

**Asymmetries between Passivization and Antipassivization in the
Tarramiutut Subdialect of Inuktitut**

Matthew Beach
University at Buffalo, State University of New York

Proceedings of the LFG03 Conference
University at Albany, State University of New York
Miriam Butt and Tracy Holloway King (Editors)

2003
CSLI Publications

<http://csli-publications.stanford.edu/>

Abstract

This paper investigates some of the properties of passivization, antipassivization, and two types of causatives in the *Tarramiutut* subdialect of Inuktitut, within the Role and Reference Grammar framework. Data from the use of the floated quantifier, “*atuniiit*”, as well as interclausal binding will be used to suggest that NPs which express arguments in constructions which, in their most canonical use, leave the argument unspecified behave as peripheral adjuncts. Since this is not the case with antipassives, undergoers in antipassive constructions behave as core arguments, rather than as peripheral adjuncts. This paper will also investigate the interaction between antipassivization and dative shift. The data will be used to argue that a “lexical intransitivization” account of antipassivization, which would claim that there is no undergoer in antipassive constructions, makes incorrect predictions. I will argue that the undergoer in antipassive constructions has a similar status to accusative undergoers in nominative/accusative languages. The strongest prediction that this paper can make is that the two types of voice alternations investigated in this paper are representative of the types of voice alternations which are available cross-linguistically. If this is true, than binding phenomena can be predicted based on the primary use of a construction.

1. Overview

This paper will present new data which will be used to argue that antipassivization has a different effect on the status of undergoers than passivization has on actors in *Tarramiutut*.¹ The arguments in this paper will be made in Role and Reference Grammar. However, it would be important to explain these asymmetries in any syntactic theory. The major claims with regard to voice alternations in Inuktitut will be that while passivization demotes the actor to the status of a peripheral adjunct, the undergoer in antipassive constructions has an equivalent status to an accusative undergoer in nominative/accusative languages.

Based on Dorais’ dialectical classifications, Eastern Canadian Inuktitut is a dialect of Inuit, which is a member of the Eskimo-Aleut language family (Dorais 1990). *Tarramiutut* is a subdialect of Inuktitut spoken in Northern Quebec along the Ungava Bay. All of the sentences in this paper have been checked with Joanna Okpik, who comes from the village of Quartaq, which is within the *Tarramiutut* speaking region. In some cases, similar examples were elicited from either Annie Okpik, who is also from Quartaq, or from Elizabeth Annahatak, who is from a neighboring village, Kangirsuk. Johns (2001) has suggested that the degree to which antipassive constructions parallel accusative constructions in nominative/accusative languages may be subject to dialectical variation. Hopefully, the tests used in this paper can be applied to other dialects in the future.

¹ My thanks to Alana Johns, Aaron Broadwell, Keren Rice, Jean-Pierre Koenig, and Robert Van Valin for their comments and suggestions. I am also thankful to Joanna Okpik, Anni Okpik, and Ilisapi Annahatak for providing me with the data.

1.1 Overview of voice alternations in Inuktitut

Inuktitut is an ergative language which allows for a three-way voice contrast for transitive verbs. With intransitive verbs, the inflectional morphology agrees with the single argument, and the single argument is placed in absolutive case, as illustrated by example (1), below.

- (1) Jaani itir -tuq
Jaani(ABS) enter-IND(3s)
Jaani entered.

For transitive verbs in the ergative construction, the verbal inflection agrees with both the actor and the undergoer. The actor takes ergative case, and the undergoer takes absolutive case, as in example (2).

- (2) Jaani-up nanuq qukir -ta -nga
Jaani-ERG bear(ABS) shoot-IND-3sA:3sU
Jaani shot the bear.

For transitive verbs in the antipassive construction, the verbal inflection agrees with the actor only. The actor takes absolutive case, and the undergoer takes secondary case. I have chosen the label of secondary case as a neutral term, following Dorais (1990) and Johns (1996). I will argue that its function in antipassives is essentially equivalent to accusative case in nominative/accusative languages. Example (3) is the antipassive version of example (2).

- (3) Jaani nanur-mik quki-i-juq
Jaani(ABS) bear-SEC shoot-AP-3s
Jaani shot a bear.

For transitive verbs in the passive construction, the verbal inflection agrees with the undergoer only. While the undergoer takes absolutive case, the actor takes dative case. As with *by*-phrases in English, the actor is often left unspecified. An example of a passive is given in (4).

- (4) nanuq qukir-ta -u -laur -tuq Jaani-mut
bear(ABS) shoot-PASSPRT-be-PAST-IND(3s) John-DAT
‘The bear was shot by John’

1.2 Theories about voice alternations in Inuktitut

There are three major approaches to voice alternations in the literature. In the first approach, the status of the undergoer in antipassivization is similar to the status of dative *by*-phrases in passives, but different from the status of accusative undergoers in nominative/accusative languages. These theories generally treat secondary case-marked NPs, as well as dative *by*-phrases, as obliques, which may or may not be adjuncts

depending on the theory. This has been argued for in an LFG framework by Manning (1996), and by Grimshaw and Mester (1986), and in a principles and parameters approach by Johns (1996). It should be noted that, in a more recent paper, Johns has also suggested that the status of secondary case-marked NPs in antipassives varies between the dialects, and that, in the more Eastern dialects, such as Labrador Inuttut, the secondary case in antipassives is equivalent to the accusative case in the nominative/accusative languages (Johns 2001). Labrador *Inuttut* is very closely related to *Tarramiutut*, the dialect which will be investigated in this paper.

Another approach is given by Bittner(1994), and Bittner and Hale (1996). Undergoers in antipassive constructions are placed in a similar but different position to accusative undergoers in nominative/accusative languages. The difference is that, in ergative languages, the undergoer is not directly a complement to the verb, but rather a branch of a noun phrase which also contains a trace of an antipassive morpheme, which is incorporated by the verb. This larger noun phrase containing both the antipassive morpheme and the NP marked with secondary case is placed in the same position relative to the verb where accusative objects are placed in nominative/accusative languages. Their account of passivization places *by*-phrases, which, in the West Greenlandic dialect which their analysis is based on, get ablative rather than dative case, in the specifier of the verb phrase. This is the same position which is given to ergative actors in ergative constructions. Thus, neither the actor in passivization, nor the undergoer in antipassivization, are treated as structural adjuncts. While the mechanisms for case assignment given in Bittner (1994) and Bittner and Hale (1996) are too complicated to discuss in this brief literature review, it should be noted that the cases given to both *by*-phrases and undergoers in antipassives are considered to be oblique.

