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Transitivity and Grammatical Relations in Iqkittut

by

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A thesis
presented to the University of Ottawa
in fulfillment of the
thesis requirement for the degree of
Doctor of Philosophy
in
the Department of Linguistics

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ISBN 0-315-40709-3



UNIVERSITÉ D'OTTAWA
UNIVERSITY OF OTTAWA

ABSTRACT

This thesis contends that transitivity, defined as a predicate directly linking two arguments, may vary from the concept of verb governing object in a language that lacks the syntactic category verb. A formal treatment is given to the claim made by early Eskimo scholars that Eskimo is such a language, in that the transitive construction meaning *The boy sees the dog* in Eskimo is constructed along the lines of *The dog is the boy's seen one*. Evidence for this position is provided by the morphology of the transitive construction in Inuktitut, a Canadian Eskimo language. It is argued that the transitive morpheme in main clauses has referential properties, as compared with the intransitive morpheme. This claim provides an explanation as to why transitive and possessive agreement are so similar. Other aspects of Inuktitut grammar are discussed in light of this approach. It is shown that a simple explanation of the relative clause construction can be provided under the assumption that relative clauses contain verbal nouns without the sentential node I(NFL). It is also shown that facts concerning adverbial clauses, and anaphoric agreement markers, which have been used as evidence against this nominalist approach to Eskimo syntax, find a natural explanation in this analysis.

ACKNOWLEDGMENTS

I would like to thank all the people who have helped me to produce this work. On the academic side, I'd like to thank my advisor Maria-Luisa Rivero, who initiated and sustained my interest in syntax, and who allowed me the freedom to work on exotic languages. It is hard to imagine how I could have finished without her firm and unfailing support. I would also like to thank those who started me on this particular path in linguistics. A special thanks to John Jensen, who collaborated with me at the beginning of my research on Eskimo. His orientation towards a lexical approach to word formation has influenced me greatly. A thanks also to Paul Hirschbuhler for those seminars on current topics. I would also like to thank Shalom Lappin for his encouragement and discussion.

I would like to thank also my external examiner Anthony Woodbury. Not only has his work in Eskimo linguistics been a constant source of inspiration, but his remarks and questions have provided me with future paths of investigation.

From another academic perspective, I would like to thank Mic Mallon for having written those wonderful teaching grammars of Inuktitut, which I first became acquainted with many years ago. My warmest thanks go to Basil Kiblakoot, who worked with me as a language consultant, and whose belief in the utility of my studies, I some day hope to prove well-founded. The value of Basil's modest accuracy in the midst of my error-filled enthusiasm cannot be overestimated.

I would also like to thank the Department of Linguistics at the University of Ottawa for immeasurable support of all kinds, ranging from assistantships through taperecorders to computer time. My research has been funded in part by a Social Sci-

ences and Humanities Research Council of Canada Doctoral Fellowship, and the Northern Research Scientific Training Fund.

Finally I would like to thank my friends, colleagues, and especially my parents, who gave their support during this period in my life.

LIST OF ABBREVIATIONS

NOM - nominative case
ACC - accusative case
S(ent) - sentence
I,(NFL) - inflection
SUB - subject
OBJ - object
V - verb
N - noun
(abs) - absolutive case (phonetically null)
ERG - ergative case
rel. - relative case -(u)p; also referred
to as ergative case
abl. - ablative case -mit
comit. - comitative case -mik
all. - allative case -mut
vial. - vialis case -kkut
eq. - equative case -tut
loc. - locative case -mi
sg. - singular (phonetically null)
du. - dual
pl. - plural
N - N person, i.e. first, second, third or fourth
N/N - number of agent followed by number of patient
poss.N - possessive followed by person and number of
possessor
dupl.N - duplex followed by person and number of
possessor
pass. - passive
(intr) indic. - intransitive indicative
 -vu(q)- after vowels,
 -pu(q)- after consonants
(tr) indic. - transitive indicative
 -va(q)- after vowels,
 -pa(q)- after consonants
(intr) part. - intransitive participle
 -ju(q)- after vowels,
 -tu(q)- after consonants
(tr) part. - transitive or passive participle
 -ja(q)- after vowels,
 -ta(q)- after consonants

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Chapter I.
INTRODUCTION

1.1 Description and Outline of the Thesis

The thesis of this work is that transitivity in Eskimo presents an alternative concept of transitivity to that of object governed by verb. The crux of this alternative is the claim that Eskimo lacks the category V at the level of word. In consequence, two arguments can only be linked by the same predicate (i.e. be in a transitive relationship) by what I term inter-referential predication, which is the same syntactic process that links arguments in a possessive construction.

Following the thesis outline is a description of the current model of generative grammar, on which this thesis is based, followed by a brief introduction to the dialect of Eskimo discussed in this thesis.

Chapter 2 is a discussion of the theoretical importance of ergativity, which is a property of Eskimo transitive clauses. I will discuss one alternative to the standard concept of transitivity, which is syntactic ergativity. I argue, on the basis of learnability, that agent roles are universally prohibited from occurring in direct object position.

Chapter 3 is an examination of the claim of Marantz (1984) that Greenlandic Eskimo is a nominative-accusative language, while Central Arctic Eskimo is a syntactically ergative language. I will argue that these dialects are not typologically distinct, but that their classification is uncertain. Chapters 2 and 3 conclude that a) syntactic ergativity is undesirable and b) there is no ready explanation for Eskimo ergativity.

Chapter 4 is an introduction to a set of data which has intrigued Eskimo language scholars for over a century. This is the fact that the possessive construction

bears an amazing resemblance to the transitive construction. I will present a critical review of the two main responses to this parallelism. One school believes that Eskimo verbs are nominal in nature and that transitivity is equivalent to possession. This nominalist tradition forms the basis of this thesis. The second school believes that possessive constructions are clauses. I will give reasons for rejecting this approach.

Chapter 5 is a formal presentation of the view that Eskimo verbs are nominal at the level of word. I stress that, although there is no categorial distinction between nouns and verbs at the level of word, there are two semantic classes which function in a similar manner below word level. Following this is a description of the predicate classes of Eskimo, and a morphosyntactic explanation of transitivity, in which the transitive morphology features prominently. I argue that the referential properties of the transitive morpheme allow it to link up with another argument, in a manner identical to that which links possessor and possessum. A distinguishing property between transitive and possessive constructions is that only the former involves raising of the noun to a sentential node (INFL). This distinction accounts for various differences observed between nominal clauses containing possessive constructions, and transitive clauses.

Chapter 6 is a discussion of a number of syntactic constructions that have relevance to the analysis of transitivity presented in Chapter 5. The first of these is the relative clause. I show that some of the idiosyncratic properties of this construction in Eskimo find a simple explanation under an analysis of relative clause as verbal nouns in apposition, a construction which lacks the sentential category INFL. The second construction is the adverbial clause. That adverbial clauses in Eskimo resemble a certain type of possessive construction has been cited as evidence against the nominalist position. I present an analysis of adverbial clauses that shows them to differ somewhat from these possessive constructions, while at the same time accounting for the morphological similarity. Finally, I discuss the phenomenon of switch-reference (fourth person)

in Eskimo, showing, contrary to what has been claimed, that it can be explained under the nominalist position. Moreover, one puzzling property of switch-reference, that it is both anaphoric and referential, is explained by the particular analysis of transitivity argued in this thesis. Chapter 7 contains some additional remarks.

1.2 The Theory of Generative Grammar

This thesis is based on the theory of Generative Grammar, which takes as its fundamental starting point that all human languages are derived from a species-specific language faculty termed UG, or universal grammar (see Chomsky 1965, 1975, and especially 1986a). Our study of the properties of individual languages reveals to us instances of phenomena that are common to all linguistic systems. Such phenomena are thought to be innate, that is, they form part of our biological make-up. In general, these phenomena are not easy to discern, and it is difficult, if not impossible, to imagine how they might be taught. That children readily display such phenomena in their language is taken as evidence that the set of such phenomena is not learned, but forms part of our inherent linguistic capacity.

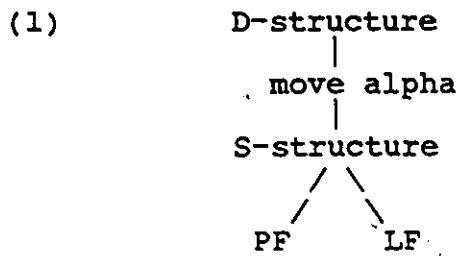
I have used the more neutral term phenomena here because early versions of generative grammar conceived of linguistic universals in the form of rules. Later versions attempted to reduce the set of possible rules by the addition of universal conditions on form and application of rules. The current version of the theory has eliminated virtually all necessity for rules as linguistic descriptions, in favour of a model based on a set of principles and parameters which govern linguistic representation. In this model (see Chomsky 1986a), linguistic structures are essentially projections of lexical information, these projections being subject to the principles operating at different levels of the grammar. Language variation results from different lexicons, the lexicon being the repository of all non-predictable information (which must be learned), as well as differ-

ent settings of the possible parameters. An example of the latter is the parameter of directionality of case assignment. Some languages may assign case to the left, some to the right. The setting of a parameter may result in a constellation of related properties.

Chomsky (1986a) describes the tension between the requirements for descriptive adequacy, and for explanatory adequacy, which is the defining characteristic of the theory of Generative Grammar. On the one hand, the theory must account for all linguistic data in a non-trivial way; on the other hand, the theory must restrict the class of possible grammars in order to account for the fact that children acquire language quite quickly on the basis of limited experience. In other words, the necessity to account for a large range of data must not be coupled with a large range of possible grammars. The goal is to account for as much data as is observed, at the same time reducing as much as possible what must be contained in the linguistic faculty in order for a child to learn a grammar of a language. An example of this type of tension is the topic of this thesis. Views on the concept of transitivity have leaned more to the universal side of the data/universal issue. I will argue that the emphasis on the universal structure of a transitive clause has led to a certain distortion, which is remedied by an abstraction away from transitivity as a structure towards the idea of transitivity as a linking of two arguments by the same predicate. This less rigid concept of transitivity restores the balance between empirical data and explanatory adequacy in what I hope is an interesting way.

1.2.1 The Model

The linguistic model of Generative Grammar is organized into various levels of structure, as shown in (1). This model is not intended to represent real processing.



The grammar of a language must adhere to a number of general principles. The *Projection Principle* states that all lexical structure must be represented at every level of the grammar, while the *Principle of Full Interpretation* (FI), requires that every element of PF and LF be licensed, or interpreted (in other words, vacuous elements are ruled out). Licensing may take the form of subcategorization or predication. For instance a direct object of a verb is licensed by the fact that the verb subcategorizes for assigning a thematic role, while the subject of a sentence (or the specifier of IP) is licensed by the category I (or inflection) by the relation of predication that exists between I and the specifier (see the tree diagram in (11) below).

The fact that all arguments must have case, either abstract or morphological, falls out from the *Visibility Condition*, which requires that an element be assigned case in order to be theta-marked. In other words, case is simply a result of licensing requirements. Without case, an item is not visible, and therefore is not theta-marked and thus is unlicensed.

Another important principle is the *Theta Criterion* which, in Chomsky (1986a, 135), is described as a restriction on CHAINS, given in (2), where a CHAIN is the history of movement (if any).

(2) Theta Criterion

A CHAIN has at most one theta-position;
 a theta-position is visible in its maximal
 chain.

Essentially, this principle ensures that multiple theta-roles are not assigned to an argument from various lexical items.

Predication (see Williams 1980 and Rothstein 1983) is a relation of coindexing between predicates and subjects that takes place before LF. Primary predication, as in (3a), can be distinguished from secondary predication, as in (3b) by the fact that only the former requires a licensing node.

(3) a. $John_i$ left $_i$

b. $John_i$ left nude $_i$

In (3a) the subject *John* is licensed by the node I containing the V *left*, while in (3b) there is no licensing node, merely the relation of predication between the subject *John* and the adjunct *nude*.

Arguments must be classified as to whether or not they are anaphors, pronominals or referring expressions. Each of these categories can be lexical, i.e. have phonetic substance, or an empty category, i.e. have no phonetic substance. They fall under the principles of the Binding Theory (Chomsky (1986a, 171) given in (4), where I is the association of indices in a particular expression.

(4) Binding Theory

I is BT-compatible with (alpha, beta) if:

A alpha is an anaphor and is bound
in beta under I

B alpha is a pronominal and is free
in beta under I

C alpha is an r-expression and is
free in beta under I

Condition A refers to lexical anaphors, such as *himself*, and NP-trace (the empty category left after NP movement). Condition B refers to pronominals, such as *he*, and *pro* (the empty category licensed by agreement). Condition C refers to any item which has its own referential index, and to WH-trace (the trace left after Wh-movement).

Between D-structure and S-structure a rule move-alpha may occur. The rule of move-alpha has no restrictions. There is, however, a restriction on possible outputs.

This is known as the *Empty Category Principle*. This principle requires that the trace (or the position of origin) must be antecedent governed (or hold a specific local relation) with the moved element (or antecedent). I will assume the version of government provided in Chomsky (1986b).¹ The concept of government is built upon a number of other concepts which I will describe prior to giving the definition of government. I will give these definitions in sentences rather than a formalism. The first of these concepts is L-marking, as defined in (5).

(5) L-marking

A lexical category L-marks its complement, the head of its complement, and any specifier that agrees with the head of its complement

The second concept is that of a Blocking Category, as defined in (6).

(6) Blocking Category

A BC is an X^{max} which is not L-marked (IP is an exception to this definition)

The next concept is that of a barrier, as in (7).

(7) Barrier

An X^{max} is a Barrier either because
a) it is a BC by the above definition (i.e. a Barrier inherently)
or
b) it dominates a blocking category (i.e. a Barrier by inheritance)

Whether or not a particular category is a barrier with respect to an element is subject to the Minimality Condition, as in (8).

(8) Minimality Condition

A category is ~~only~~ a barrier to its complements

The Minimality Condition exempts the specifier position from having its dominating category as a barrier.

¹ The reader should be advised that this version is already under revision.

Another crucial concept is c-command. The definition given in (9) is based on Aoun and Sportiche (1983), which Chomsky (1986b) refers to as *m-command*.

(9) C-command

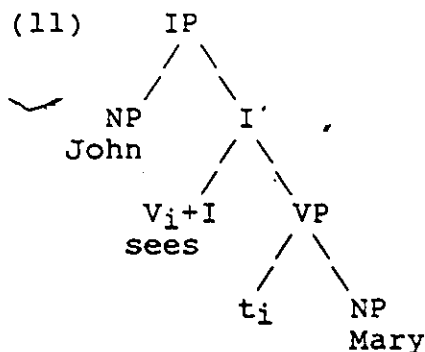
A c-commands B only if A does not dominate B, and every maximal projection that dominates A dominates B.

Finally the concept of government is given in (10).

(10) Government

A governs B only if A c-commands B, and there is no barrier for B which does not have at least a segment which dominates A.

The concept of government allows for only two types of movement. The first type of movement which is permitted is termed substitution. Although NP-movement and WH-Movement are substitutions, the only rule of substitution which will concern us in this thesis is what is termed Head Movement. This involves the movement of a X^0 (the lexical head of the phrase) into the position of another X^0 (see Travis 1984 and Chomsky 1986b). An example of Head Movement is the raising of V to the node I, as shown in (11), where V stands for the category Verb, and I stands for the category Inflection, which carries the feature tense and agreement, and projects the clausal node IP. Movement of the V to I in English is necessary (where no auxiliary is present) so that the verb may carry the features tense and agreement.



- John sees Mary

Head Movement is characteristically local and this locality restriction can be shown to follow from the definitions given above. If we assume that I does not L-mark VP, on the basis of the fact that I is not in itself a lexical category, then we must conclude that I containing V does L-mark VP; otherwise the VP would serve as a barrier to antecedent government of the trace of the moved V, and no such movement could take place. In other words the movement of the lexical item V into I serves to eliminate the barrierhood of VP. This explains why Head Movement must be local, since the lexical item effectively serves both as antecedent to the trace of the head and L-marker of the maximal projection of that head.²

The second type of movement which is permitted under the theory of Barriers to Government as described above is what is termed adjunction. Adjunction is restricted to the movement of a maximal projection (the whole phrase) to an adjunct position, so long as the phrase to which it adjoins is a non-argument.

In summary, the theory of generative grammar presented above is a system where, on the one hand, components of the grammar are independent of each other, but on the other hand, a derivation is linked throughout by its lexical properties. In this thesis the lexical properties of an item are assumed to underlie much of what has been previously described in terms of rules. In particular, the morphology associated with the transitive construction is assumed to play a role in, rather than merely signalling, transitivity.

² This reflexive view of Head Movement, where the head liberates itself, as it were, is confined to categories where the target head is functional (that is to say not lexical). Baker (1985) proposes that other instances of Head Movement occur where the target head L-marks the maximal projection of the head which moves, e.g. noun incorporation. This extended use of Head Movement requires some version of the Minimality Condition to explain the local nature of the rule.

1.3 The Eskimo Language

The Eskimo language forms one branch of the Eskimo-Aleut family. Within this branch, a division is made into Yupik Eskimo and Inuit-Inupiaq (or Eastern Eskimo). While the claims put forth in this thesis are directed toward the Inuit-Inupiaq branch, it is probable that they apply equally to Yupik. Inuit-Inupiaq forms more or less a continuum of dialects which are mutually intelligible with their neighbours,³ extending from Alaska to Greenland. According to Woodbury (1984), these dialects can be broken down into four groups: Alaska, Western Canada, Eastern Canada, and Greenland.

This thesis is based on research on both Caribou and Netsilingmiut dialects spoken in Canada, which are classified as Western Inuit-Inupiaq, although the term Central is also used. This research consisted of two field trips, totalling a period of five weeks, sponsored by the Northern Research Scientific Training Fund and the University of Ottawa. The first trip was to Rankin Inlet (Kangiqliniq), where Caribou dialects are spoken, and the other to Pelly Bay (Arviligjuaq), where Netsilingmiut dialects are spoken. In addition, a large amount of data was collected in Ottawa and Montreal from native speakers residing in the area. One speaker is a citizen of Greenland, and the other comes from Baker Lake (Qamani'tuaq). The original data presented in this thesis come from the latter source. Within the Caribou grouping, this dialect is referred to as Qairnirmiut, which is spoken in Baker Lake and Rankin Inlet.⁴ The data were collected by means of elicitation - both by means of translation from English, and judgements of grammaticality.⁵

³ But see Fortescue (1985a).

⁴ It should be noted that communities often contain speakers of more than one dialect.

⁵ While there are problems with this means of data collection, none of the data presented in this thesis are at odds with respect to published data collected by others. If a crucial point were to rest on some piece of data presented here, which did not conform to other known facts about Eskimo, there would be cause for concern; however, this is not the case. Moreover, the main source of my data comes from a professional translator, who also has experience working with linguists.

The orthography used in the examples⁶ is the Roman orthography adopted by the Inuit Cultural Institute (ICI),⁷ which is phonemically based.

Both vowels and consonants may be phonemically short or long. There are three vowels, given in (12).

(12) i u
 a

There are fourteen consonants given in (13).

(13) p t k q
 v j g r
 m n ng
 l
 ʔ s/h

The symbol /q/ stands for a uvular stop, /r/ for a uvular fricative, /ng/ for a velar nasal, /j/ for a palatal glide, /h/ for a voiceless lateral fricative, and /ʔ/ for a glottal stop.⁸ All the other symbols are straightforward. There is inter- (and perhaps also intra-) dialectal alternation between /s/ and /h/.

The Eskimo language is a so-called polysynthetic language, that is, the language makes use of morphology to express what in other languages would be separate words. The word is made of a stem followed by any number of suffixes. There are no prefixes, and only a few enclitics.

⁶ To give credit where credit is due, the spelling was provided by my language consultant Basil Kiblakoot. Any errors are due to my reproduction of it.

⁷ Keewatin speakers favour the syllabic orthography over the Roman. For a historical overview, see Harper (1983).

⁸ The glottal stop is only found in a few dialects of Inuit-Inupiaq (see Webster and Zibell 1976), and is rare even within these dialects.

Nouns are obligatorily marked for number and case, and optionally for possession. Number is either singular (null), dual (-V-k), or plural (-i)t), as in (14).

- (14) a. qimmiq. 'dog'
 b. qimmi-ik 'two dogs'
 c. qimmi-it 'dogs'

Throughout this thesis I omit dual forms from paradigms. For a complete description of Eskimo morphology, see Fortescue (1984) on West Greenlandic, and for a description of most forms of a dialect close to the one presented here, see Lowe (1985).

The cases can be divided into two grammatical cases, which may agree with the verb, and six oblique cases, which may not agree with the verb. Examples are given in (15).

- (15) a. angut siqumit-si-juq unaar-mik
 man(abs) break-agent-part.3sg. harpoon-comit.
 'The man broke the harpoon'
- b. angut taku-jau-lauq-tuq ilinniarving-mi
 man(abs) see-pass-past-part.3sg.
 school-loc.
 'The man was seen in school'
- c. Jaani-up agгаа-nga
 John-rel. glove-poss.3sg.
 'John's glove'
- d. Jaani-up natsiq siqqu-gaa
 John-rel. seal(abs) shoot at-part.3sg.
 'John shot at the seal'
- e. Jaani pisuk-tuq niuvirving-mut
 John(abs) walk-part. store-all.
 'John walked to the store'
- f. Jaani-up ipuittuq anmag-aa pilauti-mut
 John-rel. can(abs) open-part.3sg./3sg.
 snow.knife-all.
 'John opened the can with a knife'

- g. Jaani-up Miuri-mut ipuittuq angmaq-ti-taa
 John-rel. Mary-all. can(abs)
 open-cause-part.3sg./3sg.

'John made Mary open the can'

- h. Jaani ani-juq tuksiarving-mit
 John(abs) go out-part.3sg. church-abl.

'John left the church'

- i. Jaani ikajug-au-laug-tuq nutaqqa-mit
 John(abs) help-pass-past-part.3sg.
 child-abl.

'John was helped by a child'

- j. Jaani Qamani tua-lia-laug-tuq tingmisuu-kkut
 John(abs) Baker Lake-travel-past-part.3sg.
 plane-vial.

'John travelled to Baker Laker by plane'

- k. Jaani qai-juq siku-kkut
 John(abs) come-part.3sg. ice-vial.
 'John is coming over the ice'

- l. nutaqqa-tuq uqaju-jutit
 child-eg. speak-part.2sg.

'You speak like a child'

The absolute case (null) is not associated with any uniform meaning, as can be seen in examples (15a) and (15b). The relative case (-up) is the second grammatical case, and is associated either with a possessive or an agentive (in the broad sense) meaning, as in (15c) and (15d). While the oblique cases all have some core sense, there are exceptions. For example, the allative case (-mut), which usually conveys the sense of goal, as in (15e), is also one of the cases found on oblique instruments and agents, seen in (15f) and (15g). The comitative case (-mik), which is sometimes called the modalis, is usually associated with a patient role, as in (15a), (though it is also the instrumental in Greenlandic). The ablative (-mit) is either the source or the agent, as in (15h) and (15i). The vialis (-kkut), which is also called the prosecutive, refers to the

path or means of a motion, as in (15j) and (15k). The locative, or localis, (*-mi*) refers to the location of something, as in (15b). Finally, the equative, or similaris, (*-tut*) refers to something that resembles something else, as in (15l). Due to the proliferation of different names for these cases, the reader is advised to remember the form, which at least remains more or less the same across dialects.

The verb minimally consists of a verb stem followed by a mood marker and agreement, as in (16).

(16) *sinik-tu-nga*
 sleep-part.-1sg.

'I am sleeping'

The example in (16) contains the verb stem *sinik-*,⁹ followed by the intransitive participial mood marker *-tu(q)-*, followed by the first person agreement marker *-nga*. Declarative clauses must have either indicative or participial mood markers. The intransitive indicative mood marker is *-vu(q)-* after vowels and *-pu(q)-* after consonants. The participial mood marker is *-ju(q)-* after vowels and *-tu(q)-* after consonants. Transitive participial mood markers are *-ja(q)-* / *-ta(q)-*, and transitive indicative mood markers are *-va(q)-* / *-pa(q)-*.¹⁰ For brevity, I gloss declarative mood markers only as indicative or participial. The transitivity of the mood marker should be clear from the form and from the agreement - single agreement for intransitive constructions, and double agreement for transitive constructions.¹¹ There is agreement for first, second, third, and what is termed either fourth person or third person reflexive. Throughout this thesis, I often gloss third person with only a single meaning, e.g. 'he'; more correctly this morpheme should always be glossed 'he/she or it'. Gender and animacy must be supplied by the context in Eskimo. Fourth person, which may only appear as agreement in

⁹ Verb stems are discussed in Chapter 5, sections 2 and 3.

¹⁰ These forms are discussed further in Chapter 5, section 4.

¹¹ But see Chapter 6, section 1.

either possessives or subordinate verbs, is an anaphoric agreement marker which marks shared reference with the "subject" of the main clause. This will be discussed in Chapter 6, section 3.

According to Fortescue (1984), the only real tense in Eskimo is the future. All others are either aspect or mood.¹² The absence of any morpheme specifying tense or aspect indicates that the verb can be translated either as present or recent past, as shown in (17a) through (17c), with the exception of stative verbs, as shown by (17d).¹³ Throughout this thesis, I will provide only one translation for these forms.

- (17) a. Jaani aullaq-tuq
John(abs) leave-part.3sg.
'John is leaving/left'
- b. unaaq siqumit-tuq
harpoon(abs) break-part.
'The harpoon is breaking (or just broke a few seconds ago)'
- c. Jaani-up natsiq kapi-jaa
John-rel. seal(abs) stab-part.3sg./3sg.
'John is stabbing/stabbed the seal'
- d. Jaani sinik-tuq
John(abs) sleep-part.3sg.
'John is sleeping/*slept'

For a good introductory teaching grammar to Inuktitut, see Mallon (1984), and for a much more advanced grammar, based on Greenlandic, see Fortescue (1984). An extensive bibliography of Eskimo can be found in Woodbury (1984).

¹² Woodbury (p.c.) says that the future is somewhat modal.

¹³ Predicate classes are discussed in Chapter 5, section 3.

Chapter II

ON THE RELEVANCE OF ERGATIVITY

In this chapter I will introduce the subject of ergative case patterning. I will also review a claim that has been made on the basis of some ergative languages that it is possible that languages may vary as to the mapping of semantic roles to grammatical functions. It will be argued that the existence of such variation poses a major problem for theories of language learnability.

2.1 The Phenomenon of Ergativity

The traditional usage of the term *ergativity* refers to the linguistic phenomenon where a language treats the object of a transitive verb in the same fashion as the subject of an intransitive verb. This entails that the subject of a transitive verb is uniquely marked, in contrast with nominative-accusative systems where the object of a transitive verb is uniquely marked with respect to the subjects of transitive and intransitive verbs. A nominative-accusative system and an ergative system are distinguished by the distribution of case. Compare the nominative-accusative distribution of the cases in the Russian examples in (1) with the ergative-absolutive distribution of the Inuktitut examples in (2).¹ The ergative case is called *relative* in Eskimo linguistics, a term which I will use throughout this thesis when referring to Eskimo.

¹ I use the term Inuktitut to refer to the dialects of Eskimo spoken in Canada, including Western dialects (Inuvialuktun), Quebec dialects and the Labrador dialect (Inuttut). This excludes the Greenlandic dialect (Kalaallit oqaasi). The examples I provide, unless otherwise indicated, are from a Caribou dialect, Qairnirmiut.

(1) Russian

- a. *chelovek idj-ët*
man-nom. walk-3sg.

'The man is walking'

- b. *chelovek ljub-it zhenshchin-u*
man-nom. love-3sg. woman-accus.

'The man loves the woman'

(2) Inuktitut

- a. *angut pisuk-puq*
man(abs.) walk-3sg.

'The man is walking'

- b. *anguti-up arnaq taku-vaa*
man-rel. woman(abs:) see-3sg./3sg.

'The man sees the woman'

In all the examples in (1) and (2) the NP *the man* refers to the person performing the action. In the Russian examples in (1) *chelovek* 'the man' is the sole argument agreeing with the verb and receives nominative case in both instances. In (1b), *zhenshchina* (citation form) 'the woman', which is the "patient" of the action, does not agree with the verb and receives accusative case *-u*. In the Inuktitut examples in (2), we see that although *angut* 'the man' is performing the action and agrees with the verb in both instances, it does not receive the same case. In (2a) it is in the absolutive case, which is phonetically null, and in (2b) it is in the relative case *-up*. Another difference is that the patient of the action in (2b) *arnaq* 'the woman' also agrees with the verb, unlike (1b), and that the case it receives is the same case, absolutive, as is found on *angut* 'the man' in (2a).

If we were to assume that the lexical item meaning 'the man' is the subject, and that the one meaning 'the woman' is the object in the examples in (1) and (2), we could then describe Russian as assigning nominative case to subjects of both transitive and

intransitive verbs, and accusative case to objects of transitive verbs. Under this line of reasoning, Inuktitut assigns absolutive case to subjects of intransitive verbs and objects of transitive verbs, and relative (or ergative) case to subjects of transitive verbs. In this way, Inuktitut shows ergativity as described above, since the subject of a transitive verb is the marked relation. This contrasts with the nominative-accusative system of Russian, where the object of a transitive verb is the marked relation. The difference in grouping is schematized in (3).

<u>(3) Nominative-accusative</u>			<u>Ergative-absolutive</u>	
Nom. {	SUB of transitive		SUB of transitive	Erg.
	SUB of intransitive		SUB of intransitive	
Acc. >	OBJ of transitive		OBJ of transitive	} Abs.

2.2 Morphological and Syntactic Ergativity

In the preceding section Inuktitut was described as assigning relative case to the subject of transitive verbs and absolutive case to the subject of intransitive verbs (and to the object of transitive verbs). This type of ergativity, where the case assigned to subject position is dependent on the transitivity of the verb, is termed morphological ergativity. Morphological ergativity is viewed as a relatively surface phenomena since the case assigned to the subject position is dependent on the context of the subject at surface level. This type of ergativity is claimed by Levin (1983) to be the system of Warlpiri.² Morphologically ergative languages almost always display what is termed split ergativity, meaning that the language has properties of both an ergative-absolutive and a nominative-accusative system (see Dixon 1979 and DeLancey 1981). The existence of morphological ergativity presents a number of questions. For instance, why should the case assigned to subject position be sensitive to the transitivity of the verb, and why

² Sadock (1980) describes West Greenlandic Eskimo as morphologically ergative. Johnson (1980) claims the same for Central Arctic Eskimo.

should the case assigned to the subject of an intransitive verb be identical to that assigned to the object of a transitive verb? Is there any motivation for positing the existence of subjects sensitive to transitivity other than to preserve our notions of subjects of transitive verbs being equated with agents, and objects of transitive verbs being equated with patients?³ If it were the case that all instances of morphological ergativity were based on a semantic characteristic, for instance aspect (see van Voorst 1986), its existence would not seem so surprising. In fact, there seems to be a variety of semantic factors which result in morphological ergativity (see DeLancey 1981). In languages with morphological ergativity, the syntax ignores the case differences between subject of transitive and intransitive verbs, and operates like any other nominative-accusative system.

Dixon (1979) showed that there are some languages in which the grouping of subject of intransitive with object of transitive, as distinct from subject of transitive, extends beyond case assignment into the syntax. Such a language is often termed syntactically ergative. In effect, a syntactically ergative language treats the patient or affected object of a transitive verb and the single argument of an intransitive verb as if they formed the same type of constituent - what Dixon calls a syntactic pivot. The agent of a transitive verb is another type of constituent. One of the nice results of such a proposal is that case assignment can be seen as uniform since absolutive case will be assigned to one type of constituent and ergative case to the other. It is important to note that this type of grouping is at a relatively surface level for Dixon, and that he assumes the universal existence of a more abstract subject which groups agents of transitive verbs with arguments of intransitive verbs (in effect a nominative-accusative grouping).

³ Subjects of intransitive verbs can typically be actors or themes, such as *I walk* or *I fall* respectively.

Another approach to syntactic ergativity was developed in the framework of Marantz (1981 & 1984), wherein he proposed the Ergativity Hypothesis.⁴ Marantz argues that languages utilize generalizations concerning the mapping between semantic roles, such as agent, patient, theme, etc. and initial logical structures of sentences. One such generalization is that agent and theme roles are assigned to subject position and patient roles to direct object position. The Ergativity Hypothesis is that an alternative mapping exists where theme and patient roles are assigned to subject position and agent roles are assigned to direct object position. This distinction is shown in (4).

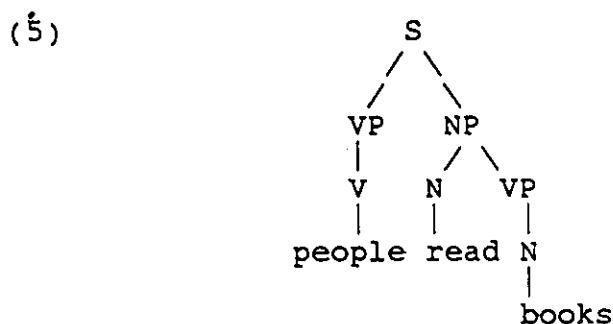
(4)	Transitive Clause	
	Nominative-accusative	Syntactically Ergative
SUB:	agent	patient
OBJ:	patient	agent

Note that morphologically ergative languages will be nominative-accusative in terms of this parameter since it only refers to the mapping between semantic role and grammatical function. Case assignment is not part of this mapping. Before discussing this proposal in detail, I will show that syntactic ergativity is problematic vis a vis learnability. Agents in direct object position undermine the core feature of current learning theories, and force the stipulation of a yet unknown learning process in order to account for them. This makes it desirable that syntactic ergativity be eliminated as a possibility in natural language.

⁴ See Levin (1983) for an extensive examination of a number of languages within this hypothesis.

2.3 Learnability and the Ergativity Hypothesis

Grimshaw (1981) points out that there is a gap in our understanding of how the child learning its first language makes the initial linking between the stream of input and the syntactic categories which are innate to the child's language acquisition device. A child may be expecting to find such syntactic entities as nouns and verbs in its language, but the problem remains as to how the child identifies these entities in the input. There is no universal marker of noun or verb that the child could use to make this connection. The problem consists of more than just knowing the meaning of the input because, as Grimshaw shows in an example (p. 174),⁵ even if the child knew the meaning of the sentence *People read books* how is it that the structure in (5) is not assigned?



As a solution to this problem, Grimshaw hypothesized the Canonical Structure Realization Principle which utilizes the child's semantico-cognitive abilities to form a linking between, for example, things and nouns, actions and verbs, agents and subjects, and patients and objects. These relations are universal and enable the child to begin the process of acquisition by what is, in effect, a bootstrapping procedure. Pinker (1982) terms this the Semantic Bootstrapping Hypothesis. Once the initial linking has been achieved, the child is able to continue the acquisition process on the basis of other types of information, for example distributional evidence.

⁵ Grimshaw's example is given in linear brackets, but I have given it in tree structure.

Pinker (1984) discusses the role that parents play in this process. Parents of the child, by using sentences which conform to the Semantic Bootstrapping Hypothesis, and by referring only to items and events in the vicinity of the child's perception, unconsciously aid in acquisition. Based on a suggestion by David Lebeaux, Pinker further extends the usefulness of this learning mechanism to the learning of lexical entries such as the subcategorization features of verbs. He calls this the Canonical Mapping Principle. This principle states that, in the two tiers given in (6), the lines of association may not cross, and that one and only one thematic role must be linked to the subject.

(6) From Pinker (1984, 297)

SUB	OBJ	OBLIQUE
agent	theme/patient	goal/source/location

(where the top line represents grammatical functions,
and the bottom line represents thematic relations)

If a crossing occurs the construction is non-canonical. It is probably clear by now that the aspect of the Semantic Bootstrapping Hypothesis which concerns us here is the association of agents with subjects and patients with objects. In the diagram in (6), if SUBJ were connected to patient, and OBJ to agent, the two lines would cross each other.

Pinker (1984, 41) allows for an association of subject with:

Agent of action; cause of causal event; subject of an attribution of location, state, or circumstance; argument with "autonomous reference".

The object is associated with "patient or theme". A generalization across languages seems to be that the subject position can be filled with many types of semantic roles, as can be seen in the examples in (7).

- (7) a. The man broke the cup.
 b. The cup was broken.
 c. The key opened the door.
 d. The man received the book.
 e. The cat went up the tree.

