga MG see -NIKU -former -DAT.sg -UQ -probably -PPT -his/her.sg 'It is probably because he/she saw it (in the past).'

It appears that, in (4.15.2), the gerund inherits both a SUBJ and an OBJ from the verb stem taku, 'see', and this is then inherited by the verb stem created by the suffixation of -uq. This is in violation of the generalization from the previous section that gerunds which are not reverbalized with -uq can only be formed from intransitive stems. In (4.15.1), it appears that only a SUBJ is inherited. If this is the correct analysis, then we should predict it to be possible to replace taku with an antipassive stem in (4.15.1), but not (4.15.2). Similarly, we would expect a reflexive reading when a transitive/reflexive stem is substituted into (4.15.1), but not (4.15.2). Examples (4.15.3) to (4.15.6) show that these predictions are borne out. (4.15.3) and (4.15.4) show that, with the antipassive stem nalligusuk, suffixation of the sequence -nikumuuq can only create an intransitive stem.

- (4.15.3) nalli -gusun -niku -mu -u -rquu -tu -nga MG love -AP -NIKU -DAT.sg -UQ -probably -INDI -1sg 'It's probably because I love someone.'
- (4.15.4) *nalli-gusun -niku -mu -u -rquu -ta -ra MG love -AP -NIKU -DAT.sg -UQ -probably -PPT -my.sg 'It is probably because I love him/her.'

Examples (4.15.5) and (4.15.6) illustrate that the transitive/reflexive stem *nalligi* can either be used to form a transitive stem or an intransitive reflexive stem when *-nikumuuq* is suffixed onto it.

- (4.15.5) nalli -gi -niku -mu -u -rquu -ta -ra MG love -TR -NIKU -DAT.sg -UQ -probably -PPT -my.sg 'It is probably because I love him/her.'
- (4.15.6) nalli -gi -niku -mu -u -rquu -tu -nga MG love -TR -NIKU -DAT.sg -UQ -probably -INDI -1sg 'It's probably because I love myself.'

One curiosity of these examples is that the subject of the stem onto which -nikumut attaches cannot be deleted. In other words, (4.15.1) and (4.15.6) cannot mean, 'It's probably because someone sees him/her' or 'it is probably because someone loves me', or, at least, I was not given those alternative translations. This is true despite the ability that gerunds have to delete a subject argument. In terms of a theory which treats subjects and objects as grammatical primitives, we can rule out this possibility with a constraint that rules out stems with an object but no subject, but we don't need to, because there is no verbal morphology that assigns case to an object but not to a subject, and active participles only nominalize subjects. The restriction is more difficult to capture in an HPSG framework which does not treat subjects and objects as grammatical primitives.

We also need some explanation for why, if -niku attaches to a transitive stem, the

word must be reverbalized with -uq following the addition of a dative suffix. The Chomskian notion of case may indeed be helpful to understanding the restriction, since suffixation of -uq is the only way in which it is possible to assign case to two arguments, using transitive verbal inflection.

The suffix -uq can be understood as in (4.15.7). It attaches to an inflected noun with an argument structure. As is the case with other nouns in the language, it must have a nominal referent. Since it is a gerund, this nominal referent presumably refers to the state of affairs, event, or activity described by the verb stem onto which -niku was attached. Since -uq is a verbalizing suffix, it creates a stem which has no nominal referent. The argument structure of the dative case-marked gerund that -uq is attached to is represented with the 'list(x)' notation. The verb stem created by the suffixation of -uq is the same as the argument structure of the noun stem onto which -uq is attached.

$$(4.15.7)$$
 a) R, $<$ list $(x)>$

b)
$$\langle list(x) \rangle$$

At this point, it may be instructive to point out that an entirely different morphological analysis is possible for this construction. If it weren't for examples (4.14.1) and (4.14.2), where *-vinir*, 'former' is suffixed between *-niku* and *-muur*, it would be tempting to claim that *-nikumuuq* is treated as a single suffix which creates verb stems from verb stems, and which inherits the TRANS feature from the stem which it attaches to. However, we can still claim that the sequence *-muuq* is treated as a single morpheme in this construction. Example (4.15.2) is repeated below to aid in the discussion of this analysis.

(4.15.2) taku -niku -vinir -mu -u -quur -ta -nga MG see -NIKU -former -DAT.sg -UQ -probably -PPT -his/her.sg 'It is probably because he/she saw it (in the past).'

Here is how the analysis works. When -niku is used in the -nikumuur construction, it creates nominal stems with the NSSCAT feature [nikumuur]. If we are making use of TRANS features, it inherits the TRANS feature of the stem onto which it attaches. In (4.15.2), the stems taku and takuniku both have the TRANS feature [transitive]. -vinir, 'former', can attach to any noun stem, in which case it creates a noun stem which inherits all of the features of the noun stem which it attaches to. In example (4.15.2), the stem takunikuvinir bears the TRANS feature [transitive], and the NSSCAT feature [nikumuur]. -Muuq attaches to noun stems with the NSSCAT feature [nikumuur]. The verb stem created inherits a TRANS feature from the noun stem onto which -muuq is attached. For this reason, the stem takunikuvinirmuur is [transitive] in example (4.15.2).

It is presumably obligatory to attach —muuq onto a stem with the NSSCAT feature [nikumuur], as there are presumably no inflectional processes that can convert stems of the class [nikumuur] into words of the class [noun].

4.16 -Liag and -taag

This section will address *-liaq* and *-taaq*, which attach to noun stems to create a noun meaning, 'one that is built', or 'one that was gotten', respectively. There will also be a review of the uses of dative case to mark arguments that the language would otherwise treat as subjects in this section, since this is the final instance to be presented. The subject of 'build', or 'receive', can be treated as a possessor, as in (4.16.1), omitted, as in (4.16.2), or expressed in dative case, as in (4.16.3).

- (4.16.1) aupartu -it illu -lia -vini -kka MG red.one -ABS.pl house -one.which.is.built -former -my.pl 'I built the red houses.' 'the red houses which I built.'
- (4.16.2) illu -lia -viniq MG
 house -one.which.was.built -former
 'The house was built'
 'the house which was built.'
- (4.16.3) Jaani -mut illu -lia -viniq MG
 John -DAT.sg house -one.which.is.built -former

 'The house was built by John.'

In terms of the theory presented herein, *-liaq* and *-taaq* have a nominal referent which is equated with the nominal referent of the noun stem they attach to, and either a SUBJ or an argument which is treated like a by phrase.⁶⁸ In terms of HPSG, this argument is either caseless or specified to take dative case.

At this point, all of the uses of dative case to mark arguments which would otherwise be treated as subjects have been presented. In most cases, a suffix is added to a verb stem and the subject of the original subject no longer counts as a subject or an object, but it can still be expressed in dative case. In the case of *-tsau* (4.7) and passive participles (4.11), it is always the subject of a [transitive] verb stem that gets demoted. In the case of *vik*-type nominalizations (4.10), it is always the subject of an intransitive stem that gets demoted. The *naq*-causative construction (4.6) will demote either the subject of a [transitive] or an [intransitive] stem. If one were to base an analysis based on the aforementioned derivational processes alone, one might conclude that an argument gets dative case if it was once a subject and then got stripped of its status as a subject.

⁶⁸ -*Taaq*, 'one that is received', behaves very much the same way as -*liaq*, except that it can also be used with a source argument, expressed in ablative case, indicating who the entity in question is received from. There is also a verb stem forming suffix, -*taaq*, which creates intransitive verb stems meaning, 'receive X'.

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However, such an analysis does not apply to the suffixes in this section. In the derivation of *illuliaviniq*, 'house which was built', or 'the/a house was built', from example (4.16.3), there is no verb stem that later has its subject demoted. Rather, *-liaq* adds a dative argument to the noun stem's argument structure.

Another point that should be made about dative case to mark arguments that would otherwise be treated as subjects is that it is constructionally idiosyncratic.

Example (4.10.5) repeated below shows that, when –*vik* is used to create [atransitive] noun stems, it is possible to express the argument which was originally the subject of the verb stem onto which -*vik* was attached in dative case. However, MG rejects the use of dative case with gerunds, as illustrated by the unacceptability of (4.14.11).

'Can you see the place where someone (John) fell?'

(4.14.11) *Jaani-mut ani -nir -mik MG
John-DAT.sg leave -GER -SEC.sg
*'leaving by John'

With -tsau, 'can/should be Xed', it is possible to express the subject of the transitive verb stem onto which -tsau is attached in dative case, as shown by (4.7.1), repeated below.

(4.7.1) tuttuk quki -tsau -juq (Jaani -mut) JO caribou(ABS.sg) shoot(TR) -TSAU -APT(ABS.sg) (John -DAT.sg) 'The caribou can/should be shot (by John).'

The suffix *-giakit*, 'can X with ease' is like *-tsau* in that it can attach to an [transitive] verb stem creating an output with an intransitive output which is equated with

the subject of the stem onto which *-giakit* is attached, as shown by the grammaticality of (4.8.3), repeated below. However, (4.8.4), also repeated below, illustrated that, with *-giakit*, it is not possible to express the original subject of the verb stem onto which *-giakit* is attached in dative case.

- (4.8.3) Jaani quki -riakit -tuq MG
 John(ABS) shoot(TR) -can.with.ease -APT
 'John can be shot with ease.'

 *'John can shoot with ease.'
- (4.8.4) *Tuttuk Jaani-mut quki -riakit -tuq MG caribou(ABS.sg) John-DAT.s shoot(TR) -can.with.ease -APT *'The caribou can easily be shot by John.'

These data illustrate that one cannot claim that it is always possible to express any entity which used to be a subject of a verb stem. Rather, some suffixes create stems with dative arguments and other suffixes do not. In terms of HPSG, we can simply say that the arguments in question are specified to get dative case, and this is the author's personal preference about how things should be handled theoretically. But it should, in principle, still be possible to claim that there is a grammatical function similar to by-phrases in English which expresses arguments that are not subjects, but which the language would, in other constructions, treat as syntactic subjects. Some suffixes add an argument expressing this grammatical function and others do not. Dative case is used to mark arguments expressing this grammatical function.

4.17. Argument Modifying Suffixes in the Imperative/Optative

It is possible to attach argument modifying suffixes to verb stems, but only in the imperative/optative mood. The stems used in (4.17.1) to (4.17.6) cannot be used with any other mood conjugation other than the imperative/optative mood. The adjectival suffix modifies either the subject if there is inflection for only one argument, or the

object, if there is inflection for two arguments. In (4.17.1) and (4.17.2), *apik*, 'small or dear', has been added onto the stems *aniqu* and *aniquji*. Both of these stems mean 'tell someone to leave', but the first behaves as a transitive/reflexive stem, and the second behaves as an antipassive stem. In (4.17.1), where there is inflection for both a subject and an object, *-apik* must modify the object. In (4.17.2), where there is only inflection for the subject, *-apik* can only modify the subject. ⁶⁹

- (4.17.1) ani -qu -api -guk MG leave -tell(TR)- small/dear -IMP.2sgA:3sgU 'tell the dear one to leave.'

 *'tell him/her to leave, dear one.'
- (4.17.2) ani -qu -ji -api -git MG leave -tell -AP -small/dear -IMP.2sg 'tell someone to leave, dear one.'
 *'the dear one to leave.'

Interestingly, -apik does not have to come immediately before the imperative/optative verbal inflection. Examples (4.17.3) and (4.17.4) illustrate that it can come before or after the suffix -taili, 'refrain', and examples (4.17.5) and (4.17.6) illustrate that it can come before or after -lauq, which is a suffix which resembles the past tense suffix, but which seems to have no effect on meaning in the imperative/optative mood.

- (4.17.3) ani -qu -api -taili -guk MG leave -tell-small/dear -refrain -IMP.2sgA:3sgU 'Refrain from telling the dear one to leave'.
- (4.17.4) ani -qu -taili -api -guk MG leave -tell -refrain -small/dear -IMP.2sgA:3sgU 'Refrain from telling the dear one to leave'.

⁶⁹ It should be noted that *-apik* can also be attached to verb stems with the meaning, 'do something a little bit', in which case it can create stems which do not have to be used in the imperative/optative mood. This is not possible with the other diminutive suffix, *-guluk*, which can also be used in the imperative/optative mood. While *-aluk*, 'big', can be used in the imperative/optative mood, *-laaluk*, 'very big' cannot.

- (4.17.5) ani -qu -api -lau -ruk MG leave -tell -small/dear -LAUQ -IMP.2sgA:3sgU 'Tell the dear one to leave'.
- (4.17.6) ani -qu -lau -raapi -guk MG leave -tell -LAUQ -small/dear -IMP.2sgA:3sgU 'Tell the dear one to leave'

From a theoretical standpoint, we can claim that suffixation of an adjectival suffix onto a verb stem creates a stem which is of the subclass [+imperative]. [+imperative] stems may only be used in the imperative mood. They also cannot be nominalized. In contrast, suffixation of *-taili* does not generally create stems with this restriction. It can create stems which can be placed in any mood or which can be nominalized. In (4.17.7), a passive participle has been created from a stem which makes use of *-taili*, 'refrain'.

In contrast, when *-taili* follows an adjectival modifier, it creates a stem which cannot be nominalized or used in any mood other than the imperative/optative mood, as illustrated by the ungrammaticality of (4.17.8), where a passive participle is formed.

We can claim that *-taili* attaches to verb stems, and it creates a stem which inherits the subclass specification of the stem onto which *-taili* attaches. (This also applies to any other suffix which creates verb stems from verb stems which I have tested.) In terms of HPSG, one of the features in the syntactic category representation is VSFORM, for 'verb stem form'. Stems which can only be used in the imperative mood have [imperative] as their VSFORM specification. Verb stems which have no such

restriction are [-imperative]. Nominalizing suffixes and inflectional suffixes in moods other than the imperative/optative mood only attach to stems of the form [-imperative]. This accounts for the difference in grammaticality between (4.17.7) and (4.17.8). A nominalizing suffix can attach to the [-imperative] stem *aniqutaililaur*, 'refrained from asking someone to leave', from example (4.17.7), but not to the [imperative] stem *aniquapitaililaur*, 'refrained from asking the dear on to leave', from example (4.17.8). Verb stems or roots from the lexicon, such as *ani*, 'leave', are [-imperative]. Suffixation of an argument modifying suffix onto a verb stem creates verb stems which are [imperative]. Suffixes which create verb stems from verb stems, including *-taili*, 'refrain from' and the past tense suffix, *-laur*, inherit the VSFORM feature of the stem which they are attached to. This feature inheritance ensures that *aniquapitaililaur*, 'refrained from asking the dear on to leave', from example (4.17.8), bears the VSFORM feature [imperative], while *aniqutaililaur*, 'refrained from asking someone to leave', from example (4.17.7), bears the feature [-imperative].

The next set of examples will involve another argument modifying suffix, -aluk, 'big', 'bad', or 'big and bad'. Argument modifying suffixes all follow the same pattern that they modify either the subject of a transitive stem or the subject of an intransitive stem, as illustrated by the following examples. -Lauq is optionally used in the imperative/optative mood, without any clear change in meaning, so it has just been glossed as 'LAUQ', in example (4.17.9). In (4.17.9), -aluk attaches to a transitive stem, and it modifies the object, whereas, in (4.17.10), it attaches to an intransitive stem and it modifies the subject. Sentence (4.17.10) is used if the speaker has a grudge against Jaani, and it is considered to be very disrespectful.

- (4.17.9) nanuq quki -alu -laur -li -uk Jaani -up JO bear(ABS) shoot(TR)-big/bad -LAUQ -IMP.3Sa -3sU John -REL.sg 'Let/may Johnny shoot the big bad bear'.
- (4.17.10) Jaani nanur -mik quki -i -raalul -li JO John bear -SEC.sg shoot -AP -big/bad -IMP.3sg 'Let/may big bad Johnny shoot the bear'.

The next three examples will address the issue of affix ordering. In (4.17.11), it modifies the object of the transitive stem niriqu, 'ask someone to eat'. In (4.17.12) and (4.17.13), it modifies the subject of niri, 'eat', since -qu only attaches to intransitive stems. However, in (4.17.13), if it came after -quji, it would presumably modify the subject of niriquji, 'tell someone to eat', since this is an intransitive stem. It should be noted that, while two speakers gave me these judgements, there are different restrictions in the dialect of SM. It is also the case that these suffixes modify either the subject of an intransitive stem or the object of a transitive stem, but it is ungrammatical to suffix -quji, 'ask/want/tell someone to X', onto a stem containing an argument modifying suffix.

- (4.7.11) niri -qu -alu -guk LM/MG eat -ask-big/bad -IMP.2sA.3sU 'Tell the big bad one to eat.'
- (4.17.12) niri -alu -qu -guk LM/MG eat -big/bad -ask -IMP.2SA.3SU 'Tell the big bad one to eat.'
- (4.17.13) niri -alu -qu -ji -git LM/MG eat -big/bad -ask -AP -IMP.2sg 'Tell the big bad one to eat.'

In terms of the theory of this dissertation, there are two derivational processes which attach argument modifying suffixes to verb stems: one which takes [transitive] verb stems as the input, and the object gets modified, and another which takes [intransitive] verb stems as the input, and the subject gets modified. The reasons for not

attempting to have a theory which can make use of a single derivational rule to capture ergative patterns of transitivity alternations were given in section (4.2), (4.12), and (4.13). There is quite a range of different transitivity alternations and transitivity restrictions in Inuktitut. The correct generalization about Inuktitut grammar is that the grammar allows [transitive] and [intransitive] stems to be treated differently, but the pattern observed is best treated as a property of the suffixes, rather than as a property of verb stems. This is logically nearly equivalent to saying that transitivity alternations are best handled with multiple derivational rules.

The other reason for believing that the features [transitive] and [intransitive] are an important part of the grammar of Inuktitut comes from the data from Chapter 2.

Recall that the grammar of Inuktitut treats neither the subject nor the object of a transitive verb the same way it treats the subject of an intransitive verb. Once a theory distinguishes between [transitive] and [intransitive] verbs, it is hard to motivate a theory which attempts to get any given transitivity alternation without making reference to the features [transitive] and [intransitive], unless there is some reason to believe that there is a restriction such that only a narrow range of transitivity alternations are available with the language's derivational suffixes. Since this is not the case, attempting to alter our syntactic theory so that the ergative pattern in this section can be captured with a single derivational rule would represent a case of theoretical bias, as discussed in section 4.2.

It should be pointed out that there is yet another reason to believe that there are multiple derivational rules for *-apik*, 'small', or 'dear', and *-aluk*, 'big', 'bad', or 'big and bad'. These suffixes can also be added to nouns, in which case they modify the nouns they attach to. These uses of *-apik* and *-aluk* involve distinct derivational rules from the

other uses which attach them to verb stems, while creating [+imperative] verb stems.

The use of adjectival modifiers in the imperatave/optative mood could be the result of a historical process of speaker innovation. At least in the North Baffin dialect, the suffix -kuluk, 'small' or 'dear', is used quite frequently when talking about a child. Verb stems are nominalized, the suffix is added, and then the stem is reverbalized if it is to be placed in any of the verbal conjugations. It is quite conceivable that the use of -kuluk on imperative stems was a morphological simplification of the sequence tukuluu, which involves the formation of an active participle, suffixation of -kuluk, followed by reverbalization of -u, 'be'. It could have been created as a less cumbersome way of addressing children. Since speakers were aware of the analogy between the use of -kuluk in the imperative/optative mood and the use of -kuluk in the sequence tukuluu, they were able to innovate further to allow -kuluk to attach to transitive stems. For transitive stems, the high frequency sequence that involves nominalization followed by reverbalization is--takulugi. This involves the formation of a passive participle followed by the suffixation of -guluk, followed by the suffixation of -gi, 'have'. It is the object that ends up getting nominalized in this sequence. By analogy, speakers may have innovated a new use of kuluk where it is attached to transitive stems in the imperative/optative mood to modify the object.

I have found that, in Kangirsuk, -aluk, 'big and/or scary', -apik, 'small or dear', -guluk, 'small/bad', and -ruluk, 'small/bad', which most frequently attach to noun stems to modify the noun stem they attach to, can all be attached to verb stems in the imperative/optative mood. Cross-constructional analogy can be used to explain why a number of these suffixes can now be attached to verbal stems in the imperative/optative

mood. Formal linguistic theory has little to say about cross-constructional analogy.

4.18. Guminaaq, 'I wish I could'

I have found some interesting dialectical variation with the suffix *-guminaaq*, 'I wish I could'. The dialects of SM and MG differ with respect to the restrictions of this suffix. It will be argued that, in the dialect of SM, the output is a clausal word when it attaches to [intransitive] verb stems, but the output is a noun stem meaning 'one that I wish I could X' when it is attached to transitive verb stems. This is a relatively strong piece of evidence that some transitivity alternations should be handled with multiple derivational rules. In contrast, in the dialect of MG, the output is always a clausal word. Starting out with the dialect of MG, we see that it can attach to either transitive or antipassive stems, as in (4.18.1) and (4.18.2). When it attaches to a transitive stem, the object can be expressed in absolutive case, as in (4.18.1). When it attaches to antipassive stems, the OBJθ of the antipassive stem can be expressed in the expected secondary case, as in (4.18.2).

- (4.18.1) tuttuk quki -ruminaaq MG caribou(ABS.sg) shoot(TR) -GUMINAAQ 'I wish I could shoot the caribou.'
- (4.18.2) Mary -mik kuni -i -guminaaq MG Mary -SEC.sg kiss -AP-GUMINAAQ 'I wish I could kiss Mary.'

The plural form of example (4.18.1) is given in (4.18.3). This plural marker is used on nouns, but also in some verbal conjugations.

(4.18.3) tuttu -it quki -ruminaa -t MG caribou -pl shoot -GUMINAAQ -pl 'I wish I could shoot more than one caribou.'

Examples (4.18.4) to (4.18.7) illustrate that it is not possible to use dative case to

express the subject of the verb stem onto which *-guminaaq* is attached, nor is it possible to add a possessive suffix. This is true whether *-guminaaq* attaches to a transitive stem as in (4.18.4) and (4.18.5) or if it attaches to an antipassive stem, as in (4.18.6) and (4.18.7).

- (4.18.4) *tuttuk Jaani -mut quki -ruminaaq MG caribou(ABS.sg) John -DAT shoot(TR) -GUMINAAQ 'John wishes he could shoot the caribou.'
- (4.18.5) *tuttuk Jaani -up quki -ruminaa -nga MG caribou(ABS.sg) John -REL.sg shoot(TR)-GUMINAAQ -his/her.sg 'John wishes he could shoot the caribou.'
- (4.18.6) *Mary -mik Jaani -mut kuni -i -guminaaq MG
 Mary -SEC.sg John -DAT.sg kiss -AP -GUMINAAQ
 'John wishes he could kiss Mary.'
- (4.18.7) *Mary -mik Jaani -up kuni -i -guminaa -nga MG Mary -SEC.sg John -REL.sg kiss -AP -GUMINAAQ -his/her.sg 'John wishes he could kiss Mary.'