The third major approach to voice alternations will be referred to as the accusative approach to antipassivization. Under this approach, the status of the undergoer in antipassives is similar to that of accusative undergoers in nominative/accusative languages. Proponents of this view most likely treat passivization differently from antipassivization, since the standard views of passivization generally treat passive *by*-phrases differently from undergoers in accusative constructions. In a principles and parameters approach, several researchers have placed the undergoer in antipassives in same position that accusative undergoers are given in nominative/accusative languages. Included in this group are Bok-Bennema (1991), Manga (1996a,b), Van Geenhoven (1998, 2002), and Spreng (2001). Johns has also argued that, for the more eastern Canadian dialects of Inuit, the secondary case in antipassives should be treated as an accusative case (Johns 2001). In the minimalist framework, Bobaljik and Brannigan (2003) have placed the undergoer in antipassives in the theta position associated with objects in accusative languages. They claim that the undergoer gets oblique case morphology, however, it is unclear what their criteria are for claiming that a case is morphologically oblique. One could easily argue that this account is essentially in lines with the accusative approach to antipassivization. This general approach has been taken up in LFG by Falk (2000).

Falk's analysis of ergativity and antipassivization is very similar to the account which I intend to give for antipassivization in Role and Reference Grammar. The undergoer of a transitive verb is treated as an OBJECT in both constructions. The difference between the two constructions is related to subjecthood. Falk divides the

traditional notion of subjecthood into two grammatical primitives, GF[^], which he claims to be the thematically most prominent argument, and PIV, for “pivot” (The notion of “pivot” is borrowed from Foley and Van Valin (1984) and Dixon (1994)). The voice alternation between ergative voice and antipassive voice is related to which argument is equated with PIV. In the antipassive construction, GF[^] is equated with PIV, whereas, in the ergative construction, object is equated with PIV.

This mechanism of voice alternation is very similar to one of the major forms of voice alternation in Role and Reference Grammar (Van Valin and LaPolla 1997). This is referred to as Privileged Syntactic Argument (PSA) Modulation voice. An analysis of antipassivization which involves PSA Modulation voice only would function as follows. The difference between ergative voice and antipassive voice is that the undergoer counts as the PSA (or pivot) in ergative voice, whereas, in antipassive voice, the actor is the PSA (or pivot).

The other major mechanism of voice alternation in Role and Reference Grammar is Argument Modulation Voice. In such a voice alternation, “non-canonical realization” is given to an argument. Argument modulation voice may, but need not, occur in conjunction with PSA Modulation Voice. There are two types of Argument Modulation Voice given in Van Valin and LaPolla (1997). The first type involves demotion of an argument to the status of a peripheral adjunct. Another type of argument modulation is referred to as “lexical intransitivization”. In “lexical intransitivization”, a verb fails to be assigned an actor or an undergoer, despite having two logical arguments. The argument which fails to be assigned status as either an actor or an undergoer need not be demoted to the status of a peripheral adjunct. The predictions of a lexical intransitivization account, as well as the role of undergoers in Role and Reference Grammar will be discussed in section 5.

1.3 Proposed analysis

The data in this paper will be consistent with the accusative approach to antipassivization. I intend to argue that antipassivization involves PSA modulation only. Analyses in which antipassivization involves either form of Argument Modulation Voice will be shown to make problematic predictions. This will lead to an analysis in which secondary case-marked nouns in antipassives are treated as undergoers, and they are not demoted to the status of peripheral adjuncts, as is the case with accusative undergoers in nominative/accusative languages. On the other hand, I will argue that passivization does involve argument modulation, demoting the actor to the periphery.

Two major types of evidence will be used to support these analyses of passivization and antipassivization. Section 3 will make use of a floated quantifier, *atuniit*, “each”. When used as a floated quantifier, there appears to be a restriction that it cannot be construed with peripheral adjuncts. Data from passive constructions and antipassive constructions will illustrate that dative *by*-phrases in passives pattern with peripheral adjuncts, but secondary case-marked undergoers do not.

Section 4 will investigate the interaction of interclausal binding with two types of causative constructions. While antipassivized *tit*-causatives create arguments which may be antecedents for interclausal binding, *naq*-causatives create dative *by*-phrases which cannot be antecedents for interclausal binding. These phenomena will be related to a

cross-linguistic tendency for binding phenomena to be sensitive to a core versus peripheral distinction as argued for by Van Valin and LaPolla (1997). They will also be used to make an argument that whether or not an argument has the status of a peripheral adjunct can be related to the use of the construction. Passive constructions and *naq*-causatives both share the feature that the argument which may be expressed with a dative NP is usually omitted, and the argument in question is interpreted as “someone, people, something, or things”. I will make the claim that this property of constructions can be used to predict whether or not an NP expressing a semantic argument of the verb is treated as a peripheral adjunct.

Section 5 will investigate the possibility of a “lexical intransitivization” account for antipassives. In a lexical intransitivization account, secondary case-marked arguments would not count as undergoers. I will argue that, since the notion of undergoer is essential to explaining dative shift phenomena in Inuktitut, and dative shift does occur in antipassives, undergoers must be present in antipassive constructions.

Section 6 will be the summary. There will also be a discussion of what cross-linguistic predictions can be made if one assumes that the two types of voice alternations observed in Inuktitut are the only two types of voice alternations which are possible cross-linguistically, and that that whether or not an argument is usually left semantically unspecified can be used to predict which type of voice alternation is at work.

2. Core arguments versus peripheral adjuncts in Role and Reference Grammar

This section will review the distinction made between core arguments and peripheral adjuncts in Role and Reference Grammar, based on Van Valin and LaPolla (1997). It should be noted that the use of the term “core” in “core argument” differs from its use in LFG. In section 3, data will be presented which suggests that *atuniit*, “each” is sensitive to a core versus peripheral distinction. This test will be used to argue that, while dative actors in passives are demoted to the status of peripheral adjuncts, secondary case-marked undergoers in antipassives are treated as core arguments. Similar arguments will be made in section 4, where the interaction of interclausal binding with two types of causatives will be investigated.

For clauses in the active voice, all of the verbs semantic arguments are core arguments. Thus, all of the bracketed NPs or PPs in examples (7) to (9) represent core arguments.

