

**ON THE INTERPRETATION OF (UN)CERTAIN INDEFINITES  
IN INUKTITUT AND RELATED LANGUAGES**

Douglas Wharram

B.A., Concordia University (1994)

M.A., Memorial University of Newfoundland (1997)

M.A., University of Connecticut (2000)

A Dissertation

Submitted in Partial Fulfilment of the

Requirements for the Degree of

Doctor of Philosophy

at the

University of Connecticut

2003



**ON THE INTERPRETATION OF (UN)CERTAIN INDEFINITES  
IN INUKTITUT AND RELATED LANGUAGES**

Douglas Wharram, PhD

University of Connecticut, 2003

ABSTRACT

The ultimate goal of this dissertation is to move closer toward a universal semantic analysis of indefinite descriptions, with the route being taken principally an examination of the scope-interpretational properties of indefinites in the related languages/dialects of Inuktitut and Kalaallisut (Eskimo-Aleut: Inuit), both of which are languages lacking (overt) indefinite articles. The general idea behind the dissertation is this: I take a highly constrained view of what an indefinite can denote (a property, unambiguously) and as to what quantificational force it has (none, unambiguously), and, with this, I investigate to what extent the semantic properties of indefinites in Inuktitut and Kalaallisut can be explained. I additionally adopt the idea, which has received increasing attention among linguists in recent years, that choice functions play a role in the interpretation of certain indefinites. Explicitly, I assume that indefinites may be freely combined with an indefinite article denoting a choice function, and that this choice function is left free, its interpretation being contextually determined (Kratzer (1998)). Though it is not obvious why choice functions in natural languages should be formulated in this manner, as there are logical alternatives

– Reinhart (1995,1997) and Winter (1997), for example, have argued for two –, data from Inuktitut are considered, and it is shown that, of the choice function theories that have been recently proposed, only Kratzer’s approach can easily accommodate the data presented. Moreover, I argue that there is only a single mechanism available by which an indefinite may be existentially closed at LF, fundamentally a generalised version of the semantic incorporation process of van Geenhoven (1995,1998a), whereby the predicate contributed by an indefinite is absorbed by a lexical item  $\alpha$  as the restriction of the argument introduced by  $\alpha$ , the existential interpretation of which is lexicalised as part of  $\alpha$ ’s meaning.

**APPROVAL PAGE**

Doctor of Philosophy Dissertation

**ON THE INTERPRETATION OF (UN)CERTAIN INDEFINITES**

**IN INUKTITUT AND RELATED LANGUAGES**

Presented by

Douglas Wharram, B.A., M.A., M.A.

Major Advisor -----

Sigrid Beck

Associate Advisor -----

Howard Lasnik

Associate Advisor -----

Lisa Matthewson

University of Connecticut

2003

ii

De omnibus dubitandum.

# Table of Contents

## CHAPTER ONE

Introduction and background.....	1
1.1 Preliminaries .....	1
1.2 The Eskimo-Aleut family, and terminology used.....	4
1.3 Background and theoretical assumptions .....	5
1.3.1 Syntax.....	5
1.3.2 Semantics.....	6
1.3.2.1 The model.....	6
1.3.2.2 “Transparent” LFs .....	7
1.3.2.3 Argument structure .....	8
1.3.2.4 Choice functions.....	10
1.4 Layout of the remainder of the dissertation.....	16
1.5 Comments on the data and the methodology .....	18

## CHAPTER TWO

Morphological and Syntactic considerations .....	21
2.1 Preliminaries .....	21
2.2 Ergativity.....	22
2.3 Clausal structure and basic Case relations in Inuktitut.....	24
2.3.1 Agreement.....	25
2.3.2 Syntactic detransitivisation: Passivisation and antipassivisation .....	27
2.4 Certain properties of antipassive clauses .....	29
2.5 Incorporation.....	32

## CHAPTER THREE

Indefinites I: Two interpretive mechanisms.....	36
3.1 Preliminaries .....	36
3.2 Preliminary data .....	37
3.3 Bittner (1994a).....	43
3.3.1 The syntax.....	44
3.3.1.1 Antipassives.....	45
3.3.1.2 Suffixal Verbs in Kalaallisut and Inuktitut (Part One).....	47

3.3.2	The semantics .....	50
3.3.2.1	Suffixal Verbs in Kalaallisut and Inuktitut (Part Two) .....	54
3.3.3	Noun incorporation .....	56
3.4	Van Geenhoven (1998a) .....	57
3.5	Some comments on the Bittner and van Geenhoven approaches .....	60
3.6	Antipassives and indefinites in Inuktitut and Kalaallisut simple sentences ...	64
3.6.1	The basic sentences .....	65
3.7	Indefinites and their interpretation(s) .....	74
3.7.1	Absolutive arguments of V .....	78
3.7.2	Absolutive arguments of v .....	79
3.8	Antipassives revisited: Intensionality and cross-linguistic variation .....	86
3.8.1	Suffixal verbs in Kalaallisut and Inuktitut (Part Three) .....	88
3.9	Not <i>again!</i> Preliminary comments on “scope” and certain adv operators .....	92
3.10	Passive ambiguities and other leftovers .....	96
3.11	Preliminary conclusions .....	101

## CHAPTER FOUR

Labrador Inuttut: Where have all the obligatory existentially-quantified-in-V property-denoting antipassive objects gone, long time passing? .....	104
--	-----

## CHAPTER FIVE

Indefinites II: The irrelevancy of islands .....	109
5.1 Preliminaries .....	109
5.2 Choice functions and the (near) absence of intermediate readings .....	111
5.2.1 Bound variables .....	115
5.2.2 The irrelevancy of syntactic binding .....	122
5.3 Concluding remarks .....	123

## CHAPTER SIX

Indefinites III: Some cross-linguistic observations (and future directions) .....	126
6.1 Preliminaries .....	126
6.2 Inuktitut and St’át’imcets .....	126
6.3 A note on Kratzer’s (1998) implicit argument .....	132
6.4 “Antipassives” across languages .....	134

REFERENCES .....	137
------------------	-----

# List of Abbreviations

	<u>Inuktitut</u>
ABS = absolute Case	-Ø
ACC = accusative Case	
ERG = ergative Case	-(u)p
GEN = genitive Case	
NOM = nominative Case	
ABL = ablative case	-mit
DAT = dative case	-mut
EQU = equative case	-tut
LOC = locative case	-mi
MOD = modalis case	-mik
VIA = vialis case	-kkut
s, d, p = singular, dual, plural	
tr = transitive	
csl = causal (mood)	
cond = conditional (mood)	
dub = dubitative (mood)	
freq = frequentative (mood)	
imper = imperative (mood)	
ind = indicative (mood)	
interrog = interrogative (mood)	
part = participial (mood)	
nfut = near future	-niaq-
nonfut = non-future	
perf = perfective	-sima-
PASS = passive	-jaq-
AP = antipassive	
REP = repetitive	-taq-

# Acknowledgements

Donald Rumsfeld is evil. Immensely evil. But I digress.

Inuktitut has a verb which, I think, nicely captures the essence of much of what the process of writing a dissertation involves. It's *naniaq-*, and it means something like to have the feeling of falling in the pit of one's stomach. Nanialauqtunga, but I don't anymore. For reasons not entirely apparent to me, then, writing one of these beasts is actually something of an enjoyable bit of business. I say "not entirely", because some of it is quite clear to me, and it involves the people mentioned in these acknowledgements.

Not so very many years ago, I would not have contemplated writing a dissertation in semantics. That this dissertation exists is due in large part to the coaxing and assistance of Sigrid Beck, her perserverence in the face of utter block-headedness, her charm, and her love of lambdas (though which I originally thought to be quite perverse). Thanks to Sigrid for scaring the hell out of me from time to time, and for not scaring the hell out of me on several occasions when she most certainly could have. Sigrid's also one of the coolest people I know, and I feel honoured to have been able to work with her on this.

Coming up with anything new to say about Howard's contribution here is pretty much impossible, not because of the sheer number of thesis committees which he's either chaired or sat on, but because all the resultant dissertations generally begin with acknowledgements which go on in some length about how wonderful he is as a teacher and as a researcher. As I've discovered during my time in Storrs, there's a reason that they do that. As such, ditto. And a friend.

Lisa's expertise has been, I'm afraid, woefully underutilised, which I very much regret, as there are some very obvious correlations between what goes on in Inuktitut and St'át'imcets that cry out for attention, and which I only hint at in the final chapter. Her care with the data and her commitment to the language community that she works with is something I very much admire and aspire to.

For discussions, chats, and various points of advise along the way, I'm grateful to: Klaus Abels, Judith Aissen, Shanley Allen, Catharine Andersen, Mona Anderson, Susana Bejar, Maria Bittner, Jonathan Bobaljik, Cédric Boeckx, Željko Bošković, Denis Bouchard, Dave Braze, Julie Brittain, Andrea Calabrese, Ernesto Cardenal, Deborah Chen Pichler, Noam Chomsky, Sandy Chung, Norman Clarke, Elizabeth Cowper, Henry Davis, Rose-Marie Déchaine, Marcel den Dikken, Elan Dresher, Markus Egg, Kai von Fintel, Veerle van Geenhoven, Jila Ghomeshi, Carrie Gillon, Kazuko Hiramatsu, Kleanthes Grohmann, Ken Hale, Heidi Harley, Irene Heim, Jim Higginbotham, Paul Hirschbühler, Norbert Hornstein, Tien-Hsin Hsin, Harry van der Hulst, Richie Kayne, Angelika Kratzer (whose intellectual contributions can be felt in almost every corner of this dissertation), Alexina Kublu, Papatsi Kublu-Hill, Bill Ladusaw, Julie Legate, David Lightfoot, Diane Lillo-Martin (the patience of that woman!), Mick Mallon, Luísa Martí, Irene Mazurkewich, Diane Massam, David Michaels, Kumiko Murasugi, Maire Noonan, Jairo Nunes, Masao Ochi, Satoshi Oku, Barbara

Partee, Jean-Yves Pollock, Subashree Rangaswami, Betsy Ritter, Ian Roberts, Yvan Rose, Leslie Saxon, Uli Sauerland, Yael Sharvit, Eric Shortt, Mark Simoneau, Carolyn Smallwood, William Synder, Sandra Stjepanović, Lisa Travis, Juan Uriagereka, Marie-Thérèse Vinet, Saša Vukić, Ede Zimmermann, and, especially, Phil Branigan, Mark Campana, Jack Grayson, and Alana Johns. There are others, too, forgotten for the moment, but no less important.

Judy Marcus is owed thanks for her work in and around the department.

Less directly, thanks to Fidel Castro, Hugo Chávez, Alexander Cockburn, Roddy Doyle, Gabriel García Márquez, Jeffrey St. Clair, Joss Whedon, and, well, the entire cast and crew of *Buffy the Vampire Slayer*, all for making life more interesting.

I owe much to my classmates, Adolfo Ausín (first, because of alphabetical and other considerations), Stephanie Berk, Yutaka Kudo, Arthur Stepanov, and Mitomo. We may not all be here at the end, but we all went through those initial stages together (“Er, can anyone read what the hell he’s got written on the board?”).

I need to express special thanks to the following people, without whom I would surely have gone mad living in the Storrs vicinity: Klaus Abels (¡mi amor! – no... wait... wrong dissertation...), Adolfo Ausín, Sigrid Beck, Debbie Chen Pichler, Marcela Depiante, Kazuko Hiramatsu (Ha! My dissertation’s shorter than yours is!), Luísa Martí, Marin Pichler, and Suba Rangaswami (the last quite simply for being Suba).

This research was made financially possible by the Social Sciences and Humanities Research Council of Canada (Doctoral Fellowship No. 752-98-0349) and assistance from the Department of Linguistics – though the odd pint, in Iqaluit, Boston, St. John’s, and Willimantic, may have slipped in there on those funds.

Life both precedes and follows the writing of a dissertation, and – to some extent – even continues through it, and I need to thank at least the following people (Standard disclaimers apply, as many will be regretfully left out): My wonderful parents, my grandparents, my brothers Charles and Robert, my parents-in-law, Jeff, Michael, Tracey, Jeong-Sil, Nancy, Melanie, JDR, Dave, Yvan, Éliane, a terribly large group of people in Montréal (with special mention of Mark S. and Mark C. again), Tim (who taught me the importance of working out one’s thoughts while surrounded by coffee and doughnoughts), Yvonne Earle and Judy Watts (for putting me up in Iqaluit for so long), and my extraordinary wife, Susan Earle, to whom this work is dedicated.

In the end, it’s all about the data, of course, and this dissertation would not exist without the people who provided the data that are discussed in it. Come to think of it, it would have been a rather boring process without them, as well. Papatsi Kublu-Hill, my principal consultant for Baffin Inuktitut, cheerfully endured hours upon days upon weeks of elicitation sessions, often, methinks, realising long before I did what aspect of the grammar I was attempting to investigate at the time. She is an exceptional language consultant, and to the extent that linguistic fieldwork can go easily, she made it so. It was certainly enjoyable. Alexina Kublu and numerous elders at the afternoon tea in Iqaluit were also very generous with their time and knowledge, and Mick Mallon and Susan Sammons deftly handled all type of technical and practical details on Baffin. For Labrador Inuttut judgements, I am very grateful to Maria Dicker, Christine Evans, Ellen Ford, Nat Igloliorte, and Holda Zarpa,

and, for Itivimmiut Inuktitut, Qiallak Qumaaluk and one consultant who wishes to remain anonymous.

Somewhat mysteriously, but in a very substantial way, I also owe a huge debt of gratitude to olives.

CΔL

iFMLN!

# CHAPTER ONE

## Introduction and background

---

### *1.1 Preliminaries*

The ultimate goal of this dissertation is to move closer toward a universal semantic analysis of indefinite descriptions, with the route taken being principally an examination of the scope-interpretational properties of indefinites in the related languages/dialects of Inuktitut and Kalaallisut (West Greenlandic Eskimo) (Eskimo-Aleut: Inuit), both of which are languages lacking (overt) indefinite articles. The general idea behind the dissertation is this: I take a highly constrained view of what an indefinite can denote (a property, unambiguously) and as to what quantificational force it has (none, unambiguously), and, with this, I investigate to what extent the semantic properties of indefinites in Inuktitut and Kalaallisut can be explained. I additionally adopt the idea, which has received increasing attention among linguists in recent years, that choice functions play a role in the interpretation of certain indefinites. Explicitly, I assume each of the hypotheses in (1).

- (1)
- A: All indefinites are non-quantificational expressions.
  - B: All indefinites denote a property.
  - C: Indefinites may be freely combined with a(n) (possibly phonetically-null) indefinite article denoting a choice function.

Moreover, I will argue that there is only a single mechanism available by which an indefinite may be existentially closed at LF. This will force an addition to (1.C) above, along the lines of Kratzer's (1998) choice function analysis of indefinites in English. That is, (1.C') more properly captures the approach to choice functions pursued here than does (1.C) above:

- (1) C': Indefinites may be freely combined with a(n) (possibly phonetically-null) indefinite article denoting a choice function variable. This choice function is left free, and its interpretation is contextually determined.

Though it is not obvious why choice functions in natural language should be formulated in this manner, as there are logical alternatives – Reinhart (1995,1997) and Winter (1997,1999), for example, have argued for two –, data from Inuktitut are considered, and it is shown that, of the various 'flavours' of choice function theories that have been recently proposed, only Kratzer's (1998) approach can easily accommodate the data presented.

It is demonstrated that we can go remarkably far in accounting for the relevant facts of both Inuktitut and Kalaallisut – and in explaining points of dialectal variation that hold between the two – while maintaining the bare assumptions in (1). That said, where it is seen that the approach that I take falls short in accounting for certain data considered, I note this, and I point to possible analyses – stipulatory, at present – that might be pursued which allow holding to the assumptions in (1). Some cross-linguistic implications

of the analysis are then explored in the final chapter.

The single LF interpretive mechanism available by which an indefinite may be existentially closed that I assume is the process of *semantic incorporation*, whereby the predicate contributed by an indefinite is absorbed by a lexical item  $\alpha$  as the restriction of the argument introduced by  $\alpha$ , the existential interpretation of which is lexicalised as part of  $\alpha$ 's meaning. While bearing obvious similarities to the lexicalised existential quantifier proposal of Carlson (1977), the concept of *semantic incorporation* that I have in mind is largely a generalised one of the process more strictly defined in van Geenhoven (1995, 1998a) as something like the following: An incorporated noun is absorbed by a verb as the restriction of this verb's internal argument, the existential interpretation of which is lexicalised as part of that verb's meaning (*cf.* the generalised definition just above). Given that the assumed hypotheses in (1) above have been subsequently adapted and added to, I provide the final version of (1) as (1')

- (1') A: All indefinites are non-quantificational expressions.  
 B: All indefinites denote a property.  
 C: Indefinites may be freely combined with a(n) (possibly phonetically-null) indefinite article denoting a choice function variable. This choice function is left free, and its interpretation is contextually determined.  
 D: The only LF interpretive mechanism available by which an indefinite may be existentially closed is the process of *semantic incorporation*, whereby the predicate contributed by an indefinite is absorbed by a lexical item  $\alpha$  as the restriction of the argument introduced by  $\alpha$ , the existential interpretation of which is lexicalised as part of  $\alpha$ 's meaning.

In sum, in addition to providing a highly restricted analysis of indefinite interpretations in a family of closely related Inuit languages, this dissertation provides additional evidence for two rather different recent proposals about how indefinites receive their interpretations. Moreover, it is shown that an analysis involving a novel combination of these two proposals can go a long way toward providing a universal semantic theory of indefinite descriptions.

### ***1.2 The Eskimo-Aleut family, and terminology used***

For the purpose of this dissertation, I call the language family spoken by the Inuit in Canada *Inuktitut*, although not every member of this family of languages refers to itself by this term. Where necessary, I indicate individual dialect/language names. The eastern Inuktitut dialects of North Baffin, South Baffin, Itivimmiut (western Nunavik/western arctic Québec), and, to a lesser extent, Labrador Inuttut, are the principal focus of this work, while the western Arctic dialects that make up the Inuvialuktun group are generally not discussed. In total, according to Harnum (1993), there are approximately 27500 Inuktitut speakers in Canada. Inuktitut itself belongs to a substantially larger language family, Eskimo-Aleut, which includes Aleutian, Siberian and Alaskan Yup'ik, Iñupiaq (spoken in northern Alaska), the Inuktitut dialects, and Greenlandic Kalaallisut. Since West Greenlandic Eskimo remains arguably the most-studied of all the languages in this family, unarguably, from the point of view of semantic research (see, for example, Bittner

(1989, 1994a, 1994b, 1995, 2001) and van Geenhoven (1995,1998a,1998b), I will also be discussing data from this language in some detail. My use of the term Kalaallisut in this dissertation refers exclusively to West Greenlandic, and I make no claims about the grammatical properties of Polar (Thule) or East Greenlandic.

### ***1.3 Background and theoretical assumptions***

This section briefly introduces the syntactic and semantic tools that I adopt to undertake the analysis sketched out above.

#### *1.3.1 Syntax*

The syntactic model assumed is roughly minimalist (Chomsky (1995,1998)), in the sense that it takes a *bare phrase structure* view of structure-building, and takes movement to be driven solely by the need to check morphological features. Such feature-checking is forced, to remove grammatical elements that are uninterpretable at either of the two interfaces – being the semantic interface and the phonological/phonetic interface – that narrow syntax participates in. As the linguistic details that this dissertation is concerned with are interpretational in nature, the most relevant point to be taken from this is that structural Case-features are assumed to be uninterpretable to the semantic component, so all such features must be checked and erased in the narrow syntax before being outputted to the semantics.

### 1.3.2 Semantics

#### 1.3.2.1 The model

The interpretation process assumed is that denotations are assigned to bracketed strings of lexical items in a type-driven manner (à la Klein & Sag (1985)). Except in discussion of differing analyses, denotations throughout are given through expressions of an extensional type logic, as I find this more convenient, with three basic types: individuals (e), events (s), and truth-values (t). Possible denotations are individuals, events, truth-values, and functions combined from these entities.

The denotations of lexical categories must be provided in the lexicon, and the denotations of complex expressions are calculated via a very short list of compositional rules. The compositional principles assumed are generally those of Heim & Kratzer (1998), notably the basic operation of Functional Application, and the rule of Predicate Abstraction (2), for the interpretation of syntactic movement, with an example shown in (3) (ignoring, as throughout, the semantic contribution of tense).

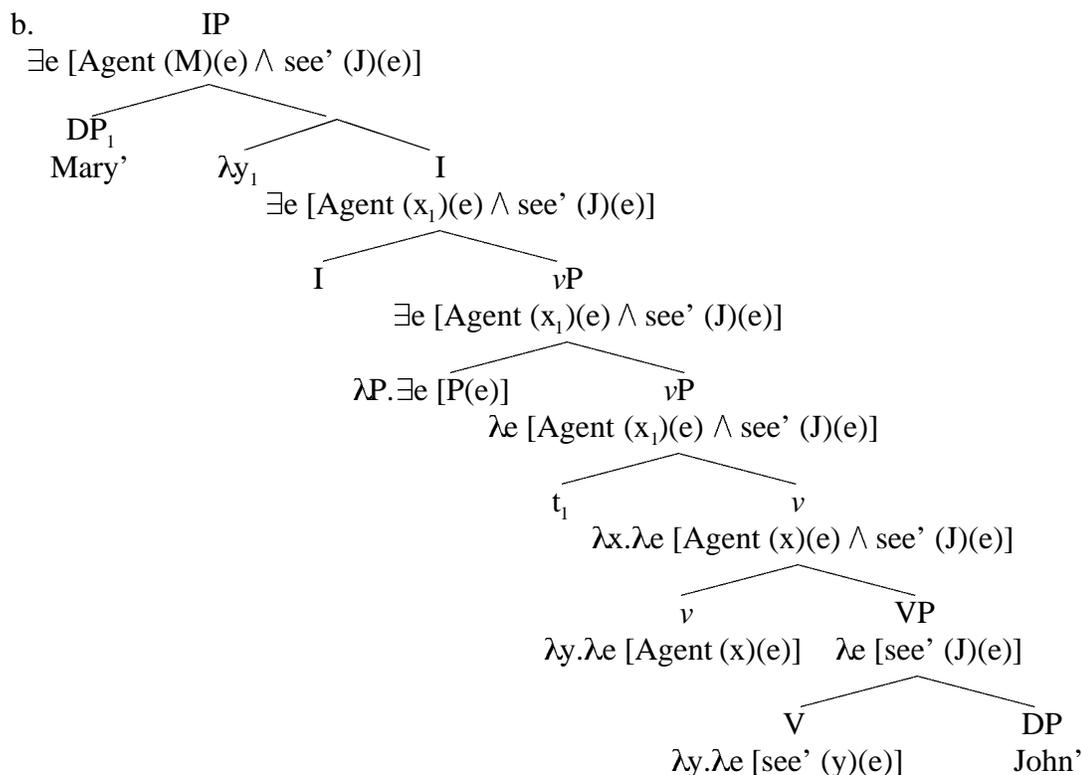
#### (2) *Predicate Abstraction Rule*

If  $\beta$  dominates only a numerical index  $I$ , and  $\delta$  translates as  $\delta'$ , then  $\beta$  translates as  $\lambda x_1[\delta']$ .



(adapted from Heim & Kratzer (1998:186))

(3) a. Mary saw John.



As indicated in the tree above, one additional compositional principle, the conjunction operation of *Event Identification*, will be introduced in §1.3.2.3, as I adopt the position of Kratzer (1996, in prep) that ‘external’ arguments do not in fact constitute arguments of the verb at all.

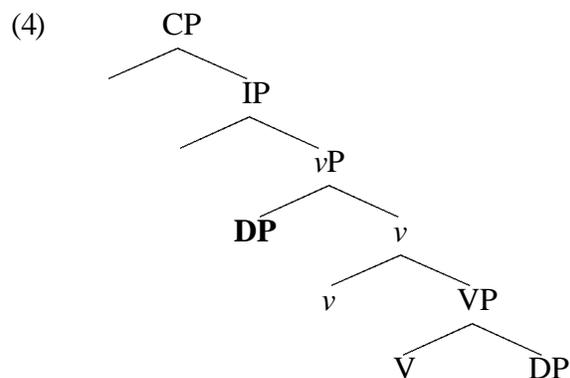
### 1.3.2.2 “Transparent” LFs

The conception of LF that I adopt here is the *transparent LF* of von Stechow (1993,1996), such that (i) reading an interpretation off of an LF proceeds trivially; and (ii) each LF is semantically interpretable in an unambiguous way. That is, for (ii), if a sentence can be

interpreted ambiguously, each reading must be due to a different LF representation of that sentence, and each LF must be syntactically motivated. As to whether this way of looking at the semantics interface differs in substance from more canonical views (for example, May (1985)) or is simply a matter of personal taste partially remains to be seen (though see the above references and Beck (1996) and Heim & Kratzer (1998) for initial evidence pointing to the former). Whatever the case, it is true that it is useful to look at the semantics interface in this way only inasmuch as it allows us to explain facts about the interpretation of natural language phenomena. It is hoped that the discussion here further demonstrates its usefulness.

#### *1.3.2.3 Argument structure*

I adopt the position here, as proposed in Marantz (1984), and most fully developed in Kratzer (1996, in prep), that a verb's 'external' argument (Williams (1981)) is truly external, in that it does not constitute an argument of the verb at all. Rather, adopting the structure of a transitive clause similar to that proposed in Chomsky (1995), as in (4), it is taken as the internal argument of the head *v*:



Incorporating some neo-Davidsonian argument association into the syntax of verbs and of  $v$  heads, the denotations of  $V^0$  and  $v^0$  (more properly, of the lexical items that they dominate in the tree) are henceforth assumed to be as indicated in (5a) and (5b), respectively.

- (5)
- a.  $\llbracket V \rrbracket = \lambda x_e. \lambda e_s [V(x)(e)]$
  - b.  $\llbracket v \rrbracket = \lambda x_e. \lambda e_s [v(x)(e)]$

In illustration of how this works, compositionally, let us look at an example:

- (6) That idiot governs the United States.

Combination of the verb and its internal argument via Functional Application provide the denotation of the VP as  $\lambda e[\text{govern}'(\text{the.US}')(e)]$ , of type  $\langle s, t \rangle$ . The conjunction operation *Event Identification*, stated in (7) and from Kratzer (1996:120), makes it possible to string together different conditions for the event described in the sentence, and the node combining the VP and the  $v$  head, by Event Identification, has the denotation  $\lambda x. \lambda e[\text{Agent}(x)(e) \wedge \text{govern}'(\text{the.US}')(e)]$ .



briefly summarises their motivations and a few of their distinct formalisations in natural language semantic theory .

The observation, originating in Fodor & Sag (1982), that the scope properties of indefinites are not restrained by the syntactic islands that characterise movement of other quantifying phrases, has been an impetus in the recent increasing interest in using choice functions in semantic theory.<sup>2</sup> In consideration of the sentence in (9),

- (9) Each teacher overheard the rumour that *a student of mine* had been called before the dean.

Fodor & Sag observe that it is ambiguous between what has been called a narrow scope reading of the indefinite noun phrase *a student of mine*, where the sentence is understood as meaning that each teacher has overheard the rumour that some/any student of the present author's had been called before the dean (i.e., the content of the rumour is: a student of Wharram's has been called before the dean), and a widest scope reading of that indefinite NP, where each teacher has overheard the rumour that a (specific) student of mine, say Rutherford, had been called before the dean.

Fodor & Sag suggest that indefinites are ambiguous between a quantificational reading and a referential reading, quantificational indefinites being subject to the same

movement constraints as other quantificational NPs, and referential indefinites being scopeless elements, like proper names. Thus, in the former reading of (9), the relevant indefinite is quantificational, its scope restricted to whatever local domain such items are standardly subject to. In the latter reading, the relevant indefinite is referential, giving the illusion of widest scope. A potential reading of (9) that is claimed to be absent by Fodor & Sag is one where the relevant indefinite takes intermediate scope, under *each teacher*, but wider than the *that*-clause. Such a reading could describe a state of affairs where the calculus teacher overheard the rumour that  $\alpha$  was called before the dean, the geometry teacher overheard the rumour that  $\beta$  was called before the dean, and the economics teacher overheard the rumour that  $\delta$  was called before the dean, and each of  $\alpha$ ,  $\beta$ , and  $\delta$  are students of mine.<sup>3</sup> The absence of such a reading for (9), Fodor & Sag note, follows from their treatment of all greater-than-narrowest scope indefinites as referential; only an (apparent) widest scope reading is possible for these NPs.<sup>4</sup> That Fodor & Sag's account is not tenable is well-known, the prediction of the impossibility of intermediate scope readings for all indefinites having been shown to be false almost immediately in Farkas (1981) and later discussed in, for example, Ludlow & Neale (1991) and Abusch (1994).

Consider (10), taken from Reinhart (1997).

- (10) Most linguists have looked at every analysis that solves some problem.  
           most linguists > some problem > every analysis

In addition to a widest scope and narrowest scope readings of *some problem* in (10), the reading where the scope of noun phrases is as indicated in (10) is also possible; that is, an intermediate scope reading of the indefinite NP *some problem* is possible.

According to Reinhart (1997), a simple choice function  $f$  assigns to any non-empty set of individuals a member of this set. More formally, (11):<sup>5</sup>

- (11)  $f$  is a choice function ( $\text{ch}(f)$ ) iff for any  $P, P(f(P))$ , where  $f$  is of type  $\langle\langle e, t \rangle, e \rangle$  and  $P$  is non-empty.