Indeed, it appears that *-guminaaq* can only mean 'I wish I could'. Let us now turn to some tests to see whether words formed by suffixing *-guminaaq* are verbs or deverbal nouns.

Examples (4.18.8) and (4.18.9) show that words formed by suffixing –guminaaq cannot be given dative case and used to express Goalθs, nor can they be verbalized with –u, 'be'. The stem *aatsi* means 'give', and it places its goal argument in dative case. The glossing 'EST.DS' in example (4.18.9) indicates that this is a verb form in the established mood meaning 'because' or 'when' in the past, or 'that' as in 'I know that', and that it is the form that is used when the subject is different from some topical entity.

(4.18.8) *aatsi -laur -tu -nga kuni -guminaar -mut MG
AATSI -PAST-INDI -1sg kiss -GUMINAAQ -DAT.sg
*'I gave something to the one I wish I could kiss.'

(4.18.9) *kuni -guminaa -ngu -mma -t MG kiss -GUMINAAQ -be -EST.DS -3sg *'because I wish I could kiss him/her.'

Thus, it appears that, in the dialect of MG, there is a deficient verbal paradigm with the meaning 'I wish I could X'. It contains only a handful of forms. An [intransitive] form ending in *—guminaaq* with a first person subject, a [transitive] form ending in *—guminaaq*, with a first person subject and a third person object, a [transitive] form ending in *—guminaa-t*, with a first person subject and a third person object, and one would also expect a form with a third person dual object.

Let us now turn to the dialect of SM. The next set of examples will show that, when *—guminaaq* is attached to transitive stems, the output is a noun stem meaning, 'one that I wish I could'. When it attaches to intransitive stems, it creates verbs with the meaning, 'I wish I could X'. Examples (4.18.10) and (4.18.11) show that *—guminaaq* creates object nominalizations when it attaches to the stem *kunik*, 'kiss'. *—U*, 'be', can only attach to noun stems, and *—kuluk* can only attach to noun stems or to verb stems in the imperative/optative mood. The fact that it modifies the object in (4.18.11) shows that this is an object nominalization. The derivation of (4.18.10) works as follows. The noun stem *kuniguminaaq* means 'one that I wish I could kiss'. Suffixation of *—u* creates a stem meaning 'be one that I wish I could kiss'. Suffixation of *—laur* creates a stem meaning 'was one that I wished I could kiss. Finally, addition of an active participle forming suffix yields *kuniguminaangulaurtuq*, 'one that I wished I could kiss', or, when used as a predicate, it means 'I wished I could kiss him/her.'

(4.18.10) kuni -guminaa -ngu -laur -tuq SM kiss -GUMINAAQ -be -PAST -APT 'I wished I could kiss him/her.

,

SM

(4.18.11) kuni -guminaa -kuluk kiss -GUMINAAQ -little/dear 'I wish I could kiss the dear one.'

Example (4.8.12) shows that *-guminaaq* can attach to antipassive stems in this dialect. If this were a noun, it would mean 'me who is one who kissed someone'.

(4.18.12) kunik -si -guminaaq SM kiss -AP -GUMINAAQ 'I wish I could kiss someone.'

However, the next example shows that the noun stem kuniksiguminaaq does not exist. It cannot be verbalized with -u and then given first person verbal inflection.

(4.18.13) *kunik -si -guminaa -ngu-laur -tu -nga SM kiss -AP -GUMINAAQ -be-PAST-INDI -1sg 'I wished that I could kiss someone '

Example (4.18.14) also shows that it is not possible to verbalize the stem *kuniksiguminaaq* and then reverbalize with -u, 'be', and then form an active participle.

(4.18.14) *kunik -si -guminaa -ngu -laur -tuq SM kiss -AP -GUMINAAQ -be -PAST -APT *'he/she wished he/she could kiss someone.'

In the dialect of SM, there are two derivational rules for —guminaaq. One takes a transitive stem as its input, and the output is of the type [noun stem]. The index of the output is equated with the object of the input. The other takes an intransitive stem as its input and creates a word of the type [clausalword], of the subtype [intransitive] with a first person singular subject. It is clear based on data from this section as well as data from previous sections that the grammar of Inuktitut treats [intransitive] and [transitive] verb stems differently. One simply has to learn whether a given suffix can attach to either or both [intransitive] or [transitive] stems and how the input maps to the output. This essentially amounts to a multiple derivational rule approach for all classes of

suffixes.

4.19. -Tigi, 'be/do as much as'

In both the dialects of MG and SM, there is a semantic alternation with this suffix depending on whether it attaches to transitive or intransitive stems. It follows an ergative pattern of alternation similar to that of argument modifying suffixes in the imperative/optative mood, as discussed in sections (4.12) and (4.17). The theoretical implications do not differ for this suffix as compared to those other suffixes, so the reader is referred to those sections for a theoretical discussion. In (4.19.1), -tigi is attached to a transitive stem and the simulative case-marked argument is compared with the object of the stem onto which -tigi is attached. In (4.19.2), -tigi is attached to an antipassive stem and the simulative case-marked argument must be equated with the subject. In (4.19.3), -tigi is attached to a stem which has been passivized. In (4.19.4), -tigi is attached to a passive stem, nalligijau, 'be loved', which treats the one who is loved as the subject. Again, comparison is only possible with the subject of the stem that -tigi is attached to when -tigi attaches to an intransitive stem.

- (4.19.1) Jaani -tut nagli -gi -tigi -ja -ra SM John -SIM.sg love -TR -be/do.as.much -PPT -my.sg 'I love him/her as much as I love John.'

 *'I love him/her as much as John does.'
- (4.19.2) Mary -mit nagli -gusuk -tigi -ju -nga Jaani -tut SM Mary -SEC.sg love -AP -be/do.as.much -INDI -1sg John -SIM.sg 'I love him/her as much as John does.'

 *'I love him/her as much as I love Mary.'

(4.19.3) Jaani -tut Mary -mut SM
John -SIM.sg Mary -DAT.sg

nagli -gi -ja -u -tigi -ju-nga
love -TR -PPT -be -be/do.as.much INDI-1sg

'I am loved by Mary the way she loves John.'

It should be noted that, in the absence of the suffix –*tigi*, there is no requirement that nouns marked with simulative case be equated with either the subject of an intransitive clausal word or the object of a transitive clausal word. This is exemplified by (4.19.4). Because the predicate in this example ends with a possessive suffix, it is a transitive clausal word. The subject of transitive nominal clausal words is the entity which the possessive suffix shows the person as well as the number of. The translation of this sentence shows that *Jaanitut* is being compared with the narrator, which is the subject of a transitive clausal word.

(4.19.4) Jaani -tut niri -suu -kka SM John -SIM.sg eat -HABNOM -my.pl 'I eat them the way Johnny does.'

In (4.19.5), *nalligijaujunga* means, 'I am loved'. *Marymut* expresses the demoted subject of the verb stem *nalligi*, 'love'. The translation of this sentence shows that the simulative case marked noun, *Jaanitut*, can be compared with *Marymut*. There appears to be no grammatical restriction on what a simulative case-marked noun can be compared to when the suffix *-tigi* is not used.

(4.19.5) Jaani -tut Mary -mut nalli -gi -ja -u -ju -nga SM John -SIM.sg Mary -DAT.sg love -TR -PPT -be -INDI -1sg 'I am loved by Mary as much as by John.'

This language exploits the fact that there is both a transitive and an intransitive version for almost every verb stem. In the case of -tigi, it allows a simple way of

^{*&#}x27;I am loved as much by Mary as by John.'

showing whether comparison is made with the subject or the object. However, an approach which makes use of multiple derivational rules is preferred in this dissertation for reasons discussed in section (4.2).

Finally, MG has given me the following translation for *John loves Mary as much* as *Sue loves Joanna*. The 'DS' notation stands for 'different subject', since this is the form of the established conjugation that is used when the subject is not topical.

4.20 Review of Chapter 4

Only a very short review will be given here, because there are overviews at the beginning of the chapter, the beginning of section 4.1, and at the end of section 4.2, where the remainder of the chapter is overviewed. In this chapter we have seen quite a variety of transitivity alternations, and there are more to come in section 7.1. The data are consistent with a powerful lexicalist theory that allows just about any input to be mapped to any output, and which can have multiple derivational rules that specify that the input must be either a [transitive] verb stem or an [intransitive] verb stem.

There were two areas where some of the diversity of the ways that the inputs of lexical rules can be mapped to outputs was reviewed. In section 4.13, the restrictions on nominalizing suffixes, excluding gerunds, were reviewed. In section 4.16, there was a review of the diversity of whether the outputs of various derivational rules have a dative *by*-P.

In section 4.2, it was argued that a theory which makes use of a PIV, such as that given by Manning (1996), has no advantages over a theory which makes use of the TRANS features [intransitive] and [transitive]. Furthermore, a theory which makes use of TRANS features fares better than a theory which makes use of a PIV in accounting for the restrictions on [atransitive] noun stems. Yet another theory was discussed and rejected in this chapter. That alternative theory made use of [illicit] case specifications to rule out ungrammatical words, and it was presented in sections (4.1) and (4.2). The strongest arguments against this theory were given in sections (4.11) and (4.12).

The analysis of [atransitive] versus [intransitive] noun stems, as presented in sections (2.7) and (4.2), is also very important, because it is quite a simple theory that accounts for some difficult grammatical restrictions with respect to which inflectional or derivational processes can be used with which deverbal nouns. It also accounts for why possessive suffixes, -qaq, 'have', -gi, 'have', and -lik, 'one that has', can all either express a possessive relation or have arguments that are determined by the morphological processes which have formed a deverbal noun, or have an argument that corresponds to the giver when the noun stem *aittutuuti*, 'things that are given out repeatedly' is used. Most of the data and argumentation pertaining to these analyses is given in sections (4.2), and (4.10) to (4.13).

Chapter 5: Adjectival stems

This Chapter will be an investigation of a number of stems which correspond in meaning to adjectives in English. The goals are primarily descriptive, having little impact on the theoretical discussions in the other chapters of this dissertation. These include *mamaq* 'be tasty', *mamaik*, 'be slow', *sukak*, 'be fast', *sukaik*, 'be slow', *aupaq*, 'be red', and *piu*, 'be good'. Most frequently, they are followed by the active participle suffix, suggesting that they are verb stems. However, in this section, we will see that the stems vary in terms of what verbal suffixes they can or cannot be followed by.

Unsurprisingly, they can all be suffixed with the nominalizing suffix *-nirsaq*, 'be or do more than', and with *-tigi*, 'be/do as much as'. However, it is considered very incorrect to add some suffixes directly onto adjectival stems. One such ungrammatical example is given in (5.1), where *-niraq*, 'claim', is added directly onto *aupar*, 'red'.

(5.1) *aupar -nirar -ta -nga MG be.red-declare-PPT -his/her.sg *'he/she claimed that it is red.'

However, example (5.2) is grammatical where an active participle is formed, which is then reverbalized with -u, 'be', which is then suffixed with -niraq, 'claim'.

(5.2) aupar -tu -u -nirar -ta -nga MG be.red -APT-be -declare -PPT -his/her.sg 'He/she claimed that it is red.'

I have investigated a number of stems such as *aupar*, 'red', which correspond to adjectives in the English translation, with regards to when a suffix can be attached directly to the stem and when it is necessary to form an active participle and then

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⁷⁰ Both MG and JO make use of the reverbalization strategy for some adjectival stems. The data in the section should not be attributed to stylistic preferences, because JO accepts some sentences that are very unusual stylistically.

reverbalize with *u*, 'be'. A number of examples will be presented that involve *mamaq*, 'be tasty', *mamaik*, 'be yucky', *sukak*, 'be fast' *sukaik*, 'be slow' and *aupaq*, 'be red'. Only one of these stems, *mamaq*, can be verbally inflected. This is also the only stem which can be suffixed with the past tense suffix, *-lauq*. *-Tsiaq*, 'well' or 'very much', can be attached to *mamaq* and *aupaq*, but not to *sukak*. The data are summarized below in table (5.1).

Table 5.1: Suffixes which can or cannot be added to five stems which correspond to adjectives in the English translation

	-nirsaq ⁷¹ 'one that is more'	-tigi 'do as much as'	-lauq PAST	(-tsiaq) 'well'	DEC/EST declarative/established inflectional suffixes
Mamaq 'be.tasty'	Yes	Yes	Yes	Yes	Yes
Mamaik 'be.yucky'	Yes	Yes	No		No
Sukak 'be.fast'	Yes	Yes	No	No	No
Sukaik 'be.slow'			No		No
Aupaq 'be.red'	Yes	Yes		Yes	No

Based on Table 5.1, it would appear that these stems belong to at least two classes, one which includes *mamaq* as well as all the other verbs in the language, and one that includes the other adjectival stems. However, when we investigate *piu*, 'be good', we will see that the situation is more complicated than that. It will be addressed at the end of this chapter. It should be noted that one possibility is that these examples are hard to judge because of the infrequency of their occurrence. Indeed, frequency is most likely the major reason for why adjectival stems belong to a distinct subcategory of verb stems. They are nominalized more frequently than other verb stems because they are usually not

'fastest one'

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⁷¹ Another suffix which can attach to either verbal or adjectival stems is the superlative suffix *-nirpaaq*. Two examples are given below.

A) sukan -nipaaq MG be.fast -one.that.is/does.most

B) Jaani -up nalli -gi -nirpaa -nga MG
John -REL.sg love -TR -one.that.is/does.most -his/her.sg

'John loves him/her more than anyone else does.'

the main predicate. For the purpose of having an invariant terminology in this section, a stem will be considered verbal if it can be followed either by the past tense suffix, -laur, or by inflectional morphology in either the declarative or the established mood. A stem will be said to be adjectival if it can be followed either by an active participle forming suffix or by -nirsaq, 'one that is more', but not by either the past tense suffix, -laur, or by inflectional morphology in either the declarative or the established mood. There is no reason to believe that adjectival stems in any way have the same syntactic properties as adjectives in English.

The first set of examples will show that *-nirsaq* and *-tigi* can be suffixed onto both verbal and adjectival stems. In (5.3) and (5.4), *-nirsaq* and *-tigi* are suffixed onto *nalligi*, 'love'. In (4.5) and (4.6), they are suffixed onto *mamaik*, 'be yucky', and *sukak*, 'be fast', respectively.

- (5.3) Jaani -mit nalli -gi -nirsa -ra MG John -ABL.sg love -TR -one.that.is.more -my.sg 'I love him/her more than I love John.'
- (5.4) Jaani-tut nalli -gi -tigi -ja -ra MG
 John-SIM.sg love -TR -be/do.as.much -PPT -my.sg
 'I love him/her as much as I love John.'
 *'I love him/her as much as John does.'
- (5.5) tatsu -manngat mamain -nisaq MG this.one -ABL.sg be.yucky -one.that.is.more 'It is yuckier than this one.'
- (5.6) tatsu -tuna sukat -tigi -juq MG this.one -SIM.sg be.fast -be.as.much -APT 'It is as fast as this one.'

The next set of examples will illustrate the restriction against adding verbal

inflection to adjectival stems. Example (5.7) illustrates that $aupaq^{72}$ cannot be suffixed with inflection from the established mood without using the reverbalization strategy. The same is true for mamaik, sukak, and sukaik. The glossing DS stands for 'different subject'. This is the form of the established mood marker which is used with third person subjects that are not very topical.

Example (5.8) illustrates that *aupaq* cannot be suffixed with inflection from the declarative mood.

Example (5.9) illustrates that *mamaq* can be suffixed with inflection from the established mood, unlike the other stems.

- (5.9) a) mamar -ma -t MG be.tasty -EST.DS -3sg 'because it is tasty.'
 - b) mamar -tu -u -ma -t MG be.tasty -APT -be -EST.DS -3sg 'because it is tasty.'

Example (5.10) illustrates the restriction against using the past tense suffix with sukaik, 'be slow'. Because the past tense suffix cannot be added directly to the stem as in (5.10a), the reverbalization strategy can be used as in (5.10b), or the suffix *-viniq*,

⁷² In Kangirsuk, there is another word, *aupaluttaq*, meaning 'red one'. It is a noun rather than a deverbal noun. It can be always used to replace *aupartuq*.

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'former', can be used, as in (5.10c). It should be noted that (5.10b) and (5.10c) do not have exactly the same use. My consultant informs me that (5.10b) is more likely to be used when the narrator saw the thing when it was slow, while (5.10c) is more likely to be used when the narrator did not see the thing when it was slow. This corresponds to what Mick Mallon teaches in his course on Inuktitut. The same pattern is observed with *sukak* and *mamaik*.

- (5.10) a) *sukkai -laur -tuq MG be.slow -PAST-APT *'It was slow.'
 - b) sukkait -tu -u -laur -tuq MG be.slow -APT-be -PAST-APT 'It was slow.'
 - c) sukkai -tu -viniq MG be.slow -APT -former 'It was slow.'

The next two examples involve *-tsiaq*, 'very much', or 'well'. It can be attached to *aupaq* but not to *sukak*. However, *-tsiaq* can also attach to noun stems, making (5.12b) grammatical.

- (5.11) aupa -tsia -tuq MG be.red -well -APT 'It is very red'.
- (5.12) a) *suka -tsia -tuq MG be.fast -well -APT *'he/she is very fast.'
 - b) sukat -tu -siaq MG be.fast -APT -well 'It is very fast'.

The next several examples will involve *piu*, 'be good'. At first glance it appears to be much like some of the other adjectival stems we have seen, since it cannot be given

first person indicative morphology, as in (5.13a). Rather the reverbalization strategy is required as in (5.13b).

However, in other ways, it behaves as an ordinary verb stem. Examples (5.14), (5.15), and (5.16) illustrate that it can be placed in the established mood, and it can be suffixed with *-tsiaq*, 'very much', or 'well', as well as the past tense suffix, *-lauq*.

- (5.15) piu -tsia -tuq MG be.good -well -APT 'It is very good.'
- (5.16) piu -laur -tuq MG be.good -PAST -APT 'It was good.'

Example (5.17) suggests that the correct generalization is that the reverbalization strategy is required when the subject is animate. It is the same as example (5.14) except that there is an animate subject.

(5.17) *Jaani piu -mma -t John(ABS.sg be.good -EST -3sg *'because John is good.'

We can argue that there are two lexical entries in the lexicon, *piu*, 'be good', and *piujuq*, 'good one'. The semantic restrictions of *piu* are such that the single argument must be inanimate. This is part of the verb stem's semantic restrictions. The noun stem,

piujuq, 'good one', has no such semantic restrictions. However, if it is used as a predicate, the single argument must be third person. As discussed in Chapter 2, the covert lexical rule that makes noun stems into singular absolutive nouns makes the noun third person. It then retains this semantic restriction when it is used as a predicate.

To the extent that I have tested it, the reverbalization strategy is not used with stems that are used to describe people, such as *aannia*, 'be sick', *taqa*, 'be tired', and *aangajaa*, 'be drunk'. These stems can be freely used with any verbal suffix.

Presumably, these stems are used more frequently as sentential predicates.'

Tarramiutut is not the only dialect in this language family that has a distinct class of adjectival stems. According to Lowe (1985), the related dialect of Siglitun has a distinct class of stems which can take the suffixes -juq/tuq. Ordinary verb stems in that language can only take the declarative suffixes -juaq/tuaq when there is a third person subject.

Chapter 6: Affix Ordering and Semantic Scope

This chapter will attempt to investigate the restrictions on the ordering of some of the derivational suffixes which are added to verb stems. It is of theoretical importance because it will be argued that the standard assumptions made by most lexicalist frameworks are sufficient to explain the restrictions on the ordering of the suffixes. The first subsection will deal with the suffixes -qattaq, -suuq, -lauq, and -viniq. The suffixes -qattaq and -suuq both denote habitual aspect and they both attach to verb stems. They differ in that -qattaq creates verb stems but -suuq is a nominalizing suffix. -Lauq and -viniq both denote past tense. They differ in that -lauq attaches to verb stems, indicating that an event occurred at least a day ago, whereas -viniq attaches to noun stems. It can be translated as 'former'.

The first two examples make use of the habitual aspect suffix *-qattaq*, and the past tense suffix *-lauq*. In example (6.1), the habitual suffix precedes the past-tense suffix.

When both -qattaq and -laur are used to modify the same verb stem, -qattaq must precede -lauq, as illustrated by the ungrammaticality of (6.2), where the order of -qattaq and -lauq has been reversed.

The previous two examples illustrate that the habitual aspect suffix *-qattaq* must precede the past tense suffix *-lauq*. At this point, it may appear that a word structure rule such as that given in (6.3) can explain the ordering. This theory will be rejected shortly.

(6.3) verb stem \rightarrow verb root (aspect) (tense)

In the next two examples, habitual aspect will be expressed by the nominalizing suffix *-suuq*. Example (6.4) expresses past tense with the suffix *-viniq*, 'former', which is placed after *-suuq*. It has the same translation as example (6.1).

(6.4) niri -suu -vini -kka MG eat -HABNOM -former -my.pl 'I used to eat them.'

In (6.5) the past tense suffix *-laur*, precedes *-suuq*. MG has indicated that this is pretty well unacceptable. The unacceptability appears to be related to meaning. If anyone ever did utter this word, it would mean 'I eat them every once in a while', according to MG.

(6.5) ??niri -lau -suu -kka eat -PAST -HABNOM -my.pl ??'I eat them every once in a while.'

The differences in meaning with these examples make sense on semantic grounds if we assume that more rightward suffixes must take scope over more leftward suffixes. This does appear to be a general principle affecting the positions of suffixes in Inuktitut. In examples (6.1) and (6.4), habitual aspect is semantically embedded within a logical structure which includes tense. These examples can be paraphrased as 'It was something of which she was a habitual eater'. The reverse is true for example (6.5). This example can be paraphrased as, 'it is something for which it is habitually the case that I have eaten it, at least a day ago'. See de Swart (1998) for a more in-depth semantic explanation for why tense scopes over aspect.⁷³

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⁷³ A similar ordering restriction exists between the aspectual suffix *-lir* and the past tense suffix, as illustrated by the grammaticality of A where *-liq* precedes *-lauq*, and the ungrammaticality of B, where *-lauq* precedes *liq*. The suffix-*lir* appears to indicate that, with respect to a certain time reference, something is true then which wasn't true moments ago. The unacceptability of B appears to be related to

Most lexicalist theories have no difficulty explaining these ordering restrictions, since they assume that a suffix will alter the meaning of the stem which it attaches to in a predictable way which is independent of the internal structure of the stem which the suffix is attached to. In other words, if suffix B is attached to stem A, the output C will be a stem which can be used as the input for further suffixation. However, in the event of further suffixation the internal structure of stem C will have no effect on the meaning of the output. In the acceptable examples, past tense is given to a stem which already has 'eat habitually' as part of its meaning. In the unacceptable examples, habitual aspect is added to a stem which already means, 'eat at least a day ago'.