(7) [I] presented [Lou] [with some flowers]

(8) [I] gave [the book] [to John]

(9) [I] talked [to Mary] [about Philip]

Applicative constructions and benefactive shift create derived core arguments, which are not actually semantic arguments of the verb. The motivation for this claim comes from the fact that applicative constructions and benefactive shift often effects the position and marking of the shifted noun phrase, and these processes often feed passivization. Thus, “Mary” in example (10) below is a derived core argument.

(10) [I] baked [Mary] [the cake]

In some cases, arguments which are semantic arguments of the verb are not core arguments. This includes arguments with a demoted status which are usually omitted. Thus, *by*-phrases in English are not core arguments. Rather, they are peripheral adjuncts.

Argument adjuncts are semantic arguments of the verbs which are introduced by a preposition which gives additional semantic information that is not specified by the verbal semantics. Both of the italicized PPs in (11) and (12) are argument adjuncts.

(11) I put the book *in the bag*.

(12) I ran *out of the house*

Peripheral adjuncts include elements which are not part of the semantic representation of the verb which have not been made into derived core arguments of applicative or benefactive shift constructions. All of the italicized PPs in (13) to (16) are peripheral adjuncts.

(13) I saw John *in the library*.

(14) I baked the cake *for Terry*.

(15) I saw Mary *after the Party*.

(16) I spoke to Craig *for five minutes*.

Verbal arguments with a demoted status which are usually left unexpressed are also considered to be peripheral adjuncts. The *by*-phrase in example (17) is a peripheral adjunct.

(17) Mary was seen *by John*.

3. Asymmetry between Passivization and Antipassivization with “each”, *Atuniit*

In this section, I will argue that the quantifier, *atuniit*, “each”, is sensitive to a core versus peripheral distinction. When used as a floated quantifier, there are restrictions on what nouns it may or may not be construed with. I will argue that the generalization is that *atuniit* may be construed with a plural NP if it is a core argument, when *atuniit* is placed in a position which is discontinuous from the plural NP. However, *atuniit* may not be construed with a peripheral adjunct if *atuniit* is placed in a position discontinuous from the peripheral adjunct. It should be noted, however, that, for many of the examples which I have tested, where it is not possible for *atuniit* to be construed with a peripheral adjunct, grammaticality is restored if *atuniit* is placed in a position immediately following the peripheral adjunct. The asymmetry between core arguments and peripheral adjuncts which will be the main focus of this section only applies to sentences where *atuniit* is placed in a position discontinuous from the plural noun phrase. This test will be used to illustrate that, while secondary case-marked arguments in passives pattern with core-arguments, dative NPs in passives pattern with peripheral adjuncts. This is consistent with the accusative view of antipassivization, since accusative undergoers in nominative/accusative languages are assumed to be core arguments.

3.1 Basic Pattern of Quantification with *Atuniit*

The basic pattern of quantification with *atuniit* is summarized in (18). Ergative actors may be construed with *atuniit*. Similarly, absolutive NPs may be construed with *atuniit*, whether they express the undergoer in an ergative or a passive construction, or the actor in an antipassive construction. In contrast, the dative NP in passive constructions may not be construed with *atuniit*, when *atuniit* is placed in a position discontinuous from the dative NP. However, secondary case-marked NPs in antipassives can be construed with *atuniit*, when *atuniit* is placed in a position discontinuous from the plural noun phrase.

(18)	Actor	Undergoer
ergative constructions	yes	yes
antipassive constructions	yes	yes
passive constructions	no	yes

Example (19) illustrates that *atuniit* can be construed with an ergative actor in an ergative construction when *atuniit* is used as a floated quantifier.

- (19) anguti-it arnaq taku-laur-ta -ngat atuniit
 man-ERG.pl woman(ABS) see-PAST-IND-3plA:3sU each
 ‘The men each saw the woman.’

Similarly, example (20) illustrates that *atuniit* may also be construed with an absolutive undergoer in an ergative construction, when placed in a position discontinuous from the absolutive NP.

- (20) arna -up anguti-it taku-laur -ta -ngit atuniit
 woman-ERG man-ABS.pl see-PAST-IND-3sA:3plU each
 ‘The woman saw each of the men.’

Turning now to antipassive constructions, example (21) illustrates that absolutive actors in antipassive constructions may be construed with *atuniit*, when *atuniit* is used as a floated quantifier.

- (21) anguti-it arna -mik taku-laur -tu -it atuniit
 man -ABS.pl woman-SEC see -PAST-IND-3pl each
 The men each saw a woman.

Similarly, secondary case-marked undergoers in antipassive constructions may also be construed with *atuniit*, when *atuniit* is used as a floated quantifier, as illustrated by example (22).

- (22) arnaq anguti-nik taku-laur -tuq atuniit
 woman(ABS) man -SEC.pl see -PAST-IND(3s) each
 The woman saw each of the men.

In contrast, dative NPs expressing the actor in passives may not be construed with *atuniit*, when *atuniit* is placed in a position discontinuous from the dative NP. This is illustrated by (23).

- (23) arnaq anguti-nut taku-ja -u -laur -tuq (*atuniit)
 woman(ABS) man -DAT.pl see -PASSPRT-be-PAST-IND(3s) (*each)
 The woman was seen by (*each of) the men.

Unsurprisingly, absolutive undergoers in passives may be construed with *atuniit*, when *atuniit* is used as a floated quantifier as illustrated by the grammaticality of (24), below.

- (24) anguti-it arna -mut taku-ja -u -laur -tu -it atuniit
 man-ABS.pl woman-DAT see-PASSPRT-be-PAST-IND-3pl each
 The men were each seen by the woman.

The data in this section have demonstrated that there is an asymmetry between passivization and antipassivization. While passivization makes it impossible for the actor to be construed with *atuniit*, antipassivization does not have the same effect on undergoers in antipassives. Data in the next two sections will be used to argue that *atuniit* is sensitive to a distinction between core arguments and peripheral adjuncts. I will conclude that dative *by*-phrases cannot be construed with *atuniit* when *atuniit* is used as a floated quantifier because the actor has been demoted to the periphery. However, antipassivization does not have a similar effect on the undergoer.

3.2 Dative Core Arguments

In RRG, dative recipients of dyadic verbs are considered to be core arguments, since they are semantic arguments of the verb. Example (25) illustrates that dative recipients can be construed with *atuniit*, when *atuniit* is placed in a position discontinuous from the plural noun phrase.

- (25) qimirqua-mik anguti-nut aittu-i-laur-tu-nga atuniit
 book -SEC man -DAT.pl give-AP-PAST-IND-1s each
 “I gave a book to each of the men.”