How an indefinite could be interpreted by means of a choice function on Reinhart's theory, then, is indicated in (12).

- (12) a. A woman walks.  
 $\exists f [\text{ch}(f) \wedge \text{walk}(f(\text{woman}))]$   
 b. A woman sees a man.  
 $\exists f_1, f_2 [\text{ch}(f_1) \wedge \text{cf}(f_2) \wedge \text{see}(f_1(\text{woman}), f_2(\text{man}))]$

For Reinhart, indefinite determiners may introduce variables over choice functions, and, in turn, these variables can be bound by existential quantifiers that can be introduced at any level.

Indefinites are, as such, not subject to constraints on movement, and can potentially

be interpreted with widest scope or intermediate scope, which is to say, outside of the scope of an island while still within the scope of some other operator, while remaining *in-situ* within an island. Turning our attention back to the sentence in (10), I will leave it to the reader to ascertain that a theory allowing existential quantifiers binding choice function variables to appear at any level is able to capture the three relevant readings for that sentence.

Kratzer's (1998) theory differs from that of Reinhart (1995,1997) in that, for Kratzer, choice function variables are not existentially quantified, but remain free at LF. The value of the variable is determined by the context, with Kratzer arguing speaker intent to be sufficient here. As a consequence, Kratzer's theory does not predict the availability of intermediate scope readings in the typically understood sense. However, she argues that the *appearance* of intermediate readings can obtain if a bound variable pronoun is present. That is, reconsider Fodor & Sag's famous sentence in (9), repeated here as (13a). As noted above, an intermediate reading of the indefinite NP in this sentence is either impossible or exceedingly difficult to obtain. On the other hand, for the sentence seen here in (13b), an intermediate reading of the indefinite comes quite easily, with the meaning that for each teacher, there is a (potentially different) student of hers such that she overheard the rumour that that student had been called before the dean.

- (13) a. Each teacher overheard the rumour that *a student of mine* had been called before the dean.  
 b. Each teacher overheard the rumour that *a teacher of hers* had been called before the dean.

Clearly, a salient difference between the sentences in (13a) and (13b) is that the one in (13b) contains a (potentially) bound variable pronoun, while (13a) does not. In (13b), under the bound pronoun interpretation of *hers*, the choice function which selects one student from a set of a teacher's students will have a different restrictor set for each teacher, and, therefore, a different individual student for each teacher can be selected by the choice function. This leads, Kratzer argues, to the appearance of an intermediate scope reading for the indefinite. In (13a), however, the choice function that selects one student of mine from the set of my students cannot diverge with respect to differing teachers.

A substantial difference between Winter's (1997) approach and those of both Reinhart and Kratzer is that Winter takes all indefinites to be unambiguously interpreted as a choice function, while Reinhart and Kratzer claim that indefinites are ambiguous between a generalised quantifier interpretation and an interpretation as a choice function. I will have little to say about this debate here, although it will be seen that the scope behaviour of antipassive objects in Inuktitut and Kalaallisut presents a considerable challenge for Winter's approach. Otherwise, on points crucial to the discussion in this

dissertation, Reinhart's and Winter's analyses do not substantially differ, at least with respect to their empirical predictions. Since Winter, like Reinhart, assumes existential closure of choice function variables to be possible at every level, both predict that intermediate readings for indefinites are always possible, though they may be apparently absent due to pragmatic interference or competition from other readings. On the other hand, Kratzer predicts that intermediate readings are never possible, although apparent intermediate pseudo-scope readings are possible with the presence of bound variable pronouns or implicit arguments. It is these latter predictions that this dissertation is primarily concerned with, and it is demonstrated that the data from Inuktitut and Kalaallisut favour a Kratzer-style approach to choice functions. In this, parts of this dissertation cover some of the same ground as Matthewson's (1999) study of St'át'imcets, arriving at largely the same theoretical conclusions as Matthewson, although via consideration of typologically unrelated languages. This dissertation, then, constitutes additional evidence that at least the general lines of Kratzer's (1998) approach are correct.

#### ***1.4 Layout of the remainder of the dissertation***

Chapter Two provides a non-exhaustive description of Inuktitut morpho-syntax, meant only to provide a jumping-off point for the semantic analyses contained in the following chapters. The syntactic aspects of the so-called *antipassive* are considered and the distribution of different types of DPs/NPs that may appear as the complement of an

antipassivised verb is preliminarily examined.

In Chapter Three, the scope properties of indefinites in simple sentences in Inuktitut and Kalaallisut are examined. The data are surveyed with two principal goals in mind. (A) To provide an analysis of the obligatory narrow-scope interpretation of the internal argument, which appears in an oblique case, of *antipassivised* verbs. An adaptation of van Geenhoven's (1995,1998a) analysis of noun-incorporating verb configurations in Kalaallisut is shown to provide an adequate account of the relevant data; (B) To provide an explanation for the obligatory wide-scope interpretation of absolutive and ergative indefinites. It is argued that these facts are best explained by means of a (phonetically null) indefinite article denoting a choice function which optionally combines with indefinite NPs. Further, the absence of any less-than-widest scope interpretations for these indefinites in simple single-clause sentences argues for an approach to choice function-driven interpretation of indefinites either like that elaborated in Kratzer (1998), which proposes contextually determined – free at the level of LF – natural language choice functions, or like the proposal made in Matthewson (1999), motivated on the basis of similar empirical details, that natural language choice functions are existentially closed, though only at the topmost level. Throughout this chapter, a number of points of dialectal variation that hold between Inuktitut and Kalaallisut are observed and analysed.

Chapter Four considers data from Labrador Inuttut, a dialect of Inuktitut in which antipassive objects do not show the obligatory narrowest-scope interpretational properties that characterise these arguments in the other Inuktitut dialects and in Kalaallisut. The analysis developed in Chapter Three, however, is shown to be compatible with the relevant characteristics of Inuttut.

Chapter Five continues the investigation of the scope properties of indefinites in Inuktitut, examining said properties in more complex sentences, involving apparent island contexts. It is demonstrated that the observed data align with the predictions made by Kratzer's particular formulation of choice function-driven indefinite interpretation, while the systematic absence of certain (intermediate) interpretations for sentences containing indefinites within islands argues against the 'free existential closure' approach to choice functions of Reinhart and Winter.

Chapter Six constitutes the beginning of an evaluation of the findings of the previous chapters in terms of a cross-linguistic semantics.

### ***1.5 Comments on the data and the methodology***

Unless marked otherwise, examples in this dissertation result from the following fieldwork activities with native speakers of Inuktitut: (i) consultation sessions carried out in Iqaluit

(Baffin Island, Nunavut) in April and May, 2000; (ii) consultations sessions carried out in St. John's (Newfoundland, Canada) over a period on two years (1999-2000); and consultation sessions carried out in Montréal (Québec, Canada) in June, 2000.

Truth condition judgements were elicited from consultants by first presenting a scenario, then presenting a sentence of potentially ambiguous interpretation that is independently known to be grammatical, and asking the consultant whether the sentence is true in the scenario provided. To provide a simple example, while testing whether the internal argument of an antipassivised verb could be interpreted referentially, the following context was described to the consultant:

- (14) **Context:** Both you and your sister know me. Having just returned from Montréal, where you saw me, you're now talking to your sister.

The sentence in (15) was then presented to the consultant, and was asked whether it was an acceptable utterance in this context.

- (15) *Inuktitut*  
 Ippaksak      Tuglasi-mik   taku-lauq-t-u-nga  
 yesterday      Douglas-MOD see-past-part-[-tr]-1sABS  
 (#) 'Yesterday, I saw Douglas'

The consultant commented: "Um, weird, unless I was telling her about seeing someone named Douglas yesterday. I guess that'd be OK, but when would I say that? I'd just say

*Tuglasi takulauqtara*”. Examples like this, along with other elicited judgement, lead to the conclusion that the (internal) argument of an antipassivised verb cannot be interpreted referentially.<sup>6</sup>

---

<sup>1</sup>If existential quantification is the right way to treat the event argument – and it is not clear to me what other notion(s) might be applicable –, there are a number of positions where this might take place. However, as Kratzer (1996) points out, it must occur at a level above the *v* head, else the conjunction operation of Event Identification becomes inapplicable.

<sup>2</sup>The idea of making use of choice functions for the interpretation of *wh*-phrases, as discussed in, for example, Engdahl (1980) and Reinhart (1992,1995), is not considered in this dissertation.

<sup>3</sup>The debate (see, for example, Farkas (1981), Ludlow & Neale (1991), Ruys (1992), and Abusch (1994)) as to whether this reading is truly absent strikes at the root of issue of evaluating various choice function analyses on the basis of, principally, English data. That the degree of success in empirical coverage of the approaches is difficult to reckon solely on the basis of English is given by Matthewson (1999) as one of the motivating factors in her study of St’at’imcets indefinite scope. Similarly, this is the case for large parts of the present work.

<sup>4</sup>Thus, Fodor & Sag (1982) claimed that intermediate scope readings for indefinites in sentences involving islands do not exist.

<sup>5</sup>That the definition in (14) in the text faces difficulties if the set denoted by the noun is empty has been discussed in Winter (1997). While the issue is not of direct relevance for the data discussed in this dissertation, we could adopt (i), from von Stechow (2000:196), as a revised definition of a choice function that avoids the problems that Winter considers.

- (i) Let  $f$  be of type  $\langle\langle e,t \rangle, e \rangle$ .  $f$  is a choice function iff (a) and (b) hold:  
 (a)  $P(f(P))$  if  $P$  is non-empty.  
 (b)  $f(P) = *$  if  $P$  is empty.

Where  $*$  is an object not in any semantic domain.

<sup>6</sup>In this dialect (South Baffin). See Chapter Four for discussion of a dialect of Inuktitut where this is not the case.

# CHAPTER TWO

## Morphological and Syntactic considerations

### *2.1 Preliminaries*

This chapter briefly describes two fundamental syntactic aspects of Inuktitut syntax. First, Inuktitut is an *ergative* language, which, glossing away from complicating details, means that the single external argument ('subject') of a syntactically intransitive predicate and the internal argument ('object') of a transitive predicate pattern themselves in the same way with respect to (absolutive) Case-marking and verbal agreement, in a manner distinct from the (ergative) Case and agreement patterning of the external argument ('subject') of a transitive predicate. Since there is some debate in the literature as to the syntactic position of verbal arguments in the Inuit languages (see, for example, Levin & Massam (1984), Johns (1987,1992), Bok-Bennema (1991), Bobaljik (1993), Bittner (1994), Bittner & Hale (1996b), and Wharram (1996)), I will briefly lay out the assumptions that I make in this respect in subsequent chapters. Second, Inuktitut is a highly incorporating language, and some space is devoted to examining the resultant clause structure of the language, especially as this phenomenon pertains to the structure of complement clauses. The discussion in this chapter is not meant to be exhaustive by any means, but is present in order to provide a view of the clausal structure of Inuktitut from which the analyses of the following chapters can proceed.

## 2.2 Ergativity

Questions about the nature of ergativity have occupied generative grammarians at least since Hale (1970).<sup>1</sup> For introductory purposes, I conditionally offer the following definition of *ergativity*: An ergative language is a language in which the single (overt) argument ('subject') of an intransitive predicate and the internal argument ('object') of a transitive predicate pattern themselves in the same way with respect to (absolutive) Case-marking and verbal agreement, in a manner distinct from the (ergative) Case and agreement patterning of the external argument ('subject') of a transitive verb. The Dyirbal (northeastern Australia) sentences in (1), the Niuean (Oceanic: Niue) sentences in (2), and the Walpiri (central Australia) sentences in (3) serve to exemplify the Case/agreement pattern of ergative languages.<sup>2</sup>

(1) *Dyirbal*

a. Payi            parrkan            pang-kul    yarang-ku    jurrkanyu  
       there.ABS   wallaby(ABS)    **there-ERG** **man-ERG**    spear.NONFUT  
       ‘man is spearing wallaby’  
(Dixon (1972:62))

b. Payi            yara            paninyu  
       there(ABS)    man(ABS)    come-NONFUT  
       ‘man is coming’  
(Dixon (1972:48))

(2) *Niuean*

- a. Ne tala aga e ia e tala ke he tagata  
 past tel directional.3 **ERG he** ABS story to man  
 ‘he told the story to the man’

(Lane (n.d.); cited in Massam (1995:1))

- b. Hifo a Lemani ke hagi...  
 go-down ABS Lemani to sea  
 ‘Lemani went down to the sea’

(Seiter (1980); cited in Massam (1995:1))

(3) *Walpiri*

- a. Marlu-ngku ka ngarrka nya-nyi  
**kangaroo-ERG** PRES man(ABS) see-NONPAST  
 ‘the kangaroo sees the man’

- b. Ngarrka ka wangka-mi  
 man(ABS) PRES speak-NONPAST  
 ‘the man is speaking’

(Hale (1982:2))

This type of language stands in contrast to the more familiar accusative languages, in which external arguments of both transitive and intransitive verbs form a natural class, differing from the Case and Agreement patterning of transitive objects, as in (4) (German):

(4) *German*

- a. Der Mann sieht den Hund  
 the.man(NOM) see.pres.3s the.dog(ACC)  
 ‘the man sees the dog’
- b. Der Hund ißt.  
 the.dog(NOM) eat.pres,3s  
 ‘the dog eats’
- c. \*Den Hund ißt.

Such a definition is neither complete nor totally correct, and will be modified throughout

the dissertation as required.

### 2.3 Clausal structure and basic Case relations in Inuktitut

All the Inuit and Yup'ik dialects/languages are ergative languages:

(5) *Inuktitut*

- a. Anguti-up nutaraq taku-v-a-a.  
 man -ERG child(ABS) see-ind-[+tr]-3sERG.3sABS  
 'the man sees/saw the child'
- b. Angut niri-v-u-q.  
 man(ABS) eat-ind-[-tr]-3sABS  
 'the man eats/ate'
- c. \*Anguti-up niri-vuq.

(6) *Kalaallisut*

- a. Piita-p mattak niri-v-a-a  
 P. -ERG whale.skin(ABS) eat-ind-[+tr]-3sERG.3sABS  
 'Piita ate the whale skin'
- b. Piita tikip-p-u-q  
 P. (ABS) arrive-ind-[-tr]-3sABS  
 'Piita arrived'

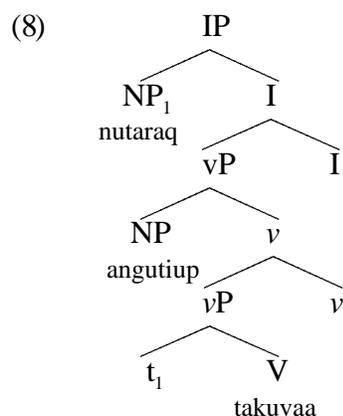
(Bok-Bennema (1991:72))

(7) *Central Alaskan Yup'ik*

- a. Arna-m mikelnguq nunur-aa  
 woman-ERG child(ABS) scold-3sERG.3sABS  
 'the woman is scolding the child'
- b. Arnaq ner'uq  
 woman(ABS) eat.3sABS  
 'the woman is eating'

(Jacobson (1995:119,31))

The derivation of a basic syntactically transitive clause in Inuktitut that I will assume in subsequent chapters of this dissertation is indicated in (8), illustrating the sentence in (5a) and ignoring  $X^0$ .



That is, I will associate the absolutive Case with Infl, and the ergative Case with  $v^0$ . However, for the purposes of what follows, nothing crucially hinges on this assumed structure, and what I will argue for is equally compatible with the view that the ergative is associated with Infl and the absolutive with  $v^0$  (see Levin & Massam (1984) and Bobaljik (1993)).<sup>3</sup> Indeed, it is my intent to demonstrate that the structural position of noun phrases in Inuktitut is irrelevant in determining their scopal properties.

### 2.3.1 Agreement

As indicated in the immediately preceding subsection, verbs in Inuktitut show double (subject/object) agreement in syntactically transitive clauses, or single (subject) agreement

in syntactically intransitive clauses:

(9) *Inuktitut*

- a. Anguti-up nutaraq taku-v-a-a.  
 man -ERG child (ABS) see-ind-[+tr]-3sERG.3sABS  
 ‘the man sees/saw the child’
- b. Angut niri-v-u-q.  
 man(ABS) eat-ind-[-tr]-3sABS  
 ‘the man eats/ate’
- c. \*Anguti-up niri-vuq.

(10) *Inuktitut*

- a. Anguti-up tuku qukiq-p-a-a  
 man-ERG caribou (ABS) shoot-ind-[+tr]-3sERG.3sABS  
 ‘the man shoots/shot the caribou’
- b. Angut tikip-p-u-q  
 man (ABS) arrive-ind-[+tr]-3sABS  
 ‘the man arrived’

The sentences in (5) versus those in (10) also illustrate an allomorphic variation that holds of the indicative morphology: A stem ending in a vowel takes /v/, a stem ending in a consonant takes /p/.

Likewise, an allomorphic variation holds of the participial mood morphology: A stem ending in a vowel takes /j/, where a stem ending in a consonant takes /t/:<sup>4</sup>

(11) *Inuktitut*

- a. Anguti-up      nutaraq      taku-j-a-a  
 man-ERG      child (ABS)      see-part-[+tr]-3sERG.3sABS  
 ‘the man sees/saw the child’
- b. Angut      niri-j-u-q  
 man (ABS)      eat-part-[-tr]-3sABS  
 ‘the man eats/ate’

- (12) a. Anguti-up      nutaraq      tusar-t-a-a  
 man-ERG      child (ABS)      hear-part-[+tr]-3sERG.3sABS  
 ‘the man hears/heard the child’

- b. Angut      quviasuk-t-u-q  
 man (ABS)      be.happy-part-[-tr]-3sABS  
 ‘the man is happy’

2.3.2 *Syntactic detransitivisation: Passivisation and antipassivisation*

I will now briefly discuss two operation that serve to syntactically detransitivise a verbal category in Inuktitut. Passivisation operates in the familiar manner, taking a syntactically transitive verb and changing it into an unaccusative one, its (optional) agentive argument being expressed in an oblique case:

(13) *Inuktitut*

- a. Anguti-up      tuktu      taku-j-a-a  
 man-ERG      caribou (ABS)      see-part-[+tr]-3sERG.3sABS  
 ‘the man sees/saw the caribou’
- b. Tuktu      (anguti-mut)      taku-jau-j-u-q  
 caribou (ABS)      (man-DAT)      see-PASS-part-[-tr]-3sABS  
 ‘the caribou is seen (by a/the man)’

The antipassive, or what Kleinschmidt (1851) called the “half transitive”, changes the valency of a verb in the manner exemplified in sentences (14) through (16); the (a) sentences are basic transitive clauses, while the (b) sentences are (a)’s respective antipassive variant.<sup>5</sup>

(14) *Kalaallisut*

- a. Hansi-p inuit tuqup-p-a-a  
 H. -ERG person (ABS.p) kill-ind-[+tr]-3sERG.3sABS  
 ‘Hansi killed the people’
- b. Hansi inun-nik tuqut-si-v-u-q  
 H. (ABS) person-MOD.p kill-AP-ind-[-tr]-3sABS  
 ‘Hansi killed people’ (Bok-Bennema (1991))

(15) *Kalaallisut*

- a. Jaaku-p arnaq tuqup-p-a-a  
 J. -ERG woman (ABS) kill-ind-[+tr]-3sERG.3sABS  
 ‘Jacob killed the woman / a particular woman’
- b. Jaaku arna-mik tuqut-si-v-u-q  
 J. (ABS) woman-MOD kill-AP-ind-[-tr]-3sABS  
 ‘Jacob killed a woman’ (Bittner (1988))

(16) *Inuktitut*

- a. Kingmaalisaa-p atautsiq iqaluk taku-j-a-nga  
 K. -ERG one (ABS) fish (ABS) see-part-[+tr]-3sERG.3sABS  
 ‘Kingmaalisaaq saw a (particular) fish’
- b. Kingmaalisaaq atautsi-mik iqalung-mik taku-Ø-j-u-q  
 K. (ABS) one-MOD fish-MOD see-AP-part-[-tr]-3sABS  
 ‘Kingmaalisaaq saw a fish’

Again, the (a) sentences illustrate the canonical state of Case/agreement patterning affairs

in the languages of the Inuit, where transitive verbal inflection includes number agreement with both the ergative (‘subject’) and absolutive (‘object’) argument. Antipassivisation is typically described as a process which makes a syntactically transitive predicate syntactically intransitive (though see Johns (2001)). More specifically, given the distinction between unergative and unaccusative intransitive predicates elaborated in Perlmutter (1978) and Burzio (1986), antipassivised transitive verbs become syntactically unergative. Note that although the antipassive verbs in (12b) - (16b) remain semantically transitive, the verbs there have intransitive inflection, agreeing only with their ‘subject’. The internal argument must be expressed in an oblique case. The external (agent) argument remains unaffected – aside from the change in its Case, an expected result, given the canonical patterning of Case in the language.

#### ***2.4 Certain properties of antipassive clauses***

In the following chapter, I will discuss antipassive clauses in Inuktitut and Kalaallisut in considerably more detail. However, here I will discuss the availability of referential NPs as verbal complements of antipassive verbs in the Eskimo languages. It is a very old observation among grammarians, dating back to Egede (1760), that there is a connection between the use of the *-mik* (modalis) form or the absolutive form of the noun as the NP complement of a verb and the interpretational properties of that NP. For Egede (1760), and many researchers subsequent (Kleinschmidt (1851), Bergsland (1955), Woodbury

(1975), and Sadock (1985), among others), the (absolutive) complement NP of a transitive verb is definite, while the (modalis) complement NP of an antipassive verb is indefinite. This view has been questioned in, for example, Bittner (1987), who offers the sentence in (17), an apparent example of a proper name, being interpreted referentially, in the object position of an antipassive verb.

- (17) *Kalaallisut*  
 Jesusi-mik taku-Ø-v-u-q / taku-nnip-p-u-q  
 J. -MOD see-AP-ind-[-tr]-3sABS / see-AP-ind-[-tr]-3sABS  
 ‘(s)he saw Jesus’ (Bittner (1987:196))

Manning (1994:75) cites a personal communication from Micheal Fortescue doubting the acceptability of a proper name in the modalis case in *Kalaallisut*, saying that speakers find the sentence in (17) “fairly strange” and must have a meaning something along the lines of seeing the concept of Jesus. I will return to this apparent dispute in Chapter Four, after having discussed some relevant data from the Labrador Inuttut dialect of Inuktitut.

For clarification, there is no difficulty for speakers in assigning a referential reading to the (absolutive) object of a verb showing double agreement, as was indicated at the end of Chapter One, in one consultant’s substituted sentence (18b) for the example in (15) there, repeated here as (18a):<sup>6</sup>

(18) *Inuktitut*

- a. Ippaksak      Tuglasi-mik      taku-lauq-t-u-nga  
 yesterday      Douglas-MOD      see-past-part-[-tr]-1sABS  
 ‘Yesterday, I saw someone named Douglas’
- b. Tuglasi              taku-lauq-t-a-ra  
 Douglas (ABS)      see-past-part-  
 ‘I saw Douglas’

Manning (1994) also reports that the linguist Edna Pateatak MacLean, an Iñupiaq speaker, does not accept sentences with proper names as the complement of an antipassivised verb:

(19) *Iñupiaq*

- \* John              tautuk-t-u-q              Mary-mik  
 J. (ABS)              see-part-[-tr]-3sABS      Mary-MOD  
 ‘John sees Mary’

(Manning (1994:75))

Benua (1995), however, indicates that in Alaskan Yup’ik, a (family of) language(s) closely related to Inuktitut, proper names can appear in the relevant position and be understood referentially:

(20) *Alaskan Yup’ik*

- Caanaq              Mary-mek      tangellruuq  
 John (ABS)      Mary-MOD      see.past.ind.3sABS  
 ‘John saw Mary’

(Benua (1995:32))

I will not discuss the Yup’ik data further in this dissertation (though see Chapter Four for

some possible extensions to Yup'ik), as very little available data exist to test Benua's claims in this respect – to my knowledge, Benua's (1995) paper is the only one discussing such data, and I lack access to Yup'ik speakers.

## 2.5 *Incorporation*

Inuktitut is a highly polysynthetic language,<sup>7</sup> in the sense that it has the ability to express in one word (consisting of a number of morphemes) what would require a sentence (consisting of a number of words) in, for instance, an agglutinative or isolating language. Consider, for example, the Arctic Québec Inuktitut sentence in (21), from Dorais (1988:8):<sup>8</sup>

- (21) Illjuaraalummuulaursimannginamalittauq  
 illu- juaq-aluk- mut- uq- lauq-sima-nngit-nama- li- ttauq  
 house-big- EMPHATIC-DAT-go-past-perf- neg- CAUSALIS-1sABS-but-also  
 'but also, because I never went to the really big house'

Briefly, and in general, three main classes of root words exist in Inuktitut: Verbs, nominals (as in (21), for *illu-* 'house'), and particle words. While the former two classes of root words require inflectional endings, and can usually accommodate a number of attached morphemes (as in (21), and canonically referred to as *postbases* in the Inuktitut literature), the latter class of particle words take no inflection. Some examples of particle words are listed in (22).

- (22) a. aamai 'I don't know'  
 b. ilaali 'you're welcome'  
 c. iilaak 'yes indeed'  
 d. aasit 'as usual'

Inuktitut verbs can be either roots, that is, sitting as the head of a word, or suffixal, in never being able to appear at the beginning of a word. As already seen – in, for example, the (5) sentences –, root verbs in Inuktitut can be either transitive or intransitive. A small number of ditransitive verbs also exist in Inuktitut. For example:

- (23) a. *Central Arctic Inuktitut*  
 Anguti-up titiraut nutarar-mut tuni  
 man -ERG pencil (ABS) child-DAT give-v-a-a  
 'the man gave the pencil to the child'  
 (Johnson (1980))
- b. *North Baffin Inuktitut*  
 Kingmaalisa-p iqaluk Miali-mut tuni-lauq-t-a-nga.  
 K -ERG fish (ABS) M. -DAT give-past-part-[+tr]-3sERG.3sABS  
 'Kingmaalisaq give the fish to Miali'

The suffixal verbs can be divided into at least two distinct categories. First, a number of suffixal verbs obligatorily incorporate their nominal complement. This is a closed class of verbs, and although the number of such verbs varies slightly by dialect, Alana Johns (personal communication) has suggested the number to be in the vicinity of one hundred. Some examples of noun-incorporating verbs in Inuktitut are found in (24).

(24) *Inuktitut*

- a. Iqaluk-**tu**-qqau-vit -TUQ-  
 fish-TUQ-recent.past-interrog.2sABS  
 ‘Did you(s) eat fish?’
- b. Pani-**qar**-p-u-q -QAQ-  
 daughter-HAVE-ind-[-tr]-3sABS  
 ‘(s)he has a daughter’

*Labrador Inuttut*

- c. Anguti-**u**-v-u-nga -U-  
 man-be-ind-[-tr]-1sABS  
 ‘I am a man’
- d. Montreali-**lia**-laut-t-u-q -LIA-  
 Montréal-go.to-past-part-[-tr]-3sABS  
 ‘(s)he went to Montréal’

The second class of suffixal verbs consists of those which obligatorily incorporate other verbs. These are verbs like *-qu-* ‘tell to, want’ (Kalaallisut *-qqu-*), *-niraq-* ‘say’ (Kalaallisut *-nira(r)-*), and *-nasugi-* ‘think’ (Kalaallisut *-suri-*). Examples follow:

- (25) a. Miali tukisi-nasugi-j-a-ra  
 M. (ABS) understand-think-part-[+tr]-1sERG.3sABS  
 ‘I think that Miali understand’
- b. Suula-up Arnainnuk ikaju-qu-j-a-nga Maliktar-mik  
 S. -ERG A. (ABS) help-tell-part-[+tr]-3sERG.3sABS M. -MOD  
 ‘Suula tells/wants Arnainnuk to help Malikitaq’

Both noun-incorporating and verb-incorporating suffixal verbs and their structures are discussed in more detail in the next chapter, where the scope properties of indefinites in simple sentences in Inuktitut and Kalaallisut are examined.

<sup>1</sup>Again, it is not my intent here to offer any sort of comprehensive overview of the literature on ergativity, but merely to present the set of assumptions from which I proceed in the subsequent chapters – for a good overview of the relevant issues, see Johns (1996), and also Dixon (1979,1994) for further empirical considerations.

<sup>2</sup>For discussion of so-called ‘split ergative’ systems, see, among others, Campana (1992), Jelinek (1993), and Dixon (1994).

<sup>3</sup>Trivially, under Levin & Massam’s (1984) approach, this amounts to association of the ergative with Infl and the absolutive with the verb, while for Bobaljik (1993), ergative with Agr<sub>s</sub> and absolutive with Agr<sub>o</sub>.

<sup>4</sup>The participial mood does not appear on matrix verbs in Kalaallisut, though it commonly does so in all of the Inuktitut dialects.

<sup>5</sup>I use the label *absolutive* (ABS), common in the linguistic literature on Inuit (Bergsland (1955), Woodbury (1975), Sadock (1980), Fortescue (1984), and Johns (1987,1992), among others), in reference to the Case of intransitive ‘subjects’ and transitive ‘objects’, where Bittner (1994a) uses the label *nominative*.