The next four examples will involve the past tense suffix -laur and -galuag, 'indeed'. ⁷⁴ (6.6) and (6.7) show that *-laur* must precede *-galuag*.

- (6.6)-raluar -ma MG niri -lau -t eat -PAST-indeed -DS.EST -3sg 'because he/she did indeed watch something'
- (6.7)*niri -galua -laur -ma MG eat -indeed -PAST-DS.EST -3sg *'because he/she did indeed watch something'

Initially, it may appear again that a word-internal phrase structure tree like the one

semantic scope, since it would mean, 'it is now the case that I followed him/her/it yesterday, but it wasn't the case moments ago'.

MG

'Indeed, he/she is not sleeping.'

mali -li -laur -ta -ra follow -LIQ-PAST-PPT-my.sg 'I then followed him/her'

B) *mali -lau -lir -ta -ra follow -PAST-LIQ-PPT-my.sg *'I then followed him/her'

⁷⁴ In the dialect of MG, there appears to be an unusual restriction that some suffixes cannot occur after the negative suffix -nngit. One such suffix is -galuaq, 'indeed/although'. However, my research on this topic is quite limited. There is another suffix -ugaluaq, 'athough/indeed', that functions as an enclitic ending being placed at the end of the word. According to MG, this suffix has to be used if one is to translate 'indeed, he/she is not sleeping' into her dialect, as in example (A), below.

sini -nngi -tu -ugaluaq sleep -NEG -APT -UGALUAQ

in (6.3) may be helpful. However, it does not explain the following two examples. While (6.8) is grammatical, (6.9) is not. As is the case with examples (6.6) and (6.7), they differ in that the positions of *-galuaq* and *-lauq* have been switched. However, in these examples, the stem is nominalized and then reverbalized between the two suffixes.

- (6.8) niri -laur -tu -gulu -u -galuar -ma -t MG eat -PAST -APT -small/bad -be -indeed -EST.DS -3sg 'Because the bad little one indeed ate something.'
- (6.9) *niri -galuar -tu -gulu -u -laur -ma -t MG eat -indeed -APT -small/bad -be -PAST -EST.DS -3sg *'Because the bad little one indeed ate something.'

The word in (6.8) is constructed as follows. -lauq is suffixed onto niri, 'eat', to yield nirilaur, 'ate something'. Next, the active participle, nirilaurtuq, 'one that ate something', is formed. It has then been suffixed with -guluk, yielding nirilaurtuguluk, 'bad or little one that ate something'. It has then been reverbalized with -u to yield nirilaurtuguluu, 'be a bad little one who ate something'. Onto this has been suffixed -galuar, 'indeed', as well as third person singular inflection in the established mood. The DS notation in the glossing stands for 'different subject'. It is the form of the established mood marker that is used when the subject is not very topical. This word forming strategy, where a stem is nominalized and then reverbalized, is very common in spoken Inuktitut.

The ungrammaticality of (6.9) cannot be attributed to a restriction that *-galuaq* cannot be followed by an active participle forming suffix which is then followed by the reverbalizing suffix *-u*, 'be', since (6.10) is grammatical. Based on the translation which MG has given me, it appears that *katak* can also mean 'fall appart'. If *-galuaq* means 'indeed', then *katagaluartuq* should then mean 'one that is indeed falling apart'. The

translation that MG gives for the predicate in (6.10) is 'because it is falling apart too easily'. A more literal translation would probably be something like 'because the bad one is indeed falling apart'.

(6.10) kata -galuar -tu -gulu -u -mma -t MG fall.apart(ITR)-indeed -APT-small/bad -be -EST.DS -3sg 'because it is falling apart too easily.'

As with the previous set of examples involving tense and aspect, a rule such as the one given in (6.11) would have considerable difference explaining the contrast between (6.8) and (6.9). Illocutionary force is a fancy word for words or suffixes with the meaning 'indeed'.

(6.11) verb stem→verb root (tense) (Illocutionary Force)

The active participle forming suffix attaches to verb stems, which can contain either the suffix -galuaq or -lauq, as shown by (6.8) and (6.10). So, the rule in (6.11) occurs before the rule which adds the active participle forming suffix. While the data will not be given, it is also possible to put both -lauq and -galuaq after the sequence -tuguluu, where an active participle gets reverbalized, but the past tense suffix has to come before -galuaq. In other words, we would need to claim that the rule in (6.11) also applies to deverbal noun stems that have been reverbalized with -u. They are treated as verb 'roots' for the purposes of that rule. Allowing the rule in (6.11) to apply both before and after the suffixation of the sequence -tuguluu would allow the creation of the ungrammatical word in (6.9) which places tense after illocutionary force, with the sequence -tuguluu in between.

We are left with two possible explanations for the restriction that the illocutionary force suffix, -galuaq, 'indeed', must follow the past tense suffix -lauq. First, it could be

that we need a stipulation that *-laur* must always precede *-galuaq* within a word. Second, we could investigate a semantic explanation that relies on scope to place *-galuaq* after *-laur*. If we argue that *-galuaq* really means something like, 'in case someone is wondering, it is very much true that', then it may be that it makes no sense for *-galuaq* to be situated in the past tense, since present tense reference to the ongoing narrative may be inherent to the meaning of *-galuaq*, 'indeed'. For this reason, illocutionary force must scope over tense.

The theory of this dissertation predicts that a semantic explanation for affix ordering should be available whenever sentences like (6.8) and (6.9) can be constructed. Further semantic investigations will either be consistent with or refute this analysis.⁷⁵

Far better evidence that semantic scope can account for affix ordering restrictions comes from examples like (6.12) and (6.13), where both orders are grammatical, but there is a difference in meaning. Both of these sentences can be translated as 'they are following each other repeatedly', since, in both of the examples, the reciprocal suffix and the repetitive suffix are added to the verb stem *malik*, 'follow'. These stems have then been made into active participles, and then given dual inflection.

The theory which I have presented predicts that either the suffixes have a different meaning, or that what appears to be two suffixes in some dialects is really treated as if it is one suffix. In such cases, it should not be possible to nominalize and then reverbalize the verb stem between the two elements that are being incorrectly analyzed as two suffixes. In the dialect of SM, the habitual suffix -qattaq and the suffix -innaq, 'still', can be placed in either order, as in taku-inna-qatta-ta-ra and taku-qatta-innaq-ta-ra. Both of those words mean, 'I always see him/her/it'. While -innaq does mean 'still', it can also give a verb stem habitual aspect at the same time in her dialect. When both -qattaq and -innaq are added to a stem, the narrator is essentially repeating the fact that the stem is habitual, which is why it is translated as 'always'. The test described in this section shows that these two suffixes can also occur in either order if the verb stem is nominalized rather than reverbalized. The sequence -tualuu involves forming an active participle followed by the addition of -aluk, 'big/bad', followed by the verbalizing suffix, -u, 'be'. It is often used to mean 'be/do something a lot', much as in English we can say 'I am a big eater' if we mean 'I eat a lot'. The following two words both mean, 'I see someone/something just constantly: taku-qattaq-tu-alu-u-nginnaq-tu-nga, and taku-innaq-tu-alu-u-qattaq-tu-nga.

- (6.12) mali -kata -uti -ju -uk MG follow -repeatedly -REC -APT -du 'They are following each other repeatedly.'
- (6.13) mali -uti -katat tu -uk MG follow -REC repeatedly -APT-du 'They are following each other repeatedly.'

The subtle difference is as follows. In (6.13), there are repeated events where both people are following each other at the same time. For example, they might follow each other around in a circle and then stop and then start up again repeatedly. This is not necessarily the case with (6.12). In (6.12), the scenario described for (6.13) is possible, but it is also possible that the first person follows the second person and then the second person follows the first person.

It is not immediately clear how a rule such as the one in (6.14) would be able to get the difference in meaning that is observed between these two words. The rule seems to assume we need a syntactic rule to account for affix order because there can be no better explanation.

(6.14) verb stem → verb root (reciprocal) (repetitive) (reciprocal)

The difference can be explained quite easily in a lexicalist theory such as HPSG. In such theories, morphological derivation is treated as a series of successive affixations. Each stem has a meaning associated with it and each suffix can change the meaning of a stem in a consistent predictable way. In 6.12, the repetitive suffix is attached to a stem which refers to a single following event. It creates a stem which refers to a single following event where both participants follow each other. The reciprocal suffix then indicates that there are actually a series of repeated events which can all be described by the stem onto which the reciprocal suffix is attached. For (6.11), the reciprocal suffix

attaches to a stem meaning 'follow repeatedly'. ⁷⁶ The reciprocal suffix shows a reciprocal relation between the subject and the object of that stem. The two entities which are described by the subject do not have to act at the same time for the following reason. When repetitive suffixes are used and the subject is plural or dual, the entities described by the subject do not all need to do what is described by the verb at the same time, as shown by example (6.15). Here, *-katak*, 'repeatedly', is attached to *qaaq*, 'explode', or 'pop' (if it is a balloon). In this case, it makes no sense for each one to explode or pop repreatedly, so it means, 'exploded one after the other'.

The semantics of the repetitive suffix certainly does require more formal treatment than I am giving in this dissertation, but, hopefully, I have shown that most lexicalist frameworks, including HPSG, should be able to handle the difference in meaning quite nicely. If we were to make use of a rule such as (6.14), we would need to make additional stipulations about how the positioning of the reciprocal suffix relative to other suffixes can have an impact on the meaning of the word created. This hardly seems desireable, since a rule like the one in (6.14) seems to be a last resort strategy to get ordering restrictions for which there can be no other explanation. But, the discussion above shows that there is another much easier explanation.

The next two examples will involve *tit*-causatives. Semantics alone can most likely account for the restrictions on what suffixes are possible in the verb stem which they are attached to. Example (6.16a) illustrates that a future tense suffix can precede

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⁷⁶ It should also be noted that, for many verbs, there are separate repetitive and non-repetitive forms in the lexicon.

niraq. The future tense is reflected in the meaning of the translation. The future suffix -laaq is used to refer to something that will happen the next day or later. Another example making use of the suffix -laaq produced by JO is given in (6.16b). JO has consented to the first translation given, but it is mine. The second translation was given by MG. The restrictions on the use of the suffix -guminaq were discussed in section 4.6. It is the author's impression that it is not at all uncommon for the agent of causation to be construed as the situation that is being discussed, in this case, her frustration about her insomnia, when -guminaq attaches to intransitive stems. More descriptive research should be done on the uses of the suffix -guminaq, because its range of uses are otherwise difficult to learn, even though the morphosyntactic restrictions described in section 4.6 appear to be correct.

- (6.16) a) quki -i -laar -nira -laur -ta -ra MG shoot -AP -FUTURE -claim -PAST -PPT -my.sg 'I claimed that I was going to shoot it.'
 - b) tupa -tsia -laa -rumina -li -ri JO/MG wake.up -well -FUT cause.to.want.to -starting.moments.ago-too
 - -vuq qaupat -tau -DECI(3sg) tomorrow -too

'The situation is now also making it desireable to wake up well tomorrow too'

'In hopes of waking up well, once again, tomorrow.'

Example (6.17) illustrates that this is also possible with *-juritsi*, 'think that'. Here, *-langa*, 'later today', is suffixed before *-juritsi*, the antipassive version for 'think that'. Again, the embedded future tense is reflected in the meaning of the translation.

(6.17) niri -langa -juri -tsi -ju -nga MG eat -later.today -think -AP -IND I-1sg 'I thought that someone was going to eat it'

Example (6.18) illustrates that this is not possible with *-tit*. Just as in English, it is not possible to make someone to be going to do something. There does appear to be a semantic explanation for this. The suffix *-tit*, 'cause', does not describe a separate event or state of affairs from that which is described by the verb stem onto which it is attached. It simply adds an agent of causation who is linked to the event or state of affairs described by the predicate onto which it is attached. It simply does not contain enough semantic information for it to make any sense to situate the causation itself at a separate time than the event or state of affair that was caused.

- (6.18) a) *niri -laar -ti -laur -ta -ra JO eat -FUTURE -make -PAST -PPT -my.sg *'I made him/her eat something in the future'
- (6.18) b) niri -ti -laur -ta -ra JO/MG eat -make -PAST -PPT -my.sg 'I made him/her eat something.'

 'I fed him/her.'

 'I served him/her some food.'

Some of the restrictions on the ordering enclitic suffixes can also be explained by claiming that successive affixation reflects semantic scope. Enclitic endings can attach to either nouns or verbs, and they come after nominal or verbal inflection. The next four examples involve -guuq/kuuq/ruuq and -tuq/tuuq, which will be glossed GUUQ and TUUQ, respectively.⁷⁷ GUUQ indicates that something is hearsay, but it can also be

The rules regarding the phonological restrictions of the suffixes has largely been ignored. However, in this case there are some unresolved issues with regards to the phonological realization of TUUQ. It may turn out that the vowel length is optional in this dialect, or it may turn out that a long vowel is used just in case this suffix occurs at the end of the word, but the latter scenario would be most unusual for Inuktitut phonology. Another possibility is that the sequence -turuuq from example (5.19) really needs to be treated as one suffix that has evolved from the sequence of TUUQ followed by GUUQ. GUUQ behaves like other suffixes in the language. -Guuq occurs after vowels or stems ending in velar consonants, in quich case the velar consonant is deleted. -Ruuq occurs after stems ending in uvular consonants, in which case the uvular consonant is deleted. -Kuuq occurs after stems ending with a /t/ or a /p/, in which case the preceding consonant is assimilated

used for direct quotations. TUUQ indicates that a future event is hoped for by the narrator. When these suffixes are attached to a verbal argument, the translations appear to suggest that they have a topic shifting effect, such that the entity in question now plays a more important part in the discourse than it did in the preceding discourse. But, again, this is only based on the translations of these sentences. There has been no text analysis to confirm this claim.

If GUUQ were not used in (6.19a), the sentence would mean, 'Ilisapi loves John'. But, with the addition of GUUQ to the end of *Jaanimik*, the secondary case form of 'John', the sentence means, 'I have heard that Ilisapi loves John'. For sentences like (6.19a), an indirect quotation reading is possible. The true function of GUUQ appears to be to indicate that the narrator is introducing some hearsay about John, but *Jaanimiguuq* otherwise has the same role in the sentence that *Jaanimik* would, if GUUQ were not suffixed to the end of this argument.

- (6.19) a) Jaani -mi -guuq Ilisapi nalli -gusut -tuq MG
 John -SEC.sg -GUUQ Elizabeth(ABS) love -AP -APT
 'I have heard that Elizabeth loves John.'
 - b) niri -guma -ju -ruuq Jaani MG eat -want -APT -GUUQ Jaani(ABS.sg) 'I have heard that John wants to eat.'
 - c) niri -guma -ju -nga -guuq MG eat -want -INDI -1sg -GUUQ 'He/she said, "I want to eat"

In example (6.19b), -guuq is attached to a clausal word, indicating that the narrator has heard about a situation. According to MG, there is an important difference in meaning between (6.19b) and (6.19c), where –guuq is attached to a verb with first person inflection in (6.19c). Example (6.19c) must be a direct quotation. According to MG,

words such as (6.19c) are used when the person who said *nirigumajunga* wanted the narrator to convey the message. In contrast, according to MG, in (6.19b), it is not necessarily the case that someone said the word *nirigumajuq*. It might instead be that *Jaani* himself said that he was hungry, or that someone else said that *Jaani* was hungry. The correct generalization is most likely that, when *-guuq* is used to introduce hearsay, it cannot be used to introduce hearsay about the narrator. However, it can also be used to mark direct quotations. Another example where it was used to mark a direct quotation was given in section (2.11).

If -tuuq were not used in (6.20), the sentence would mean 'John's mother will understand'. With the addition of -tuuq to the end of Jaaniup, 'John', the relative case form of John, the sentence means, 'with regards to John, I hope that his mother understands'. I believe that these suffixes have a topic shifting effect when they attach to nouns, but I don't really have any evidence for that. But, that is the reason for the unusual translation. In this case, the function of TUUQ appears to be that the narrator is introducing a hope he/she has for John's future, but Jaaniuttuuq has the same role that Jaaniup would otherwise have in the sentence if -tuuq were not added.

(6.20) Jaani -ut -tuuq anaana -nga tukisi -langa -vuq MG John -REL.sg -TUUQ mother -his/her.sg understand -later -DECI(3sg) 'With regards to John, I hope that his mother will understand.'

Examples (6.21) and (6.22) would also mean 'John's mother will understand' if TUUQ and GUUQ were not used. They differ in that TUUQ occurs before GUUQ in (6.19). GUUQ comes before TUUQ in (6.22). (6.21) is grammatical, and it means 'He or she said "I hope that John's mother will understand." According to MG, such a sentence would be uttered if the person who said *Jaaniuttuq anaananga tukisilangavuq*

said so with the intension that the narrator would convey the message so as to make sure that John's mother really does understand. The other order, where TUUQ comes after GUUQ, is not grammatical.

(6.21)MG Jaani -ut -tu -ruuq anaana -nga John -REL.sg -TUUQ -GUUQ mother -his/her.sg tukisi -langa -vuq understand -later -DECI(3sg)

"He or she said "I hope that John's mother will understand."

(6.22)*Jaani -uk MG -kuu -tuuq anaana -nga -REL.sg -GUUQ -TUUQ mother-his/her.sg John tukisi -langa -vuq understand -later -DECI(3sg)

*'He or she said "I hope that John's mother will understand."

Example (6.21) is easily explained. Since this is a direct quotation, -guuq is attached to a word that someone said, in this case *Jaaniuttug*. The other words also belong to the direct quotation. Another suffix that is used with direct quotations will be discussed at the end of section 7.2. The relative ordering of *-guuq* and *-tuuq* in (6.22) makes no sense. Jaaniukkuuq would mean either 'I have heard something about John' or 'he/she said "John". Suffixation of *-tuuq* would indicate that the narrator is introducing a wish about John. It would indicate that the material which follows is both something which is hearsay and something wished for. That is a contradiction in the absence of the semantic embedding that is possible with example (6.21).⁷⁸

 78 I have no explanation for why -li, 'but' or 'how about', comes before TUUQ and GUUQ, as in the

following example. Jaani -ul -tu MG -li -ruuq anaana -nga tukisi -langa -vuq John -REL.sg-but -TUUO -GUUO mother -his/her.sg understand -later -DECI(3sg)

^{&#}x27;But, with regards to John, it is said that someone hopes that his mother will understand'.

Chapter 7: Noun Incorporation

There has been a considerable amount of controversy in the literature about suffixes which attach to noun stems to create verb stems. The data in this chapter will be used to argue that some theories fare better than others. HPSG representations will be simplified and made less formal in order to make them easier to understand. The analysis is very close to the one already given by Malouf (1999). However, it is the author's opinion that the debate between lexicalism versus incorporation theory should ultimately focus on the nominalizing suffixes as well as a number of other phenomena discussed in Chapter 4. Those other derivational processes present far greater difficulties for an incorporation analysis than do the phenomena to be addressed in this section. Because the nominalizing suffixes can attach to any stem, regardless of whether it contains an incorporated noun, adopting a lexicalist analysis for the nominalizing suffixes would necessarily involve adopting a lexicalist analysis for noun incorporation. Because some readers have found some of the uses of terminology in this section to be problematic, it should be pointed out that, in a lexicalist framework, when a verbalizing suffix is added to a noun stem with a lexical derivational rule, that is considered to be an instance of noun incorporation. Use of the term noun incorporation does not imply syntactic movement in lexicalist frameworks which lack movement. Section 7.1 will address bare noun incorporation, where a verbalizing suffix attaches to a noun stem. Section 7.2 will address post-inflectional noun incorporation, where fully inflected nouns get verbalized. Section 7.3 will be a discussion of coordination constructions as they relate to noun incorporation. These constructions are difficult for any syntactic theory.

7.1 Bare Noun Incorporation

This section will address verbalizing suffixes which attach to noun stems with no inflectional suffixes. The first set of data will show that there is some diversity with repect to the argument structures of the verb stems created with these suffixes. This will be followed by a discussion of the semantics of noun incorporation. Contrary to some of the claims in the literature, it will be argued that sentences involving noun incorporation do not have any interpretational restriction that incorporated nouns must be indefinite. This will be followed by an investigation of some noun-incorporating suffixes which can attach to [intransitive] noun stems. Understanding the analysis of section (2.7) will be crucial to understanding that discussion.

An example of bare noun incorporation is given in (7.1.1). Here, -*liuq*, build, is attached to *illuk*, 'house', to yield 'build a house or houses'.

With this predicate, it is possible to add a separate word in secondary case describing the house or houses, as in (7.1.2), where *aupartumik*, 'red one', indicates that it was a red house that was built.

In terms of the theory presented herein, *illuliuq*, 'build a house', has an OBJ θ , which expresses the house which is built.⁷⁹ Noun incorporation can be handled quite

 $^{^{79}}$ -Lik is a suffix meaning 'one that has'. It attaches to noun stems to create noun stems with an OBJ θ which, along with the incorporated noun, expresses that which is had. An example of its use is given in the example below.

easily in HPSG. An informal HPSG representation of *illuliur*, 'build a house', is given in (7.1.3).

(7.1.3) HPSG representation of the [intransitive] verb stem, illuling, 'build a house'

CLASS: stem

CAT: verbstem

TRANS: [intransitive]

ARG-ST < X,

INDEX*i* **INDEX***i* CASE: SEC

SEM [i builds j, and j is a house]

This verb stem has two arguments. The subject bears index i and and it is equated with the builder in the semantic representation. The other argument is specified to get secondary case, and it is equated with j in [i builds j, and j is a house]. In the case of example (7.1.2), the secondary case marked argument is *aupartumik*, 'red one'. With respect to the semantic relations in (7.1.3), aupartumik must bear the index j in example (7.1.2). The representation of *aupartumik* relates the index *j* to the semantic representation [j is a red one]. When these words are put together into a sentence, we get the meaning [i builds j, and j is a house, and j is red]. Note that there is never a requirement that any of a word's arguments have to be expressed with another word. They are always optional. Indeed, the type of phrase structure generating rule discussed

JO

A) aupartu gimirrua-lik -mik

red.one -SEC.sg book -one that has

^{&#}x27;he/she has a red book.'

^{&#}x27;one that has a red book.'