3.3 Other peripheral adjuncts

Stronger evidence for claiming that *atuniit* is sensitive to a core versus peripheral distinction comes from the fact that NPs which do not express semantic arguments of the verb may not be construed with *atuniit*, when *atuniit* is used as a floated quantifier. This is illustrated by the fact that the locative expression in (26), meaning “in the libraries”, cannot be construed with *atuniit*, when *atuniit* is placed in a position discontinuous from the locative NP. Since “in the libraries” is not a semantic argument of the verb in this sentence, it is, therefore, a peripheral adjunct.

- (26) qimirqaqarvi-ni Jaani taku-sima-ja-ra (*atuniit)
 library-LOC.pl John see-PERF-IND-1s:3s (*each)
 'I have seen John in (*each of) the libraries.'

Similarly, the dative NP in (27) expresses an instrument which is not a semantic argument of the verb in this sentence. Unsurprisingly, it cannot be construed with *atuniit*, in its use as a floated quantifier.

- (27) qirmusijauti -nut nanuq taku-ja -u -laur -tuq (*atuniit)
 binoculars -DAT.pl bear(ABS) see -PASSPRT-be-PAST-IND(3s) (*each)
 The bear was seen with (*each of) the binoculars.

The data in this section have been used to argue that *atuniit* is sensitive to a distinction between core arguments and peripheral adjuncts. The data have also shown an asymmetry between antipassivization and passivization. While dative *by*-phrases in passives are peripheral adjuncts, NPs with secondary case in antipassives are core arguments, not peripheral adjuncts.

The difference in the status of secondary case-marked undergoers in antipassives and dative NPs in passives can be related to a difference in use. In passives, the dative NP is usually omitted. It is left semantically unspecified with a meaning “someone, people, something, or some things.” Manga (1996a,b) has illustrated that it is also possible to omit the undergoer in antipassive constructions, in which case the undergoer is left semantically unspecified. However, this does not represent the canonical use of the antipassive. Manga (1996a,b) uses several tests to illustrate that there is a difference in the interpretation of the undergoer in ergative constructions and antipassive/accusative constructions. Absolutive undergoers in ergative constructions get a specific interpretation, whereas this is not a requirement for secondary case-marked NPs in antipassive constructions. Berge (1997) has pointed out that, in texts, antipassivization is most commonly used when the undergoer represents new information. This appears to be the most canonical use of the antipassive. The possibility of omitting a secondary case-marked NP is unremarkable, since any NP can be dropped in this language. The fact that the omitted argument is interpreted as “someone, something, people, or things” is related to the tendency for undergoers to be interpreted as non-specific indefinites. In contrast, omission of the actor can be argued to be the most canonical use of the passive voice. While the actor is clearly part of the semantic representation of the verb, we can claim that it is an inherent property of the passive construction that the actor is left unspecified. A general property of peripheral adjuncts is that they add information which is not generally associated with the predicate. Thus, the status of dative *by*-phrases as peripheral adjuncts stems from the fact that the most canonical use of the passive construction is with the actor unspecified.

4. Two types of causatives, *atuniit*, and interclausal binding

This section will investigate two types of causatives, *tit*, and *naq*. In *tit*-causatives, the derived verb stem can undergo an alternation between ergative and antipassive voice. In the antipassive voice, it is one of the arguments of the incorporated

verb stem which is placed in secondary case. This argument is placed in absolutive case in the ergative voice. The corresponding argument is usually omitted in *naq*-causatives, though it may optionally be expressed in dative case.

Section 4.1 will illustrate that, when *tit*-causatives are antipassivized, the argument placed in secondary case may be construed with *atuniit*. Section 4.2 will illustrate that the dative argument associated with *naq*-causatives may not be construed with *atuniit*. Since the dative expression in *naq*-causatives is similar to dative *by*-phrases in passives in that it is usually omitted, and the floated quantifier test yields similar results for the two constructions, I will suggest that the dative NP is a peripheral adjunct in both constructions.

Section 4.3 will investigate interclausal binding as it interacts with these two types of causative constructions. In the interclausal binding test, *imminit*, “than self”, has an antecedent which is introduced in another clause. It will not be possible to go through a complete overview of what the restrictions are on what does or does not constitute a possible antecedent for interclausal binding, since space is limited. The data presented will, however, illustrate that there is a contrast with respect to interclausal binding, as it relates to the two types of causatives which will mirror the asymmetry observed with *atuniit*. While secondary case-marked arguments associated with antipassivized *tit*-causatives can be antecedents for interclausal binding, dative *by*-phrases associated with *naq*-causative constructions cannot be.

4.1 *Tit*-causatives and *atuniit*

Example (28) is an instance of a *tit*-causative in ergative voice. In this example, *tit* has been suffixed onto the intransitive verb *aanniaq* “be sick”². For simplicity, all of the examples in this section will make use of incorporated intransitive verbs. It should be noted, however, that the pattern for incorporated transitive verbs is quite similar. In this example, the single argument of the incorporated verb, *angutiit*, “men” is placed in absolutive case. Example (28) also illustrates that this absolutive NP can be construed with *atuniit*.

- (28) anguti-it aannia-**ti** -laur -ta -ngit atuniit
 man -ABS.pl sick -**TIT**-PAST-IND-3sA:3plU each
 “It made each of the men sick”

The antipassive version of (28) is given in (29). In the antipassive, the single argument of the incorporated intransitive verb is placed in secondary case. Example (29) also illustrates that the secondary case-marked NP in constructions involving antipassivized *tit*-causatives can be construed with *atuniit*.

² For simplicity, all of the examples involving either *naq*-causative or *tit*-causatives in this paper will make use of incorporated intransitive verbs. For transitive verbs, in this dialect, it is the actor which undergoes the case alternations which will be addressed for *tit*-causatives and *naq*-causatives in sections 4.1 and 4.2.

- (29) anguti-**nik** aannia -**tit** -**si** -laur -tuq atuniit
 man-**SEC.pl** be.sick-**TIT-AP-PAST-IND(3s)** each
 “It made each of the men sick”

4.2 NAQ-causatives and *atuniit*

When *naq*-causatives are formed from an intransitive stem, the single argument usually omitted, and left semantically unspecified. Typically “people” is used to express the omitted argument in the English translation. An example is given in (30).

- (30) aannia -na -laur -tuq
 be.sick-NAQ-PAST-IND(3s)
 “It made people sick”

The argument which is usually omitted can be expressed with a dative NP, as in (31). This example also illustrates that this dative NP cannot be construed with *atuniit*, in its use as a floated quantifier.