<sup>6</sup>A number of (Baffin Inuktitut) speakers consulted by this author indicated that it would be acceptable for me, as a language learner, to use the *-mik* form of a proper name in object-of-antipassive-verb position, though they would not use the construction.

<sup>7</sup>*Polysynthetic* in traditional terms, rather than in Baker’s (1996) theory-specific terms.

<sup>8</sup>Dorais does not provide a morpheme-by-morpheme gloss of this sentence. The gloss that I provide is based on my knowledge of Baffin Inuktitut, and may not exactly match up with the forms of the morphemes in the Arctic Québec dialect that Dorais’s example is from.

# CHAPTER THREE

## Indefinites I: Two interpretive mechanisms

### *3.1 Preliminaries*

In this chapter, the scope properties of indefinites in simple (single-clause) sentences in Inuktitut and Kalaallisut are examined. The data are surveyed with two principal goals in mind. The first is to provide an analysis of the obligatory narrow-scope interpretation of the internal argument, which appears in an oblique morphological case, of so-called *antipassivised* verbs. An adaptation of van Geenhoven's (1995,1998a) analysis of noun-incorporating verb configurations in Kalaallisut is developed and shown to provide an adequate account of the relevant properties of antipassive constructions in both Inuktitut and Kalaallisut. The second is to provide an account of the obligatory wide-scope interpretation of absolutive and ergative indefinites in these languages, with an eye towards explaining certain points of dialectal variation pertaining to the interpretational properties of ergatives. The analysis presented, taken as a whole, is then shown to account for the (generally) optional scope properties of other oblique indefinites in these languages.

The chapter is organised as follows: Section 3.2 introduces the basic Kalaallisut and Inuktitut data to be discussed, followed, in §3.3, by a summary of Bittner's (1994a) analysis of a well-defined subset of indefinites in Kalaallisut which display obligatory

narrow-scope behaviour. Section 3.4 briefly presents and discusses van Geenhoven's (1995,1998a) theory of *semantic incorporation*. Specific aspects of these two approaches are evaluated in §3.5. Section 3.6 presents the current work's analysis of obligatory narrow-scope indefinites in Inuktitut and Kalaallisut, while §3.7 advances a choice function-driven theory of indefinite interpretation to account for obligatory wide-scope indefinites in these languages. Section 3.8 revisits the issue of antipassivisation, as it obtains with a class of suffixal verbs in Kalaallisut, and as it *cannot* obtain with that same class of verbs in (Baffin) Inuktitut. Section §3.9 makes some preliminary observations on the behaviour of certain adverbial operators and their interaction with indefinites in Kalaallisut and Inuktitut, and the chapter ends with consideration of the interpretations available for obliquely case-marked indefinites in these languages.

### ***3.2 Preliminary data***

The Kalaallisut sentences in (1) and the Inuktitut ones in (2) indicate the basic data to be considered in this chapter. Absolutive arguments in both languages are restricted to wide scope readings, with respect to negation, as can be seen for the sole argument of the intransitive predicate in (1b). Where Inuktitut and Kalaallisut differ greatly from English, in scope matters, is that the same wide scope restriction holds for the internal argument of a transitive verb in sentences like (1a). In the case of the internal argument of an antipassive construction, (1d), and the modifier(s) of an internal argument in a noun

incorporation construction, (1c), the argument and/or modifier can only take narrow scope relative to negation. The sentence in (1e) illustrates a basic transitive clause, and shows that the agentive (ergative) argument of a transitive predicate can take either narrow or wide scope relative to negation.

- (1) *Kalaallisut*
- a. **Absolutive object of a standard transitive clause:**  
 Suli Juuna-p *atuagaq ataasiq tigu-sima-nngi-l-a-a*  
 still J.-ERG *book(ABS) one(ABS)* get-perf-neg-ind-[+tr]-3sERG.3sABS  
 i. # Juuna hasn't received (even) one book yet  
 ii. There is one book Juuna hasn't received yet
- b. **Absolutive subject of a standard intransitive clause:**  
*Atuagaq ataasiq tikis-sima-nngi-l-a-q*  
*book(ABS) one(ABS)* come-perf-neg-ind-[-tr]-3sABS  
 i. # It is not the case that any book has arrived  
 ii. There is one (particular) book that hasn't arrived  
 (Bittner (1994a:2))
- c. **Incorporated object:**  
 Suli Juuna *ataatsi-mik atuagar-si-sima-nngi-l-a-q*  
 still J.(ABS) *one-MOD book*-get-perf-neg-ind-[-tr]-3sABS  
 i. Juuna hasn't received (even) one book yet  
 ii. # There is one book Juuna hasn't received yet (Bittner (1992:13))
- d. **Modalis object of an antipassive clause:**  
 Suli Juuna *atuakka-mik ataatsi-mik tigu-si-sima-nngi-l-a-q*  
 still J.(ABS) *book-MOD one-MOD* get-AP-perf-neg-ind-[-tr]-3sABS  
 i. Juuna hasn't received (even) one book yet  
 ii. # There is one book Juuna hasn't received yet (Bittner (1994a:35))
- e. **Ergative subject of a standard transitive clause:**  
 Suli *atuartu-p ataatsi-p Juuna*  
 still *student-ERG one-ERG* J. (ABS)  
*uqaluqatigi-sima-nngi-l-a-a*  
 talk.with-perf-neg-ind-[+tr]-3sERG.3sABS  
 i. No student has talked with Juuna yet  
 ii. There is one student who hasn't talked with Juuna yet  
 (Bittner (1994b:57))

As the sentences in (2) indicate, the relevant scope facts are the same in Inuktitut as in

Kalaallisut, with one exception, illustrated by the sentences in (3): Although a narrow scope reading with respect to some sentential operator for an ergative argument is reported by Bittner to be available for Kalaallisut speakers, it does not seem to be the case that such interpretations are possible in the Inuktitut dialects.<sup>1</sup> Thus, for sentences like those in (3), the (i)-type interpretation is always rejected by Inuktitut speakers, while accepted by Kalaallisut speakers.

(2) *Inuktitut*

- a. Taqqialu-up *tuktu* taku-lau-nngit-t-a-(ng)a  
 T. -ERG *caribou (ABS)* see-past-neg-part-[+tr]-3sERG.3sABS  
 i. # Taqqialuk didn't see a (single) caribou  
 ii. There is a (certain) caribou Taqqialuk didn't see
- b. *Angunasukti atautsiq* ani-lau-nngit-t-uq  
*hunter (ABS) one (ABS)* leave-past-neg-part-[-tr]-3sABS  
 i. # It is not the case that any hunter left  
 ii. There is one (particular) hunter that didn't leave
- c. Ulluriaq *iqaluk-tu-nngit-t-u-q*  
 U. (ABS) *fish-TUQ-neg-part-[-tr]-3sABS*  
 i. Ulluriaq didn't eat a (single) fish  
 ii. # There is a fish/are fish that Ulluriaq didn't eat  
*cf. Kalaallisut:*  
 Arnajaraq *aalisaga-si-nngi-l-a-q*  
 A. (ABS) *fish-buy/get-ind-[-tr]-3sABS*  
 i. Arnajaraq didn't buy a (single) fish  
 ii. # There is a fish/are fish that Arnajaraq didn't buy  
 (van Geenhoven (1998a:31))
- d. Akittiq *iqalung-mik* taku-Ø-nngit-t-u-q  
 A. (ABS) *fish-MOD* see-AP-neg-part-[-tr]-3sABS  
 i. 'Akittiq didn't/doesn't see (even) a single fish'  
 ii. # 'There is a (particular) fish that Akittiq doesn't/didn't see'

- (3) *Inuktitut*
- a. Angunasukti-up atautsi-up Ulluriaq  
 hunter-ERG one-ERG U.(ABS)  
 taku-lau-nngit-t-a-(ng)a  
 see-past-neg-part-[+tr]-3sERG.3sABS  
 i. # No hunter saw Ulluriaq  
 ii. There is one hunter who didn't see Ulluriaq
- b. Ilinniaqti-up Maliktaq  
 student-ERG M. (ABS)  
 uqallaqatigi-lau-nngit-t-a-(ng)a  
 talk.with-past-neg-part-ind-[+tr]-3sERG.3sABS  
 i. # No student talked with Maliktaq  
 ii. There is a (certain) student who didn't talk with Maliktaq  
 (*cf.* (1e))

This point of dialectal variation, such that in Inuktitut ergative indefinites are unambiguously interpreted as having widest scope, while in Kalaallisut such indefinites can take either narrow or wide scope with respect to some sentential operator, is discussed in §3.8, below.

Narrow scope readings for internal arguments in antipassive constructions hold not only with respect to the negation operator *-nngit-*, of course, but to other sentential operators as well. Bittner (1987) discusses a wide variety of such sentential operators and their interaction with antipassivisation and scope in Kalaallisut – among others, the conditional, interrogative, and imperative mood operators, aspectual operators, and modals of necessity and possibility. Consider, for example, the sentences in (4) and (5), from Bittner (1987:219,200). Bittner indicates that only a wide-scope interpretation of transitive objects is possible – the (i) readings in (4) and (5) – with respect to an imperative mood

operator (4) or an interrogative mood operator (5), while, for the object of antipassivised verbs, only a narrow-scope reading is available.

- (4) *Kalaallisut*
- a. nakursaq aa-niar-uk  
 doctor (ABS) go.to.get-imper-2sERG.3sERG  
 i. Go to get a (particular) doctor, e.g., Dr. Strawson  
 ii. # Go to get a doctor, any doctor at all
  - b. nakursa-mik aa-llir-niar-it  
 doctor-MOD go.to.get-AP-imper-2sABS  
 i. # Go to get a (particular) doctor, e.g., Dr. Grenfell  
 ii. Go to get a doctor, any doctor at all

- (5) *Kalaallisut*
- a. puisi taku-vi-uk  
 seal (ABS) see-interrog-2sERG.3sABS  
 i. A  
 ii. # B
  - b. puisi-mik taku-Ø-vi-t  
 seal-MOD see-AP-interrog-2sABS  
 i. # A  
 ii. B

- A. Did you see the/a particular seal? (The person who is asking knows that there is a seal about; for example, she has seen it herself. She is asking whether the addressee has also seen it.)
- B. Did you see a seal? (The person who is asking doesn't know whether there are any seals about. She hasn't seen any herself.)

The Kalaallisut judgements for these sorts of sentences that Bittner reports align with the Inuktitut judgements that were given in response to the sentences in (6) and (7).<sup>2</sup>

- (6) *Inuktitut*
- a. Qallunaaq ikaju-ruk  
 qallunaaq help-imper.2sERG.3sABS  
 i. A  
 ii. # B

- b. Qallunaa-mik            ikaju-Ø-rit  
 qallunaaq-MOD        help-AP-2sABS  
 i. # A  
 ii. B

- A. Help a (particular) qallunaaq! (E.g., a qallunaaq (literally, a Dane, but generally referring to any non-Inuk) who looks particularly lost.)  
 B. Help a qallunaaq! (Any qallunaaq at all.)

(7) *Inuktitut*

- a. Natsiq            taku-viuk  
 seal (ABS)        see-interrog.2sERG.3sABS  
 i. A  
 ii. # B
- b. Natsi-mik        taku-Ø-visik  
 seal-MOD        see-AP-interrog.2dABS  
 i. # A  
 ii. B

- A. Did you see the/a particular seal? (The person who is asking knows that there is a seal about; for example, she has seen it herself. She is asking whether the addressee(s) have also seen it.)  
 B. Did you see a seal? (The person who is asking doesn't know whether there are any seals about. She hasn't seen any herself.)

Indefinite NP scope interactions with some other aspectual operators are discussed later in this chapter, in §3.9, and Chapter Four investigates in detail the scope facts of Inuktitut with respect to the conditional mood operator.

Thus, as an initial observation, it appears that we can say that there is a correlation between Case/case and scope in the Inuit languages, as summarised in (8), though I will discuss data below from Kalaallisut and Labrador Inuttut, in sections 3.8 and 3.9, respectively, that show that the correlation is not strictly precise. For now, I will proceed from the view that this is a valid generalisation, and begin by proposing a treatment of the

narrow-scope modalis-marked objects, returning then to the wide-scope absolutive- and ergative-marked arguments. First, I briefly outline and evaluate two recent approaches, forwarded by Maria Bittner and Veerle van Geenhoven, which offer differing treatments of narrow-scope indefinites in Kalaallisut.

(8)	$V_{+tr}$ :  $V_{-tr}$ : $V_{incorp}$ : $V_{+ap}$ :	External argument <sub>ERGATIVE</sub> External argument <sub>ERGATIVE</sub> Internal argument <sub>ABSOLUTIVE</sub> Argument <sub>ABSOLUTIVE</sub> Incorporated argument Internal argument <sub>MODALIS</sub>	Optional scope effects in Kalaallisut Obligatory wide scope in Inuktitut Obligatory wide scope Obligatory wide scope Obligatory narrow scope Obligatory narrow scope
-----	---	--	---

### 3.3 Bittner (1994a)

Bittner (1994a) proposes both a novel syntactic theory, subject to cross-linguistic variation, and a universal semantic theory. The former is an abbreviated version of the more detailed Bittner & Hale (1996a,1996b), while the latter is more fully developed in Bittner (1994b). I take the central goal of Bittner (1994a) to be a demonstration of the universality of both of these theories, providing a concise examination of a number of typologically distinct languages, and a highly detailed study of one language, namely Kalaallisut. As the sphere of Bittner's study is quite substantial, this section will be necessarily cursory in nature, and will outline only a small corner of her work, though it should suffice to indicate the general direction of her analysis as it pertains to the present thesis. Looking at Bittner's semantic analysis of the antipassive without knowing the syntactic assumptions

that underlie it will yield little insight. Therefore, the following subsection will very briefly introduce the novel syntactic assumptions made in Bittner's work, applying these assumptions as they pertain to the antipassive construction.

### *3.3.1 The syntax*

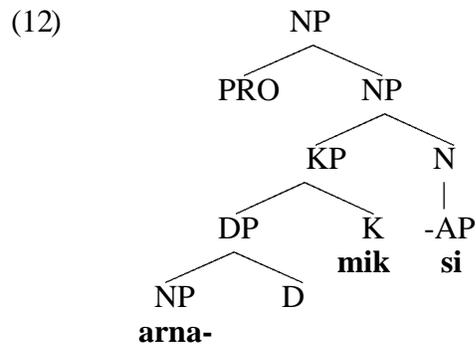
The syntactic theory of Case that Bittner (1994a) adopts is that of Bittner & Hale (1996a,1996b), incorporating a number of familiar principles of the GB framework. Where this theory differs from standard GB theory, however, is in its proposal that structural Case assignment is strictly dependent on satisfying certain configurational requirements, rather than being dependent on a certain category, such as a verb, Infl, or a preposition. Simplifying somewhat, the principal requirement for structural Case assignment in this system is what Bittner & Hale (1996a) call a Case-binding configuration, or K-configuration. This sort of configuration involves three elements: an argument to receive Case, a Case-assigning head that c-commands that argument, and a Case-competitor, a nominal element which serves to activate the head to assign its Case. The inventory of Case-competitors is argued to be subject to cross-linguistic variation, consisting of, for Kalaallisut, DP objects in transitive clauses as well as incorporated nouns. Let us now consider how this theory plays out with respect to the goal of this and the following sections: an account of the behaviour of antipassives in Inuktitut and Kalaallisut.

### 3.3.1.1 Antipassives

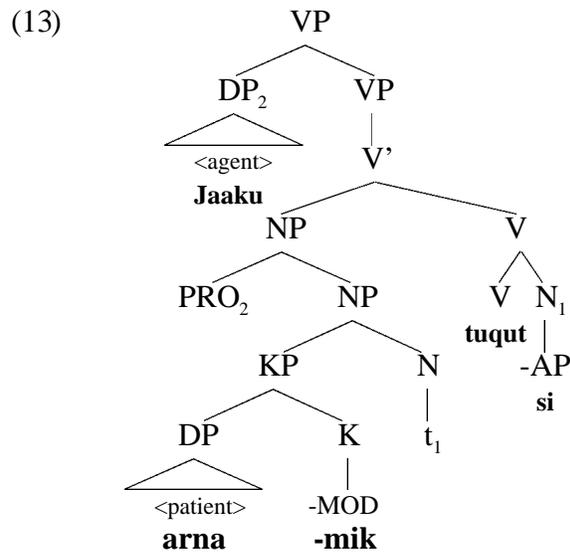
In review, consider again the sentences in (9) - (11), which were discussed in Chapter Two, where the (a) sentences are basic transitive clauses while the (b) sentences are the respective antipassive variants of the (a) sentences..

- (9) *Kalaallisut*
- a. Hansi-p inuit tuqup-p-a-a  
 H. -ERG people (ABS) kill-ind-[+tr]-3sERG.3sABS  
 ‘Hansi killed the people’
- b. Hansi inun-nik tuqut-si-v-u-q  
 H. (ABS) people-MOD kill-AP-ind-[-tr]-3sABS  
 ‘Hansi killed people’ (Bok-Bennema (1991))
- (10) *Kalaallisut*
- a. Jaaku-p arnaq tuqup-p-a-a  
 J. -ERG woman (ABS) kill-ind-[+tr]-3sERG.3sABS  
 ‘Jacob killed the woman / a particular woman’
- b. Jaaku arna-mik tuqut-si-v-u-q  
 J. (ABS) woman-MOD kill-AP-ind-[-tr]-3sABS  
 ‘Jacob killed a woman’ (Bittner (1988))
- (11) *Inuktitut*
- a. Kingmaalisaa-p atautsiq iqaluk taku-j-a-nga  
 K. -ERG one (ABS) fish (ABS) see-part-[+tr]-3sERG.3sABS  
 ‘Kingmaalisaaq saw a (particular) fish’
- b. Kingmaalisaaq atautsi-mik iqalung-mik taku-Ø-j-u-q  
 K. (ABS) one-MOD fish-MOD see-AP-part-[-tr]-3sABS  
 ‘Kingmaalisaaq saw a fish’

Bittner (1994a) supposes the D-Structure projection given in (12) for an antipassive suffix. For concreteness, let us look at Bittner’s theory applied to the sentence in (10b).



First, Bittner assumes, extending the work of Lamontagne & Travis (1987), that Case is a functional category ( $K^0$ ), and that it heads the highest phrase in the extended projection of the (lexical) category N, while D(eterminer) heads the intermediate phrase in that extended projection. The structure in (12) involves embedding what would, in the absence of the antipassive suffix, be the internal KP/DP/NP argument of a syntactically transitive verb. We also see in (12) that Bittner follows Baker (1988) in assuming the antipassive suffix to be of the syntactic category N. Bittner proposes, further, that the antipassive suffixal noun heads a small clause – the structure in (12) –, with PRO as its subject. Finally, as can be seen in (13), Bittner also adopts Baker’s analysis of the antipassive construction as a sub-species of noun-incorporation, where the incorporated noun is in fact the antipassive suffix.



The trace of the suffixal antipassive noun in (13) is in a K-configuration (see §3.3.1), there being present both a nominal element (the incorporated antipassive suffix) to activate the head (its trace) to assign its Case and an argument (the KP) c-commanded by the trace to receive Case. The underlyingly empty K in this instance, then, is realised as *modalis* (MOD) (for details of the different sorts of Case realisations, see Bittner (1992; especially Appendix 1); Bittner & Hale (1996b) provides a modified set of assumptions regarding the distribution of marked structural Cases).

### 3.3.1.2 Suffixal Verbs in Kalaallisut and Inuktitut (Part One)

There is a closed class of Inuit *suffixal* verbs which cannot stand on their own, but must attach to a secondary verb. Some Kalaallisut examples of verbs from this class are *-qqu-* ‘want’, *-suri-* ‘think’, *-tsir-* ‘wait for’, and *-nira(r)-* ‘say’, and, from Inuktitut, *-qu-* ‘tell

to, want’, *-niraq-* ‘say’, and *-nasugi-* ‘think’. Bittner discusses the behaviour of antipassivisation as it obtains with these suffixal verbs in Kalaallisut, and observes the judgements in (14) (sentences slightly simplified from Bittner (1994a:33,36,76) and (1995:69-70)).

- (14) *Kalaallisut*
- a. Aani-p Juuna atuakka-mik  
 A. -ERG J.(ABS) book-MOD  
 tigu-si-sima-nngin-nirar-p-a-a  
 get-AP-perf-neg-say-ind-[+tr]-3sERG.3sABS  
 i. # About some book, Aani said that Juuna has not got it yet  
 $\exists x [\text{book}'(x) \wedge \text{say}' [\neg \text{get}'(x)(j)](a)]$   
 ii. Aani said that Juuna has not received any book yet  
 $\text{say}' [\neg \exists x (\text{book}'(x) \wedge \text{get}'(x)(j))](a)$
- b. (\*) Aani Juuna-mut atuakka-mik  
 A. (ABS) J. -DAT book-MOD  
 tigu-sima-nngin-nira(r-s)i-v-u-q  
 get-perf-neg-say-AP-ind-[-tr]-3sABS  
 i.  $\exists x [\text{book}'(x) \wedge \text{say}' [\neg \text{get}'(x)(j)](a)]$   
 ii. #  $\text{say}' [\neg \exists x (\text{book}'(x) \wedge \text{get}'(x)(j))](a)$

In (14a), the antipassive morpheme is attached directly to the subordinate verb *tigu-* ‘get’.

As we might expect, given the scope facts illustrated in (1d), repeated here as (15),

- (15) Suli Juuna *atuakka-mik ataatsi-mik* tigu-si-sima-nngi-l-a-q  
 still J.(ABS) *book-MOD one-MOD* get-AP-perf-neg-ind-[-tr]-3sABS  
 i. Juuna hasn’t received (even) one book yet  
 ii. # There is one book Juuna hasn’t received yet

the only interpretation possible for (14a) is the one given in (ii), where the (modalis) indefinite complement of the antipassivised verb is the narrowest one. The bracketed asterisk on (14b) indicates that some Kalaallisut speakers find this sentence – that is,

where the suffixal verb *nira(r)*- ‘say’ is antipassivised – acceptable while others do not (reported in Bittner (1994a)). Speakers of North and South Baffin and Itivimmiut dialects of Inuktitut that I consulted on sentences of this type found sentences like (14b), where the antipassive immediately follows the suffixal verb, fully ungrammatical, while accepting as fully grammatical sentences like (14a). Bittner supposes an analysis as follows for these types of sentences. For both sentences in (14), she takes the view that suffixal verbs in Kalaallisut take bare VP complements. For (14a), then, the suffixal verb *nira(r)*- ‘say’ takes the VP projected by the antipassivised verb as its complement, and the derivation proceeds just as discussed for (13) above. For (14b), Bittner supposes that the entire NP complement of the embedded verb raises to the Specifier position of the matrix, suffixal, verb, with the antipassive head then incorporating into the suffixal verb, *nira(r)*- ‘say’. The V’ projection of the higher verb is then reanalysed as V proper ( $V^0$ ), since otherwise the trace of the incorporated antipassive suffix could not be governed by its antecedent, violating the ECP. Bittner proposes that those speakers who judge sentences like (14b) as grammatical accept such phrasal reanalysis, while those who judge likewise sentences as ungrammatical do not.

None of this, of course, yet says anything about the observed scope facts, but simply sets up the syntactic structures which feed Bittner’s semantic analysis, to which I now turn.

### 3.3.2 *The semantics*

It is not my intent in this section to offer anything but the most threadbare of descriptions of Bittner's (1994a,1994b) semantic analysis of the scopal properties of antipassive objects; given the breadth of Bittner's study, to do otherwise would extend the present work to unacceptable lengths, and so the reader is referred to Bittner's original work (especially, (1994b), but also (1994a)) for further details, exceptions, and clarifications.<sup>3</sup>

Underlying Bittner's technical analysis is the idea that S-Structure is the default LF,<sup>4</sup> with alternative LFs being derived by optional movement of arguments, which is to say Quantifier Raising (QR), subject to the usual constraints on movement, as discussed in May (1977,1985) and Stowell (1981), *inter alia*.<sup>5</sup> LF constituents are then outputted, via four core rules, to an *Interpreted Logical Form* (ILF), and basic translations associated with each node can then be derived, through two type-adjusting rules – (17) and (18) –, to an alternative translation of a more complex logical type. Subsequently, three filters ensure that every ILF is semantically interpretable.

Under Bittner's theory, each translation is an ordered pair, the first member of the pair,  $\varepsilon$ , being an expression of an interpreted formal language, and the second member,  $\sigma$ , a (possibly empty) set of variables. One of the two principal innovations of Bittner's

theory is the idea that a trace is interpreted as a variable whose logical type is determined by the logical type of some local constituent. In general, this determination proceeds as follows: The trace of an argument is interpreted as a variable which can serve as the argument of its sister; a trace in an adjunct position is interpreted as a variable of the correct type to serve as an intersective modifier of its sister; and a trace in a head position is interpreted as a variable of the same type as the sister of its maximal projection. For example, as we will see again when we come to incorporation structures in the following section, the trace of an incorporated head is interpreted as a variable of the same type as the sister of its maximal projection. In this sense, it acts as a place-holder for the complex head formed by the incorporation. This idea is formalised in (16). To ensure that all such variables introduced by traces are bound within the ILF, the filter in (20) holds of all ILFs.

(16) *Core Rule E(empty nodes)*

Let  $[e]_i$  be an empty node indexed  $i$ , let  $\alpha$  be a node,  $\langle \varepsilon, \sigma \rangle$  is a translation of  $\alpha$ , and let  $\tau$  and  $\rho$  be types. Moreover, let (i) (ii), or (iii) hold:

- i.  $[e]_i$  is in an ARG-position and sister to  $\alpha$ , and  $\text{TYPE}(\varepsilon) = \langle \tau, \rho \rangle$ .
- ii.  $[e]_i$  is an adjunct and sister to  $\alpha$ , and  $\langle s, \text{TYPE}(\varepsilon) \rangle = \tau$ .
- iii.  $[e]_i$  heads a complement of  $\alpha$ ,  $\alpha$  has the index  $i$ , and  $\text{TYPE}(\varepsilon) = \tau$ .

Then  $\langle v_{i,\tau}, \{v_{i,t}\} \rangle$  is a translation of  $[e]_i$ .

Where an ARG-position is an A-position or complement of a functional head, and where an A-position is the complement, specifier, or internal subject of a lexical head. (Bittner (1994a:7,26); also Bittner (1994b:66))

The second principal innovation in this theory is the proposal that  $\lambda$ -binding of stored

variables is a type-adjusting operation which derives a second translation for any constituent whose initial translation includes a stored variable. This idea is formalised in (17).

- (17) *Type-adjusting Rule B(inding)*  
 Let  $\alpha$  have a translation  $\langle \varepsilon, \sigma \rangle$ , let  $i$  be the index of either  $\alpha$  or a sister of  $\alpha$ , and let  $u_i \in \sigma$ .  
 Then  $\langle \lambda u_i [\varepsilon], \sigma - \{u_i\} \rangle$  is a translation of  $\alpha$ .  
 (Bittner (1994b:69); also Bittner (1994a:26))

In order to investigate Bittner's analysis of the antipassive construction, we will also need the type-lifting rule in (18), which she assumes. Two families of type-lifting operators are defined, though we need only introduce a subset of one of the families ( $\uparrow$ ) here, in (19).

- (18) *Type-adjusting Rule T*  
 Let  $\alpha$  and  $\beta$ , with translations  $\alpha'$  and  $\beta'$ , be sisters,  $\langle \alpha', \beta' \rangle \notin \text{Dom}(f)$ , and let  $\omega$  be a type-lifting operator such that  $\langle \alpha', \langle \omega, \emptyset \rangle \rangle \in \text{Dom}(f)$ . Then  $f(\alpha', \langle \omega, \emptyset \rangle)$  is a translation of  $\alpha$ .  
 (Bittner (1994b:71,72); also Bittner (1994a:27))

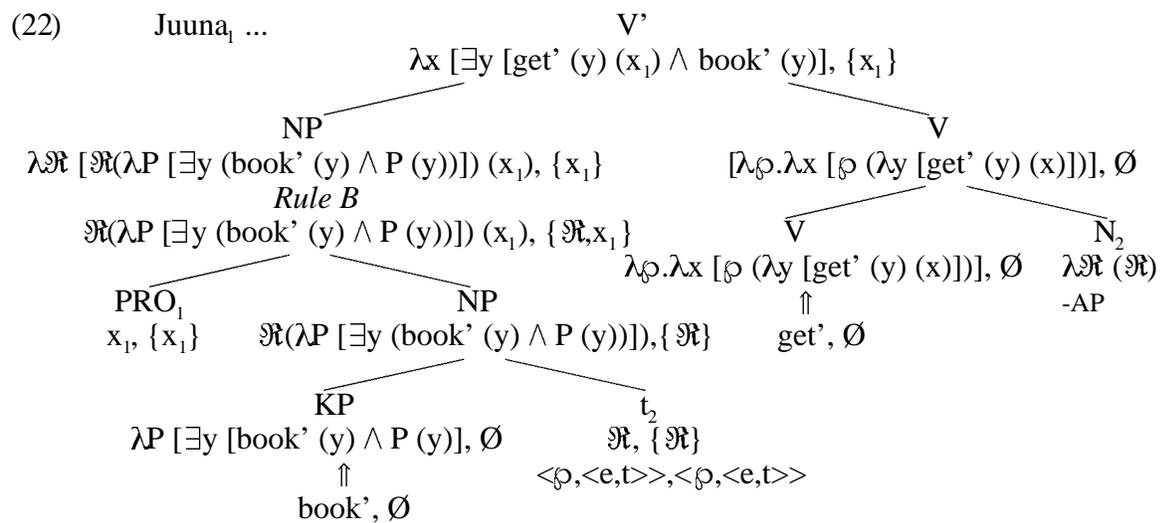
- (19)  $\uparrow$ :
- | <i>Input type</i>  | <i>Operator</i>  | <i>Output type</i>  |
|--|--|---|
| $\langle s, \langle e, t \rangle \rangle$                    | $\langle \lambda Q, \lambda P [\exists y (P(y) \wedge Q(y))], \emptyset \rangle$               | $\langle \langle s, \langle e, t \rangle \rangle, t \rangle$  |
| $\langle s, \langle e, \langle e, t \rangle \rangle \rangle$ | $\langle \lambda R, \lambda \rho, \lambda x [\rho (\lambda y [R (y) (x)])], \emptyset \rangle$ | $\langle \langle s, \langle \langle \langle s, \langle e, t \rangle \rangle, t \rangle \rangle, \langle e, t \rangle \rangle \rangle$ |

- (20) *Store Filter*  
 The root node has a translation  $\langle \varepsilon, \sigma \rangle$ , where  $\sigma = \emptyset$

So, let us examine how all this works with respect to a simple antipassive clause. Consider the sentence in (21), and the possible (partial) ILF that Bittner's theory predicts for it in

(22). I will describe her compositional analysis only up to the V' node, since further details of the proposed ILF will force me to introduce further technical machinery from Bittner's theory which is irrelevant to the current discussion.