In (7a) the subject is an agent, in (7b) a patient, in (7c) an instrument, in (7d) a goal, in (7e) a theme. Thus in terms of the Ergativity Hypothesis, patients in subject position do not present a serious problem for an acquisition theory containing the Semantic Bootstrapping Hypothesis. Where the Ergativity Hypothesis is at odds with the Semantic Bootstrapping Hypothesis is in its claim that agents can occur in object position, and it is this claim which I wish to dispute. Marantz's generalization is similar to the Canonical Mapping Principle in that both restrict the mapping from thematic role to grammatical function. The acquisition of verbs is facilitated by the existence of such a generalization. Otherwise, the learner would have to learn the mapping of semantic role to grammatical function for every individual verb. With the aid of a mapping principle, once a child knows that a particular verb assigns both an agent and a patient role, the principle will predict the grammatical functions which these roles are mapped onto. Where Pinker's generalization and that of Marantz differ is that the Canonical Mapping Principle is not a parameter, while the Ergativity Hypothesis is. In other words, Marantz's framework is subject to an additional requirement, that information which leads the learner to set the parameter be part of the input. Pinker's theory does not have to meet such a requirement since there is no parameter; in other words, the child does not have a choice as to the canonical mapping.

Pinker (1984, fn. 4, 398) fully realizes the problem that syntactically ergative languages would pose for his theory.

...I simply note here that "true ergative" languages (which are not to be confused with "morphological ergative" languages) are fairly rare, and that the acquisition theory at present cannot easily account for their acquisition...

Pinker reasons that if such languages do indeed exist, then there must be some mechanism for overriding the Canonical Mapping Principle. He makes the following conjecture.

Presumably the child at some point can learn some sufficiently large set of properties diagnostic of subjecthood (using some mechanism yet to be specified) such as controllability in infinitival complements or alternation with certain oblique functions in passivization, and can use them to predict the others, semantic evidence to the contrary, notwithstanding.

This appears to be a weakening of the theory since the door must be left open for a process which accomplishes the same task as the Semantic Bootstrapping Hypothesis, but clearly will not resemble it in any way since it will be based on purely syntactic criteria. More importantly, it is unclear exactly how this process works.

Marantz (1982) describes the results of two experiments designed to test aspects of the acquisition of grammatical relations. Briefly, the experiments were as follows: children grouped according to age were taught artificial verbs describing actions that have no equivalent verb in English. A child might have to learn the verb *nade* which might mean 'X hits Y with the back of X's hand'. This verb would be exemplified by something like 'Larry is nading the table'. In this instance the agent is related to subject position while the patient is related to object position. Other relations than the normal agent/patient (AP) were used, such as agent/location (AL), patient/location (PA), and location/agent (LA). An example of a patient/agent verb would be the verb *moak*, meaning 'X pounds Y with X's elbow' as in 'The table is moaking Larry'. The experiments found that the three and four year old children had more difficulty learning the anomalous (or non-canonical) verbs than those which conformed to the semantic generalizations of English (and the Semantic Bootstrapping Hypothesis). The five year old children were found to learn all types of verbs with equal ease.

Marantz (p. 65) concludes that "children learning English are first dependent on knowledge connecting semantic relational classes directly to structural positions but later employ non-semantic classes to mediate this connection". This conclusion seems to conform to the Semantic Bootstrapping Hypothesis where the initial relation between the input and the grammar is via semantics until a later stage when the grammatical categories and functions exist independently. Yet Marantz insists that semantic relations cannot flag grammatical relations in the sense of Pinker. One of his arguments against Pinker⁶ is the existence of syntactically ergative languages, which is the issue of debate here. The other is the fact that, although the three and four year olds appear to be more reliant on semantic generalizations, they nonetheless did manage to learn some non-canonical forms. Pinker (1984) says that this result shows that positive evidence can be used in the acquisition of non-canonical forms.

There is perhaps another way to view the results of Marantz (1982). It concerns the actions used in the experiment and the interpretation given to the child's usage of the novel verbs. In both experiments, with the exception of one verb, the artificial verbs described actions of one entity on, or near, another, for example pounding one's elbow on something, hitting with the back of one's knee, etc. The only verb where an object was affected was in the first experiment where the nonsense verb denoted the action of moving something up and down on one's knee. The reason that this is significant is that, without an affected patient, there may be reason to suspect an alternative analysis to some of the findings. There was no testing of what the children really meant when they said the table is moaking Larry, where Larry is pounding his elbow on the table. If the table has not undergone a change of state as a result of the pounding, it is possible that the sentence might have been meant as 'The table is making Larry pound his elbow'. The fact that the table is inanimate is not a major hurdle for a child's imagination. In the second experiment all the verbs were actions that did not affect anyone

⁶ Marantz discusses Pinker (1980), an earlier version of the theory.

else, and all the participants were animate. The results of Marantz's experiment might have been more conclusive if he had included transitive verbs where we could be sure that a causative interpretation is impossible, for example 'push into a box'. Thus 'The ball moaked Larry' meaning that Larry pushed the ball into the box would not be open to the causative meaning where the ball caused Larry to push. In other words, it may be that the children learned the so-called LA or PA verbs as lexical causatives such as the English verb *walk* 'Mary walked the dog' where the subject causes the object to act. As mentioned in Pinker (1984), Bowerman (1982, 108-109) provides evidence that children create novel lexical causatives that do not exist in English, such as the following.

- (8) a. Mommy, can you stay this open?
 b. I come it closer so it won't fall.
 c. Don't giggle me.

Although there is no way of knowing for certain from the description of the experiments, we cannot rule out the possibility that the problems which the younger children had with the "non-canonical" forms were, in fact, problems with lexical causatives.

In the previous discussion we have seen that Marantz, and as a consequence Pinker, have left the option open for languages to assign agent roles to direct object position. Marantz has this option firmly embedded within his theory as the Ergative Parameter, while Pinker proposes a weakening of his Semantic Bootstrapping Hypothesis by allowing an unknown mechanism to override semantic generalizations. While Pinker's theory accounts for the problem originally posed by Grimshaw, that is, how the child manages to form an association between the input and the innate syntactic categories and functions, Marantz does not directly address this issue. In a section which discusses the scarcity of syntactically ergative languages, Marantz tentatively proposes that this fact may derive from the way in which children view the world. He suggests that if children see themselves as topics of actions, and if the topic is associated with the subject position, then the unmarked case will be nominative-accusative lan-

guage where agents are associated with subject position, and patients with direct object position. This means that syntactically ergative languages are marked with respect to the Ergative Parameter.

One of the essential characteristics of a marked option is that this option should be unambiguously represented. The reasoning is that the child does not need a great deal of evidence, if any, to choose the unmarked option, but that clear evidence must be provided in order for him or her to pick the marked option. In other words, there must be a reason that the child goes against natural inclinations. In terms of acquisition theory this means that the evidence which determines that the child will choose the marked parameter must meet a criterion of robustness. The importance of robustness in markedness theory is discussed by Dresher and Kaye (1986). This criterion seems implicit in Pinker's description of how the semantic correlations might be overridden by "some large set of other properties" discussed above.

2.4 Summary

In summary, an acquisition model based on the Semantic Bootstrapping Hypothesis is at odds with the Ergative Parameter. It will be seen in the following section that the evidence which purports to show that Inuktitut is a syntactically ergative language does not meet the robustness criterion. Without robustness, or some means initiating the marked option, the acquisition of a syntactically ergative language is impossible. Marantz provides only two candidates for syntactic ergativity, Central Arctic Eskimo and Dyirbal. Moreover, Marantz claims to show that Greenlandic Eskimo is morphologically ergative. I will review the argument in Johns (1984) that the two dialects do not differ typologically, and present a rather different analysis from that proposed by Marantz, in that the case distinctions in Eskimo do not represent morphological ergativity, nor do they result from the agent role occurring in direct object position. I will argue for

an intermediate analysis, based on the insights of early Eskimo grammarians such as William Thalbitzer and Louis Hammerich, wherein the question as to which element is direct object is obviated in favour of an analysis which has both the relative and the absolutive nominals as subjects, the relative the subject of a verbal noun and the absolutive the subject of the predicate containing this noun. This analysis thus claims that Inuktitut is not morphologically ergative, since case assignment will be contingent on whether or not the noun-phrase is subject of a predicate or a noun-phrase, yet conforms to the Semantic Bootstrapping Hypothesis, since the agent is never the object of the verb. In fact this analysis claims that there are no direct objects in Eskimo. A consequence of the removal of Inuktitut from the list of syntactically ergative languages is that the existence of languages of this type must be seriously in doubt. It is possible that Dyirbal, the remaining candidate for syntactic ergativity, may also turn out to have no direct object. The reduction of language types, and the strengthening of the acquisition theory by prohibiting any other mechanism than the Semantic Bootstrapping Hypothesis in the early acquisition of grammatical relations is a welcome by-product of the analysis to be presented.

Chapter III

TYPOLOGICAL AMBIGUITY IN ESKIMO

3.1 Introduction

Marantz (1984) argues that one dialect of Eskimo, Greenlandic, is a nominative-accusative language with ergative case marking, and another dialect of Eskimo, Central Arctic, is an ergative-absolutive language with nominative-accusative case marking. As we shall see, this claim predicts that for most constructions the two dialects will appear identical, but there will be some differences. Marantz assumes the existence of both syntactic and morphological ergativity. Recall that syntactic ergativity is based on a different mapping between semantic role and syntactic function, while morphological ergativity is case assignment to subject position being sensitive to the transitivity of the verb. Marantz views syntactic and morphological ergativity as two values of two separate parameters. Based on the two parameters, semantic role assignment and case assignment, he allows for four different language types, as in (1).¹

(1) Four Language Types (based on Marantz 1984)

A. Nominative-accusative with nominative-accusative case

transitive verb		intransitive verb
agent	patient	theme
subject	object	subject
nom.	acc.	nom.

¹ Note that I have differentiated patient from theme in this chart for illustrative purposes. This does not mean that I assume them to be different roles, cf. Gruber (1976) and Jackendoff (1983) for versions where the two arguments are theme, but they differ as to the function which assign them their role. Patient is but a theme role of a 'cause' function.

B. Nominative-accusative with ergative case

transitive verb		intransitive verb
agent	patient	theme
subject	object	subject
erg.	abs.	abs.

C. Ergative-absolutive with nominative-accusative case

transitive verb		intransitive verb
patient	agent	theme
subject	object	subject
nom.	acc.	nom.

D. Ergative-absolutive with ergative case

transitive verb		intransitive verb
patient	agent	theme
subject	object	subject
erg.	abs.	abs.

Marantz's claim is that Greenlandic Eskimo is a type B language and that Central Arctic Eskimo is a type C language. As can be seen in the chart, these two languages will appear identical at the surface level, since the combination of grammatical relations and case assignment produces in both dialects a system wherein the case of agents is differentiated from that of themes or patients. In type B languages this distinction originates at the surface level where case is assigned, while in type C languages it originates earlier, at the level where semantic roles are assigned to grammatical relations. If the Ergative Parameter is correct, there will be differences in the two languages which hinge on the fact that the grammatical relations are reversed. In other words, there should be differences which can only result from the agent and patient roles being assigned to mirror image grammatical functions in the two dialects. The main evidence which Marantz provides to support his claim that Greenlandic Eskimo is a type B language and that Central Arctic is a type C language concerns two constructions, the derived intransitive and the lexical reflexive.

3.2 Lexical Reflexives and Intransitives

Lexical reflexives are defined by Marantz as reflexives which are based on the intransitive form. He gives examples from Albanian, French and Russian as in (2)

(2) examples from Marantz (1984)

a) Albanian

- i. Agimi lan veten
Agim wash-3sg. self
'Agim washes himself'
- ii. Agimi lahet.
Agim wash-3sg.
'Agim washed himself'

b) French

Les enfants se lavent maintenant.
the children self wash now
'The children are washing themselves now'

c) Russian

Deti mojuts'a teper'.
children wash-PRES3pl.-SELF now
'The children are washing themselves now'

Marantz's argument goes as follows. There are only two possible analyses of lexical reflexives. In the so-called clitic analysis the verb is transitive, and the reflexive morpheme is assigned the semantic role normally assigned to the logical object of a transitive verb. In the non-clitic analysis, which is the one that Marantz favours, the verb is intransitive, and the semantic role normally assigned to the logical object is assigned to the surface subject. The reflexive morpheme itself receives the semantic role which would have been assigned to the logical subject. This means that the features of a lexical reflexive will resemble those of the passive construction, since, in both constructions, the role normally assigned to the logical object is assigned to the subject position, and the role normally assigned to the logical subject is assigned elsewhere. Marantz then shows evidence that, in many languages, the form of the lexical reflexive and the form of the passive are homophonous. The crux of this analysis is that a) all lexical

reflexives are intransitive, and that b) intransitivity implies the non-assignment of semantic role to logical subject position. With respect to a), Marantz cites evidence from Grimshaw (1981b) that French reflexives behave like intransitive constructions. Albanian reflexives are also intransitives (see Hubbard 1979). Part b) of the argument derives from Burzio's Generalization, which is given in (3).

(3) Burzio's Generalization (Burzio 1981)

T \leftrightarrow A

where T = Thematic role assignment to subject
A = Accusative case assignment

Burzio's generalization says that, where there is no accusative case assignment, neither is there assignment of thematic role to subject. This generalization is made on the basis of a number of constructions which demonstrate this correlation such as passive, raising and unaccusative verbs, as in (4) to (6).

(4) Passive

- a. [e] was broken (the glass) by the child
- b. The glass was broken by the child

(5) Raising

- a. [e] seems (John) to be happy
- b. John seems to be happy

(6) Unaccusative

- a. [e] arrived (John)
- b. John arrived

In all the above examples, the argument in parentheses does not receive case. The element bearing the thematic role, which must be assigned case in order to be realized, moves or is mapped into the surface subject position. The latter position does not have a thematic role assigned to it so this movement does not violate the Theta Criterion of Chomsky (1981). Inflection assigns case to the subject position thus licensing the thematic role of the logical object. Under these assumptions, Marantz considers the data from Greenlandic and Central Arctic intransitive forms given in (7).

(7) INTRANSITIVES

Central Arctic

- a. angut taku-vuq
man(abs.) see-indic.3sg.

'The man sees something'

Greenlandic

- b. Piniartoq toqup-poq (from Sadock 1980)
hunter(abs.) kill-indic.3sg.

'The hunter was killed'

- c. tigianaq taku-voq (from Swadesh 1944, 45)
Fox(abs.) see-indic.3sg.

'The fox was seen'

(8) REFLEXIVES

Central Arctic

- a. uvam-nik taku-vunga
myself-comit. see-indic.1sg.

'I see myself'

- b. angut ingmi-nik kapi-vuq
man(abs.) himself-comit. stab-indic.3sg.

'The man stabbed himself'

Greenlandic (Marantz 1984, 217)

- c. angut ingmi-nut taku-vuq
man(abs.) self-all. see-indic.-3sg.

'The man saw himself'

According to Marantz, the fact that (7b) and (7c) contrast with (7a) with respect to the thematic roles of the intransitive results from the fact that they assign different roles to the direct object. Recall that, according to Burzio's Generalization, if they are intransitive, which they clearly are, they must all be "passive" in construction. Under this assumption, the Central Arctic verb in (7a), which assigns an agent role to the surface subject position, must normally assign agent roles to the logical object position. Likewise, the Greenlandic verbs in (7b) and (7c), which assign patient roles to the surface subject position, must normally assign patient roles to the logical object

position. We must therefore conclude that the two dialects assign different roles to the logical object position. Central Arctic, which assigns agent roles to the logical object position, appears to be a syntactically ergative language, while Greenlandic, which assigns patient roles to the logical object position, appears to be a nominative-accusative language.

The second argument concerns the case marking on the reflexive pronouns *ingmi-* in (8). In (8a) the case is the comitative, which is the case usually found on displaced patients. By displaced, I mean an argument which is found in an oblique position, as opposed to its canonical position as grammatical argument of the verb. The agent by-phrase in the English passive construction would be an example of a displaced agent, since the agent role is normally found on the grammatical subject. An example of the comitative case on a displaced patient can be seen in (9b), which is often termed the "antipassive" construction in Eskimo.²

(9) a. Central Arctic

anguti-up arnaq kunik-paa
 man-rel. woman(abs.) kiss-indic.3sg./3sg.
 'The man kissed the woman'

b. angut arna-mik kunik-si-vuq
 man(abs.) woman-comit. kiss-si-indic.3sg.
 'The man kissed a woman'

In (9a), the patient 'woman' is in the absolutive case and agrees with the verb, while in (9b) it is in the comitative case and does not agree with the verb. Note that one of the effects of the antipassive is that the displaced patient usually becomes indefinite in reference.

² Note that in the following two examples I do not give a gloss for the morphemes *-si* and *-jau-*, since whether they are termed passive or antipassive is dependent on the typological classification of the language, the subject under discussion here. My own position is that proposed in Jensen and Johns (to appear), where these morphemes are analysed as bearing thematic roles. Further discussion is to be found in Chapter 5, section 4.

Assuming that the lexical reflexive is passive-like in feature, the comitative case marking on the Central Arctic reflexive pronoun in (8a and b) indicates the logical subject which is displaced by the passive-like features of the reflexive. The example in (9b) shows that this case represents displaced patients. We must conclude that the logical subject of a Central Arctic transitive verb is the patient argument. This argument combined with the evidence that the logical object of a transitive verb is the agent argument results in the classification of Central Arctic Eskimo as syntactically ergative with nominative-accusative case marking as defined above.

The third reflexive form (8c) is from Greenlandic Eskimo. The case on the reflexive pronoun is the allative case, which is usually found on displaced patients, as in the "passive" construction in (10b).

- (10) Greenlandic
(from Woodbury 1977, 323-324)
- a. angut-ip arnaq taku-vaa
man-rel. woman(abs.) see-indic.3sg./3sg.
'The man saw the woman'
- b. arnaq anguti-mut taku-tau-pug
woman(abs.) man-all. see-tau-indic.3sg.
'The woman was seen by the man'

As can be seen, 'the man' *angut-* in (10a) agrees with the verb, and is therefore in a primary relationship with the verb. In (10b) *angut* does not agree with the verb and is oblique. Therefore the case that a displaced agent receives in Greenlandic is the allative. Again, if the intransitive reflexive is passive-like in feature, then the allative case marking on the reflexive pronoun in (8c) means that the logical subject of a transitive verb in Greenlandic is assigned the allative case. The evidence from (10) shows that the allative case is assigned to displaced agents. Therefore in Greenlandic the logical subject is assigned the agent role. This, combined with the argument that in Greenlandic patient roles are assigned to logical objects of transitive verbs, means that Greenlandic Eskimo must be classified as a nominative-accusative language with ergative

case marking (since the subjects of transitive verbs are marked as distinct from subjects of intransitive verbs). Note that, under this analysis, the antipassive construction in (9b), and the passive construction in (10b), must both be passive constructions in their respective dialects. The passive of a nominative-accusative language will move a patient to subject position, making the agent oblique, while the passive of an ergative language will move an agent to subject position, making the patient oblique. This describes exactly the surface forms in (9b) and (10b).

3.3 Problems with a Typological Distinction Within Eskimo

In Johns (1984) I reviewed the evidence presented above that is intended to support the claim that Central Arctic is an ergative language with nominative-accusative case marking, and Greenlandic is a nominative-accusative language with ergative case-marking. I concluded that both dialects are typologically identical, but that it was impossible to determine what type they were within the framework provided by Marantz. In this section, I will briefly discuss my argument against Marantz's conclusions, and present some additional evidence to support my criticism.

3.3.1 Burzio's Generalization: Some Exceptions

One of the major problems with Marantz's proposal for a typological distinction between the two dialects is its crucial reliance on Burzio's Generalization. Recall that it is Burzio's Generalization which motivates the assumption that all the simple intransitive forms, including the lexical reflexive, must be passive-like in feature. This is because the inability to assign accusative case (the forms are intransitive) is linked to the inability to assign a semantic role to the subject position.

There are a number of constructions in natural language which do not adhere to this generalization, among which are the so-called unergative verbs, or verbs such as 'swim' in English, where the subject is not thought to have originated in direct object

position. These verbs do not assign accusative case, but they do assign a semantic role to the subject position, a clear violation of Burzio's Generalization. Another type of violation of this generalization, and an important one since this violation is known to exist in the languages under discussion, is the antipassive construction. Recall that the example in (9b) above is traditionally termed antipassive (or *halbtransitiv*, cf. Kleinschmidt 1851) by Eskimologists. There is another construction in Central Arctic, given in (11) which is traditionally termed passive, but which would be analyzed as antipassive if we were to accept Marantz's proposal.³

(11) Central Arctic

arnaq anguti-mut kunik-tau-juq
 woman(abs.) man-all. kiss-tau-indic.3sg.
 'The woman was kissed by the man'

The reason that (11) would be an example of an antipassive under Marantz's proposal is that, in a syntactically ergative language, the direct object *angut* 'man', normally found in relative case, see (9a), is oblique and does not agree with the verb. The verb therefore does not assign case to the direct object, however, the subject *arnaq* 'woman' is in its usual case relation with the verb (absolute). Thus the verb assigns a semantic role to its subject. Central Arctic Eskimo clearly has two types of affixational processes, one which corresponds to passive and is in Burzio's terms -T, -A, and the other which corresponds to antipassive and is T, -A, the very combination of features which are considered to be, at the very least, highly marked by Burzio's Generalization (at most impossible). As will be shown below, Greenlandic also has both passive and antipassive. The point here is that, given a language where both types of feature combinations are common, it is not a strong claim that all intransitives forms, including lexical reflexives, must be -T, -A, especially since most other languages do not have antipas-

³ In fact Levin (1983, 97-98), working within Marantz's framework, cites this construction in Central Arctic as "a candidate for an antipassive construction". She qualifies this labelling on the basis that the affix involved can be further divided into two morphemes. This will be discussed further in Chapter 5, section 4.

sive constructions. We cannot be sure that all the examples in (7) and (8) are passive-like (i.e. that some are not antipassive-like), and the argument for a typological distinction becomes spurious. It may be that Central Arctic reflexives are antipassive-like while, Greenlandic reflexives are passive-like, or vice-versa. It does seem to be true, at least for Central Arctic, that only one type of reflexive form is found, i.e. a form like that in the Greenlandic example (8c) is not possible. With respect to Greenlandic, Woodbury (1977) cites another example of a reflexive, given in (12).

(12) Bergsland (1955, 34)

Kunuq ingmi-nik tai-vuq
Kunuk self-comit. name-3sg.

'Kunuk named himself'

Either this example is from a different dialect within Greenlandic Eskimo, or Greenlandic Eskimo allows more than one type of case on the reflexive pronoun.⁴ Woodbury (1977, 316) says that, in Greenlandic, the use of the comitative (what he calls the instrumental) and the allative case "seems to vary by dialect when replacing primaries, but the use of the allative is becoming standard."

It seems to be the case that other languages allow lexical reflexives with the features T, -A. also. Levin (1985) discusses Russian lexical reflexives which contain the affix *-sja*. Levin argues that constructions containing this affix, while never assigning accusative case, sometimes assign a semantic role to the subject position, i.e. are T, -A. Examples are in (13).

⁴ The Greenlandic speaker I worked with did not accept examples with a reflexive pronoun in comitative case, but reported that the dialect spoken in northern Greenland used those forms.

(13) from Levin (1985)

- a. Sobaka kusaetsja
dog.-NOM bite-Pres3s.-sja
The dog bites.
- b. Rebenok ob"elsja (blinami)
child-NOM o-eat-PSTm-sja (blini-INSTp)
The child overate/gorged (on blini).
- c. Ona ulibalas' schastlivoj ulibkoj
She-NOM smile-PSTfs-sja happy-INSTfs
smile-INSTfs
She smiled a happy smile.

Note that in all the examples in (13) the argument in the nominative case has the semantic role of agent or actor, even though the verb contains the reflexive affix *-sja*. Based on the semantic roles of the nominative NPs and the fact that they behave like underived subjects with respect to the genitive of negation, Levin provides convincing evidence that both types of lexical reflexives exist in Russian. Again, given the existence of violations of Burzio's Generalization, we cannot be certain that all the crucial examples in (7) and (8) are -T, -A.

A final point is the reputed homophony between the forms of lexical reflexives and passives. Levin (1983) points out that the reflexive construction in Eskimo is not a unique affix but simply the intransitive conjugation, which can appear with both agents and patients as single arguments. Some examples are given in (14b) and (15b).

- (14) a. anguti-up tuktu niri-vaa
man-rel. caribou(abs.) eat-indic.3sg./3sg.
'The man ate the caribou'
- b. angut niri-vug
man(abs.) eat-indic.3sg.
'The man ate'

- (15) a. arna-up titiraut siqumit-aa
 woman-rel. pencil(abs.) break-part.3sg./3sg.
 'The woman broke the pencil'
- b. titiraut siqumit-tuq
 pencil(abs.) break-part.3sg.
 'The pencil broke'

Levin (p. 118) says that

The fact that the same verb form may be used for both alternations in Eskimo languages suggests that the form is not associated with the feature (-T). The intransitive conjugation is found with intransitive verbs from any semantic class, not with a subset of intransitive verbs.

Levin sees the problem, but does not, however, argue against Marantz's proposal for Eskimo.

Another problem for the reflexive/passive equation is the affix *-si* in Central Arctic, which, as mentioned above, is the passive morpheme under Marantz's proposal. This morpheme is obligatory for the "passive" form of a certain class of verbs.

(16) Central Arctic

- a. angut nanur-mik kapi-si-vuq/ *kapi-vuq
 man(abs.) bear-comit. stab-si-indic.3sg.
 'The man stabbed a bear'
- b. angut ingmi-nik kapi-vuq/*kapi-si-vuq
 man(abs.) self-comit. stab-indic.3sg.
 'The man stabbed himself'

The example in (16a) is not grammatical without the morpheme *-si-*, but the reflexive (formerly 8b) is not possible with the same meaning as is shown in (16b).⁵ These facts are not consistent with the assumption that the form of the lexical reflexive and the form of the passive are identical.

⁵ The sentence *angut ingminik kapisivuq* is grammatical only with an alternative reading 'The man stabbed it himself', where the morpheme *-si-* clearly implies that the agent and the patient are not the same referent.

In summary, the intransitive form in Eskimo indicates only that the construction has a single argument, the subject. Nothing more may be predicted from this form.

3.3.2 The Mirror Image Problem

In the preceding section we have introduced a Central Arctic construction (11) which was not discussed in Marantz (1984).⁶ Another Greenlandic construction, which is analysed by Marantz as antipassive is given in (17).⁷

(17) Marantz (1984, 151)

angut·miirqu-nik paar-si-vuq
man(abs) child-pl.comit. take care of-
si-3sg.

The man takes care of the children

According to Marantz, Greenlandic being a nominative-accusative language, the antipassive will derive an oblique patient, leaving the agent subject intact. This appears to be the case in (17), where the patient *miiraq* is oblique, and the agent *angut* is subject and agrees with the verb. However, when we compare the affixes which are connected with the passive and antipassive of each dialect, as in (18), we find a striking pattern.

(18)	Central Arctic	Greenlandic
Passive:	-si-	-jau-
Antipassive:	-jau-	-si-

In Marantz's analysis, the affix which is passive in one dialect is antipassive in the other, and vice-versa. The affixes are in a mirror image relation with each other in the two dialects. The only reason that this mirror image exists is that the two dialects have been classified as typologically opposite. If they are classified as the same type of language, whether nominative-accusative or ergative, the mirror image disappears, and we

⁶ This construction can be found in Mallon (1976) and Johnson (1980) as passive.

⁷ Following Woodbury (p.c.), I have corrected what appears to be a typographical error in Marantz's example. He had *anut* rather than *angut* for 'man'.

are left with the same affix performing the same operation in both dialects. Recall that the main empirical evidence for the typological distinction was based on the disputable authority of Burzio's Generalization.

3.3.3 The Residual Class

Marantz appears aware that the evidence based on intransitive verb forms is greatly weakened by the presence of alternations, such as those discussed above in (14) and (15), where the single argument of an intransitive form is sometimes agent and sometimes patient. As a result, Marantz argues that only one class of intransitive verbs will display the predicted passive features. The other classes, such as those in examples (14) and (15), are exempted from this prediction since they involve other aspects of the grammar such as object deletion, etc.. Marantz assumes that cognate verbs are of the same class in all Eskimo dialects. This is generally true. He offers evidence from this "residual" class of verbs, which is the class of verbs that are necessarily passive in feature, that the difference in typology holds. His single example of a verb from this class is the pair (7a) and (7c), here repeated as (19).

- (19) a. Central Arctic
 angut taku-vuq
 man(abs.) see-indic.3sg.
 'The man sees (something)'
- b. Greenlandic
 tigianaq taku-vuq
 fox(abs.) see-indic.3sg.
 'The fox was seen'

In (19a) the subject of the intransitive verb is the agent of the action, while in (19b) the subject of the same intransitive verb is the patient of the action. The whole of Marantz's argument for a typological distinction between Greenlandic and Central Arctic Eskimo rests on this one example. As was argued above, the cases of the reflexive pronouns do not constitute evidence for a distinction, as reflexives may be either -T, -A or T, -A.

The Central Arctic example in (19a) is correct, according to the speakers I have worked with. On the other hand, the Greenlandic speaker I consulted gave the following example.

(20) Greenlandic
taku-vog
see-indic. 3sg.

'He sees (something)'

The speaker did not give Marantz's predicted reading 'He was seen'.⁸ The Greenlandic example (19b) originates from Swadesh (1945, 45).⁹ Although (20) suggests that this reading is no longer possible, I argue that, even if it were, it would not constitute evidence for a typological distinction. For a verb to change class would not be surprising. The surprising fact is the consistency of verb classes across dialects. Given that some semantic factors must at least partially determine the class into which a verb falls, verbs would be expected to change class on the basis of changing or extending semantics.

3.4 Summary

Overwhelming evidence indicates that the two dialects discussed are typologically identical. Burzio's Generalization was shown not to be a strong enough generalization to warrant the claim that all intransitive verbs in Eskimo are -T;-A. With the removal of this assumption, the argument for a typological distinction collapses into two examples of the same verb from the two dialects. I showed evidence that one of the examples was no longer correct for Greenlandic. Nor could it have been used to support a typological distinction, since alternative explanations were possible. Once the typological distinction is removed, the passive and antipassive affixes are seen to perform the

⁸ Note that this speaker used the allative case consistently on reflexive pronouns.

⁹ Woodbury (p.c.) says that Swadesh manufactured this example.

same function in both dialects.

Having established that the dialects are identical in typology, it still remains to be seen what type they both are. In Johns (1984) I pointed out that one of the weaknesses of Marantz's model was that Eskimo could be analyzed as either nominative-accusative with ergative case marking, or syntactically ergative with nominative-accusative case marking. Both analyses work reasonably well. This interesting fact about Eskimo was also noted by Dowty (1982, 113). A theory of grammar which proposes four possible language types, such as that of Marantz (1984), must also provide a clear-cut method by which the linguist and the child can determine the classification of any particular language. Levin (1983) provides a detailed account of the predictions of Marantz's Ergativity Parameter; however, none of these predictions sheds light on the classification of Inuktitut. This language does not seem to fit readily within the choices of type made available in Marantz's model. In Chapter 4, I will argue that this fact results from an overly restricted view of the nature of transitivity. I will argue for a formal version of the ideas put forth by early grammarians of Eskimo, wherein the transitive verb is composed of a possessed nominalization which is predicated of an argument in absolutive case. The definition of transitive is thus extended from its original meaning of argument governed by the verb to include any instance where two arguments are linked by the same predicate.

Chapter IV

THE TRANSITIVE/POSSESSIVE QUESTION

4.1 Introduction

In the previous two chapters I have argued that syntactic ergativity weakens theories of acquisition, such as the one proposed in Pinker (1984).¹ I have also shown that it is difficult, if not impossible, to decide whether or not Inuktitut is syntactically ergative within the model of Marantz (1984). This ambiguity of typology goes against the idea, discussed in Chapter 3, that marked values must be learned by means of positive (and robust) evidence in the input.

The thesis of this work is that the Eskimo transitive construction is essentially the same as a predication construction where the predicate is a possessed verbal noun. Under this view, the transitive sentence in Eskimo meaning 'Mary kissed John' is syntactically composed along the lines of *John is Mary's kissed one*, where *Mary*, the agent, is the possessive subject of a verbal noun *kissed one*, which is predicated of another subject *John*. All subjects of non-referential (or attributional) predicates receive the same case, absolutive, and all subjects of referential predicates receive the same case, relative. This analysis therefore claims that Inuktitut has two types of sub-

¹ At no time do I examine in depth the possibility that Eskimo is morphologically ergative. As shown in Woodbury (1975) and (1977), a large part of Eskimo syntax works on the basis of an ergative/absolutive distinction, where the absolutive position appears to be primary.

This thesis will concentrate on this phenomenon and leave aside questions that arise with respect to some verbal moods, e.g. optative (see Woodbury 1985a), and derivational affixes (see Grimshaw and Mester 1985, Woodbury 1985b, and Jensen and Johns to appear).

² See also Woodbury (1985a and 1985b), who states that both the subject and the object are external to the VP, which means that the object is not a conventional

ject, but no direct object.² As such, it is outside of the possibilities afforded by the Ergative Parameter, but conforms to the Semantic Bootstrapping Hypothesis, as described above in Chapter 2, in that the agent role is never found in direct object position. If this analysis is correct, then there remains only one language, Dyirbal, which has been analyzed as a syntactically ergative language under Marantz's Ergative Parameter. If Dyirbal were also subject to reanalysis,³ we would be in a position to claim that there is a universal restriction that agents are never found in direct object position. This restriction is no doubt derived from a cognitive relation between certain semantic roles and grammatical functions, the nature of which is yet to be determined.

The formal version of this hypothesis will be presented in Chapter 5. In this chapter, I discuss the facts that motivate this view of Eskimo syntax and review the history of the interpretation of these facts in Eskimo linguistics.

4.2 Morphological Evidence

It has been noticed by all linguists working in Eskimo that the relative case marking of the subject of a transitive clause is also found on the possessor in a possessive construction as in (1).

- (1) a. arna-up siksik taku-vaa
 woman-rel. squirrel(abs.) see-3sg./3sg.
 'The woman sees/saw the squirrel'
- b. arna-up nasa-a
 woman-rel. hat-3sposs.
 'The woman's hat'

direct object.

³ In Eskimo, the claim that there is no direct object involves the homophony between the case assigned to the "agent" of the transitive clause and the case assigned to the possessor in a possessive construction. In Dyirbal, there is a homophony between the case assigned to the "agent" of a transitive clause, and the instrumental case (see Dixon 1972, and Levin 1983). In addition, Dyirbal shows distinct case patterning on first and second pronominals.

In (1) we see that relative case *-up-* is assigned both to the noun *arnaq* 'woman' which is the agent of the transitive verb in (1a), and to the same noun when it is the possessor in a possessive construction in (1b). This fact, combined with near identical agreement morphology on the transitive verb and the possessum, has given rise to some speculation. The transitive verb in Eskimo, as mentioned above, always agrees with two arguments, the agent and the patient. In (1a) above, the verb *taku-vaa* contains the verb stem *taku-* followed by the morpheme *-vaa* which indicates that the verb has a third person singular agent and a third person singular patient. The breakdown of this morpheme into indicative mood marker and the two agreement markers will be discussed in Chapter 5, sections 4 and 5. For the moment, let us examine these forms as a single unit, in order to compare them with possessives. In (2) I give a listing of the present tense indicative forms of the Eskimo for the transitive verb *taku-* 'see', with the exception of the dual forms, which I have omitted for sake of convenience (see Lowe (1985) for a complete set of endings). The vertical columns indicate the person and number of the patient, and the horizontal columns indicate the person and number of the agent. Our example in (1a) can be located on the Singular/Singular chart by following the third person patient column down to the third person agent column, or vice-versa.

(2) a. Singular/Singular

		P A T I E N T (Sing.)		
		1	2	3
A G E N T (Sing.)	1	-	taku-vagit	taku-vara
	2	taku-varma	-	taku-vait
	3	taku-vaanga	taku-vaatit	taku-vaa

b. Plural/Singular

		P A T I E N T (Sing.)		
		1	2	3
	1	- - -	taku-vaptigit	taku-vaqput
A G E N T (Pl.)	2	taku-vapsinga	-	taku-vaqsi
	3	taku-vaannga	taku-vaatit	taku-vaat

c. Singular/Plural

		P A T I E N T (Pl.)		
		1	2	3
	1	-	taku-vapsi	taku-vatka
A G E N T (Sing.)	2	taku-vaptigit	-	taku-vatit
	3	taku-vaatigit	taku-vaasi	taku-vai

d. Plural/Plural

		P A T I E N T (Pl.)		
		1	2	3
	1	-	taku-vapsi	taku-vavut
A G E N T (Pl.)	2	taku-vaptigit	-	taku-vasi
	3	taku-vaatigit	taku-vaasi	taku-vai

As can be seen in these examples, there is some regularity in the affixes which make up the agent/patient inflection following the stem. One of the first things to note is that verbs, but not nouns, are characterized by the presence of the indicative mood marker *-va(q)-* following the verb stem of every example.⁴

When we examine the agreement affixes of the possessive construction, shown in (3), we see that they closely resemble those of the verb stem. In (3) the noun stems are *nasaq* 'hat' and *qimmiq* 'dog'. The vertical columns indicate the person of the possessor, while the horizontal columns indicate the number of the possessum. Note the absence of any mood marker.