- (31) anguti-nut aannia-na-laur-tuq (*atuniit)
 man -DAT.pl be.sick-NAQ-PAST-IND(3s) (*each)
 “It made (*each of) these men sick”

Because the dative NP in *naq*-causatives is generally omitted, leaving the argument in question semantically unspecified, and the floated quantifier test yields similar results for dative NPs in both *naq*-causative constructions and in passives, it seems reasonable to suggest that dative NPs in *naq*-causatives have the same status as *by*-phrases in passives. The data from *naq*-causatives supports the view that an NPs status as a peripheral adjunct is related to its use. Peripheral adjuncts add information which is not usually coded in a sentence headed by the verb which heads that sentence.

4.3 Interclausal binding

This section will show the interaction of the two types of causatives with interclausal binding. While secondary case-marked arguments in antipassivized *tit*-causatives can be antecedents for interclausal binding, dative NPs in *naq*-causatives cannot be antecedents for interclausal binding. These data will be considered additional supporting evidence for the claim that dative *by*-phrases have a different grammatical status from secondary case-marked NPs in antipassive constructions.

The main clauses in the examples in this section will be in the form given in 32, below.

- (32) Jaani -mit takinirsaqalaurtuq³
 John -ABL there.was.someone.taller
 “There was someone taller than John.”

In the examples of interclausal binding in this section, the ablative NP will be *imminit*, “than self”, and its antecedent will be in a dependant clause. In example (33), the dependent clause is translated as “although the giant was in Iqaluit”. In this sentence, *Imminit* takes *inutjuaq* “giant” as an antecedent.

- (33) immi-nit [inutjuaq iqalunnii -galuar -su-ni] takinirsaqalaurtuq
 self -ABL giant(ABS) be.in.Iqaluit-although-APP -3s there.was.someone.taller
 “Although the giant_i was in Iqaluit, there was someone/something taller than him/her_i”

Since the main point of this section is to illustrate that there is an asymmetry between *naq*-causatives and *tit*-causatives with respect to interclausal binding, it will not be necessary to give a detailed account of what can or cannot be an antecedent for interclausal binding in other constructions. Based on my fieldwork, I have found that the restrictions for interclausal binding in *Tarramiutut* are largely the same as those given for West Greenlandic by Bittner (1994)⁴.

Because the examples which I have collected are morphologically complex, a staged derivation is given in (34a-d). The clause in (34d) will be the dependent clause used to test the interaction of interclausal binding and *naq*-causativization. In (34a), a third person singular indicative suffix has been added to a verb root, meaning “run”, to get “he/she is running.” Example (34b) differs in that *guma*, “want” has been suffixed onto “run”, before the indicative suffix has been added. The resulting word means, “he/she wants to run”. In (34c), *naq* has been suffixed after *guma*, “want”. The word created means, “it makes people want to run”. However, a dative NP has been added which expresses the single argument of the incorporated predicate, “wants to run”, yielding, “it makes John want to run”. In (34d), a number of additional suffixes have been added in place of the indicative morphology, resulting in a clause meaning, “although it made John want to run.”

³ The word *takinirsaqalaurtuq*, “there was someone taller” is formed as follows. The root *taki*, “be tall” is followed suffixed with *nirsaq*, to yield “one which is taller”. This is, in turn, suffixed by *qaq*, “have:”, which, in this sentence, is interpreted as “there is”. *Takinirsaqaq* is then suffixed with *lauq*, the past tense marker. The word is then given third person singular indicative inflection. For many of the younger speakers the standard of comparison is placed in dative case, rather than ablative case.

⁴ However, that account does not address the interaction between interclausal binding and causativization. Based on the data which I have collected for *Tarramiutut*, causativization is required to show that secondary case marked arguments can be antecedents for interclausal binding. The basic restrictions on interclausal binding for clauses which do not involve causativization are as follows. The single argument of an intransitive verb, or the undergoer of a verb which has been passivized, or an actor of a verb which has not been passivized can be an antecedent for interclausal binding. Undergoers of transitive verbs cannot be antecedents for logophoric binding unless the verb has been passivized. The situation where secondary case-marked arguments can be antecedents for interclausal binding only arises in causatives, where the argument bearing secondary case is an argument of an incorporated predicate. The argument bearing secondary case must be one which would be a possible antecedent for interclausal binding if the predicate were not incorporated by a causativizing suffix.

- (34) a) ulla-tuq
run-IND(3s)
“He/she is running.”
- b) ulla-guma-juq
run-want-IND(3s)
“He/she wants to run.”
- c) ulla-guma-nar-tuq Jaani-mut
run-want-NAQ-IND(3s) John-DAT
“It makes John want to run.”
- d) Jaani-mut ulla-guma-na -raluar -ti -lu -gu
John-DAT run-want-NAQ-although-OBV-APP-3s
“Although it made John want to run....”

In example (35), 34(d) is used as a subordinate clause, where the main clause means, “there was someone faster”. While it is similar in form to example (33), where the interclausal binding test was introduced, it is ungrammatical to place *imminit*, “than self” at the beginning of this sentence.

35. (*immi-nit) [Jaani-mut ulla-guma-na -raluar-ti -lu -gu] sukannisaqalaurtuq
self -ABL [John-DAT run-want-NAQ-indeed-OBV-APP-3s] there.was.someone.faster
‘Although it made John want to run, there was someone faster (*than self).’

The reason why it is ungrammatical to place *imminit* at the beginning of (35) appears to stem from the fact that there is no possible antecedent for *imminit*, since the sentence becomes grammatical if *imminit* is replaced by a proper noun with ablative case, as in (36).

36. Anni-mit [Jaani-mut ulla-guma-na -raluar -ti -lu-gu] sukannisaqalaurtuq
Anni -ABL [John-DAT run-want-NAQ-indeed-OBV-APP-3s] there.was.someone.faster
“Although it made John want to run, there was someone faster than Anni.”

The next couple of examples will be used to illustrate that secondary case-marked NPs in antipassivized *tit*-causatives can be antecedents for interclausal binding. Example (37) is a subordinate clause which is minimally different from the one used in the previous two examples (35 and 36). *Naq* has been replaced by *tit*, *which* in turn has been antipassivized. As predicted, the single argument of *ullaguma*, “want to run”, is placed in secondary case, rather than in dative case.

37. Jaani-mik ulla -guma-tit -si -galuar -ti -lu -gu
John -SEC run-want -cause-AP-although-OBV-APP-1s
“Although he/she/it made John want to run....”