- (21) Juuna atuakka-mik tigu-si-sima-nngi-l-a-q  
 J. (ABS) book-MOD get-AP-perf-neg-ind-[-tr]-3sABS  
 i. 'Juuna has not received a (single) book'  
 ii.# 'There is a (particular) book that Juuna hasn't received'  
 (Bittner (1994a:35))



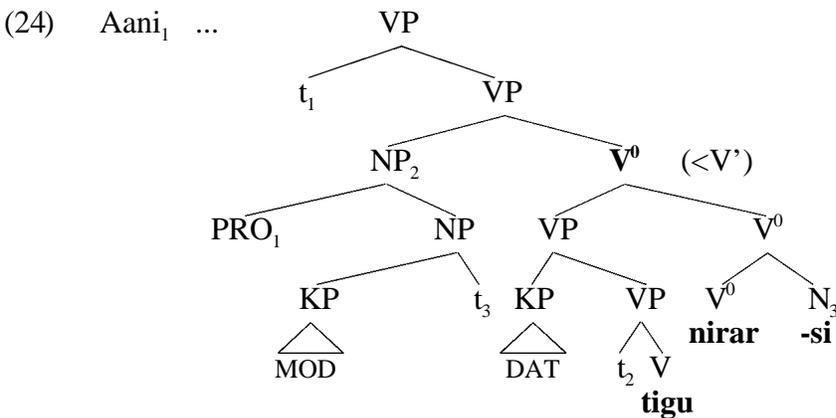
The idea here is that the antipassive nouns are interpreted as identity operators on higher order predicates. The initial translation of the incorporated antipassive noun forces the type-lifting rule  $\uparrow$  in (18) to lift the translation of the extensional verb into which the antipassive noun incorporates to the type of an intensional verb.<sup>6</sup> This translation is associated with the verbal complex, consisting of the verb and the incorporated antipassive noun, which must, Bittner argues, be interpreted as if it occupied the position of the trace

of the incorporated antipassive suffix. Consequently, the oblique object KP sister of the trace behaves as if it were the complement of an intensional verb, and will always be interpreted *in situ*.

### 3.3.2.1 *Suffixal Verbs in Kalaallisut and Inuktitut (Part Two)*

Recall from §3.3.1.2 above that the antipassive suffix may also combine with verbs embedded under suffixal verbs, as in (14a) above. Perhaps more curiously, for some Kalaallisut speakers, the antipassive may combine with a matrix suffixal verb itself. The sentence in (14b) illustrates this latter phenomenon, and it is repeated here as (23) for convenience. For the cases of combining the antipassive with an embedded verb, as in (14a), the reader is left to ascertain that Bittner's analysis described just above follows as it does there. For the other cases, however, where the antipassive combines with a suffixal verb – that is, the sentences which are accepted as fully grammatical by some Kalaallisut speakers, but rejected as fully ungrammatical by others –, Bittner supposes a different sort of S-Structure representation. The partial S-Structure representation shown in (24) is the one that Bittner (1994a) provides for the sentence in (23). Notice that I now also indicate the status that Bittner reports for a logically possible reading that I left out of the prior discussion of these constructions. That is, the interpretation indicated in (ii) in the following sentence shows the scope status of the modalis-marked indefinite with respect to the propositional operator introduced by the suffixal verb *nira(r)*- 'say'.

- (23) (\*) Aani Juuna-mut atuakka-mik tigu-sima-nngin-nira(r-s)i-v-u-q  
 A. (ABS) J. -DAT book-MOD get-perf-neg-say-AP-ind-[-tr]-3sABS  
 i. About some book, Aani said that Juuna has not received it yet  
 $\exists x [\text{book}'(x) \wedge \text{say}'[\neg \text{get}'(x)(j)](a)]$   
 ii. Aani said that there is a book which Juuna has not received yet  
 $\text{say}'[\exists x (\text{book}'(x) \wedge \neg \text{get}'(x)(j))](a)$   
 iii.# Aani said that Juuna has not received any book yet  
 $\text{say}'[\neg \exists x (\text{book}'(x) \wedge \text{get}'(x)(j))](a)$



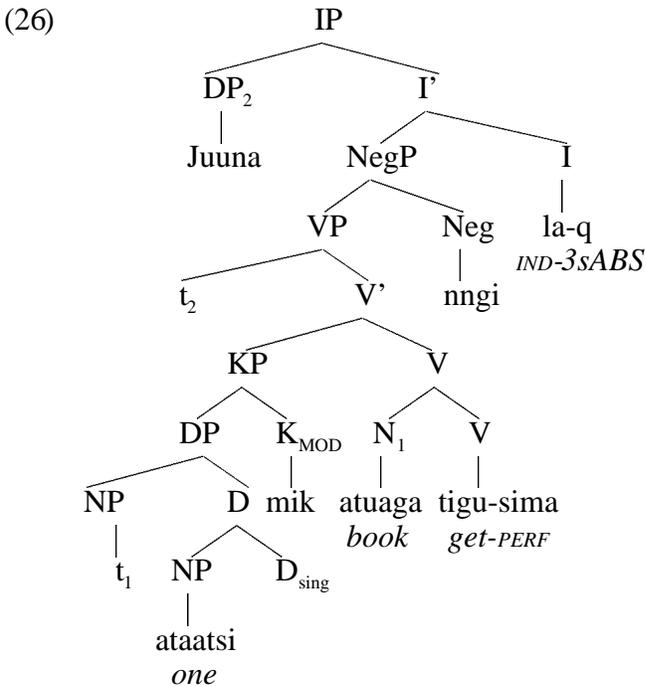
Bittner proposes that for those speakers who accept (23), and sentences like it, there is reanalysis of the V'-projection of the suffixal verb *nira(r)* 'say' as V<sup>0</sup> proper, and she suggests that the highest reanalysed-as-V<sup>0</sup> node (bolded in the above tree) of the suffixal verb is then treated, in the semantics – specifically, by the trace rule (Rule E in (16) above) –, as a simple verb, and is interpreted as if it were in the position of the trace of the incorporated antipassive suffix (t<sub>3</sub>). This captures the available interpretation indicated in (23.ii), where the modalis-marked indefinite takes scope outside the embedded negation operator, but under the propositional operator introduced by *nira(r)*- 'say'. Presumably, the widest-scope reading indicated in (23.i), can be derived via QR-ing. After introducing

this dissertation's semantic analysis of the scope behaviour of indefinites in antipassive clauses in Inuktitut and Kalaallisut, I will return to these sentences, and Bittner's analysis of them, in §3.8.

### 3.3.3 *Noun incorporation*

While Bittner offers a semantic account of the lack of wide-scope reading, with respect to negation, of antipassive objects in Kalaallisut, she provides a syntactic explanation for the lack of wide-scope reading, with respect to negation, of incorporated nouns in that language. Following Baker (1988), Bittner assumes noun incorporation (NI) to be an instance of syntactic  $X^0$ -movement of N to V, N leaving a trace in its base-generated position. Consider the sentence in (1c), repeated here as (25), for which Bittner's analysis would predict a (partial) S-Structure representation as in (26):

- (25) Suli Juuna *ataatsi-mik atuagar-si-sima-nngi-l-a-q*  
 still J.(ABS) *one-MOD book-get-perf-neg-ind-[-tr]-3sABS*  
 i. Juuna hasn't received (even) one book yet  
 ii. # There is one book Juuna hasn't received yet



In order to derive a wide-scope reading, with respect to negation, for the internal argument in (25/26), *one book*, the DP containing the trace of the incorporated noun would need to undergo QR after S-Structure. Such a derivation is blocked, Bittner argues, since the trace of the incorporated noun would move to a position where it cannot be properly governed, resulting in an Empty Category Principle (ECP, Chomsky (1981)) violation.

### 3.4 Van Geenhoven (1998a)

Van Geenhoven (1998a; also 1995) raises a number of questions for Bittner's (1994a) account of NI in Kalaallisut. For reasons of space, I will mention here only one such issue that van Geenhoven raises, the one of greatest interest for this dissertation. She

observes that there are a number of semantic properties that Kalaallisut NI constructions and bare plural configurations in West Germanic have in common. One such property, exemplified in (1c) and (2c) above, is that “incorporated” nouns in Kalaallisut and Inuktitut cannot be interpreted as taking wide scope with respect to negation. The English sentence in (27) similarly indicates that bare plural objects in West Germanic languages can take only narrow scope with respect to negation.

- (27) Marin didn't see skunks in the yard.  
 i. It is not the case that Marin saw skunks in the yard.  
 ii. # There were skunks in the yard that Marin didn't see.

Carlson (1977) argues that the impossibility of the (ii) interpretation for the sentence in (27), and others like it, derives from the fact that an existential quantifier is in fact introduced with the verb in (27). That is, as Carlson (1977:19) puts it, “the existential quantifier apparently associated with the bare plural actually arises as being part of the predicate itself”.

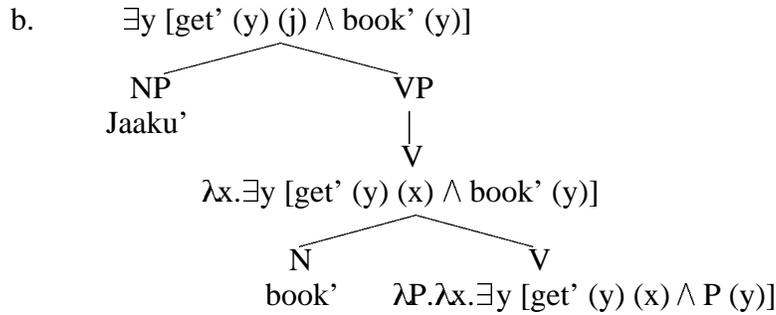
Given certain other semantic similarities between Kalaallisut NI constructions and West Germanic bare plural configurations, along with the negation facts discussed above, van Geenhoven points out that a uniform explanation of the semantic properties of the two constructions might be in order.

Van Geenhoven adopts that part of Carlson's analysis discussed above, essentially unchanged, for her account of the Kalaallisut NI construction: Incorporating verbs introduce the existential quantification of their internal argument's variable. However, van Geenhoven does not adopt Carlson's view that the bare plural (or, for van Geenhoven, the Kalaallisut incorporated noun) denotes an individual kind, but rather denotes a property. I adopt the view of antipassive objects as denoting properties below. Any operator taking scope over such a verb as is being discussed thus automatically takes scope over the semantic components of the verb's meaning. Van Geenhoven terms this as *semantic incorporation*, and represents the meaning of an incorporating verb as in (28a), and a nonincorporating verb in the usual manner, as (28b).

- (28) a.  $\lambda P.\lambda x.\exists y [\text{Verb}(y)(x) \wedge P(y)]$   
 b.  $\lambda y.\lambda x [\text{Verb}(y)(x)]$

The representation in (29b) indicates the type of semantic translation (irrelevant details slightly simplified) that she would attribute to a sentence like (29a).

- (29) a. Jaaku atuagar-si-v-u-q.  
 J. (ABS) book-get-ind-[-tr]-3sABS  
 'Jaaku got a book'



### 3.5 Some comments on the Bittner and van Geenhoven approaches

As I discussed above, Bittner's underlying theory, roughly equivalent in principle to the lines pursued in Rullmann (1995), is that LF potentially differs from S-Structure only minimally, or not at all. Subsequently, for Bittner, additional ILFs can be derived from the "default" LF by a small number of core semantic rules and type-lifting mechanisms. By this, each LF representation can and does derive one or more ILFs, and it is these ILFs which are semantically interpretable. The conception of LF that I have adopted here, the *transparent LFs* of von Stechow (1993,1996), is that each LF is semantically interpretable in an unambiguous way. No additional levels of semantic interpretation exist, so no second translations associated with node  $\alpha$  can be generated. Thus, reading an interpretation off an LF proceeds trivially.

The differences underlying these two approaches clearly revolve around a conceptual question, though it is a question that can ultimately be resolved only on the basis of

empirical data – data that comes to us only indirectly, given that the object of study is LF. However, it seems to me that the view that I adopt has already been evidenced to have promising consequences, having been shown to provide the necessary machinery in explaining certain linguistic data that otherwise prove recalcitrant to explanation (see, for example, von Stechow's (1999) study of partial *wh*-movement in German and the facts derived by Beck's (1996) Minimal Quantified Structure Constraint).

Given van Geenhoven's proposal that Kalaallisut incorporated nouns and West Germanic existential bare plurals share the same semantics, an obvious question remains open. All things being equal, one expects the distribution of these two constructions to be similar. But it is well known that existential bare plurals can also occur in subject position, as in the English sentence in (30), which is not the case for incorporated nouns in Kalaallisut.

(30) Linguists fled the building.

And, like bare plural objects, bare plural subjects can only receive narrow interpretations. The sentence in (31) can only mean that no linguists fled the building, not that some linguists did not.

(31) Linguists didn't flee the building.

All things are not, of course, equal, under the general view, due to Mithun (1984) and Baker (1988) (see also Postal (1962)), of NI configurations as involving syntactic movement of a nominal complement into a verbal head. On this approach, object incorporation is a legitimate syntactic operation, while a similar process, but instead applied to a subject, will always result in an ECP violation. Thus, the distribution of noun incorporation constructions and bare plural configurations are predicted to potentially differ, for syntactic reasons.

But van Geenhoven rejects the movement approach, arguing that noun incorporation constructions do not involve syntactic movement at all, in the relevant sense. Rather, she argues that ‘noun-incorporating’ verbs in Kalaallisut involve a Caseless object position, adjoined to V, in which incorporated nouns are base generated. That is, ‘noun incorporation’ configurations do not involve incorporation at all. Yet, the scope facts indicated in (31) lead van Geenhoven to argue, I believe rightly, that West Germanic existential bare plural subjects also involve semantic incorporation. To exclude the existence of predicative indefinite subjects in Kalaallisut, van Geenhoven suggests adoption of the idea that external arguments are not true arguments of the verb, but are introduced by an independent functional head (Kratzer (1996), following ideas of Marantz (1984), and as discussed in more detail in Chapter One). Thus, a verb cannot absorb a predicate of an “external argument”, since it is not truly one of its arguments at all. So, why does this not prevent

existential bare plural subjects from resulting in West Germanic? Van Geenhoven makes the very interesting observation that, in the Dutch examples in (32), the existential bare plural subject must be preceded by the existential *er* ‘there’, and she advances the idea that a similar occurrence of an LF existential occurs in English, as for the sentences in (30) and (31) above, and in German.

(32) *Dutch*

- a. ?\* Honden kwamen de kamer binnen  
 dogs came the room in
- b. Er kwamen honden de kamer binnen  
 there came dogs the room in  
 ‘dogs entered the room’

(van Geenhoven (1998a:177))

Van Geenhoven (1998a:178)) continues:

Details aside, the semantic contribution of this (implicit) existential is to make the VP semantically incorporating with respect to its Subject. Its semantic role is thus similar to that of the West Greenlandic antipassive morphemes.... Again, we have case of semantic incorporation which is not simply a matter of lexical redundancy. Rather, it can be triggered by a syntactic element other than the verb.

As van Geenhoven does not say, I do not know what “details” she has in mind, and I will admit that it is not entirely clear to me, aside from the West Germanic existential bare plural subjects, as to which linguistic details she might be hinting at in the final sentence of this passage (if any at all). However, the analysis that I present below shares what I

take to be the intuition behind the above extract that semantic incorporation is not restricted to obtaining solely with verbs. That is, I will argue that the lexical meaning that I propose for the antipassive is potentially semantically combinable with a number of grammatical categories, and I show that this can explain a number of additional interpretational properties of Inuktitut and Kalaallisut.

But contra van Geenhoven, I will argue below that predicative subjects *do* occur in Kalaallisut. Recall that she adopts the position, most fully developed in Kratzer (1996), that “external arguments” do not constitute arguments of the verb. This, van Geenhoven asserts, explains the absence of semantically incorporated subjects in Kalaallisut. Interestingly, I will show that it is precisely this assumption, which I have also adopted here, that allows us to explain their presence.

### ***3.6 Antipassives and indefinites in Inuktitut and Kalaallisut simple sentences***

This section contains both the proposed analysis of antipassive clauses in Inuktitut and Kalaallisut and the beginnings, pursued in subsequent sections and chapters of this dissertation, of a comprehensive analysis of indefinites in these languages that is demonstrated to require the use of choice functions. I begin by looking at simple clauses, and then turn to cases of the more complex suffixal verbs in §3.8.

### 3.6.1 *The basic sentences*

In contrast to Bittner (1994a,1994b), I do not adopt the view that antipassivisation in Inuktitut and Kalaallisut involves a type of noun incorporation into the verb. Rather, I take the view that the antipassive (morpheme) is introduced into a syntactic structure via adjunction to a verb, as in (33).<sup>7</sup>

(33) [<sub>v</sub> V ap]

Syntactically, the antipassive checks the structural Case of the verb (or the structural Case associated with the verb – see Johns (1987,1992), Campana (1992), Murasugi (1992), and Wharram (1996); also Levin & Massam (1984) and Bobaljik (1993) for a differing view). This suffices to account for the impossibility of combining the antipassive with an unaccusative predicate, as in the following sentence:

(34) *Kalaallisut*  
 \* Savi-nik ipittu-nik nugus-si-v-u-q  
 knife-MOD.p sharp-MOD be.gone-AP-ind-[-tr]-3pABS  
 cf. Savii-t ipitu-t nungup-p-u-t  
 knife-ABS.p sharp-ABS.p be.gone-ind-[-tr]-3pABS  
 ‘the sharp knives are gone’  
 (Bittner (1994a:73,74))

That is, in the sentence in (34), the antipassive has a Case-feature that needs to be checked, in the sense of Chomsky (1995), but there is no featural property of any item in the sentence that can check it, the unaccusative verb itself having no Case-feature. The

absence of such clauses as (34), then, receives a purely syntactic explanation.

We may not be able to so quickly dispense with the syntax of antipassives, however, since Bittner & Hale (1996a:30,31; page numbers refer to draft version) have discussed sentences like (35), where an unaccusative does appear to combine with the antipassive. As they observe, “[o]n that use, it introduces inchoative aspect, and has no effect on structural Case assignment.”

- (35) *Kalaallisut*
- a. Miiqqa-t piqqip-p-u-t  
 child-ABS.p be.healthy-ind-[-tr]-3pABS  
 ‘the children are healthy’
- b. Miiqqa-t piqqis-si-pp-u-t  
 child-ABS.p be.healthy-AP-ind-[-tr]3pABS  
 ‘the children are getting well’

However, it is not clear to me that the morpheme which they gloss as the antipassive in (35b) does, in fact, have that status. Baffin Inuktitut, also, has a *-si* morpheme whose only role appears to be to encode inchoative aspect, in addition to the antipassive morpheme *-si*.<sup>8</sup> That is, is it not difficult to elicit data where a *-si* occurs in which it clearly plays no role in antipassivisation. Consider the following examples:

- (36) *Inuktitut*
- a. Tuktu taku-j-a-angik  
 caribou (ABS) see-part-[+tr]-3dERG.3sABS  
 ‘those two see/saw a caribou’

- b. Tuktu taku-si-j-a-angik  
 caribou (ABS) see-SI-part-[+tr]-3dERG.3sABS  
 ‘those two (just) caught sight of a caribou’
- c. Tuktu-mik taku-Ø-j-u-t  
 caribou-MOD see-AP-part-[-tr]-3pABS  
 ‘they see/saw a caribou’
- d. Tuktu-mik taku-Ø-si-j-u-(u)uk  
 caribou-MOD see-AP-SI-part-[tr]-3dABS  
 ‘those two (just) caught sight of a caribou’

The English glosses of the sentences in (36) are the ones offered by my principal consultant in Iqaluit, and were confirmed by four other Baffin Inuktitut speakers in Iqaluit and two Itivimmiut speakers in Montréal. I will proceed from the view that this is the role (i.e., a role unrelated to antipassivisation) that the morpheme *-si* is playing in the Kalaallisut sentence in (35b), while acknowledging that the issue is worthy of further study.

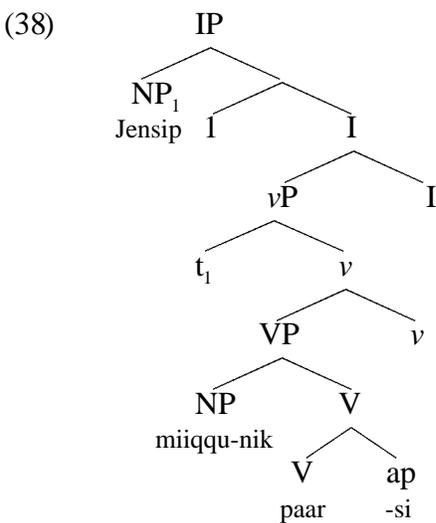
In the following, denotations are given through expressions of an extensional type logic with three basic types: individuals (e), events (s), and truth-values (t). Possible denotations are individuals, events, truth-values, and functions combined from these entities.

In illustration of this dissertation’s semantic analysis of antipassive clauses in Inuktitut and Kalaallisut, let us first take the simple antipassive clause in (37).<sup>9</sup>

- (37) *Kalaallisut*  
 Jensi miiqqu-nik paar-si-v-u-q  
 J. (ABS) child-MOD.p look.after-AP-ind-[-tr]-3sABS  
 ‘the man is looking after / taking care of children’

cf. Jensi-p miiqqa-t paar(i-v)-a-i  
 J.-ERG child-ABS.p look.after-ind-[-tr]-3sERG.3sABS  
 (Shultz-Lorentzen (1945); orthography slightly adapted)

I take a possible LF representation of (37) to be as in (38).



The lexical meaning of the predicate *paar* ‘look after’ in (37/38) is represented, as under Kratzer’s (1996) approach, as follows:<sup>10</sup>

- (39)  $\lambda x_e. \lambda e_s$  [look.after’ (x) (e)]

In (37), the verb, having translation (39), combines with the antipassive, which I propose has the lexical semantics represented in (40).

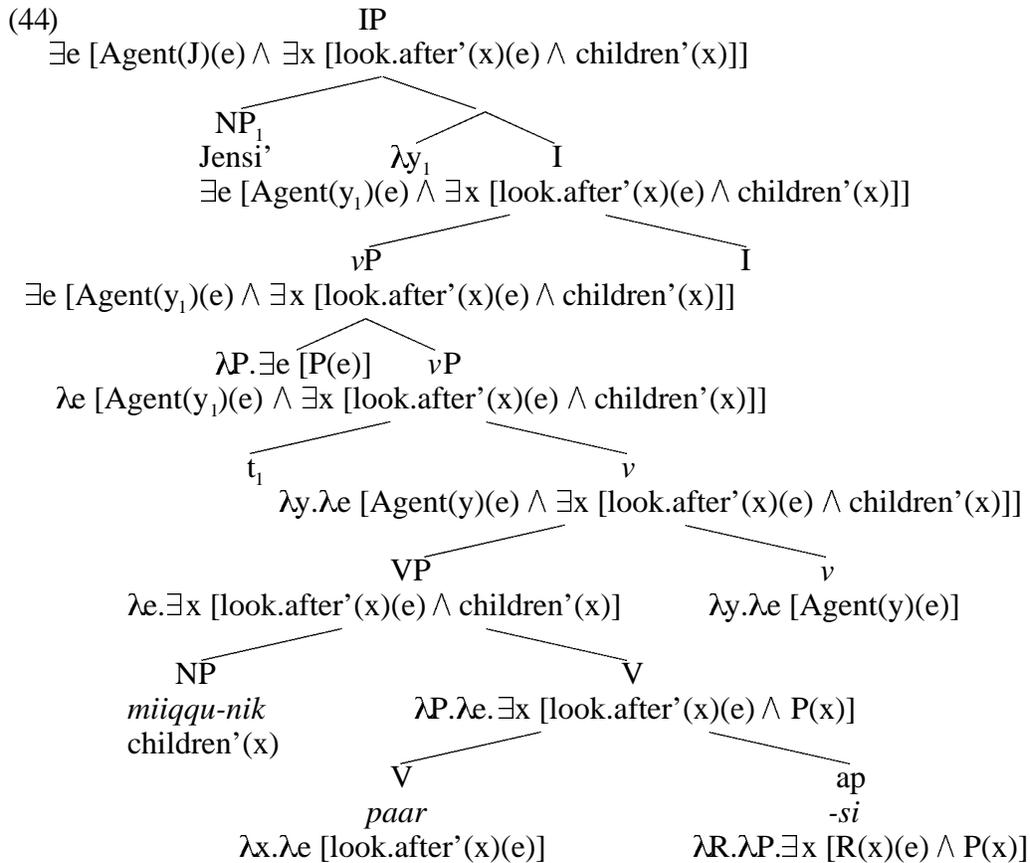
$$(40) \quad \lambda R. \lambda P. \exists x [R(x)(e) \wedge P(x)]$$

Observe that the variable of which the internal (theme) argument of the verb holds is introduced with the antipassive suffix. The nominal expression that acts as the internal argument of the verb, then, introduces only a predicate, and not a variable. The verb and the antipassive combine to give the verbal complex with the syntactic representation in (33) and the semantic translation in (41).

$$(41) \quad \lambda P. \lambda e. \exists x [\text{look.after}(x)(e) \wedge P(x)]$$

Since the existential interpretation of the internal argument is contributed by the antipassive suffix, it is contained within the verbal complex. This, of course, will be of relevance in the discussion below of the scopal properties of the objects of antipassivised verbs in Inuktitut and Kalaallisut. The verbal complex, of translation (41), needs to combine with a category denoting the property of an individual or of individuals, and I will assume, following Bittner's (1994a, 1994b) extensive consideration of the issue, that common nouns in Kalaallisut – and in Inuktitut – are always of type  $\langle e, t \rangle$ .<sup>11</sup> I am also assuming a treatment of indefinites as nominal expressions having no quantificational force of their own (Kamp (1981), Heim (1982)). The verbal complex combines with *miiqqunik* 'children', yielding (42).



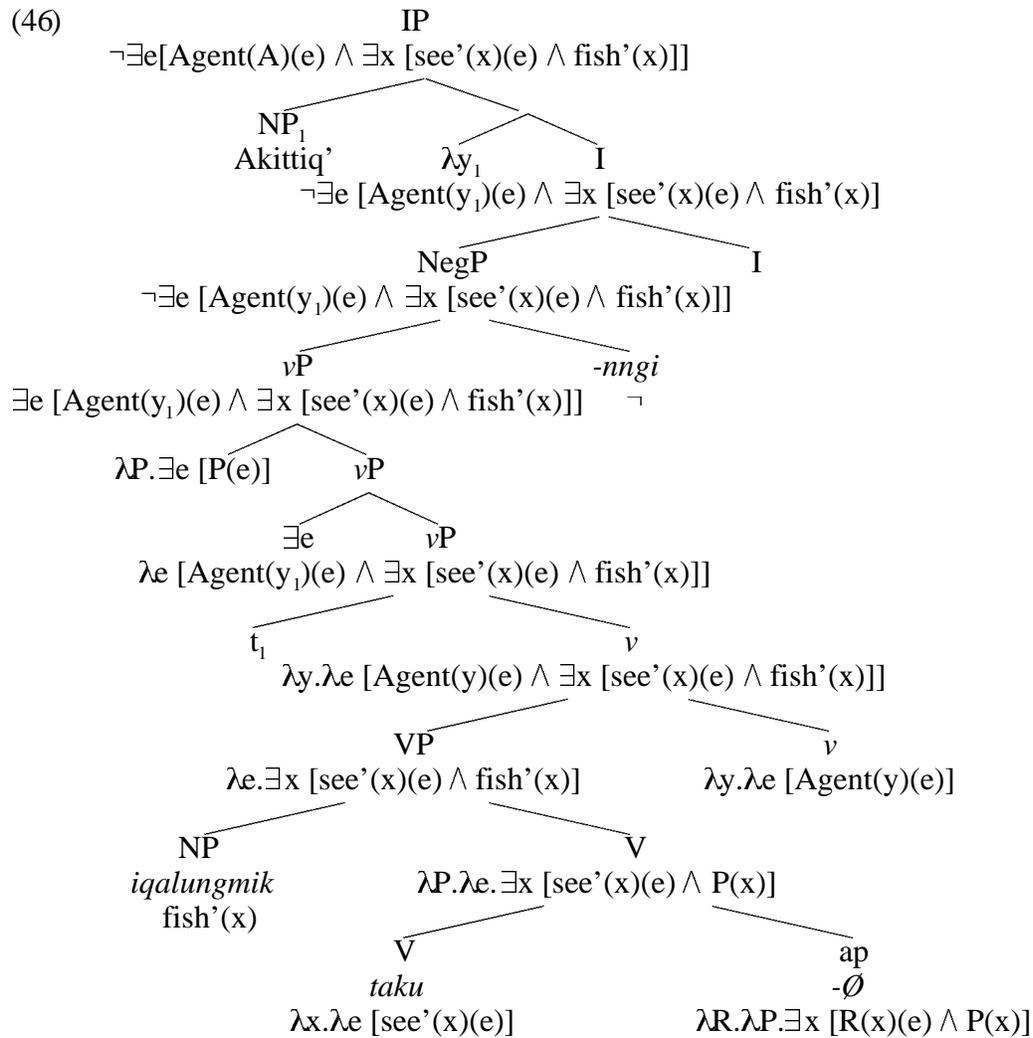


The *trace* of the internal argument of the Agent head combines with the intermediate  $v$  node by Functional Application, and we get the denotation of the  $vP$  as a property of events  $\langle s, t \rangle$ . I am assuming existential closure of the event argument at the  $vP$  level, which derives the value of the sentence as a truth-value.