(3) a. Singular Possessor

1	2	3	
nasa-ra·	nasa-it	nasa-a	(Sing.)
nasa-tka	nasaq-tit	nasa-i*	(Pl.)
*This form is <u>nasa-ngi</u> in some dialects.			

b. Plural Possessor

1	2	3	
qimmiq-put	qimmiq-si	qimmi-ngat	(Sing.)
qimmi-vut	qimmi-si	qimmi-ngit	(Pl.)

In (4) I provide a list for comparison of the verbs with third person patient, and possessives.

⁴ The final /q/ of this morpheme is sometimes assimilated, and sometimes deleted, according to the type of affix which follows it.

(4) Possessives and Verbs With Third Person Patient

- a) taku-va-ra 'I see it'
nasa-ra 'my hat'
- b) taku-va-it 'You see it'
nasa-it 'your hat'
- c) taku-va-a 'he sees it'
nasa-a 'his hat'
- d) taku-va-tka 'I see them'
nasa-tka 'my hats'
- e) taku-va-tit 'You see them'
nasaq-tit 'your hats'
- f) taku-va-i 'He sees them'
nasa-i 'his hats'
- g) taku-va-vut 'We see it'
qimmiq-put 'Our dog'
- h) taku-va-si 'You(pl.) see it'
qimmiq-si 'Your(pl.) dog'
- i) taku-va-at 'They see it'
qimmi-ngat 'Their dog'
- j) taku-va-vut 'We see them'
qimmi-vut 'Our dogs'
- k) taku-va-si 'You(pl.) see them'
qimmi-si 'Your(pl.) dogs'
- l) taku-va-i 'They see them'
qimmi-ngit 'Their dogs'

The difficulty in making a comparison between transitives and possessives with objects other than third person is no doubt related to cognitive considerations rather than linguistic ones. A possessum is invariably third person, to the extent that the idea 'my you' or 'his me', etc. seems bizarre, to say the least. This does not mean that the existence of verb forms with first or second person object, such as *takuvagut* 'I see you' are counterexamples to an analysis that treats the possessive and the transitive construction as essentially the same. As we shall see in Chapter 5, forms with other than third person object involve an additional aspect of predication.

We will first examine how early grammarians of Eskimo viewed the similarity between the possessive and the transitive construction. Of particular note are the ideas of Hammerich (1951), who saw Eskimo grammar as a system of nominal entities which interacted either by means of apposition or dependency.⁵ Following this will be a discussion of recent analyses which attempt to account for the transitive/possessive facts without assuming that verbs and nouns are the same category in Eskimo. Amongst these proposals, the closest to the analysis argued in this thesis is that of Woodbury (1981) and (1985a), in which the idea of syntactic dependency figures prominently.

4.3 The History of the Nominalist Position

Samuel Kleinschmidt's *Grammatik der grönländischen sprache* (1851)⁶ is generally thought to be the first grammar of Eskimo in its own terms; that is to say, it is not

⁵ This type of approach, which is based on similarity of form, is not without its critics. Woodbury (1985a, 61-62) expresses concern over the "venerable tradition in Eskimo linguistics" of treating nominals and verbs as similar. This tradition is to be commended, according to Woodbury, for using the methodology of studying a language in "its own terms"; however, its failing is that this study is limited to surface morphology. Not only did early grammarians studying Eskimo ignore "important elements that signal linguistic categories in conjunction with morphemes, such as intonation and syntactic context," but they held the belief that each "morpheme had one and only one meaning, so that in effect morphemes and categories were the same thing." Woodbury provides an alternative analysis based on functional criteria, which will be discussed in Chapter 4, section 5. Aronoff and Sridhar (1984) also criticize those who consider each morpheme to have a single isolable meaning which is consistent in all contexts. They argue that polysemy is widespread, even in languages which might be characterized as agglutinative. (Recall that Eskimo is usually classified as polysynthetic, i.e. the word may have the complexity of a clause.) Under this view, one might argue that there is no reason to assume that just because the agreement markers of transitive verbs are similar in form to those of the possessive agreement markers, they are necessarily the same morphemes. Nor would the fact that both the possessor and the agent of the transitive clause receive relative case hold any significance.

⁶ This discussion of Kleinschmidt's ideas is brief due to my limited knowledge of the German language, as well as my difficulty in reading the handwritten translation by Cotter.

⁷ Indeed, Kalmar (1979) reports that W.J. Samarin has credited Kleinschmidt with a role in the beginning of the descriptive tradition in linguistics. Franz Boas worked on Eskimo, and was therefore quite familiar with Kleinschmidt's approach to

based on a Latin model of grammar.⁷ Kleinschmidt attributes case to both nouns and verbs, although his use of the word case refers to the relationship of the category in the phrase, rather than a morphological marker.

In brief, Kleinschmidt attributes what he calls *casus rectus*, or the case of independence, to independent verb forms, such as the indicative, the interrogative and the optative, and also to what he calls the *project* of the verb. The project is a nominative-accusative notion of subject, that is either the agent of a transitive verb or the theme of an intransitive verb. Although both are in *casus rectus*, they differ in morphological case. The agent of the transitive verb receives Subjective case, the same case assigned to the possessor, while the theme of the intransitive verb receives Objective case, the same case as that assigned to the patient of the transitive verb, which is in *casus versus*, or the inverted case. Other elements in *casus versus* are the possessum and the transitive participle (where it exists). *Casus obliquus* is found on oblique arguments, that is to say those noun phrases which do not agree with the verb, and subordinate verbs. It is not clear how much weight Kleinschmidt gave to the transitive/possessive parallels other than the fact that Subjective case is involved in both. He seemed more concerned with the idea that both the possessum and the patient were subordinate in some way.

In summary, Kleinschmidt seems to view the Eskimo language as morphologically ergative, with a syntax that ignored syntactic category.

William Thalbitzer (1930) describes a system of syntactic dependency in Eskimo, which was influenced by the work of Otto Jespersen. He introduced the terms absolute and relative, to replace the terms objective and subjective of Kleinschmidt. Thalbitzer reduces the syntactic/morphological dichotomy of Kleinschmidt to a system where there is a one-to-one mapping between syntactic relation and morphological case.

grammar. Woodbury (p.c.) says that Boas learned Eskimo grammar via Thalbitzer.

According to Thalbitzer (1930, 324) the absolutive is "in a kind of *statu absoluto*, exclusive and balanced like a ball". The absolutive describes the noun without a case suffix, the possessum, and the indicative verb, both intransitive and transitive. The relative describes a dependency relation. It is an adjunct, usually found before the word it modifies. Possessors, agents of transitive clauses and subordinate verbs are in relative case. One of Thalbitzer's main concerns was the significance of the relative case and the agreement markers found on the verbs and the nouns. He seems to have drawn the conclusion that possession was the key to the syntax of Eskimo, as can be seen from the following quote (Thalbitzer 1911, 1057):

The part played by the possessive suffixes in the Eskimo language extends far beyond the use which our languages make of "possessive pronouns." The person suffixes of the Eskimo verbs prove to be identical with the possessive suffixes of the nouns (equivalent to MY, THY, HIS, OUR, etc.), which may be regarded as an evidence of the noun-character of the verb.

This emphasis on the semantics of possession, rather than on the formal identity of possessives and verbs in Eskimo, led Thalbitzer to translate any instance of agreement as possessive, as shown by the translation to the right of the examples in (5). In parentheses I have given provided a morphological breakdown in Thalbitzer's terms. The English gloss follows the symbol =.

(5) Thalbitzer (1911, 1058)

a. tikipponga 'my arrival'

(tikit- 'arrive', po- intr.indic., and
nga- 'my')

= 'I arrived'

b. Peelip kapiwaanga 'Peele's my-his-stab'

(Peele-rel, kapi- 'stab', wa- trans.indic.
a- 'his' nga 'my')

= 'Peele stabbed me'

Aside from an overemphasis on the idea of possession, this approach does not explain why the relative case is found on nouns which are possessors or agents, but not on nouns involved in the intransitives construction. *If Eskimo verbs are all equivalent to nouns, why is it that the intransitive verbal noun cannot take an argument in relative case, as in (6a) or (6b)?

- (6) a. *Jaani-up tikip-puq
 John-rel. arrive-intr.indic.3sg.
 'John's arrival'
- b. *Jaani-up tikip-pu(q)-a
 John-rel. arrive-intr.indic.-poss3sg.
 'John's arrival'
- c. Jaani-up nulia-nga
 John-rel. wife-poss3sg.
 'John's wife'
- d. Jaani-up Ottawa tikip-pa-a
 John-rel. Ottawa(abs) arrive-indic.-3sg./3sg.
 'John arrived at Ottawa'

That agreement on transitive and intransitive verbs is related to agreement on possessives seems clear. However, it is not sufficient to simply claim that all verbs are nouns. It remains to provide a formal explanation of the distribution of case and agreement markers. For instance, the ungrammaticality of the examples in (6a) and (6b) is tied in with the fact that an argument in relative case cannot exist in the absence of a specific form of agreement marker, as shown by (6a), but that this agreement marker cannot attach to the intransitive indicative mood, as shown in (6b). The agreement marker which licenses the presence of an argument in relative case can only attach to either "true" nominals or to the transitive mood markers *-v/pa(q)* (and *-j/ta(q)*), as shown by (6c) and (6d) respectively. This restriction must be the result of some as yet unexplored property of Eskimo grammar.

In summary, Thalbitzer's view of the Eskimo language is that it consists of a set of nouns which enter into relations of apposition or dependency. The weakness of his approach is that his model is unable to predict which combinations are possible, and which are not possible.

Louis Hammerich (1951), following in the nominalist tradition, develops the idea of syntactic relations even further. He divides the two cases described by Thalbitzer into four cases. Where Thalbitzer lumps the possessum with the absolutive, Hammerich provides a separate class called the superordinative. Relative case is broken down into two types, subordinative and duplex. The latter refers to items which are both possessed and possessing. These cases are intended to apply equally to nouns and verbs.

Absolutive case is found on constituents of nominal clauses and on intransitive verbs, as in (7), where I have provided examples that are intended to represent Hammerich's analysis.

- (7) a. una nanuq
 this(abs) bear(abs)
 'This is a bear'
- b. nanuq tikip-puq
 bear(abs) arrive(abs)
 'The bear arrives'

As pointed out in Woodbury (1985a), an important difference exists between these two types of clauses, that is, what serves as a predicate in a nominal clause cannot occur alone in a sentence, while the predicate of an intransitive clause can, as in (8)

- (8) a. *[nanuq]s 'It is a bear'
- b. [tiki-puq]s 'He arrives'

This difference will be explained in Chapter 5, section 5.

The superordinative case exists where there is an implied argument in the subordinative. With the third person, there may or may not be an accompanying subordinative in relative case, as in (9a and b), while in first and second person the subordinate is affixed to the superordinative, as in (9c) and (9d). The parentheses indicate that the argument is optional.

- (9) a. (Jaani-up) nasaa
(John-subord.) hat-superord.
'John's hat' or 'his hat'
- b. (Jaani-up) takuvaa
(John-subord.) see-superord.
'John saw it' or 'He saw it'
- c. nasa-ra
hat-superord.-subord.
'my hat'
- d. takuva-ra
sight-superord.-subord.
'I see it'

Although both nouns and verbs may be found in absolutive and superordinative case, the subordinative case differs in that it is the only one in which there is no parallel amongst the verbal categories. The subordinative case comprises those nominals which are either the possessor or are the subject of a transitive clause, i.e. are in relative case. Hammerich suggests that the pure subordination of this case does not go with verbs because the verbs or, as he calls them, verbal nouns, imply the predicate of existence. In the analysis to be presented in Chapter 5, this translates as a restriction on verbal nouns, which become predicates by movement into the sentential category I, from serving as subjects to other predicates.

Hammerich, like Thalbitzer, considered the possessive agreement markers found on nouns and verbal nouns to be the same set of morphemes. Unlike Thalbitzer,

he did not place as much emphasis on the idea of possession. Hammerich was more concerned with the characterization of formal relations between elements. It will be shown in Chapter 5 that formal identity does not imply semantic identity. At first, this might seem to go against a morphologically oriented approach; however, it will be argued that the semantic differences between possessives and verbal nouns derive, not from the agreement markers, but from the nature of the elements to which the agreement markers are attached. Agreement markers are more or less semantically neutral. This approach is implicit in Hammerich's work, which has as its main focus syntactic relations.

The matrix transitive clause for Hammerich is composed of a subordinative, an absolutive and a superordinative. On p. 21 he offers a literal translation of the sentence *piniartup nanoq takuvaa* 'The hunter sees the bear' the following: 'Of (or for or with) the hunter the bear is in sight'. A final group which Hammerich describes as subordinative are the case-marked oblique arguments since almost all the oblique case ending begin with /m/, a variant of /p/.

His fourth syntactic case that can be found on both nouns and verbs is the duplex case. This is found on nouns either when the nominal is both a possessum and a possessor, as in (10a), or when the the possessum is the agent of a transitive construction, as in (10b). The duplex case is found on verbs when the clause is adverbial with respect to a main clause, as in (10c).

- (10) a. anaana-ma qimmi-nga
 mother-dupl.1sg. dog-poss.3sg.
 'my mother's dog'
- b. anaana-ma nutaraq kuni-gaa
 mother-dupl.1sg. child(abs)
 kiss-part.3sg./3sg.
 'My mother kissed the child'
- c. quviasuk-tunga .ani-ga-ma
 happy-part.1sg. go out-because-sub.1sg.
 'I am happy because I left'

As can be seen in (10), the agreement markers on the nominal forms are the same as those found on the adverbial verb forms. A partial listing of the duplex agreement for both the possessive nominals and the adverbial intransitive verbs is given in (11).

(11)	Duplex Sing. Nouns	Duplex Intransitive Verbs
1st	ma	ma
2nd	vit	vit
3rd	ata	ngmat
4th	mi	mi
1st pl.	pta	pta
2nd pl.	psi	psi
3rd pl.	atta	ngmat
4th pl.	mik	mik

This similarity will be discussed further in Chapter 6, section 2.

According to Hammerich, a phrase like *arnavta igdlua* 'our mother's hut' is literally 'mother's-us- the hut'.⁸ One difference, for Hammerich, between duplex nouns and duplex verbs is that the latter have an abstract superordinate, i.e. there is no lexical element which the duplex verb is subordinate to. He also views the subject of the

⁸ This is supported by the fact that it contains the labial element of the relative.

duplex verb to be the subordinate to the duplex verb, which is its superordinate. The duplex verb is thus subordinate to an abstract superordinate and superordinate to a subordinate. The problem with this account is that the subject of the duplex intransitive verb is no longer in the relative (subordinate) case.⁹

The last proponent of the nominalist position to be discussed here is Schultz-Lorentzen (1945), whose opinion as to how the transitive clause is constructed is made clear by the literal translation which he gives of this sentence containing a transitive verb: *qingmip meeraq kiivaa* [dog-rel. child(abs) bite-indic.3sg./3sg.] either 'The child the dog's bitten' or 'The child is bitten by the dog'.

In general, the feeling amongst the first grammarians of the Eskimo language was that nouns and verbs did not differ formally in category, and that both entered into similar syntactic relationships. The resemblance between the transitive and the possessive construction was thought by Thalbitzer, Hammerich and Schultz-Lorentzen to result from the fact that the transitive clause contains a possessed verbal noun. The multitude of types of literal translation of the transitive clause indicates that there was some degree of uncertainty as to how the parts went together.

Amongst linguists working on Eskimo today, especially those working on Canadian dialects, there is still a tradition of considering the transitive clause to be composed along the lines of the nominalist tradition. For example, Schneider (1976), Hofmann (1978), and Lowe (1985) all analyse the transitive clause in a manner which is formally identical with the possessive (although Schneider does not consider verbs to be verbal nouns). That this approach is not the result of theoretical uniformity is shown by the fact that Schneider's work is descriptive, Hofmann's is within his own math-inspired framework, and Lowe's is within the Guillaumiste tradition of psychoméchanique.

⁹ But the "agent" of the duplex transitive verb is.

4.4 The Sentential Possessive Analyses

The next group of linguists I will discuss are three who, rather than considering verbs to be nominal in nature, took the opposite view that possessives are sentential, or verbal, in nature. This perspective is perhaps most supported by the fact that the possessum in a possessive construction contains affixes which agree with the person and number of the possessor, as well as the possessum, as in (12).

- (12) a. Jaani-up nasa-a
 John-rel. hat-3sgposs.
 'John's hat'
- b. Jaani-up nasa-i
 John-rel. hat-3sgposspl.
 'John's hats'
- c. anguti-it qimmiŋ-at
 man-pl dog-3plposs.
 'The men's dog'
- d. anguti-it qimmiŋ-it
 man-pl. dog-3plposspl.
 'The men's dogs'

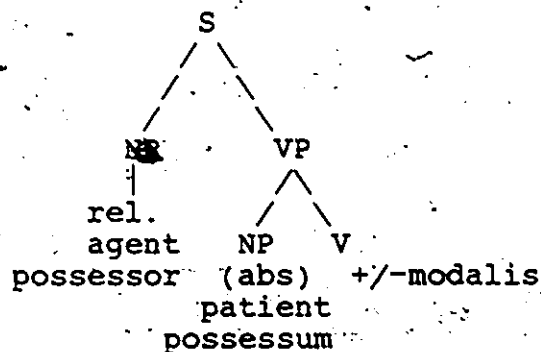
One could say that the possessive construction in Eskimo appears on the surface to be more verbal than the English possessive, where no agreement exists. Even though the possessive resembles a verb, it does not behave like one, as is evidenced by its inability to function as the main element of a clause, and in this respect, Eskimo is like English, as in (13).

- (13) a. *[John's dog]s
 b. *[Jaani-up qimmi-a]s
 John-rel. dog-poss3sg.
 'John's dog'

As will be seen, some versions of the sentential analysis of possessives do not predict the ungrammaticality of (13b).

The first proponent of the sentential possessive approach is Mey (1969). Mey criticizes the analysis of Hammerich, where verbs are considered to have the syntactic category noun, as inadequate, due to the lack of formal syntactic argumentation. Hammerich's views were based primarily on morphological data. Mey says (p. 50) that, without syntactic justification, the identity theory is "an interesting, but necessarily non-testable hypothesis." At this point, I must comment that lack of syntactic argumentation is not in itself evidence against a particular hypothesis, nor is there actually such a lack in Hammerich's work. Nonetheless, Mey rejects the nominalist position in order to pursue a sentential analysis of Eskimo possessives within the framework of Transformational Generative Grammar.¹⁰ Under his analysis, both the transitive and the possessive construction consist of a sentence containing a subject and a VP governing a direct object. The subject is either the agent or the possessor, and the object is either the patient or the possessum. The main difference between the transitive and the possessive construction is that, in the latter, the V node does not contain a mood suffix, or what in recent terms might be called INFL. Where no mood suffix exists (-modalis), the V node deletes and the agreement features which would ordinarily attach to the verb attach to the direct object, the possessum. A depiction of Mey's analysis is given in (14).

(14)



¹⁰ Mey is apparently using some version of the Aspects model of Chomsky (1965).

This account bears some resemblance to the one argued in this thesis, in that part of the similarity between the transitive and the possessive construction is thought to result from the fact that both the agent and the possessor are subjects. The two accounts differ as to what they are thought to be subject of. For Mey, they are subject of a VP, while in this thesis, it will be argued that they are subject of an NP. For Mey, the patient and the possessum are governed within VP, while in this thesis, it is argued that the patient of a transitive clause is the subject of a predication containing a verbal noun which corresponds to the possessum. Mey's account does not address the question of why the subjects of intransitive clauses receive the same case as patients of transitive clauses, which is explained under the absolutive as subject approach. Although Mey clearly sees the connection between the presence of the mood marker, and the ability of a category to be clausal, he does not elaborate on this crucial difference. He does not give a tree diagram of the final output of his transformational rules; however, it seems clear that the highest category would still be S, and he would therefore incorrectly predict the grammaticality of a possessive construction as a clause, as in (13b). Mey would not be able to argue that the mood affix must always be present for a clause to exist, since nominal clauses are quite common in Eskimo, as in (15).

(15) Jaani iliniaqtitsiji-ga
 John(abs) teacher-my

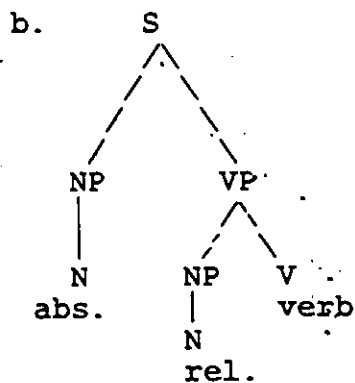
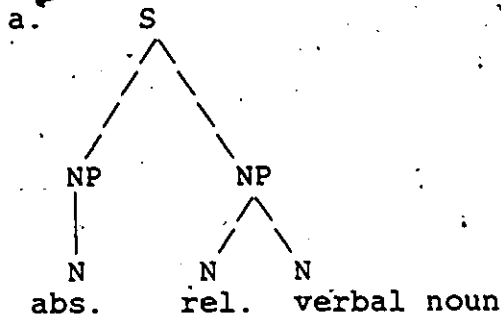
'John is my teacher'

The example in (15) contains only nominals. There is no mood affix. Were the argument in relative case in the possessive construction really the subject of S, we would expect that it and its possessum VP (minus the mood marker and the verb) should constitute a legitimate clause in Eskimo. That this is not possible is shown by the ungrammaticality of (13b), which otherwise might have been expected to mean something like 'John has a dog' or 'This is John's dog'.

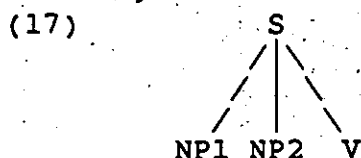
The next linguist to take up the possessive as sentence approach was Rischel (1971), again within a Transformational Generative Grammar model. Rischel assumes that a set of universal categories exists which are (p. 225) "abstract syntactic (semantic) functions". Accordingly, since in Eskimo there is a semantic distinction between actions and objects, the category verb must exist, contrary to the nominalist position, "no matter how noun-like it may seem in appearance" (p. 225-226). He argues further that, even when verbs are nominalized, they are still essentially verbs. He seems to regard the fact that they are syntactically nouns as irrelevant, and it is the syntactic form which is the essential claim of the nominalist position.

He states that, even though the more natural interpretation of Hammerich's theory in Transformational Grammar would be that a transitive clause contains a nominal constituent consisting of an argument in relative case and a verbal noun, as in (16a), the necessity of distinguishing between nouns and verbs forces us to change it instead to one where they form a VP constituent, as in (16b).

(16)



Subsequently, he rejects the VP node for lack of evidence. The elimination of the node VP necessitates a representation which encodes the distinction between subject and object without the use of dominance relations. This is done by identifying the subject of a transitive clause as the argument which is preceded by another argument. His proposed order is therefore OSV, as in (17). This contrasts with the SOV order of Mey (1969).



NP2 = subject because it is preceded by another NP

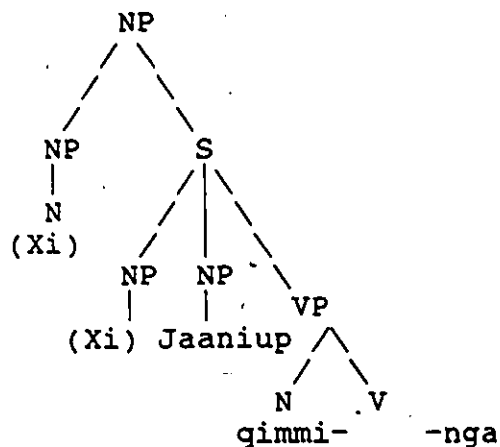
Rischel disagrees with Mey on the nature of the possessive construction. Recall that Mey's argument was that the possessive construction results from the deletion of an abstract verb with subsequent movement of that verb's agreement features to the direct object. Rischel's arguments against this analysis are that a) there is no evidence of a VP node in possessives, b) the transformation that moves the agreement from the deleted verb to the object is complicated, and c) there is no possible verb that could fill the V slot in the possessive construction. The last criticism refers to the fact that, although constructions exist in which there is a verbal affix that apparently attaches to a direct object, these constructions have intransitive agreement morphology, while the possessive construction has agreement morphology which resembles the transitive verb. Compare (18a), which is an example of such an "incorporating" verbal affix (-*qag*)¹¹ with the possessive construction (18b). Rischel's proposal is that possessive constructions most closely parallel incorporating constructions with both a free and an incorporating object, such as the example in (18c), which contains the "incorporating" affix -*gi*-.

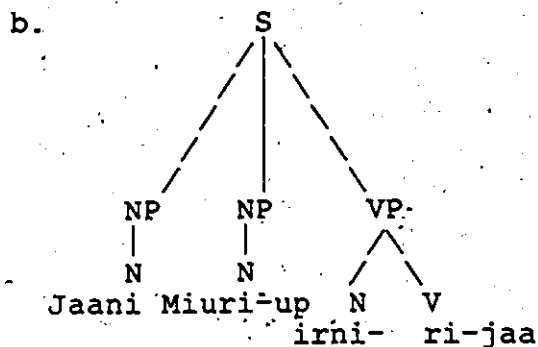
¹¹ A common view of incorporation is the idea that, after syntactic structure is generated, certain elements of the structure move inside the lexical category of another element. See Sadock (1980) and (1985), and Baker (1985).

- (18) a. angut qimmi-qaq-puq
man(abs) dog-have-indic.3sg.
'The man has a dog'
- b. anguti-up qimmi-nga
man-rel. dog-poss3sg.
'The man's dog'
- c. Miuri-up Jaani irni-ri-jaa
Mary-rel. John(abs) son-relate-
part.3sg./3sg.
'Mary has John as a son'

The construction in (18c) has both an "incorporated" object, 'son', and a "free" object 'John'. The latter accounts for the transitive agreement. Rischel proposes that possessive constructions derive from sentences similar to those from which examples like (18c) are derived. Thus, unlike Mey, who has the features of the verb move onto the direct object, Rischel has the object move under the node V. His derived structure for the possessive noun phrase in (18b) would be (19a), and for the incorporating example in (18c) would be (19b), based on Rischel (1971, fig. 9 and 7 respectively).

(19) a.





The structure in (19b) is the intermediary stage of the derivation. Before surface structure, the two NPs must change position, and the node V must replace the node VP when affix and the object combine. The sentence will then conform to the structure of the sentence given in (17).

According to (19a), example (18b) is really 'Xi, such that John has Xi as a dog'. In other words, it is a relative clause with an incorporated element in the abstract V of the complement S. Notice that if the relative clause structure could be made obligatory, this would predict the ungrammaticality of the sentence (13b) above, a clause containing just an argument in relative case and a possessed NP. The ungrammaticality could be said to result from the fact that possessives are dominated by the node NP. However, this seems difficult to motivate. Why should structures as the S in (19) occur only as complements to an NP?

All in all, this is a very complex structure. Consider also the following. Rischel does not provide an explanation of the base structure of constructions such as (19b). This would seem crucial because it is not clear from what position the incorporated object comes. He implies (p. 235) that it originates from a possessive construction. He also does not give the base structure for the possessive example (19a). Since this example is meant to parallel the incorporating example, this suggests that the possessive construction is base generated as a relative clause with a subordinate sentence containing a possessive construction as one of its constituents. Part of this possessive

construction is then incorporated into an abstract V. Unless the position of the incorporated element can be explained, this analysis might be construed as infinitely recursive.

The second criticism of this analysis concerns the alleged similarity between incorporated and possessive constructions. One of the primary characteristics of incorporated NPs is that they are indefinite in reference, so (18c) does not mean 'Mary has John as *the* son'. Yet one of the primary characteristics of possessive NPs is that they are definite in reference. In fact the principal reason for the definiteness of such an NP is that it is possessed. Thus *John's hat* does not mean 'some hat' but 'that particular hat of John's'. Of course, the definiteness in reference may be attributed to the relative structure in (19), but again it seems an addition whose only purpose is to account for the properties which the sentential account cannot handle.

A final point is the existence of nominal clauses, such as (20).

(20) Miuri Jaani-up anaana-a
 'Mary(abs) John-rel mother-pc-s3sg.

'Mary is John's mother'

This type of clause, which consists of a nominal and a possessed nominal must be dominated by the node S. It should be related to the structure given in (19a). It is mysterious then why (13b), which consists of a subject and a verb containing an incorporated nominal, cannot form a clause on its own, but it can form the predicate of a clause, as in (20).

The last proposal that considers the possessive to be sentential to be discussed is that of Kalmar (1979). Kalmar's analysis is similar to Rischel's in that he assumes that the possessum forms part of the verb. In fact he assumes that it is the verb, that is, that the possessum is a predicate. Under this view, the phrase *Jaaniup nasaa* is something like 'The X such that John hats it', where hat is the predicate, John the agent, and x the patient. This approach somewhat resembles the analysis to be argued

in this thesis. Like Kalmar, I propose that the possessive construction contains a predicate, but my analysis differs from that of Kalmar in that I make a distinction between the syntactic process of predication and the elements that are involved in this process. By not making such a distinction, Kalmar is led to conclude that the possessum in Eskimo is a verb, hence the claim that the possessor is the agent. He claims that only possessums are predicates, in contrast to Bach (1968), from whom the idea originated that all nouns derive from predicates. Moreover, Kalmar provides no explanation of how it is that a non-predicate, which I assume he would consider to be the basis of the possessum, becomes a predicate.¹² In addition, as Kalmar reasons (p. 48): "If possessums are predicates, then possessive constructions are clauses". This statement clearly predicts that a sentence like (13b), which contains a subject and a "verb" should be grammatical, but it is not. A perhaps minor point is that Kalmar's analysis does not explain why it is that only the Eskimo language can have the possessum as a predicate. Why is it that English, for example, does not also have a possessive construction that looks like the transitive clause, something like *John hat*? In the analysis proposed in this thesis, this difference between the two types of languages results from the claim that Eskimo does not have the syntactic category V. Under this view, it is not possessives that resemble clauses, but clauses that resemble possessives. That clauses resemble possessives results from the fact that the only means of linking two arguments to the same element, that is to say to make a transitive construction, is by means of predication along the lines found in the possessive construction. The English language, which has the syntactic category V, has an alternative means of transitivizing the verb, i.e. case assignment under government.

¹² Woodbury (1981) interprets Kalmar (1979) as claiming that all nouns are verbs, but my impression is that he adopts this claim only for the possessum.

¹³ Woodbury (1981, 199) states that, from a morphosyntactic perspective, "the inflection of noun bases is if anything even less reduceable to the inflection of verb bas-

In summary, the analysis of the possessive construction as clausal is not only intuitively unappealing,¹³ but has been shown to be incorrect as a result of empirical predictions (example 13b). The nominalist position does not have any problem with examples such as (13b) since the basis of its claim is that clauses are built up of certain nominal constituents. (13b) would simply be explained as an incomplete clause. The sentential possessive analyses must posit either some sort of abstract verb, or the possessum itself must be regarded as verbal in nature (a mysterious fact). As will be seen in Chapter 5, the nominalist position does not need to posit abstract constituents. In addition, the similarity between the transitive clause and the possessive construction is explained by the simple assumption that Eskimo lacks the syntactic category V.

4.5 Woodbury's Functional Analysis

In a category of its own is the final analysis to be discussed here, regarding the transitive/possessive question. The work on Yupik Eskimo by Woodbury (1981) and (1985a) is a revealing study of phrasal categories in Eskimo from a functional viewpoint. Woodbury divides the syntactic categories of Eskimo into simplex NP, complex NP, participle construction and what he terms inflected verb plus adjuncts, the latter referring to the indicative clause. He provides examples of how each structure functions. In the following description of Woodbury's findings, I will give examples in Inuktitut, as his observations apply equally in all Eskimo dialects.

The first structure discussed by Woodbury is the simplex NP. This may be composed maximally of a demonstrative, a possessor and a head noun, as in (21).

es than is reduction in the opposite direction."

- (21) a. *una Jaani-up irni-nga ani-juq*
 this(abs) John-rel. son-poss3sg.
 go out-part.3sg.
 'This son of John's went out'
- b. *una nutaraq ani-juq*
 this(abs) child(abs) go out-part.3sg.
 'This child went out'
- c. *Miuri-up irni-nga ani-juq*
 Mary-rel. son-poss3sg. go out-part.3sg.
 'Mary's son went out'
- d. *una ani-juq*
 this(abs) go out-part.3sg.
 'This one went out'
- e. *arnaq ani-juq*
 woman(abs) go out-part.3sg.
 'The woman went out'

Woodbury states that simplex NPs must always function as noun phrases, and never as clauses.¹⁴ The simplex NP gets assigned case according to its relation to the verb.

The second structure that Woodbury discusses is the complex NP, which consists of a simplex NP followed by either an adjectival phrase, or a possessive phrase. A complex NP may function either as a nominal, as in (22), or a nominal clause, as in (23).

¹⁴ Woodbury (p.c.) says that one hears in Yupik utterances with the structure [N *una*], usually with the meaning 'Suprise! it was ___'. They are not accepted by speakers as grammatical utterances. My language consultant accepted utterances consisting of a demonstrative and a nominal, e.g. *una nutaraq* 'This is a boy', only if the context were that of a listing of elements and properties (as in English). See Chapter 5.5.3.1

- (22) a. [arnaq ilinniaqtitsiji-tsiaq]_N tuqu-juq
 woman(abs) teacher-good die-part.3sg.

'The woman who is a good teacher died'

- b. [Jaani Saali-up irning-a]_N ani-juq
 John(abs) Sally-rel. son-poss3sg.
 go out-part. 3sg.

'John Sally's son went out'

- (23) a. [Jaani ilinniaqtitsiji-tsiaq]_S
 John(abs) teacher-good

'John is a good teacher'

- b. [Jaani Saali-up irning-a]_S
 John(abs) Sally-rel. son-poss3sg.

'John is Sally's son'

Woodbury shows that when a complex NP functions as a nominal, it is assigned case. When the complex NP functions as a clause it has absolutive case, although Woodbury interprets absolutive case in this instance as lack of case.

Woodbury discusses the distinctions between nominal clauses and inflected clauses. Nominal clauses cannot be subordinate clauses, since they lack a mood marker. Nominal clauses, such as those in (23), can be contrasted with their inflected counterparts in (24), which contain the predicate morphemes *-u-* 'be', and *-gi-* 'relate' respectively.

- (24) a. arnaq ilinniaqtitsiji-tsa-u-juq
 woman(abs) teacher-good-be-part.3sg.

'The woman is a good teacher'

- b. Saali-up Jaani irni-ri-jaa
 Sally-rel. John son-relate-part.3sg./3sg.

'Sally has John as a son'

According to Woodbury, one part of the nominal clause in (23a) corresponds to the subject of the intransitive verb in (24a). The first part of the nominal clause in (23b) becomes the object of the transitive verb in (24b). Likewise the possessor becomes the

transitive subject. The order of the absolutive and the relative case marked arguments in (24b) is the opposite of that in (23b).

There is one final difference between nominal clauses, such as (23b), and their inflected counterparts, such as (24b), which is not mentioned by Woodbury. This is that nominal clauses cannot express first or second person subjects, as shown in (25). Note that first or second person must be expressed through suffixation of agreement markers.

(25) a. *Jaani-up anaana-a-nga
John-rel. mother-poss3sg.-1sg.

'I am John's mother'

b. Jaani-up anaana-gi-jaanga
John-rel. mother-relate-part.3sg./1sg.

'John has me as a mother'

c. Jaani ataata-ga
John(abs) father-1sg.

'John is my father'

Only, with the use of the verbal affix -gi-, as in (25b), is it possible to express the meaning where first or second person is equivalent to the possessum. There is no problem where first or second person is the possessor, as shown in (25c).

The next structure that Woodbury discusses is that of the participle. Both intransitive and transitive participle constructions may function either as nominals, as in (26), or as full clauses, as in (27).

(26) a. nutaraq aanniaq-tuq sinik-tuq
child(abs) sick-part.3sg. sleep-part.3sg.

'The child who is sick is sleeping'

b. nutaraq anguti-up.kuni-gaa sinik-tuq
child(abs) man-rel. kiss-part.3sg./3sg.
sleep-part.3sg.

'The child that the man kissed is sleeping'

- (27) a. nutaraq aanniaq-tuq
child(abs) sick-part.3sg.

'The child is sick.'

- b. anguti-up nutaraq kuni-gaa
man-rel. child kiss-part.3sg./3sg.

'The man kissed the child.'