Example (38) tests the ability for the secondary case marked argument in (37) to function as an antecedent for interclausal binding. It illustrates that coreference between *imminit* and a secondary case-marked argument associated with an antipassivized *tit*-causative is possible. This is in contrast to example (36), where it was not possible for

the corresponding dative NP to be an antecedent for interclausal binding in the *naq*-causative construction.

38. immi-nit [Jaani-mik ulla-guma-tit -si -galuar -ti -lu -gu] sukannisaqalaurtuq
self -ABL John-SEC run-want -cause-AP-although-OBV-APP-3s] there.was.someone.faster
Although he/she/it made John_i want to run, there was someone faster than him_i.

The data in this section have reconfirmed that there is a syntactic asymmetry between secondary case-marked arguments in antipassives and dative *by*-phrases in constructions where the argument in question is usually left semantically unspecified. Van Valin and LaPolla (1997) have claimed that, in many languages, there is a restriction that antecedents for anaphoric binding must be core arguments. Such a restriction is used to explain why it is not possible to have an anaphor in subject position which is bound by a *by*-phrase in languages such as English. These data are consistent with an approach which treats dative *by*-phrases in passives as peripheral adjuncts rather than core arguments, and with the claim that binding phenomena are frequently sensitive to a core versus peripheral distinction.

The data in this section have also added further support to the claim that an NP's status as a core argument versus a peripheral adjunct is related to its use, since whether a dative NP patterns with core arguments or peripheral adjuncts can be predicted. Both passives and *naq*-constructions involve dative NPs which are usually omitted, leaving the argument in question semantically unspecified, and the dative NP patterns with peripheral adjuncts in both constructions. Peripheral adjuncts allow NPs to be introduced into the syntax, which are not usually semantically specified in sentences headed by the verbal predicate. Core arguments express arguments which are usually semantically specified in sentences headed by a given verbal predicate. It appears that, given the range of constructions containing a dative NP that have been presented in sections (3) and (4), these criteria have been adequate to determine whether or not an NP patterns with peripheral adjuncts or core arguments.

In a personal communication, George Aaron Broadwell has suggested that it may be useful to investigate an analysis of the status of *by*-phrases in passives which makes reference to the discourse properties of the construction. I believe that the status of dative *by*-phrases as adjuncts can most likely be understood in these terms. The actors in these constructions, because they are usually omitted, are grammaticized, such that, in the unmarked case, they play no role in the continued discourse. In the case of the passive, when the actor is topical, either the ergative voice or the antipassive voice will be preferred, since, in both of the ergative and antipassive voices, if the NP expressing the actor is omitted, the sentence is interpreted with pronominal reference for the actor. There is little reason to use the passive in this context. Similarly, since the actor is usually omitted in passives, the passive is most likely not the unmarked voice used in situations where the actor is new information. If this is the case, then we can claim that, in the passive voice, the actor has been grammaticized to be unlikely to play an important role in the continued discourse. Similar arguments can be made for the *naq*-causative. In cases where the actor represents either old or new information, the *tit*-causative is most likely preferred.

If we claim that it is an inherent property of passives and *naq*-causatives that the actor is unlikely to play an important role in the continued discourse, then it is

unsurprising that dative *by*-phrases in *naq*-causatives cannot be antecedents for interclausal binding. Within the LFG framework, Broadwell (2003) has proposed that the most promising way to account for some of the differences between two types of passives in Kaqchikel, is to have constructional templates which give pairings between argument structure, functional structure, and information structure settings. Using these constructional templates, he is able to specify both the oblique agent and the SUBJECT in one of the passive constructions as being restricted to (-new) information. This accounts for a number of syntactic restrictions associated with that construction. It may prove to be interesting to see if a similar discourse feature can be used to account for the adjunct status of dative *by*-phrases in passives and *naq*-causatives.

5. “Lexical Intransitivization” in RRG (based on (Van Valin and LaPolla 1997))

While the previous two sections have argued that, while passivization demotes the actor to the periphery, antipassivization does not, there is an other mechanism in RRG which would allow the secondary case-marked NP to be treated as a core argument, but which would treat it differently from accusative undergoers in nominative/accusative languages. This other mechanism is known as “lexical intransitivization”. In “lexical intransitivization”, an argument retains its status as a core argument, but fails to be assigned status as either an actor or an undergoer. Section (4.1) will be a review of the role of undergoers in Role and Reference Grammar. In section (4.2), I will argue that the interaction of antipassivization and dative shift is not captured easily in a lexical intransitivization account, and that it is preferable to claim that undergoers are present in antipassive constructions. The status of secondary case in antipassive constructions, as a case which is given to core undergoers, is analogous to the status of the accusative case in nominative/accusative languages.

5.1 Ditransitive verbs and dative shift in RRG (Van Valin and LaPolla 1997, Van Valin 2001)

In RRG, a verb may only have one actor and one undergoer. This restriction necessitates an analysis of ditransitive verbs where one of the arguments is not treated as either an actor or an undergoer. It also allows for an analysis of dative shift constructions where the alternation between shifted and unshifted forms depends on which argument is treated as the undergoer. In (39), “the book” is treated as the undergoer, whereas in (40), “John” is treated as the undergoer.

(39) I gave **the book** to John.

(40) I gave **John** the book.

This analysis has the advantage that, in some dialects, the subject of passives is restricted to undergoers. Sentence (41) is the passive of sentence (39). The undergoer has been given subject status in (41), but it has not in (39).

(41) **The book** was given to John.

Similarly, example (42) is the passive of example (40).

(42) **John** was given the book.

For many speakers, example (43) is ungrammatical. This is an alternative passive of (40), where the subject is not an undergoer.

(43) %The book was given **John**

The constructional templates for English consistently place undergoers adjacent to the verb. The case rules are as follows. Undergoers are unmarked for case. Non-undergoer recipients are marked with the preposition *to*. For “to give”, themes which are not treated as undergoers are left unmarked. It should be noted that actual mechanism for status as either an actor or an undergoer in Role and Reference Grammar makes reference to an arguments position on a layered lexical conceptual structure, rather than to thematic roles such as theme and recipient. Similarly, the case conventions for arguments which are not treated as actors and undergoers make reference to the relative position of the argument to other arguments in the layered conceptual structure. It should also be noted that Van Valin and LaPolla (1997) argue that the default realization of themes which are not treated as undergoers is with the preposition “with”. It is a lexical property of the verb “give” that themes which are not treated as undergoers are not marked with a preposition.