Consider now an antipassive clause containing negation, like the one in (45), and the readings available for such a sentence.

- (45) *Inuktitut*  
 Akittiq iqalung-mik taku-Ø-nngit-t-u-q  
 A. (ABS) fish-MOD see-AP-neg-part-[-tr]-3sABS  
 i. Akittiq doesn't/didn't see (even) a single fish  
 ii. # There is a (particular) fish that Akittiq doesn't/didn't see
- cf.* Akitti-up iqaluk taku-nngit-t-a-nga  
 A. -ERG fish (ABS) see-neg-part-[+tr]-3sERG.3sABS  
 i. # Akittiq doesn't/didn't see (even) a single fish  
 ii. There is a (particular) fish that Akittiq doesn't/didn't see

As seen in (45), there is no available interpretation of that sentence where the antipassive object takes wide scope with respect to negation. The obligatory narrow scope of the internal argument in the sentence, of course, has an obvious account on this approach, being largely the same account that van Geenhoven proposes for the similar scopal properties of incorporated arguments (see, for example, the sentence in (1c)): The existential quantification of the verb's internal argument's variable is introduced by the antipassive suffix, part of the verbal complex. Since the verbal complex falls within the scope of the negative operator, so, too, does the existential operator that binds the variable that holds of the internal argument. A possible annotated LF of (45) is given in (46).



So far, I have considered only proper names in the subject position of antipassive clauses.

But where does this sort of analysis leave us with respect to a sentence like (47), identical to the one in (45), except that the internal argument of the Agent head is an indefinite?

- (47) *Inuktitut*
- |           |   |                             |
|-----------|---|-----------------------------|
| angut     | iqalung-mik   | taku-∅-nngit-t-u-q          |
| man (ABS) | fish-MOD  | see-AP-neg-part-[-tr]-3sABS |
| i.        | There is a man that didn't/doesn't see (even) a (single) fish |                             |
| ii.       | # No man saw/sees a (single) fish                             |                             |

All speakers of (Baffin) Inuktitut, Itivimmiut Inuktitut, and Labrador Inuttut that I have consulted on the relevant data (9, 2, and 4 speakers, respectively) systematically reject interpretations of the sort found in (47.ii) for a number of sentences based on the type found in (47). Bittner (1987,1988,1994a) reports similar judgements from the Kalaallisut speakers that she has consulted. In fact, as discussed earlier, I am aware of no piece of elicited language data from any of the languages of the Inuit that demonstrates that an indefinite argument checked for absolutive Case – whether it be the internal argument of  $V^0$  or the internal argument of  $v^0$  – can take narrow scope with respect to a negation operator in its clause. The most pressing question at this point, then, seems fairly obvious: Why is this the case?

### ***3.7 Indefinites and their interpretation(s)***

The answer to the question just posed quite obviously hinges on the answer to one of the core questions of modern linguistics, bringing us to the following very much more difficult question: How are indefinites interpreted? Since even a summary of the relevant literature (see, for example, Farkas (1981), Kamp (1981), Fodor & Sag (1982), Heim (1982), Diesing (1992), Ruys (1992), Abusch (1994), Hornstein (1995), Beghelli (1996), and van Geenhoven (1996), among numerous others) would extend the present work to encyclopaedic proportions – which no one wants to see happen –, I will take a different

tack, examining to what extent I can say that, as far as LF interpretive mechanisms for indefinites go, *semantic incorporation* is all that there is. Let me explain: In the previous section, I took the view that the impossibility of greater-than-narrowest-scope readings of indefinite antipassive objects – and incorporated objects; not discussed, but analysis adopted from van Geenhoven – in Inuktitut and Kalaallisut are best explained by recourse to the so-called semantic incorporation process of van Geenhoven (1995,1998a). The idea that I will pursue in the remainder of of this dissertation is that this is the only interpretive mechanism involving (existential) closure that is available. Clearly, I have a long way to go in establishing this claim. So far, I have looked at only a very few indefinites that take obligatory narrowest-scope. Wide-scope indefinites, narrow-scope indefinites not in object-position, and essentially everything between, which is to say any indefinite having an ambiguous scope reading, remain to be considered.

I must begin somewhere, so I will assume the three plausible hypotheses in (48), as from the beginning of Chapter One.

- (48) A: All indefinites are non-quantificational expressions.  
 B: All indefinites denote a property.  
 C: Indefinites may freely be combined with a(n) (possibly phonetically-null) indefinite article denoting a choice function. This choice function is left free, and its interpretation is contextually determined.

There is nothing particularly novel about the assumptions in (48) – (A) is standard fare

from DRT (Kamp (1981), Heim (1982)), and has been adopted more recently in Abusch (1994); (B) is the position that van Geenhoven (1998a) takes; and (C) is essentially the position of Kratzer (1998), and as discussed in Chapter One. The only thing that might be said to be novel about (48) is that I am assuming everything in it.

Since it is the assumption in (48.C) that is going to provide us with the machinery that will allow us to derive the interpretations of any greater-than-narrowest-scope indefinites, to which I now turn my attention, let us briefly inspect how this would work in Inuktitut/Kalaallisut. The proposal for Inuktitut/Kalaallisut, given that these languages have no overt indefinite articles, is that indefinites may optionally combine with a phonetically-null indefinite article denoting a choice function that is contextually determined. If an indefinite, say the internal argument of the verb in (47), *iqalungmik* ‘fish’, combines with this indefinite article, the indefinite NP will be of type  $e$ , of translation (49a), composed of (49b and c).

- (49) a.  $(CH)f_x [\text{fish}'(x)]_{\langle e \rangle}$   
 b.  $\text{fish}'(x)_{\langle e, t \rangle}$   
 c.  $(CH)f_{\langle \langle e, t \rangle, e \rangle}$

- (50)  $(CH)f_x [\text{fish}'(x)]_{\langle e \rangle}$   
 $(CH)f_x_{\langle \langle e, t \rangle, e \rangle} \quad \text{fish}'(x)_{\langle e, t \rangle}$

As a start, it should be noted that this sort of treatment of Inuktitut and Kalaallisut

indefinite NPs has little to say about the scopal properties of the internal argument of an antipassivised verb, since the variable of which it holds is existentially quantified within the verbal complex itself. Combining such an indefinite NP with an indefinite article denoting a choice function will always result in an uninterpretable structure. Hence, only a narrow scope reading is possible for the object in these instances. Looking at the verb's internal argument in (47), then, is not going to tell us much of significance. We must look elsewhere for elucidation.

At the beginning of this chapter, I outlined a number of facts about the scope interpretational properties of indefinites in Inuktitut and Kalaallisut. There, it was shown that incorporated objects and objects of antipassivised verbs obligatorily take narrow scope with respect to some sentential operator. The latter facts received a treatment in the section that precedes this one. That analysis was based on van Geenhoven's notion of semantic incorporation, and I generally adopt her account of the obligatory narrow scope interpretation of incorporated nouns.<sup>12</sup> At this point, in a superficial sense, I am two-fifths of the way towards an explanation for all the scope facts that the Kalaallisut sentences in (1) and the Inuktitut sentences in (2) present. Remaining to be explained are the obligatory wide-scope interpretations of absolutes – both theme and agent arguments – and the obligatory/optional wide-scope interpretations of ergatives in Inuktitut/Kalaallisut. Each of these types of arguments will now be considered, in turn.

### 3.7.1 Absolute arguments of V

The Inuktitut sentence in (2a), repeated here as (51), indicates that an absolute argument must take wide scope with respect to some sentential operator within its clause; in this case, the negation operator.

- (51) *Inuktitut*  
 Taqqialu-up *tuktu* taku-lau-nngit-t-a-(ng)a  
 T. -ERG *caribou (ABS)* see-past-neg-part-[+tr]-3sERG.3sABS  
 i. # Taqqialuk didn't see a (single) caribou  
 ii. There is a (certain) caribou Taqqialuk didn't see

I have suggested that indefinites in Inuktitut and Kalaallisut may be freely combined with a phonetically-null indefinite article denoting a choice function of the sort proposed in Kratzer (1998), and that any greater-than-narrowest scope readings for indefinites must be derived via such a choice function mechanism. This is apparently the only possibility open to the absolute object in (51), given its obligatory wide-scope interpretation, and we would like to know why.

Suppose that the option to combine the indefinite with a choice function is taken. The NP node that combines with the transitive verb will be of type  $e$ , combinable with the type of the verb;  $\langle e, \langle s, t \rangle \rangle$ . The indefinite NP is interpreted through the contextually determined choice function, which gives the effect of a higher scope quantificational

reading for the indefinite NP, even though there is no quantificational interpretation at all; *pseudoscope*, using Kratzer's more descriptive terminology.

On the other hand, we need not go far to see that if the second option available to indefinites in these languages – not to combine with a choice function-denoting article – is taken, then the variable that holds of the verb's internal argument, *tuktu* 'caribou' in (51), remains uninterpreted. There is no (null) antipassive morpheme present, indicated by the syntactic transitivity of the verb, so the variable can not be existentially closed in that manner. Moreover, I am maintaining that the process of semantic incorporation is the only mechanism available at LF to existentially quantify a variable that holds of an indefinite. A contextually determined choice function interpretation, then, is the only option for absolutive objects, and their obligatory wide-scope reading is correctly predicted.

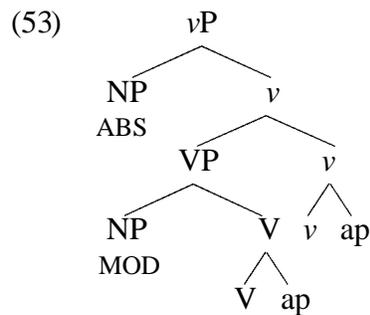
### 3.7.2 *Absolutive arguments of $\gamma$*

Let us now consider the absolutive indefinite agentive argument NPs of, for example, incorporating verbs or antipassivised verbs. Recall that for a sentence like (52), speakers uniformly reject an interpretation of the absolutive indefinite as having scope under negation.

- (52) *Inuktitut*  
 angut            iqalung-mik    taku-Ø-nngit-t-u-q  
 man (ABS)    fish-MOD        see-AP-neg-part-[-tr]-3sABS  
 i.    There is a man that didn't/doesn't see (even) a (single) single fish  
 ii. # No man saw/sees a (single) fish

This is as predicted by the current analysis, roughly for the same reasons as outlined just above for absolutive objects. Again, if the absolutive indefinite combines with a choice function-denoting indefinite article, the value of that function is supplied by the context, and a widest-scope reading emerges. The difference here from the above is that the argument in question is not an argument of the verb, but rather of the Agent (*v*) head. This makes no difference for the choice function analysis, but it may in an explanation of why semantic incorporation is not possible for the absolutive argument in (52). I will argue in the following section that adjunction of the antipassive to  $v^0$  is, in fact, possible in Kalaallisut, and serves to explain the ambiguous scope properties of ergative indefinites in that language. I will set aside the details of why I take adjunction of the antipassive to a head other than *V* to be possible until then; for now, it will suffice to show why it *cannot* happen in (52).

The reasons are purely syntactic in nature: The antipassive morpheme checks a Case-feature. Since I am building the process of semantic incorporation into the lexical semantics of the antipassive, we would need to assume the partial syntactic structure in (53) for the sentence in (52).



As I am locating the Case-feature generally associated with the verb in  $v^0$  (Kratzer (1996); also implicit, I think, in Chomsky (1995)), the antipassive adjoined to that head would check the ergative Case-feature. Since, in the sentence above, the internal argument of the  $v$  head, *angut* ‘man’, is clearly the element that is licensed as absolutive (it is morphologically unmarked and it triggers absolutive agreement on the verb<sup>13</sup>), the Case-feature of the antipassive adjoined to  $V^0$  is left unchecked. Following standard assumptions (e.g., Chomsky (1995)), I take Case-features to be uninterpretable at the semantic interface. Thus, this sort of derivation is excluded, as it provides an illegitimate LF object.

### 3.7.3 Ergatives

Turning now to ergative indefinite NPs, it would seem that I have, in the preceding analysis of obligatory wide-(pseudo)scope absolutive indefinite external argument NPs, abandoned hope of a possible account of the optional scope extensions of the ergative in Kalaallisut. Recall the facts from (1) and (2) above: In Kalaallisut, ergative indefinites

can take scope above or under a sentential operator like negation – see the available interpretations reported to be available for (54a). On the other hand, a narrow-scope reading does not appear to be possible for ergative indefinites in Inuktitut – of 15 speakers consulted, each strongly rejected a narrow-scope interpretation of the ergative (and see also Johns (1997) for comments to the same effect for consultants with whom she has worked). An example of the relevant sort is shown in (54b).

- (54) a. *Kalaallisut*  
 Suli *atuartu-p ataatsi-p Juuna*  
 still *student-ERG one-ERG J. (ABS)*  
*uqaluqatigi-sima-nngi-l-a-a*  
 talk.with-perf-neg-ind-[+tr]-3sERG.3sABS  
 i. No student has talked with Juuna yet  
 ii. There is one student who hasn't talked with Juuna yet
- b. *Inuktitut*  
 Ilinniaqti-up *Maliktaq*  
 student-ERG *M. (ABS)*  
*uqallaqatigi-lau-nngit-t-a-(ng)a*  
 talk.with-past-neg-part-ind-[+tr]-3sERG.3sABS  
 i. # No student talked with Maliktaq  
 ii. There is a (certain) student who didn't talk with Maliktaq

The wide-scope reading is easily derived. It obtains via a contextually determined choice function mechanism, in precisely the same way that an absolutive indefinite acting as the internal argument of an Agent head does, as just discussed above. So what derives the narrow-scope reading for the indefinite in the Kalaallisut sentence in (54a), illustrated by paraphrase (i)? And what prevents that reading for the Inuktitut sentence in (54b)? I will need to argue that this reading comes about by semantic incorporation, since I am maintaining

that this is the only mechanism available which can derive a narrow-scope interpretation for an indefinite. But the assumptions under which I am working dictate that an ergative indefinite is not an argument of the verb; it is an argument of  $v^0$ , the Agent head. That said, the antipassive, a trigger of semantic incorporation, must be adjoined to  $v^0$ , rather than  $V^0$ , in order to derive the optional narrow-scope interpretation of the indefinite in (54a). Let us consider how this would work.

Given the translation of  $v^0$  as  $\lambda x.\lambda e [Agent(x)(e)]$ , the combination of the antipassive, of translation  $\lambda R.\lambda P.\exists x [R(x)(e) \wedge P(x)]$ , with  $v^0$ , to which it is adjoined, results in the complex syntactic head  $[_v v AP]$ , of translation  $\lambda P.\lambda e.\exists x [Agent(x)(e) \wedge P(x)]$ . An element such as this, of type  $\langle\langle e,t\rangle, \langle s,t\rangle\rangle$ , cannot participate in the conjunction operation of Event Identification, needed to chain together the various conditions for the event described by a sentence, as it stands. We must make the indicated addition to this compositional principle:

(55) *Event Identification*

i.	f $\langle e, \langle s, t \rangle \rangle$	g $\langle s, t \rangle$	→	h $\langle e, \langle s, t \rangle \rangle$ $\lambda x.\lambda e [f(x)(e) \wedge g(e)]$
	<i>or</i>			
ii.	$\langle\langle e, t \rangle, \langle s, t \rangle\rangle$	$\langle s, t \rangle$	→	$\langle\langle e, t \rangle, \langle s, t \rangle\rangle$ $\lambda P.\lambda e [f(P)(e) \wedge g(e)]$

We now have the machinery by which to combine an Agent head which combines with an antipassive with its VP complement, so let us examine the particular details of the sentence in (54a), looking to derive the optional narrow-scope reading of the ergative indefinite. In (56), I indicate how the Event Identification operation would apply.

$$\begin{array}{ccc}
 (56) & \begin{array}{c} f \\ \langle\langle e,t\rangle,\langle s,t\rangle\rangle \\ \lambda P.\lambda e.\exists x [Agent(x)(e) \wedge P(x)] \end{array} & \begin{array}{c} g \\ \langle s,t\rangle \\ \lambda e [talk.with' (J)(e)] \end{array} & \rightarrow \\
 & & \begin{array}{c} h \\ \langle\langle e,t\rangle,\langle s,t\rangle\rangle \\ \lambda P.\lambda e [Agent(x)(e) \wedge P(x)] \wedge [talk.with' (J)(e)] \end{array} &
 \end{array}$$

I will leave it to the reader to ascertain that the denotation of the sentence can be calculated as a truth-value, the compositional procedure following roughly along the same lines as in the annotated LF in (46) for the sentence in (45). Just as semantic incorporation of an object “into” a verb+antipassive results in that argument having its scope determined by the position of that complex head, so too does semantic incorporation of a subject “into” an Agent+antipassive head.

Still, under the analysis presented here, we do not expect the availability of a narrow-scope agentive indefinite and ergative Case to co-occur. I proposed that the syntactic properties of the antipassive morpheme include the ability to check a Case-feature. If adjoined to  $v^0$ , then, it should check that head’s ergative Case-feature. Yet the Kalaallisut

sentence in (54a) indicates that that prediction is wrong. We could say that the antipassive morpheme that adjoins to  $v^0$  differs slightly from the one that adjoins to  $V^0$ , though only in its syntactic properties, such that only the one that adjoins to  $V^0$  serves to check Case. That might be the correct way of looking at this, but it would leave unexplained the impossibility of narrow-scope readings for absolutive agentive indefinites, as described in the immediately preceding section. What I would like to do is propose an alternative that lets us maintain that it is the same antipassive morpheme, identical in its syntactic and semantic properties, that adjoins to both the  $V$  and the  $v$  heads, and which lets us keep the syntactic analysis from the preceding section which ruled out semantic incorporation for absolutive agentive indefinites.

The antipassive morpheme is clearly nominal in a number of ways, not the least of which is the fact that it bears a structural Case-feature. Adjunction of this morpheme to  $v^0$  would place the internal argument of  $v^0$  – in [Spec, $v$ ] – in the canonical configuration to receive (or be checked for) genitive Case. In Kalaallisut (and Inuktitut), ergative and genitive Case are identically morphologically realised. As such, I will suppose that the prediction that ergative Case cannot obtain on an narrow-scope indefinite does turn out to be correct: Under the wide-scope reading of the indefinite in (54a), the indefinite bears ergative Case. Under the narrow-scope reading, it bears genitive Case.

Observe that the Case-theoretic objections which prevent semantic incorporation of an absolutive indefinite by an Agent head do not apply here: All Case-features are checked. So, we have an analysis involving adjunction of the antipassive to  $v^0$  that is able to explain the optional narrow-scope reading of superficially “ergative” indefinites in Kalaallisut. But I have not yet considered why such adjunction should be disallowed in Inuktitut. More pointedly, why are narrow-scope interpretations for “ergative” indefinites not possible in Inuktitut, while they are reported to be available in Kalaallisut? Since I have no real explanation for this fact, I am inclined to simply offer a stipulation at this point, with the hope that further research will provide some clues as to its underlying nature: Adjunction of the antipassive to  $v^0$  is allowed in Kalaallisut, disallowed in Inuktitut.

### ***3.8 Antipassives revisited: Intensionality and cross-linguistic variation***

As the reader may by now have surmised, my proposal regarding the denotation of the antipassive suffix in Inuktitut and Kalaallisut is apparently incompatible with the possibility, for some Kalaallisut speakers, of combining the suffix with a verb taking a clause as its internal argument. Recall from the discussion in §3.3 that Bittner (1994a) (see also Bittner & Hale (1996b)) proposes that these cases involve reanalysis of a  $V'$  projection of the matrix verb as  $V$  proper. Bittner’s proposal is that those Kalaallisut speakers who accept as grammatical a sentence like the one in (57) accept such reanalysis, while those

speakers who do not accept such reanalysis judge (57) to be fully ungrammatical.

- (57) (\*) Aani            miiqqa-nik        Juuna-mut    paari-suri-*nnip-p-u-q*  
 A.(ABS) child-MOD.p    J.-DAT        look.after-think-AP-ind-[-tr]-3sABS  
 ‘Aani thinks that Juuna is looking after the children’

That said, an analysis like the one found here – one avoiding recourse to type-lifting operations – does not benefit from Bittner’s suggestion, since the denotation of the matrix verbal complex, containing the antipassive suffix, can never combine with a clause. Moreover, it is not at all clear to me why some speakers would accept such reanalysis while others would not.

As an alternative analysis, what I propose is that the antipassive in these cases is a generalised use of the morpheme. It is generalised in the sense that it is appearing in its canonical syntactic or morphological position as immediately right-adjacent to a verb. But its denotation is incompatible with that position, so speakers who have made this syntactic generalisation must reinterpret the lexical semantics of the morpheme accordingly. While the syntactic properties of the morpheme as it occurs in this position remain the same as in its canonical use (i.e., it checks a Case-feature), it is reinterpreted as having no semantic content. In all of the data that have been considered up until this point, it has been clear that the presence versus absence of an antipassive morpheme has semantic consequences. But there is evidence from the scopal properties of indefinites in these

sentences that an antipassive adjoined to a suffixal verb makes no semantic contribution to the denotation of the sentence. I consider that evidence now.

### 3.8.1 Suffixal verbs in *Kalaallisut* and *Inuktitut* (Part Three)

The following sentences are from Schultz-Lorentzen (1945):

#### (58) *Kalaallisut*

- a. Anguti-p miiqqat paar(i-v)-a-i.  
man-ERG child-ABS.p look.after-ind-[+tr]-3sERG.3sABS  
'the man is looking after the children'
- b. Angut miiqqa-nik paar-si-v-u-q.  
man(ABS) child-MOD.p look.after-AP-ind-[-tr]-3sABS  
'the man is looking after children'

Now observe the behaviour of very similar sentences when they are embedded under a suffixal verb like *sur(i)*- 'think':

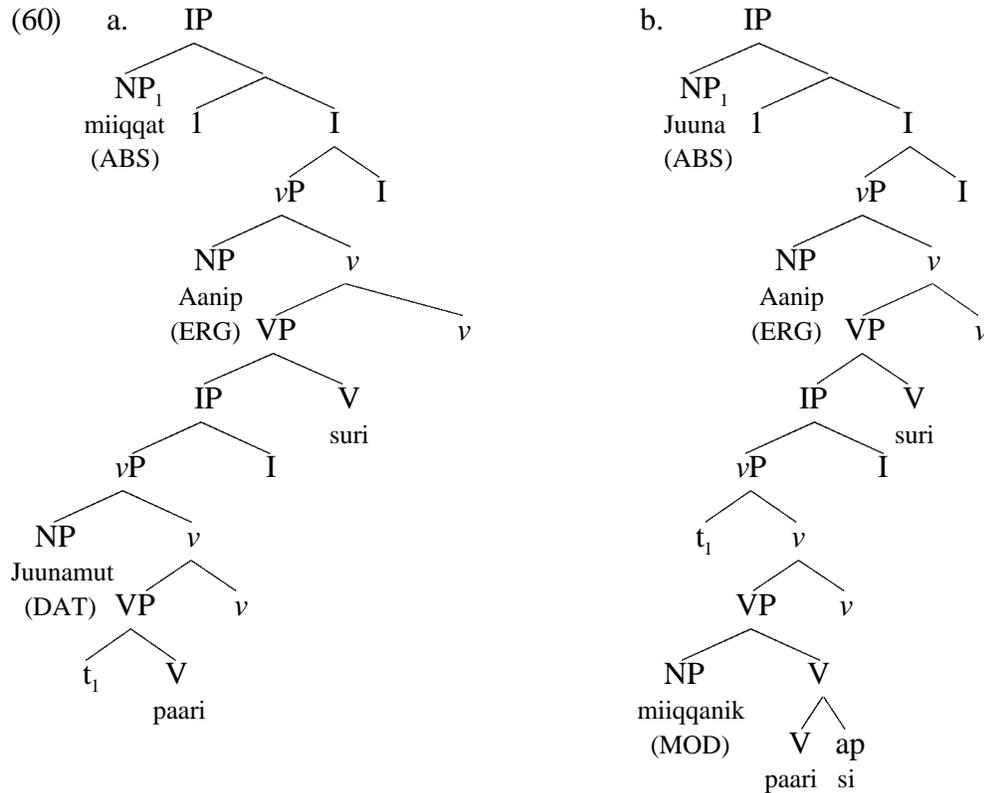
#### (59) *Kalaallisut*

- a. Aani-p miiqqa-t Juuna-mut paari-su(i-v)-a-i.  
A.-ERG child-ABS.p J.-DAT look.after-think-ind-[+tr]-3sERG.3pABS  
'Aani thinks that Juuna is looking after the children'
- b. Aani-p Juuna miiqqa-nik paar-si-sur(i-v)-a-a.  
A.-ERG J.(ABS) child-MOD.p look.after-AP-think-[+tr]-3sERG.3sABS  
'Aani thinks that Juuna is looking after children'
- c. (\*) Aani miiqqa-nik Juuna-mut paari-suri-nnip-p-u-q.  
A.(ABS) child.MOD.p J.-DAT look.after-think-AP-ind-[-tr]-3sABS  
'Aani thinks that Juuna is looking after the children'

(Bittner (1994a:76))

In the sentence in (59b), the antipassive suffix immediately follows the embedded verb.

This sort of sentence is, to my knowledge, accepted as grammatical by all Inuktitut and Kalaallisut speakers. The matrix suffixal verb maintains its syntactic transitivity, and ergative Case is checked on its subject. As the embedded verb is antipassivised, the lower  $v$  head loses its ability to check any Case, and the agentive argument raises to [Spec,I] of the matrix clause to be checked for absolutive, while the internal argument of the verb must be expressed in the oblique modalis case. In (59c), the sort of the sentence accepted by only some Kalaallisut speakers, and not possible in at least Baffin Inuktitut, it is the matrix suffixal verb that undergoes (generalised) antipassivisation, thereby losing its syntactic transitivity. The agentive argument of the lower  $v^0$  is checked for Case by that head – apparently structural dative Case, rather than ergative, is checked by  $v^0$  when it appears in this configuration, as also indicated in (59a) – and no structural Case-checkers remain, so the internal argument of the lower verb must, as in (59b), be expressed in the oblique modalis case. Summarising, I suppose the possible LF representations in (60a and b) for the sentences in (59a and b), respectively (ignoring verbal inflection and verb-movement, which would only serve to complicate the trees).<sup>14</sup>



Given the analysis so far, it is clear what sort of reading we expect for the indefinite *miiqqanik* ‘children’ in (59b/60b). Since the lower verb is antipassivised, the existential quantification of the internal argument’s variable is introduced within the verbal complex. Thus, only a narrowest-scope reading is predicted. And, as discussed above in §3.3 in terms of Bittner’s (1994a) analysis, this is the only interpretation available for such an indefinite. The modalis-marked indefinite in (61) can only be understood as taking scope below both the intensional operator introduced by *nirar-* ‘say’ and the negation operator in the embedded clause.

(61) *Kalaallisut*

Aani-p Juuna atuakka-mik tigu-si-sima-nngin-nirar-p-a-a

A.-ERG J.(ABS) book-MOD get-AP-perf-neg-say-ind[+tr]-3sERG.3sABS

i. # About some book, Aani said that Juuna has not received it yet

 $\exists x [\text{book}'(x) \wedge \text{say}'[\neg \text{get}'(x)(j)](a)]$ 

ii. # Aani said that there is a book which Juuna has not received yet

say'  $[\exists x (\text{book}'(x) \wedge \neg \text{get}'(x)(j))](a)$ 

iii. Aani said that Juuna has not received any book yet

say'  $[\neg \exists x (\text{book}'(x) \wedge \text{get}'(x)(j))](a)$ 

Not so clear is what interpretive mechanism(s) might be expected to be available for the modalis-marked indefinite in (59c), where the generalised antipassive is adjoined to the suffixal verb. We see the available scope readings of such an indefinite in (62), with respect to a negation and intensional operator.