When the participle functions as a nominal, it a) is assigned case, b) cannot agree with an absolutive argument in first or second person, and c) has OSV order in the transitive form. When the participle functions as a clause, it a) is not assigned case, b) can agree with first or second person absolutive arguments, and c) has SOV order in the transitive form. Woodbury argues that when participle constructions function as clause, they more closely resemble inflected clauses than nominal clauses. As mentioned in section 3, a major distinction between the two classes is that, while the predicate of a participle construction can function as a sentence on its own, as in (28a), the predicate of a nominal clause cannot, as shown in (28b).

- (28) a. [*Jaani-up irni-nga]s
John-rel. son-poss3sg.

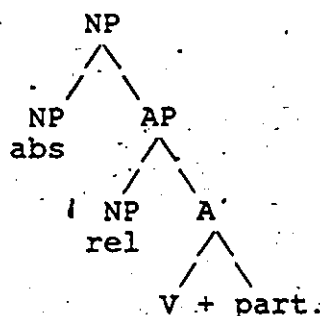
'He is John's son'

- b. [Jaani-up irni-ri-jaa]s
John-rel. son-relatē-part.3sg./3sg.

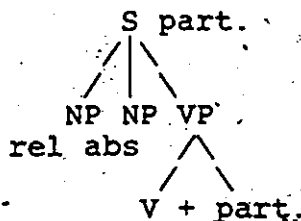
'John has him as a son.'

Woodbury compares the structure of the participle as nominal with the structure of the participle as clause as follows. The participle suffix on the nominal produces an adjective, while the participle structure on the clause functions as a mood marker. The structure of the two functions is as in (29), based on Woodbury (1985a, figure 1)²

(29) Nominal



Clause



As Woodbury points out, the main difference between the two structures is that, when the participle functions as a nominal, the absolutive NP is not governed¹⁵ by the constituent containing the participle (AP), while when the participle construction functions as a clause, the absolutive NP is governed by the constituent containing the participle (S part.). He assumes that the clause is distinctively a participle clause, so that this feature is present at the highest node. Otherwise, we would be forced to compare AP and VP, rather than AP and S part.

Woodbury has clearly outlined significant correspondences between noun phrase, nominal clause, and inflected clause in Eskimo. In contrast to the nominalist position, which views the inflected clause as being built up from nominal expressions, Woodbury considers the close noun phrase/clause parallels to be the result of historical convergence. He suggests both that clause-like elements were extended to the nominal function, and that noun-like elements were extended to the clause function. He acknowledges that such an account does not explain why such convergences should occur in the first place. It will be argued in Chapter 5 that there is a uni-directionality in Eskimo, extending from the noun upwards, and that this can be explained by the fact that Eskimo lacks the category V. In other words, inflected clauses do not resemble nominal constructions because clause morphology was extended to nominal function, but because nominal morphology is involved in the formation of the clause. I must

¹⁵ I assume Woodbury uses the term govern in its traditional meaning, since no definition is provided.

emphasize that, even though the analysis to be proposed is based upon the nominalist position of Thalbitzer and Hammerich, it draws heavily from the careful description and insights of Woodbury's work.

4.6 Summary

In this chapter we have seen that there exists a parallel between the possessive construction and the transitive clause in Eskimo. The nominalist position is defined as the assumption that verbal categories do not exist in Eskimo and that the "VP" constituent of the transitive clause is a possessive construction, thus explaining the morphological similarities between the two construction types.¹⁶

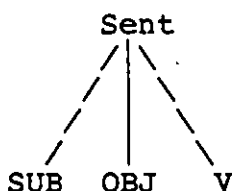
We have reviewed the accounts that treated the possessive construction as clausal in origin, and have seen that they are unwieldy and cannot predict the ungrammaticality of possessives as clauses. Finally, the work of Woodbury (1981) and (1985a) has demonstrated the continuum of predication from the noun phrase to the clause, which will serve as the basis of a formal analysis of the nominalist position to be presented in the Chapter 5. I will begin with an account of lexical categories in Eskimo, and continue on to provide an analysis of the transitive verb as a verbal noun containing a referential affix. This affix serves to make the verbal noun transitive, since its referentiality contrasts with the argument it is predicated upon, just as the referentiality of a regular noun contrasts with another in a possessive construction. It is this process which I term inter-referential predication, that is the essence of transitivity in Eskimo, and explains the transitive/possessive parallels. The presentation will be within the framework of the Government and Binding theory of Chomsky (1981, 1986a and 1986b) as described in the Introduction.

¹⁶ Although Kleinschmidt held the view that there was no categorial distinction in Eskimo, he did not view the transitive clause as possessive, and therefore cannot be classed as a proponent of the nominalist position.

The analysis proposed in this thesis obviates the question of whether to consider Eskimo to be a syntactically or morphologically ergative language, since the solution lies not in the claim that Eskimo assigns case to subject on the basis of transitivity, nor on the claim that some languages assign agent roles to direct object position. In fact this proposal claims that there is no direct object position in Eskimo.¹⁷ There are two subjects in the Eskimo transitive clause, one the subject of inter-referential predication, and the other subject of "regular" (or non-referential predication). Interestingly, Woodbury (1985b) describes the transitive clause of Central Alaskan Yupik Eskimo as having two "external" arguments. By this he means that there is no VP constituent containing either subject or object.¹⁸ Such a structure goes against a configurational definition of 'object', and requires that the concepts subject and object be primitives within the theory (see Marantz (1984) for discussion).¹⁹

As the result of the work of Bergland (1962), and Woodbury (1977), most linguists working on Eskimo consider the transitive clause to be a flat structure wherein both the agent and the patient are dominated by S, as in (30).

(30)



¹⁷ This has also been proposed by Melčuk (1980) for Lezgian.

¹⁸ In this sense, Woodbury's position treats them both as subjects.

¹⁹ I will not defend a configurational treatment of Eskimo here. As Saxon (1985) points out, configurationality divides up into two issues: a) whether or not the language has hierarchical structure, and b) whether or not there are empty categories at S-structure. See Saito (1985) for a discussion of the former property, and Jelinek (1984), Hale (1983), (1986); and Saxon (1985) for discussion of the latter property. I assume that, in the unmarked case, a language has hierarchical structure. Moreover, anaphoric relations of fourth person, discussed in Chapter 6, section 3, clearly depend on hierarchical structure. Fourth person also suggests that Eskimo has empty categories. These issues require more attention.

This is because, while much of the grammar of Eskimo operates as if the absolutive argument in the transitive clause were the subject, certain anaphoric processes (to be discussed in Chapter 6, section 3) operate as if the relative argument were subject. In my proposal, the argument which receives the patient role and absolutive case in a transitive clause will always be dominated by the clause (S or IP). In contrast, the argument bearing agent role and relative case, originates within an NP clause, but moves to a higher position outside the NP to conform with an adjacency restriction that is "reactivated" as a result of a rule that moves the verbal noun into a higher position when the verbal noun is the main "verb" in the sentence. This will explain the split ergative effects, that is, why only anaphoric "processes" appear to treat the relative argument as subject. The interpretation of indices takes place at LF, so that anaphoric binding will show nominative-accusative patterning.

By this analysis I will show that transitivity, as defined as a verb relating two arguments, need not always involve the notion of direct object, or NP governed by the verb. Languages have a choice of a number of means to relate two arguments to a verb. Another such choice might be the use of prepositions rather than verbs to assign case, as in the case of animate objects in Spanish, e.g. *Juan ha visto a su madre* 'Juan saw his mother', where the "direct object" *su madre* 'his mother' is preceded by the preposition *a*. It is essential that these choices be considered for each language. Otherwise, a framework which relies only on the notions subject and object for transitive verbs may result in non-resolvable paradoxes, as has happened in the recent history of Eskimo linguistics.

Chapter V

A FORMAL PRESENTATION OF THE NOMINALIST POSITION

5.1 Introduction

In this chapter I will propose a formal analysis of the nominalist position as espoused by Thalbitzer (1911), and Hammerich (1951). I will argue that an Eskimo sentence containing a transitive verb, such as (1a) below, will be generated syntactically in a manner similar to the calque in (1b).¹

a. angutiup arnaq taku-vaa
man-rel. woman(abs.) see-indic.3sg./3sg.

'The man sees the woman'

b. The woman is the man's seen one

This chapter will provide a formal analysis of the transitive construction beginning with the verb stem and continuing outwards. First I will discuss the difference between noun and verb stems in Inuktitut. It will be shown that the noun/verb distinction in Eskimo exists only below the level of word. At the word level, where the lexical item makes contact with the syntax, there is no distinction between the categories. Rather than ascribe category only below the word level, I propose two lexical/semantic features to account for observed differences. In languages like English, these lexical/semantic features can be viewed as the source of syntactic category in the same way as

¹ As mentioned in Chapter 4, Thalbitzer and Hammerich had a number of different calques for both the intransitive and the transitive clause. Woodbury (1985a, 86) uses the same sort of calque as that in (1b) to represent the nominalist position. He does so to illustrate one of the primary elements of the nominalist position, i.e. that the transitive clause consists of two syntactic relations, dependence and apposition. I will give specific arguments for the validity of this calque, in particular that the dependence relationship in Inuktitut is best characterized as a possessive subject, e.g. John's X, rather than a possessive complement, e.g. X of John.

the semantic subcategorization of a lexical item is the source of the syntactic category of complements (see Stowell 1981). The difference between a language like English and Eskimo is that in Eskimo a "verb" on its own cannot project a syntactic category.

I will also propose different types of lexical entries to account for the different types of verbs in Eskimo. It will be shown that the ability to transitive can be predicted on the basis of these entries. Following this will be an investigation into the properties of the indicative and the participial mood affixes. I will argue that these two affixes are essentially the same, except for the fact that the indicative mood affix is marked as obligatorily attaching directly under IP (or S), while the participial mood affix is not. A related proposal is that the intransitive forms of these affixes differ from the transitive forms in that only the latter are marked as referential. Next will be a discussion of the possessive construction in Eskimo. I will show that the possessor NP is in a subject rather than a complement relation to the possessum. Finally, I shall discuss the nature of predication in Eskimo. It will be shown that the transitive clause, as characterized by (1b), is a result of the predication of one referential nominal onto another, producing a possessive construction, which accounts for the case and agreement markers found in the transitive clause. The verbal noun moves into a higher node I in order to function as the main predicate of the clause. This movement entails that the possessor also move in order to preserve its relation with the possessum. The movement of the possessor has as an effect that, at the level at which binding relations are interpreted, the relative argument appears to be the subject of the clause, thus explaining the split ergative effects described in Woodbury (1975 and 1977).

5.2 Lexical Categories in Eskimo

The nominalist position, which claims that all verbs are nominals in Eskimo, has at times been interpreted as a claim that there is no distinction made in Eskimo between things and actions (cf. Rischel 1971). I believe this to be a misinterpretation. The idea of verbal nouns does not imply that there is no distinction of type between, for example, the item meaning 'dog' and the item meaning 'eat'. I assume that, like other languages, the Eskimo language makes a distinction between referring expressions and predicates. The semantic type of a lexical item forms part of its lexical entry. In most languages the semantic type of a lexical item will correlate with the syntactic category of that item, that is, the category which the lexical item has when it enters the syntax. This utilization of these semantic types, which are needed in any event, is reminiscent of the important argument made in Stowell (1981)² to the effect that the greater part of the phrase structure component can be eliminated, as it is predicted by the semantic subcategorization features of lexical items and certain other principles, such as the adjacency condition on case assignment, which are required independently. In other words, the idea is not to simplify the one area of the grammar by complicating another, but to get the most "mileage", as it were, out of the parts that must be stated explicitly in any case.

I will call the semantic property which results in the category noun *referential*, and the semantic property which results in the category verb *predicate*. My claim is that, although the Eskimo languages make a distinction between these two semantic features, the class of elements characterized by the feature predicate in Eskimo forms what I call a defective category, and as such, cannot project the category V. This property of Eskimo predicates requires that a nominal affix be attached in order for the predicate to form a word in Eskimo. The affixes that perform this function project the

² Stowell (p. 24) suggests that the property referential accounts for clefting restrictions in English (see also Gueron 1984).

category N, or at least a category non-distinct from N. These affixes are referred to as mood markers. As a result, both "nouns" and "verbs" are treated the same in the syntax. Any differences that are observed derive from the semantic features, referential versus predicate, and not from syntactic category. This will account for why, in declarative matrix clauses, transitive verbs appear more "nominal" than intransitive ones. Thus on the one hand transitive verbs group with intransitive verbs because their stems are of the class predicate, and on the other hand, they group with nouns because their mood markers are of the class referential.

In the next section, I will outline a set of criteria for distinguishing referential from predicative stems. It will be shown that at the level of stem (derived and non-derived), Eskimo makes grammatical distinctions between semantic types.

5.2.1 Verbs Are Not Nouns

The first fact which will form a member of the set of criteria which distinguish referents from predicates is that only referents may appear within possessive constructions, as shown in (2).

- (2) a. *nasag* 'hat'
 b. *sinik-* 'sleep'
 c. *kapi-* 'stab'
 d. *nasara:* 'my hat'
 e. **sini-ga*
 f. **kapi-ga*

The stem meaning 'hat' of (2a) may have an agreement marker *-ga-*, indicating first person singular possessive, attached directly to the stem, as in (2d). This is not possible with the intransitive stem meaning 'sleep' from (2b), as shown in (2e), nor with the transitive stem meaning 'stab' from (2c), as shown in (2f).

Another fact is that, unlike the referential stem in (2a), the predicative stems in (2b) and (2c) cannot stand alone, as indicated by the hyphen. This fact is shown in (3), where *nasag* can serve as a citation form, but *sinik-* and *kapi-* cannot.

- (3) a. [nasaq] 'hat'
 b. *[sinik] 'sleep'
 c. *[kapi] 'see'

As expected, a referential form like that in (3a) may take a predicate, while predicative forms like (3b) and (3c) may not.

- (4) a. [nasaq aupaluktuq] 'The hat is red'
 hat red
 b. *[sinik Xpred] where X is any predicate
 c. *[kapi Xpred] where X is any predicate

Another fact that distinguishes referents is that they may be pluralized directly, while predicates may not, as shown in (5).

- (5) a. nasa-it 'hats'
 b. *sini-it 'sleepings'
 c. *kapi-it 'stabbings'

Derived stems have the same properties as the semantic feature of the affix which heads the derivation. Consider the referential affix *-vik*, which attaches to predicates, and means 'place where to X'. Consider also the predicative affix *-qaq-*, which attaches to referents, and means 'to have an X'. In both instances X represents the semantic type to which the affix attaches. The lexical entries for these affixes are given in (6).³

- (6) a. -vik
]PRED vik] 'place where to X'
 b. -qaq-
]REF qaq] 'to have an X'

Examples showing the use of these affixes inside words are given in (7).

- (7) a. maqait-tuq
 hunts-part.3sg.
 'He is hunting'

³ In fact more would have to be specified for the lexical entry of *-qaq-*, since it is obligatorily an intransitive affix. Other affixes, such as *-gi-* 'to relate to', are obligatorily transitive. See section 3 for a discussion of how these features might be represented in a lexical entry.

b. maqaiv-vik 'hunting place'

c. nasa-qaq-tunga 'I have a hat'

That stems headed by *-vik* are referential, and stems headed by *-qaq-* are not, is shown in (8).

(8) a. maqaiv-vi-ga 'my hunting place'

b. *nasa-qa-ra 'my having a hat'

c. maqaiv-vik qanit-tuq 'the hunting place is near'

d. *nasar-qaq X_{pred} where X is any predicate

e. maqaiv-vi-it 'hunting places'

f. *nasar-qa-it 'having hats'

In summary, a referent is characterized by its potential to 1) inflect directly, 2) to be cited, and 3) to be the subject of a predicate. I propose that these properties are all accounted for by the semantic feature of referentiality, which I will call REF. The semantic feature REF forms part of an item's lexical entry, as in (9).

(9) a. nasaq 'hat'
REF

b. PRED] -vik] 'place'
REF

I assume that the property REF is the semantic category underlying the syntactic category N in languages like English.

5.2.2 Nouns Are Not Verbs

The set of criteria which distinguish verbs, or predicates, is as follows: predicates must attach obligatorily to what are termed mood markers, and mood markers, with the exception of the participial mood, obligatorily take agreement morphology. There are numerous types of mood markers for both matrix and subordinate clauses, however, for the moment I will provide examples only with the indicative or participial mood, discussed in Chapter 1. That mood markers attach to predicative stems rather than referential stems is shown in (10).

- (10) a. *niri-ju-nga* 'I eat'
 b. *niri-ja-ra* 'I eat it'
 c. *akla* 'brown bear'
 d. **akla-ju-nga* 'I brown bear'
 e. **akla-ja-ra* 'I brown bear it'

As can be seen in (10), although mood markers attach to the verbal stem *niri-* 'eat', as in (10a) and (10b), they may not attach to a nominal with referential value, such as *akla* 'brown bear', as in (10d) and (10e). There does exist a construction which closely resembles the ungrammatical examples in (10). This is the construction which means 'get an X', as in (11).

- (11) a. *natsiq-punga* 'I shot a seal'
 seal-indic. 1sg.
 b. *nasaq-punga* 'I put on a hat'
 hat-indic. 1sg.
 c. *aklap-punga* 'I shot a brown bear'
 brown bear-indic. 1sg.

At first glance it looks as if the addition of a mood marker to a nominal is possible, but the form in (11c) is revealing. The stem *akla* ends in a vowel, yet the mood marker is the form which is added to stems ending in a consonant. Moreover, there is an extra consonant /p/ to the left of the mood marker. If, in order to express 'get an X', one simply added on a mood marker, we would expect the form meaning 'I shot a brown bear' to look like the ungrammatical (10d). This suggests that 'to get an X' is expressed by a consonant C which is predicative in nature and takes mood and agreement morphology. For whatever reason, this consonant is only permitted to surface in stems ending in vowels.

The following facts are clearly dependent on the existence of mood and agreement morphology, which was shown to be dependent on a certain type of stem, namely one that is predicative. Predicates may agree with nouns in a coreferential, or predicational way, i.e. non-possessional, as in (12).

- (12) a. arna-it pisuk-tu-t
woman-pl. walk-part.-3pl

'The women walked'

- b. *arna-it pukiqtalig-tu-t
woman-pl. policeman-part.3pl

'The women are policemen'

A related fact is that, while a single predicate may form a complete sentence, a single referent may not (as pointed out in Woodbury 1985a). This is shown in (13).

- (13) a. {pisuk-punga}s
walk-indic. 1sg.

'I am walking'

- b. *[pukiqtalik-(pu)-nga]s
policeman-(indic.)-1sg.

'I (am) policeman'

- c. *[pukiqtalik]s
policeman

'He (is) policeman'

The last property which distinguishes predicates is that they are the only stem which may take affixes of tense or aspect, as shown in (14).

- (14) a. angut pisu-niaq-tuq
man(abs) walk-fut.-part. 3sg.

'The man will walk'

- b. *nasa-niaq
hat-fut.

'my future hat'

As with referential affixes, stems headed by predicative affixes show the same properties as non-derived predicative stems, as in (15).

- (15) [nasa-qar-niaq-pu-nga]s 'I will have a hat'

The example in (15), which is headed by the predicative affix *-qaq-*, demonstrates all the properties of a predicate. It contains the mood marker *-pu(q)-*; it agrees with a

null pronoun 'I'; it forms a matrix clause on its own; and it contains the future morpheme *-niaq-*.

I propose that the semantic property which characterizes elements in Eskimo that are called verbs is that they are predicative. Inherent predicates contrast with referential expressions, which have referential value.⁴ Predicates are often defined as requiring a referential term.⁵ I assume that a predicate contains a variable which seeks an index, whereas a referential expression contains an index referring to some referent. A variable must seek an index from a term bearing REF, within the sentence. Accordingly, the lexical feature which distinguishes a predicate from a noun is X, where X represents a variable, as in (16).⁶

- (16) a. *pisuk-* 'walk' X
 b.]REF *-qaq* 'have a ___' X

In summary, the features described above will provide a means of determining whether a lexical item is nominal or verbal in nature. In this way, it will be possible to study the interaction in Eskimo between referential elements and elements seeking reference, that is, between subjects and predicates.

I will argue that, at the surface level, there is only a single syntactic category in Eskimo, which for lack of a better term, I will call N.⁷ In languages like English, REF

⁴ I use the term here 'inherent predicates' because I wish to claim in section 5 below that referential expressions can also function as predicates under certain conditions.

⁵ Quine (1965) defines predicates as containing free variables, and Frege (1970) views functions (or predicates) as 'unsaturated' or needing completion.

⁶ As the reader has no doubt noticed, the "incorporating" affix *-qaq-* not only seeks reference as a predicate, but is subcategorized for attaching to something with reference. I do not propose to give an analysis of such constructions here. I would like to say, however, that it is probable that these constructions may be analysed within a lexical approach involving word-internal satisfaction of argument structure, by means of lexical features, as opposed to approaches assuming full blown syntax, such as Sadock (1985) and Baker (1985). See Jensen and Johns (to appear) for an outline of such an approach with regard to causative formation.

⁷ As Paul Hirschbuhler pointed out, if there is no difference between nouns and

(or nominals) can be said to project N, and X (or predicates) can be said to project V. Eskimo differs in that, while REF projects N, X forms a defective category, that is, it cannot project a syntactic category on its own, but must attach to a morpheme that can - the mood markers. I will argue below that both indicative and the participial mood markers project N. The defective category explanation of Eskimo predicates accounts for the nominal nature of Eskimo verbs, while at the same time preserving the semantic differences which result in the distribution described above. That there is only one syntactic category at the level of word in Eskimo predicts that syntactic processes that apply to "nouns", e.g. apposition and case assignment, will also apply to "verbs". I will show that in general this is the case, but that important exceptions exist. These exceptions will be explained according to the semantic categories that underlie the syntactic category.

5.3 Predicate Classes

In the previous section, I have argued that there does not exist a syntactic category V in Eskimo, or at least that there exists only a single syntactic category Z, for what in other languages is subdivided into the categories N and V. Eskimo differentiates between nouns and verbs only at the level of morpheme, a level preceding syntactic category. Stems are marked in the lexicon as to whether they are referential (i.e. nouns) or predicates (i.e. verbs). In this section, I will explore the different sorts of predicates that are possible in Eskimo. I assume the predicate classes to be semantic primitives, however, I do not assume that all languages will be based on the same primitives. In other words, although the set of semantic primitives must be finite, it is not necessary that any particular language make use of all members of the set. In this way use of semantic primitives may be compared with colour systems (cf. Berlin and Kay 1969), which vary across languages, although the cognitive capacity to distinguish verbs, then the use of the term noun is somewhat misleading.

colour does not vary. Nevertheless, just as some colour distinctions turn out to be more necessary than others, it is almost certain that some semantic primitives will be necessary in any linguistic system.

It will be my contention that the different types of transitivity alternations observed in Eskimo can be explained on the basis of predicate class rather than rule, or structural representation.⁸ Implicit in this account is the assumption that thematic roles derive from predicate classes, so that, roughly speaking, theme roles come from stative predicates, and agent and patient roles from event predicates. Activity predicates involve "agent" roles, and result predicates involve "patient" roles, but it is important to realize that these thematic roles are perhaps less polarized than those found in the event predicate, possibly due to the lack of contrast.

Woodbury (1981) distinguishes between four distinct classes of verbs in Eskimo, which I will call states, events, activities and results.⁹

5.3.1 State Predicates

State predicates are those which depict a property of the entity which they are predicated upon, as in (17).

⁸ The idea of predicate class comes from Vendler (1967) and has been used also by Dowty (1979), Van Voorst (1986) and Van Valin (1986). Normally, arguments for predicate classes are provided on the basis of permissible time adverbials. I have chosen to motivate these classes here on the basis of transitivity. These classes are well-known in Eskimo (see Woodbury 1981), but are not usually described as predicate classes. If tests equivalent to time adverbials were to be developed for Eskimo, the prediction of this analysis is that they will classify predicates along the same lines.

⁹ Woodbury (1981, 108) calls them exclusively intransitive, exclusively transitive, S/A core and S/O core respectively, where S refers to the theme of an intransitive verb, A to the agent of a transitive verb, and O to the object of a transitive verb. At a later point (285ff), he subdivides these classes further on the basis of their interaction with certain affixes. While this subdivision (for the most part motion versus non-motion) is important, it does not figure in the present discussion..

(17) State Predicates

a. sinik-tuq
sleep-part.3sg.

'He sleeps'

b. angi-juq
big-part.3sg.

'He is big'

c. miki-juq
small-part.3sg.

'He is small'

d. aanniaq-tuq
sick-part.3sg.

'He is sick'

e. paallak-tuq
fall-part.3sg.

'He fell (flat on his face)'

f. kaak-tuq
hungry-part.3sg.

'He is hungry'

g. tuqu-juq
die-part.3sg.

'He is dead'

Stative predicates describe properties which are internal to the entity of which they are predicated. Transitive predicates involve some notion of direct causation. The properties of sleeping, being small, etc. are, in general, self-induced properties,¹⁰ that is to say, they are not caused by factors external to the entity in question. In fact, they are typically outside of the volitional control of this entity. Dying, sleeping, being tall, etc. cannot be induced at will. As a result of this semantic restriction on causation, stative

¹⁰ Even though all permanent, or inherent properties, are statives, not all stative predicates describe permanent properties. Thus sleeping and falling flat on one's face are only temporary, but nonetheless are internal.

predicates may not be transitive, as shown in (18), which show that stative predicates with transitive morphology are ungrammatical.

- (18) a. *sinik-taa
 b. *angi-jaa
 c. *miki-jaa
 d. *aanniaq-taa
 e. *paallak-taa
 f. *kaak-taa
 g. *tuqu-jaa

Even though stative predicates are inherently self-induced, there can be contexts where someone other than the entity involved causes that state to come about. In these less common instances, the lexical causative affix *-tit-* is found, as shown in (19).

- (19) a. angakku-up angut sinik-ti-taa
 shaman-rel. man(abs) sleep-cause-part.3sg./3sg.
 'The shaman made the man sleep'
- b. ujara-up angut paallak-tip-paa
 rock-rel. man(abs) fall-cause-indic.3sg./3sg.
 'The rock caused the man to fall'
- c. nigi-up angut aanniaq-ti-ta
 meat-rel. man(abs) sick-cause-part.3sg./3sg.
 'The meat caused the man to be sick'

The lexical entry of an item like *sinik-* will contain the information that it is a predicate (requires a referent) and that the predicate is a stative, as in (20).

- (20) sinik- 'sleep' [Stative, X]

5.3.2 Event Predicates

The second class of predicates in Eskimo are those which denote events, as in the examples in (21).

(21) Event Predicates

- a. anguti-up arnaq kunik-paa
 man-rel. woman(abs) kiss-indic.3sg./3sg.
 'The man kissed the woman'

- b. angutiup nutaraq irmi-gaa
man-rel child(abs) wash-part.3sg./3sg.
'The man washed the child'
- c. arna-up angut kapi-jaa
woman-rel. man(abs) stab-part.3sg./3sg.
'The woman stabbed the man'
- d. anguti-up titiraut tigu-jaa
man-rel. pencil(abs) take-part.3sg./3sg.
'The man took the pencil'
- e. arna-up angut tuqu-taa*
woman-rel. man(abs) kill-part.3sg./3sg.
'The woman killed the man'
- f. anguti-up arnaq tuni-vaa
man-rel. woman(abs) give-indic.3sg./3sg.
'The man gave it to the woman'
- g. arna-up angut aktu-gaa
woman-rel. man(abs) touch-part.3sg./3sg.
'The woman touched the man'

Event predicates obligatorily imply both a patient and an agent role. As a result of this, event predicates are said to be obligatorily transitive. The fact is, however, that some event predicates can be intransitive, but the intransitive must be reflexive, as shown in (22), where the asterisk before the parentheses indicates that the sentence is ungrammatical without the argument in the parentheses.¹¹

(22)

- a. arnaq *(ingmi-nik) kunik-tuq
woman(abs) self-comit. kiss-part.3sg.
'The woman is kissing herself'

¹¹ Note that the predicate *irmik-* 'wash' is grammatical without the reflexive pronoun. I tentatively include such a predicate in the event class rather than the result class in section 3.4. Such verbs, like their English equivalents, imply a volitional process in the intransitive form, rather than simply a change of state, as in result predicates like *break*.

- b. arnaq (ingmi-nik) irmik-tuq
 woman self-comit. wash-part.3sg.
 'The woman is washing (herself)'
- c. angut *(ingmi-nik) kapi-juq
 man(abs) self-comit. stab-part.3sg.
 'The man stabbed himself'
- d. *angut (ingmi-nik) tigu-juq
 man(abs) self-comit. take-part.3sg.
 ?'The man took himself'
- e. angut *(ingmi-nik) tuqut-tuq
 man(abs) self-comit. kill-part.3sg.
 'The man killed himself'
- f. angut *(ingmi-nik) tuni-vuq
 man(abs) self-comit. giye-indic.3sg.
 'The man gave it to himself'
- g. angut *(ingmi-nik) aktuq-tuq
 man(abs) self-comit. touch-part.3sg.
 'The man touched himself'

Note that where the reflexive is anomalous, as in (22d), there can be no intransitive form whatsoever.

The reflexive in Eskimo must always be intransitive morphologically, that is to say, the predicate must only agree with one argument (in absolutive case). The reflexive is also accompanied by a reflexive pronoun *ingmi-* 'self'. This pronoun is found with an oblique case attached to it, usually either the comitative (Inuktitut), or the allative (Greenlandic), as discussed in Chapter 3, sections 2 and 3. I leave aside the question of whether the subject is assigned the agent role, and the oblique argument the patient role, or vice-versa. The lexical entry for an item like *kapi-* 'stab' in Eskimo will contain the information that it is a predicate and that the predicate type is Event, as in (23).

(23) —kapi- 'stab' [Event, X, Y]

The lexical entry for an event predicate is unique in that it requires two variables for the predicate to be satisfied. In general this should be considered a marked feature.¹² This is not to say that event predicates are decomposable. On the contrary, they may be compared to lexicalized forms in that they are a single form, no matter how close a resemblance they bear to forms that can be decomposed.

5.3.3 Activity Predicates

The third class of predicates consists of those which I call activities. Activity predicates may be described as denoting ongoing activities, including those of movement, as in (24).

(24) Activity Predicates

- a. Jaani niri-juq (nigi-mik)
John(abs) eat-part.3sg. (meat-comit.)
'John eats (meat).'
- b. Jaani tikit-tuq (Iqalungnut)
John(abs) arrive-part.3sg.
(Frobisher Bay-all.)
'John arrived (at Frobisher Bay)'
- c. Jaani tamua-juq (nigi-mik)
John(abs) chew-part.3sg. (meat-comit.)
'John chews (on meat)'
- d. arnaq (pisir-mik) imngiq-tuq
woman(abs) (song-comit.) sing-part:3sg.
'The woman sang (a song)'
- e. Jaani pisuk-tuq (Iqalungnut)
John(abs) walk-part.3sg. (Frobisher Bay-all.)
'John is walking (to Frobisher Bay)'

¹² I am assuming that the unmarked case is a binary system involving predicates and subjects. This makes both event and activity predicates marked with respect to state and result predicates.

- f. arnaq (mumirusir-mik) mumiq-tug
 woman(abs) (dance-comit.) dance-part.3sg.
 'The woman danced (a dance)'
- g. arnaq migsug-tug. (japa-mik)
 woman(abs) sew-part.3sg. (parka-comit.)
 'The woman sews (a parka)'

The elements in parentheses are optional arguments in the sentence, and can be said to modify or restrict the reference of the goal¹³ of the action. They are usually indefinite in meaning. Activity predicate alternates with a transitive form, as shown in (25).¹⁴

- (25) a. Jaani-up niqi niri-jaa
 John-rel. meat(abs) eat-part.3sg./3sg.
 'John eats the meat'
- b. Jaani-up Iqaluit tika-~~taa~~
 aqauungngur-mat
 John-rel. Frobisher Bay(abs)
 arrive-indic.3sg./3sg.
 the next day-sub.3sg.
 'John reached Frobisher Bay the next day'
- c. Jaani-up niqi tamua-jaa
 John-rel. meat(abs) chew-part.3sg./3sg.
 'John chewed the meat'

¹³ Here I use goal in the broad sense to mean goal of an action, which includes both destination (the usual sense of goal), and affected argument (less commonly thought of as a goal). I assume that languages may differ as to whether or not they differentiate between these two concepts. Eskimo does not (at least in terms of transitivity, cf. footnote 9). English can be described as subcategorizing for both destination and affected argument goals, however, it assigns case only to the latter. Destination goals must be assigned case by a preposition. Eskimo, on the other hand, treats both destination goals and affected arguments goals in the same fashion. Both may appear either as oblique arguments, as in (24), or as arguments directly linked to the predicate, as in (25).

¹⁴ Some of the examples in (25) have some contextual restrictions that are not explained here. For instance, the language consultant I worked with would only allow (25b) either with the adverbial clause *aqagungngurmat* or with the meaning that the event is happening just as the speaker makes the utterance. This same restriction holds of (25a). In addition, he stated that (25c) could only be used if one were disputing the item chewed. The latter restriction seems related to the idea that the transitive only serves to specify the goal constant.

- d. arna-up pisiq imngi-gaa
 woman-rel. song(abs) sing-part.3sg./3sg.
 'The woman sings the song'
- e. Jaani-up Iqaluit pisuk-paa
 John-rel. Frobisher Bay(abs)
 walk-indic.3sg./3sg.
 'John walked to Frobisher Bay'
- f. arna-up mumirusiq mumiq-taa
 woman-rel. dance(abs) dance-part.3sg./3sg.
 'The woman dances the dance'
- g. arna-up japa miqsu-gaa
 woman-rel. parka(abs) sew-part.3sg./3sg.
 'The woman sews the parka'

The difference between the intransitive and the transitive forms of activity predicates is that the transitive form agrees with an additional argument, which receives absolutive case. This additional argument appears related to the oblique argument of the intransitive form. For example, in (25a) the absolutive argument *niqui* of the predicate *niri-jaa* bears the same thematic relation to the action as does the oblique argument *niqui-mik* in (24a), that is, they are both entities which undergo the action of eating. In addition, the argument which in the intransitive form receives absolutive case receives relative case in the transitive form. Woodbury (1975) relates the intransitive forms of verbs of this class to their transitive forms by a rule he calls *absolutive shift*, given in (26).

(26) Woodbury (1975, 50)

		ERG	ABS	(ADV)			
SD:	X	∅	NP ₁	(NP ₂)	Y	V	-->
SC:	X	NP ₁	NP ₂	∅	Y	V	

Condition: ADV is a specific relation to the verb which is idiosyncratic, and is specified in the lexical entry.

Woodbury reasons that the semantic roles of the optional oblique arguments of verbs of this class (see 24) cannot be predicted, therefore the oblique argument is subcategorized by the verb. This is NP₂ mentioned in the rule in (26). The rule permits this argument to shift from an oblique position in the intransitive construction to the absolutive position of the transitive construction. The absolutive argument of the intransitive construction becomes the relative argument of the transitive construction.

A more recent approach to this type of problem is found in Hale and Keyser (1986), who discuss transitivity alternations in English. Among the alternations investigated are those of the following sort.

- (27) a. Yesterday John sang.
b. Yesterday John sang an operetta.

The similarity between this type of alternation in English and activity verbs in Eskimo lies in the fact that in both languages the intransitive construction may consist of only a single argument denoting the entity performing the action. They differ in that only Eskimo permits an oblique argument denoting the entity undergoing the action, as in (28).¹⁵

- (28) *Yesterday John sang of an operetta.
(meaning he sang some operetta)

Hale and Keyser (for a slightly different approach, see Zubizarreta 1986) propose that the lexical entries of verbs like *sing* and *eat* in English contain information that the object position is, in a sense, committed¹⁶ to a semantic constant, rather than a variable. This means that not any entity in the world can be the object of such a verb, but only an entity that, so to speak, fits the bill. The semantic constant forms part of the lexical entry as shown in (29).

¹⁵ The two languages also differ in that the class of activity predicates in Eskimo is much larger than that in English, and includes verbs of motion.

¹⁶ The term *committed* is meant to express the fact that an object position is reserved for a particular thematic role. Thus while some verbs permit the object position to be occupied by a semantic role *path*, e.g. *John jumped the wall*, other do not, e.g. *John slid the floor*.