A more precise analysis of this suffix was given in Chapter 4.10. It attaches to [intransitive] noun stems with a subject argument. The nominal referent of the output is equated with the nominal referent subject of the input. The output also has an OBJ θ which is equated with the nominal referent of the nounstem onto which -lik is attached.

in section 3.1 would have no way to prevent speakers from using the stem illuliuq without an overt secondary case-marked argument. The derivational rule that attaches – liuq onto a noun stem works as follows. The list(y) notation refers to the entire semantic content of the input. It is mapped to the output, but the output has an additional semantic relation, [i builds j]. The index of the input is equated with the index of the secondary case-marked argument in the output, as well as the one that is built. The derivational rule also assumes that any arguments in the input will be mapped to the output, but it is not at all clear that this is true with this suffix. This assumption is represented by the 'list(x)' notation which represents the entire argument structure list of the input.

(7.1.4) Input and output to the derivational rule which attaches *-liuq*, 'build' to a noun stem

INPUTCLASS: stemCAT: nounstemARG-ST < list(x)>INDEX
$$j$$
SEM [list(y)]OUTPUTCLASS: stemCAT: verbstemTRANS: [intransitive]ARG-ST < X, Y, INDEX i CASE:SEC INDEX j SEM [list(y), and i builds j]

A very different theory has been proposed by Sadock (1985, 1991). In his theory, there are two parallel levels of representation. At one level of representation, 'house' is expressed as a separate word bearing secondary case. The other level of representation appears as in (7.1.2). Baker's theory is very similar (Baker 1988). In his theory, 'house' undergoes movement to attach to the verb. Bittner (1997) has also adopted this analysis, as has Johns. Johns (2007) has made a further refinement to the theory such that the incorporated noun undergoes movement because it is a root rather than a fully inflected noun. Bok-Bennema (1991), and Bok-Bennema and Groos (1988) have given a very similar analysis, involving morphological and syntactic reanalysis.

There is a considerable amount of heterogeneity in terms of how the input maps to the output in noun incorporation. In (7.1.5), the predicate *nasaittuq* means 'he/she doesn't have a hat'. It is constructed by suffixing -*it*, 'not have', onto *nasaq*, 'hat'. It is not possible to modify the incorporated noun with another word bearing secondary case, as in (7.1.5a), nor is it possible to modify the incorporated noun with a noun bearing absolutive case, as illustrated by the ungrammaticality of example (7.1.5b).

- (7.1.5) a) (*aupartu-mik) nasa -it -tuq MG red.one-SEC.sg hat -not.have -APT 'He/she doesn't have a (*red) hat.'
 - b) *nasa -it -tu -nga aupaluttaq MG hat -have.no -INDI -1sg red.one(ABS.sg) 'I don't have a red hat'

In contrast, it is possible to use a secondary case marked word-external modifier with -qaq, 'have', even when it is negated, as illustrated by example (7.1.6).

In the theory presented in this dissertation, the stem *nasait*, 'not have a hat', from example (7.1.5), differs from *nasaqanngit*, 'not have a hat', in that it does not have an OBJθ. In terms of HPSG, its argument structure does not contain an element which bears the same index as the incorporated noun. It only has a subject corresponding to the one who does not have something.

Sadock's theory would have a hard time explaining this with parallel levels of representation. His theory assumes that at the level of representation where there is no incorporation, the same phrase structure is possible that is found when other non-incorporating verbs are used. Under his theory, a noun phrase can contain multiple nouns

which are coreferential.

Baker's analysis would also have a hard time explaining this restriction for approximately the same reasons. However, since Baker's theory is done in the Chomskyan framework, it might be possible to argue that there is no way for a stranded modifier to get case in this sentence. However, it may be very difficult to explain why it is possible to assign case to a word-external modifier in (7.1.6) but not (7.1.5).

Another possible avenue for Sadock (1991) would be to claim that -it, 'have no', is a lexical suffix, and that the analysis for -liuq, where the incorporated noun occurs as a separate word in another level of representation, does not apply to -it. The same avenue might be available to Baker. However, once we adopt a lexicalist analysis for one instance of noun incorporation, we might need an explanation for the assumption that that there is some reason why a lexical suffix cannot create a verb stem with an OBJ θ which is coreferent with an incorporated noun. Given these considerations, there appears to be little empirical or conceptual advantage to adopt either Baker or Sadock's theory over the theory of this dissertation.

The suffixes -u, and -nnguq, 'become', are also like -it, 'have no', in that they do not allow word-external modifiers of the incorporated noun. Example (7.1.7) illustrates that word-external modifiers are not possible with -u, 'be', in either secondary or absolutive case, at least not for MG. Example (7.1.8) is the grammatical equivalent of

⁸⁰ Sadock (2003: 32) has reported the equivalent of the following sentence to be grammatical in the related dialect of West Greenlandic, though in that dialect it is *ilinniatitsisuuit*.

'Are you the new teacher?'

For MG, sentence B is the only possible translation of 'are you the new teacher?', even though the word *nutaaq* exists in her dialect. It is difficult to explain the ungrammaticality of example A, since Inuktitut ultimately allows nouns to refer to first or second person entities, as explained in Chapter 2.5. I have no

A) *ilinniatitsiji -u -vit nutaaq? MG

teacher -be -INT.2sg new.one(ABS.sg)

example (7.1.7). The equivalent to 'I am a linguist from Buffalo' involves two predicates in Inuktitut, one which expresses that I am a linguist, the other which expresses that I am from Buffalo. While I have not studied the distribution of the different moods in depth, the appositional marking on the second predicate in (7.1.8) appears to allow these two predicates to be treated as a single sentence. The second translation given in (7.1.8) was not given by a speaker. I have given that alternative translation to help understand the structure of this sentence. A third person equivalent to (7.1.8) was given in (2.1.12).

- (7.1.7) *uqausiliriji -u -vu -nga MG linguist -be -DECI -1sg

 buffalo -miu /buffalo -miu -mik Buffalo -inhabitant.of(ABS.sg) /Buffalo -inhabitant.of -SEC.sg

 *'I am a linguist from Buffalo.'
- (7.1.8) uqausiliriji -u -vu -nga buffalo -miu -ngu -tsu -nga MG linguist -be -DECI -1sg Buffalo -inhabitant.of -be -APP -1sg 'I am a linguist from buffalo.'

 'Being an inhabitant of Buffalo, I am a linguist.'

Another claim originally made by Baker (1988), and later adopted by Bittner (1997), is that antipassivization is a type of noun incorporation. Baker's reasoning was as follows. Since word-external modifiers of incorporated nouns bear secondary case, and

explanation for why example A is not grammatical in the dialect of MG, where *nutaaq* would express the absolutive subject of *uqausilirijiuvit*. It should be noted that Sadock has found that *nutaaq* has to come after the verb in sentence A in West Greenlandic. This is consistent with an analysis where *nutaaq* expresses the subject. It would be very difficult to process the sentence in A if *nutaaq* were placed at the beginning of the sentence because nouns do not normally refer to first person entities. Language processing might also account for the better acceptability of this sentence in West Greenlandic as opposed to Inuktitut. Because Inuktitut has nominal predicates, sentence A could be two sentences meaning 'are you the teacher?', and 'He/she/it is new.' West Greenlandic lacks simple nominal predicates where a single absolutive noun can express an entire sentence, making sentence A unambiguous, which may account for the differing grammaticality judgements. It is the author's opinion that more research should be done to see if there is speaker variation with regards to sentences such as (7.1.7), because some of his earlier fieldwork findings were in line with the findings of Sadock (1993).

B) uqausiliriji -ttaaqammi -u -vit? linguist -new -be-INT.2sg 'Are you the new teacher?'

this is the same case used to mark the non-actor in the antipassive construction, then the antipassive suffix must be an incorporated pronoun meaning 'someone' or 'something', and secondary case must be a case which is used to mark 'stranded' modifiers of incorporated nouns or pronouns. This theory does not capture the fact that word-external modifiers of incorporated nouns do not always get secondary case. With -liaq, 'go to', the word-external modifier bears dative case, as in (7.1.9), suggesting that it is treated as a Goalθ.

Indeed, this is not surprising, since parallel examples which do not involve noun incorporation also put the argument in question in dative case, as illustrated by (7.1.10).

With the suffix -gi, 'have', the word-external modifiers are placed in absolutive case, as in (7.1.11) Recall that -gi creates a transitive stem with an object which has the same semantic restrictions as the noun stem onto which it has been attached. This object has then been nominalized with the passive participle forming suffix. Because the passive participle is used as a predicate, the argument in question bears absolutive case.⁸¹

 $^{^{81}}$ -Gi is the only verbalizing suffix in the language which equates an object with an incorporated noun. The other suffixes which allow word-external modifiers always place the word external modifier in the same case, usually secondary, with the exception of -liaq which uses dative case, and the suffixes to be addressed in the next section. A question arises as to why none of these suffixes allow an alternation such that the word-external modifier can either be treated as an OBJ or an OBJ0. In the case of possession, two different suffixes are used: -Gi, which treats the word-external modifier as an OBJ, and -qaq, which treats it as an OBJ θ . In the case of -taaq, 'receive', and -liuq, 'build', there are also the suffixes -taaq, which create noun stems from noun stems, with the meanings 'one that is built', and 'one that is received', respectively. If they are used as predicates, the word-external modifier will get absolutive case, as illustrated by the examples in section (4.16) which addresses these suffixes. Finally, as discussed in section 4.5, many of these verbalizing suffixes allow a benefactor to be treated as an object (or an OBJ0).

(7.1.11) aupar -tu -it qimirqua -gi -laur -ta -ka be.red -APT-pl(ABS) book -GI -PAST-PPT -my.pl(ABS) 'I had the red books'='the red books were mine'

Baker has claimed that, cross-linguistically, subjects are never incorporated (Baker 1988, 1996). He has also argued that there must be some principle of inborn universal grammar which accounts for this restriction. Lexicalist theories such as HPSG or LFG have a hard time treating such a restriction as being part of an inborn universal grammar. However, there are at least two reasons to think that it is not necessary to claim that the restriction in question is in any way hard-wired into our brains. First of all, if no such language exists, it could be accidental. In the next section, we will see that Inuktitut has post-inflectional noun incorporation, where some suffixes can attach to noun stems that are fully inflected for number and case. The author knows of no other language family where this occurs. If the Eskimo-Aleut language family dies out and there truly are no other languages with post-inflectional noun incorporation, would it then be reasonable to conclude that there is a principle of universal grammar that rules out post-inflectional noun incorporation? Furthermore, Baker (1996) claims that goals cannot be incorporated in Mohawk, and he gives a theory for how that could be true. But this does not appear to be the case for Inuktitut. Example (7.1.9) was one example of a goal being incorporated in Inuktitut. There will be more examples of this in the next section. This sort of variation between languages suggests that the restrictions on noun incorporation are not universally hard-wired. The second reason for not thinking that we need to make reference to a hard-wired universal grammar to understand the restrictions on noun incorporation in Inuktitut comes from an understanding of the distribution of

Disallowing word-external modifiers of incorporated nouns from also being treated as objects reduces ambiguity. For most verbalizing suffixes, there is a verb stem with the same meaning that does allow the argument in question to be treated as an object.

constructions involving noun incorporation, as well as the other grammatical restrictions on noun incorporation.

In Inuktitut, whether or not a verb is affixal is clearly lexical. Arguably, the thematic role of the noun which the affixal verb attaches to is also a property of the suffix. But, there does appear to be an important generalization. The argument that gets incorporated is always the one that is the least likely to be first or second person. This is unsurprising given that Inuktitut does not allow pronouns to be incorporated. Examples (7.1.12) illustrates that it is not possible for *-siuq* to incorporate a first person pronoun.

The analysis presented herein closely resembles that of Van Geenhoven (2002), in that there is no movement or parallel levels or representation to explain noun incorporation. However, she makes one claim which is most likely not correct for the dialect of JO and MG. I do not know about West Greenlandic, the dialect that Veerle Van Geenhoven worked on. She claims that incorporated nouns are always existentially quantified, and that this property of existential quantification comes from the verbalizing suffixes. While this appears to be true for -it, 'have no', there appears to be no semantic restriction on the interpretation of incorporated nouns in Inuktitut. This is illustrated by examples (7.1.13) to (7.1.15). In (7.1.13), the incorporated noun *illuk*, in the second sentence, is used endophorically to refer back to the house that was introduced in the previous sentence. The possibility of translating the second sentence as 'John built the house' shows that the incorporated noun does not need to be interpreted as an indefinite with the meaning 'some house or houses'. If there is no restriction with respect to

definiteness or indefiniteness with incorporated nouns, then there really seems to be no reason to think that there is some way in which incorporated noun stems have different quantificational properties from unincorporated noun stems.⁸²

(7.1.13)atausir -mik illu Quaqta -mi -lik Quaqtaq -LOC.sg one -SEC.sg house -one.which.has tupi -lik. ammalu atausir mik and one -SEC.sg tent -one.which.has 'In Quagtag, there is one house and there is one tent'. Jaani illu -liu -laur

Jaani(ABS.sg) house -build -PAST -APT(ABS.sg)

'John built the house (possibly the only one in Quaqtaq.)'

In example (7.1.14), a proper name is incorporated. Proper nouns are presumably never existentially quantified.

(7.1.14)Jaani -siur -nga JO -tu John -look.for -INDI -1sg 'I am looking for John.'

In (7.1.15), the incorporated noun must be definite, because a demonstrative pronoun is used as a word-external modifier. 83 If the incorporated noun were

'Who has a/the red hat?'

B) taitsu -minga illu -gar -tua SM that.one -SEC.sg house -have -APT

Both -lik and -qaq can be also be used in existential constructions meaning 'there is' or 'there are'. If we drop out taitsuminga from the preceding two examples, they could mean either 'he/she has a house' or 'there is a house'.

⁸² Below is another example where MG informs me that a definite reading is possible in the right context.

A) kina aupartu -mik nasa -lik? MG who red.one -SEC.sg hat -one.that.has

⁸³ The following two examples illustrate that it is possible for -lik, 'one that has', and -qaq, 'have', to attach to a noun which is given a definite interpretation.

taitsu -minga illu -lik MG this.one -SEC.sg house -one.that.has 'he/she has that house'

^{*&#}x27;that house exists.'

^{&#}x27;He/she has that house.'

existentially quantified, this sentence would mean something like 'There is a house which he/she built which is that one'. That would be quite an unusual way of speaking, and it is doubtful that the speaker would accept a sentence with such an unusual meaning.

(7.1.15) taitsu -minga illu -liu -laur -tuq MG that.one -SEC.sg house -build -PAST -APT(ABS.sg) 'He/she built that house'.

Van Geenhoven's theory is done within the principles and parameters or minimalist approach to syntax. In her theory, noun incorporation occurs by head adjunction. She has argued that there is no reason to believe that the syntax of West Greenlandic allows any arguments of an incorporated noun to be expressed syntactically, and this is supposed to be an advantage that her theory has over transformational approaches to noun incorporation. In contrast, most lexicalist theories such as HPSG allow the output of a derivational rule to inherit arguments from the stem which a suffix is attached to. Example (7.1.16) suggests that the arguments of an incorporated noun are indeed inherited by a verb stem created by noun-incorporation, at least in the dialect of JO. However, MG and SM do not consider it to be very grammatical. Ideally, one really should find another speaker who finds this example to be grammatical before concluding that it really is grammatical in some dialect.

(7.1.16) tuttu -mik quki -i -vi -vini -liar -tu -nga JO caribou -SEC.sg shoot -AP-place/time -former -go.to -INDI -1sg 'I am going to the place where the caribou was shot.'

⁸⁴ MG does, however, accept the following example. Here -qaq, 'have', is used to introduce *itirtuq*, 'one that enters', existentially. The Goalθ of *itiq*, 'enter', is expressed as a separate word. In terms of HPSG, we can claim that MG does not allow -*liaq* to inherit arguments from the stem which it attaches to, but she does allow it with -qaq, 'have'. The sentence below is not necessarily problematic for Van Geenhoven's theory, because she could treat *illumut* as an adjunct. However, her analysis can clearly not be extended to the data from the next section, where a relative case marked argument is inherited by a verb stem is far more problematic, because Inuktitut does not have relative case marked adjuncts.

A) illu -mut itir -tu -qa -kainna -tuq MG house -DAT.sg enter -APT -have -moments.ago -APT 'Someone just entered the house.

In this example, the predicate has been constructed as follows. Onto *qukii*, 'shoot', has been suffixed -*vik*, 'time/place of', yielding *qukiivik*, 'place where something was shot'. Because -*vik* only attaches to intransitive stems, *qukii* must be treated as an intransitive stem with an OBJθ in this example. *Qukiivik* has then been suffixed with - *viniq*, 'former', yielding *qukiiviviniq*, 'place where something was shot'. This has then been suffixed with -*liaq*, 'go to', yielding *qukiiviviniliaq*, 'go to a/the place where something will be eaten'. This has in turn been suffixed with first person indicative morphology, which indicates that the person who has gone somewhere is first person. The resulting predicate means 'I am going to the place where something was shot'. *Tuttuvinirmik*, 'caribou meat', expresses that which was shot. It bears secondary case because it expresses the OBJθ of *qukii*, 'shoot'. This example illustrates that when a noun is incorporated, the verb stem which is created inherits the arguments of the incorporated noun, at least in the dialect of JO. Otherwise, the predicate *qukiiviviniliartunga* would not have an OBJθ which expresses that which is shot.

The suffixation of *-liaq* can be understood as in (7.1.17). The input has a nominal referent and an argument structure represented by 'list(x)'. The output has a subject, the one that is going somewhere, and a Goal θ , which bears the same index as the nominal referent of the input. The rule also assumes that it also has the arguments of the noun in the input, represented by 'list(x)'.

$$(7.1.17)$$
 a) INPUT R(i), $<$ list(x)>

b) \leq SUBJ, Goal θ (i), list(x) \geq

The next section will deal with another type of noun incorporation which will be called post-inflectional noun incorporation. We will see that that type of noun

incorporation allows the inheritance of relative case-marked possessors from the noun stem which has been reverbalized.

Another empirical question about noun incorporation that needs to be addressed involves the question of whether incorporated noun stem are [atransitive] or [intransitive]. In Chapter 4, it was shown that some noun stems, such as *nalligiji*, 'one that loves', must be followed either by a possessive suffix or by a restricted list of derivational suffixes. Such noun stems are [intransitive] because they have a subject argument. The next set of examples will involve *suuq*-type nominalizations, which were discussed in section 4.12. When *suuq*-type nominalizations nominalize the subject, the output is [atransitive]. In contrast, when *suuq*-type nominalizations nominalize the object, the output is [intransitive]. Two examples are given in (7.1.18) and (7.1.19). In both example (7.1.18) and (7.1.19), -*suuq* has been attached to *niri*, 'eat'. However, in (7.1.18) there is no possessive suffix and it is a subject nominalization, whereas, in (7.1.19), there is a possessive suffix and it is an object nominalization. With the stem *nirisuuq*, we can determine whether a suffix attaches to [intransitive] or [atransitive] nouns based on whether the subject or the object gets nominalized.

- (7.1.18) niri -suuq MG
 eat -HABNOM
 'one that eats'
- (7.1.19) niri -suu -ra MG eat -HABNOM -my.sg 'one that I eat.'

Examples (7.1.20) and (7.1.21) show us a number of things about the suffix -siuq.

(7.1.20) niri -suur -siu -tu -nga MG
eat -HABNOM -look.for -DECI -1sg
'I am looking for someone that eats.'
*'I am looking for something that is eaten'

(7.1.21) ?niri -suur -siu -ta -ra MG eat -HABNOM -look.for -PPT -my.sg 'I am looking for something that he/she will/can eat.'
*'I am looking for someone that eats.'

First of all, it can create either transitive or intransitive stems, since the verbal morphology in (7.1.20) can only attach to intransitive stems, whereas (7.1.21) involves forming a passive participle, which can only be formed from transitive stems. Second, the translations of these two sentences show that the stem *nirisuuq* is a subject nominalization in (7.1.20), but it is an object nominalization in (7.1.21). In other words, -siug can either attach to an [atransitive] noun stem to create an [intransitive] verb stem, or it can attach to an [intransitive] noun stem to create a [transitive] noun stem. The third point to be made about these examples involves the interpretation of the object in (7.1.21). The suffixes -ta-ra, glossed as 'PPT', for 'passive participle', followed by 'my.sg', are used when the subject is first person singular and the object is third person singular. The translation shows that the object of the stem *nirisuursiuq* is the one who habitually eats something. When the noun stem *nirisuuq* is an object nominalization, its subject is the one that eats something. This example shows that the object of the stem created by suffixing -siuq onto a noun stem to create a transitive verb stem is equated with the subject of the [intransitive] noun stem onto which -siuq is attached. In truth, while MG has repeatedly given very strong judgements about whether the subject or the object is nominalized in (7.1.21), she does not consider the word to be completely grammatical. However, she insists that the problem is related to the meaning. It does not violate the grammatical rules of her language. I have elicited other words that work the same way, but I have been unable to find any that MG considers to be semantically

plausible, though she consistently follows the same grammatical rules about whether it is a subject nominalization or an object nominalization. It is not too surprising that this word is not all that semantically plausible. If it means 'I am looking for something that he/she will be able to eat', habituality is not normally marked in that context. If it means 'I am looking for something that he/she will eat', then habitual marking makes more sense, if it is a large animal like a whale. However, it seems unusual to claim that someone will for certain eat something that hasn't even been found yet. More research should be done to see if there are some more grammatical examples involving this construction.

Examples (7.1.22) and (7.1.23) are unsurprising given the theory of this dissertation. As discussed in section 4.5, -gutji adds a benefactor argument to a verb stem's argument structure list. While the output can be either intransitive or transitive, it always attaches to intransitive stems. While the output is intransitive in (7.1.22) and transitive in (7.1.22), nirisuuq is a subject nominalization in both cases.

- (7.1.22) niri -suur -siu -rutji -ju -nga MG
 eat -HABNOM -look.for -BEN -INDI -1sg
 'I am looking for an eater for someone.'
 *'I am looking for something to eat for someone.'
- (7.1.23) niri -suur -siu -rutji -ja -ra MG eat -HABNOM -look.for -BEN -PPT -my.sg *'I am looking for something to eat for him/her.'
 'I am looking for an eater for him/her.'

This is because, when *-siuq* creates [intransitive] stems, it is attached to [atransitive] noun stems, and, when *-suuq* nominalizes the object, the output is an [intransitive] noun stem, making it impossible for *nirisuuq* to nominalize the object in these examples.

While the output can be either intransitive or transitive, it always attaches to intransitive

stems. While the output is intransitive in (7.1.23) and transitive in (7.1.23), *nirisuuq* is a subject nominalization in both cases.

According to MG, a far more fluent way of saying, 'I am looking for something that he/she will be able to eat' is given in (7.1.24). In this example, suffixation of -siuq creates a [transitive] verb stem with an object. The noun stem onto which it is attached is nirigunnataq, 'one that can be eaten'.

(7.1.24) niri -gunna -tar -siu -ta -ra MG eat -be.able -PPT -look.for -PPT -my.sg 'I am looking for something that he/she will be able to eat.