(62) *Kalaallisut*

(\*) Aani Juuna-mut atuakka-mik tigu-sima-nngin-nira(r-s)i-v-u-q

A. (ABS) J. -DAT book-MOD get-perf-neg-say-AP-ind[-tr]-3sABS

i. About some book, Aani said that Juuna has not received it yet

 $\exists x [\text{book}'(x) \wedge \text{say}'[\neg \text{get}'(x)(j)](a)]$ 

ii. Aani said that there is a book which Juuna has not received yet

say'  $[\exists x (\text{book}'(x) \wedge \neg \text{get}'(x)(j))](a)$ 

iii.# Aani said that Juuna has not received any book yet

say'  $[\neg \exists x (\text{book}'(x) \wedge \text{get}'(x)(j))](a)$ 

The (i) reading indicated in (62), at least, is fully predicted. The modalis-marked indefinite is free to combine with a contextually determined choice function-denoting indefinite article, giving that indefinite the appearance of widest-scope. This is the first case that we have seen where a modalis-marked indefinite is not restricted to a narrowest-scope interpretation. But it is predicted by the current analysis, since no antipassivisation

obtains on the lower verb that takes the indefinite as its internal argument. We see, then, that the appearance of modalis case is not deeply tied to an obligatory narrow-scope interpretation, though syntactic aspects of the grammar generally conspire to give the appearance that it is.

Less apparent is how the intermediate scope reading of the indefinite in (62) – the (ii) reading, where the indefinite takes scope outside the negation operator, but under the intensional operator – might be derived. Unfortunately, this must remain an unanswered question in this dissertation, as no straightforward account is forthcoming, and I will need to defer further analysis until such time that more relevant Kalaallisut data come to light. However, recall that these types of sentences are not accepted as grammatical by all Kalaallisut speakers

### ***3.9 Not again! Preliminary comments on “scope” and certain adverbial operators***

Thus far, the scope facts that have been discussed for Inuktitut and Kalaallisut indefinites have largely involved unambiguous readings. For example, objects of antipassivised verbs have been observed to take only a narrow-scope reading with respect to some sentential operator, while the only interpretation available for the object of a syntactically transitive verb is a wide-scope one. For consistency, I have concentrated on the scope interpretation of indefinites with respect to simple negation. However, speakers’ judgements

about the scope of indefinites with respect to other operators like conditional, imperative, and interrogative mood operators, as introduced in §3.2, follow the same pattern that we have seen for negation, and are quite strong. However, Bittner (1987,1988) has reported for Kalaallisut that some objects of antipassivised verbs may optionally take apparent scope over certain aspectual suffixes. Consider, for example, the sentences in (63), from Bittner (1988), containing the frequentative aspectual marker *-sar/-tar-*, and the interpretations that Bittner indicates that they allow.

- (63) *Kalaallisut*
- a. Jaaku-p arnaq franskig  
 J. -ERG woman(ABS) French(ABS)  
 angirlaat-**tar**-p-a-a  
 bring.home-**rep**-ind-[+tr]-3sERG.3sABS  
 i. # Jaaku often brings home a French woman (different woman)  
 ii. Jaaku often brings home a French woman (same woman)
- b. Jaaku arna-mik franskig-mik angirlaa-ssi-**sar**-p-u-q  
 J. (ABS) woman-MOD French-MOD bring.home-AP-**rep**-ind-[-tr]-3sABS  
 i. Jaaku often brings home a French woman (different woman)  
 ii. Jaaku often brings home a French woman (same woman)

Van Geenhoven (2001) has taken up this question, observing that Kalaallisut speakers with whom she has worked prefer an apparent narrow-scope reading for indefinites, with respect to a marker of frequency, only when plural. Consider (64).



like those indicated in reading (i) only marginally, none entirely rejected it in that context. Thus, the judgements that Inuktitut speakers have provided me with, as far as they go, seem to at least roughly match up with the Kalaallisut facts reported by van Geenhoven.

Van Geenhoven's (2001) take on these facts involves analysis of the frequency morphemes as temporal pluractional markers (Lasersohn (1995)). While I think that something along the lines of what van Geenhoven pursues is correct, the reader is directed to those works, and van Geenhoven (2000a), as I will not go through her analysis here. I do not, as it seems fairly clear to me that speakers' intuitions about available interpretations for the sentences in this section involve more than simply determining the scope of indefinites. On the analysis developed here, I can only vaguely point to some type of interaction between the *Event Identification* operation of Kratzer (1996), which chains together the various conditions for the event described by a sentence, and the semantic contribution of the pluractional marker, and that the issue is partially one of distribution over those conditions. That said, however the relationship between pluralities in the nominal domain and those in the verbal domain should be properly formalised, thus capturing the ways in which they interact with one another, I will leave to those more qualified than I. My point here is that I do not think that it bears directly on the question of how indefinites in these languages, or any language, receive their basic interpretations, which is the principal focus of this work. Consequently, while I find the issue quite

interesting, I will set it aside for the purposes of this dissertation.

### ***3.10 Passive ambiguities and other leftovers***

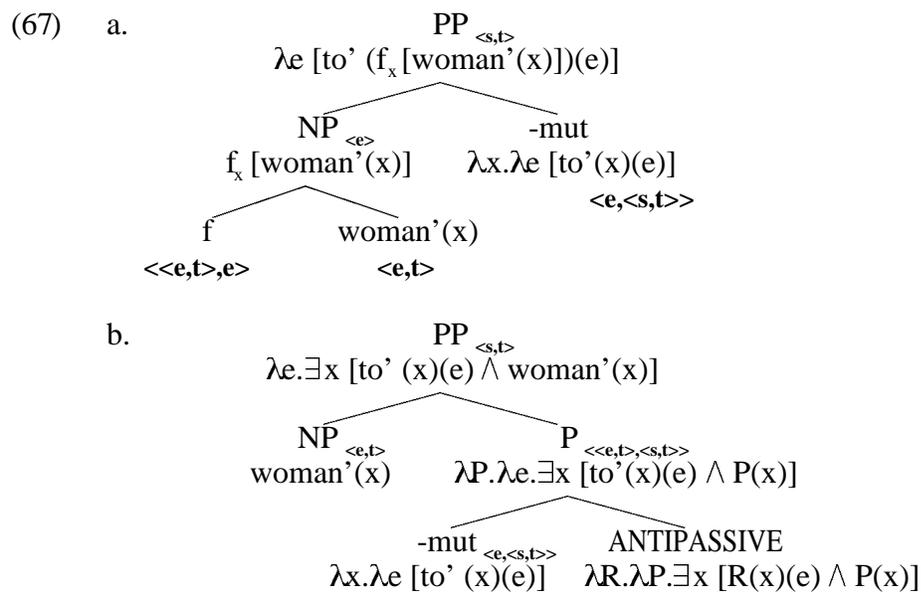
The inventory of morphological cases in Inuktitut does not exhaust itself with the modalis, and nominals in Inuktitut, in the relevant context, may also be morphologically marked in the ablative, dative, equative, locative, or vialis cases. I will consider a few such oblique indefinites here, and show that the previous analysis easily accounts for the observed scope facts.

Reconsider the proposed lexical semantics of the antipassive morpheme, repeated here as (66).

$$(66) \quad \lambda R. \lambda P. \exists x [R(x)(e) \wedge P(x)]$$

Maintaining the Kratzerian view that heads can take at most two arguments, one an event argument, it follows that the potential exists for combining the antipassive with a number of syntactic heads, beyond verbs (or  $v^0$ , as discussed above in §3.7.3). One of these syntactic categories is semantically contentful prepositions/postpositions, and, barring introduction of grammatical restrictions on its combination with these heads, it should potentially obtain. The oblique case-markers in the Inuit languages are postpositions, and I will argue here that the antipassive morpheme freely adjoins to these heads, thus

deriving the scope properties that these indefinites display.<sup>16,17</sup> In short, oblique indefinite NPs in Inuktitut can take two interpretable forms: One where the postpositional case-marker remains bare and must combine with an indefinite who receives its interpretation via the choice function mechanism, and the second, where the postposition undergoes “antipassivisation” and must combine with a property-denoting indefinite. The structures are indicated in (67) (for expository purposes, the representations are given for the dative form of *arnaq* ‘woman’, *arnarmut* ‘to [a] woman’).



The prediction is that oblique indefinites in these languages should generally have ambiguous scope readings available to them – wide-scope coming about via choice function interpretation, narrow-scope by semantic incorporation within the PP –, unless some requirement of the grammar forces them to be property-denoting (i.e., as for objects of

antipassivised verbs). And this is correct. Consider the passive sentence in (68), where the agent is expressed in ablative case.

- (68) *Inuktitut*  
 tuktu-it            taku-jau-lau-nngit-t-tut            angunasukti-mit  
 caribou-ABS.p see-pass-past-neg-part-[-tr]-3pABS hunter-ABL  
 i. There is a hunter, and caribou weren't seen by him  
 ii. The caribou weren't seen by any hunter

*Consultant's comment:* He's a bad hunter... Maybe [a] qallunaaq. Or maybe the caribou were very clever, [and] they were never seen by anyone.

The wide-scope reading of the indefinite *angunasukti* 'hunter' derives from an LF containing the PP *angunasuktimik* 'by hunter' of denotation (69a), equivalent in structure to (67a), while the narrow-scope reading of this indefinite derives from an LF containing the PP of denotation (69b), and equivalent in structure to (67b).

- (69) a.  $\llbracket \text{PP} \rrbracket = \lambda e [\text{by}' (f_x [\text{hunter}'(x)])(e)]$   
 b.  $\llbracket \text{PP} \rrbracket = \lambda e. \exists x [\text{by}'(x)(e) \wedge \text{hunter}'(x)]$

Similarly, an indefinite marked for dative Case can take wide or narrow scope with respect to a negation operator, as indicated by the readings in (70b) that were judged to be possible by 12 Inuktitut speakers. Note also for ditransitive verbs, like *tuni-* 'give', that the theme argument surfaces in modalis case even when the verb has observably not undergone antipassivisation (i.e., both ergative and absolutive agreement obtains on the verb). In these cases, the modalis-marked indefinite can take wide or narrow scope with respect to some sentential operator. But our interest here lies with the status of the dative

indefinite.

(70) *Inuktitut*

a. Kingmaalisaa-p iqalung-mik arnaq  
K. -ERG fish-MOD woman(ABS)

tuni-lau-nngit-t-a-(ng)a  
give-past-neg-part-[+tr]-3sERG.3sABS

- i. # Kingmaalisaaq didn't give the/a fish to any woman.
- ii. There is a woman that Kingmaalisaaq didn't give a fish to.

b. Kingmaalisaaq iqalung-mik arnar-mut  
K. (ABS) fish-MOD woman-DAT

tuni-si-lau-nngit-t-u-q  
give-AP-past-neg-part-[-tr]-3sABS

- i. Kingmaalisaaq didn't give any fish to any woman.
- ii. There is a woman that Kingmaalisaaq didn't give any fish to.

Likewise for the English preposition *in*, which appears to have a lexical translation not unlike that of a Verb or Agent head, taking both an internal and event argument. While the lexical translation assumed for a V head is repeated here, from above, in (39), the analysis of the preposition *in* is shown in (71).

(39)  $\lambda x_e . \lambda e_s [V(x)(e)]$

(71)  $\lambda x_e . \lambda e_s [in'(x)(e)]$

Thus, the various arguments found in the sentence in (72a) are indicated in (72b).<sup>18</sup>

(72) a. She owns a house in town.  
b.  $\exists e [own(house)(e)_1 \wedge v(she)(e)_2 \wedge in(town)(e)_3]$



the form in (74b), the indefinite is interpreted *in situ* – that is, in the location of the [postposition + antipassive] complex.

### ***3.11 Preliminary conclusions***

In this chapter, I have argued that a single LF interpretive mechanism, semantic incorporation (à la van Geenhoven (1995,1998a)), is responsible for all narrowest-scope indefinite readings in Inuktitut and Kalaallisut, and, moreover, that this is the only LF mechanism by which an indefinite may be (existentially) quantified. All greater-than-narrowest-scope interpretations are taken to be due to a choice function mechanism in the manner of Kratzer (1998), which leaves the variable of which the indefinite holds free at LF, and has its value contextually determined. Though I have adopted Kratzer's particular theory of choice functions, rather than the differing approaches of Reinhart (1995,1997) and of Winter (1997), it should be observed that it is not obvious that any of these three theories could not adequately account for the data considered to this point. This may not be so obvious for Winter's approach, taking indefinites to be unambiguously interpreted by means of choice functions, though I think that it would be technically possible to formalise semantic incorporation in terms of a choice function interpretation. I will not pursue this matter, as Chapter Five presents data from Inuktitut that are demonstrated to present considerable problems for both Reinhart's (1995,1997) and Winter's (1997) approaches, but which can be easily accommodated under Kratzer's theory.

<sup>1</sup>This is at least true of the four main dialects of Inuktitut where I have been able to get judgements (North Baffin, South Baffin, Itivimmiut (western Nunavik/Northwestern Québec) Inuktitut, and Labrador Inuttut). See also Johns (1997).

<sup>2</sup>A couple of consultants suggested that a more fitting use of *qallunaaq* in an imperative sentence would be *Qallunaamik naalanngittit* ‘Don’t listen to a qallunaaq! Any qallunaaq’.

<sup>3</sup>A few additional comments on Bittner’s study are also found in §3.5 in the text, below.

<sup>4</sup>Bittner’s conception of *S-Structure* is generally that of Chomsky (1989), in the sense that it minimally differs from D-Structure, only so far as movement to satisfy S-Structure filters – for example, the Case Filter (Vergnaud (1977), Chomsky (1981)) – requires it to do so.

<sup>5</sup>In discussion of data from English and Yoruba (Congo-Kordofanian: Kwa), unrelated to the topic of current interest, Bittner suggests that QR can also apply to VPs, though this proposal need not concern us here.

<sup>6</sup>Though see Zimmermann (1993), where it is argued that the ‘object’ of an intensional verb is a first order property, rather than an intensional quantifier (à la Montague (1974)), as Bittner assumes.

<sup>7</sup>Nothing in the semantic analysis here crucially hinges on this assumption, with the possible exception of the discussion in §3.7.3, and I remain amenable to the movement approach espoused by Bittner. I adopt the present position since exposition through semantic and syntactic tree representations becomes simpler by assuming it.

<sup>8</sup>The morpheme *-si*, in its antipassive use, appears to be much less regularly used in Baffin Inuktitut and Itivimmiut than its Kalaallisut counterpart. Unlike Kalaallisut and Labrador Inuttut, which have been shown to have a number of antipassive morphemes (see Bittner (1989) for Kalaallisut and Beaudoin-Lietz (1982,1994) for Labrador Inuttut), antipassivisation in Baffin Inuktitut is generally indicated by a null morpheme.

<sup>9</sup>Shultz-Lorentzen’s original sentence is, in fact, *Angut miqqunik paarsivuaq* ‘man is looking after children’. I have replaced the indefinite with a proper name, *Jensi*, in the example in the text, since Shultz-Lorentzen’s original sentence introduces additional complications which are not immediately relevant to the treatment of antipassive objects. Absolutive and ergative indefinites will be dealt with subsequently.

<sup>10</sup>Under an extensional semantics without events, (39) in the text would be  $\lambda y_e. \lambda x_e$  [look.after’ (y) (x)]. A neo-Davidsonian association in conceptual structure (e.g., see Parsons (1990)) equivalent to (39) would be  $\lambda x. \lambda y. \lambda e$  [look.after’ (e)  $\wedge$  Th (x) (e)  $\wedge$  Ag (y) (e)]. Consequently, the proposed lexical semantics in (40) in the text for the antipassive morpheme would need to be revised accordingly to  $\lambda R_{\langle e, \langle e, t \rangle \rangle}. \lambda P_{\langle e, t \rangle}. \lambda x_e. \exists y$  [R (y) (x)  $\wedge$  P (y)] for an extensional semantics without events, etc..

<sup>11</sup>See Chapter Two for the discussion of (the lack of) determiners in Inuktitut/Kalaallisut, and of the apparent absence of entity-denoting antipassive objects. The latter issue is also revisited in §3.9, below.

<sup>12</sup>I do not necessarily adopt van Geenhoven’s position that noun incorporation configurations do not actually involve any syntactic incorporation at all, but rather entail base generation of the noun in a Caseless position adjoined to  $V^0$ .

<sup>13</sup>As to the latter point, it might be suggested that the agreement on the verb is just a “default” third person singular agreement. That this is not the case can easily be shown, as by (i).

- (i) *Inuktitut*
- |             |   |                             |
|-------------|---|-----------------------------|
| arna-it     | iqalung-mik   | taku-Ø-nngit-t-u-t          |
| woman-ABS.p | fish-MOD  | see-AP-neg-part-[-tr]-3pABS |
| i.          | There are woman that didn’t/don’t see (even) a (single) single fish |                             |
| ii. #       | No women saw/see a (single) fish                                    |                             |

<sup>14</sup>Bittner (1994a) supposes that these suffixal verbs select a VP complement, rather than a CP or IP complement, since absolutive Case, associated with Infl, is never available within these complements. However, while I agree that there is something deficient about the Infl head in these complements, tense is available:

- (i) *Inuktitut*  
 Suula-up aullar-**nia**-rasugi-j-a-(ng)a qaukpat Arnainnuk  
 S. -ERG leave-**nfut**-think-part-[+tr]-3sERG.3sBS tomorrow A. (ABS)  
 ‘Suula thinks that Arnainnuk will leave tomorrow’

As Bittner assumes the same treatment for suffixal verbs of ‘control’, like Inuktitut *guma-* ‘want’, it can also be shown that tense is available in the (clausal?) complements of these verbs.

- (ii) a. Aulla-laa-ruma-j-u-nga  
 leave-fut-want-part-[-tr]-1sABS  
 ‘I want to leave’ (wanting is now, or in the past)
- b. Aulla-ruma-laaq-t-u-nga  
 leave-want-fut-part-[-tr]-1sABS  
 ‘I will want to leave’

Similarly, (iii).

- (iii) a. Sana-laa-ruma-j-uq  
 work-fut-want-part-[-tr]-3sABS  
 ‘She wants to work someday’
- b. Sana-juma-laaq-t-u-q  
 work-want-fut-part-[-tr]-3sABS  
 ‘Someday, she will want to work’

<sup>15</sup>Given that the unboundedness of the plural plays a role in van Geenhoven’s analysis (see her (2001) for details), one should expect to find that nominals taking dual number in Inuktitut (now lacking in Kalaallisut) should pattern as those taking the singular in these cases. I do not know the relevant data.

<sup>16</sup>To be sure, at this point, the term *antipassive* is becoming less descriptively adequate. Indeed, I will argue in Chapter Six that the semantic function of the antipassive applies productively across languages, which is essentially van Geenhoven’s (1998a, 2000b) point. For continuity, however, I will keep using the term.

<sup>17</sup>Given that the shape of the case-marker can effect phological changes to the noun stem, I assume that there is most likely subsequent N-to-P incorporation. Since nothing in the present analysis will hinge on whether such incorporation occurs or not, I will not indicate such movement in the representations in the text.

<sup>18</sup>For convenience, I am simply labelling the head that introduces the ‘external’ argument as *v* in (82) and (84) in the text, as it does not introduce an agent. The event arguments here are not events proper, but states. I assume states to be a subkind of events.

# CHAPTER FOUR

## Labrador Inuttut: Where have all the obligatory existentially-quantified-in-V property-denoting antipassive objects gone, long time passing?

So far, we have seen data from Kalaallisut and Inuktitut which show that the internal (modalis-marked) arguments of antipassivised verbs almost universally take the narrowest possible scope with respect to various sentential operators. The preceding chapter (§3.8) examined one case where, for some speakers of Kalaallisut, a less-than-narrowest scope interpretation of these arguments is available. There, I rejected Bittner's proposal that these cases involve reanalysis of a V' projection of the matrix verb as V proper, in favour of a novel proposal that the antipassive morpheme that is found in these sentences is a generalised use of the morpheme, such that it carries the canonical syntactic properties of the suffix, but is semantically vacuous. The details of that proposal might be predicted to have far-reaching consequences for the grammar of Kalaallisut. For example, we might hypothesise that some speakers could reinterpret the semantically vacuous (generalised) antipassive as the "real" antipassive, and begin using it with all verbs. We may have already seen one such example in Chapter Two, where the "Jesus" sentence from Bittner (1987:196), repeated here as (1), was discussed.

- (1) *Kalaallisut*  
 Jesusi-mik taku-Ø-v-u-q / taku-nnip-p-u-q  
 J. -MOD see-AP-ind-[-tr]-3sABS / see-AP-ind-[-tr]-3sABS  
 ‘(s)he saw Jesus’

If Bittner is correct, contra Fortescue’s objections which were mentioned in Chapter Two, in analysing *Jesusimik* in (1) as being referential, then an antipassivised verb is here taking an individual-denoting complement, which, on the current analysis, should not be possible.

In this chapter, I will briefly describe the scope interpretations of antipassive objects and other related matters in Labrador Inuttut, and show that such broad generalisation of the semantically vacuous antipassive morpheme has already occurred in at least one Inuktitut language. The scope facts related here are due to fieldwork with four consultants, but the rest of the discussion is taken largely from Johns (1999,2001).

Johns (1999) observes that proper names may freely occur as the object of an antipassivised verb in Labrador Inuttut. Consider (2).

- (2) *Labrador Inuttut*  
 Margarita Kuinatsa-i-j-u-k Ritsati-mik  
 Margarita (ABS) tickle-AP-part-[-tr]-3sABS Richard-MOD  
 ‘Margarita is tickling Richard’ (Johns (1999:81))

Johns reports that the name *Richard* in this example refers to someone known in the

context of the elicitation. That seems fairly conclusive, but lest we suppose that Fortescue's concerns about the status the proper name in (1) could be said to hold of (2), Johns also provides the following mini-text in Rigolet Inuttut, another Inuktitut language/dialect spoken in Labrador.

(3) *Rigolet Inuttut*

Nancy angka-li-mmat akłâ-gulak  
 Nancy (ABS) home-progressive-csl.3sABS black.bear-dear (ABS)

iksiva-j-u-k haksi-tâ-gulang-mi, iksiva-ju  
 sitting-part-[-tr]-3sABS hillock-get-dear-LOC.s sitting-part.[-tr]

haksi-tâ-gulang-mi, Nancy-mi(k) tautuk-t-u-k.  
 hillock-get-dear-LOC.s Nancy-MOD look.at-part-[-tr]-3sABS

'... if Nancy was coming home, the young black bear would be sitting on a little hill, sitting on the little hill, watching Nancy'

Here, the proper name *Nancymi(k)* is clearly being used referentially, as the person that it denotes has already been introduced into the story. The narrator in this case, in fact, is Nancy's mother.

From this, I must conclude that a semantic incorporation-type account of antipassivisation is incorrect for those speakers' dialect(s). And, as such, it is predicted that wide-scope readings for indefinites selected by antipassivised verbs should be possible in Inuttut, contrary to the facts observed in other Inuktitut dialects and Kalaallisut. This prediction is correct, as is shown by the readings judged to be available for the sentence

in (4b).

- (4) *Labrador Inuttut*
- a. Holda-up      puijik      taku-nngit-t-a-nga  
 H.    -ERG   seal (ABS)    see-neg-part-[+tr]-3sERG.3sABS  
 i. # Holda has not seen a (single) seal  
 ii. There is a seal that Holda has not seen
- b. Holda      puiji-mik      taku-si-nngit-t-u-k  
 H. (ABS)    seal-MOD    see-AP-neg-part-[-tr]-3sABS  
 i. Holda has not seen a (single) seal  
 ii. There is a seal that Holda has not seen

If sentences of the sort in (4) are presented in tandem, the Labrador Inuttut speakers who I have consulted favour the narrow-scope reading of the indefinite in the antipassive variant of the sentence. But if these type of sentences are presented independently, the same speakers do not express a marked preference for either of the readings indicated in (4b).

I will suppose, then, that the antipassive morpheme in Labrador Inuttut is ambiguous between having the properties of the canonical antipassive-as-semantic-incorporator and having the properties of the Kalaallisut antipassive-as-adjoined-to-a-suffixal-verb, which is to say, being semantically contentless. The ambiguous interpretation of the sentence in (4b) derives from two different LFs, each semantically interpretable in an unambiguous way. In the LF representation which provides the reading of the indefinite outside of negation, the denotation of the PP *puijimik* ‘seal’ is (5a), while the narrow-scope interpretation of the indefinite is read off of an LF where the denotation of the PP is (5b).

- (5) a.  $[[PP]] = f_x [seal'(x)]$   
b.  $[[PP]] = seal'(x)$

While predicting the course of language change is dangerous business, it could be the case that the generalised use of the antipassive as adjoined to a suffixal verb will trigger movement of Kalaallisut towards the grammar of Inuttut, in the relevant respects. I hypothesise that Inuttut has undergone such diachronic change.

# CHAPTER FIVE

## Indefinites II: The irrelevancy of islands

### *5.1 Preliminaries*

In the preceding chapters, I have laid out a restrictive theory of indefinite interpretation to account for the observed scope facts of indefinites in Inuktitut and Kalaallisut, and I have adopted an analysis which predicts that intermediate-scope readings of indefinites should be, in large part, absent. This chapter introduces data from Inuktitut involving indefinites inside of *if*-clauses, and indicates the interpretations of these indefinites that are judged to be possible by speakers.

As discussed in Chapter One, we know, from a substantial body of research, that indefinite NPs behave in a distinct manner, in a number of ways, from ordinary quantificational NPs. One of these ways is in their apparent scope behaviour, with indefinites not being subject to the usual constraints on the syntactic QR movement that holds of other quantificational elements. The approach to dealing with indefinite NPs that take apparent scope outside a syntactic island that contains them that has been proposed by, for example, Reinhart (1997), Winter (1997), and Kratzer (1998), is to divide the descriptive contribution of these indefinites from their logical impact. As

elaborated in Heim (1982), indefinites are taken to have no quantificational force of their own. For Reinhart, Winter, and Kratzer, the class of so-called *specific*, or non-quantificational, indefinite NPs are scopeless, being introduced by an indefinite article that expresses a choice function (for Heim, an individual variable). For this class of indefinite NPs, syntactic islands are irrelevant, as their descriptive contribution is interpreted *in situ* – no QR is necessary or allowed. To account for narrow scope indefinite NPs, both Reinhart and Kratzer argue that indefinite NPs are ambiguous between the choice function variable and the individual variable reading. That is, indefinite determiners are ambiguous: They are either choice function variables or standard existential quantifiers. Thus, for these researchers, the (non-)presence of syntactic islands is relevant to the interpretation of narrow-scope (quantificational) indefinite NPs.

However, in examination of the scopal properties of indefinites in Inuktitut and Kalaallisut, I have concluded that indefinites in these languages are unambiguous in this respect: Indefinite NPs are uniformly non-quantificational. The *obligatory* narrow-scope reading, with respect to sentential operators even within the same clause, of both antipassive objects and incorporated objects is not compatible with an analysis of these items as quantificational, being available for QR. So, the thesis here is that the logical impact of an indefinite is *always* split from its descriptive contents – in the case of any greater-than-narrowest-scope reading, indefinites receive their interpretation with respect

to choice functions, while, in the case of a narrowest-scope reading, the predicate contributed by the indefinite is absorbed by a lexical item  $\alpha$  as the restriction of the argument introduced by  $\alpha$ , the existential interpretation of which is lexicalised as part of  $\alpha$ 's meaning.

## 5.2 *Choice functions and the (near) absence of intermediate readings*

In Chapter One, the empirical predictions of several approaches toward the treatment of indefinites via the use of choice functions were discussed, and I summarise the most relevant details in (1):

- (1) *Reinhart (1995,1997) and Winter (1997)*: Intermediate readings are always possible (but may be apparently absent due to pragmatic interference or competition from other readings).

*Kratzer (1998)*: Intermediate readings are never possible (but apparent intermediate pseudo-scope readings are possible with the presence of bound variable pronouns or implicit arguments)

This chapter introduces data from Inuktitut which are similar to data which Matthewson (1999) has presented from St'át'imcets (Salish: Northern Interior) – some of which I will examine in the final chapter here – that argue for a theory of choice function-driven indefinite interpretation that very much resembles the one proposed by Kratzer, and against those of Reinhart and Winter. While St'át'imcets and Inuktitut are genetically unrelated languages, it is seen that the judgements elicited from speakers in

both languages are strikingly similar to one another, in the relevant sense. As such, Inuktitut provides us with additional cross-linguistic evidence for the adoption that part of Kratzer's analysis that deals with (apparent) wide-scope or intermediate-scope indefinites.<sup>1</sup>

Consider, then, indefinites contained within *if*-clauses, canonical instances of syntactic islands. It is apparent that each of Reinhart's and Winter's approaches are capable of accounting for the ambiguous scope readings of the sentence in (2), with respect to the interpretation of the indefinite *some Iraqi*.