(29) Hale and Keyser (1986, example 53)

[X SING TUNE]

The entry in (29) represents that the verb *sing* is a predicate which takes as an object something which must fall under the definition TUNE. As the object position of this verb is never unoccupied, they correctly predict that a verb like *sing* can never alternate with a causative meaning, as in (30).¹⁷

(30) *John sang Mary (meaning John caused Mary to sing)

Hale and Keyser must explain how it is possible that the thematic role of the direct object of a verb like *sing* need not be assigned to an argument at s-structure, an apparent violation of the Projection Principle of Chomsky (1981), discussed in Chapter 1, section 2. Their answer is that the thematic requirements of a verb in English may be satisfied at a level prior to phrase-structure. They claim that the ability to do this is reminiscent of "non-configurational languages" wherein arguments need not be expressed at the level of phrase-structure (see Hale 1983). This type of explanation does not explain Eskimo activity predicates. Eskimo is a language which allows for the non-expression of arguments, as shown in (31).

(31) tigu-jara
take-part.1sg./3sg.

'I took it'

In (31) there is no independent lexical argument denoting either the agent of the taking, or the thing taken. Instead, agreement affixes on the verb provide the information that the agent is first person singular and that the patient is third person singular. That non-expression of lexical argument is a phenomenon distinct from the non-expression of the semantic constant of activity predicates is shown in (32), where it can be seen

¹⁷ If there were no object position, the verb could participate in a causative formation rule, e.g. The cup broke/John broke the cup. This is because their analysis has the single argument of the intransitive form of *break* become the object of the same verb in the causative. If an object were already in place, the single argument of the verb *sing* could not become the object of a transitive form. Thus, that activity predicates cannot undergo this rule shows that something occupies object position.

that the the semantic constant of the activity predicate *niri-* 'eat' can be lexical, as in (32a), non-lexical but inflected, as in (32b), or absent entirely, as in (32c).¹⁸

(32)

a. *tuktu niri-jara*
caribou(abs) eat-part.1sg./3sg.

'I am eating the caribou'

b. *niri-jara*
eat-part.1sg./3sg

'I am eating it'

c. *niri-junga*
eat-part.1sg.

'I am eating'

The crucial difference is that in (32c) there is agreement for only one argument, the actor, on the verb. This shows that the property which allows Eskimo to optionally express a semantic constant of an activity verb is in effect *prior* to the level at which lexical arguments are optionally realized. Nevertheless, I believe that the idea of semantic constant as underlying the behaviour of activity predicates is correct, and propose lexical entries of the sort given in (33).

(33) a. *niri-* 'eat' [[ACTIVITY[FOOD]], X]

I will assume that the semantic constant FOOD in (33) forms an integral part of the predicate. In fact, I argue that the semantic constant of an activity verb is never linked directly to a syntactic position, be it direct object or whatever. This claim is similar to that of Zubizarreta (1986) who states that semantic constants differ from variables in that they are not projected onto other levels of representation. She proposes that there are two lexical entries for the verb *eat*, an intransitive one containing a semantic constant FOOD, and a transitive one containing the variable *x*. I will assume that only one

¹⁸ As pointed out to me by Maria-Luisa Rivero, this situation parallels that of French clitics. Such a parallel would be predicted under the analysis of Bergsland (1962), who argues that patient agreement historically derives from independent pronouns (see section 5.2). For a lexical account of cliticization, see Mullen (1986).

lexical entry is required, and that the transitive construction contains a morpheme (the transitive marker) which binds the semantic constant.¹⁹

5.3.4 Result Predicates

The final class of predicates are those I call results. These predicates denote a change of state, e.g. of position, quality, etc. This change of state may or may not have been brought about by an external entity. Examples are given in (34).

(34) Result Predicates

- a. kaapi kuvi-juq
coffee(abs) spill-part.3sg.
'The coffee spilt'
- b. qijuk gupi-juq
wood(abs) split-part.3sg.
'The wood split (lengthwise)'
- c. Jaani nutqaq-tuq
John(abs) stop-part.-3sg.
'John stopped'
- d. pana imaaq-tuq
snow-knife fell in water-part.3sg.
'The snow knife fell in the water'
- e. ukkuaq ukkuiq-tuq
door(abs) open-part.3sg.
'The door is open'
- f. qimmiq ipiq-tuq
dog(abs) tied up-part.3sg.
'The dog is tied up'
- g. titiraut siqumit-tuq
pencil(abs) break-part.3sg.
'The pencil is broken'

¹⁹ See section 5.2.

Result predicates alternate with transitive forms which appear to have added an agent in relative case, as in (35).

- (35) a. arna-up kaapi kuvi-jaa
 woman-rel. coffee(abs) spill-part.3sg./3sg.
 'The woman spilt the coffee'
- b. arna-up qijuk qupi-vaa
 woman-rel. wood(abs) split-indic.3sg./3sg.
 'The woman split the wood (lengthwise)'
- c. Jaani-up nutaraq nutqag-taa qia-si-juq
 John-erg. child(abs) stop-part.3sg./3sg.
 cry-start-part.3sg.
 'The child which John stopped started crying'
- d. arna-up pana imaaq-paa
 woman-rel. knife(abs)
 fell in water-indic.3sg./3sg.
 'The woman put the snow-knife in water'
- e. arna-up ukkuag ukkui-gaa
 woman-rel. door(abs) open-part.3sg./3sg.
 'The woman opened the door'
- f. arna-up gimmiq ipiq-paa
 woman-rel. dog(abs) tie up-indic.3sg./3sg.
 'The woman just finished tying up the dog'
- g. arna-up titiraut siqumi-taa
 woman-rel. pencil(abs) break-part.3sg./3sg.
 'The woman broke the pencil'

In contrast to the activity predicates, which in the intransitive form may optionally have an oblique argument that is related to the absolutive argument of the transitive form (see (24) above), result predicates do not allow oblique arguments in intransitive forms, as shown in (36).²⁰

²⁰ I assume that the oblique arguments would be agentive, since the thematic role which is syntactically realized in both the intransitive and the transitive forms is the theme or patient. This contrasts with activity predicates, where the thematic role which is syntactically realized in both forms is the actor.

- (36) a. *kaapi kuvi-juq anguti-mit
 coffee(abs) spill-part.3sg. man-abl.

'The coffee was spilt by the man'

- b. *titiraut sigumit-tuq arna-mit
 pencil(abs) break-part. woman-abl.

'The pencil was broken by the woman'

The ungrammaticality of the examples in (36) is evidence that there is no semantic constant in the lexical entries of result predicates, as there was in activity predicates.

Woodbury (1975) explains the alternation of result predicates by means of a rule of causativization, as given in (37).

(37) Woodbury (1975, 46)

a. Formally Intransitive: $P[x_1, x_2, \dots, x_n]$

b. Formally Transitive: $CAUSE[y, [P[x_1, x_2, \dots, x_n]]]$

The rule in (37) describes a process whereby a proposition P can be embedded *integer* within a function CAUSE, which takes as its arguments an agent y and a proposition.

Hale and Keyser (1985) also consider alternations in English of verbs which could be classified as result predicates, as in (38).²¹

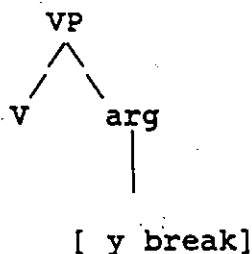
- (38) a. The cup broke.
 b. John broke the cup.

The verb *break* in English, like the result predicates in (34), alternates between the intransitive, where reference is made only to the entity that undergoes the change of state, and the transitive, which denotes not only the entity which undergoes the change of state, but the agent of the change.

Hale and Keyser argue that the lexical entry of a verb like *break* contains the information that the theme or patient role (the entity undergoing the change of state) is committed to the direct object position, as in (39)

²¹ These verbs are also known as inchoatives or ergative verbs. The latter term is at present enjoying a wide range of usage.

(39) break Hale and Keyser (1986)



They point out that the fact that the theme role is committed to the direct object position is in keeping with the Unaccusativity Hypothesis (see Perlmutter 1978, and Burzio 1981), which states that, for a certain class of intransitive verbs, the argument in subject position originates in direct object position, and moves to subject position in order to get case (hence the term unaccusative).²² There is no evidence in Eskimo for an unaccusative analysis with regard to any of the predicate classes discussed here. This fact may be interpreted as indirect support for the claim in this thesis that there is no direct object in Eskimo. If there were evidence suggesting that the subject of any class of intransitive predicate originates in any other position than that in which it is found, this would seriously undermine the claim that there exist only subjects in Eskimo.²³

Hale and Keyser argue that, in the case of *break*, the patient role surfaces either as the direct object position of the transitive verb as in (38b) above, or where a subject is lacking, as the subject of an intransitive verb, as in (38a). The agent role of the transitive verb is assigned constructionally, that is, in the configuration (NP VP), the NP is assigned the agent role by the ergative verb and its patient.

²² For alternative explanations of the evidence which is used to support the Unaccusativity Hypothesis, see Van Voorst (1986), Lappin (1986) and Van Valin (1986).

²³ Interestingly, Levin (1983, 245) states that there is no evidence for a class of unaccusative verbs in Dyrbal. Dyrbal is the only other language that has been treated as syntactically ergative under Marantz's Ergativity Hypothesis (see Marantz 1984 and Levin 1983). Although I believe that an explanation other than the Unaccusative Hypothesis underlies the evidence surrounding this topic, nonetheless, we still expect that a language without direct objects, such as Eskimo, will not be able to display characteristics that could be interpreted as having a class of predicates whose subject originates in direct object position.

As mentioned above, under an analysis which does not admit direct objects, the patient roles must be assigned directly by the predicates. Accordingly, the lexical entries for Inuktitut result predicates will be as in (40).

(40) 'break' [RESULT, X]

5.3.5 Summary

My goal in defining a set of predicate classes for Eskimo is to explain the transitivity alternations (and lack thereof) without recourse to rules of deletion, movement, etc. The burden of the analysis is therefore on the lexical entries themselves. I assume that the syntax operates freely. Any account of Eskimo transitivity alternations must be able to predict which forms can be made transitive, which must be transitive, and which cannot be transitive. I have argued that the latter two properties derive from the nature of the semantic predicate which the lexical entry represents. As for the forms that alternate between an intransitive and transitive form, an analysis which will provide a proper account must predict, for example, that *niri-jara* ('I ate it') will not mean *'I caused him to eat', and that *siqumit-tuq* ('It broke') will not mean *'He broke (something)'. The rules of absolute shift and causativization in Woodbury (1975) make the correct predictions, albeit with a little effort. The causative rule in (37) could be prevented from applying incorrectly to activity predicates to produce the ungrammatical association **niri-jara* 'I caused him to eat' on the basis that activity predicates are not "formally intransitive", as specified by the causative rule. In addition, Woodbury's rule of absolute shift is prevented from applying to result predicates. This is because result predicates do not meet the structural description of absolute shift, since they do not have a subcategorized adverbial. Hale and Keyser's account also makes the correct predictions.²⁴

²⁴ Of course, this would be under the assumption that predicates like *pisuk-* have lexical entries like the verb *to sing* in English, and that there are direct objects in Eskimo.

Up until now, my proposal that the predicate class distinction underlie transitivity alternations in Eskimo is simply another alternative. All three proposals make similar predictions. The point at which my proposal differs from that of Woodbury and Hale and Keyser concerns the nature of transitivity. Woodbury's analysis, and to a lesser extent Hale and Keyser's, implicitly claim that transitivity is a varied process. In Woodbury's analysis, transitivization is either a rule of causativization, or a rule moving an argument to an absolutive position, with subsequent movement of the old absolutive to relative position. Under Hale and Keyser's analysis, transitivization is either the projection of a semantic constant onto direct object position, or the addition of an agent argument by constructional means. In the account to be proposed below, I will unify the transitivization process as much as possible. Under this view, transitive morphology contributes directly to the transitivization process. The fact that transitive morphology exists in Eskimo, and can be seen to be the same in all instances, will be taken to be evidence for a uniform treatment of the transitivization process. The uniformity of the morphology is unexplained under an analysis which treats the transitivization of activity and result predicates as different processes.²⁵ Why do we not find, for instance, one set of transitive morphemes on activity predicates, and another on result predicates? Admittedly, we would not expect that agreement would vary, but why are the forms of the indicative and the participial affixes the same in all predicate classes? The account I propose will adhere to what I shall term the One Morpheme/One Meaning Principle.²⁶ This principle, while not obligatory in a grammar, provides one means

²⁵ Of course, we could always assume that Eskimo, like English, has no morphology for the transitivization process, and that the morphology we observe on the transitive forms is simply added to a pre-existent transitive. It seems unlikely, however, that a language with such rich morphology, and so few genuine cases of null morphemes, would have null morphemes in just these constructions.

²⁶ This principle is not an original proposal. It is implicit in any theory of morphology, where widespread homophony is undesirable. My claim is that this principle is not utilized to its potential in linguistic analyses where the morphology of a language differs from conventional syntax.

of comparing competing analyses. Under this principle, where two analyses account for the same set of data with more or less the same level of adequacy, the One Morpheme/One Meaning Principle will effect a choice of the analysis which has a uniform meaning associated with a single morpheme over that of another analysis which ascribes more than one meaning to a single morpheme. It is motivated by principles of learnability on the grounds that it is easier to learn to associate a form with a single meaning than it is to learn to associate a form with multiple meanings. In essence, this is a principle of markedness, designating the marked value where the language allows for a non-unique mapping between form and meaning. Again, I emphasize, pace Aroff, that this principle does not govern an analysis, but serves as a sort of evaluation metric.

5.4 The Indicative and the Participial Moods

In the previous section I claimed that whether or not a predicate can be transitive or intransitive derives from the nature of the predicate. I also claimed that the morphology found to the right of the predicate stem in Eskimo does not reflect, but effects the transitivity of the construction. In this section I will discuss some of the morphemes that occur immediately to the left of the agreement markers on the predicate.²⁷ These affixes, the indicative and the participial mood, will be shown to be the crucial factor in determining the transitivity of the predicate. Examples of the affixes under discussion are the italicized forms in (41) and (42).

(41) a. angut pisuk-pug
man(abs.) walk-indic.3sg.

'The man walks/walked'

²⁷ Indicative and participial mood markers can be described as to the immediate right of the verb stem, only if one makes a distinction between root and stem.

b. angut pisuk-tuq
man(abs.) walk-IP3sg.

'The man walks/walked'

(42) a. arna-up nutaraq kunik-paa
woman-rel. child(abs.) kiss-indic.3sg./3sg.

'The woman kisses/kissed the child'

b. arnau-up nutaraq kunik-taa
woman-rel. child(abs.) kiss-PP3sg./3sg.

'The woman kisses/kissed the child'

The a. forms in both (41) and (42) are known as the indicative mood markers, and the b. forms are known as the participial mood markers.²⁸ It can be seen that, apart from beginning with a different consonant, the indicative and the participial forms are quite similar. Nevertheless they have been treated as quite distinct syntactically. For example, Fortescue (1984) calls the *-vaq-* form in Greenlandic the indicative, but calls the *-saq-* form (West Greenlandic's version of *-jaq-*) the passive participle. In fact, as we shall see, both these forms are "indicative" and "passive". The practice of treating the indicative and the participial mood markers as quite distinct arises in part from the fact that, in some dialects, they are indeed unrelated morphemes. The chart in (43) provides an overview of the indicative and the participial mood of a number of dialects.²⁹

²⁸ See discussion in Chapter 1, section 3.

²⁹ Of note is the West Greenlandic transitive participle *-gi-*, which Fortescue (1984) says changes to /ga/ before /a/. In Inuktitut, there is also a transitive variant of the form /ga/ which apparently results from a stem ending in /k/ and the following transitive participial form - thus *kuni-gara* 'I kissed him'. As I assume that the Greenlandic /ga/ only shows up before third person subject irrespective of verb stem, the two forms must be different.

(43) a. West Greenlandic Fortescue (1984)

	Intr.	Tr.
Indic.	vuq/puq	vaq/paq
Part.	suq/tuq	gi
Pass.	saq/taq	

b. Caribou

	Intr.	Tr.
Indic.	vuq/puq	vaq/paq
Part.	juq/tuq	jaq/taq
Pass.	-jaq/taq	

c. Kangiryuarmitut Lowe (1985)

	Intr.	Tr.
Indic.	juq/tuq	jaq/taq
Part.	juq/tuq	jaq/taq
Pass.	jaq/taq	

d. Yupik Woodbury (1981 and 1985a)

	Intr.	Tr.
Indic.	+ 'u(r)/tu(r)	+ 'ar
Part.	-lri+a(r)	-ke-
Pass.	+ 'ar	

Woodbury (1985, 82) states that the intransitive participle *-suq-* / *-tuq-* comes from the pan-Eskimo intransitive indicative **-tuq-* / *-řuq-*. I am unaware of the historical evidence which led to this statement, which implies that, where indicative and participial morphemes resemble one another, the participial forms are innovations. Is it not possi-

ble that the parallel forms reflect the original system, and that, as the indicative usage assumed prominence, other morphemes took on the function of the participial mood? It is interesting that, in West Greenlandic, the indicative mood has a less restricted function than in Inuktitut. In Inuktitut, the use of the indicative implies some sort of performative function. Its use is less common than that of the participial. Hofmann (1978) proposes that the indicative forms are predicative, while the participial forms are attributive.³⁰ He relates this to the reported feelings amongst Quebec dialect speakers that the indicative forms are "vulgar". He claims that this impression results from the fact that predication is related to assertion. My own impression is that something like assertion is indeed involved. Indicative forms seem to relate the meaning of the utterance to the moment of speaking. Whatever the factor, it would seem to be not equivalent to, but a sub-set of, predication. Examples (41b) and (42b), which have participial rather than indicative forms clearly involve predication. They do not, however, involve the extra feature which is carried by the indicative form.³¹

In any event, a synchronic grammar of Inuktitut must take into account the similarity of form between the indicative and the participial mood, especially for dialects such as Kangiryuarmiutut which do not make any morphological distinction between the two usages. Once again, the One Morpheme/One Meaning Principle forces us to consider first an analysis where the two forms are related. Only if such an attempt proves unsuccessful, either by the complexity of the claim, or by resultant complexity in other parts of the grammar, will we turn to an analysis which has the indicative and participial morphemes of (43b) and (43c) as unrelated morphemes.³²

³⁰ Hofmann uses these terms in their traditional sense, i.e. predicative means that a property is asserted of an individual, while attributive means that a property is presupposed of an individual. See also Chapter 6, section 1.2.

³¹ As it is difficult to characterize this feature, I have made no attempt to do so in the translations.

³² This is a broader interpretation of the One Morpheme/One Meaning Principle, in that two separate morphemes are being related on the basis that they bear a

The distribution of the Inuktitut indicative and participial mood markers is as follows. Both may appear as the main predicate of a matrix clause, as in (41) and (42) above. However, only constructions containing the participial mood can appear as nominals in a clause, as shown in (44)

- (44) a. [taku-vara sinik-tuq]s
 see-indic.1sg./3sg. sleep-IP3sg.
 'I see the one sleeping'
- b. *[taku-vara sinik-puq]s
 see-indic.1sg./3sg. sleep-indic.3sg.
 'I see the one sleeping'
- c. [taku-vara nanuq kapi-jait]s
 see-indic.1sg./3sg. polar bear(abs)
 stab-part.2sg./3sg.
 'I see the bear that you stabbed'
- d. *[taku-vara nanuq kapi-vait]s
 see-indic.1sg./3sg. polar bear(abs)
 stab-indic.2sg./3sg.
 'I see the bear that you stabbed'

The example in (44a) shows that an intransitive participle can function as a nominal in a clause, but (44b) shows that an intransitive indicative form cannot function as a nominal. Example (44c) shows that a transitive participle can function as a nominal in a sentence, but (44d) shows that a transitive indicative form cannot.³³

phonological resemblance to one another. This might at first seem to be a dangerous extension; however, implicit in the One Morpheme/One Meaning Principle is the requirement that any morpheme or morphemes under consideration must at least have some plausible semantico-syntactic connection. Thus, if the indicative morphemes had the same form as the word which meant 'caribou calf', we would not search for some commonality. It is the very fact that the participial and the indicative forms overlap in terms of distribution that leads us to investigate whether or not there may be a common feature underlying this distribution.

³³ Note that transitive participial forms are never found with first and second person patients for reasons that will be made clear in Chapter 6, section 1.

I propose that all of the indicative and the participial forms are nominal, and that the indicative forms are distinct from the participial forms in only one feature. This feature requires that the indicative mood marker obligatorily attach under the node I (or INFL).³⁴ The I node, as defined in Chomsky (1986b) is the head of the clause IP (formerly S).³⁵ The feature of obligatorily attaching under the node I undoubtedly derives from the fact that the indicative form has some extra performative function, as discussed above. Participial forms are not marked for attaching under I, and therefore may appear as either nominals or main clause predicates.³⁶ This account predicts that, if a sentence contains both an indicative and a participial form, the former will be the main predicate of the sentence.³⁷ This turns out to be true, as shown in (45).

(45) angut mumiq-tuq imngiq-puq
man(abs) dance-part.3sg. sing-indic.3sg.

'The man who is dancing is singing'
(*'The man who is singing is dancing')

Another fact of indicative and participial mood markers which requires an explanation is that the intransitive forms of both moods take one argument, while the transitive forms take two. My proposal is that the intransitive mood markers resemble the class of predicate affixes, in that they do not carry the feature REF. On the other hand, they resemble nominals since, I argue, they project the syntactic category N. In some sense, they are like adjectivals. Recall that predicate stems were defined as

³⁴ Maria-Luisa Rivero has suggested to me that this feature may be interpreted as some element requiring broad scope.

³⁵ Recall that it was claimed in section 2.1 that nominals in Eskimo are defined by the fact that they inflect directly, that they are independent morphologically, and that they can function as subjects of other predicates. Predicates with mood markers reflect these properties, except when they must or do appear in I.

³⁶ In other words, they may have either broad or narrow scope, depending on their position at SS (see footnote 34 above).

³⁷ Relative clauses will be dealt with in Chapter 6, section 1.

defective because they lack a syntactic category. That an adjectival mood marker can project the syntactic category N is not a contradiction, as the fact that there is only a single syntactic category in Eskimo does not imply that all words in Eskimo are referential. The generalization that exists in Eskimo may be characterized as in (46).

- (46) In Eskimo all elements bearing the feature REF, as well as intransitive mood markers, project the syntactic category N.

Intransitive mood markers are affixes that must attach to the right of predicates. Rather than stating this as a subcategorization feature, I shall posit that intransitive mood markers are a form of anaphoric predicate, that is they are predicative elements which must be coindexed with an antecedent predicate within the word.

I propose that the transitive mood markers, both indicative and participial, fall into the class of referential affixes. Like intransitive mood markers, they are anaphoric.³⁸ That transitive mood markers are referential, and intransitive mood markers are not, will be shown below to explain why the former take single arguments and the latter take two arguments. As lexical entries carrying the feature REF, transitive mood markers will project the syntactic category N. The lexical entries for the four mood markers are given in (47).

(47) a. Intransitive Mood Markers

Indicative		Participial	
PRED]-vuq]	[X _i]	PRED]-juq]	[X _i]
I			

b. Transitive Mood Markers

Indicative		Participial	
PRED]-vaq]	[REF]	PRED]-jaq]	[REF]
I	goal _i		goal _i

³⁸ I will argue below that the anaphoric property of transitive mood markers is not a matter of the feature REF, but of the thematic role which is associated with these morphemes.

The left-hand side of each lexical entry provides the form and subcategorization facts of the morpheme. This is based on Lieber (1980). The right-hand side of the lexical entry indicates the semantic class of the item, i.e. whether or not it is referential, and whether or not it is anaphoric. Note that the fact that the indicative and the participial mood marker must attach to predicates rather than nominals does not need to be mentioned in the left-hand subcategorization frame. This restriction will follow from the semantic features on the right, which require that they be bound either to a predicate, as in the case of intransitive mood markers, or to the goal of a predicate, as in the case of transitive mood markers (discussed below).

The intransitive mood markers basically convey the meaning 'The one who (is) X', where X represents a predicate. In functional terms, they simply make a predicate into an Eskimo word. Transitive mood markers require a more detailed explanation. In (47b) the semantic class of transitive mood markers is given as REF. There has been an implicit assumption all along that each element carrying the feature REF has some specific semantic meaning associated with it. Thus, the lexical entry for *qimmiq* 'dog' will have some information that the referent is of the class canine, etc. Transitive mood markers also have a specific meaning, except that rather than denoting a class of animals, trees, etc., they denote a class of elements which have in common that they all bear the same thematic role - goal. From another point of view, they can be compared with syntactic anaphors. Lexical syntactic anaphors share a common referent with their antecedent, but have an independent thematic role, e.g. English *himself*. Affixial anaphors, on the other hand, share a thematic role with their antecedent. In this respect, they resemble the trace of NP-movement. Jensen and Johns (to appear) argue that the passive participle, which is identical to what is here termed the transitive participle, is similar to the nominalizing suffix *-ee* in English, as in (48).³⁹

³⁹ I ignore the complexities of an analysis of this morpheme in English. The English examples are given only to give the reader an impression of the nature of the analysis to follow. For an analysis along similar lines for the English suffix *-er*, see

- (48) a. The kissee - The one who was kissed
 b. The breakee - The one who was broken

As elements within the word bearing the thematic role goal, the semantic equivalent of *-ee* in Eskimo, the transitive mood markers in Eskimo must either receive the goal role from the predicate, as in (49a), or bind a goal role within the predicate, as in (49b).

- (49) a. Predicate
 goal -----> vaq/jaq

- b. Predicate vaq/jaq
 goal_i goal_i

It is important to note that only three of the four classes of predicates are capable of assigning or binding a goal role. These are activity, result and event predicates. State predicates, by definition, do not assign a goal role.

That these morphemes bind rather than receive a thematic role can be argued by the fact that nonsense words in English still convey the thematic role of patient, even though the verb is meaningless, as in (50).

- (50) The marfuree - The one who was marfured,
 not *The one who marfured
 someone else.

I interpret (50) as evidence that the thematic role of affixial anaphors forms part of their lexical entry.⁴⁰ Activity and event predicates provide additional support for the argument that affixial anaphors have independent semantic properties. Recall that activity predicates predicate an activity containing a semantic constant goal onto an argument. If the transitive mood markers did not contain semantic properties of their own, we would be unable to predict whether the actor or the goal role would be

Sproat (1985) who calls this process theta-indexing. In Jensen and Johns (to appear) the so-called "antipassive" morpheme *-si-* is treated as an agent binding affixial anaphor.

⁴⁰ I made up a predicate *puli-* and asked my consultant whether *pulijaq* would refer to the one doing the action, or the one to whom the action happened. He chose the latter. This choice is predicted by the analysis argued here.

assigned to the affix. Likewise, event predicates, which assign both an agent and a goal role would potentially assign the wrong role to the affix. Result predicates, which assign only goal role, do not pose a problem here. Only by considering transitive mood markers as affixial anaphors as defined above, can this problem be avoided. The possible combinations are shown in (51).

(51) a.	kunik- agent, goal _i	jaq goal _i	'kiss' EVENT
b.	niri- actor FOOD _i	jaq goal _i	'eat' ACTIVITY
c.	siqumit- goal _i	jaq goal _i	'break' RESULT
d.	*angi- theme _i	jaq goal _i	'big' STATE

In some respects, constructions containing transitive mood markers resemble a passive construction. One might imagine an argument against a passive analysis of the transitive construction on the basis 1) that if the transitive forms are like the passive, then this begs the question of what the active forms are which the passive forms derive from, and 2) that an independent passive construction exists in Eskimo, as shown in (52). Compare the passive construction in (52a) with the transitive construction in (52b).⁴¹

- (52)
- a. Jaani kuni-ga-u-vuq Miurimit
John(abs.) kiss-partc.-be-3sg. Mary-abl.
'John was kissed by Mary'
- b. Miuriup Jaani kuni-ga-a
Mary-rel. John(abs.) kiss-partc.-3sg.
'Mary kissed John'

⁴¹ My consultant informs me that *kuniktaujuq* could be used under the circumstances where one had been waiting for John to be kissed.

This type of argument would be based on a mistaken view that the transitive clause is claimed to be equivalent to the passive construction. Instead the claim is that the transitive clause is related to the passive construction by virtue of the fact that they both contain the transitive participial mood marker *-jaq-* (sometimes termed the passive participle). It is well known that the passive construction consists of not only the passive participle, but also a copula. Example (52a) conforms to this definition. It contains the copula *-u-* 'be' to the right of the participle. Note that only the participial form can be found in the passive construction. The feature I on the lexical entry of the transitive indicative mood marker, which signifies that the morpheme must be attached directly to the node I, predicts that it cannot be embedded within a word, as is shown by (53).⁴²

- (53) a. *Jaani kunik-pa-u-vuq Miuri-mit
 John(abs) kiss-indic.-be-indic.3sg.
 Mary-abl.

'John was kissed by Mary'

The transitive construction in (52b) does not contain a copula morpheme. The only morpheme it has in common with the passive construction is the transitive participial mood marker. The transitive construction is not equivalent to the passive construction any more than the adjectival passive in English is equivalent to the passive construction, as in (54).

- (54) a. The burnt toast was a depressing sight.
 b. The toast was burnt by the woman.

This is not to say that the transitive clause in Eskimo is the same as the adjectival passive in English, only that the passive participle can appear in different constructions without implying that the constructions are identical. The other hypothetical argument

⁴² Also **kunikpaujuq*, where the last morpheme is the participial.

⁴³ The term "passive" is so highly charged that I have chosen to call these morphemes "transitive". Hammerich (1951, 21) says there is little reason in discussing whether or not the Eskimo clause is active or passive.

against a "passive" analysis⁴³ of the transitive clause is that there is no active form from which the passive is derived. This too, is not an argument since, as just stated, the transitive clause is not equivalent to the passive construction. Moreover, if the claim that direct objects do not exist in Eskimo is correct, then a nominalizing morpheme carrying the goal role is one of the few conceivable ways to transitivize a predicate. If there is no direct object, then a second argument cannot be linked to a predicate by means of accusative case.⁴⁴ I will argue in the following section that the only way in which two arguments can be linked in Eskimo is by nominal predication, that is, one nominal predicated of another. Therefore the only way for an agent and a goal (or patient) to be linked by a single predicate in Eskimo is for that predicate to be nominalized. That this nominalization involves an anaphoric goal rather than an anaphoric agent follows from the fact that the goal role, as shown above in (51), is the only thematic role in common with the three predicate classes. An anaphoric agent would be ruled out for RESULT predicates which, as was shown by the ungrammaticality of oblique agent phrases in (36) above, do not contain agent roles, and, therefore, could not antecedent-bind the anaphoric agent. The view of transitivity contained in this thesis is that transitivity is merely the linking of two arguments by a predicate. The exact nature of this linking is a topic of research, and may vary from language to language, but is governed by principles of universal grammar. In other words, it is the goal of the linguist to explain the linking without recourse to such "macro" concepts as accusativity. Accusativity, like the idea of the passive construction, is the name for a certain generalization that is observed in language, but which may be deserving of a more particular explanation.

⁴⁴ Perhaps the claim is really that there is no accusative case in Eskimo. As my understanding of transitivity in Eskimo grows, I find the notion accusative more and more puzzling.

The final feature of the transitive mood markers that must be mentioned is that they rarely occur as bare nominals. As will be seen in the next section, they most often are predicated of another referent. In some respects, transitive mood markers are like nouns of inalienable possession. Nouns of inalienable possession imply a possessor, and transitive mood markers generally imply an agent. I have omitted putting a feature of this sort in the lexical entry for transitive mood markers. This is because examples exist in which a transitive mood marker appears as a bare nominal, as shown in (55).

(55) a. kuni-gaq aullaq-tuq
kiss-goal leave-part.3sg.

'The kissed one left

b. *kunik-paq aullaqtuq

As shown in (55b), the transitive indicative cannot form a bare nominal, since it can only appear under I. The conditions which permit bare nominal transitive mood markers are unclear. Until research sheds more light on this matter, I will assume that transitive mood markers do not automatically imply "possession" as described in the next section. Note, however, that the existence of such examples provides support for the analysis of them as nominalizing affixes, comparable to the English morpheme *-ee*. An analysis which does not treat the indicative and participial morphemes as nominalizing affixial anaphors would have to explain why the nominalized forms in (55) appear as transitive forms without agreement markers. If transitive mood markers are not nominal, why then is there not some overt nominalizing affix in (55)? The existence, and the form of examples like (55) is predicted by the analysis presented here.⁴⁵

⁴⁵ For further discussion on the nominal use of mood markers, see Chapter 6, section 1.

5.5 Syntactic Dependency in Inuktitut

In the previous section I argued that the transitive mood markers are distinguished from the intransitive mood markers by the fact that only the former carry the semantic feature REF, which conveys the information that the lexical element is referential. In this section, I will show how the transitivity of the two types of mood markers follows from this difference: that is, the intransitive mood markers allow for only a single argument, while the transitive mood markers allow for two arguments. It will be shown that the explanation of the transitive clause is based on the same syntactic principles that account for the possessive construction in Inuktitut. The main thrust of this explanation is that the syntactic dependency exhibited by the possessor in a possessive construction derives from the predication of one referential element onto another. This contrasts with the explanation of Woodbury (1981), who assumes the concept of syntactic dependency to contrast with apposition, as shown by the following quote.

Semantically, a constituent *dependent* on another is never coreferential with it; a constituent in *apposition* with another is presupposed or asserted to be coreferential with it. Woodbury (1981, 201)

It seems clear that Woodbury, following Hammerich, considers that dependency and apposition are independent syntactic relationships, and that the reference or coreference are merely restrictions on these relations. I will argue in Chapter 6, section 1 that there is a separate syntactic relation of apposition, but that it never involves assertion.⁴⁶ In the present framework, syntactic dependency is a subset of predication, and can be termed *inter-referential predication*. Thus a subject may have as a predicate either a referential element or a predicate. The former will result in syntactic depen-

⁴⁶ This means that I divide things up somewhat differently from Woodbury. While for him coreference vs disjoint reference is linked to the contrast dependency vs apposition, I posit a distinction predication vs apposition, where predication breaks down into "regular" and inter-referential predication (i.e. coreference vs non-coreference). Furthermore, I posit a separate process of apposition. In other words, the distinction of the present analysis is assertion/non-assertion.

dency, the latter will result in predication, as schematized in (56).

- (56) [REF₁ REF₁] Syntactic Dependency
 [REF₁ X₁] Predication

I will also assume the following principle.

- (57) The subject of a predication must be REF

Rothstein (1983) showed that the Extended Projection Principle of Chomsky (1982), which states that all clauses must have subjects, follows from the fact that all predications require a subject. She further claims (p. 28) that a predicate can only be linked to an argument "which is defined as a closed, i.e. non-predicative, XP." She defines subjects as non-predicative rather than referential in order to allow for what are known as "dummy" subjects, which she eliminates from LF. As I have defined predicates as elements seeking reference, it is impossible that any predicate could link to a non-referential subject. Sentential subjects in English, such as *That John left surprised me* are clearly referring to the event of John leaving, and are therefore referential. Constructions with dummy subjects such as *It is raining* and *It seems that John is sick* must also have referential subjects. The subject positions in these examples are generally thought to be semantically empty. I would suggest that there is a sense in which such dummy subjects are referential; however, where they differ from regular subjects is that they lack thematic roles, a separate semantic property. Chomsky (1981, 324-325) calls these elements *quasi-arguments* on the basis of the fact that they cannot be quantified, cf. **What snowed*. I think this property results from the fact that their referent is unique (i.e. the weather, appearance). It should be predictable that unique referents cannot be quantified. This seems to be true for first and second person, which have unique referential values, e.g. **Who am leaving?* It is impossible to imagine how principle (57) could be derived from any other semantic restriction, and it therefore must be a principle of universal grammar.

5.5.1 The Possessive Construction in Inuktitut

This section is concerned with the nature of the most clear cut case of inter-referential predication in Inuktitut - the possessive construction, as in (58).

(58) anguti-up nasa-a
man-rel. hat-poss. 3sg.

'The man's hat.'

I will argue that the argument *angutiup* in (58) is the subject of a predication that involves a referent.⁴⁷ The main evidence which supports this claim is the fact that the possessum shows agreement with the possessor, as in (58), where the marker *-a* indicates that the possessor is third person singular, and that the possessum is singular. Third person possessive markers are the only person in which the number of the possessum and the number of the possessor are part of the same morpheme. In (59) I provide examples of the possessive agreement markers broken down into person and number.