Let us now address the semantics of example (7.1.24). The stem *nirigunnataq* has an index, which, in this case, is equated with one of the arguments of the semantic relation 'eat'. In this example, it is equated with the one that is eaten. This noun stem also describes a situation which involves ability to eat. The semantics of the stem *nirigunnatarsiuq* can be paraphrased roughly as follows: 'x is looking for y so that z will be able to eat y'. Two of the important semantic relations in this translation are 'look for' and 'will'. 'Look for' has two arguments, the one that looks for someone or something, and the entity that is looked for. The entity which is looked for is equated with the index of the incorporated noun. The semantic relation 'will' also has two semantic arguments, the one who is able to do something, and a situational argument which describes what someone will be or do. The situational argument is equated with the situation described by the noun stem *nirigunnataq*, 'eat habitually'.

There are a number of suffixes that allow the equivalent to the alternation between (7.1.20) and (7.1.21), where -siuq created either a transitive or an intransitive stem. Example (7.1.25) is a repetition of example (4.5.9).

(7.1.25) Jaani aupar -tu -nik illu -liu -laur -ta -ra JO John(ABS) be.red -APT-SEC.pl house -build -PAST-PPT -my.sg 'I built some red houses for John.'

In this example, -liuq is attached to illuk, 'house', to create a transitive verb stem. The verb stem *illuliuq* means 'build a house for someone' when it is transitive, and it treats the benefactor as an object. *Illuliulaurtara* means, 'someone for whom a house was built'. Because passive participles nominalize the object and this is a passive participle, the object must be the entity which was nominalized. Similarly, -siuq, from example (7.1.21), can be used to mean 'look for something for someone', where the benefactor is treated as the object. The semantics of *illuliuq*, in example (7.1.25), can be paraphrased as follows: x builds y, and y is a house, so that z will have y. Let us now assume that -liug is like -siug in that, when it creates transitive verb stems, it attaches to [intransitive] noun stems. The analysis of this dissertation is that there is a covert derivational rule which converts noun stem of the type [atransitive] into noun stems of the type [intransitive] while adding the possessive semantic relation to the noun's set of semantic relations, and making the possessor into a subject argument. In such a case, the situation described by the noun stem *illuk*, when it is [intransitive] is 'have a house'. In the discussion of example (7.1.24), we derived the semantic representation 'x is looking for y so that z will be able to eat y'. For (7.1.25), just replace the underlined portion with 'have y and y is a house'.

According to MG, if one replaces *nirisuuq*, from example (7.1.26), with *nalligiji*, the word does not make sense.

(7.1.26) !nalli -gi -ji -siur -ta -ra MG love -TR -JI -look.for -PPT -my.sg *'I am looking for someone who will love him/her.'

The stem *nalligiji*, discussed in sections (4.2) and (4.13), is an [intransitive] stem meaning 'one that loves someone'. The person who is loved is treated as the subject. Example (4.13.2) is repeated below as (7.1.27).

In this example, *Nalligiji* is followed by a possessive suffix which agrees with a first person singular argument. This first person argument is equated with the object of nalligi, 'love', the original verb stem onto which -ji/ti was attached. Let us now return to the semantic implausibility of example (7.1.26). Based on the explanations given for other examples, we would expect it to mean 'I am looking for someone that he/she will be loved by'. In English, that is a strange thing to say because one has no way of knowing who will or will not end up loving someone. Once more investigation is done into the semantics of these examples, it may also turn out that the subject of the noun stem *nalligiji* in (7.1.26) and (7.1.27) does not have the correct thematic role, as some derivational processes do require certain arguments to take certain thematic roles. For example, -ji can only nominalize the subject if it takes on an agentive role, as discussed in section 4.13. There are also other possible ways of translating (7.1.21), (7.1.24) and (7.1.26) that lead to (7.1.26) making the least sense of the three. For example, we could translate (7.1.21) as 'I am looking for something to eat habitually for him/her', and we could translate (7.1.24) as 'I am looking for something that can be eaten for him/her', and we could translate (7.1.26) as 'I am looking for someone who loves for him/her.' More examples would be required to determine exactly what the semantic restrictions are. However, the author's opinion is that the real reason why example (7.1.26) makes no

sense is probably that it is too complicated.

There is a subtle difference between -*siuq*, 'look for', and some other suffixes such as -*tuq*, 'eat/drink', and -*liri*, 'work with', all of which can create either intransitive or transitive verb stems. Example (7.1.28a) can mean either 'I am looking for a rock for him/her' or 'I am looking for his/her rock'. When the first translation is valid, the third person entity translated as 'him/her' does not yet own the rock, but he/she will after it is found.

- (7.1.28) a) ujarar-siu -ta -ra JO rock-look.for-PPT -my.sg
 'I am looking for a rock for him/her.'
 'I am looking for his/her rock.'
 - b) imagar-tu -qau -ja -ra JO
 pop -eat/drink/use -earlier-PPT -my.sg
 'I drank his/her pop earlier.'
 * 'I drank a pop for him/her.'
 - c) uqa -usi -liri -qatta -ta -git MG say -way/means.of -work.with -HAB -INDT -1sgA:2sgU 'I work on your language.'
 - d) uqa -usi -liri gutji -qatta -ta -git MG say -way/means.of -work.with BEN -HAB -INDT -1sgA:2sgU 'I work on languages for you.'

The suffixes -tuq, 'eat/drink/use', and -liri, 'work with', allow only the equivalent of the second translation of (7.1.28a), when they are used to create transitive stems. Two relevant examples are given in (7.1.28b) and (7.1.28c). In both of these examples, the object of the verb stem created by suffixing -tuq or -liri is equated with the subject of the noun stem onto which these suffixes are attached. In (7.1.28b), the argument in question is a possessor. In both (7.1.28c) and (7.1.28d), -liri is attached to uqausiq, which really means 'what someone says', but it will often get translated as 'language'. If there is a

subject, it is equated with the one who says something. The translation shows that the object of *uqausiliriqattatagit* is equated with the subject of the noun stem *uqausiq*. According to MG, this word can only mean 'I work on your language'.

Example (7.1.28d) involves suffixing the benefactive suffix *-gutji* onto the presumably intransitive stem *uqausiliri*. As expected, *uqausilirigutji* means 'work on (a) language(s) for someone'. According to MG, in the context that someone Inuit who does not speak Mohawk is paying the narrator to work on Mohawk, sentence (7.1.28d) can be uttered but not (7.1.28c).

All three of these suffixes can attach to either [transitive] or [intransitive] noun stems with the meanings 'look for', 'eat/drink/use', or 'work with'. In terms of the theory of this dissertation, as it has been presented so far, the suffix -siuq differs from the other two in that it can also attach to transitive noun stems with the meaning 'look for i so that it will be the case that s', where j is the index of the noun stem onto which -siuq is attached and i is the situation described by the noun stem onto which -siuq is attached. However, there is most likely a simpler way to capture the difference. It might be that the semantic representation of (7.1.28) is underspecified with respect to whether or not the rock is already possessed by someone at the time that the narrator looks for the rock. For the other examples in (7.1.28), it might be that only one translation is possible because the alternative translations make no sense. Indeed this appears to be the case, because the translation 'I drank something that was going to be his/her pop' makes no sense. And, the sentence 'I work with his/her language' can mean either, 'I work on the things that he/she said', or 'I work on the things that he/she will say'. It may ultimately turn out that the range of possible interpretations for instances of incorporation of

[intransitive] noun stems is completely predictable. The suffix –si, 'find' or 'buy', allows all the same possibilities that are available to –siuq, most likely because more than one translation into English makes sense with this suffix when it attaches to [intransitive] nouns. I have not had the chance to investigate all of the possibilities with all of the verbalizing suffixes in this dialect.⁸⁵

The data in (7.1.29) illustrate that it is also possible for these suffixes to create intransitive verb stems when they attach to intransitive noun stems. In such a case, there is a secondary case-marked argument. Example (7.1.29a) illustrates that the secondary case-marked argument is equated with the subject of the noun stem onto which *-liri*, 'work with', is attached. In (7.1.29b), the dative case-marked noun *Jaanimut* expresses a benefactor. In contrast, in (7.1.29c) and (7.1.29d), which make use of the suffixes *-liuq* and *-siuq*, the translation does suggest that the argument in question is a benefactor. However, the same semantic analyses that were possible for the corresponding verb stems where the output was a [transitive] verb stem can also be given for these sentences.

- (7.1.29) a) uqa -usi -liri -ju -nga Jaani -mik JO say -way/means.of -work.with -INDI -1sg John -SEC.sg 'I am working with John's words or on John's language.'
 - b) uqa -usi -liri -ju -nga Jaani -mut JO say -way/means.of -work.with -INDI -1sg John -DAT.sg 'I am working on languages for John.'

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In English, there is also no restriction that possessed nouns must already be owned by the possessor at the time of the event described by the sentence. For instance, one may say *I had visited John's house even before he had bought it*. In comparing possessive constructions in Inuktitut to the English equivalents, it is important to remember that, at least in some syntactic constructions, possessed nouns are definite in English, but there is no such requirement in Inuktitut as discussed in section (2.6). When we say *I found John's rock*, he did not necessarily own the rock at the time that I found it, but, when we say *I am looking for John's rock*, he does necessarily already own the rock. But this is most likely related to definiteness. Since the noun phrase *John's rock* must refer to an entity which can be identified by the audience, there must already be a possessive relationship for the rock to be identified.

- (7.1.29) c) illu -liu -laur -tu -nga Jaani -mik JO house -build-PAST -INDI -1sg John -SEC.sg 'I am building a house for John.'
 - d) ujarar-siu -tu -nga Jaani-mik JO rock -look.for -INDI -1sg John -SEC.sg 'I am looking for a rock for John.'

Let us now return to the contrast between (7.1.20) and (7.1.21), repeated below. We still have an explanation for why the noun stem *nirisuuq* in (7.1.21) must be an object nominalization, since the theory of this dissertation still claims that when *-siuq* creates a transitive verb stem, it must attach to an [intransitive] noun stem. However, the theory of this dissertation now predicts that either translation should be possible for (7.1.20). These sentences have also been shown to JO, and she agrees that there is something semantically unusual about (7.1.21). This may indeed be why only the first reading is possible for (7.1.20). The second reading would be unusual, and people would not generally speak that way. I asked JO what (7.1.20) would mean if the secondary casemarked noun *Jaanimik*, 'John', were added at the end. The problem is that the easiest translation for her to get is 'I am looking for someone that eats John', where *Jaanimik* expresses the OBJθ of the verb stem *niri*, 'eat'.

- (7.1.20) niri -suur -siu -tu -nga MG
 eat -HABNOM -look.for -DECI -1sg
 'I am looking for someone that eats.'
 *'I am looking for something that is eaten'
- (7.1.21) ?niri -suur -siu -ta -ra MG eat -HABNOM -look.for-PPT -my.sg 'I am looking for something that he/she will/can eat.'
 *'I am looking for someone that eats.'

In terms of the theory of Chapter 4, there are at least three different derivational rules for the suffixes -*liri*, 'work with', -*tuq*, 'eat/drink/use', -*siuq*, 'look for', and -*liuq*,

'build'. There is one that attaches them to [atransitive] noun stems, adding a subject argument to the argument of the output. There is another that attaches to [intransitive] noun stems creating a [transitive] output with a SUBJ and an OBJ which corresponds to the SUBJ of the noun stem which the suffixes are added to. There is another similar rule which also takes [intransitive] noun stems for the input, but which differs from the previous rule discussed in that the output is [intransitive], and it has an OBJ θ rather than an OBJ. For the suffix *-siuq* there most likely need to be more derivational rules to get the two possible meanings in (7.2.28a)

It should be noted that the dialect of SM differs from that of JO and MG with regards to noun incorporation. The suffix *-liri* can never create transitive verb stems. Furthermore, SM rejects sentences where *-siuq*, 'look for', is attached to *suuq*-type nominalizations, even though she does allow it to be attached to other deverbal noun stems. One such example is given in (7.1.30). Here *-siuq* is attached to *nirijatsaq*, 'potential thing that is eaten'. *Nirijatsaq* is formed as follows. A passive participle is made from *niri*, 'eat'. *Nirijaq* means 'something that is eaten'. Adding *-tsaq*, 'potential', yields *nirijatsaq*, 'something that can be eaten'. Her aversion to adding *-siuq* to a *suuq*-type nominalization in her dialect may be related to not knowing whether *-siuq* attaches [atransitive] or [intransitive] noun stems in either case, and/or against the unusualness of the meaning associated with attaching *-siuq* to intransitive noun stems ending in *-suuq*.

(7.1.30) niri -ja -tsaq -siuq -tu -nga SM eat -PPT -potential -look.for -INDI -1sg 'I am looking for something that can be eaten.'

Before turning to post-inflectional noun incorporation, there are a few more

examples that need to be explained. Examples (7.1.31a) to (7.1.31c) illustrate that *-taar*, 'receive', *-u*, 'be', and *-it*, 'have no', are all unable to create transitive stems, since the endings *-tara* and *-jagit* can only be added to transitive stems.

- (7.1.31) a) **beer -taar -ta -ra MG beer -receive -PPT -my.sg *'I received his/her beer.'
 - b) **anaana -u -ja -git MG mother -be -INDT -1sgA.2sgU *'I am your mother.'
 - c) nasa -it -ta -ra MG hat -have.no -PPT -my.sg *'I don't have his/her hat.'

These examples show that it is not possible for these suffixes to attach to a noun stem which has possessor argument to create verb stems which treat that possessor as an object. (7.1.29a) to (7.1.29c) would mean, 'I received his/her beer', 'You are my mother', and 'I do not have a hat which also belongs to him/her/it', respectively. There are two ways that these data can be handled with the theory of this dissertation. First, the output of adding , -taar, 'receive', -u, 'be', and -it, 'have no', is [intransitive]. The suffixes glossed PPT, for 'have no', and INDT, for 'indicative transitive', can only attach to [transitive] stems. We could also claim that -taar, 'receive' and -u, 'be', only attach to noun stems which are [atransitive]. Such noun stems do not have a possessor argument. In principle, we can either claim that -it, 'have no', also attaches to [atransitive] noun stems or that it attaches to [intransitive] noun stems and equates its subject with the possessor of an [intransitive] noun stem. ⁸⁶

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⁸⁶The reasons for believing that the features [intransitive] and [atransitive] are relevant to noun stems comes from some of the restrictions on deverbal nouns in the language, as discussed in sections (4.3), (4.12), and (4.13). In particular, some deverbal noun stems must be followed by one of a specific set of suffixes which normally only attach to possessed nouns. Using the terminology of this dissertation, these

These suffixes are heterogeneous. If—u could attach to [intransitive] stems, the possessor would end up in second position in the argument structure of the verb stem in the output. However, this is not the case with -taaq. In (7.1.32), we see that there is both a secondary case marked OBJ θ , which functions as a word-external modifier of the incorporated noun, and a source argument.

(7.1.32) atausir -mik beer -taar -tu -nga Jaani -mit MG one -SEC.sg beer -receive -INDI -1sg John -ABL.sg 'I got one beer from John.'

The next set of examples will show that there is no head-modifier asymmetry with respect to what can or cannot be incorporated. In (7.1.33a), *pingasut*, 'three', is incorporated, and the word external modifier is *illunik*, 'houses', whereas, in (7.1.33b), *illuk*, 'house', is incorporated but *pingasunik*, 'three', is not incorporated. A parallel example that does not involve noun incorporation is given in (7.1.33c).

- (7.1.33) a) illu -nik pingasu -liu -laur -tu -nga JO house -SEC.pl three -build -PAST -INDI -1sg 'I built three houses.'
 - b) pingasu -nik illu -liu -laur -tu -nga JO three -SEC.pl house -build -PAST-INDI -1sg 'I built three houses.'
 - c) pingasu -nik illu -nik sana -laur -tu -nga JO three -SEC.pl house -SEC.pl build -PAST -INDI -1sg 'I built three houses.'

In (7.1.34) and (7.1.34b), the same relationship exists with *aupartuq/aupartumik*, 'red one', and *illuk/illumut*, 'house'. However, based on my work with MG, I would expect sentences (7.1.33b) and (7.1.34b) to be more normal than sentences (7.1.33a) and (7.1.34a).

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- (7.1.34) a) aupartu -liar -tu -nga illu -mut JO red.one -go.to -INDI -1sg house -DAT.sg 'I went to the red house.'
- (7.1.34) b) illu -liar -tu -nga aupartu -mut JO house -go.to -INDI -1sg red.one -DAT.sg 'I went to the red house.'

These data are consistent with the theory that I have given, which predicts that there should be no semantic difference between (7.1.33a) and (7.1.33b), or between (7.1.34a) and (7.1.34b). In terms of the semantic representation of the verb, the entity which is built or gone to is equated both with the index of the noun stem which gets incorporated and with the index of the argument which gets either secondary or dative case. Because the incorporated noun and the argument which bears secondary or dative case are equated and treated as the same entity or set of entities, it makes no difference which one is incorporated and which one is treated as a word-external modifier.

7.2. Post-inflectional noun incorporation and -la, 'say'

It is possible to reverbalize stems marked with dative, locative, simulative or vialis case. These nouns may be inflected for number as well as for a possessor. In (7.2.1), a possessed noun marked with dative case is reverbalized. In (7.2.2a), a vialis plural noun is reverbalized, whereas, in (7.2.2b), a vialis singular noun is reverbalized. I will give essentially the same analysis for post-inflectional noun incorporation that I have given for bare noun incorporation. The difference is that the input for post-inflectional noun incorporation is fully inflected nouns rather than noun stems. At the end of this section, there will be an investigation of another type of post-inflectional process, whereby the suffix -la, 'say' attaches either to a fully inflected noun or to a fully inflected verb.

(7.2.1) aupar -tu -mut illu -nga -nu -ur -tu -nga JO be.red -APT-DAT.sg house -his/her.sg -DAT -UQ -INDI -1sg

Jaani up John -REL.sg

(7.2.2) a) tupir -ti -gu -u -laur -tu -nga JO tent -pl -VIA -UQ -PAST -INDI -1sg 'I went through the tents.'

'I arrived at John's red house.'

b) aupartu -kut tupi -kku -u -laur -tu -nga MG red.one -VIA.sg tent -VIA.sg -UQ -PAST -INDI -1sg 'I went through the red tent.'

When -uq is attached to illunganut, 'to his/her house', in (7.2.1), we get the stem illunganuur, 'arrive at his/her house'. 87 It has then been given first person singular indicative inflection to yield illunganuurtunga, 'I arrived at his/her house'. 88 In (7.2.2a), tupirtigut, 'through the tents', is reverbalized with -uq to yield tupirtiguur, 'go through the tents', though the final uvular consonant ends up getting deleted in this example.

This has then been given past tense as well as first person singular indicative inflection to yield tupirtiguulaurtunga, 'I went through the tents'. Example (7.2.2b) differs in that it is the singular noun tupikkut, 'through a/the tent', that gets reverbalized.

Examples (7.2.1) and (7.2.2b) illustrate two other properties of post-inflectional noun incorporation. First, it is possible to express a word-external modifier bearing the same case as the incorporated noun. Second, example (7.2.1) illustrates that, when a noun bearing a possessive suffix is incorporated, the possessor can be expressed as a

As discussed in Chapter 2, when relative case-marked arguments are omitted, they get a definite interpretation. This is also the case in post-inflectional noun incorporation. When *illunganuurtunga* is used by itself, it cannot mean 'I am arriving at someone's house'.

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⁸⁷ If one adds the suffix -si, 'begin to', after the sequence *tupirmuuq*, 'arrive at the tent', we create a stem meaning 'entering the tent', as in *tupir-mu-u-si-juq*, 'he/she is entering the tent'. *Tupirmut* means 'to the tent'. It verbalized with -uq, then the suffix -si, 'begin to', is attached, and then an active participle is formed.

separate word bearing relative case.⁸⁹

When the suffixes from section (7.1) are used, it will be referred to as bare noun incorporation, since they attach to noun stems rather than to inflected nouns. (7.2.3) shows that *-liuq*, 'build', cannot attach to a noun bearing plural morphology. (7.2.4) illustrates that *-siur*, 'look for', cannot attach to nouns bearing a possessive suffix. Example (7.2.5) shows that nouns incorporated by *-siuq* do not allow the possessor to be expressed as a separate word bearing relative case, though, in this example, the final consonant of *-siuq* has been deleted by a regular phonological rule. This could in principle be because a possessive suffix is required to assign case to a possessor, and there is no possessive suffix in this example.

The theory which has been presented in this dissertation has very little difficulty explaining post-inflectional noun incorporation. When *-uq* means 'go to' it attaches to

grammatical, she did not accept it as readily as the example below. This may mean that it is more common to place the arguments of a clausal word in any order than to place the possessor of an unincorporated noun in a position which is not adjacent to the possessed noun.

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⁸⁹ JO very readily accepted the word order in the example below, where a relative case-marked possessor of a noun that has undergone post-inflectional noun incorporation is not adjacent to the predicate. *Suusi* expresses the subject of the predicate in the example below, and it is placed between the predicate and the relative case-marked possessor. However, example (3.1.1) is very similar to the example below except that the noun expressing 'to his/her house' is not incorporated into the predicate. While that sentence is grammatical, she did not accept it as readily as the example below. This may mean that it is more common

A) Mary -up Suusi illu -nga -nu -ur -tuq JO Mary -REL.sg Sue(ABS) house -his/her.sg -DAT -UQ -APT(ABS.s) 'Sue went to Mary's house.'

stems of the class [noun], whereas -liaq, 'go to', attaches to stems of the class [nounstem]. The noun which -uq is attached to must also bear the case feature [dative]. This analysis otherwise looks very similar to the derivational rule given in (7.1.4), except that the semantic relation that is added is 'arrive at' rather than 'build', and the case of the second argument is dative rather than secondary. Two other possible analyses will be discussed in this section. One of them involves claiming that the meaning 'arrive at' comes from the dative case-marker rather than the suffix -uq, and that -uq can attach to nouns with multiple different case markings, the output having an argument with case marking that must match that of the incorporated noun. A formal analysis will not be given because, if anything, it has disadvantages compared to the first analysis described in this paragraph. The other analysis involves claiming that the phonological sequences that appear to be a case marker followed by the verbalizing suffix -uq should really be treated as a single morpheme. Even under this third analysis, post-inflectional processes differ from bare noun incorporation in that the suffixes can attach to partially inflected noun stems which can bear a possessive suffix or a dual suffix. In the author's opinion, this is probably the most correct of the three possible analyses. The patterns which are observed with word-external possessors are also readily explained. This dissertation has assumed that possessive suffixes assign relative case to an [intransitive] noun stem's subject argument, so a relative case marked possessor is only possible when a noun stem is followed by a possessive suffix. When -uq attaches to an inflected noun in postinflectional noun incorporation, the arguments of the noun in the input become part of the noun stem in the output. The output of adding a possessive suffix belongs to a distinct stem class from noun stems. In some cases the output is an absolutive or a relative casemarked noun. In other cases, it is a stem onto which only case suffixes can be added. There are at least two ways to rule out a relative case-marked possessor in (7.2.5). Because *-siuq*, 'look for', can only attach to noun stems, there can never be a relative case-marked possessor of the incorporated noun, because suffixation of a possessive suffix would be required to assign relative case.