- (2) If some Iraqi dies, Rumsfeld will be happy.
- i.  $\exists f [CH(f) \wedge [die (f \text{ Iraqi})) \rightarrow happy (Rumsfeld)]]$
  - ii.  $[\exists f [ CH(f) \wedge die (f \text{ Iraqi})]] \rightarrow happy (Rumsfeld)$

That is, the sentence in (2) is ambiguous between the reading indicated in (2.i) where Rumsfeld will be happy if a particular Iraqi, say Tariq Aziz, dies, and the more salient – given our knowledge of Donald Rumsfeld's sociopathic nature – reading, indicated in (2.ii), where Rumsfeld will be happy if any Iraqi dies. In Inuktitut, we find that such ambiguity is absent:

- (3) *Inuktitut*
- a. Ulluriaq            kappiasung-niaq-t-u-q  
 U.(ABS)            be.frightened-NFUT-part-[-tr]-3sABS
- arviq                            **qaja-mik**                    katja-Ø-kpat  
 bowhead.whale(ABS)        kayak-MOD                    hit-AP-cond.3sABS
- i. # There is a kayak *x*, and Ulluriaq will be frightened if a particular bowhead hits *x*.  
 ii. Ulluriaq will be frightened if a particular bowhead hits any kayak
- b. Miali                    kappiasung-niaq-t-u-q  
 M. (ABS)            be.frightened-nfut-part-[-tr]-3sABS
- arvi-up                            **qajaq**                    katja-kpagu  
 bowhead.whale-ERG kayak (ABS) hit-cond.[+tr].3sERG.3sABS
- i. There is a kayak *x*, and Miali will be frightened if a particular bowhead hits *x*.  
 ii. # Miali will be frightened if the bowhead hits any kayak

Consider first the sentence in (3a), where the indefinite of interest, *qajamik* ‘kayak’, surfaces with modalis case, and is the complement of an antipassivised verb. This sentence is rejected by all speakers that I have consulted in the context of there being a certain kayak, such that Ulluriaq will be frightened if a particular whale hits that kayak. It is only accepted in the context of Ulluriaq being frightened if a particular whale hits any kayak. One consultant commented that “either Ulluriaq’s a very nervous person, or that’s one scary whale!” The obligatory narrow-scope reading of this indefinite follows from the analysis in the previous chapter, as choice functions are predicted never to come into play in the interpretation of the complements of antipassivised verbs.

On the other hand, the logically possible narrow scope reading of the absolutive

indefinite *qajaq* in (3b), as in (3b.ii), is systematically rejected by my consultants, each saying that the sentence can only be uttered in a context where Miali will be frightened if a particular bowhead hits a particular kayak – most likely, but not necessarily, the kayak that Miali is in (another possible felicitous context mentioned by two consultants was if Miali was standing on the shore, watching some *arviat* [bowhead whale hunters] out on the bay, and her father is in a certain kayak, and M. will be frightened if a particularly large bowhead that she’s been watching hits her father’s kayak. Miali doesn’t really care one way or the other if the whale hits another kayak, or, as one consultant said, “at least she won’t be frightened”).

Given that this absolute indefinite, by the analysis in Chapter Three, must be receiving its interpretation via a choice function mechanism, its obligatory widest-scope interpretation follows directly out of the relevant part of Kratzer’s analysis, though obvious problems arise for both the Reinhart and the Winter approach and their shared prediction that the indefinite should also be interpretable with narrow scope, inside the *if*-clause. Note, however, that not even Kratzer’s approach fully predicts the complete absence of narrow-scope readings for these indefinites, as she, like Reinhart, takes indefinite NPs to have an optional quantificational interpretation.

The same basic facts exemplified by (3b) are repeated in (4), where the only

reading judged to be possible by my consultants is the one where the indefinite *inaaq* ‘elder’ has wide scope outside of the *if*-clause.

- (4) *Inuktitut*  
 Kingmaalisaaq quviasung-niaq-tuq **innaq** qai-kpat  
 K.(ABS) happy-nfut-3sABS elder (ABS) come-cond.3sABS  
 ‘Kingmaalisaaq will be happy if an elder comes’  
 i.  $\exists x [\text{elder}(x) \wedge [\text{come}(x) \rightarrow \text{happy}(\text{Kingmaalisaaq})]]$   
 ii.  $\# [\exists x [\text{elder}(x) \wedge \text{come}(x)] \rightarrow \text{happy}(\text{Kingmaalisaaq})]$

All consultants indicated that (4) is only compatible with a context in which Kingmaalisaaq has some particular elder in mind, and he would achieve a state of happiness if that elder comes. Again, for precisely the same reasons as just gone through for the obligatory widest-scope interpretation of the absolutive indefinite in (3b), the facts in (4) are straightforwardly predicted under Kratzer’s theory.

### 5.2.1 Bound variables

At this point, before turning to an examination of indefinites contained more deeply within scope islands, a few words must be said about anaphora in Inuktitut. Let us begin by examining the sentence in (4). There, the proper name *Kingmaalisaaq* triggers third person agreement on the verb in its clause, as does the nominal *inaaq* ‘elder’ on the verb in its, the embedded, clause. The third person agreement on the embedded verb in (4) indicates that the nominal triggering the agreement, *inaaq*, cannot be anaphorically linked to any dominating subject, although it can be freely anaphorically linked to any other

type of argument. *Anaphoric linking* remains to be precisely defined, which I will return to in a moment. For now, consider sentences in (5), similar to (4), but instead containing a (non-overt) pronoun in the embedded clause. The third person agreement on the embedded clause's verb in (5a) indicates that the subject of that clause cannot be anaphorically linked to the subject of its superordinate clause, *Kingmaalisaaq*. In (5b), however, the agreement that I gloss as *fourth person* signals that the (null) pronoun acting as the subject of that clause must be anaphorically linked to a higher subject.<sup>2,3</sup>

- (5) *Inuktitut*
- |    |  |                    |                           |
|----|--|--------------------|---------------------------|
| a. | Kingmaalisaaq  | quviasung-niaq-tuq | tikip- <b>pat</b>         |
|    | K.(ABS)  | happy-nfut-3sABS   | arrive- <b>cond.3sABS</b> |
|    | 'Kingmaalisaaq <sub>i</sub> will be happy if (s)he/it <sub>2/*1</sub> arrives' |                    |                           |
|    |  |                    |                           |
| b. | Kingmaalisaaq  | quviasung-niaq-tuq | tikik- <b>kuni</b>        |
|    | K.(ABS)  | happy-nfut-3sABS   | arrive- <b>cond.4sABS</b> |
|    | 'Kingmaalisaaq <sub>i</sub> will be happy if he <sub>1/*2</sub> arrives'       |                    |                           |

In (5b), the relation that holds between the subject of the lower clause and the subject of the matrix clause is strictly one of identity of referents. However, this does not properly capture the nature of syntactic binding in Inuktitut, as indicated by the sentences in (6).

- (6) *Inuktitut*
- |    |   |                          |
|----|---|--------------------------|
| a. | Quviasuk-t-u-t                          | tikim- <b>mat</b>        |
|    | happy-part-[-tr]-3pABS                  | arrive- <b>cs1.3sABS</b> |
|    | 'They are happy, because (s)he arrived' |                          |

(the person who arrived is obligatory not included in the set of people who are heartened by her/his arrival)

- b. Quviasuk-t-u-t                      tikik-kami  
 happy-part-[-tr]-3pABS            arrive-**csl.4sABS**  
 ‘They<sub>1</sub> are happy, because one of them<sub>1/\*2</sub> arrived’

(the person who arrived must be included in the set of people who are happy because of her/his arrival)

Thus, the term *anaphorically linked to*, as used above, should be read as *contained-within-the-referent-of*.

With this in mind, the possible readings offered for the sentence in (7) demonstrate that only a widest-scope reading is possible for an absolutive indefinite NP in an island context where no antipassivisation has taken place. With no bound variable pronoun present, Kratzer’s analysis correctly predicts the absence of the intermediate reading.

(7) *Inuktitut*

- a. Anaana-limaa-t                      numaasuk-kajaq-t-u-t  
 mother-all-ABS.p                    be.sad-would-part-[-tr]-3pABS

**nutaraq**            tuquk-pat  
 child (ABS)       die-cond.3sABS

‘every mother will be sad if a child dies’

- i. There is one child who every mother doesn’t want to see die
  - ii. # For each mother, there is one child who she doesn’t want to see die
  - iii. # Every mother will be sad if any child dies
- b. Ilisaiji-limaa-t                      aittarusuk-kajaq-t-u-t  
 teacher-all-ABS.p                    be.disappointed-would-part-[-tr]-3pABS

**ilinniaqti**                      nuqqaq-pat  
 student (ABS)                    quit-COND.3sABS

‘every teacher will be disappointed if a student quits’

- i. There is one student, who every teacher doesn’t want to see quit
- ii. # For each teacher, there is one student who (s)he doesn’t want to see quit
- iii. # Every teacher will be disappointed if any student quits

So, we see that in an island context without a bound variable, only widest scope is possible for an absolutive indefinite. The sentences in (7) are judged by consultants to have only widest-scopes interpretation for the indefinite *nutaraq* ‘child’, in (7a), and the indefinite *ilinniaqti* ‘student’, in (7b). One consultant offered the unelicited example in (8), containing a potentially bound variable pronoun, to capture something like the absent intermediate reading for the sentences in (7a).

- (8) *Inuktitut*  
 Anaana-limaa-t numaasuk-kajaq-t-u-t nutara-**ni** tuquk-pat  
 mother-all-ABS.p be.sad-would-part-[-tr]-3pABS child-4s**POSS** die-cond.3sABS
- ‘every mother<sub>1</sub> will be sad if her<sub>1/\*2</sub> child dies’
- i. There is one child of one of the mothers, and every mother will be sad if that child dies
  - ii. For *each mother*, there is a child of *hers* who she doesn’t want to see die (bound variable reading of *hers*)
  - iii. # Every mother will be sad if any child dies

In (8), under the bound variable interpretation of *her* – reading (ii) –, the choice function which selects one child from a set of a mother’s children will have a different restrictor set for each mother, and, therefore, a different individual child for each mother can be selected by the choice function.

On the other hand, when I then presented the sentence in (9), where the third person possession marking on *nutaraq* ‘child’ indicates that the possessor cannot be any member of the set of all mothers, consultants systematically responded that it could only

be uttered in a context where there is a certain child of some father, and every mother will be sad if that child dies. As the choice function which picks out one child of some father's from the set of that father's children cannot vary with respect to different mothers, the intermediate reading is (correctly) predicted to disappear:

- (9) *Inuktitut*  
 Anaana-limaa-t numaasuk-kajaq-t-u-t nutara-**nga** tuquk-pat  
 mother-all-ABS.p be.sad-would-part-[-tr]-3pABS child-**3s**POSS die-cond.3sABS

‘every mother will be sad if his child dies’

- i. There is one child of some  $x$ ,  $x$  not a mother (i.e.,  $x$  a father), and every mother will be sad if that child dies
- ii. # For each mother, there is a child of some  $x$ ,  $x$  a father, and every mother will be sad if that child dies
- iii. # Every mother will be sad if any child dies

Consider now the more complex sentences in (10). In (10a), the fourth person agreement on the verb *nagligi* ‘love’ indicates that the subject of that verb must be contained within the reference of the higher subject, *anaanat* ‘mothers’. The possible readings judged by consultants to be available for this sentence – both a wide-scope and intermediate-scope interpretation for the relevant indefinite being possible – are exactly as Kratzer’s theory predicts, and contrast with those available in (7a) and (8), differing only in that an intermediate reading appears to become available when a bound variable interpretation of a pronoun occurs. And again, as above, a sentence can be constructed where the possibility of a bound variable reading of the pronoun is ruled out. Such a sentence is given in (10b), where the third person agreement morphology on *nagligi* indicates that the sentence



subject of that verb must be anaphorically linked to the higher subject, *ilisaijit* ‘teachers’. Both wide- and intermediate-scope readings for the indefinite *ilinniaqti* ‘student’ are judged by consultants to be available for this sentence, and the intermediate-scope reading arises in concert with the bound variable pronoun interpretation. For (11b), where the third person agreement morphology on *ikajuq* indicates that the sentence is describing a state of affairs where someone who is not a teacher helps some student, thus ruling out the presence of a bound variable pronoun, the intermediate scope-reading is unavailable.

- (11) a.    *ilisaiji-limaa-t*            *aittarusuk-kajaq-t-u-t*  
           teacher-all-ABS.p        be.disappoint-would-part-[-tr]-3pABS
- ilinniaqti**                    *ikajuq-tavinini*            *nuqqaq-pat*  
                   student(ABS.s)            help-4sERG.3sABS        quit-4sABS
- ‘every teacher<sub>1</sub> will be disappointed if a student (s)he<sub>1/\*2</sub> helps quits’  
 Literally, something like: ‘every teacher will be disappointed if a student, who is her helped one, quits’
- i. There is one student, who every teacher helped, and doesn't want to see quit
  - ii. For every teacher, there is one student that (s)he taught, and doesn't want to see quit
  - iii. # Every teacher will be disappointed if any student quits
- b.    *ilisaiji-limaa-t*            *aittarusukka-jaq-t-u-t*  
           teacher-all-ABS.p        be.disappointed-would-part-[-tr]-3pABS
- ilinniaqti**                    *ikajuq-tavinga*            *nuqqar-pat*  
                   student (ABS)            help-3sERG.3sABS        quit-4sABS
- i. There is one student, who some *x*, *x* not a teacher, helped, and every teacher doesn't want to see that student quit
  - ii. # For each teacher, there is a (potentially different) student that some *x*, *x* not a teacher, helped, and that teacher doesn't want to see that student quit
  - iii. # Every teacher will be disappointed if any student quits

Like (10b) and (11b), the readings judged by consultants to be available for the sentence in (12) show that an intermediate-scope reading cannot obtain in the absence of a pronoun receiving a bound variable interpretation.

- (12) *Inuktitut*
- |                             |                               |                |
|-----------------------------|-------------------------------|----------------|
| Anaana-limaa-t              | numaasuk-kajaq-t-u-t          | <b>nutaraq</b> |
| mother-every-ABS.p          | be.sad-would-part-[-tr]-3pABS | child(ABS)     |
| nagligi-j-aga               | tuqu-kpat.                    |                |
| love-part-[+tr]-1sERG.3sABS | die-COND.3sABS                |                |
- ‘every mother will be sad if a child that I love dies’  
 Literally, something like: ‘every mother will be sad if a child, who is my loved one, dies’
- i. There is a particular child, who I love, and every mother will be sad if that child dies
  - ii. # For every mother, there is a (potentially different) child that I love, and that mother will be sad if that child dies
  - iii. # Every mother will be sad if any child dies

### 5.2.2 *The irrelevancy of syntactic binding*

The syntactic binding facts are essentially irrelevant to this discussion, but the presence versus absence of a bound variable pronoun is playing a crucial role. This can be seen by the readings judged to be possible for the following sentence:

- (13) *Inuktitut*  
 Anaana-limaa-t            numaasuk-kajaq-t-u-t            **nutaraq**  
 mother-every-ABS.p    be.sad-would-part-[-tr]-3pABS    child(ABS)
- Miali-up            nagligi-j-ani            tuqu-kpat.  
 M- -ERG    love-part-[+tr]-4s.3s    die-COND.3sABS

‘Every mother will be sad if a child Miali loves dies’  
 Literally, something like: ‘every mother will be sad if a child, who is Miali’s loved one, dies’

*Consultant’s comment:* “You know Miali has to be a mother in this, right, kind of like before, except backwards?”

- i. There is a particular child who Miali loves, and every mother will be sad if that child dies
- ii. # For every mother, there is a (potentially different) child that Miali loves, and that mother will be sad if that child dies
- iii. # Every mother will will sad if any child dies

That is, for (13), although fourth person morphology obtains on the verb *nagligi*, indicating an anaphoric relation between the subject of that clause, *Miali*, and the subject of the higher clause, *Anaana* ‘mothers’, there is no possibility of a bound variable reading. And, as predicted, no intermediate-scope reading of the absolutive indefinite *nutaraq* is available.

### 5.3 Concluding remarks

In the following chapter, I will briefly look at aspects of Matthewson (1999), where it is convincingly argued that, in St’át’imcets, the difference between choice function indefinites and non-choice function indefinites is overtly encoded in the determiner system. In the current and preceding chapters, I have shown that, in Inuktitut, which entirely lacks

indefinite articles, we are able to decisively detect whether an indefinite in the language must be interpreted via a choice function mechanism or not. In this, the empirical predictions made by each of Reinhart's, Winter's, and Kratzer's approaches can be tested in a less obscured way in both St'át'imcets and Inuktitut than they can in a language like English, where both Reinhart's and Kratzer's approaches predict an alternative interpretation of some indefinites as existential quantifiers. That the specific aspects of the grammar by which St'át'imcets and Inuktitut provide the linguist with a relatively unobscured view of the processes of indefinite interpretation differ so greatly, yet the resulting empirical details in each language so closely resemble the other, is strongly indicative of the correctness of Kratzer's analysis.

Summing up where we are, for Inuktitut (and Kalaallisut) I have argued that any indefinite not receiving its interpretation via semantic incorporation remains free at LF, acquiring its interpretation via a contextually-determined choice function mechanism. While this is a somewhat slim inventory of interpretive mechanisms available for indefinite descriptions, it suffices in explaining the observed facts of Inuktitut and Kalaallisut. Additional interpretive mechanisms are undesirable, as they would overgenerate possible readings.

The final chapter begins to look at some of the cross-linguistic implications of the

analysis carried out so far.

---

<sup>1</sup>It is true that Matthewson's and Kratzer's analyses are formally quite different, Matthewson taking choice functions to be (existentially) closed, though only at the topmost level, and Kratzer arguing that choice functions are left free, their value being contextually determined. But, given that, in the latter theory, contextual determination can reduce to nothing more than speaker intent, it is not clear to me how to go about teasing the two theories apart on the basis of empirical detail. See, however, Mathewson (1999) for some thoughts on this.

<sup>2</sup>The term *higher* in "... must be anaphorically linked to a higher subject" in the text, I define in terms of *c-command* (Reinhart (1976)). This is sufficient for present purposes, though not entirely empirically accurate. See Woodbury (1983,1985b) for a discussion of the syntactic versus rhetorical use of fourth person in Yup'ik, a discussion that carries over, at least in part, to Inuktitut and Kalaallisut. See also Stirling (1993) for similar observations.

<sup>3</sup>Bittner (1994a) glosses this agreement as *third person, reflexive*. It is not my intent to provide an account of Inuit/Yup'ik third person versus fourth person properties here (see Woodbury (1983,1985b), Finer (1985a,1985b), Johns (1987), Bok-Bennema (1991), Bittner (1994a), and Wharram (in prep)), but simply to observe the fact that fourth person agreement markers indicate that the argument with which they agree is necessarily interpreted as anaphorically linked to another element within the sentence.

# CHAPTER SIX

## Indefinites III: Some cross-linguistic observations (and future directions)

### *6.1 Preliminaries*

In summary of the most important theoretical implications for the analysis of Inuktitut and Kalaallisut indefinites contained in this dissertation, I have: (A) Adopted that part of Kratzer's (1998) analysis having to do with the choice function interpretation of wide-scope indefinites. But I have rejected the idea that narrow-scope indefinites – what we could call island-bound indefinites, but for the fact that 'islands' have no status in the theory of indefinite interpretation that I am pursuing – have local scope due to their interpretation as generalised quantifiers; and (B) Taken the view that any narrowest-scope indefinites must receive their interpretation via semantic incorporation (à la van Geenhoven (1995 et seq.)).

### *6.2 Inuktitut and St'át'imcets*

As mentioned in the preceding chapter, the scope facts of Inuktitut discussed in this dissertation are consistent with Matthewson's (1999) findings with respect to St'át'imcets. Matthewson carefully examines the interpretive properties of, principally, wide-scope

indefinites in St’át’imcets, concluding that these indefinites must be receiving their “exceptional scope” readings not through movement, but by means of choice functions. While Matthewson argues that, in St’át’imcets, the difference between choice function indefinites and non-choice function indefinites is overtly encoded in the determiner system, I have argued here that, in Inuktitut, whether an indefinite in the language must be interpreted via a choice function or not is determined by the (non-)presence of a semantic incorporator, adjoined to a predicate.

In St’át’imcets, those indefinites introduced by what Matthewson terms *non-polarity* determiners (*ti...a*, *i...a*, *ni...a*, *nelh...a*, *ku...a*, and *kwelh...a*, which encode number and distance information – see Matthewson (1999) for details) never take narrow scope with respect to scope-bearing operators. Consider the sentence in (1a), from Matthewson (1999:91), together with the simialr Inuktitut sentence in (1b), and the possible readings for the indefinites indicated:

- (1) a. *St’át’imcets*  
 cwʔaow kw-s            áz-en-as            **ti**    **sts’úqwaz’-a** kw-s            Sophie  
 neg            DET-NOM buy-[+tr]-3sERG **DET** **fish-DET**            DET-NOM S.  
 ‘Sophie didn’t buy a fish’
- i.  $\exists x$  [fish’(x)  $\wedge$   $\neg \exists e$  [Agent (Sophie’)(e)  $\wedge$  buy’(x)(e)]]  
 ii. #  $\neg \exists e$  [Agent (Sophie’)(e)  $\wedge$   $\exists x$  [buy’(x)(e)  $\wedge$  fish’(x)]]

b. *Inuktitut*

Tuqqialu-up **tuktu** taku-lau-nngit-t-a-a  
 T. -ERG **caribou(ABS)** see-past-neg-part-[+tr]-3sERG.3sABS  
 ‘Taqqialuk didn’t see a caribou’

- i.  $\exists x$  [caribou’ (x)  $\wedge$   $\neg \exists e$  [Agent (Tuqqialuk’) (e)  $\wedge$  see’(x)(e)]]  
 ii. #  $\neg \exists e$  [Agent (Tuqqialuk’)(e)  $\wedge$   $\exists x$  [see’(x)(e)  $\wedge$  caribou’(x)]]

On the other hand, those indefinites introduced by *ku* – a so-called *polarity determiner*, in that it is only licensed in the c-command domain of an operator such as negation, a modal, interrogation, etc. – receive only narrow-scope readings. Again, similar and relevant sentences from St’át’imcets and Inuktitut appear in (2).

(2) a. *St’át’imcets*

cwʔaow kw-s áz-en-as **ku sts’úqwaz’** kw-s Sophie  
 neg DET-NOM buy-[+tr]-3sERG **DET fish-DET** DET-NOM S.  
 ‘Sophie didn’t buy any fish’

- i. #  $\exists x$  [fish’ (x)  $\wedge$   $\neg \exists e$  [Agent (Sophie’) (e)  $\wedge$  buy’(x)(e)]]  
 ii.  $\neg \exists e$  [Agent (Sophie’)(e)  $\wedge$   $\exists x$  [buy’(x)(e)  $\wedge$  fish’(x)]]

b. *Inuktitut*

Akittiq **iqalung-mik** taku-Ø-nngit-t-u-q  
 A.(ABS) **fish-MOD** see-AP-neg-part-[-tr]-3sABS  
 ‘Akittiq doesn’t/didn’t see any fish’

- i. #  $\exists x$  [fish’ (x)  $\wedge$   $\neg \exists e$  [Agent (Akittiq’) (e)  $\wedge$  see’(x)(e)]]  
 ii.  $\neg \exists e$  [Agent (Akittiq’)(e)  $\wedge$   $\exists x$  [see’(x)(e)  $\wedge$  fish’(x)]]

Matthewson analyses the non-polarity determiner as unambiguously introducing variables over choice functions, and discusses a considerable range of data which demonstrate the unavailability of intermediate-scope readings for indefinites introduced by these determiners, save for those cases where a potentially bound pronoun is present. Less extensive is Matthewson’s consideration of the interpretational possibilities open to *ku*-

introduced indefinites, stating that “[m]ore research needs to be done into the properties of *ku*, since it is not yet clear whether *ku* unambiguously forces narrowest scope, or merely disallows widest scope” (Mathewson (1999:122)).

Mathewson’s analysis of obligatory wide-scope indefinites (those introduced by the non-polarity determiners) in St’át’incets and the analysis of obligatory wide-scope indefinites in Inuktitut (namely, ergative and absolutive arguments) contained here are more or less alike. But, just by looking at the examples in (1) and (2), we can observe some clear differences between the St’át’incets and the Inuktitut data. First, St’át’incets has overt indefinite determiners (see Mathewson (1999) for evidence that these determiners are not definite), while Inuktitut does not. Second, the Inuktitut (b) sentences in (1) and (2) show different Case realisations for the arguments involved, reflecting the antipassivisation of the verb in (2b), a crucial component in the account above of the obligatory narrow-scope reading of the indefinite *iqalungmik* ‘fish’(MOD) in that sentence. This is not the case in St’át’incets, where the agreement on the verb indicates that the Case realisations of the arguments in the (2a) sentence remain the same as those in (1a).

Werle (2000) analyses DPs headed by *ku* as kind-denoting, such object DPs combining with a transitive verb by first suppressing the verb’s direct object argument. But extending the analysis here of narrowest-scope indefinites in Inuktitut, I would suggest

that *ku*-indefinites in St'át'imcets denote properties of individuals. That is, the polarity determiner *ku* is semantically vacuous. In conditions where *ku* is syntactically licensed to introduce a direct object argument, the verb must adjoin with the semantic incorporator, as discussed in Chapter Three, and having the semantic translation in (3), in order to combine with its complement.

- (3) *Semantic Incorporator:*  
 $\lambda R.\lambda P.\exists x [R(x)(e) \wedge P(x)]$

In St'át'imcets, the proposed semantic incorporator does not syntactically detransitivise the verb, as appears at first glance to be the case in Inuktitut. But I have already argued that the narrowest-scope reading for indefinites in Inuktitut is not, in fact, strongly tied to syntactic antipassivisation (see, for example, the discussion of Inuktitut obliquely case-marked NPs in §3.10), even though the language shows a superficial correlation between the two phenomena. So, if St'át'imcets has at its disposal the same interpretive mechanisms for indefinites as does Inuktitut, then those indefinites introduced by the polarity determiner *ku* are predicted by the theory spelled out here never to have any greater-than-narrowest-scope reading available to them. While the preliminary data available does point to the correctness of this prediction, whether or not this turns out to be true remains to be fully investigated.

A final brief observation about St'át'imcets that I will make here is regarding the

status of indefinites introduced by *ku* in subject position. Consider the exchange in (4), taken from Lisa Matthewson’s fieldwork and cited in Werle (2000):

- (4) *St’át’imcets*  
 A: Lots of people went hunting yesterday.  
 B: How many deer did the Indians shoot?  
 A: ay t’uʔ kw-s qus-en-itas **ku ucwalmicw** ku ts’iʔ,  
     NEG just Det-NOM shoot-[+tr]-3pERG **Det Indian** Det deer  
                     tsukw t’uʔ i samʔ-a tsicw pix-em’  
                     finish just Det white.person-Det go hunt-[-tr]  
 ‘No Indians shot any deer; only white people went hunting’

In (4), one of the *ku* introduced indefinites, *ku ucwalmicw* ‘Indian’, appears in the subject position, and can take narrow scope with respect to the negation operator in the clause. However, Matthewson (1998) has reported that, in general, *St’át’imcets* speakers are uncertain about the acceptability of *ku*-indefinites in subject position, and Werle suggests that *St’át’imcets* speakers have a dispreference for *ku*-indefinites in subject position, rather than completely rejecting them as ungrammatical.

While more research needs to be done into the (non-)acceptability of these narrow-scope subjects in *St’át’imcets*, this does seem reminiscent of the fact discussed in Chapter Three – most notably in §3.7.3 – that Kalaallisut speakers accept a narrow-scope reading for ergative subjects, while Inuktitut speakers do not. It is plausible to hypothesise that the grammar of *St’át’imcets*, in the relevant respect, currently occupies a “mid-point” between Kalaallisut and Inuktitut, with *St’át’imcets* speakers either beginning to accept

or beginning to reject – which of these is impossible to ascertain in the absence of a diachronic study of the relevant facts – adjunction of the semantic incorporator to the *v* head. It is worth noting that, in Kalaallisut, both of a verb’s “external” and “internal” arguments cannot be semantically incorporated simultaneously, while, under the current proposed analysis, exactly this obtains in St’át’imcets in sentence (4). But, as discussed in Chapter Three, what rules this out in Kalaallisut is a syntactic matter – specifically, a Case Filter violation, due to the correlation between Case absorption and verbal semantic incorporation in Kalaallisut and Inuktitut – that does not hold in St’át’imcets. That said, the cross-linguistic availability of narrow-scope subjects clearly remains an important avenue of exploration for this dissertation’s analysis and proposals.

### ***6.3 A note on Kratzer’s (1998) implicit argument argument***

In Chapter One, the sentence in (5), similar to sentences discussed in Reinhart (1997), was presented, although the availability of intermediate-scope interpretation for the indefinite *some Ministry*, paraphrased in (5.ii), was not discussed in terms of Kratzer’s (1998) analysis.