- | | | |
|---------|-------------|------------------|
| (59) a. | nasa-ra | 'my hat' |
| b. | nasa-t-ka | 'my hats' |
| c. | nasa-it | 'your hat' |
| d. | nasaq-t-it | 'your hats' |
| e. | nasa-a | 'his hat' |
| f. | nasa-i | 'his hats' |
| g. | qimmig-put | 'our dog' |
| h. | qimmi-vut | 'our dogs' |
| i. | qimmig-si | 'your (pl) dog' |
| j. | qimmi-si | 'your (pl) dogs' |
| k. | qimmi-nga-t | 'their dog' |
| l. | qimmi-ngi-t | 'their dogs' |

As can be seen in (59b) and (59c), in the first and second person singular, the plurality of the possessum is marked by the /t/ immediately preceding the possessor markers. The number of the possessum in third person singular, however, is indistinguishable from the marker indicating the possessor, as shown in (59e) and (59f). In the the first

⁴⁷ Note that I am not saying that predicates can be referential. Predicates, as defined above, are elements containing variables that must seek reference from their subject. I will continue, however, to use the term predication, with the caution to the reader that not all predications are assumed to involve predicates.

and second person plural forms the plurality of the possessum does not appear to be marked at first glance. Compare (59g) with (59h), and (59i) with (59j). However, it is possible to assume that the plural marker of the possessum is present in some abstract form. This would account for the deletion of the final consonant /q/ in the noun stem of in (59h) and (59j). Note, though, that the initial consonant of the first person plural possessor marker /vut/ is not sensitive to this hypothesized abstract consonant, but to the actual presence or absence of a final consonant in the stem.

The number of the possessor is indicated to the right of the number of the possessum, either by a change in form, as in first person from /ka/ to /vut/, or by the addition of a plural marker /t/ to the right of the possessor marker, as in third person. Compare (59a) with (59g), and (59e) with (59k).

Agreement between two elements is highly suggestive of a predication relationship. The element triggering agreement is the subject and the element showing the agreement is the element predicated of that subject. Under this view, the possessor in the possessive construction in Inuktitut is the subject, and the possessum is the predicated element. The claim, then, is that the Inuktitut possessive construction is more similar to the English possessive construction *John's hat* than to the alternative *The hat of John*.⁴⁸ In fact, outside of a subject/predicate relation, it is difficult to imagine what relation a possessor could bear with a possessum. There is no sense in which one could say that nominals (in the unmarked case) subcategorize for possessors. For instance, the noun meaning 'bear' in any language is an unlikely referent to be possessed, and as such, it would seem incorrect to mark it as subcategorizing for a possessor. Nonetheless, under certain circumstances, bears can be said to be possessed, say in a circus, or if they were killed. The idea of possession seems directly related to the juxtaposition of

⁴⁸ Abney (1986) claims that where the prenominal genitive in English involves attribution, such as *John's honesty*, there is a predication relation. He does not explicitly state that regular possessives, such as *John's hat* involve predication.

⁴⁹ Chomsky (1986a, 195) refers to a manuscript by Mona Anderson in which

two referential elements.⁴⁹ Based on remarks in Woodbury (1981), I will argue that the operative semantic relation between referential subject and referential predication is that of container to contained. Under this view, the referentiality of the two elements is inviolate,⁵⁰ and the only means of combining them is for one to contain the other. That it is the subject that contains, rather than the predication, necessitates the existence of a principle, given in (60).

(60) The subject in a predication relationship involving two referents is the "container" of the referent which is predicated.

In (60) the quotation marks indicate that this notion is to be interpreted loosely, since possessors do not really contain objects. What containers do is in effect delimit the possible reference of that which is contained within them. This is related to the idea that possessors somehow determine possessi. In the Government and Binding Theory of Chomsky (1986a and 1986b), both subjects and possessors are what are called specifiers. That the semantic relationship has a parallel in the syntax derives, no doubt, from cognitive considerations, cf. Jackendoff (1983).⁵¹ Note that the fact that an element may have its reference specified is quite distinct from not having any referential value at all. Thus possessa continue to be crucially distinct from predicates, although both may be predicated.

Having argued that the possessive construction in Inuktitut reflects a predication relation, where the possessor is a subject, and the possessum is a referent predicated of that subject, it remains to determine more specific facts of the syntactic relation, in particular phrase structure and case assignment.

the thematic role possessor is argued to be assigned to a structural position.

⁵⁰ That is to say, their referential values cannot become one or even overlap.

⁵¹ It is interesting that, even in verbs, the subject seems to always express the possessor, rather than the possessum relation. Thus while verbs like *contain* and *surround* exist, verbs generally do not have the form where the subject is contained in object. John Jensen has pointed out to me that the verbs *fill*, *inhabit*, and *occupy* contradict this generalization.

Abney (1986) builds upon the traditional distinction between *meaningful* elements, such as nouns, verbs, etc., and *functional* elements, such as inflection, complementizers and determiners. In the present framework, functional elements can be contrasted with elements bearing the semantic features REF (for "nouns") and X (for "verbs"). Abney claims that the distinguishing feature of functional elements is that they lack semantic value. Abney further states that the purpose of functional elements is not to describe, but to set the modality of a description. He goes on to propose that the noun phrase in English is in fact a form of determiner phrase, with a node D serving as head and functional element in the phrase.⁵²

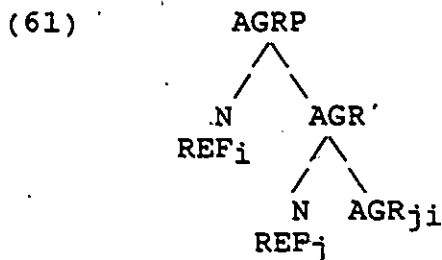
Following Abney's reasoning, I propose that the agreement markers on possessive constructions in Eskimo are this sort of functional elements. They have no semantic value *per se*, and they serve only to relate two referential elements. In addition, I propose that these agreement markers are neither determiners, nor inflection (as found at the level of clause). Instead, they fall somewhere in between in terms of level of modality. Recall that I claimed that what are usually called noun stems in Eskimo are lexical entries marked with the semantic feature REF. English can be viewed as a language where the feature REF is not added until the phrase level. This would explain why in English articles are necessary in the noun phrase, while in Eskimo articles do not exist. Eskimo nouns come pre-determined as a result of the semantic feature REF. What this means is that, while English cannot have NP, but must have DP containing NP at the level of phrase-structure, Eskimo can have simply N.⁵³ The agreement markers that express the predication relation between two referents are the lowest lev-

⁵² This idea is found elsewhere, e.g. Montague Grammar (see Dowty 1979), where determiners are treated as functions.

⁵³ A number of people have pointed out to me that Russian is a problem for this line of reasoning.

⁵⁴ The account of Eskimo possessive agreement of Bok-Bennema and Groos,

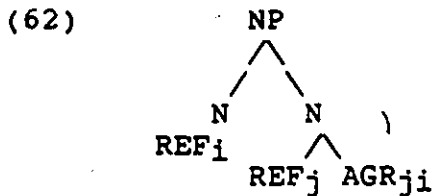
el of functional element required in Eskimo. I will call this type of functional element AGR.⁵⁴ AGR⁵⁵ is like I in that it expresses a predication relation between two elements, but it is like D (determiner) in that it cannot express a temporal modality.⁵⁶ I will assume that AGR projects a phrasal category AGRP, i.e. is a phrasal head. It might be assumed that AGR simply is merely the lexical head of the word, i.e. is a morphological head. Recall that I claimed that AGR exists at the lowest level in Eskimo. The problem is that in Eskimo, lowest level sometimes means inside the word. The two possible structures of the possessive construction are given in (61) and (62)



as described in Bok-Bennema (1985), resembles the one here in that they posit a node *infl* (which is distinct from INFL) which contains *agr* (which is distinct from AGR). Thus possessives involve *agr* in INFL, while transitive clauses involve *agr* and AGR in INFL. In this way the similarity between possessive and transitive agreement is captured. Their account, however, does not explain why the possessive agreement should resemble the agent agreement and not, say, the patient agreement. In the account presented here, this is explained under a view of transitivity that involves inter-referential predication. Another problem with their analysis is that they assume that the direct object is assigned case by AGR in INFL, since the verb is not case-assigning. This contrasts with the present analysis, which is that the patient is a subject assigned case by agreement in I. Furthermore, that there is no syntactic category verb, predicts the fact that the "verb" cannot assign case to an object.

⁵⁵ It is important that the reader not confuse AGR with the usual concept of agreement in INFL. In the present discussion, AGR stands for a functional node which projects the maximal category AGRP, in exactly the same fashion as I projects IP, etc.. The node AGR has its own set of agreement markers which are distinct from the set of agreement markers which are found in I (though the two sets appear to be related, see below and section 5.5.3.2.).

⁵⁶ It remains to be investigated whether or not there exists the functional element COMP in Eskimo.



In both (61) and (62), it is clear that the addition of AGR creates a phrase quite distinct from the noun-phrase. In the case of (61), the phrasal category has changed from NP to AGRP, while in (62) the syntactic head of the noun-phrase is lexically headed by AGR rather than REF, even though the category of the entire possessum is shown as NP. This would follow from the claim made above that all lexical categories are N.

Note that, in both structures, I have posited that the agreement feature is a fusion of the number of the possessum with the person and number of the possessor. As was mentioned above, in some instances, the two markers can be separated into distinct morphemes, but in others they cannot. By assuming that the agreement node carries the features of both nominals,⁵⁷ the fact that morphological fusion has taken place in the case of third person possessors, and is probably at work in first and second person possessors, is accounted for. The indices for both arguments occur regularly under a single node which allows for that node to be lexicalized as a single morpheme.

The reader has no doubt noted certain similarities between the analysis of possessives presented here and the Sentential Possessive analyses of Mey (1969), Rischel (1971), and Kalmar (1979), discussed in Chapter 4, section 4, which claim that the possessive nominal is derived either by transformation or incorporation from a full sen-

⁵⁷ Possessi will always be lexical third person by virtue of a cognitive principle that restricts first and second person from possession, e.g. *his me, *John's you, etc. This is also noted in Kalmar (1979). This fact derives from the restriction that pronominals in general cannot be possessed, e.g. *John's him. Abney (1986) explains restrictions on pronominals by considering them to be determiners. Under this reasoning, pronominals cannot be possessed because they are already specified. This question deserves further attention.

tence.⁵⁸ The present analysis is able to capture the intuition behind this idea, which is that possessives are a sort of clause, without having to derive them from a clause, a direction of derivation which Woodbury (1981, 199) considers to be much less plausible (from a morphosyntactic point of view) than deriving clauses from nominals.⁵⁹ In the present framework, the similarities between the possessive construction and the clause construction, which will be discussed in detail in the following section, derive from the fact that both involve predication. This might at first seem reminiscent of Kalmar's claim that possessives are predicates; however, he is unable to make the distinction between predication involving referents, and predication involving predicates, and therefore would predict that possessives could function as sentences. In the present analysis, the difference between possessives and clauses is found in the nature of the functional element that licenses predication. In the case of possessives, the functional element is AGR, which differs from I, perhaps only by the fact that it cannot express tense.⁶⁰ In fact, it has been said (cf. Schultz-Lorentzen) that the agreement markers that express possession are related to the agreement markers that express predication. This is exactly what would be expected under the analysis that both involve predication. Yet there is no need to derive one from the other.

A problem for my assumption that (61), and not (62), represents the structure of the possessive construction in Eskimo involves case assignment. Case is assigned to the possessum and its agreement as a whole, as in (63).

⁵⁸ This analysis most closely resembles that of Mey (1969), who posited that possessives were like clauses without the mood.

⁵⁹ He does not elaborate on this statement, other than to say that the criticisms of Bergsland (1962) would apply. I interpret this to mean that the morphological evidence leads one to a nominalist position rather than a sentential/possessive one, as the sentential/possessive analysis has abstract structure which is not represented morphologically.

⁶⁰ It is probable that the ability to express tense is directly related to the nature of the element predicated, i.e. REF or X.

- (63) a. Jaani-up irning-a ani-juq
 John-rel. son-3sg.poss.(abs)
 go out-part.3sg.

'John's son went out'

- b. Miuri Jaani-up iglurjuang-a-nut pisuk-tuq
 Mary(abs) John-rel. house-3sg.poss.-all.
 walk-part.3sg.

Mary went to John's house

- c. arnaq kuni-gau-juq Jaani-up inrning-a-nit
 woman(abs) kiss-pass.-part.3s John-rel.
 son-3s.poss.-abl.

'The woman was kissed by John's son'

Case is usually assumed to be assigned to the node N. There are clearly many details to work out if the assumption that (61) is the correct structure is to be maintained. Nothing in the analysis to be presented will be dependent on this assumption.

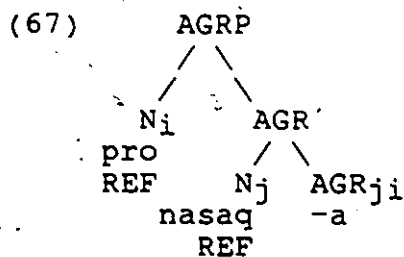
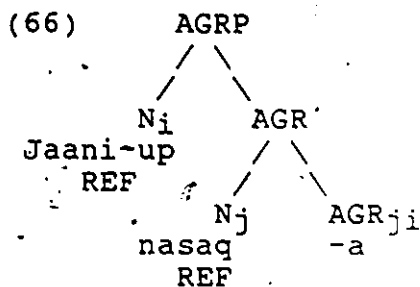
While the head of the phrase receives the case that is assigned to the position in the clause that the noun-phrase appears, the subject, or possessor, receives relative case if it is lexical. I assume that agreement is coindexed with the subject position, and that, even when the subject position is not lexical (as in the case of first and second person, and optionally with third person), that the person and number features on the agreement marker attached to the possessum are a direct reflection of the person and number features of the subject. Where the subject is lexically absent, the position is filled by small pro. Chomsky (1986a, 121) describes pro as a null pronominal which is the counterpart of lexical pronouns. Like lexical nouns, pro is free, or has independent reference, with the exception that this freedom is obligatory within a smaller domain (see Chapter 1, section 2). This is exactly the concept needed here. The use of first and second person pronominals in Eskimo is usually found only as emphasis, as shown in (64).

- (64) a. uvanga nasa-ra-una
I(abs) hat-poss1sg.-this
'This here is my hat'
- b. igvit nasa-in-una
you(abs) hat-poss2sg.-this
'This here is your hat'

With third person, the lexical subject may be present or not, but agreement exists in both instances, as shown in (65).

- (65) a. Jaani-up nasa-a
John-rel. hat-poss3sg.
'John's hat'
- b. nasa-a
hat-poss3sg.
'his/her/its hat'

The example in (65a) will have the structure in (66), and (65b) will have the structure (67).



The final point that must be accounted for in the possessive construction is the relative case *-up* assigned to the third person lexical subjects. As discussed in Chapter 1, section 2, the Government and Binding framework of Chomsky (1981), and (1986a),

requires that all NPs must receive Case. Case is an abstract concept based on the idea that all NPs must be licensed by a syntactic relation to a case-assigning element. This is summarized in the Case filter, which states that *NP, if NP has phonetic content and has no case. As mentioned previously, the Case filter is now thought to derive from conditions on visibility, that state that, in order for a noun to receive a theta-role, it must be in a position which is assigned case. Since NPs must get a theta-role in order to satisfy the Theta-criterion, it naturally follows that they must occur in positions licensed by Case.

We could assume that the node AGR, like I, assigns a case to its subject. I will argue that this is not so. AGR is simply the marker of predication. If AGR were to mark its subject with relative case, then we would expect to find no evidence of theta-marking since, as Chomsky (1986a, 193) points out, structural case is not associated with theta-marking. The fact is that the predication relation between two referents is associated with theta-marking. The subject in a possessive construction is assigned the thematic role possessor. This suggests that the relative case is an instance of inherent case. Inherent case is associated with theta-marking at the level of D-structure. If relative case is inherent case, then it should be more similar to oblique case than to absolutive case. This seems correct, as some linguists have argued that oblique cases in Eskimo are built from relative case. Thus the /m/ in the oblique cases *-mut* (allative), *-mit*, etc. are said to be derived historically from the bilabial relative case *-(u)p* (cf. Woodbury 1981).⁶¹ Above, I argued that the possessive relation between two referents derives from a container to contained relation between the two referents involved. It is this thematic relation, which assigns the thematic role possessor and relative case to the subject of the noun-phrase. This conforms to the uniformity condition proposed in Chomsky (1986a, 194) given in (68).

⁶¹ For further discussion, see Chapter 6, section 2.

- (68) If alpha is an inherent Case-marker,
then alpha Case-marks NP if and only
if [alpha] theta-marks the chain headed
by NP.

The uniformity condition requires that the element which assigns the thematic role also assign the case. In possessive constructions, the thematic role of possessor is determined by the nature of the predication, that is, REF/REF, therefore it is this factor which also assigns the relative case to the subject. Since the possessor role only exists as a result of a syntactic relation, it is crucial that this relation be clear. This accounts for why the possessor NP, unlike other arguments bearing thematic roles, must be adjacent to the element to which it bears the syntactic relation, as shown in (69).

- (69) a. Jaani-up irning-a aullaq-tuq/
*Jaani-up aullaq-tuq irning-a
John-rel. son-3s.poss.(abs) left-part.3sg.

'John's son left'

- b. Jaani pirujar-mut pisuk-tuq/
Jaani pisuk-tuq pirujar-mut
John(abs) walk-part.3s cache-all.

'John walked to the cache'

The examples in (69) show that, while an oblique argument such as the directional phrase in (69b) can occur on either side of the predicate, a possessor cannot. The oblique argument, like the turtle, takes its thematic role assigner (the allative case) with it. The possessor, like a parasite, must remain in fixed relation in order to maintain the thematic role. Adjacency is a surface level restriction on case assignment discussed at length in Stowell (1981, 110ff.). The adjacency requirement on case assignment seems to vary somewhat across languages. For instance, while English has a more or less strict adjacency requirement on the assignment of case to direct objects, Romance languages have a less strict requirement (see Stowell 1981 and Travis

⁶² English does not allow manner adverbials to intervene between the verb and its object, e.g. **break suddenly the glass*, while French does, e.g. *casse soudainement le verre*.

1984).⁶² Travis (1984, 75) posits the *Domain Adjacency Condition*, which states that an element Y cannot intervene between two sisters, X and W, where X either assigns case or a theta role to W; unless X also assigns case or a theta role to Y. This condition clearly accounts for the ungrammatical form in (69a). The problem lies in ensuring that it applies only in constructions assigning either possessor or agent role. Aside from possessors and agents of transitive clauses, word order in Eskimo is relatively free. For the most part, this can be explained by the fact that arguments usually have oblique case; however, absolutive case is a syntactic case, yet it is not subject to an adjacency condition.⁶³ As mentioned above, it is likely that the adjacency restriction on possessors/agents is a direct result of the fact that the thematic role is assigned only as a result of the predication relation.

I therefore propose an adjacency condition that governs the assignment of possessor/agent role (and as a result, relative case⁶⁴). This is given in (70).⁶⁵

(70) In order to receive a thematic role
 possessor/agent, a subject must be
 adjacent to the phrase headed by its
 referential predicate.

The condition in (70) states that the possessor need not be strictly adjacent to the referential predicate. This is to allow for examples such as (71), which show that material may intervene between the subject and the referential predicate so long as the material forms part of the phrase containing the predicate.⁶⁶

⁶³ Lamontagne and Travis (1986) claim that INFL has a "special" relationship with nominative case, which they represent by co-superscripting.

⁶⁴ The assignment of relative case is discussed further in Chapter 6, section 2.

⁶⁵ Theta role assignment is clearly to the left in Eskimo.

⁶⁶ My consultant did not find the order *anullaksirvingmit Jaaniup anininga quviasunaqtuq* very good, but said it might be an answer to a question.

(71) Jaani-up anullaksirving-mit anini-nga
 quvia-naq-tug
 John-rel. jail-abl. escape-poss3sg.
 joy-producing-part.3sg.

'John's escape from jail is a joyful event'

In (71), the phrase *anullakirvingmit* 'from jail' is a complement of the possessum *anininga* 'his escape', and may therefore intervene between the possessor and the possessum.

The principle in (70) could equally be formulated in terms of the Domain Adjacency Condition of Travis (1984), or even c-command or government.⁶⁷

5.5.2 The Transitive Mood Marker As Referential Predicate

In section 4, I argued that the transitive mood markers, both indicative and participial, are marked for the semantic feature REF. What this means is that the predicates to which these affixes are attached change from predicates requiring reference to referential predicates. Recall also that I suggested that transitive mood markers have a property similar to inalienable possession in that they imply the existence of another argument.⁶⁸ It follows from everything stated above that this other argument must be disjoint in reference from the reference of the predicate. In this prediction lies the explanation of syntactic transitivity in Inuktitut. Proof that the referential predication involved in the possessive construction is paralleled in the transitive construction comes from the fact that the transitive agreement markers can be seen to derive from the possessive agreement markers. Moreover, the agent in the transitive construction (the subject of the referential predication) is assigned the relative case, just as is assigned to the subject of the referential predicate in a possessive construction.

⁶⁷ See Lamontagne and Travis (1986) who propose that case adjacency falls under the ECP.

⁶⁸ This fact may be the result of some cognitive considerations, such as that GOAL implies SOURCE. See Van Voorst (1986) for a development of the idea that events involve points of origin and points of termination.

Let us examine transitive agreement first. This is a somewhat delicate subject, as there has been a certain amount of lexicalization of the agreement markers that refer to the agent and the patient of the transitive construction. Even though some of the transitive agreement markers are fused, it is plain that, where they may be separated, the agent agreement precedes the patient agreement. This is confirmed by Fortescue (1984, 289):

The corresponding transitive forms can be analysed as consisting of (additive) mood marker *va(r)* followed by the subject marker ... followed by the object marker, (e.g. *-vakkit* 'I-thou' from *va + *m + kit*) except for the third person object forms, where endings corresponding to the absolutive case personal possession markers... immediately follow the mood marker

If the Eskimo transitive clause were anything resembling the English transitive clause, we would expect to find that patient agreement would precede subject agreement, since the patient in English is found inside the VP. We can therefore consider agreement order in Eskimo transitives to be evidence against a nominative-accusative analysis, and evidence in favour of either a syntactically ergative analysis or a possessive analysis. In order to show that the possessive analysis is the correct one, I will deal with the two agreement functions in turn. As patient agreement will be discussed in the following section, the goal here is to show that there is ample reason to consider the "subject" agreement found in the transitive to be equivalent to the possessive agreement.⁶⁹ The chart in (72) repeats the transitive agreement markers first introduced in Chapter 4, section 2.

⁶⁹ Note that the claim in this thesis is that possessive agreement and predication agreement involve the same syntactic process, so that we expect to see similarities across the two types.

(72) Transitive Agreement Markers

Agent	Patient					
	1	2	3	1pl	2pl	3pl
1	-	-git	-ra	-	-psi	-tka
2	-rma	-	-it	-ptigut	-	-tit
3	-anga	-atit	-a	-atigut	-asi	-i
1pl	-	-ptigit	-qput	-	-psi	-vut
2pl	-psinga	-	-qsi	-ptigut	-	-si
3pl	-annga	-atit	-at	-atigut	-asi	-i

In some dialects, 2pl/1sg. is *-psingga* (see Lowe 1985). Note that the agreement markers in (72) sometimes include the final /q/ of the transitive mood marker.

Most linguists working in Eskimo agree that transitive agreement markers where the patient is third person are the clearest case showing the possessive/transitive parallel which was discussed in Chapter 4, section 2. For the purpose of comparison, the possessive agreement markers from (59), minus the noun stem, are given in (73).

(73) Possessive Agreement Markers

	Sing.	Pl.
1	-ga	-tka
2	-it	-tit
3	-a	-i
1pl	-put	-vut
2pl	-si	-si
3pl	-at	-it

When we compare the column showing possession of a singular possessum in (73) with the column representing third person patient singular in (72), we see that the agreement morphemes are identical. A comparison of the column showing possession of plural objects with the column showing third person plural patients again demonstrates

amazing similarity. The exception is in the third person plural possessor/agent, but even so, there is a morphological similarity; thus *-i/ -it*.

The reason that transitive agreement markers involving third person patients are so clearly related to the possession markers derives from the fact that they do not require an additional morpheme to mark the possessum/patient. Unlike the first and second person patient markers, which will be discussed in the next section, there is no need for a third person agreement marker to the right of the possessor/agent marker. The features needed to express third person patient agreement are met entirely by the possessive agreement markers, which automatically imply possessor in relation to *third person* possessum, both singular and plural.⁷⁰ In fact, since the transitive mood markers add a referential element which, like all referential elements, may be singular or plural, the number of the third person patients, in the same manner as possessives, is expressed to the left of the agent agreement. Thus, in *-tka*, the morphemes expressing transitive first person singular agent/ third person plural patient, the */t/* indicates the plurality of the patient. This is not a contradiction of the statement made above to the effect that agent agreement precedes patient agreement in transitive agreement. The claim here is that there is no patient agreement in third person.⁷¹ There is no need for it, since lack of patient agreement will automatically imply third person due to the referentiality of the transitive mood marker, and the number of this element will suffice to reflect number of the patient.

⁷⁰ Alternatively, one could analyse third person singular possessor as null, and state that *-a* really marks third person singular possessed, and *-i* marks third person plural possessed. As Hammerich (1951) points out, third person agreement is clearly different from other forms of agreement. I will assume, however, that all third person agreement at one time contained the morpheme *-a*, but that it has deleted in forms with third person plural possessi. This assumption is supported by the fact that third person agent forms with first and second person patients contain *-a*, whether the possessum is plural or not.

⁷¹ I realize that this is not the last word on third person agreement, but the point is that third person patient is marked on the predicate in a manner quite distinct from what I term patient agreement.

The situation is quite different when the patient is first and second person and the agent is third person. When we inspect the two columns indicating third person agent, we see that there are two agreement markers. The agent agreement markers *-a-* 'his' and *-at-* 'their' occur on the left, while the patient agreement markers occur on the right.

The agreement markers which pose the biggest problem for the analysis argued here are those involving first person agents when the patient is second person (i.e. 1/2), as well as second person agent when the patient is first person (i.e. 2/1). These markers are repeated here in (74).

(74)	Agent	Patient			
		1s	1pl	2s	2pl
	1s	-	-	-git	-psi
	1pl	-	-	-ptigit	-psi
	2s	-ma	-ptigit	-	-
	2pl	-psingà	-ptigit	-	-

Both Bergsland (1962) and Woodbury (1981) state that these forms etymologically involve the relative case marker /p/ before the personal suffixes. This is quite unexpected in the type of account that I propose in this thesis. Recall that my claim is that the transitive clause consists of two predications, one embedded inside the other. There is no reason to expect that a case should play a role in this process. Relative case, as defined above, serves only to mark the syntactic dependency in inter-referential predication.⁷² The transitive predicate is not itself dependent on anything else.

I will adopt the proposal of Bergsland (1962). Bergsland notes that in Aleut (the other half of the Eskimo-Aleut language family) the only patient agreement found

⁷² As we shall see in Chapter 6, section 2, its use extends beyond the possessive/transitive.

morphologically attached to the verb is the third person of the non-declarative moods.⁷³ The agreement forms of the adverbial clause, a non-declarative mood, have relative case marked on them for reasons that will be discussed in the following chapter. In the declarative (or independent) mood of Aleut, first and second person patients are represented by independent pronominals. Agent agreement is attached to the verb. Bergsland hypothesizes that Eskimo first expanded patient agreement in non-declarative moods to include first and second person, and subsequently transferred the whole double agreement from the non-declarative to the declarative mood. This analysis appears to be generally correct, although it leaves a number of questions unanswered. For instance, why did Eskimo not simply cliticize the first and second person independent pronouns of the declarative mood (which mark patient agreement) directly to the verb? This seems to have been the strategy of the transitive agreement markers with third person agent. If Bergsland's hypothesis were entirely correct, we would expect that third person agent forms would also resemble their non-declarative counterparts. Thus, we might expect to find **taku-ja-matit* 'He sees you', with relative case. Instead, we get *taku-ja-a-tit*. Clearly, a more complete historical analysis remains to be done.

In any event, the facts from Aleut not only do not hinder, but in fact support the type of analysis presented here. That it is the patient argument, rather than the agent argument, which forms an independent element in Aleut grammar fits in naturally with an analysis where agent agreement is a syntactic relation formed prior to the relation between the patient and the predicate. If it were the case that in Aleut, agents were instead independent pronominals, and patients attached to the verb in the form of agreement, then the grammar of Aleut would seem bizarre, to say the least, in terms of the framework argued here.⁷⁴

⁷³ I am using terminology different from that of Bergsland (1962).

⁷⁴ It is difficult to say why this is so, but there seems something strange about

In summary, the transitive agreement markers show evidence that possessive-type agreement (i.e. inter-referential) is involved - if not synchronically, then diachronically. The agent role of the transitive clause will be assigned to the subject of the inter-referential predication on the basis of the principle in (60), which states that such a subject will be interpreted as the "container" of the possessum. In the case where the possessum is a nominalized predicate referring to an individual who underwent an event, the "container" delimits the possible reference of this nominalized predicate, i.e. is the agent. Agents possess an event to the extent that they specify it.

The process of lexicalization has partially obscured some of the similarities between agent and possessive agreement, most notably in the case of first and second person interaction, where borrowing from the agreement sets of other moods has possibly taken place. One might argue that lexicalization and borrowing are incompatible with the type of analysis where the two arguments are linked to the one predicate, by predication, and that in fact lexicalization represents the equivalent of accusativity where the relation of the two arguments is in some sense *a priori*. This would lead to an analysis such as that proposed by Marantz, where the agent is the direct object of the predicate, and the relative case assigned to any agent is equivalent to accusative case. I think, however, that many generalizations would be lost under such an interpretation. Moreover, it is not inconceivable that a single morpheme, which is the result of a lexicalization process, could simultaneously represent agreement between two nouns that relate to the predicate, without having to posit that one of the nouns is subcategorized by the predicate, while the other isn't.

pronominals relating to predicates, and then having the whole complex agree with a higher element, and still maintain that two predications are involved. Such a situation would instead suggest government by a verb.

5.5.3 Clause Structure in Inuktitut

In the previous section I have discussed the transitive agreement markers with a view to showing the resemblance that they bear to possessive agreement markers. In this section I will look once again at transitive agreement; only this time, I will concentrate on the similarities that it has with the agreement markers found on intransitive predications. If the transitive clause is, as I claim, comparable to 'X is the Y's Z-ed one', then the outermost agreement is simply the predication of the predicate 'Y's Z-ed one' on 'X'. Before proceeding with a discussion of the details of this type of agreement, I would first like to provide a brief outline of the types of permissible clause structures in Eskimo.

5.5.3.1 Nominal Clauses in Eskimo

As discussed in Chapter 4, section 5, Woodbury (1981) and (1985) identifies and sheds light on the fact that there exists in Eskimo a type of clause, called nominal clause, which has properties quite distinct from the regular clause. Nominal clauses, which consist of two nominals and no predicate stem, lack mood markers, and cannot have pro-drop. The four types of nominal clause discussed by Woodbury are exemplified in (75).

- (75) a. Jaani ilinniaqtitsiji-ga
 John(abs) teacher-poss1sg.(abs)
 'John is my teacher'
- b. Jaani ilinniaqtitsijitsiaq
 John(abs) teacher-good(abs)
 'John is a good teacher'
- c. una arnaq pukiqtalik
 this(abs) woman(abs) policeman(abs)
 'This woman is a policeman'
- d. savik saunaq
 knife(abs) bone(abs)
 'The knife is bone'

Compare the nominal clauses in (75) with a regular clause in (76), which contains an explicit predicate *-u-* 'to be':

(76) Piita ilinniaqtisiji-u-juq
Peter(abs) teacher-be-part.3sg.

'Peter is a teacher'

Now compare the regular clause in (77a), which is grammatical with only a predicate, with the nominal clause in (77b), which is ungrammatical with only a predicate-nominal.

(77) a. ilinniaqtitsiji-u-juq
teacher-be-part.3sg.

'He is a teacher'

b. ilinniaqtitsiji-ga
teacher-poss1sg.

*'He is my teacher'

Another fact that distinguishes nominal clauses from regular clauses is that they can never show agreement with more than one argument. Thus while the example in (75a) denotes a relation between a first person singular and a third person singular, there is no morphology indicating the third person singular. When extra morphology is necessary, such as in the case 'I am John's teacher', where we would expect to find first person singular attached to the right of a third person possessive, a nominal clause is impossible, as shown by (78a).

(78) a. *ilinniaqtitsiji-a-nga
teacher-poss3sg.-1sg.

'I am his teacher'

b. ilinniaqtitsiji-gi-jaanga
teacher-have-part.3sg/1sg.

'He has me as a teacher' or
'I am his teacher'

The only way that this sentence can be expressed is by the addition of a predicative morpheme *-gi-* meaning 'have (in the capacity of X)' shown in (78b), which naturally requires a mood marker.

In some sense these nominal clauses are similar to those found in other languages, including Russian and Hebrew, which allow clauses of the form [NP NP]_S shown in the Hebrew examples below from Rapoport (1985)

(79) Hebrew

a. David student
David student

'David is a student'

b. David xole
David sick

'David is sick'

Rapoport claims that clauses such as those in (79) crucially lack the node I (INFL). She also claims that the predicate nominal in a nominal clause must be predicative rather than identificational.⁷⁵ This restriction predicts the ungrammaticality of a nominal clause in Hebrew where the predicate contains the definite article, such as in (80).

(80) a. *David ha-more
David the-teacher

'David is the teacher'

b. David hu ha-more
David (3-m-s) the-teacher

'David is the teacher'

Sentences such as (80a) are only grammatical when there is the node I, containing an agreement marker, as in (80b).

⁷⁵ The concept identificational is similar to the feature REF. Both imply that the argument has a unique referential index.

Nominal clauses in Eskimo show a somewhat different distribution. While the equivalent of (80a) is also ungrammatical in Eskimo, so too is the nominal clause where the noun is used predicatively, as shown in (81).

(81) *Jaani ilinniaqtitsiji
John(abs) teacher(abs)

'John is the teacher' or
'John is a teacher'

This means that, unlike Hebrew nouns, which can be used predicatively, Eskimo nouns always behave as if they were referential. This is exactly what has been claimed throughout this thesis - that the lexical items called nouns in Eskimo are distinguished in the lexicon by the feature REF. While other languages complete the reference of a noun by the addition of determiners, Eskimo has no such need for the functional item determiner, since nouns in Eskimo are pre-determined. In other words, while the class of items designated by the category N in most languages are only *potentially* referential, in that their reference must be fixed by a functional element, in Eskimo these items *are* referential.

Rapoport claims that the fact that nominal clauses must contain a predicative nominal derives from the fact that an identificational nominal (or REF) must receive a theta role, and that this is possible only if there is a verb, such as a copula, to assign the theta role. I do not accept this line of reasoning. It seems unlikely that the copula assigns a theta role. Instead, I would suggest, the restriction against referential predicates in nominal clauses derives from the fact that inter-referential predication, as stated above in (60), produces either a possessor or an agent thematic role.⁷⁶ In the framework presented in this thesis, inter-referential predication could not produce nominal clauses, which appear to require predication between a referent and a predicate having no reference. The question still remains as to why only predications involv-

⁷⁶ That a referent used predicatively must be disjoint in reference follows from Principle B and C of the Binding Theory (see Chapter 1, section 2).

ing predicates can form nominal clauses, but predications involving referents cannot. In other words, why is it that clauses such as (81) cannot mean 'John has a teacher'? Two possibilities suggest themselves. The first is that a predicate could be said in a sense to project S, or clausehood, by virtue of the fact that it is incomplete, and must have a subject. This is to say that a predicate forms part of a complex whole by definition. Referents are complete in themselves and it might be said that this property prevents them from projecting S. The second possibility is that all referents must have something said of them. This could be stated in terms of a licensing principle, such as (82).

- (82) Referents must either be linked to predicates, or must be linked to other referents that are linked to predicates.

This is similar to Rapoport's argument that the Theta Criterion is responsible for the ungrammaticality of (80a). The difference lies in the fact that (82) does not assume ~~that copulas assign thematic roles~~, merely that they assign indices. Under this view, the ungrammaticality of (80a) and (81) derives from the fact that, while the first nominal is assigned an index by the second nominal, the second nominal is not assigned an index, and violates (82).

A major question that must now be explained is the grammaticality of the Inuktitut examples in (75). How is it that a possessed nominal such as (75a) forms a permissible predicate? A possessed nominal would seem to be even more referential than a regular one, yet it can form a predicate in a nominal clause, where a bare nominal cannot. Woodbury (1981) and (1985a) describes a nominal clause in Eskimo as a *complex NP* which consists of an NP in apposition with either an AP or N'. Woodbury (1985a, 84) suggests that the ability to form a clause is related to the structural complexity of the components:

The possibility for predicational function increases from simplex NP to complex NP to participle construction to inflected verb plus adjuncts... In part this appears to be due to the increase in structural elaboration from simplex NP on down: the more complex the construction, the more possibility for a differentiation within it of topic and comment.

I propose that the factor that licenses for possessive predicates in nominal clauses in Inuktitut is the same as was discussed above, that is, that a nominal clause cannot consist of two referents in a predication relation. The nominal clause containing a possessed nominal meets this requirement by virtue of the fact that the element which heads the possessive phrase AGRP is AGR, a non-referential element. Recall that referential elements are listed in the lexicon with the feature REF. A functional element such as AGR has no such feature, AGR serving only to mark the predication relation which exists between the word it is attached to and its subject, as in (83).