A “lexical intransitivization” account of antipassivization would claim there is no undergoer in antipassive constructions. A phenomenon such as dative shift would be impossible in antipassive constructions, since the two constructions differ primarily with respect to which argument has been assigned status as an undergoer. Data from the next section will show that dative shift is possible in antipassive constructions. I will use this as an argument that it is preferable to claim that undergoers are present in antipassive constructions.

4.2 Interaction of Antipassivization and Dative Shift

For the verb “to give”, there are four different possible case arrays for the three semantic arguments. These possibilities are outlined in table (44)⁵.

(44) Options for ditransitive verbs

Voice	Agent	Theme	Recipient
a) Ergative	Erg	Abs	Dat/*Sec
b) Ergative	Erg	Sec	Abs
c) Antipassive	Abs	Sec	Dat
d) Antipassive	Abs	Sec	Sec

⁵ Using the restrictions on the use of *atuniiit* as a floated quantifier, the data which I have collected suggest that, for all of the possible case realizations in table (44), the agent, the theme, and the recipient all count as core arguments.

In the ergative voice, the actor gets ergative case. The either the theme or the recipient gets absolutive case. When the theme does not get absolutive case, it is placed in secondary case. When the recipient does not get absolutive case, it is placed in dative case. In antipassive constructions, the theme is placed in secondary case. The recipient may be placed in either secondary case or dative case.

According to Bittner, the case array in (44d), where both the theme and the recipient are placed in secondary case, is only considered to be grammatical by some speakers of West Greenlandic (Bittner 1994, page 87). All three of the speakers of the Tarramiutut subdialect on whom I have tested these sentences find them to be grammatical. Since the structure of the argumentation in this section will be such that one theory is preferred over the other based on the grammaticality of the case array in (44d), some of the possible analyses of dialects where 44(d) is ungrammatical will be addressed at the end of this section.

The data from ergative constructions suggest that recipients which are not treated as undergoers get dative case, and themes which are not treated as undergoers get secondary case. A lexical intransitivization account for antipassivization would claim that there is no undergoer in antipassives. Since neither the theme nor the recipient would count as an undergoer, the cases used for themes and recipients which are not treated as undergoers would be used. This would yield the case array in (44c), but it would not give an explanation for (44d), since the data from ergative constructions (44b) suggest that recipients which are not treated as undergoers cannot get secondary case.

The accusative approach to antipassivization makes a different set of predictions. In this approach, undergoers are present in antipassive constructions, as well as in ergative constructions. Since undergoers are present in antipassive voice as well as in ergative voice, the two constructions differ with respect to what case is given to the undergoer. The undergoer is given absolutive case in ergative constructions, but secondary case in antipassive constructions. The data from ergative constructions still lead to an analysis in which themes and recipients which are not treated as undergoers get secondary and dative case, respectively. Thus (44c) is the antipassive equivalent of (44a), and (44d) is the antipassive equivalent of (44b). This approach seems to be much more able to explain the possibility of (44d) in this dialect.

Examples of the case-arrays displayed in table (44) are given in examples (45) to (49). Example (45) illustrates that, in ergative voice, when the theme is given absolutive case, the recipient is placed in dative case.

- (45) pattaq inummarim-mut aittu-lauq -ta -ra
 ball(ABS) adult -DAT give-PAST-IND-1sA:3sU
 I gave the ball to the adult.

Example (46) illustrates that it is not possible to mark the recipient with secondary case in ergative constructions where the theme gets absolutive case.

- (46) *inummarim-mik pattaq aittu-lauq -ta -ra
 adult -SEC ball(ABS) give-PAST-IND-1sA:3sU
 'I gave the ball to the adult.'

Example (47) illustrates that, when absolutive case is given to the recipient in ergative constructions, the theme gets secondary case.

- (47) inummarik patta-mik aittu-lauq -ta -ra
adult(ABS) ball-SEC give-PAST-IND-1sA:3sU
I gave the adult a ball.

Example (48) illustrates that, in the antipassive voice, it is possible to mark the recipient with dative case, while marking the theme with secondary case.

- (48) inummarim-mut aittu-i -laur -tu -nga patta-mik
adult -DAT give-AP-PAST-IND-1s ball -SEC
I gave the ball to the adult.

Example (49) illustrates that it is possible to mark both the theme and the recipient with secondary case.

- (49) inummarim-mik aittu-i -laur -tu -nga patta-mik
adult -SEC give-AP-PAST-IND -1s ball -SEC
I gave the adult a ball.

The data in this section have been used to argue that it is preferable to claim that undergoers are present in antipassive constructions. This data is consistent with theories which give a similar treatment to antipassive constructions as is given for accusative constructions in nominative/accusative languages. Secondary case is a case assigned to core undergoers which have not been given a privileged status as an absolutive argument, much as accusative case is a case which is given to core arguments which have not been given a privileged status as a nominative argument.

For dialects in which it is impossible to mark both the theme and the recipient with secondary case, a lexical intransitivization account does make the correct predictions, and this is one possible analysis for these dialects. However, there is another possible reason why this construction may be ruled out for some speakers of some dialects. Van Valin (2001) has argued that a number of facts about dative shift constructions in English, some of which have been very important in the principles and parameters literature (e.g. Barss and Lasnik (1986) and Larson (1988)), can be accounted for by claiming that, when the recipient is treated as the undergoer, it must be more topical than the theme. The data which he discusses include a restriction against the recipient being indefinite while the theme is definite in shifted constructions. Similarly, there is a requirement in shifted constructions that the recipient take wide scope with respect to the theme. Since quantifier scope interactions are dealt with by focus structure in Role and Reference Grammar, Van Valin argues that this scope freezing effect must stem from a requirement that the recipient be topical with respect to the theme in shifted constructions. Van Valin (2001) also relates this to a restriction against forming WH-questions which question a recipient undergoer. Again, the restriction stems from the inability for recipient undergoers to take contrastive focus.

Berge's (1997) analysis of West Greenlandic texts demonstrated that absolutive arguments tend to be topical. Bittner (1994) and Bittner and Hale (1996) have pointed out that absolutive arguments cannot take narrow scope with respect to negation.⁶ This effect is expected if there is a restriction that absolutive arguments be topical. Other authors have pointed out additional restrictions on the interpretation of absolutives. Manga (1996a,b) has provided evidence that absolutive "objects" take a specific reading. Wharram (2003) has argued that indefinite absolutives must take scope over the entire sentence, claiming that they are non-quantificational. These findings give further support that there is a grammaticalized discourse role associated with absolutives, which leads to a wide scope interpretation.