- (5) Most politicians reject every proposed bill that eliminates some Ministry.
- i. ‘There is some Ministry, such that most politicians reject every proposed bill that eliminates that Ministry’
  - ii. ‘For most politicians, there is some Ministry, such that they reject every proposed bill that eliminates that Ministry’
  - iii. ‘Most politicians reject every proposed bill that eliminates a/any Ministry’

Noting for a sentence like the one in (6), identical to the one in (5), but for the choice of the indefinite article, that most English speakers lose the reading of the sentence where the indefinite gets an apparent intermediate-scope reading, Kratzer (1998) proposes that, for many speakers – i.e., those who get the intermediate-scope reading for the *some*-indefinite in (5) –, the indefinite *some* can contain an implicit argument whose variable can be bound.<sup>1</sup>

- (6) Most politicians reject every proposed bill that eliminates a Ministry.
- i. ‘There is a Ministry, such that most politicians reject every proposed bill that eliminates that Ministry’
  - ii. # ‘For most politicians, there is a Ministry, such that they reject every proposed bill that eliminates that Ministry’
  - iii. ‘Most politicians reject every proposed bill that eliminates a/any Ministry’

An empirical implication of this type of approach to deriving some apparent intermediate-scope readings for indefinites, by assuming the presence of an implicit argument in certain articles/determiners which can be interpreted as a bound variable, arises when we look at languages without overt indefinite or definite articles. In these types of languages, in the absence of an overtly bound variable pronoun, one does not expect the selection of determiner to affect the availability of an intermediate reading, as occurs in English, for the obvious reason that there is no selection to be made. Inuktitut, as a language which entirely lacks articles, falls into this category. And, as we have seen, intermediate scope readings are universally rejected by speakers, save in those instances where a bound variable pronoun obtains. So, it seems that Inuktitut speakers, having no access to

variation in the shape of the indefinite article, interpret the sole (phonetically null) indefinite article in the language as unambiguously lacking an implicit argument. However, one could easily imagine a language similar to Inuktitut, in lacking variation in the shape of the indefinite determiner, but whose speakers choose to interpret all indefinite determiners as containing an implicit argument potentially interpreted as a bound variable. In such a language, apparent intermediate-scope reading for indefinites could obtain in contexts where no bound variable pronoun is present. From the point of view of learnability, what one does not expect to find is a language like Inuktitut, in lacking overt indefinite determiners, but whose speakers interpret articles which introduce non-narrow-scope indefinites as ambiguous between containing an implicit argument and lacking one. Confirmation of the (non-)existence of such languages will have to be deferred.

#### ***6.4 “Antipassives” across languages***

I have posited a slim inventory of interpretive devices for indefinites in Inuktitut. Any indefinites not caught by semantic incorporation must receive their interpretation with the assistance of a choice function mechanism that leaves the choice function variable free at LF, being contextually determined. The notion of semantic incorporation that I make use of is certainly akin to that of van Geenhoven (1995 et seq.), but considerably more generalised, in that it may hold not only of the arguments of incorporating verbs, but potentially of general verbs, heads that introduce “external” arguments, and

prepositions/postpositions. It must be said that this generalised notion of semantic incorporation can only be maintained insofar as the strongly Fregean programme which Kratzer (1996, in prep) puts forward, such that heads introduce at most one argument, in addition to an implicit event argument, can be maintained. As such, this remains an important road of future investigation for the theory of narrow-scope indefinites expounded here.

Of most interest to the present author is whether or not the proposed restrictive inventory of interpretive mechanisms for indefinites in Inuktitut is sufficient to account for the properties of indefinites universally. There is clearly much research that remains to be done on this topic, but I will point to a number of recent works – among them, McNally (1992,1995,1998), McNally & van Geenhoven (1998,2000), van Geenhoven (1998b,2000b), and Chung & Ladusaw (2001) – which go considerable distance in demonstrating some of the cross-linguistic uses of semantic incorporation (in the case of McNally (1992,1995), pointing in this direction) in accounting for the properties of indefinites in a variety of contexts. One substantial omission in the current work is that generic interpretations of indefinites need to be examined, and I have not done that here – even for Inuktitut, as I have not yet managed to collect the relevant data. As for the use of choice function variables to capture the interpretation of all remaining indefinites, some particulars remain to be worked out (see, for example, Chierchia's (2001) observations

on the presence of intermediate-scope readings in combination with downward entailing contexts in English), and more empirical data must be investigated. Nevertheless, even if this experiment turns out not to be tenable, an equally interesting question would arise in its place: What could it be about the grammar of Inuktitut, and languages closely related to it, that would prevent interpretive mechanisms, otherwise assumed to be universal, from being available to it?

FIN

---

<sup>1</sup>Thus, these indefinite articles are treated not unlike Mitchell's (1987) treatment of *local*. See also Hintikka's (1986) consideration of English *a certain*.

# References

---

- Abusch, D. (1994) "The scope of indefinites", in *Natural Language Semantics* 2, 83-135.
- Allen, S.E. (1994) *Acquisition of Some Mechanisms of Transitivity Alternation in Arctic Quebec Inuktitut*. PhD dissertation, McGill University.
- . (2000) "A discourse-pragmatic explanation for argument representation in child Inuktitut", in *Linguistics* 38(3), 483-521.
- Aoun, J. (1986) *Generalized Binding*. Dordrecht: Foris.
- Baker, M. (1988) *Incorporation: A Theory of Grammatical Function Changing*. Chicago: University of Chicago Press.
- . (1996) *The Polysynthesis Parameter*. Oxford: Oxford University Press.
- Beaudoin-Lietz, C. (1982) "Aspects of certain intransitivising postbases of a transitivity postbase in Labrador Inuttut". MA thesis, Memorial University of Newfoundland.
- . (1994) "Antipassive and verbal classes in Labrador Inuttut". MS, Memorial University of Newfoundland.
- Beck, S. (1996) *Wh-Constructions and Transparent Logical Form*. PhD dissertation, Eberhard-Karls-Universität Tübingen. [SfS-Report-04-96, Eberhard-Karls-Universität Tübingen].
- Beghelli, F. (1995) *The Phrase Structure of Quantifier Scope*. PhD dissertation, UCLA.
- . (1996) "Subjacency and the scope of (in)definites". MS, University of Pennsylvania.
- Belletti, A. (1988) "The Case of Unaccusatives", in *Linguistic Inquiry* 19, 1-34.
- Benua, L. (1995) "Yup'ik Antipassive", in A. Dainora et al. (eds.) *Papers from the 31st Regional Meeting of the Chicago Linguistic Society* 1, 28-44.
- Berge, A. (1993) "A comparison of four theories of syntax and their relation to the study of Inuktitut". MS, Nunavut Arctic College at Iqaluit and University of California at Berkeley.
- Bergsland, K. (1955) *A Grammatical Outline of the Eskimo Language of West Greenland*. MS, University of Oslo.
- . (1976) "Some questions of subordination in Eskimo and Aleut", in E. Hamp (ed.) *Papers on Eskimo and Aleut Linguistics*. Chicago: Chicago Linguistic Society.
- Bittner, M. (1987) "On the semantics of the Greenlandic antipassive and related constructions", in *International Journal of American Linguistics* 53, 194-231.
- . (1988) *Canonical and Noncanonical Argument Expressions*. PhD dissertation, University of Texas (Austin).
- . (1992) *Ergativity, Scope, and Binding*. MS, Rutgers.
- . (1994a) *Case, Scope, and Binding*. Dordrecht: Kluwer.
- . (1994b) "Cross-linguistic semantics", in *Linguistics and Philosophy* 17, 53-108.
- . (1995) "Quantification in Eskimo: A challenge for compositional semantics", in E. Bach, E. Jelinek, A. Kratzer, and B.H. Partee (eds.) *Quantification in Natural Languages*. Dordrecht: Kluwer.

- . (2001) “Surface composition as bridging”, in *Journal of Semantics* 18(2).
- Bittner, M. and K. Hale (1996a) “The structural determination of Case and Agreement”, in *Linguistic Inquiry* 27(1), 1-68.
- . (1996b) “Ergativity: Towards a theory of a heterogeneous class”, in *Linguistic Inquiry* 27, 531-604.
- Bobaljik, J.D. (1993) “On ergativity and ergative unergatives”, in C. Phillips (ed.) *MIT Working Papers in Linguistics* 19, 45-88.
- Bok-Bennema, R. (1991) *Case and Agreement in Inuit*. Dordrecht: Foris.
- Branigan, P. (1992) *Subjects and Complementizers*. PhD dissertation, MIT.
- . (1998) *CP-Structure and the Syntax of Subject*. MS, Memorial University of Newfoundland.
- Burzio, L. (1986) *Italian Syntax: A Government-Binding Approach*. Dordrecht: Reidel.
- Campana, M. (1992) *A Movement Theory of Ergativity*. PhD dissertation, McGill University.
- Carlson, G. (1977) *Reference to Kinds in English*. PhD dissertation, University of Massachusetts (Amherst). [Reprinted (1980). New York: Garland Press].
- Cecchetto, C. (forthcoming) “Syntactic or semantic reconstruction? Evidence from pseudoclefts and clitic left dislocation”, in C. Cecchetto, G. Chierchia, and M.T. Guasti (eds.) *Semantic Interfaces: References, Anaphora, and Aspect*. Stanford: CSLI Publications.
- Chierchia, G. (1998) “Reference to kinds across languages”, in *Natural Language Semantics* 6, 339-405.
- . (2001) . A puzzle about indefinites”, in C. Cecchetto, G. Chierchia , and M.T. Guasti (eds.) *Semantic Interfaces: Reference, Anaphora and Aspect*. Stanford: Center for the Study of Language and Information
- Chomsky, N. (1981) *Lectures on Government and Binding*. Dordrecht: Foris.
- . (1995) *The Minimalist Program*. Cambridge, Mass.: MIT Press.
- . (1998) “Minimalist inquiries: The framework”, *MIT Occasional Papers in Linguistics* 15.
- Chun\g, S. and W.A. Ladusaw (2001) *Restriction and Saturation*. MS, University of California (Santa Cruz).
- Diesing, M. (1992) *Indefinites*. Cambridge, Mass: MIT Press.
- Dixon, R.M.W. (1972) *The Dyirbal Language of North Queensland*. Cambridge: Cambridge University Press.
- . (1979) “Ergativity”, in *Language* 55, 59-138.
- . (1994) *Ergativity*. Cambridge: Cambridge University Press.
- Dorais, L.-J. (1977) *Inuit Kupaimmiut Uqausingit*. Québec: Association Inuksiutiit Katimajit (Université Laval).
- . (1978) *Iglulingmiut Uqausingit*. Québec: Association Inuksiutiit Katimajit (Université Laval).

- Egede, P. (1760) *Grammatica Grönlandica Danica-Latina*. Copenhagen: Gottmann.
- Egli, U. and K. von Heusinger (1995) “The epsilon operator and E-type pronouns”, in U. Egli (ed.) *Lexical Knowledge in the Organization of Language*. Amsterdam: John Benjamins.
- Enç, M. (1991) ‘The semantics of specificity’, *Linguistic Inquiry* 22(1), 1-25.
- Engdahl, E. (1980) *The Syntax and Semantics of Questions in Swedish*. PhD dissertation, University of Massachusetts.
- Espinal, M.T. (2000) “Property-denoting objects and incorporation in idiomatic constructions”. MS, Universitat Autònoma de Barcelona.
- Evans, G. (1977) “Pronouns, quantifiers and relative clauses (I)”, in *Canadian Journal of Philosophy* 7(3).
- Farkas, D. (1981) “Quantifier scope and syntactic islands”, in *Chicago Linguistic Society* 17, 59-66.
- . (2000) “Scope matters”, in K. von Heusinger and U. Egli (eds.) *Reference and Anaphoric Relations*. Dordrecht: Kluwer.
- Finer, D. (1985a) *The Formal Grammar of Switch-Reference*. PhD dissertation, University of Massachusetts (Amherst).
- . (1985b) “The syntax of switch-reference”, *Linguistic Inquiry* 16(1), 35-55.
- Fodor, J. and I. Sag (1982) “Referential and quantificational indefinites”, *Linguistics and Philosophy* 5, 355-398.
- Fortescue, M. (1984) *West Greenlandic*. London: Croom Helm.
- Fox, D. and U. Sauerland (1995) “Illusive scope of universal quantifiers”. MS, MIT.
- Gallin, D. (1975) *Intensional and Higher-Order Modal Logic*. Amsterdam: North-Holland Publishing Company.
- van Geenhoven, V. (1995) “Semantic incorporation: A uniform semantics for West Greenlandic noun incorporation and West Germanic bare plural configurations”, in A. Dainora et al. (eds.) *Papers from the 31st Regional Meeting of the Chicago Linguistic Society* 1, 171-186.
- . (1996) *Semantic Incorporation and Indefinite Descriptions: Semantic and Syntactic Aspects of Noun Incorporation in West Greenlandic*. PhD dissertation, Eberhard-Karls-Universität Tübingen. [SfS-Report-03-96, Eberhard-Karls-Universität Tübingen].
- . (1998a) *Semantic Incorporation and Indefinite Descriptions: Semantic and Syntactic Aspects of Noun Incorporation in West Greenlandic*. Stanford: CSLI Publications.
- . (1998b) “On the argument structure of some noun incorporating verbs in West Greenlandic”, in M. Butt and W. Geuder (eds.) *The Projection of Arguments: Lexical and Compositional Factors*. Stanford: CSLI Publications.
- . (2000a) “On durativity and iterativity: The case of *for*-adverbials”. MS, Max Planck Institut für Psycholinguistik, Nijmegen.

- . (2000b) “Pro properties, contra generalized kinds”, in B. Jackson and T. Matthews (eds.) *Proceedings of SALT 10*, 221-238.
- . (2001) “For-adverbials, pluractionality, and properties”. Talk/handout, *First Annual Semantics of Under-represented Languages of the Americas (SULA) Conference*, University of Massachusetts (Amherst).
- Gillon, C. (1999) “When *wh*-words move and why: A case study in Inuktitut”. MA thesis, University of Toronto.
- Grimshaw, J. and R.-A. Mester (1985) “Complex verb formation in Eskimo”, in *Natural Language and Linguistic Theory* 3, 1-19.
- Hale, K.L. (1982) “The essential features of Walpiri main clauses”, in S. Swartz (ed.) *Papers in Walpiri Grammar: In Memory of Lothar Jagst. Working Papers of SIL-AAB. Series A, Volume 6*. Berrimah, Australia: Summer Institute of Linguistics.
- Harley, H. (1995) *Subject, Events, and Licensing*. PhD dissertation, MIT.
- Harnum, B. (1993) *Eight Official Languages: Meeting the Challenge*. Annual Report of the Languages Commissioner of the Northwest Territories, Yellowknife.
- Heim, I. (1982) *The Semantics of Definite and Indefinite Noun Phrases*. PhD dissertation, MIT.
- . (1990) “E-type pronouns and donkey anaphora”, in *Linguistics and Philosophy* 13, 137-177.
- Heim, I. and A. Krazter (1998) *Semantics in Generative Grammar*. Oxford: Blackwell.
- von Heusinger, K. (1995) “Reference and salience”, in U. Egli and K. von Heusinger (eds.) *Universität Konstanz Fachgruppe Sprachwissenschaft Arbeitspapier 71*.
- . (1997) “Definite descriptions and choice functions”, in S. Akama (ed.) *Logic, Language and Computation*. Dordrecht: Kluwer.
- . (2000) “The reference of indefinites”, in K. von Heusinger and U. Egli (eds.) *Reference and Anaphoric Relations*. Dordrecht: Kluwer.
- Higginbotham, J. (1983) “Logical Form, binding, and nominals”, in *Linguistic Inquiry* 14(3), 395-420.
- . (1985) “On semantics”, in *Linguistic Inquiry* 16, 547-594.
- Hilbert, D. and P. Bernays (1939) *Grundlagen der Mathematik*. Berlin: Heidelberg
- Hintikka, J. (1986) “The semantics of *a certain*”, in *Linguistic Inquiry* 17(2), 331-336.
- de Hoop, H. (1992) *Case Configuration and Noun Phrase Configuration*. PhD dissertation, Rijksuniversiteit Groningen.
- Hornstein, N. (1995) *LF: The Grammar of Logical Form from GB to Minimalism*. Oxford: Blackwell.
- Jacobson, S. A. (1995) *A Practical Grammar of the Central Alaskan Yup'ik Eskimo Language*. Fairbanks: Alaska Native Language Center.
- Jech, T.J. (1977) “About the axiom of choice”, in J. Barwise (ed.) *Handbook of Mathematical Logic*. Amsterdam: North-Holland Publishing Company.

- Jelinek, E. (1993) "Ergative splits and argument types", in J.D. Bobaljik and C. Phillips (eds.) *Papers on Case and Agreement MIT Working Papers in Linguistics* 18, 15-42.
- Johns, A. (1987) *Transitivity and Grammatical Relations in Inuktitut*. PhD dissertation, Université d'Ottawa.
- . (1992) "Deriving ergativity", in *Linguistic Inquiry* 23, 57-88.
- . (1995) "On some mood alternations in Labrador Inuttut". MS, Memorial University of Newfoundland.
- . (1996) "Ergativity: Working through some recent analyses", in *Glott International* 2(6), 3-8.
- . (1999) "The decline of ergativity in Labrador Inuttut", in L. Bar-el, R.-M. Déchaine, and C. Reinholtz (eds.) *Papers from the Workshop on Structure and Constituency in Native American Languages. MIT Occasional Papers in Linguistics* 17, 73-90.
- . (2001) "Ergative to accusative: Comparing evidence from Inuktitut", in J.T. Faarland (ed.) *Grammatical Relations in Change*. Amsterdam: John Benjamins.
- Johns, A. and C. Smallwood (1999) "On (non-)finiteness in Inuktitut", in C. Smallwood and S. Bejar (eds.) *Toronto Working Papers in Linguistics* 17, 159-170.
- Kalmár, I. (1979) "The antipassive and grammatical relations in Eskimo", in F. Plank (ed.) *Ergativity: Towards a Theory of Grammatical Relations*. London, Academic Press.
- Kamp, H. (1981) "A theory of truth and semantic representation", in M. Stokhof, J. Groenendijk, and T. Jensen (eds.) *Truth, Interpretation, and Information: Selected Papers from the Third Amsterdam Colloquium*. Dordrecht: Foris.
- Klein, E. and I. Sag (1985) "Type-driven translation", in *Linguistics and Philosophy* 8, 163-197.
- Kleinschmidt, S. (1851) *Grammatik der Grönlandischen Sprache*. Berlin.
- Koopman, H. and D. Sportiche (1982) "Variables and the Bijection Principle", in *The Linguistic Review* 2, 139-160.
- Kratzer, A. (1996) "Severing the external argument from its verb", in J. Rooryck and L. Zaring (eds.) *Phrase Structure and the Lexicon*. Dordrecht: Kluwer.
- . (1998a) "Scope or pseudo-scope? Are there wide-scope indefinites?", in S. Rothstein (ed.) *Events in Grammar*. Dordrecht: Kluwer, 163-196.
- . (1998b) "More structural analogies between pronouns and tenses", in *Proceedings of SALT* 8.
- . (in preparation) *The Event Argument and the Semantics of Voice*. Cambridge, Mass.: MIT Press.
- Ladusaw, W. (1982) "Semantic constraints on the English partitive construction", in *Proceedings of WCCFL* 1, 231-242.

- . (1994) “Thetic and categorial, stage and individual, weak and strong”, in *Proceedings of SALT 4*.
- Lamontagne, G. and L. Travis (1987) “The syntax of adjacency”, in M. Crowhurst (ed.) *Proceedings of WCCFL 6*. Stanford Linguistics Association, 173-185.
- Lane, C. (n.d.) “Field notes on Niuean”. ms, University of Wellington.
- Lasersohn, P. (1995) *Plurality, Conjunction, and Events*. Dordrecht: Kluwer.
- Lasnik, H. (1976) “Remarks on coreference”, in *Linguistic Analysis* 2(1), 1-21.
- Legate, J.A. (1999) “On the interpretation of indefinites”, in *Proceedings of NELS 29*.
- Levin, J. and D. Massam (1984) “Surface ergativity: Case/theta roles reexamined”, in S. Berman (ed.) *Proceedings of NELS XV*.
- Levy, A. (1966) “Comparing the axioms of local and universal choice”, in Y. Bar-Hillel et al. (eds.) *Essays on the Foundations of Mathematics*. Jerusalem: The Magnes Press, The Hebrew University
- Lipscomb, D. R. (1993) “A critique of the nominal hypothesis for Eskimo”, in *Études/Inuit/Studies* 17(2), 127-140.
- Ludlow, P. and S. Neale (1991) “Indefinite descriptions: In defense of Russell”, in *Linguistics and Philosophy* 14, 171-202.
- Mahajan, A. (1992) “The Specificity Condition and the CED”, in *Linguistic Inquiry* 23, 510-516.
- Manga, L. (1996) “Specificity in Inuktitut and syntactic representation”, in *Études/Inuit/Studies* 20(1), 63-85.
- Manning, C.D. (1994) *Understanding Ergativity*. PhD dissertation, Stanford.
- . (1995) “Ergativity: Argument structure and grammatical relations”. MS, Carnegie Mellon University.
- Massam, D. (1995) “Clause structure and Case in Niuean”. ms, University of Toronto.
- . (2001) “Pseudo noun incorporation in Niuean”, in *Natural Language and Linguistic Theory* 19, 153-197.
- Matthewson, L. (1998) *Determiner Systems and Quantificational Strategies: Evidence from Salish*. The Hague: Holland Academic Graphics.
- . (1999) “On the interpretation of wide scope indefinites”, in *Natural Language Semantics* 7, 79-134.
- . (2000) “Quantification and (the absence of) cross-linguistic variation”, in K. Kusumoto and E. Villalta (eds.) *Issues in Semantics. University of Massachusetts Occasional Papers in Linguistics* 23, 101-135.
- May, R. (1985) *Logical Form: Its Structure and Derivation*. Cambridge, Mass.: MIT Press.
- McNally, Louise (1992) *An Interpretation for the English Existential Construction*. PhD dissertation, UCSC.

- . (1995) “Bare plurals in Spanish are interpreted as properties”. MS, Universitat Pompeu Fabra.
- . (1998) “Existential sentences without existential quantification”, in *Linguistics and Philosophy* 21, 353-392.
- McNally, L. and V. van Geenhoven (1998) “Redefining the weak/strong distinction”. MS, Universitat Pompeu Fabra and Max Planck Institut für Psycholinguistik.
- . (2000) “Beliefs about opaque and other property arguments”. MS, Universitat Pompeu Fabra and Max Planck Institut für Psycholinguistik.
- Mitchell, J.E. (1987) *The Formal Semantics of Point of View*. PhD dissertation, UMass (Amherst).
- Mithun, M. (1984) “The evolution of Noun Incorporation”, in *Language* 60, 847-895.
- Montague, R. (1974) *Formal Philosophy*. R.H. Thompson (ed.), New Haven: Yale University Press.
- Murasugi, K. (1992) *Crossing and Nested Paths: NP Movement in Accusative and Ergative Languages*. PhD dissertation, MIT.
- . (1993) “Lexical Case and NP raising”. MS, McGill University.
- . (1997) “Relative restrictions on relative clauses”, in K. Kusumoto (ed.) *Proceedings of NELS 27*, 273-286.
- Nowak, E. (1996) *Transforming the Images: Ergativity and Transitivity in Inuktitut (Eskimo)*. Berlin: Mouton de Gruyter.
- Parsons, T. (1990) *Events in the Semantics of English. A Study in Subatomic Semantics*. Cambridge, Mass.: MIT Press.
- Peregrin, J. (2000) “Reference and inference: The case of anaphora”, in K. von Stechow and U. Egli (eds.) *Reference and Anaphoric Relations*. Dordrecht: Kluwer.
- Perlmutter, D. (1978) “Impersonal Passives and The Unaccusative Hypothesis”, in *Proceedings of the Fourth Annual Meeting of the Berkeley Linguistics Society*, 157-189.
- Postal, P. (1962) *Some Syntactic Rules of Mohawk*. PhD dissertation, Yale University [Reprinted (1979) New York: Garland Press].
- . (1966) “A note on ‘understood transitively’”, in *International Journal of American Linguistics* 32, 90-93.
- Reed, I. et al. (1977) *Yup’ik Eskimo Grammar*. Fairbanks: Alaska Native Language Center.
- Reinhart, T. (1976) *The Syntactic Domain of Anaphora*. PhD dissertation, MIT.
- . (1992) “Wh-in-situ: An apparent paradox”, in P. Dekker and M. Stokhof (eds.) *Proceedings of the Eighth Amsterdam Colloquium*. Institute for Logic, Language, and Computation (ILLC), 483-491.
- . (1995) *Interface Strategies*. OTS Working Papers, University of Utrecht, TL-95-002.

- . (1997) “Quantifier scope: How labor is divided between QR and choice functions”, in *Linguistics and Philosophy* 20, 335-397.
- Rullmann, H. (1995) *Maximality in the Semantics of WH-Constructions*. PhD dissertation, University of Massachusetts (Amherst).
- Runner, J. (1993) “Quantificational objects and Agr-O”, in *Proceedings of SCIL 5. MIT Working Papers in Linguistics* 20, 209-224.
- Ruys, E. (1992) *The Scope of Indefinites*. PhD dissertation, University of Utrecht.
- Sadock, J.M. (1980) “Noun Incorporation in Greenlandic: A case of syntactic word formation”, *Language* 56, 300-319.
- . (1985) “Autolexical syntax: A proposal for the treatment of noun incorporation and similar phenomena”, in *Natural Language and Linguistic Theory* 3, 379-439.
- . (1986) “Some notes on noun incorporation”, in *Language* 62(1), 19-31.
- Sauerland, U. (1998) “Why variables?”, in *Proceedings of NELS* 29.
- Saxon, L. (1984) “Disjoint anaphora and the Binding Theory”, in *Proceedings of WCCFL* 3, 242-251.
- Schultz-Lorentzen, C.W. (1945) *A Grammar of the West Greenlandic Language*. Copenhagen: C.A. Reitzels Forlag.
- . (1951) *Det Vestgrønlandske Sprog: I Grammatisk Fremstilling*. Copenhagen: Bianco Lunos Bogtrykkeri.
- Seiter, W. (1980) *Studies in Niuean Syntax*. New York: Garland.
- Slater, B.H. (1986) “E-type pronouns and  $\epsilon$ -terms”, in *Canadian Journal of Philosophy* 16(1), 27-38.
- Spalding, A. E. (1960) *A Grammar of the East and West Coasts of Hudson Bay*. Ottawa: The Queen’s Printer and Controller of Stationary.
- von Stechow, A. (1991) “Syntax und Semantik”, in A. von Stechow and D. Wunderlich (eds.) *Semantik: Ein internationales Handbuch seifgenössischer Forschung*. Berlin, Walter de Gruyter, 90-148.
- . (1996) “Against LF pied-piping” in *Natural Language Semantics* 4, 57-110.
- . (1999) “Partial *Wh*-movement, scope marking, and Transparent Logical Form”. MS.
- . (2000) “Some remarks on choice functions and LF-movement”, in K. von Heusinger and U. Egli (eds.) *Reference and Anaphoric Relations*. Dordrecht: Kluwer, 193-228.
- Stirling, L. (1993) *Switch-reference and Discourse Representation*. Cambridge: Cambridge University Press.
- Travis, L. (1991) “Derived objects, inner aspect, and the structure of VP”. MS, McGill University.

- . (1994) “Event phrase and a theory of functional categories”, in P. Koskinen (ed.) *Proceedings of the 1994 Annual Conference of the Canadian Linguistic Association/Actes du Congrès annuel de l’Association canadienne de linguistique*.
- . (2000) “Event structure in syntax”. MS, McGill University.
- Vergnaud, J.-R. (1977) Personal letter to Lasnik and Chomsky.
- Viol, W.M. et al. (199?) “Indefinites as Epsilon Terms: A labelled deduction account”. MS, University of London.
- Werle, A. (2000) “Semantic incorporation in Lillooet”, in S. Gessner & S. Oh (eds.) *University of British Columbia Working Papers in Linguistics 3: Proceedings of the 35th International Conference on Salish and Neighbouring Languages*, 209-225.
- Wharram, D. (1996) “In the event of an event: A minimalist account of ‘subjects’”. MA thesis, Memorial University of Newfoundland.
- Wilkinson, K. (1990) “Genericity and indefinite NPs”, in G. Lamontagne and A. Taub (eds.) *University of Massachusetts Occasional Papers in Linguistics* 13.
- Williams, E. (1981) “Argument structure and morphology”, in *The Linguistic Review* 1, 81-114.
- Winter, Y. (1997) “Choice functions and the scopal semantics of indefinites”, in *Linguistics and Philosophy* 20, 399-467.
- . (1999) “What makes choice natural?”, in K. von Stechow and U. Egli (eds.) *Reference and Anaphoric Relations*. Dordrecht: Kluwer.
- Woodbury, A.C. (1975) “Ergativity of grammatical processes: A study of Greenlandic Eskimo”, MA thesis, University of Chicago.
- . (1983) “Switch reference, syntactic organization, and rhetorical structure in Central Yupik Eskimo”, in J. Haiman and P. Munroe (eds.) *Switch Reference and Universal Grammar*. Amsterdam: John Benjamins, 291-315.
- . (1985a) “Marginal agent clauses in Central Alaskan Yupik Eskimo: Internal and external syntax”, in W.H. Eilfort, P.D. Kroeber, and K.L. Peterson (eds.) *Papers from the Parasession on Causatives and Agentivity at the 21st Regional Meeting of the Chicago Linguistics Society* 2, 271-292.
- . (1985b) “Noun phrase, nominal sentence, and clause in Central Alaskan Yupik Eskimo”, in J. Nichols and A.C. Woodbury (eds.) *Grammar Inside and Outside the Clause: Some Approaches to Theory from the Field*. Cambridge: Cambridge University Press.
- Zimmermann, T.E. (1993) “On the proper treatment of opacity in certain verbs”, in *Natural Language Semantics* 1, 149-179.