(83) Jaani Miuri-up irning-a
 John Mary-rel. son-poss.3sg.

'John is Mary's son'

In (83), the morpheme *-a* is AGR and does not carry the feature REF. The phrase AGRP *irninga* is thus able to serve as a predicate to the subject *Jaani*. The subject of the possessum *irniq*, which is *Miuri*, does not play a role in this process.⁷⁷

The second nominal clause (75b) contains a nominal with an adverbial suffix. Again, the addition of a non-referential element creates a phrase which may be used as a predicate.

The next example (75c), consists of a nominal clause containing a demonstrative and a referential NP, followed by a referential NP. Without the demonstrative, the sentence would be ungrammatical.⁷⁸ This type of nominal clause requires a slightly different explanation. There is no non-referential affix on the predicate, therefore the

⁷⁷ Another possibility is that the reference of the possessum is somehow "absorbed" by its predication relation with the possessor.

⁷⁸ Actually, sentences such as (81), which I have called ungrammatical, can occur in very specific circumstances. My consultant says they are acceptable only when preceded by a question, such as 'What does John do?', or if they occur in a listing of people with occupations. These two contexts seem suggestive of some sort of deletion phenomenon, but one quite distinct from any that I am aware of in English. Perhaps it might be called I anaphora. In any event, I do not consider them grammatical sentences anymore than I consider grammatical the second utterance in the conversation 'What is your name?' 'Bill.'

predicate must be referential. Instead the acceptability of this type of clause seems to hinge on the presence of the demonstrative associated with the subject nominal. I suggest that the demonstrative forms a link with a real world referent, and that somehow this process allows for inter-referential predication where the indices are coreferential. Perhaps the link with the real world entity keeps the reference of the subject "occupied", so that the predication of another referent does not clash. Another possibility is that somehow the real world entity is able to hook up simultaneously with both subject and predicate.⁷⁹ The problem remains how to ensure that this happens only in the case of demonstratives.

The last type of nominal clause identified by Woodbury is that in (75d); which is composed of two NPs, where one is a substance. Mass nouns are semantically non-referential and will be marked in the lexicon as (REF). This property allows them to function as referents or predicates. Thus mass nouns in Eskimo most closely resemble nouns in other languages, such as English and Hebrew.

In summary, the generalization is that nominal clauses in Eskimo may consist of a referent followed by a phrase which is not headed by a referent.⁸⁰

5.5.3.2 The Node I in Eskimo

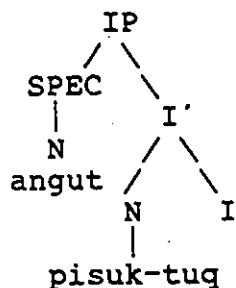
In the previous section we have seen that nominal clauses are characterized by the lack of the node I. Nominal clauses serve to link a predicate and a subject. There is, however, no theta role assignment involved in this process, nor is there agreement between the subject and the predicate. Nominal clauses, as pointed out by Woodbury, are rather restricted in function. The standard examples of clause involve the node I which

⁷⁹ The idea here is that there is no principle B or C violation because the coindexing is achieved extra-linguistically, as it were.

⁸⁰ Perhaps the fact that English nominals obligatorily require a determiner node, as suggested by Abney (1986), combined with the fact that they do not permit affixation, prevents English from having nominal clauses. This would obviate any parameterization of the obligatory nature of the node I across languages.

projects the clause IP and has a position SPEC, which is normally called subject. SPEC agrees with the head I. As mentioned above, all instances of indicative mood must be attached under I (or INFL) in Eskimo, as must the participial mood when it forms the main verb in a clause. Let us now examine the results of this attachment. I will assume that the structure of the intransitive clause is as in (84). Note that I assume the maximal expansion of the noun to be \bar{N} , rather than NP. This is motivated by the fact that elements which in other languages fall under the node NP, e.g. the possessor, the determiner, adjectives, etc. are either lacking in Eskimo, as is the case of determiners, or are linked by other means - the possessor being linked under AGRP, and adjectives being linked by apposition, which is discussed in Chapter 6, section 1.

(84)



angut pisuk-tuq 'The man walks'

The functional element I is like AGR⁸¹ in that it marks predication, and like AGR, it projects a higher category, this time IP. In the same way that the verb in English moves into I,⁸² the head of the complement of I in Eskimo, which is N, will move into the

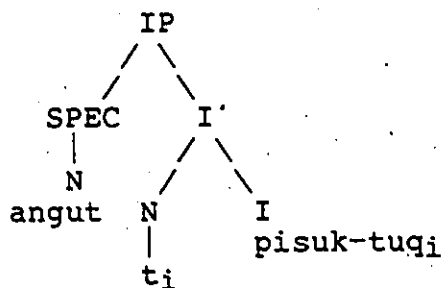
⁸¹ Recall that AGR here is a distinct functional category, and is not the same AGR as is normally considered to form part of I. In the present work, both I and AGR have a set of agreement markers, which we could call agr₁ and agr₂ in order to express their relatedness. Unlike English, the Eskimo node I does not contain tense. Tense, if there is any (see Chapter 1, section 3), is found inside the word. Alec Marantz has suggested to me that this might prove a difficulty for my analysis. This is because, under my assumption that order of affixation is all important, tense would be affixed before the node I. It remains to be seen whether or not this is really a problem. In any event, I projects a phrasal category with properties distinct from that projected by AGR.

⁸² See discussion in Chapter 1, section 2.

⁸³ There remains to be explained why the category N cannot move to I in languages like English. Clearly, the properties of the indicative and participial mood

head position of IP.⁸³ In the case of the participial, this movement is prompted by the requirement that the verbal noun assign a thematic role to the subject SPEC. In the case of the indicative, movement is required both to assign a thematic role to the subject, and to meet the requirement of the lexical features of the mood marker, which state that the affix must appear at the level of I. This assignment of thematic role to the subject could equally be interpreted as somehow involving the subject in the temporal aspect of the event. The movement of N to I is a type of head-to-head movement (see Travis 1984). The final result will be the structure given in (85), where t represents the trace of the movement to I.⁸⁴

(85)



It will be assumed that there exists a rule in Eskimo that assigns absolutive case to the subject of I in all instances, as in (86).⁸⁵

(86) If N specifies I, then N is assigned absolutive case

Just as AGR was the functional element which licensed inter-referential predication, I is the functional element which licenses sentential predication. Nominal clauses have no functional element whatsoever. The agreement markers which are found in I are very similar to those found in AGR, since both involve predication, though each at a markers play a role in this distinction.

⁸⁴ Lamontagne and Travis (1986) state that head-to-head movement does not leave a trace, a factor which they say explains the local properties of this type of movement.

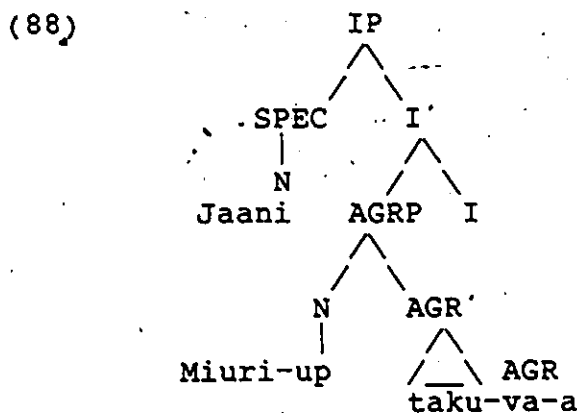
⁸⁵ The fact that, in nominal clauses, both the subject and the predicate are assigned absolutive case, yet there is no node I, nor is there any other element which could assign case, raises the possibility that some relations may not require case. In this event, (86) may prove unnecessary.

different level. The main difference is that predication at the level of I has no explicit morpheme indicating third person, while at the level of AGR, there are the markers *-a* and *-i*. As mentioned above, this no doubt has something to do with the fact that there is a referential distinction between a third person possessor and a possessum, while there is none between a third person and a predicate. When only a single referent is present, it seems less necessary to mark third person than when there are two.

The intransitive agreement markers that occur under I are given in (87).⁸⁶

(87)	Sing.	Pl.
	1	-nga
	2	-tit
	3	-
		-gut
		-si
		-t

The transitive clause is created in the same fashion as the intransitive, save that the predicate is a possessed nominal. Accordingly the structure before head-to-head movement will look like (88).



Miuri-up Jaani taku-va-a 'Mary sees John'

The movement of a possessed nominal into I is licensed by two facts. First the possessed nominal functions as a predicate, rather than a referent, as was shown above in the discussion of nominal clauses. Secondly, the only elements which are allowed to attach under I are the mood markers, the indicative obligatorily, the participial option-

⁸⁶ Third person singular is sometimes given as /q/, since the verb will end with /vuq/, etc.; however I assume that /q/ is the final consonant of the intransitive mood marker and gets deleted by the other suffixes.

ally. As mood markers attach only to predicates, this rules out instances of "true" possessives in I. Compare (89a) with (89b), which contains the predicate *-gi-* 'have as', which licenses the participial mood marker. The participial mood marker then licenses the movement to I.

- (89) a. *Jaani-up ilinniaqtitsiji-a-nga
 John-rel. teacher-3sg.-1sg.
 or
 *Jaani-up ilinniaqtitsiji-ja-a-nga
 John-rel. teacher-part.-3sg.-1sg.
 'I am John's teacher'
- b. Jaani-up ilinniaqtitsiji-gi-ja-a-nga
 John-rel. teacher-have as-part.-3sg.-1sg.
 'John has me as a teacher' or
 'I am John's teacher'

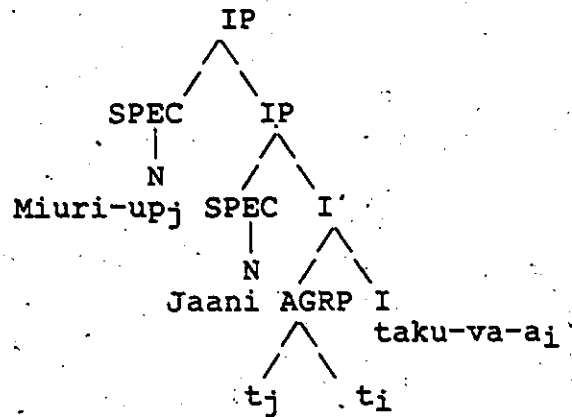
The movement of the possessed nominal into I introduces a problem which did not exist in the intransitive form. Recall that principle (70), which, in combination with principle (60), determines that the "container role" (and subsequently relative case) be assigned to the subject of a referential predicate, states that the subject has to be adjacent to the phrase which contains the referential predicate, since both the thematic role of "possessor" and the relative case are "relationally" assigned; that is to say, they derive not from any case or thematic role assigning features of the predicate, but from the relation between the referential subject and the referential predicate.

As such, the movement of the verbal noun into I produces a problem in that the adjacency requirement is not met, and subsequently, neither thematic role nor case can be assigned to the argument which should bear the agent role. As noted by Baker (1985, 128ff.), the trace of N does not suffice to license the possessor argument.⁸⁷ This means that the agent *Miuri* in (88) will not have the correct (if any) interpretation,

⁸⁷ Baker discusses instances where the movement of the head noun of a possessive construction leaves behind the possessor. The latter, which cannot get case from the trace, is assigned case from a governing verb containing the moved head. Such a solution is not possible here because the node I cannot assign case to its complement.

once the head N moves into I. In order to preserve the adjacency requirement with the nominal, the argument in relative case must move up to form an adjunct relation with the IP, as in (90).

(90)



As can be seen in (90), the adjunct *Miuri-up* is now in a position that meets the requirements of (70) since it is adjacent to a phrase IP which contains the predicate.⁸⁸

The resulting structure in some ways resembles the structure of the transitive clause, as described in Woodbury (1985a), since both the agent and the patient are external arguments, that is to say, not governed by the predicate. The main difference is that the structure in (90) is binary, while the one proposed by Woodbury is ternary.

The movement of the argument in relative case to a position outside of the main predication is supported by the fact that the word order of the transitive clause is generally considered to be (Agent Patient Verb), as in (91a), rather than (Patient Agent Verb), as in (91b).

- (91) a. anguti-up arnaq taku-jaa
 man-rel. woman(abs) see-part.3sg./3sg.

'The man saw the woman'

- b. arnaq anguti-up taku-jaa

⁸⁸ I find it interesting that the word which Kleinschmidt (1851) chose to call the subject of the transitive verb and the subject of the intransitive verb is the German word *project*. Although the subject of the intransitive verb is not required to move, the possessive subject of the transitive verb is certainly projected upwards by the adjacency requirements of the relative case.

My consultant felt that the normal order was the example given in (91a), and that the order given in (91b) was either emphatic, or was missing another predicate. With the addition of another predicate, such as in (92),⁸⁹ the sentence was deemed to be complete.

(92) arnaq anguti-up taku-jaa ani-juq
 woman man-rel. see-part.3sg./3sg.
 go out-part.3sg.

'The woman who the man saw went out'

The word order facts of (91) have been used to argue against the Nominalist Position; however, we have seen that they are a direct consequence of the adjacency principle, which is independently required to account for the possessive. The fact that the absolutive argument intervenes between the agent and the predicate in I is permitted for the same reason that the complement of the possessum was allowed to intervene between the possessor and the predicate in (71) above.

5.6 Summary

In this chapter we have seen that a formal version of the nominalist position first proposed by Thalbitzer and Hammerich provides an explanation of the case system found on Eskimo as well as the double agreement markers on the "verb". Absolutive case is uniformly assigned to subjects of non-referential predicates by I, while relative case is uniformly assigned to subjects of referential predicates (the assignment of relative case will receive further attention in Chapter 6, section 2). There is double agreement on the Eskimo "verb" because it has served as a predicate twice, once as a referential predicate, and once as a non-referential predicate. Both sets of agreement markers resemble one another, because both sets mark predication. Finally the movement of the predicate into I predicts that the argument in relative case will be found outside the argument in absolutive case, so as to preserve the condition that states that the subject

⁸⁹ These structures are further discussed in Chapter 6, section 1.

of a referential predicate must be adjacent to the phrase containing the predicate. When the referential predicate moves into I, the adjacency condition forces the subject of the referential predicate to attach to IP as an adjunct. This accounts for why the transitive clause in Eskimo appears to have the order S O V. In fact, the order is really S S N-I.

Chapter VI

RELATED ISSUES IN ESKIMO SYNTAX

In this chapter I will discuss some issues of Eskimo syntax that relate to the analysis of transitivity presented in Chapter 5. In particular, I will address most of the points raised in criticism of the nominalist position in an extremely important article by Knut Bergsland published in 1962.¹ It will be shown that the nominalist analysis of transitivity as proposed in this thesis not only meets these criticisms, but, in addition, provides a natural account of many other grammatical phenomena in Eskimo.

6.1 Relative Constructions in Eskimo

In this section I will discuss some properties of what are often called relative clauses. Woodbury (1985a) calls these structures adjectival noun participles, which is the most accurate description; however, I will call them relative constructions. I do this because the term relative, not to be confused with relative case, denotes the fact that these structures function in place of relative clauses such as are found in other languages, even though they differ structurally from relative clauses. I use the word construction to denote the fact that they need not be considered equivalent to a clause. I will argue that a relative construction in Eskimo is a clause without the node I. This is not to say that these constructions are reduced clauses. On the contrary, they will be shown to be verbal nouns, as we are familiar with from Chapter 5, in apposition with another noun.

¹ Most linguists who reject the nominalist position do so on the basis of this article. I will only address the points made with reference to Eskimo, but there are clearly interesting comparisons to be made with Aleut. For example, the lack of comitative case marker in Aleut entails constructions with two NPs in absolutive case, where only one agrees with the predicate.

The concept of apposition which will be introduced here differs from predication in a crucial feature. Two nouns in apposition may share their referential indices.

It will be seen that not having the node I explains certain restrictions on the Eskimo relative construction which must be stipulated in an account which treats them as subordinate clauses. Furthermore, the fact that an insightful account of relative clauses can be provided on the basis of the ideas presented in the previous chapters, without recourse to any new mechanism other than apposition, lends support to those ideas.

6.1.1 Properties of the Relative Construction in Eskimo

Before proceeding with a formal treatment of the relative construction in Eskimo, I will first outline the characteristics of these forms. The basis of this description comes from Woodbury (1975), and Creider (1978).

The first property of Eskimo relative constructions that must be noted is that, rather than containing a relative marker of some sort, they contain the participial form of the verb, as shown in (1).

- (1) a. angut imngi-lauq-tuq quviasuk-tuq
man(abs) sing-past-part.3sg. happy-part.

'The man who sang is happy'

- b. nanuq taku-lau-gara nutara-up taku-lau-gaa
polar bear(abs) see-past-part.1sg/3sg
child-rel. see-past-part.3sg(abs)

'I saw the bear that the child saw'

- c. tuni-jara nutarar-mut arna-up taku-jaa-nut
give-part.1sg/3sg child-all. woman-rel.
see-part.3sg-all.

'I gave it to the child that the woman saw'

On the basis of this fact, Woodbury (1975) voices concern that these constructions are not really relative clauses.

Another property of these constructions, as shown in (1c), is that the case assigned to the nominal position is assigned to the structure as a whole, including the verb. Thus any item in the relative phrase in (1c) 'the child that the woman saw' which does not already have a case, i.e. 'the woman', is assigned allative case. Creider (1978) refers to this as case spreading.² This indicates that the participial forms of the verbs in (1) are nominal. Case is not normally found on verbs. Creider (1978) reports that in the Great Whale River dialect the case does not spread to the NP which might be called the head, as shown in (2).

(2) Creider (1978, 99): Great Whale River Dialect

angut niqi-mik pilaum-mut niri-ju-mik taku-vunga
 man(abs) meat-comit. knife-all. eat-part.-comit.
 see-indic.1sg.

'I saw the man who ate the meat with a knife'

Since variation in case assignment revolves not around the verbal noun, but its "associate", this suggests that the verbal noun might be more properly considered the head of the construction, since case assignment can be construed as a measure of linkage to the matrix clause. It seems odd somehow to think that a case assigned by a matrix clause might be found on the complements, but not the head of a construction.³

The main characteristic of the relative construction in Eskimo, as described by Creider, is that the NP position within the relative construction itself which corresponds to some argument of the matrix clause must always be an argument which would receive absolutive case.⁴ If Eskimo were a language such as English, this would

² Examples such as (1c) are of interest because Woodbury (1975, 24) says that the transitive participle in Greenlandic cannot take case. That it cannot is probably due to the fact, as mentioned in Chapter 5, section 4, that Greenlandic has a different transitive participle than Inuktitut.

³ This might be explained by the analysis of Lamontagne and Travis (1986) which claims that null case falls under the ECP.

⁴ There are no restrictions on the position of the relative construction within the matrix clause. For examples showing this, see Creider (1978).

amount to a restriction that the "gap" in a relative clause could only be the subject of an intransitive clause, or the object of a transitive clause. Evidence supporting this generalization is the grammaticality of the examples in (1). In the example in (1a) the position in the relative construction corresponding to the matrix clause is the theme of the intransitive verb meaning 'sing'. In both examples (1b) and (1c) the position in the relative construction corresponding to the matrix clause is the patient of the verbs meaning 'kill' and 'help' respectively. Now consider the ungrammaticality of the examples in (3).

- (3) a. *anguti-up natsiq taku-jaa angaju-ga
 man-rel. seal(abs) see-part.3sg(abs)
 older sibling (of male)-poss1sg.

'The man who saw the seal is my brother'

- b. *iglurjuag(mi) arnaq sinik-tuq(mi)
 uquit-tuq
 house(abs) or locative woman(abs)
 sleep-part.3sg(abs) or locative
 cold-part.3sg.

'The house in which the woman is
 sleeping is cold'

- c. *anguti(mut) pilaut tuni-jaa(nut)
 angaju-ga
 man(abs) or allative knife(abs)
 give-part.3sg(abs) or allative
 older sibling (of male)-poss1sg.

'The man who he gave the knife to is
 my brother'

The example in (3a) shows that where the position in the relative construction corresponding to the matrix clause is the agent of a transitive verb, in this case the verb meaning 'see', the sentence is ungrammatical. The example in (3b) shows that an oblique position in the relative construction cannot be relativized either with the case of the matrix clause (the absolutive) or the case of the relative construction (the loca-

tive).⁵ Example (3c) is another example showing that the position in the relative clause corresponding to the matrix clause cannot be an oblique argument. We know that the position in question is an oblique position, since the thing given ('the knife') is in absolutive case. If the thing given were in oblique case, the goal role could be in absolutive case, as in (4a), and a relative construction would be possible, as in (4b).⁶

- (4) a. arna-up pilauti-mik angut tuni-jaa
 woman-rel. knife-comit. man(abs)
 give-part.3sg/3sg

The woman gave the man the knife

- b. angut-pilauti-mik arna-up tuni-jaa angaju-ga
 man(abs) knife-comit. woman-rel.
 give-part.3sg(abs)
 older sibling (of male)-possls

The man that the woman gave the knife to
 is my brother

This primacy of the absolutive position with respect to relativizability has been used as evidence suggesting revisions of the NP accessibility hierarchy proposed by Keenan and Comrie (1977). Woodbury (1977) argues that an alternative hierarchy exists which reflects the ergative patterning of Eskimo. The NP accessibility hierarchy is often associated with tests of subjecthood.⁷

⁵ That this is not simply a matter of case clash is shown by the ungrammaticality of the following example, where both the matrix clause and the relative construction assign allative case: i. *[Jaaniup tunijaa unaaq angummut Miuri uqalulauqtuq ikpak-saq] 'John gave the harpoon to the man Mary spoke to yesterday', where both *tunijaa* 'give-part.3sg./3sg.' and *uqalulautuq* 'speak-past-part.3sg.' can have an argument in allative case. According to my consultant, example i. is two sentences 'John gave the man the harpoon' and 'Mary spoke'. The correct way to express the gloss of example i. is ii. [Jaaniup tunijaa unaaq angummut uqalugvigilaugaanut ikpaksaq], where the noun meaning 'man' is in an absolutive relation to the verbal noun. The whole phrase gets assigned allative case.

⁶ For a discussion of dative alternation in Eskimo, see Johns (1984b) and references cited therein.

⁷ Johnson (1980) rejects relativizability outright as a test of subjecthood for Eskimo on the grounds that only absolutive NPs can relativize, which is apparently skewing the results. Both Johnson and Creider seem to view this as some independent property of the grammar.

Even if Eskimo were a syntactically ergative language with respect to relativization; this does not explain why only the absolutive position should relativize. After all, languages like English relativize from subject, object and oblique position, as in (5).

- (5) a. The man who saw the dog laughed.
 b. The dog which the man saw was playing.
 c. The box in which she keeps her jewels is in the drawer.

Another fact that must be taken into account is that there exist relative constructions which might seem to contradict Creider's generalization that only absolutive NPs in the subordinate clause relativize. These are constructions where a possessive agreement morpheme is found attached to a verb containing the agentive morpheme *-ji-*, as in (6).

- (6) a. Miuri-up natsiq kii-ji-ga tuqu-staa
 Mary-rel. seal(abs) bite-agent-poss1sg.
 kill-part.3sg./3sg.
 'Mary killed the seal that bit me'
 b. angut taku-ji-ga qimak-tuq
 man(abs) see-agent-poss1sg. fun away-part.3sg.
 'The man who saw me ran away'

These constructions contain verbal nouns. Moreover, the element in the relative construction which corresponds to the argument in the matrix clause would normally receive relative case, as in (7), which is equivalent in meaning to the relative construction in (6a).

- (7) natsi-up kii-jaanga
 seal-rel. bite-part.3sg./1sg.
 'The seal bit me'

Either constructions like those in (6) are fundamentally different from the examples presented above, and therefore do not violate the generalization,⁸ or they are like

⁸ For example, they could be analyzed as derived structures, in which case they adhere to the generalization, since the agent is in absolutive position. This is what Smith (1984) calls "indirect accessibility", meaning that the position is accessible by

those in (6), and we must explain why these forms appear to violate the generalization. I will argue that both positions are essentially correct. I propose that examples like those in (6) are constructed in the same fashion as the previous relative constructions, and that the restriction on relativizability of the subordinate clause is a spurious one, in that there is no subordinate clause. Instead, the generalization concerning the absolute position is a direct result of the type of verbal derivation as described in Chapter 5, where the verb is built up into a nominal, which may then enter into syntactic operations, for example predication.

6.1.2 A Nominal Account of the Relative Construction

In this section, I will argue that the relative construction in Eskimo consists simply of a verbal noun (as derived by the mechanisms described in Chapter 5) which does not move into the sentential node *I*. Evidence for this position is that the relative construction is identical to the participial construction found in main clauses - with one crucial exception. This is that the relative construction can never show first and second person agreement on intransitive clauses,⁹ nor double agreement on transitive clauses.¹⁰ This is shown in (8).¹¹

derivation. Nevertheless, these constructions do not conform to sentential analyses of the relative construction.

⁹ This restriction is pointed out in Woodbury (1985a). It seems that Yupik Eskimo can only express a first or second person relative construction by means of an independent pronoun followed by a participial form in locative case, e.g. from Woodbury, p. 77 *wangkuta kit'e-llria-ni* we(abs) sink-part-loc 'We who sank'.

¹⁰ In earlier examples in this thesis, I gloss relative constructions with double agreement, eg. (44c) in Chapter 5. Such examples always implied third person patients. In point of fact, there are no overt agreement markers on these examples.

¹¹ While (8a) is ungrammatical, *quviasuktutigut mumiriarniaqtugut* is grammatical with the same meaning. The only difference between the two sentences is the presence of the morpheme *-ti-*. I cannot explain this construction, nor do I know what this morpheme is. It can also be found on bare nominals, e.g. *arnatigut* 'we who are women', but is not present for morphophonological purposes: 'We are happy' is *quviasuktugut*. In any event, the point still remains that first or second person agreement may not attach directly to the intransitive participial form *only* when it functions as a nominal.

- (8) a. *`[quviasuk-tu-gut mumir-iar-niaq-tu-gut]s`
happy-part.-1pl dance-going-fut.-part.-1pl

Those of us who are happy are going dancing

- b. *`angut taku-jaanga aullaq-tuq`
man (abs) see-part.3sg./1sg. leave-part.3sg.

The man who saw me left

While the restriction against non-absolute positions for relativization accounts for the ungrammaticality of (8b), it cannot account for (8a), since (8a), being an intransitive verb involves only an absolute position. The example in (8a) would seem to require an additional restriction on the relative construction. The two restrictions are given in (9).

- (9) a. First and second person agreement cannot appear on intransitive relative constructions
- b. Only the absolute position within the relative construction is relativizable

Both restrictions in (9) are entirely arbitrary within the grammar of Eskimo. In other words, they derive from no principle of the grammar nor semantic property.¹² If it can be shown that these facts are explainable by the lack of a node I, not only will these two properties be collapsed into one, but immediately an explanation in terms of independent properties will present itself. The lack of a node I in a relative construction

¹² Smith (1984) claims that (9b) in Labrador Eskimo derives from an independent constraint which he calls the Detransitive Complement Constraint on Affixal Clause Union. This constraint states that an affixal verb cannot be transitive. He argues that relative constructions are produced by the verb of a full clause "incorporating" to its nominal subject. Since the verb is functioning as an affix, it cannot be transitive, and any transitive verb must therefore detransitivize. A complete discussion of Smith's analysis would be quite lengthy; however, it should seem clear to the reader that such an analysis is minimally more complex than the one proposed here. The former involves both detransitivization and incorporation, while the latter simply does not generate a sentence node I. Moreover, the DCC cannot be used to account for the facts of the relative construction in the dialect under discussion. It is a fact that transitive "complement" verbs can be affixed, both in this dialect (see Jensen and Johns to appear), and in Greenlandic (see Woodbury and Sadock 1986). Given that the DCC is not in effect in these dialects, some other explanation, such as the one suggested here, is required for the fact that some form of constraint (9b) is in effect in all dialects.

can be directly attributed to the fact that I only exists at the level of sentence in Eskimo. As these constructions are functioning as nominals, rather than clauses, it seems only reasonable that such a node is lacking.

Recall that both agreement of first and second person on intransitive clauses,¹³ and the second part of double agreement, was claimed to take place at the level of I. If I is never generated, which is a natural assumption given that I projects the sentential node IP, neither of these agreement markers should be found. Under this view, the verbal portion of the relative construction consists simply of a stem PRED (derived or not) followed by a nominalizing mood marker, which may be referential (transitive), or not (intransitive). This derived nominal may then appear as a nominal in a clause, as in (10),¹⁴ or in apposition with another nominal, as in (11).

(10) a. aanniaq-tuq sinik-tuq
sick-part.3sg. sleep-part.3sg.

'The sick one is sleeping'

b. ani-taq nani-jara
throw out-part. find-part.1sg./3sg.

'I found the thrown out thing'

c. taku-ja-ra qimak-tuq
see-part.-1sg. run away-part.3sg.

'The one who I saw ran away'

(11) a. nutaraq aanniaq-tuq sinik-tuq
child(abs) sick-part.3sg. sleep-part.3sg.

'The child who is sick is sleeping'

¹³ That the /q/ associated with third person is found on relative constructions can be taken as evidence that third person agreement is really null. The /q/ clearly forms part of the participle stem, which is deleted when first or second person agreement is attached.

¹⁴ In fact, the intransitive participle does not normally function as a nominal unless it has already been linked to a referent in the discourse; (10a) would be ungrammatical without a context. This is to be expected under the analysis of intransitive participles given in Chapter 5, section 4, where they are nominal, but lack the feature REF. One is tempted to describe them as adjectival, but this would not explain why they can appear, under certain circumstances, in constructions such as (10a).

b. niqi ani-taq nani-jara
 meat(abs) throw out-part. find-part.1sg./3sg.

'I found the thrown out meat'

c. nutaraq taku-ja-ra qimak-tug
 child(abs) see-part.-1sg. run away-part.

'The child who I saw ran away'

6.1.2.1 The Licensing of Appositional Elements

Before discussing more elaborate examples of the relative construction, such as possessives or the examples in (6), we must first define the syntactic concept of apposition.

At first glance, it might seem that what is called apposition is some sort of predication, since like predication, it involves the joining of two properties. If this were the case, however, we would have a problem, since the concept of predication in Eskimo, as discussed in Chapter 5, section 5, crucially claims that predication between two referential elements must a) be licensed by some functional node, and b) must involve a container to contained relation. In the examples in (11), these criteria are not met, since there is neither a licensing node, nor is there a container to contained relation. I will therefore assume that the syntactic relation between the two nominals in (11) is distinct from predication. Traditionally, this relation has been termed apposition. It remains to give it a formal characterization.¹⁵ Intuitively, while the idea of predication revolves around the *assertion* of a property (which may be a referent), the idea of apposition involves instead a *conjunction* of properties.¹⁶ This idea is best illustrated by the English appositional clause, and NP in (12).

¹⁵ Hofmann (1978) calls this coindexing relation *equation*. He claims that this is the basic relation in Eskimo syntax, although he is forced to introduce an additional notion of predication. While Hofmann's proposals are in some ways comparable to the one argued in this thesis, they are sketchy and do not explain, for instance, why two nouns cannot form a sentence, as in (15) below (see also Chapter 5, section 5.3.1).

¹⁶ Thompson (1971) proposes that all relative clauses (both restrictive and non-restrictive) have their basis in conjunction. See her bibliography for others who have proposed that appositive relatives are conjunctions, and also Emonds (1979).

- (12) a. John, who is my teacher, will be coming.
 b. John, the nurse, will be coming.

Woodbury (1981, 201) defines apposition as asserted or presupposed coreference between two constituents. Using this idea of presupposed coreference as a starting point, apposition can be described in the current framework as two elements with identical indices. It is this property which distinguishes apposition from predication. Whereas predication *links* either a predicate lacking a referential index or a referential expression with a distinct index to a subject, it might be argued that elements which are said to be in apposition need no syntactic linking because their referential indices are identical to begin with. In this way, apposition can be viewed more as a listing of properties rather than an assertion of properties. Unlike predication, apposition is not a syntactic operation, but a syntactic fact.¹⁷ The principle of licensing that permits elements in apposition to appear in the same position is given in (13).

(13) Appositional Licensing Principle

Two (or more) elements are licensed in the same position if they bear identical referential indices, (assuming the position is licensed independently).

The principle in (13) accounts for the data in (14), where the examples are only grammatical with identical indexing.

- (14) a. angut_i aanniaq-tuq_i (*j)
 pisuk-tuq
 man(abs) sick-part.3sg.(abs) walk-part.3sg.

'The man who is sick is walking'

- b. angut_i pukiqtalik_i (*j)
 pisuk-tuq
 man(abs) policeman(abs) walk-part.3sg.

'The man who is a policeman is walking'

¹⁷ That is to say, while predication licenses the coindexation of A to B, the principle of apposition states that the conjunction of two coindexed elements A and B does not need a function.

Note example (14b), which involves two non-derived nouns in apposition. This contrasts with examples of predication discussed in Chapter 5 section 5.3, where two non-derived nouns could not be related by predication, as in (15a).

(15) a. *arnaqi ilinniaqtitsiji
 woman(abs) teacher(abs)

 'The woman is a teacher'

 b. *niqi ani-taqi
 meat(abs) throw out-part.(abs)

 'The meat is thrown out'

The example in (15b) shows that the transitive participle without possessive agreement cannot function as a predicate, which is predicted by the claim that it is marked REF.

The explanation for why the examples in (14), but not those in (15), are grammatical is quite straightforward. In both the examples in (14), the subject position is licensed by the node I, along with the predication relation between the subject and the non-referential predicate situated in I. The Appositional Licensing Principle in (13) says that, as long as the position is licensed, as many instances of elements with identical indices may be listed. In the examples in (15), on the other hand, although the two elements may have the same indices, nothing licenses either position. There is no node I, and the only way in which they could be linked by predication is via inter-referential predication, which necessarily involves two elements with distinct indices. The requirement that inter-referential predication involves disjoint reference would follow from the Binding Theory of Chomsky (1981), as discussed in Chapter 1, section 2, which states that referring expressions must be free in their governing category. Under this definition, either the arguments in each example in (15) are in different positions, in which case they must be disjoint in reference, or they are in the same position, in which case they are in apposition, and must be identical in reference.¹⁸ In the latter case, the sen-

¹⁸ Elements which are disjoint in reference may appear in the same position, only if they are licensed by a coordinating functional element, such as 'and', e.g. *angulu amarluk niuvirvingmut pisuktuk* 'The man and the woman walked to the store',

ence is ruled out because it either lacks a subject or a predicate.¹⁹

6.1.2.2 Relative Constructions Types

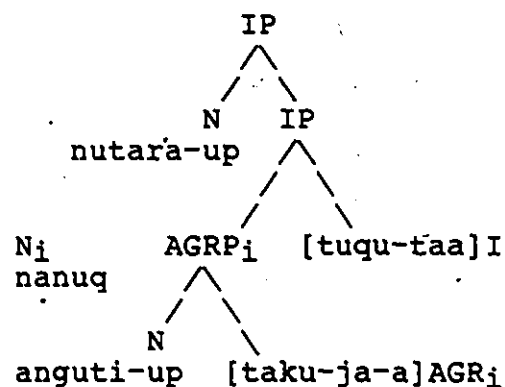
In this section, I will show in more detail how only possible relative construction types are predicted by the concept of apposition, along with the claim that relative constructions lack I. The relative construction containing an intransitive predicate, such as (14a) above is the most simple form. The nominalizing affix *-juq/tuq-* is attached to the predicate, and the resultant derived noun is permitted to co-occur with any coreferential element. As mentioned above, the impossibility of first and second person inflection in these forms is explained by the lack of the node I.

Transitive constructions such as (16a), again involve the generation of a verbal noun without the node I, as in (16b).²⁰

- (16) a. nanuq anguti-up taku-lau-gaa nutara-up
 tuqu-taa
 polar bear(abs) man-rel. see-past-part.3sg
 child-rel. kill-part.3sg./3sg.

'The child killed the polar bear that the man saw'

b.



where both 'the man' and 'the woman' have the coordinating morpheme *-lu* attached.

¹⁹ It would seem that *pro* must be licensed by agreement.

²⁰ In the tree in (16b) I do not show the movement of N to I.

As can be seen in (16b), the relative construction of (16a) consists of an N in apposition with an AGRP. That an I node is not involved predicts that the element in apposition can only be third person. Both first or second person patient agreement, and the outer part of double agreement are assigned at the level of I. This explains the ungrammaticality of (8b), repeated here as (17).

- (17) *angut taku-jaanga aullaq-tuq
 man (abs) see-part.3sg./1sg. leave-part.3sg.