There is another way that we could rule out the presence of word-external possessors in bare noun incorporation. We could claim that —*siuq* attaches only to nouns which are [atransitive]. Such nouns would have no possessor argument, since the rule in 2.8 which adds a possessor to a noun's argument structure creates an output bearing the feature [intransitive]. Precisely such a rule was advocated in reference to example (7.1.20).

Sadock's theory of noun incorporation has no explanation for why it is not possible to express a relative case marked possessor in bare noun incorporation. In his theory, there are two levels of representation, one in which a noun is incorporated, and another in which the noun is expressed as a separate word with case morphology. There is an underlying assumption that the syntactic restrictions on what is or is not a possible sentence at the unincorporated level of representation is identical to what is possible with unincorporating verbs. There is no explanation for why an incorporated noun cannot bear a possessive suffix at the unincorporated level of representation. For examples (7.2.4) and (7.2.5), the hypothetical unincorporating level of representation would be *siurtunga nasanganik Jaaniup*. *Siurtunga* represents the last three morphemes of the predicates in those two examples. *Nasanganik* is *nasaq*, 'hat', followed by *-nga*, 'his/her single possession', followed by the secondary case marker *-nik*. At the incorporating level of

representation, *siuqtunga* would be suffixed onto *nasanganik*. In Sadock's theory, the case marker gets deleted at the incorporated level of representation. If possessive suffixes are not deleted at the level of representation that involves syntactic incorporation, then his theory would predict that (7.2.4) should be grammatical. If possessive suffixes do get deleted, then Sadock's theory would predict that it should be possible to express *Jaaniup* as a separate word in (7.2.5), because the sentence given earlier in this paragraph, *siurtunga nasanganik Jaaniup*, would be a possible parallel representation for this sentence.

In Baker's theory, there needs to be some explanation for the difference between post-inflectional noun incorporation and bare noun incorporation (Baker 1988). One possible explanation is that uninflected nouns are the heads of NPs, or 'noun phrases', whereas case-marked nouns are the heads of KPs, or 'case phrases'. In bare noun incorporation, the noun stem moves from the head of an NP to attach to the verb, whereas in post-inflectional noun incorporation, the noun moves from the head of a KP to attach to the verb. Let us examine how this theory could be applied to example (7.2.1), repeated below, where *Jaaniup*, 'John', expresses the possessor of the incorporated noun *illunganut*, 'to his/her house'. Under a movement approach, such as that given by Baker, Jaaniup would be part of the KP headed by illunganut, 'to his/her house', at D-structure. *Illunganut* then undergoes movement to attach to the affixal verb -uq, 'arrive at', leaving Jaaniup stranded in a KP which is headed by an empty element referred to as a trace in that theory. Possessors such as *Jaaniup* occur in KPs, headed by nouns with possessive suffixes. There is presumably no position for a relative case-marked possessor in NPs, ruling out the possibility of a relative case-marked possessor in bare noun incorporation.

However, we are left with an analysis where sentences involving bare noun incorporation have an underlying structure which is different from sentences which do not have noun incorporation, since there are no verbs with an argument that must be expressed as a separate word but which cannot be given number or possessor morphology. Part of the motivation for Baker's theory is that there is supposed to be evidence that sentences involving bare noun incorporation have the same underlying structure as sentences without noun incorporation. The parallelism comes from the presence of word-external modifiers of incorporated nouns. There is ultimately very little advantage to adopting Baker's theory over a lexicalist analysis.

Van Geenhoven's theory is not transformational. Rather it involves adjoining a nominal head onto a verbal head. One of the principle motivations for her theory is that, in West Greenlandic, a related dialect, there is no evidence that word-external possessors of an incorporated noun are ever possible. A theory without either movement or argument structure inheritance would have no way to account for the presence of word external possessors in examples such as (7.2.1). Her theory should not be applied to post-inflectional noun incorporation because she claims that the purpose of her theory is to rule out the possibility of expressing the possessor of an incorporated noun.

The morphosyntactic properties of -uq, when it means 'arrive at', can be understood as in (7.2.6), which is identical to (7.1.17), which was used to explain -liaq, 'arrive at'. The input is a dative case-marked noun, and it has a nominal referent and an

argument structure represented by 'list(x)'. The output has a subject, the one that is going somewhere, and a Goal θ , which bears the same index as the noun onto which -uq is attached. The rule also assumes that the output has the arguments of the noun in the input, represented by 'list(x)'.

- $(7.2.6) \quad a) \text{ INPUT } R(i), < list(x) >$
 - b) $\langle SUBJ, Goal\theta(i), list(x) \rangle$

The input has a nominal referent and an argument structure represented by 'list(x)'. The output has a subject, the one that is going somewhere, and a Goal θ , which bears the same index as the nominal referent of the input. The rule also states that the output also has the arguments of the noun in the input, represented by 'list(x)'.

The verb stem which is created has a Goal θ argument which is equated with the nominal referent of the noun stem onto which -uq is attached. As with bare noun incorporation, the predicate which is formed inherits the semantic relations which identify the nominal referent of the noun which has been incorporated.

The rest of this section will illustrate what the other possibilities are with post-inflectional noun incorporation. Nouns marked with simulative case can be verbalized with -uq, producing verbs stems meaning 'do as X does'. One such example is given in (7.2.8). Here, the simulative plural stem of Inuk, 'someone Inuit', has been verbalized to produce inuttituuq, 'do what the Inuit do'. By convention, this means 'speak Inuktitut', but its meaning is really context-dependent. Onto inuttituuq, 'speak Inuktitut', has been suffixed gunnaq, 'be able to' yielding inuttituurunnaq. Onto this has been suffixed - gallaapik, 'a little bit', yielding inuttituurunnagallaapik, 'able to speak a little Inuktitut'.

Nouns marked with vialis case can be reverbalized with *-uq* to get the meaning, 'go by means of a vehicle'. One such example is given in (7.2.9).

Finally, nouns marked with locative case can be reverbalized to get the meaning 'be at', as illustrated by (7.2.10a) and (7.2.10b). There is no post-inflectional noun incorporation for nouns marked with ablative case in this dialect.

- (7.2.10) a) Jaani -up illu -nga -ni -it -tu -nga JO John -REL.sg house -his/her.sg -LOC -be.located -INDI -1sg 'I am at John's house.'
 - b) aupartu -mi illu -mi -it -tu -nga MG red.one -LOC.sg house-LOC.sg -be.located -INDI -1sg 'I am at the red house.'

Quite frequently, this suffix is used to create active participles. Because Inuktitut allows multiple nouns to express the same argument, it creates the same semantics that we get in English by placing a prepositional phrase inside a noun phrase. One such example is given in (7.2.11), below. In this example, *qimirquamik*, 'book' and *saap qaanganiittumik*, 'one that is located on top of the table', both express the OBJ0 of *takunnatunga*, 'I am looking at'. According to MG and JO, if *qaanganiittuq*, from example (7.2.11), is replaced with the locative case-marked noun *qaangani*, the sentence becomes ambiguous. It can mean either 'I am on the table looking at the book' or 'I am looking at the book that is on the table'.

'I am looking at the book on the table.'

In the dialect of MG, the suffix -uq can also be used to create transitive stems with the meaning 'cause something to go to' or 'bring to'. An example of this is given below. In example (7.2.12), a passive participle is formed from the stem suusimuuq, after adding the past tense suffix -lauq. Suusimuuq must be a transitive stem in this example, because the past tense suffix -lauq does not change the TRANS feature of the stem which it attaches to, and the passive participle forming suffix can only be attached to transitive stems. When passive participles are used as predicates, the object of the verb stem ends up in absolutive case. The absolutive case marking on titirautinga, 'his/her writing utensil', shows that the entity which is brought to Suusi is the object of the transitive verb stem created by suffixing -uq onto the dative case-marked noun Suusimut in this example.

'I brought John's writing utensil for Sue.'

In the dialects spoken by SM, the suffix -uq creates transitive stems meaning either 'give to' or 'bring to'. Three such examples are given in (7.2.12) to (7.2.14). In (7.2.13), -uq is attached to a stem meaning 'to Suusi', yielding a transitive stem which

means 'give something to Suusi', whereas, in (7.2.14), –uq is attached to najangnut, 'to your sister', yielding a stem meaning 'to your sister'. Together, these two examples show that attaching –uq to a stem with dative case marking to create a transitive stem is a productive morphological process. First of all, the stems Suusimuuq and najangnuuq are too specific in meaning to be part of the language's lexicon. In other words, it cannot be that one has to learn these stems as separate dictionary entries. Second, if (7.2.13) were grammatical, but (7.2.14) were ungrammatical, then it would be preferable to give an alternative morphological analysis, where the suffix –muuq means 'give to' and it attaches to bare noun stems. However, (7.2.14) shows that this must be a true case of post-inflectional noun incorporation because possessive suffixes are not possible in bear noun-incorporation, and the correct form for dative case markers in possessive constructions is –nut rather than –mut. Example (7.2.15) shows that suffixing –uq onto dative case-marked nouns to create transitive stems can also mean 'bring to' in the dialect of SM.

- (7.2.13) suusi -mu -ur -ta -ra SM Suusi -DAT.sg-go.to -PPT -my.sg 'I gave it to Sue.'
- (7.2.14) naja -ng -nu -ur -ta -ra SM sister -your -DAT -UQ -PPT -my.sg 'I gave it to your sister.'
- (7.2.15) uqalimagaaq uqalima -ving -mu -u -suungu -ja -ra SM book(ABS.sg) read -place -DAT.sg -UQ -HAB -PPT -my.sg 'I bring the book to the reading place'

The predicate in (7.2.15) is formed as follows. The suffix -vik is attached to uqalima, 'read', to yield uqalimavik, 'reading place'. Addition of the dative singular suffix -mut yields uqalimavingmut, 'to the reading place'. Verbalizing uqalivingmut

with *-uq* creates the transitive stem *uqalivingmuuq*, 'bring something to the reading place'. Addition of the habitual suffix *-suungu* yields *uqalivingmuusuungu*, 'bring something to the reading place'.

I have not found the equivalent of (7.2.13) and (7.2.14), which show that those examples are a true case of post-inflectional noun incorporation, to be possible with other types of case marking. In particular, I have investigated the sequence –*kkuuq*, which can only productively create intransitive stems. Phonologically, -*kkuuq* is the vialis singular marker followed by the verbalizing suffix –*uq*. In the dialect spoken by SM, a few examples suggest that the sequence -*kkuuq* can create transitive as well as intransitive stems. Some of these examples are shown in (7.2.16) to (7.2.19). At first glance, the sequences *kuukkuuq*, from examples (7.2.16) and (7.2.17), and *nunasiutikkuuq*, from examples (7.2.18) and (7.2.19), appear to have the morphological analyses given in the glosses of these examples, where the vialis singular case marker is added to a noun stem, followed by the reverbalizing suffix –*uq*.

- (7.2.16) kuu -kku -uq -ta -ra SM river -VIA.sg -UQ -PPT -my.sg 'I am going through the river.'
- (7.2.17) kuu -kku -uq -tu -nga SM river -VIA.sg -UQ -INDI -1sg 'I am going through the river.'
- (7.2.18) nunasiuti -kku -uq -tu -nga SM car -VIA.sg -UQ -INDI -1sg 'I am going by car.'
- (7.2.19) nunasiuti -kku -uq -ta -ra SM car -VIA.sg -UQ -PPT -my.sg 'I am crossing or going over it by car.'

Example (7.2.15) differs from (7.2.16) in that *kuukkuuq* is treated as a transitive stem in

(7.2.15), because a passive participle is formed, while the same stem, *kuukkuuq* is treated as an intransitive stem in (7.2.16), because the suffix glossed INDI, for 'indicative intransitive', can only attach to intransitive stems. Similarly, (7.2.17) differs in that *nunasuitikkuuq* is treated as an intransitive stem in (7.2.17), but as a transitive stem in (7.2.18). It should be noted that the translations for the intransitive sentences in (7.2.16) and (7.2.17) are exactly what is predicted based on other uses of the reverbalizing suffix —*uq*, when it attaches to vialis case-marked nouns to create intransitive verb stems. We will see shortly that the actual translations of the transitive versions of these sentences, in (7.2.15) and (7.2.18), is more of interest to lexicographers than to theoretical linguists, and this is a difficult aspect of lexicography in Inuktitut that should not be overlooked. In particular, there is reason to believe that there is no productive derivational process that allows —*uq* to attach to nouns marked with vialis case to create transitive verb stems. Rather, the transitive verb stems *kuukkuuq*, 'cross the river', and *nunasiutikkuuq*, 'go over something by car', simply must be learned by the speakers of the language.

The contrast between (7.2.20a) and (7.2.20b) illustrates that when the sequence -*kkuuq* is attached to *tupiq*, 'tent', only an intransitive verb stem can be created. The ungrammaticality of (7.2.20b) is evidence that there is no productive derivational process which allows –*uq* to be attached to nouns marked with vialis case to create transitive verb stems.

Examples (7.2.21) and (7.2.22) make use of nunasiuting agut, 'through, across, or by means of his/her car'. If -uq can productively attach to nouns marked with vialis case to produce either transitive or intransitive stems, then both (7.2.21) and (7.2.22) should be grammatical. However, the ungrammaticality of (7.2.22) shows that it is not grammatical to place -uq onto all nouns with vialis case to create a transitive stems. The ungrammaticality of this example is particularly surprising in light of example (7.2.18), which was grammatical. Phonologically, that sentence appeared to be the equivalent of example (7.2.21), where nunasiuting agut, 'through, across, or by means of his/her car', is replaced by nunasiutikkut, 'through, across, or by means of a car'.

- (7.2.21) Jaani -up nunasiuti -nga -gu -uq -tu -nga SM John -REL.sg car -his/her.sg -VIA -UQ -INDI -1sg 'I am going through John's car.'
- (7.2.22) *nunasiuti -nga -gu -uq -ta -ra SM car -his/her.sg -VIA -UQ -PPT -my.sg 'I am crossing over it with John's car.'

To summarize, there are five types of productive post-inflectional noun incorporation in Inuktitut. The suffix -it, 'be located', attaches to nouns marked with locative case, and it creates intransitive stems. The suffix -uq can attach to nouns marked with dative case to create transitive stems meaning 'bring to' or 'give to'. The same suffix can also attach to dative case-marked nouns to make intransitive stems meaning 'go to', or to vialis case-marked nouns to make intransitive stems meaning 'go across, through, or by means of', or to simulative case-marked nouns to make intransitive stems meaning 'do like/as'. We can claim that there is one derivational rule involving the suffix -it, 'be located', and four derivational rules involving the suffix -uq with the meanings, 'go to', 'give/bring to', 'go across, through, or by means of', and 'do as'.

There is ultimately little point to arguing about whether or not we can conflate the number of derivational rules, since the pattern simply has to be learned, which is equivalent to learning multiple derivational rules.

In post-inflectional noun-incorporation, the case of word-external modifiers is always the same as the case of the incorporated noun. With multiple derivational rules, there is no difficulty in having different cases for the word-external modifiers when the different derivational rules are used to add—uq onto a dative versus vialis versus simulative nouns. However, we could in principle claim that the case feature of the argument referred in this dissertation as the word-external modifier is identified with the case feature of the noun stem which is the input to the derivational rule which attaches—uq onto a noun.

We can also claim that, in some cases, word-external modifiers of the incorporated noun are not part of the verb stem's argument structure at all. Example (7.2.10b) is repeated below to help discuss this point.

(7.2.10) b) Aupartu -mi illu -mi -it -tu -nga MG red.one -LOC.sg house-LOC.sg -be.located -INDI -1sg 'I am at the red house.'

While we could claim that *aupartumi*, 'at the red one', expresses a locative case-marked argument of the predicate *illumiittunga*, 'I am at the house', it is pretty much always possible to add a noun marked with locative case to a sentence to indicate location. For this reason, we do not need to claim that *aupartumi* is an argument of *illumiittunga*. In terms of LFG, we can treat it as an adjunct. In terms of HPSG, there is a rule that can add nouns marked with locative case to any verb's argument structure to indicate location. Similarly, it is possible to add nouns marked with vialis case to

indicate movement through or by means of, or to add nouns marked with simulative case to mean 'like' or 'as', to any sentence where it makes sense to do so. For this reason, we do not need to claim that post-inflectional noun incorporation ever creates predicates with vialis or simulative case-marked arguments in their argument structure list.

The next two examples will investigate the use of demonstratives in post-inflectional noun incorporation. Demonstratives can be used as stems onto which post-inflectional noun incorporating suffixes are added. Examples (7.2.23) and (7.2.24) both mean 'I went to that house.' *Itsumunga*, 'to that one' has been incorporated in (7.2.23), whereas *illumut* has been incorporated in (7.2.24), with no difference in meaning. The forms of the verbalizing suffixes differ when they are added onto demonstrative suffixes, partially because the case suffixes are different on demonstratives compared to nouns. With nouns marked with the dative suffixes *mut/nut*, or the vialis suffixes *-gut/kut*, or the simulative suffix *-tut*, the rule is to delete the final *t* and add *uq*. For demonstratives, the corresponding suffixes are *-munga/nunga* for dative, *-guna* for vialis, and *-tuna* for simulative. An example of dative case marking on a demonstrative is given in (7.2.23).

Verbalization of these stems is a more complicated process. For example, with the dative suffix, the velar nasal becomes doubled, and a 'q' is added to the end, yielding *munngaq*. The sequence in question has been glossed MUNGGAQ in (7.2.24), although the final /q/ has been deleted by regular phonological rules. It is equivalent to a dative singular suffix which has been reverbalized with *-uq*.

- (7.2.24) a) itsu -munnga -tu -nga illu -mut JO that.one -MUNNGAQ -INDI -1sg house -DAT.sg 'I went to that house.'
 - b) tatsu -munnga -ta -nga JO that.one -MUNNGAQ -PPT -his/her.sg 'He/she gave it to that one.'

We might want to say that these suffixes have very specific specifications about the phonological forms of their inputs because it is never possible to put any suffixes between a case suffix and a reverbalizing suffix. One such ungrammatical sentence is given in (7.2.25).

(7.2.25) *uu -munga -alu -ur -ta -nga MG this.one -DAT.sg -big/terrible -UQ -PPT -his/her.sg *'He/she gave it to this terrible one.'

In Inuktitut, it is possible to place an adjectival suffix onto a demonstrative pronoun after the case suffix. The pronoun *uumungaaluk* means 'to this big or terrible one'. It is not grammatical to suffix –*uq* onto *uumungaaluk* even though MG can understand it. For those suffixes that end in –*uq*, we could claim that they are restricted to inputs that end with /ut/. Another possible analysis is that –*munngaq* and -*muuq* should be treated as single suffixes. While –*munngaq* attaches to stems of the class [demonstrative], -*muuq*, from (7.2.3), arguably attaches to stems of the class [noun stem], because it is never preceded by a dual suffix or a possessive suffix. However, there is another sequence –*nuuq* that can be preceded by a dual suffix or a possessive suffix. It should also be noted that the possessive suffixes used by those case forms that end with a case marker that starts with a consonant are different from those used when nouns bear either absolutive or relative case marking. We can claim that there are a set of inflectional suffixes that attach to noun stems to make stems of the class [partially inflected noun

stem]. Case markers as well as suffixes like *-nuur*, 'got to', *-niit*, 'be at', *-tuuq*, 'be like', and *-guuq*, "go through, across, or by means of', also attach to noun stems of the class [partially inflected noun stem]. There is little reason to assume that there are two steps to adding inflection to absolutive or relative case-marked nouns, which need not concern us here. ⁹⁰

In contrast, demonstratives cannot undergo bare noun incorporation, as illustrated by the ungrammaticality of (7.2.25) and (7.2.26). *Inna* is the absolutive form of 'that one', and *itsu* is the form that the other case endings are added onto. Presumably, neither of these count as noun stems in the language, and those suffixes which are responsible for bare noun incorporation can only attach to noun stems.⁹¹ The stem *itsu*, 'that one', from

This dissertation has mostly ignored a large group of suffixes, the enclitic endings, which can attach to either fully inflected nouns or fully inflected verbs. While demonstrative suffixes do fall into this group, all other enclitic endings must come after demonstratives. Post-inflectional noun incorporation is not possible with a noun ending with any type of enclitic ending. One ending is -kiaq, which can indicate that the speaker does not know the identity of something in the sentence. Examples (B) and (C) show that it can attach either to sunamik, 'something', or the predicate nirilaurtunga. Examples (D) and (E) illustrate that in post-inflectional noun incorporation, it can only be placed at the end of the word. A noun ending in - kiaq cannot undergo post-inflectional noun incorporation, as illustrated by the ungrammaticality of (E).

- B) suna -mi -kiaq niri -laur -ma -t MG something-SEC.sg -KIAQ eat -PAST -DS.EST -3sg 'because or when he at something or another, I don't know what.'
- C) suna -mik niri -laur -ma -kiaq MG something -SEC.sg eat -PAST -DS.EST(3sg) -KIAQ MG 'because or when he ate something or another, I don't know what.'
- D) suna -kku -u -laur -tu -kiaq something -VIA.sg -UQ -PAST-APT -KIAQ MG 'he/she crossed something or another, I don't know what.'
- E) **Suna -kku -kia -ngu -laur -tuq MG something -VIA.sg -KIAQ -UQ -PAST-APT
 *'He crossed something or another, I don't know what.'

It is not clear what phonological forms the suffix -uq would take in the ungrammatical examples (A) and (E), but I have been offered no phonological alternative which allows post-inflectional noun-incorporation to occur after adding a demonstrative pronoun or an enclitic ending.

⁹⁰ Here are two more phenomena that are not counter evidence to the claims of the preceding paragraph. It is not possible for nouns ending with a demonstrative pronoun to undergo post-inflectional noun-incorporation, as illustrated by the ungrammaticality of example (A).

A) **illu -mun -una -ur -tu -nga MG house -DAT.sg-this.one-UQ -INDI -1sg

^{&#}x27;I arrived at this house.'