This allows for another possible explanation for why it is impossible to express both the recipient and the theme in secondary case for speakers of some dialects. Assuming that, as in English, the more marked undergoer assignment treats the recipient as the undergoer, there may also be a requirement that recipient undergoers be more topical than themes, which, in some dialects, may result in a requirement that the recipient undergoer be assigned absolutive case.

5. Summary and Predictions

Data from the use of *atuniit*, "each", as a floated quantifier, as well as from the interaction of interclausal binding with two types of causatives, has been used to argue that, while secondary case-marked NPs in antipassive constructions are core arguments, dative *by*-phrases in passives and *naq*-causatives are peripheral adjuncts. Data from dative shift constructions was used to argue that antipassivization does not involve "lexical intransitivization" in *Tarramiutut*. This leads to an analysis of secondary case as a case which is assigned to core undergoers which are not assigned absolutive case.

While these data do suggest that syntactic theory must allow for two distinct types of voice alternations, it is still possible to make a few cross-linguistic predictions. The first is that whether or not the NP which expresses an argument is demoted to the periphery is related to whether or not the argument in question is usually left unspecified. The core contains the verbal or nominal predicate as well as the arguments which are usually expressed in the given construction. In constructions where an argument is usually omitted, the argument is left semantically unspecified within the core. A phrase which functions to identify such an argument is part of the periphery, since peripheral adjuncts function to give additional information which is not specified in the core. Van Valin and LaPolla have argued that binding phenomena are often sensitive to a core versus peripheral distinction, such that elements in the core may bind elements in the periphery, but not vice versa (Van Valin and LaPolla 1997, pp. 406-407). Thus, it should be possible to predict binding phenomena based on whether or not an argument is usually left semantically unspecified in a given construction.

At the end of section 4, it was argued that it is possible to claim that antipassivization does not involve "lexical intransitivization", even in dialects where it is not possible to express the recipient in secondary case in antipassive constructions, by making reference to topicality restrictions. A much stronger claim would be that lexical

⁶ Based on my own fieldwork, this generalization does not extend to absolutive arguments when it is the single argument of an intransitive verb.

intransitivization does not exist as a possible type of voice alternation cross-linguistically. Voice alternations which effect the status of an actor or an undergoer, but which do not demote the actor to the periphery, would never strip the arguments in question of their status as an actor or an undergoer.

Van Valin and LaPolla have argued that, in some languages, such as German, there is a restriction that only actors or undergoers can be antecedents for binding (Van Valin and LaPolla 1997, pp. 397-400). If lexical intransitivization does not exist as a possible type of voice alternation, then binding phenomena which are sensitive to an argument's status as an actor or an undergoer should not be effected by voice constructions whose primary use is not to leave either the actor or the undergoer semantically unspecified.

References

- Barss, Andrew and Howard Lasnik** (1986). "A note on anaphora and double objects," *Linguistic Inquiry* 17:347-354.
- Berge, Anna** (1997). *Topic and Discourse Structure in West Greenlandic Agreement Constructions*. Ph. D. Dissertation: University of California, Berkeley.
- Bittner, Maria** (1994). *Case, Scope, and Binding*. Dordrecht: Kluwer Academic Publishers.
- Bittner, Maria and Kenneth Hale** (1996). "Ergativity: Towards a Theory of a Heterogeneous Class," *Linguistic Inquiry* 27, 531-604.
- Bobaljik, Johnathan and Phil Brannigan** (2003) "Eccentric Agreement and Multiple Case Checking," Manuscript, McGill University and Memorial University.
- Bok-Bennema, Reineke** (1991). *Case and Agreement in Inuit*. New York: Foris Publications.
- Broadwell, George Aaron** (2003). "Valence, Transitivity, and Passive Constructions in Kaqchikel," presented at the Workshop on Case, Valence, and Transitivity, University of Nijmegen, June 2003.
- DiSciullo, Anne-Marie, and Williams, Edwin** (1987). *On the Definition of Word*. Cambridge: MIT Press.
- Dixon, R. M. W.** (1994) *Ergativity*. Cambridge: Cambridge University Press.
- Dorais, Lois-Jacques** (1990) *Inuit Uqausiqatigiit: Inuit Languages and Dialects*. Laval P.Q.: Inuksiitiit Katimajit.
- Falk, Yehuda** (2000). "Pivots and the Theory of Grammatical Functions," in *Proceedings in the LFG00 Conference*, eds. Miriam Butt and Tracy Holloway. Berkeley: CSLI Publications, 122-138.
- Grimshaw, Jane and Ralf-Armin Mester** (1986). "Complex Verb Formation in Eskimo," *Natural Language and Linguistic Theory* 3, 1-19.
- Johns, Alana** (1996). "The Occasional Absence of Anaphoric Agreement in Labrador Inuttut," in *Microparametric Syntax and Dialectic Variation*. eds. J. Black and V. Motapanyane, 121-143.
- Johns, Alana** (2001) "An Inclination Towards Accusative," *Linguistica Atlantica* 23, 127-144.
- Larson, Richard** (1988) On the double object constructions. *Linguistic Inquiry* 19, 335-392.
- Manga, Louise** (1996a). "Specificity in Inuktitut and Syntactic Representations," *Etudes/Inuit/Studies* 20, 63-85.
- Manga, Louise** (1996b). An explanation for Ergative versus Accusative Languages: An Examination of Inuktitut. Ph.D. dissertation, University of Ottawa.
- Manning, Christopher** (1996). *Ergativity: Argument Structure and Grammatical Relations*. Stanford: CSLI Publications.
- Van Geenhoven, Veerle** (1998) *Semantic Incorporation and Indefinite Descriptions: Semantic and Syntactic Aspects of Noun Incorporation in West Greenlandic*. Stanford: CSLI Publications.
- Van Geenhoven, Veerle** (2002) "Raised Possessors and Noun Incorporation in West Greenlandic," *Natural Language and Linguistic Theory* 20, 759-821.
- Van Valin, Robert and Randy LaPolla** (1997). *Syntax: Structure, Meaning, and Function*. Cambridge: Cambridge University Press.
- Van Valin, Robert** (2001). "The Role and Reference Grammar Analysis of Three-Place Predicates." Manuscript, State University of New York at Buffalo.
<http://linguistics.buffalo.edu/research/rrg.html>
- Spreng, Bettina** (2001). "Little *v* in Inuktitut: Antipassive Revisited," *Linguistica Atlantica* 23, 159-194.