⁹¹WH- words do appear to be treated as nouns in this language, as illustrated by the grammaticality of the

example (7.2.23), is of the class [demonstrative stem]. There are two derivational rules in the language that add dative singular case marking to [atransitive] stems. One takes noun stems as the input and adds the sequence —mut to the end. The other takes demonstrative stems and adds -munga to the end. However, we can claim that the outputs of both derivational rules are of the class [noun]. The nature of the phonological change that occurs when inflected nouns undergo post-inflectional noun incorporation is sensitive to the phonological form of the input. When the last three phonemes of the input are /unga/, then the velar nasal gets doubled and a /q/ is added to the end of the stem. When the last three phonemes of the input are /ut/, then the final consonant gets deleted and the phonemes /uq/ are added to the end of the stem. Claiming that inflected demonstratives are of the class noun makes the prediction that any construction which allows a noun will allow a demonstrative, and any derivational process which attaches a suffix to a fully inflected noun is also possible with demonstrative pronouns, though the phonological details may differ. I know of no counter-evidence to this claim.

There is another type of post-inflectional derivation in Inuktitut, involving the suffix -la, 'say'. It attaches either to fully inflected verbs or to fully inflected nouns. Phonologically, it deletes any preceding consonant. The final vowel gets lengthened if it is not already a sequence of two vowels. In (7.2.27) to (7.2.29), -la attaches to

example below.

A) suna -liur -tuq? JO what -build -APT 'What is he/she building?'

nagligusuktunga, 'I love somebody'. In (7.2.27) suffixation of -la creates a transitive stem. Jaani, the person who was told something, is treated as the object. Marymit expresses the OBJ θ of the incorporated verb nagligusuktunga, 'I love someone'.

(7.2.27) Jaani nagli -gusuk -tu -nga -ala -laur -ta -ra SM John(ABS.sg) love -AP -INDI -1sg -say-PAST -PPT -my.sg

Mary -mit Mary -SEC.sg

'I said, "I love Mary" to John.'

When -la is used to create intransitive stems, the person who is told something gets dative case, as in (7.2.29a). If Marymut, from example (7.2.29b), is replaced with the secondary case marked noun Marymit, it can only be construed as the OBJ θ of nalligusuktunga, 'I love someone', as in (7.2.29b). However, Schneider's dictionary lists an antipassive version of this suffix where it creates a stem where the person who was told something gets placed in secondary case. Under the entry for -lavaa, it is listed as -lannituq.

- (7.2.28) nagli -gusuk -tu -nga -ala -laur -tu -nga Mary -mut SM love -AP -INDI -1sg -say -PAST -INDI -1sg Mary -DAT.sg 'I said to Mary, "I love someone".'
- (7.2.29) nagli -gusuk -tu -nga -ala -laur -tu -nga Mary -mit SM love -AP -INDI -1sg -say -PAST -PPT -1sg Mary -SEC.sg 'I said, "I love Mary."

Two other possibilities from the indicative paradigm are given in (7.2.30) and (7.2.31). In (7.2.30), -*la* is attached to *nagligusuktutit*, 'you love someone'. The word created means, 'I said that you love someone'.

(7.2.30) nagli -gusuk -tu -ti -ila -lauq -tu -nga SM love -AP -INDI -1sg -say-PAST -INDI -1sg 'I said that you love someone.'

In (7.2.31), it attaches to an active participle to get the meaning, 'I said that he/she loves someone.'

(7.2.31) nagli -gusuk -tu -ula -laur -tu -nga SM love -AP -APT -say -PAST -INDI -my.1sg 'I said that he/she loves someone.'

In example (7.2.32), -la is attached to a passive participle, malittanga, 'one that is following him/her.' (7.2.32a) shows that it is possible to express the subject of malik, 'follow', in relative case. This is not surprising because the subject of malittanga, one that he/she is following', or 'he/she is following him/her/it', is always expressed in relative case. (7.2.32b) shows that it is possible to express the object of malik, 'follow', in absolutive case. In terms of the theory of this dissertation, malittanga undergoes a covert derivational rule which converts words of the class [noun] into words of the class [clausal word]. In (7.2.32), -la is suffixed onto a word of the class [clausal word].

- (7.2.32) a) Jaani -up malit -ta -nga -ala -laur -tu -nga SM John -REL.sg follow -PPT -his/her -say -PAST -INDI -1sg 'I told someone that John was following him/her/it.'
- (7.2.32) b) Jaani malit -ta -nga -ala -laur -tu -nga SM John(ABS) follow -PPT -his/her -say -PAST -INDI -1sg 'I said that he/she was following John.'

Another example showing that -la can attach to a clausal word with an absolutive argument is given in (7.2.33). In this example, -la is attached to *malittugut*, 'we are following'. Marylu bears the predicted absolutive case, and it shows that 'Mary' is part of the group that is following someone or something. The dialect of SM makes no distinction between dual and plural.

(7.2.33) Mary -lu SM
Mary(ABS) -group.including

malit -tu -gu -ula-laur -tu -nga tuktu -mit
follow -INDI -1pl -say-PAST -INDI -1sg caribou -SEC.sg

'I said that Mary and I were following the caribou.'

Suffixation of -la is more akin to direct rather than indirect quotations. This is illustrated by (7.2.34) and (7.2.35). In the absence of further suffixation, the stems nagligusuktunga, from (7.2.34), and kuniksiguminaaq, from (7.2.35) mean 'I love' and 'I wish I could kiss' Onto these stems is suffixed -la, 'say that'. They are then given past tense morphology and made into active participles. As predicates they mean 'he or she said X'. The translations shown are consistent with the direct quotations, 'he/she said, "I love someone", and 'he/she said, "I wish I could kiss someone", but they are inconsistent with the indirect quotations, 'he/she said that I love someone', and 'he/she said that I wish I could kiss someone'. At least in the dialect of MG, -la can only be used for direct quotations. If (7.2.35) is translated into her dialect, it's kuniiguminaalalaurtug. If this word is uttered, it must be that he/she uttered the word kuniiguminaaq, rather than some other paraphrase such as *kuniilangatuuq*, which also means 'I wish I could kiss someone'. Similarly, if the first person inflectional endings are removed from example (7.2.31), and it is made into an active participle, we get *nalligusuttuulalaurtua*, 'he/she said he/she loves someone'. As a direct quotation it must be that the person who said nalligusuttuq, 'he/she loves someone', was speaking about someone else. While I have not done enough research to be certain of this, I believe that -la is usually used for direct quotations involving a single word, though the examples above illustrated that it is possible to add associated words from the quotation either before or after the word

containing the suffix -la. In contrast, the verb stem uqaq, 'say', is used with longer direct quotations.

- (7.2.34) nagli -gusuk -tu -nga -ala -laur -tuq SM love -AP -INDI -1sg -say -PAST -APT 'He/she(i) said that he/she(i) loves someone.'

 *'He/she(i) said that I love someone.'
- (7.2.35) kunik -si -guminaa -la -laur -tuq SM kiss -AP -I.wish.I.could -say -PAST -APT 'he/she said that he/she wished he/she could kiss someone.'

 *'he/she said that I wished I could kiss someone.'

Finally, it might also be possible for *-la* to attach to nouns, as in (7.2.36). This word means, 'I said, '*tuktumit*'', where *tuttumit* is a noun bearing secondary case. However, this sentence does sound a bit odd to SM.

(7.2.36) ?tuktu -mi -ila -laur -tu -nga SM caribou -SEC.sg -say-PAST -INDI -1sg 'I said, "Tuktumit".'

7.3 Coordination constructions and noun incorporation

This section will address coordination constructions, ⁹² and the ways in which the language allows incorporated nouns to be used in coordination constructions. The first set of examples will involve the enclitic particle -*lu*, which is added to nouns that are fully inflected for case, number, and possession. One such example is given in (7.3.1a). Example (7.3.1b) differs from example (7.3.1a) in two ways. First, the subject of *takunnalaurtugut* is plural rather than dual. Second, -*lu* has been attacked to either *inulirijiik*, the dual form of social worker, or *inulirijiit*, the plural form of social worker. In these examples, the absolutive marking shows that the nouns in question must express

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⁹² I have not had sufficient opportunity to investigate coordination constructions in this dialect. Fortescue (1984) has shown that the restrictions are quite complex in West Greenlandic, another dialect in the Inuit dialect continuum. A more in-depth investigation of Inuktitut would most likely start out with determining what the similarities are or are not between the two dialects.

the subject of the clausal words takunnalaurtuguk or takunnalaurtugut. The suffix -lu appears to mean 'a group including j', where j represents the semantic representation of the noun onto which -lu is attached. The subject in the English translations of these sentences is 'the social worker and I' or 'the social workers and I'. This is because the semantics of the verbs in these sentences dictates that the subject must include a first person entity.

- (7.3.1) a) inuliriji -lu nanur -mik MG social.worker(ABS.sg) -including bear -SEC.sg

 takunna -laur -tu -guk look.at -PAST -INDI -1du
 - 'The social worker and I watched the polar bear.'
- (7.3.2) b) inuliriji -il -lu nanur -mik MG social.worker -pl/du -including polar.bear-SEC.sg

 takunna -laur -tu -gut look.at -PAST-INDI -1pl

'The social workers and I watched the polar bear.'

According to MG, it is possible to place the second person dual pronoun *uvaguk*, 'the two of us', after *inulirijiillu* with no change in meaning to the sentence. This should be viewed as an instance of two nouns or pronouns being used to express a single argument. Two similar sentences are given in (7.3.2) and (7.3.3). The suffix –*kku* creates noun stems which require inflection for case and number. It can mean 'X's family', 'X's dwelling place', or 'X as well as his/her companion(s)', or, in this example, it might mean, 'X as well as his/her colleague(s)'. When *takunnalaurtuuk* is used as a clausal word, it has an absolutive argument which is the one who watched something. This sentence is MG's translation of 'John as well as another linguist watched the polar

bear, where both *Jaanikkuuk* and *uqausilirijilu* express the absolutive argument. Both *Janikkuuk* and *uqausilirijilu* seem to function like associative plurals (or, in this case, duals) in this sentence, in that they both refer to a group including either *Jaani* or a linguist. However, only *Jaanikkuuk* seems to correspond in meaning to the associative plurals discussed in Daniel and Moravcsic (2011). The grammatical forms that they refer to as associative plurals are all translated as 'X and X's companions'. In contrast, *uqasilirijilu* would translate into other languages as 'a linguist and one or more other people or things.' There is no notion being companions associated with the enclitic suffix *-lu*. The suffix *-lu* will not be glossed as an associative plural or dual suffix in this dissertation to avoid confusion. The example in (7.3.3) is a good translation for 'two linguists including John watched the bear'.

(7.3.2) Jaani -kku -uk uqausiliriji -lu nanur -mik MG
John -KKU -du(ABS) linguist -including bear -SEC.sg

takunna -laur -tu -uk
look.at -PAST -apt -du

'John as well as the other linguist watched the polar bear.'

'The two linguists including John watched the bear.'

The suffixing -lu can also be attached to multiple words bearing the same case. In (7.2.4), -lu has been suffixed onto two secondary case marked nouns which both express OBJ θ s of nirigumajunga, 'I want to eat'. The result in meaning is the same as if the two entities were coordinated using the word 'and' in English. This is easily

accounted for by claiming that tuttuvinirmillu and palaugaarmillu both express the same argument, and they mean 'a group including caribou meat' and 'a group including bannack'.

'I want to eat caribou and bannack.'

The unacceptability of example (7.3.5) shows that it is not possible to drop -lu from both of the nouns. A sentence such as (7.3.5) would have to mean, 'I want to eat a caribou made out of bread'. That is nonsensical.

*'I want to eat caribou and bannack.'

However, (7.3.6) and (7.3.7) show that it is possible to omit -lu from one of the two words. In terms of the theory of this dissertation, -lu can optionally create a word with an argument whose case is identified with the case of the noun onto which -lu is attached. In other words, palaugaarmilu from (7.3.6) and (7.3.7) means 'a group containing bannack and X', where X is equated with an argument in palaugaarmilu's argument structure list. Palaugaarmillu also bears the case feature [secondary], as does the argument in its argument structure list. In this coordination construction, both nouns always have to be given the same case.

(7.3.6) tuttu -vinir -mit palaugaar -mi -lu SM caribou -former -SEC.sg bannack -SEC.sg -LU

niri -guma -ju -nga eat -want -INDI -1sg

'I want to eat caribou and bannack.'

(7.3.7) palaugaar -mil -lu tuttu -vinir -mit SM bannack -SEC.sg -LU caribou -former -SEC.sg

niri -guma -ju -nga eat -want -INDI -1sg

'I want to eat caribou and bannack.'

The next set of examples will involve an alternative coordination construction involving the word *ammalu*, 'and'. It should be noted that MG does not use the word *ammalu* in coordination constructions. She considers the *ammalu* construction to be something that younger speakers have borrowed directly from English. She only uses *-lu* to express what she refers to as 'inclusion'. Examples (7.3.8a) and (7.3.8b) show that, in the dialects of SM and JO, it is possible to omit both *-lus* if *ammalu* is put between the two words. Example (7.3.8b) shows that *ammalu* does not actually have to go directly in between the two words that are coordinated. However, (7.3.8a) and (7.3.8b) show that the suffix *-lu* can still be added to the end of one of the nouns when *ammalu* is used. I will not attempt to give an analysis of this construction.

(7.3.8) a) tuttu -vinir -mit ammalu palaugaar -mit SM caribou -former -SEC.sg AMMALU bannack -SEC.sg

niri -guma -ju -nga eat -want -INDI -1sg

'I want to eat caribou and bannack.'

- (7.3.8) b) palaugaar-mik niri -guma -ju -nga JO bannack -SEC.sg eat -want -INDI -1sg

 ammalu tuttu -vinir -mik AMMALU caribou -former -SEC.sg

 'I want to eat caribou and bannack.'
- (7.3.9) a) tuttu -vinir -mit ammalu palaugaar-mil -lu SM caribou -former -SEC.sg AMMALU bannack -SEC.sg -LU niri -guma -ju -nga eat -want -INDI -1sg

'I want to eat caribou and bannack.'

b) uvanga -lu ammalu Jaani ani -laur -tu -guk JO I(ABS.sg) -LU AMMALU Jaani(ABS) leave -PAST -INDI -1du 'John and I left.'

The following analysis can be given for *ammalu*. As with the suffix -lu, it also means 'a group including'. However, it can have any case specification which is not overtly morphologically marked. However, it can have either one or two arguments which must bear the same case specification as *ammalu*. In both (7.3.8a) and (7.2.8b), *ammalu* bears secondary case and it expresses the OBJ0 of *nirigumajunga*. Its two arguments are *tuttuvinirmit* and *palaugaarmit*. Together, these three words mean 'a group including caribou meat and bannack', and they express that which the narrator wants to eat. In (7.9.3a), *ammalu* only has one argument, *tuttuvinirmit*. These two words taken together have the same meaning as *tuttuvinirmillu*, 'a group including caribou meat'. Example (7.3.9a) can be taken as yet another instance of two index bearing entities expressing the same argument, in this case *palaugaarmillu* and *ammalu* (which has an associated argument *tuttuvinirmit*). Putting all the words together, that which the narrator wants to eat is both a group including caribou meat and a group including bannack. For

(7.3.9b), very much the same analysis can be given, except that *ammalu* is absolutive in this example and its absolutive argument is *Jaani*.

Let us now turn to the use of -lu in sentences involving noun incorporation. It is glossed as 'group.including' in example (7.3.10). The predicate tuktuturumajunga in example (7.3.10) means, 'I want to eat caribou.' Addition of the word palaugaarmillu, 'a group including bannack', yields a sentence meaning, 'I want to eat caribou and bannack'. For this construction, the case used to mark palaugaarmillu, 'a group containing bannack', is the case used to mark word external modifiers of the incorporated noun stem onto which -tuq, 'eat, drink, or use', is attached. The use of the enclitic particle -lu is required for this sentence to be grammatical. Without it, palaugaarmit would be understood to refer to the same entity as the incorporated noun stem tuktu. For this reason, (7.1.10b) is ungrammatical. This is not possible because a caribou cannot be made out of bread. It should be noted, however, that example (7.1.10a) is a bit unusual in that SM has a strong preference for placing palaugaarmillu after the verb.

- (7.3.10) a) tuktu -tu -ruma -ju -nga palaugaar -mil -lu SM caribou -eat -want -INDI -1sg bannack -SEC.sg -group.including 'I want to eat caribou and bread.'
 - b) *tuktu -tu -ruma -ju -nga palaugaar -mit SM caribou -eat -want -INDI -1sg bannack -SEC.sg *'I want to eat caribou and bread.'

Secondary case marking is required for *palaugaarmillu* in this construction as illustrated by the ungrammaticality of (7.3.11a), where *palaugaarlu* has absolutive case marking. Example (7.3.11b) illustrates that, with *-liaq*, which places its word external modifiers in dative case, it is also possible to express the equivalent of a coordination construction by placing *-lu* on the end of a dative case-marked noun. In this example, *-*

sima is the perfective marker, indicating that something has happened in the past.

- (7.3.11) a) *tuktu -tu -ruma -ju -nga palaugaar -lu SM caribou -eat -want -INDI -1sg bannack(ABS.sg) -group.including *'I want to eat caribou and bread.'
 - b) toronto -liar -sima -ju -nga buffalo -mul -lu MG Toronto -go.to -PERF -INDI -1sg Buffalo -DAT.sg -group.including 'I have gone to Toronto and Buffalo.'

To account for the acceptability of example (7.1.11a), we can claim that tuktutuq really means 'i eats j, and j is a group containing k, and k is/are (a) caribou', where the stem tuktutuq has a secondary case-marked argument which must bear the index j.

Palaugaarmillu has the index j as it relates to the semantic relations 'j is a group containing m, and m is bannack, and m does not include a first person or a second person entity, and m is a single entity'. When the word palaugaarmillu is used with the stem tuktutuq, we get the following combined semantic representation, 'i eats j, and j is a group containing k, and k is/are (a) caribou, and k is a group containing k, and k is a single entity'.

Turning now to the use of *ammalu*, 'and', some of the data are a bit surprising. In both (7.3.12) and (7.3.13), -tuq, 'eat' is attached to tuktu, 'caribou', and, in both cases, the word is preceded by ammalu, 'and'. However, in the first sentence that I was given, example (7.3.12), palaugaaq is placed in absolutive case. It can also be placed in secondary case, as in (7.3.13). The theory given so far for coordination constructions involving incorporated nouns can account for (7.3.13). In (7.3.13), ammalu has a single argument palaugaarmit. Together, these two words mean the same thing as palaugaarmillu from example (7.3.10a), and essentially the same analysis can be given

for the two examples. A few more examples will be presented before attempting to give an analysis of (7.2.12).

- (7.3.12) palaugaaq ammalu tuktu -tu -ruma -ju -nga SM bannack(ABS.sg) and caribou -eat -want -INDI -1sg 'I want to eat caribou and bannack.'
- (7.3.13) palaugaar -mit ammalu tuktu -tu -ruma -ju -nga SM bannack -SEC.sg and caribou -eat -want -INDI -1sg 'I want to eat caribou and bannack.'

The examples in (7.3.14) to (7.3.15) show a number of other options with *ammalu*, 'and'. In all of the sentences, the first word means, 'I want to eat caribou', and it is followed by *ammalu*, 'and'. It is possible to place *palaugaarmit*, 'bannack', in secondary case in (7.3.14). In such a context, it can also be followed by -lu, as in (6.2.15), which has been glossed 'a group including' elsewhere in this dissertation. In (6.2.15), *ammalu* arguably has no arguments. It means 'a group including multiple entities'. Crucially, *palaugaaq* cannot be placed in absolutive case in (7.3.16). Example (7.3.16) differs from example (7.3.12) only in the order of the words, though (7.2.16) is ungrammatical but (7.3.12) is fine.

- (7.3.14) tuktu -tu -ruma -ju -nga ammalu palaugaar -mit SM caribou -eat -want -INDI -1sg and bannack -SEC.sg 'I want to eat caribou and bannack.'
- (7.3.15) tuktu -tu -ruma -ju -nga ammalu palaugaar -mil -lu SM caribou -eat -want -INDI -1sg and bannack -SEC.sg -LU 'I want to eat caribou and bannack.'
- (7.3.16) *tuktu -tu -ruma -ju -nga ammalu palaugaaq SM caribou -eat -want -INDI -1sg and bannack(ABS.sg)

 *'I want to eat caribou and bannack.'

It is now possible to give an analysis of (7.3.12). While phonologically there are three words in (7.3.12), we can argue that morphologically it is only one word. There is a

derivational rule which produces noun stems from two noun stems by placing *ammalu* between the two noun stems. However, we would need to argue that the output of this derivational rule belongs to a subclass of noun stem that must be used in bare noun incorporation rather than directly suffixed with case morphology.

Finally, in (7.3.17), *ammalu*, 'and', is placed between two verbs meaning 'I want to eat caribou' and 'I want to eat bannack'. As a marker of coordination, it is only helpful to the audience if *ammalu* is placed between the two things that are coordinated. For this reason, I have not even checked alternative word orders where *ammalu* is placed at the end of the sentence.

'I want to eat caribou and I want to eat bannack.'

MG prefers the following translation for (7.3.17) because she does not use the word *ammalu*. In this sentence, -*lu* is placed on the end of the second verb which is placed in the appositional mood. A more literal translation would be something like, 'I want to eat bannack, me also wanting to eat something that used to be a caribou.'

'I want to eat caribou meat and bannack.'

There is yet another type of coordination construction in Inuktitut involving the suffix *-luunniit*. And, we will see that it can also be used in noun incorporation

constructions. In (7.3.19) and (7.3.20), it is used to express the equivalent of 'either X or Y'. It can be attached to either one of the two nouns, as in (7.3.19), or to both, as in (7.3.20).

(7.3.19) aupartu -mut qakurta -mul -luuniit MG red.one -DAT.sg white.one -DAT.sg -LUUNNIIT

illu -lia -rialik house -go.to -one.that.needs.to

'he/she needs to go either to the red or the white house.'

(7.3.20) illu -mul -luuniit tupir -mu -luunniit MG house -DAT.sg -LUUNNIIT tent -DAT.sg -LUUNNIIT

ai -gialik go -one.that.needs.to

'he/she needs to go either to the house or the tent.'

We can give approximately the same analysis for *-luunniit* that was given for *-lu*. The suffix *-luunniit* adds a semantic relation that means something like, 'it could be X or something else'. The word created by suffixing *-luunniit* can also have an argument which must bear the same case as the word onto which *-luunniit* is attached, in which case the semantic relation introduced by *-luunniit* can be translated as either X or Y, where X is the noun onto which *-luunniit* is attached, and Y is the argument that must bear the same case. Sentences such as (7.3.20) should be analyzed as two nouns expressing the same argument. *Illumilluunniit* means something like 'it could be a house or something else.' *Tupirmiluunniit* means something like 'it could be a tent or something else'.

The suffix *-luunniit* can also attach to clausal words, as in (7.3.21) and (7.3.22). In such a case, we can claim that suffixation of *-luunniit* means something like 'either

situation X is true or some other situation is true'.

'Either he/she is going to the house or he/she is going to the tent.'

'Either he/she is going to the house or he/she is going to the tent.'

In (7.3.22), -luunniit is only attached to one of the clausal words. In this case, we can say that, when -luunniit attaches to a clausal word, it can have another clausal word in its argument structure list. In terms of the theory of HPSG, it might ultimately be desireable to have a unified analysis of all uses of -luunniit. One possible avenue is to claim that the argument created by suffixing -luunniit must have all the same syntactic head features as the word onto which —luunniit is attached.

If the negative suffix *-nngit* is attached to the verb, there is another option. It can attach to a single noun, in which case it is translated into English with the word 'even'. One such example is given in (7.3.23).

(7.3.23) ilinniatitsiji-luunniit taku -sima -nngi -ta -ra MG teacher -LUUNNIIT see -perfective -NEG -PPT -my.sg 'I haven't seen even the teacher.'

It can also attach to clausal words containing the negative suffix *-nngit*. Again, it is translated into English with the word 'even'. One such example is given in (7.3.24).

(7.3.24) aupartu -mut illu -mut ai -nngi -tu -nga -luunniit MG red.one -DAT.sg house -DAT.sg go -NEG -INDI -1sg -LUUNNIIT 'I am not even going to the red house.'

Example (7.3.25) shows that it can also be used to mean either X or Y when the verb is negated.

(7.3.25) illu -mut tupir -mul -luuniit isi -riaqa -nngit -tuq SM house -DAT.sg tent -DAT.sg -LUUNNIIT enter -need.to -NEG -APT 'He/she does not need to enter either the house or the tent.'

Sentences such as the one given in (7.3.26) are not uttered in Inuktitut, as MG translates this sentence as 'either he has to go to the house'. The contrast between examples (7.3.26) and (7.3.23) can be explained quite easily. We can argue that when *-luunniit* attaches to a noun stem, it always means 'either X or another entity'. (7.3.23) can then be translated into English as 'I haven't seen the teacher or another person/thing'. (7.3.26) would translate into English as 'either he/she has to go to the house or to another place'. Use of the word *illumulluuniit* violates the pragmatics of language use because it is not helpful to the audience to determine where the person may or may not be going.

(7.3.26) !illu -mul -luuniit ai -gialik house -DAT.sg -LUUNNIIT go -one.that.needs.to !'Either he/she has to go to the house.'

Finally, -*luunniit* can be used as in (7.3.27). The word *illuliarialik* usually means 'he/she has to go to the house'. However, when *tupirmuluunniit*, 'either to the tent or to somewhere else', is added to the sentence, it can mean 'he/she is going either to the house or the tent'.

(7.3.27) illu -lia -rialik tupir -mu -luunniit MG house -go.to -one.that.needs.to tent -DAT.sg -LUUNNIIT 'He/she needs to go either to the house or the tent.'

We can give the following analysis. The verb stem *illuliar* can have two different

meanings. In most sentences, it means 'i go(es) to j and j is (a) house(s)'. However, in some sentences, it can also mean 'i goes to j, and j is either (a) house(s) or something else'. However, it will not be interpreted in this second way unless there is another word in the sentence ending with -luunniit, because, to speak in such a way violates the pragmatics of language use, since it is misleading and unhelpful. When tupirmuluunniit is added to the sentence, we get approximately the same semantic representation as example (7.3.21), which did not involve incorporation. Informally, the semantic representation is 'i needs to go to j, and j is either (a) house(s) or something else, and j is either a tent or something else'.

Examples (7.3.28a) and (7.3.28b) illustrate that it is also possible to use nouns that have undergone post-inflectional noun incorporation in coordination constructions, at least with the suffix *-luunniit*.

(7.3.28) a) illuk Quarta -mi -it -tuq JO house(ABS.sg) Quartaq -LOC.sg -be.at-APT

Kangirsu -mi -luunniit Kangirsuk -LOC.sg -LUUNNIIT

'The house is located in Quartaq or Kangirsuk.'

b) Jaani -mu -ur -ta -vini -nga Suusi -mul -luuniit? JO John -DAT.sg -UQ -PPT -former -his/her.sg Suusi -DAT.sg-LUUNNIIT 'Did he or she give it to John or Sue?'

Finally, MG has given me a very interesting translation for 'He/she is either going to the house or to the tent'. It is given in (7.3.29). The first word means 'He/she is beginning to go to the house.' According to JO, *illuliatsaruni* means, 'he/she might go to the house instead'. Addition of the enclitic suffix *-lu* changes the meaning to 'and he/she might go to the house instead'. According to JO, it is not grammatical to drop the *-lu*

ending in example (7.3.29) below. However, it can be replaced with *-luunniit* with no change in meaning.

(7.3.29) tupi -lia -si -juq illu -lia -tsaru -ni -lu MG/JO tent -go.to-begin -APT house -go.to -might.instead -3sg-LU 'He/she is either going to the house or to the tent.'

Phonologically, it looks like a suffix *-tsaq* followed by conditional mood marking, and this is true for all of the conjugational forms that I have tested. However, based on my investigations with JO, it appears that this should be treated as a separate verb conjugation. According to JO, the sequence *-tsaru* or the different subject form *-tsapa* cannot be split up by any intervening suffixes. In particular, words such as (7.3.30) are not possible.

The sequence *-tu-gulu-u* involves forming an active participle, adding the suffix *-guluk*, 'small/dear', then reverbalizing with *-u*, 'be'. Sequences such as this were discussed in Chapter 6, and they can generally be placed between any two suffixes which attach to verb stems. Furthermore, according to JO, there is no morpheme *-tsaq* that can be used with any other mood form that I have tested.

Chapter 8: Concluding Remarks

The goals of this dissertation have been both descriptive and theoretical. This section will be a brief review of some of the more important points that have been made as they relate to theoretical linguistics. In section 2.6, data was presented which showed that there is a restriction that absolutive objects must get a specific reading and there is no such restriction on absolutive subjects. This empirical generalization is most important for any theory about the grammatical relations of Inuktitut. In section 4.1, a functionalist explanation was given for why the restriction is not too surprising. The restriction most likely stems from the fact that transitive clausal words are primarily used when the object is not overtly expressed, and, rather, understood to be a topical entity. It is the author's opinion that similar fieldwork should be done on other ergative languages because most of them are endangered, and it is now known that an ergative language can have different semantic restrictions for absolutive objects compared to absolutive subjects.

Also of theoretical interest in section 2.6 is the claim that there may not need to be a formal theory for why some arguments in Inuktitut will be interpreted in much the same way that definite pronouns such as 'him/her/it' are in English when the argument is not expressed overtly. This allows for an analysis of non-configurational languages that makes no use of a COMPs list, which seems desireable since there is very little evidence for a complex phrase structure in nonconfigurational languages. Rather, a very simple phrase structure rule such as the one in section 3.1, which states that a sentence is a string of words, can be invoked.

The analysis of [intransitive] versus [atransitive] noun stems in section 2.7 was very important to understanding many of the grammatical restrictions in Chapter 4 on

nominalizing suffixes. Some deverbal noun stems are [atransitive] whereas others are [intransitive]. Some suffixes attach only to [atransitive] noun stems. These include -u, 'be', and those inflectional processes that only show number, without showing person and number agreement for an argument. Other suffixes attach only to [intransitive] noun stems. These include possessive suffixes as well as the suffixes -lik, 'one that has', -qaq, 'have', and -gi, 'have', as discussed in Chapter 4. The analysis of section (2.7), which claims that there is a null derivation rule which adds a possessor to a noun stem's argument structure, accounts for why all of the suffixes which can attach to [intransitive] deverbal nouns can also be used to express a possessive relationship, since a noun stem's subject can either be a possessor or it can have another thematic role as determined by the derivational rules which create a deverbal nominal stem. Also important to this discussion were some of the verbalizing suffixes in Chapter 7, which can attach to either [intransitive] or [atransitive] noun stems. The analyses and the data raise questions about other dialects and languages in the Eskimo-Aleut language family. For example, in Central Alaskan Yup'ik, the equivalent of passive participle forming suffixes is necessarily [intransitive] (Jacobson 1995). It would be interesting to see if stems ending in that suffix can undergo noun incorporation in Yup'ik. It would also be interesting to see if verbalizing suffixes can create transitive stems when they attach to [intransitive] noun stems in that language. West Greenlandic has a very interesting type of compounding where the first part is a gerund uninflected for case or a subject argument (Sadock 2003, pp. 10-11). The gerund can be formed from either transitive or intransitive verb stems, but with different restrictions on whether the second member of the compound must be a transitive or an intransitive verb. It would be interesting to see if the analyses of transitivity alternations given in this dissertation can be extended to explain those constructions as well.

Chapter 4 illustrated that there is quite a diversity of transitivity alternations in Inuktitut. The data are consistent with a powerful theory of lexical rules which can treat transitive stems differently from intransitive stems and which can map any input to any output. Hopefully, this empirical observation will help to generate grammatical questions about other polysynthetic languages with a so-called antipassive alternation. This dissertation has also gone into far greater depth in the investigation of comparative constructions than any previous descriptive effort on any language in the Eskimo-Aleut language family. The data was presented in sections 3.9, 4.12, 4.19, and Appendix 1. It will be important to investigate how similar the restrictions are or are not in other languages and dialects in this language family, particularly since some dialects, such as Inuinnagtun, Siglitun, and Iñupiag, are quite endangered. Also, as reviewed in section (4.16), the various classes of suffixes are diverse in their restrictions on whether or not they allow for a dative by-P. This phenomenon should also be investigated in other dialects and languages in this language family, particularly since other dialects use ablative rather than dative case to mark by-Ps in passive constructions. There are a number of different uses of adjectival suffixes in Inuktitut, as described in sections (2.1), (2.10), and (4.17). It would also be interesting to investigate other dialects with respect to the different possible uses of adjectival suffixes, and, again, it would be interesting to investigate the restrictions on atuni, as discussed in section 2.9, or its cognates, in related dialects.

The discussion of affix ordering in Chapter 6 was somewhat important, because it

suggests that, in a lexicalist model, semantics alone can be used to explain many restrictions on the ordering of suffixes in Inuktitut. Particularly important to the discussion in that section was the observation that the two possible relative orderings of the reciprocal suffix and the repetitive suffix result in different meanings, which would be more difficult to capture in a theory which makes use of word-structure rules to place the suffixes in the correct order.

Two different possible analyses were given for post-inflectional noun incorporation in Chapter 7.2, one in which a verbalizing suffix attaches to a noun fully inflected for case, the other which attaches a derivational suffix onto a partially inflected noun stem, which can bear a possessive suffix. This data is of particular theoretical interest because it is often assumed that, for all languages, inflectional processes cannot precede derivational processes, where possessive suffixes are considered to be inflectional and suffixes which create verb stems are considered to be derivational. This is clearly an incorrect assumption. The data on coordination constructions in section 7.3 are quite interesting because they are difficult to capture in just about any syntactic theory. However, possible analyses were given within the assumptions of a lexicalist framework.

Appendix 1 on Comparative Constructions

While the grammatical restrictions on comparative constructions have been presented in sections 3.9, 4.12, 4.19, and Chapter 5, this appendix will present a number of other translations I have been given, all of which make use of the suffix *-nirsaq*, 'one that is more X'. Example (App1.1) is a translation of 'John loves Mary more than Sue loves Joanna'. A more literal translation of the Inuktitut into English is 'While Sue does indeed also love Joanna, John loves Mary more.' *Nalligusugaluarmitillugu* is placed in the appositional mood in this example. The DS notation stands for 'different subject'. This form is used when the subject is not topical.

App1.1 Suusi nalli -gusu-galuar -mi -til -lu -gu Juana -mik, MG Sue(ABS) love -AP -indeed -too-DS-APP-3sg Joanna-SEC.sg

Jaani nalli -gusun -nisak Mary -mik
John love -AP -one.that.is.more Mary -SEC.sg

'John loves Mary more than Sue loves Joanna'

When -nirsaq is added to a reflexive stem, MG prefers the use of comparative case to express the equivalent of 'than X' over the use of ablative case, even though it is ambiguous. One such example is given in (App1.22). According to MG, the sentence makes no sense if the comparative form *Suusiminit* from this example is replaced with the ablative case-marked form *Suusimit*. This is unsurprising since, when ablative case is used, the argument is interpreted as having the same thematic role as that which is nominalized by -nirsaq, 'one that is more'. If a reflexive stem is nominalized, the index of the resulting deverbal noun ends up being equated with two different semantic

translate what the semantic problem is into English.

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⁹³ MG has the same dispreference for the use of *Suusimit* if *nalliginirsaq* is replaced with *nalli-gi-nirsa-lik*, where *-lik*, 'one that has', has been placed on the end of the word. She replaces *Suusimit* with *Suusiminit*. Otherwise, the sentence makes no sense to her. Because the sentence makes no sense, she is unable to

arguments. In the case of *nalliginirsaq*, the index is equated with both the one that is loved and the one that loves someone.

App1.2. Jaani immi -nik nalli -gi -nirsaq Suusi -minit John self -SEC love -TR -one.that.is.more Sue -COMP.sg 'John loves himself more than he loves Sue.'

'John loves himself more than Sue loves him.'

MG has given an alternative translation for 'John loves himself more than he loves Sue'. The first four words in (App1.3) most likely mean 'John loves Sue less'. The second two words mean, 'because he loves himself more'. There are two instances of the stem *nalligijaqaq* in this example. In terms of argument structure, it is identical to the antipassive stem *nalligusuk*. The passive participle forming suffix nominalizes the object of the transitive stem *nalligiji*. Addition of –*qaq*, 'have', creates an intransitive verb stem with the same subject as the noun stem which it attaches to, and with a secondary casemarked argument which is identified with the index of the noun stem onto which -*qaq* is attached. The use of the negative marker followed by -*nirsaq* most likely creates a stem meaning 'one that is less'. The last word in (App1.3) involves reverbalizing *nalligijaqarnisaq*, 'one that loves more', followed by addition of third person singular morphology of the established mood conjugation. In this sentence, the word *nalligijaqarnisaugami* means 'because he/she loves more'.

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App1.3. Jaani Suusi -mik nalli -gi -ja -qa -nngi -nirsaq MG John(ABS) Suusi -SEC.sg love -TR -PPT -have-NEG -one.that.is.more immi -nik nalli -gi -ja -qar -nisa -u -ga -mi. self -SEC love -TR -PPT -have-one.that.is.more -be -EST -3sg 'John does not love Sue as much as he loves himself.'
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Example (App1.4) is a translation of *John loves himself more than Sue loves him*. The first three words mean, 'John loves himself'. The second two words mean, 'him

being less loved by Sue'. The passive stem *nalligijau* is negated and then nominalized with *-nirsaq*, 'be more', yielding *nalligijaunnginirsaq*, 'one that is less loved'. It is then reverbalized with *-u*, 'be', and then given third person appositional inflection. This word means 'him/her being less loved'.

App1.4. Jaani immi -nik nalli -gi -nirsaq MG
John(ABS) self -SEC love -TR -one.that.is.more

Susi -mut nalli -gi -ja -u -nngi -nirsa -u -su -ni
Sue -DAT.sg love -TR -PPT -be -NEG -one.that.is.more -be -APP -3sg

'John loves himself more than Sue loves him.'

Example (App1.5) was given as a possible translation for 'John loves Sue more than Mary does'. In this example, -nirsak is attached to the stem nalligijau, 'be loved'. Jaanimut takes dative case because it expresses a by-P. This example shows that comparative case can make a comparison with a dative case-marked by-P. There appears to be no grammatical or thematic restriction on what a noun marked with comparative case can be compared with. While this sentence is most likely ambiguous, the translation given is most likely the best one, since it would be better to use ablative case if Mary were being compared with Sue.

Ilinnit is generally cited as the ablative form for the second person singular pronoun. However, the (A.6) shows that it is also the comparative form. The translation given is MG's preferred translation out of context. Since *nalligusunnisaq* is a subject

'John loves Sue more than Mary does.'

nominalization, we would expect that this sentence could only mean 'Sue loves John more than you do', if *ilinnit* were an ablative rather than a comparative case-marked form in this sentence.

App1.6. Suusi Jaani -mik nalli -gusun -nisaq ilin -nit MG Sue(ABS) John -SEC.sg love -AP -one.that.is.more you.sg -NIT 'Sue loves John more than she loves you.'

However, MG considers example (App1.7) to be better Inuktitut. Because the verb is negated in this sentence, the first three words probably mean 'Sue loves you less'. Addition of the word *Jaaniminit* makes a comparison with John. While other sentences that I have checked have suggested that this construction must really be ambiguous, the choice of comparative case over the less ambiguous ablative case makes the given translation more likely.

App1.7. Susie nalli -gusu-nngi -nirsaq ilin -nik Jaani -minit MG Sue(ABS) love -AP -NEG -one.that.is.more you -SEC John -COMP.sg 'Sue loves John more than she loves you.'

While example (App1.7) confirms that *ilinnit* is the comparative case-marked form of *ivvit*, 'you single person', example (App1.8) confirms that it is also the ablative form, since only ablative case-marked words can be used with the meaning 'from X'. Comparative case-marked words cannot be used this way.

App1.8. beer -taa -ruma -juq ilin -nit JO beer -receive -want -APT you.sg -NIT 'He/she wants to receive a beer from you.'

Appendix 2 on noun and verb stem elision

In other dialects, it is possible to replace a noun stem or a verb stem with the empty marker pi, which can take on any meaning depending on the context. It can also have any argument structure. In this dialect, there are some vestiges of the empty marker, but it is usually not used. Rather, verb stems and noun stems are simply omitted in most cases. It should be noted that there is a verb stem pi in Tarramiutut that can only mean 'get something'.

The first three question/answer pairs will be used to introduce the phenomenon of noun and verb stem elision. In (App2.1b), the noun stem *uqausiq*, 'language', has been elided from the response. In both the question and the answer in (App2.1), *-liri* is used to create a transitive verb stem, in which case the object is equated with the subject of the noun stem onto which *-liri* is attached. The verb in this sentence is placed in the established mood, which is used quite frequently in WH-questions. The 'DS' notation stands for 'different subject'. This conjugational form is used when the subject is not topical. The noun stem *uqausiq*, 'language' has been elided in the response in (App2.1b).

- App2.1 a) kina -up uqa -usi -liri -mma -a -tit? JO who -REL.sg say -way/means.of work.with-EST.DS -3sgA -2sgU 'Who is working on your language?'
 - b) Joanna liri -ji -ga JO Joanna(ABS) work.with -JI -my.sg 'Joanna works on mine.'

The response is a bit complicated, but it is given because JO considers it to be more fluent than the sentence that I initially asked her about. *Liri* is a transitive verb stem with an object which is equated with the elided noun stem *uqausiq*. As discussed in sections 4.2 and 4.13, the agentive nominalizing suffix *-ji/ti* can nominalize the subject of a

transitive verb stem, in which case the output is an intransitive noun stem with a subject argument that is equated with the object of the verb stem onto which - *ji/ti* is attached. The subject of the noun stem *liriji* in this example is the person whose language is being worked on. The suffix -*ga* in this example indicates that the one whose language is being worked on is a first person entity and that the person who is working on a language is neither a first person nor a second person entity. Since -*lirijiga* is used as a predicate in this example, the one who is working on a language is placed in absolutive case.

In (App2.2), the question means, 'have you seen either John or Susie?'. The verb stem taku, 'see', has been elided in the response, even though Jaanimik expresses the OBJ θ of taku. Use of the past tense suffix -lauq shows that the event occurred at least a day ago

- App2.2 a) taku -sima -vi -t Jaani -mik Suusi -mil -luuniit? JO see -perfective -INT -2sg John -SEC.sg Suusi -SEC.sg -LUUNNIIT 'Have you seen either John or Susie?'
 - b) laur -tu -nga Jaani -mik PAST -INDI -1sg John -SEC.sg 'I saw John at least a day ago.'

Example (App2.3a) is a passive meaning, 'were you seen by anyone?'. The noun stem *kina* can mean 'someone', 'anyone', or 'who'. In a yes/no question, it will mean anyone. All words that can be used in WH-questions work like *kina*. While this sentence does make use of interrogative mood marking, the true marking for yes/no questions in Inuktitut is a rising intonation in the last syllable of the last word of the sentence. The vowel will also be lengthened if it is short, as is the case with this example. The suffix *-niq* is a past tense marker that is used when the narrator did not witness or was not aware of the event in question when it happened. In contrast, *-lauq* is used when the narrator

was aware of the event in question at the time that it occurred. The suffix *-viniq*, 'former', which creates noun stems from noun stems, does not appear to make any implication either way.

In the response in (App2.3b), the passive verb stem *takujau* has been elided. Phonologically, *-lauq* is a deleting suffix. If the stem which it attaches to ends with a consonant, the consonant is deleted. When *-lauq* occurs at the beginning of a word as a result of verb stem elision, one can optionally delete a final consonant off of the preceding word as in example (App2.3b). One can say either *Jaanimut laurtunga* or *Jaanimu-laurtunga*.

It is ultimately necessary to learn the word-initial form for each suffix. The suffix -qatik, 'companion', is piqatik when it occurs at the beginning of the word. This is a vestige of the historical empty marker pi. Suffixes that begin with vowels all have an alternative word initial form that does not begin with a vowel. The suffixes -aluk, 'big/terrible', -usiq, 'way/means.of', and -apik, 'do something a little bit', take the following word-initial forms: pialuk, piusiq, raapik. The use of the historical empty marker pi, is not generally optional. For example, it is not possible to say piapik instead of raapik. Similarly the word-initial forms for 'receive', 'small or terrible', and 'looks like an' are taaq, guluk, juujaaq, which can never be replaced by piguluk, pitaaq, or

pijuujaaq. The sentences in (App2.4a) make use of word-initial *-raapik*, 'do something a little bit'. According to JO, it can be used as an answer to some questions.

In contrast, (App2.4b) is ungrammatical. That is the form that we would get if it were possible to suffix *-apik* onto *Jaanimut*.

In dialects that make use of the empty marker pi, a very simple analysis can be given. There is a morphological rule that can apply to any noun stem or verb stem which replaces the phonological content of the noun stem or verb stem with pi, without changing the semantic representation or the argument structure. In this dialect, the entire phonological content of the stem is deleted. Phonologically, there is more to learn in this dialect, because one also has to know the word-initial forms of the suffixes.

It should be noted that MG does not make use of the empty marker and verb stem and noun stem elision are ungrammatical for her. She has to repeat the noun stem or the verb stem. As an older speaker from Kangirsuk, she finds verb stem and noun stem elision to be threatening to the purity of the Inuit language.

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⁹⁴ While the suffix *-juujaaq* attaches to noun stems to create verb stems, *-taaq* either attaches to noun stems to form noun stems or to noun stems to form verb stems. The suffix *-guluk* only attaches to noun stems to form noun stems.

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