'The man who saw me left'

We now have an explanation for why it appears as if only absolutive positions relativize.²¹ The verbal noun in apposition is either an intransitive NP meaning 'the one who X-ed', or a possessive construction meaning '(Y's) X-ed one'.²² The only possible way for an element in apposition to express an agentive meaning would be if the nominalizing morpheme were to express that role, something like '(Y's) X-er'. This is exactly the form of the examples in (6) above, where it appeared that there might be relativization from relative position, as in (6a), repeated here as (18).

- (18) Miuri-up natsiq kii-ji-ga tuqu-taa
 Mary-rel. seal(abs) bite-agent-poss1sg.
 kill-part.3sg./3sg.

'Mary killed the seal that bit me'

This analysis shows that examples such as (18) are constructed in exactly the same manner as other relative constructions.²³

²¹ Woodbury (1975, 23) mentions cases where the possessor is the element in apposition. He points out that these constructions usually involve parts of the body, which suggests some explanation that need not affect verbal nouns.

²² This solution is similar in some ways to that of Smith (1984) in that he places great emphasis on the fact that the nominalizing morphemes have these meanings; however, he assumes a distinct analysis for main clause verbs, thus missing out on the generalizations captured here between main clause and relative constructions.

²³ These constructions are also predicted and discussed within the analysis of Smith (1984).

6.1.3 Summary

We have seen that, by making the logical assumption that relative constructions lack the sentential node I, we are able to predict all the properties of relative constructions in accordance with the analysis of verb forms and transitivity provided in Chapter 5. As mentioned above, this exercise was intended not only to shed light on the relative construction, but to provide support for a nominalist analysis of main clause verbs in Eskimo. Under this approach, it is clear how participial forms in Inuktitut function either as main clause predicates, or relative constructions. There is no need for a special rule to account for relative constructions, other than a principle of apposition, which is needed for most languages. Neither is there a need for a special rule converting relative constructions to main clause predicates. Both indicative and participial main clause predicates are generated in the same fashion, the former differing only by the fact that they must ultimately attach to the node I.

Note that this ability to capture the facts of the relative construction in a natural way distinguishes the present analysis from that of Bok-Bennema and Groos, as described in Bok-Bennema (1985). While their analysis bears a superficial resemblance to the one argued here, they crucially claim that there exists the category verb at the level of word in Eskimo, and so would be forced to account for relative constructions in some other fashion.

6.2 Adverbial Clauses

One of the properties of the Eskimo language which has been cited as evidence both for and against the nominalist position is the fact that agreement markers in adverbial clauses (the conditional, the causative, etc.) resemble the agreement markers found on possessives that are both possessed and possessing (the duplex). Compare the agreement markers in the duplex possessive paradigm in (19) with the agreement markers in

intransitive causative paradigm in (20), where the subscript indicates fourth person (to be discussed in the following section). Note that the causative mood marker *-ga*, which translates as 'because' or 'when',²⁴ is found only in first and second person.

- (19) a. *anaana-ma gimmi-nga*
mother-dupl.1sg. dog-poss3sg.

'My mother's dog'

- b. *anaana-vit* (your(s) mother's) "
c. *anaana-ata* (his mother's) "
d. *anaana-mi* (his_i mother) "
e. *anaana-pta* (our mother's) "
f. *anaana-psi* (your(pl) mother's) "
g. *anaana-atta* (their mother's) "
h. *anaana-mik* (their_i mother's) "

- (20) *Jaani ani-juq* ...
John(abs) went out-part.3sg.

'John went out...'

- a. *niri-ga-ma* (because I was eating)
b. *niri-ga-vit* (because you(s) were eating)
c. *niri-ngmat* (because he was eating)
d. *niri-gami* (because he_i was eating)
e. *niri-ga-pta* (because we were eating)
f. *niri-ga-psi* (because you(pl) were eating)
g. *niri-ngmata* (because they were eating)
h. *niri-ga-mik* (because they_i were eating)

The agreement markers in (19) and (20), which are referred to as relative agreement, are almost completely identical, except for the third person markers, which only resemble one another. That it is the intransitive relative agreement markers that show the closest resemblance to possessive agreement in relative form, is in marked contrast with main clause agreement, where it is the transitive agreement markers that show the closest resemblance to possessive agreement. Transitive agreement in relative mood is

²⁴ The conditional mood marker is *-gu-*.

²⁵ Forms with third person plural patients are not as straightforward as it appears in the chart. I have both *-ptigik* and *-ptigit* for 1pl./3pl., as well as both *-psigik* and *-psigit* for 2pl./3pl., and both *-mitigit* and *-mitigik* for 4pl./3pl.. The last unusual aspect of this column is that 2s./3pl. is *-ngni*, where Lowe (1985) has *-pkit* and Schneider (1976) has *-vigit*.

given in (21).²⁵

(21) Transitive Agreement in Relative Mood

AGENT	PATIENT							
	1	2	3	4	1pl	2pl	3pl	4pl
1	-	pkit	pku	-	-	psi	pkit	-
2	ngma	-	ngni	-	ptigut	-	ngni	-
3	manga	matit	magu	mani	matigut	masi	magit	matik
4	minga	mitit	miuk	-	mitigut	misi	mitigut	-
1pl	-	ptigit	ptigu	-	-	psi	ptigik	-
2pl	psinga	-	psiuk	-	ptigut	-	psigik	-
3pl	mannga	matit	majjuk	mani	matigut	masi	magit	matik
4pl	minnga	mitit	mijjuk	-	mitigut	misi	mitigut	-

Note²⁶ that a fourth person cannot contrast with first or second person or itself, the latter being logically impossible.

There is no analysis of why there is a parallel between the adverbial moods and duplex constructions, other than a few suggestions. Thalbitzer (1930) believes that historically there must have been some sort of element, in current terms an event, which has since disappeared. He gives a Greenlandic example of how this element might have functioned: *iserama kingorna* of my coming-in its-after-piece, i.e. 'what happened after I came in'.

²⁶ Another thing about the chart in (21) that must be pointed out is that the third person agent forms are in fact only used in the causative mood. All of the other agreement markers can be found both after the causative marker *-ga-* or the conditional marker *-gu-*. While the third person causative agreement markers begin with /m/, the third person conditional agreement markers begin with /p/. In addition, both the third person causative and conditional agreement markers are preceded by an extra phoneme when the stem to which they attach ends in a vowel. The extra phoneme for the causative is /ng/ and for the conditional is /k/. These phonemes form part of the underlying form of third person agreement, but have been left out of the chart.

Hammerich (1951) considers that the event element is synchronically present in the clause in the form of an abstract superordinate (or "possessum") such, that the Greenlandic clause *tkičame* might be glossed as 'after [the fact] of his arrival'. Within the framework of this thesis, this idea would be something like 'his arrival's fact'. According to Hammerich, the subject of the intransitive verb receives relative case, but this is no longer so, as shown by (22).

- (22) Jaani tikki-ani-ngmat.
 Miuri imngir-iaq-tuq
 John(abs) arrive-after-when3sg. Mary(abs)
 sing-begin-3sg.

'After John arrived, Mary started to sing'

Woodbury (1975, 73) makes the following brief comment about adverbial moods.

I would be inclined to want to generate all of the dependent moods but the participles in the base as abstract predicates taking as a single argument the clauses they complementize in surface structure. The reason for this is that these moods seem to encode some semantic information of a temporal nature.

Rather than positing an abstract or historical event marker, Woodbury seems to be saying that the event argument is the main clause.

This same view of the dependency of the adverbial mood on the main clause is found in Lowe (1985), who points out that the central idea behind both the conditional and the causative is the anteriority of the time of the adverbial clause with respect to the time of the main clause. Both precede the result, the conditional being a hypothetical event preceding a future result, the causative being a real event preceding a past result.

In summary, on the one hand, Thalbitzer and Hammerich believe that there was (or is) an (implicit) argument which relates to the adverbial clause as a whole, while Woodbury and Lowe consider that this argument is the main clause. I will adopt

the latter position. I will also suggest that the similarity between the duplex forms and the adverbial moods lies not in identical structure, but in the fact that both constructions have agreement attaching to an element which bears relative case. In other words, I do not accept Thalbitzer and Hammerich's claim that the predicate of the adverbial clause itself is a "possessor" to a "possessum". If this relation of inter-referential predication held between the two clauses, it would mean that the adverbial clause in some way contained the main clause. Although the adverbial clause might be said to determine the main clause, it does not control it.²⁷

There are independent reasons for rejecting this sort of analysis. The first, as pointed out in Bergsland (1962, 1011) is that there is no agreement on the main clause, which would be expected under the analysis of the main clause as possessum of the adverbial clause, as shown in (23).

- (23) a. ataata-ma unaa-nga
 father-dupl.1sg. harpoon-poss.3sg.
 'my father's harpoon'
- b. ani-junga nutaraq gia-ngmat
 go out-part.1sg. child(abs) cry-because3sg.
 'I went out because the child was crying'

In (23a) *unaanga* 'harpoon' shows agreement with *ataatama* 'father's', while in (23b) *anijunga* 'I left' does not show agreement with *qiangmat* 'because he was crying'.

The second reason for rejecting the possessive analysis of adverbial clauses is that, unlike true possessives, there can be more than one element bearing relative case per main construction, as shown in (24).²⁸

²⁷ In some sense, though, the adverbial clause controls the main clause to the extent that the latter cannot take place without the former taking place.

²⁸ The correct form of (24b) is *angutiup arnaublu qimmingak*, which contains a conjunctive *lu*. This means that while it is possible for there to be more than one possessor linked to a possessum, the possessors must be linked to each other, a requirement that is not found on adverbial clauses, nor oblique phrases.

- (24) a. anguti-up qimmi-nga
man-rel. dog-poss3sg.
'the man's dog'
- b. *anguti-up arna-up qimmi-ngak
man-rel. woman-rel. dog-poss3du.
'the man and the woman's dog'
- c. ani-vunga qai-ngmat
go out-indic.1sg. cry-when-3sg.
'I went out when he came'
- d. itir-mat qimmiq qilug-iar-mat ani-vunga
came in-when3sg. dog(abs) bark-begin-when3sg.
go out-indic.1sg.
'When he came in, when the dog started to
bark, I left'

On the basis of these facts, I will adopt a modified version of the position of Woodbury (1981, 124), with regard to adverbial clauses:

Functionally they are embedded in other clauses as oblique constituents, serving as adverbial modifiers to the embedding clause in much the same way that oblique case phrases do.

There may be more than one oblique phrase in a clause, yet all show dependence on the main verb (and not on each other), as shown in (25).

- (25) a. ilinniarving-mut pisuk-punga
school-all. walk-part.1sg.
'I walked to school'
- b. tuktisiar-mut tili-jau-vunga
ilinniarving-mit ilinniaqtitsiji-mit
church-all. sent-pass.-indic.1sg.
school-abl. teacher-abl.
'I was sent from the school to the church
by the teacher'

These oblique cases (see discussion in Chapter 1, section 3) are thought to be composed of the relative case marker *-(u)p* (which changes to */m/*) plus some additional

material which determines the individual case. The appearance of relative case in the oblique cases is considered to be some sort of dependency marker.

Recall that the rule of relative case assignment in the possessive construction was said to be a consequence of the thematic dependence of the possessor on the possessum. Perhaps all instances of relative case indicates semantic dependency. Of course, relative case in and of itself does not license an argument. Something else like predication, or a more particular notion of case²⁹ serves as the licenser. The rule of relative case assignment is given in (26).

(26) Relative Marker Assignment

Assign the relative marker when the REF_i is semantically dependent on another REF_j , (where semantically dependent is equivalent to presupposition).

The rule in (26) will not trigger relative case assignment in intransitive constructions, where there is only one referent, nor in appositional constructions, where indices are the same.³⁰

Returning to adverbial clauses, we can now analyze them as displaying the semantic dependency between the two events (which naturally have distinct referential values) by means of relative case assignment on the adverbial verb. In this way, adverbial predicates are like possessives and oblique constructions. Whereas the possessor in a possessive construction is further linked to the possessum by a rule of predication,³¹ both the oblique construction and the adverbial predicate are not. This explains the

²⁹ The fact that most oblique cases are composed of two components - relative case and a specific case marker - remains to be examined further.

³⁰ In fact, appositional constructions do not display semantic dependence.

³¹ There is an interesting problem with the duplex construction. The order of morphemes indicates that the word bearing duplex agreement is first linked to its possessum, and then becomes the possessum of something else. As pointed out to me by John Jensen, the semantics suggests that it is the other way around, so that in a phrase *John's mother's dog*, the middle term must first combine as the possessum, and only then may it be the possessor. This looks like a possible instance of a bracketing paradox (see Sproat (1985) and all the references therein).

lack of agreement between the adverbial predicate and the main clause predicate. The oblique argument is further specified as to the range of semantic roles it may bear with respect to the main clause predicate, e.g. ablative, allative, etc., but the adverbial predicate is not. Instead the adverbial predicate is itself predicated of another referent, either the theme of the intransitive clause, or the agent of the transitive clause, i.e. the first argument in the first predication relation.³²

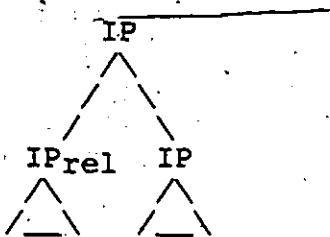
A question arises as to whether intransitive adverbial verbs participate in inter-referential predication with their subjects. Bergsland (1962, 1010-1011) claims that, in adverbial clauses, the relative agreement between the intransitive predicate and the theme is identical to that between the transitive predicate and the agent (compare (20) and (21) above). This similarity in form between the theme of an intransitive verb and the agent of the transitive verb could be interpreted as evidence that they are both subjects. This is not a problem for the analysis of Eskimo transitivity argued here. Indeed, they are both subjects. As they are both the subjects of predications, there is no reason for agreement to differ. Recall that, even in the main clauses, both types of agreement resemble one another.

While the referential value of the event, or I_{rel} , of the adverbial clause is distinct from the referential value of the event, or I , of the main clause, it is not this value which is involved in the predication between a predicate and the subject. I will therefore interpret the agreement found on the intransitive construction simply as the form that agreement takes when it is attached to the relative marker. That it is identical to the agreement found on the duplex construction is simply a result of this fact. There is no necessary implication that, like the duplex construction, the predication is inter-referential.

³² There are a number of details which present a problem here, and which I will not address at present. For example, I have claimed that transitivity in the main clause crucially revolves around the presence of the transitive participle, which receives the goal role of the predicate. Clearly, there is no such participle in adverbial clauses. Instead there is an adverbial mood marker.

A question still remains as to where, or how, the adverbial clause is linked to the main clause. It is not subcategorized by the verbal noun of the main clause, so there is little sense in attaching it as a complement of I. Finer (1984) and (1985) assumes that adverbial clauses are adjuncts of S, and that the clausal node is S'. As there is no motivation, as yet, for assuming the node COMP in Eskimo, which defines S', this would entail that the adverbial clause forms an adjunct to IP. This makes the adverbial clause a sister to the matrix clause IP. The adverbial clause is marked IP_{rel}, since its head I_{rel} is semantically dependent on the I of the matrix clause (but not vice-versa). Accordingly, the structure of a sentence containing an IP_{rel} is given in (27).

(27)



6.2.1 Summary

Although there are still many questions to be resolved with respect to adverbial clauses in Eskimo,³³ we have seen that, contrary to the claims of Bergsland (1962), the type of analysis of the transitive clause presented in Chapter 5 is quite compatible with these structures. That predication is involved between the possessor and the possessum accounts for why duplex constructions resemble adverbial clauses, without having to posit double sentential reductions for the former.³⁴

³³ There are other constructions besides the adverbial clause which also deserve attention, including the imperative, the conjunctive, etc..

³⁴ This is under the reasoning that, if a single possessive construction is a reduced sentence or relative clause (see Chapter 4, section 4), a double possessive clause must be two such constructions.

While both the duplex construction and the adverbial clause consist of agreement attaching to a relative case, in the case of the former, the constituent on which the relative marker is found is itself the subject of another predication, while in the case of the latter, the constituent on which the relative marker is found is merely semantically dependent. The agreement on both of these structures indicates that they are predicates to other arguments. This explains what Bergsland (1962, 1011) considered to be a major obstacle to the nominalist position, that the same morpheme could enter "into quite different syntactical constructions."

6.3 Fourth Person in Inuktitut

Perhaps the piece of evidence most damaging to the nominalist position is the existence of agreement markers usually referred to as fourth person (but sometimes called reflexive). I do not propose to give an account of all the properties of this phenomenon here.³⁵ My aim is to show that the facts of fourth person are compatible with the account of transitivity and grammatical relations given in Chapter 5. In addition, it will be argued that at least one property of fourth person follows from the analysis of transitivity in Eskimo argued in this thesis, wherein the transitive construction results from inter-referential predication. Before proceeding with a discussion of some of the theoretical issues raised by fourth person in Eskimo, I will first outline its characteristics.

Fourth person in Eskimo consists of a set of agreement markers which indicate that the argument with which they agree is coreferential with a higher argument. This higher argument may be either the agent, when the matrix clause is transitive, or the theme, when the matrix clause is intransitive. The examples in (28) show the contrast in meaning between third and fourth person agreement, where the potential coindexing relation is between arguments in an adverbial clause, and arguments in a matrix

³⁵ For a discussion of the syntactic versus rhetorical use of fourth person, see Woodbury (1983).

clause.

- (28) a. Miuri imngi-lauq-tuq quviasuk-ka-mi
Mary(abs) sing-past-part.3sg.
happy-because-4sg.

'Mary sang because she was happy'
(Mary = she)

- b. Miuri imngi-lauq-tuq quviasu-ngmat
Mary(abs) sing-past-part.3sg.
happy-because-3sg.

'Mary sang because she/he was happy'
(Mary ≠ she/he)

- c. Miuri-up Jaani kunik-paa quviasuk-ka-mi
Mary-rel. John(abs) kiss-indic.3sg./3sg.
happy-because-4sg.

'Mary kissed John because she was happy'
(Mary = she)

- d. Miuri-up Jaani kunik-paa quviasu-ngmat
Mary-rel. John(abs) kiss-indic.3sg./3sg.
happy-because-3sg.

'Mary kissed John because he/she was happy'
(Mary ≠ he/she)

Examples (28a) and (28c) show fourth person agreement on the subjects of intransitive adverbial clauses. Consider now the following examples with transitive adverbial clauses.

- (29) a. Miuri quviasuk-tuq Jaani kunik-ka-mi-uk
Mary(abs) happy-part.3sg.
kiss-because-4sg.-3sg.

'Mary is happy because she kissed John'
(Mary = she)

- b. Jaani-up Miuri tikin-na-mi-uk
uqa-qati-gi-giaq-paa
John-rel. Mary(abs) arrive-when-4sg.-3sg.
speak-companion-have-begin-indic.3sg./3sg.

'When John came up to Mary, he began to
speak to her'
(John = he)

- c. Jaani quviasuk-tuq Miuri-up kuni-ngma-ni
John(abs) happy-part.3sg. Mary-rel.
kiss-because3sg./4sg.

'John was happy because Mary kissed him'
(John = him)

- d. Jaani-up Miuri kuni-gaa ikajur-ma-ni
John-rel. Mary(abs) kiss-part.3sg./3sg.
help-because3sg./4sg.

'John kisses Mary because she helped him'
(John = him)

- e. Jaani-up Miuri kuni-gaa ikajur-magu
John-rel. Mary(abs) kiss-part.3sg./3sg.
help-because3sg./3sg.

'John kissed Mary because she helped him'
(John = or ≠ him)

- f. Miuri-up Jaani ikajug-aa Piita
ikaju-laur-ma-gu
Mary-rel. John(abs) help-part.3sg./3sg.
Peter(abs) help-past-because3sg./3sg.

'Mary helped John because he helped Peter'

Coreference can also be found marked on the agents of transitive adverbial clauses, as in (29a) and (29b), and the patients of transitive adverbial clauses, as in (29c) and (29d). Marking same reference on adverbial patients is often omitted in favour of the third person,³⁶ which can be interpreted as coreferent, or not, as in (29e) and (29f).³⁷ In (29e) the third person patient marker *-gu-* optionally refers to the agent of the matrix clause *Jaani*. With the addition of another participant, as in (29f), this option is

³⁶ My consultant generally would provide third person first when presented with adverbial clauses containing patients coreferent with either the agent or the theme of the matrix clause. He would readily switch to fourth person if it was suggested to him. Payne (1980) describes two different dialects of Yupik Eskimo: Kuskokwim, where patients show coreference, and Hooper Bay, where they do not. I assume that my consultant's dialect is like that of Hooper Bay with regard to fourth person, but give examples with patient coreference for illustrative purposes.

³⁷ Where either the theme of an intransitive adverbial clause or the agent of a transitive adverbial clause is coreferent with either the theme of an intransitive matrix clause, or the agent of a transitive matrix clause, fourth person is obligatory, i.e. third person is ungrammatical.

removed. The morpheme *-gu-* must obligatorily refer to Peter.

Fourth person agreement is found not only on adverbial clauses, but on possessives as well. Thus the fourth person markers in (30) show same reference between the possessor and the theme of the intransitive clause, and the agent of the transitive clause.

- (30) a. arnaq iglu-mi-nut tikit-tuq
 woman(abs) house-4poss.-all. arrive-part.3sg.

'She arrived at her house'

- b. arna-up pani-ni kunik-taa
 woman-rel. daughter-4poss. kiss-3sg./3sg.

'The woman kisses her daughter'

The crucial feature of fourth person is that it can never mark same reference between any agreement marker and the patient of a transitive clause, as shown by the fact that coreference with the patient can only be expressed by means of third person, as in (31).

- (31) a. Miuri-up Jaani kunik-paa qia-ngmat
 Mary-rel. John(abs) kiss-indic.3sg./3sg.
 cry-because3sg.

'Mary kissed John because he was crying'
 (John = or ≠ he)

- b. Jaani-up Miuri tikin-ma-gu uqa-qati-gi-giaq-paa
 John-rel. Mary arrive-when3sg./3sg.
 speak-companion-gi-begin-indic.3sg./3sg.

'When John came up to Mary, she began to
 speak to him'
 (Mary = or ≠ her)

- c. Jaani-up Miuri ikajug-aa Piita-up annir-magu
 John-rel. Mary(abs) help-part.3sg./3sg.
 Peter-rel. hurt-because3sg./3sg.

'John helped Mary because Peter hurt her'
 (Mary = or ≠ her)

- d. Jaaniup Piita kapi-jaa pilauta-a-nut
John-rel. Peter(abs) stab-part.3sg./3sg.
knife-3poss.-all.

'John stabbed Peter with his knife'
(Peter = or ≠ his)

Like their English glosses, the examples in (31) are ambiguous between an interpretation where they are coreferential with the patient, and one where they are disjoint in reference with the patient. They can never be interpreted as potentially coreferential with the agent, because, as mentioned above, such coreference must obligatorily be marked by fourth person.

That fourth person agreement is dependent on syntactic configuration, rather than thematic role, is shown by the fact that the patient subject of a passive construction serves as the antecedent of fourth person agreement, as shown in (32). In other words, fourth person agreement does not operate on the basis of some semantic notion of agent or actor.

- (32) a. Jaani kuni-gau-juq nuli-ar-mi-nit
John(abs) kiss-pass.part.3sg.
wife-poss4sg.-abl.

'John was kissed by his wife'
(John = his)

- b. Jaani kuni-gau-juq nuli-ar-mi-nit
imngi-lau-rami
John(abs) kiss-pass.part.3sg.
wife-poss4sg.-abl. sing-past-because4sg.

'John was kissed by his wife because he sang'
(John = his, he)

Bergsland (1962) and Woodbury (1975), (1981), and (1985a) cite the restriction on fourth person agreement, that is, that it can never mark coreference with a patient in a transitive clause, as evidence that the patient in a transitive clause has a grammatical status distinct from the agent of a transitive clause and the theme of an intransitive clause. In other words, they argue that there exists in Eskimo a notion of subject which

is based on a nominative-accusative pattern. Bergsland seems to assume that these facts argue for a nominative-accusative analysis of Eskimo. Woodbury (1975) and (1977) proposes that Eskimo must be analysed in a way that allows for both ergative-absolutive patterning, and nominative-accusative patterning. He argues that the rules themselves are marked for whether or not they operate in one system or another.³⁸ In order to make both the agent and the patient "available" for subjecthood, Woodbury posits that they are both governed by S in a flat structure, as discussed in Chapter 4, section 6.

The analysis of the transitive construction proposed in Chapter 5 can easily handle this criticism against the Nominative Hypothesis, since a crucial feature of this analysis is that the NP in relative case must move to a higher position as adjunct to IP in order to preserve its theta role and case, which are dependent on the adjacency of the nominal predicate. Note that even when the possessor is *pro*, and no case is assigned, it must move to the adjunct position. Though *pro* does not receive relative case, it must still be in a position to receive the possessor role. If it did not move, it would not receive a thematic role, which would constitute a violation of the Theta Criterion. Thus at the level of LF, where anaphoric relations are established,³⁹ the agent argument of a transitive construction, whether lexical or *pro*, will always be in a higher position in the clause than the absolutive argument, whether lexical or *pro*. When the matrix clause is intransitive, the highest argument is naturally the argument in absolutive case. This results in a natural grouping of agent of transitive clause with theme of

³⁸ He also proposes that there are rules which determine which system (ergative-absolutive or nominative-accusative) a particular rule of grammar will operate within. Moreover, he suggests that there are universal semantic factors underlying such meta-rules.

³⁹ Even if anaphoric relations were established at S-structure, the agent of the transitive clause would still be in the higher position, since we must assume that movement to I, and subsequent adjunction of the argument bearing relative case to IP must take place between D-structure and S-structure.

intransitive clause, i.e. a grouping resembling the notion of nominative-accusative subject.⁴⁰

That fourth person agreement must be explained on the basis of highest element in the matrix clause is exactly the type of explanation we expect to find when dealing with anaphoric elements.⁴¹ Let us now examine two analyses within the Government and Binding framework of Chomsky (1981) that have addressed some of the issues concerning fourth person in Eskimo.

6.3.1 Bok-Bennema (1985)

Bok-Bennema (1985, 7) claims that fourth person in Eskimo "is pro", i.e. is a null argument coindexed with agreement. From this assumption, she argues for the existence of an empty category which is both pronominal and a marked anaphor. It is pronominal because it cannot be bound within its own clause, as shown in (33).

(33) Jaani quviasuk-tuq Miuri-up irming-mani
John(abs) happy-part.3sg. Mary-rel. wash-
because-3sg./4sg.

'John is happy because Mary washed him'
(John = him)

In the example in (33), the fourth person agreement marker (which indicates that the patient of the adverbial clause is coreferential with the theme of the matrix clause) can never refer to the agent of its own clause, so that (33) cannot mean *'John is happy because Mary washed herself'.⁴²

⁴⁰ Woodbury (1977) observes that there is a regularity in Eskimo such that rules based on a nominative-accusative system are always concerned with indexing, while rules based on an ergative-absolutive system are concerned with case and agreement. This observation is explained in the present analysis by the fact that indexing relations operate at a later stage in the grammar.

⁴¹ This is under the assumption that all languages are configurational to the extent that there is no need for primitive notions of subject, and object.

⁴² This sentence would be *Jaani quviasuktuq Miuri (ingminik) irmingmat*. See discussion of the reflexive in Chapter 3, sections 2 and 3.

According to Bok-Bennema, fourth person is also a marked anaphor because the domain in which it is bound must be specified. She suggests that it be specified as the domain of indicative inflection, i.e., of the matrix clause. An unmarked anaphor is bound in its governing category (principle A of Chomsky's Binding Theory discussed in Chapter 1, section 2).

Bok-Bennema further argues that the fourth person in Eskimo is a marked pronominal anaphor as a result of two properties. That it is a marked anaphor derives from the fact that it agrees with one of a set of specific agreement markers that mark it as such. That it is a pronominal derives from the functional definition of empty categories given in Chomsky (1982), where a locally-determined empty category must be pronominal. Since agreement functions as a local determiner of fourth person, it is pronominal.

As stated above, Bok-Bennema's discussion of fourth person in Eskimo is centred around her assumption that it must be an empty category. That fourth person can involve a lexical argument, rather than an empty category is shown by the example in (34), where the relative case on *Jaani* shows it to be an argument of the adverbial clause, which is transitive, rather than the matrix clause, which is intransitive.

(34) *Jaani-up Miuri taku-ga-mi-uk igla-si-vuq*
 John-rel. Mary(abs) see-when-4sg./3sg.
 laugh-start-indic.3sg.

'When John saw Mary, he began to laugh'
 (John = he)

In (34) fourth person agreement is associated, not with an empty category pro, but with an overt lexical element *Jaani-up*. Proof that *Jaani-up* is not an argument of the matrix clause is provided by the fact that an intransitive predicate cannot assign relative case.

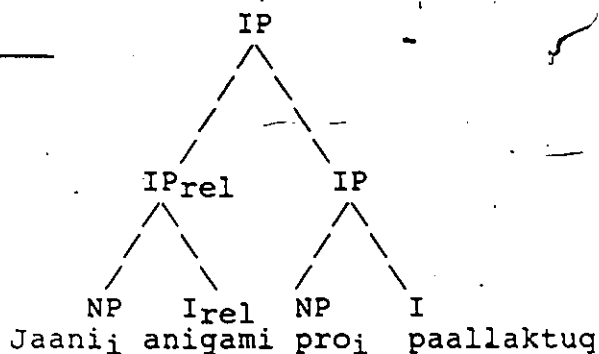
This means that any discussion of the anaphoric properties of fourth person must centre on agreement rather than the subject of that agreement. We would not

wish to state that the argument *Jaani-up* is an anaphor. It is only indirectly anaphoric, by virtue of being coindexed with an anaphoric agreement marker.

6.3.2 Finer (1984) and (1985)

The fact that fourth person in Eskimo is an agreement phenomenon rather than a property of an empty element is a main feature of the discussion of Eskimo in Finer (1984, 1985). This is because Finer's analysis is embedded within a universal treatment of what is called switch-reference. As Finer points out, languages with switch reference allow for a binding relation between elements where there is no relation of c-command. This is shown by the Eskimo example in (35a),⁴³ which is based on the example in (35b).

(35) a.



b. Jaani ani-ga-mi paallak-tug
 John(abs) go out-when-4sg.
 fall down-part.3sg.

'When John went outside, he fell down'

Note that in the English equivalent of (35), *he* may or may not refer to *John*, i.e. displays the properties of a pronominal.

The definition of c-command given in Chapter 1, section 2 states that for an element to c-command another element, every maximal projection that dominates the first element must dominate the second. It is clear that such a relation does not hold between the NP *Jaani* of the IP_{rel} and the *pro* of the matrix IP. The maximal project-

⁴³ This tree is based on the analysis of adverbial clause given in section 2, and differs from Finer's tree structures, which have COMP nodes.

ion that dominates the element *pro* is the first IP node, which does not dominate the IP_{rel} . Even if we were to accept a definition of *c-command* that allowed adjuncts to establish maximal projections, the maximal projection IP_{rel} intervenes between the two elements.

How is it then that the *pro* and *Jaani* are linked?⁴⁴ Finer argues persuasively that, although no direct link may be made between the two arguments in a switch-reference construction, there is nonetheless a principled way of linking them indirectly by means of agreement. Thus Finer's analysis focuses on agreement rather than on the arguments themselves. He argues that the agreement of the adverbial clause is related to the agreement of the matrix clause by means of A' to A' Binding (see Aoun 1986), which means that both elements involved are in non-argument positions, in this instance I. He further posits that a relation between the two clauses is established on the basis of the fact that the adverbial clause is temporally related to the matrix clause. This fact about Eskimo was discussed in section 2.

From this basis, Finer (1984) argues that the fourth person agreement marker in Eskimo is an A' anaphor, while the third person agreement marker is an A' pronominal. Finer explains the binding of all fourth person agreement outside of the governing category (IP_{rel}) by allowing the anaphor to search for an appropriate antecedent.

With regard to the fact that fourth person agreement can never bind an argument within its own clause (see (33) above), Finer proposes that fourth person patient agreement,⁴⁵ in addition to being an A' anaphor, is a referring expression with respect to A-Binding. This means that in terms of agreement, it is an anaphor, but in terms of

⁴⁴ Actually this brings up another issue. While the two elements are obviously linked by some sort of binding relation, they are not linked in the usual antecedent relation, where the reference of the antecedent determines the reference of the anaphor. In fact, examples such as (34) and (35) show the reverse, that is, the reference of the antecedent is determined by the reference of the anaphor.

⁴⁵ Actually, Finer calls it fourth person object agreement, since he is assuming a nominative-accusative analysis of Eskimo.

argument linking,⁴⁶ it is a referring expression. As a referring expression, any linking of fourth person within its own clause would result in a violation of Principle C of the Binding Theory, discussed in Chapter 1, section 2. In addition, Finer argues that, in dialects which obligatorily mark fourth person patient agreement, third person patient agreement must be a referring expression with respect to A-binding, since if it were merely a pronominal, it would be able to be coreferent with an argument in the matrix clause.⁴⁷

6.3.3 A Modified Analysis

Both Finer (1984) and (1985), and Bok-Bennema (1985) must ensure that fourth person in Eskimo involves some element which is both anaphoric outside its own clause and referential inside its own clause, and not vice-versa, i.e. anaphoric within its own clause and referential outside its own own clause. As we have seen, Bok-Bennema's means of explaining this is by the claim that the empty category *pro* must, by definition, be pronominal, while the agreement with which it is coindexed is anaphoric. Finer's means of producing the correct result is to claim that fourth person patient agreement (the only possible source of a Principle B or C violation) is on the one hand an anaphor with respect to non-argument binding, and on the other hand, a referring expression with respect to argument binding. The problem with Finer's solution is that it implies that the fourth person patient agreement morpheme must be lexically marked for a double role in the binding theory. That morphemes can be lexically marked for conflicting properties (anaphor and referent) is an unwelcome addition to universal grammar. From this point of view, Bok-Bennema's solution is to be preferred since the

⁴⁶ A positions are argument positions, while A' positions are non-argument positions.

⁴⁷ This line of reasoning poses a problem for Finer's claim that fourth person agreement is a referring expression with respect to A-Binding, since it should therefore be free in the expanded governing category as well. It would seem one of these claims must be modified.

two properties derive from altogether separate reasons, one functional, the other lexical. Bok-Bennema concentrates on the nature of *pro* as the source of the obligatory disjoint reference within the clause, which, as argued above is not correct, since fourth person agreement does not always involve *pro*.

A rather simple explanation of the referential properties of fourth person agreement with respect to its own clause can be found in the analysis of transitivity presented in Chapter 5. This is that transitivity in Eskimo involves inter-referential predication, which necessarily implies disjoint reference. The elements of an Eskimo transitive construction can no more be coreferential with each other than can those in a possessive construction, e.g. **John's himself*. The two arguments bearing the feature REF that participate in inter-referential predication are either names, lexical NPs, or *pro*. An argument which is an anaphor is not found in inter-referential predication because it does not bear the feature REF. As referring expressions, they automatically fall under either Conditions B or C or the Binding Theory, which states that they must be free in their governing category. There is no need for functional definitions of empty categories under this view. The fact that there is transitive agreement on an adverbial clause automatically implies that the two arguments of that clause are disjoint in reference. This explanation is supported by the fact that all reflexive constructions in Eskimo are intransitive, as discussed in Chapter 2, sections 2 and 3, and shown in (36).

- (36) a. Jaani ingmi-nik taku-vug
 John(abs) self-comit. see-indic.3sg.
 'John sees himself'
- b. *Jaaniup ingmi taku-jaa
 John-erg. self(abs) see-part.3sg./3sg.
 or
 *ingmi-up Jaani taku-jaa
 self-erg. John(abs) see-part.3sg./3sg.
 'John saw himself'
- c. Jaani-up ingmi-nik irmi-gaa
 John-rel. self-comit. wash-part.3sg./3sg.
 'John washed it by himself'

The only possible means of expressing that the agent and the patient of an action are coreferential is by means of the intransitive construction, as in (36a). The examples in (36b) are ungrammatical with a transitive verb accompanied by a reflexive pronoun in either absolutive or relative case. The example in (36c) can only mean that John washed something or someone other than himself. Thus both the obligatory disjoint reference in transitive clauses, and the intransitive form of the reflexive construction is predicted under an analysis of Eskimo transitivity as inter-referential predication. In a language like English, where transitivity results from government of the NP object by the verb, anaphors may occur which are bound in the clause, e.g. *John washed himself*.

Having established that the referential properties of fourth person agreement in a transitive clause derive from the particular nature of transitivity in Eskimo, we conclude that fourth person agreement is simply anaphoric. It remains to explain the reason that the anaphor relates only to the highest argument in the matrix clause.⁴⁸

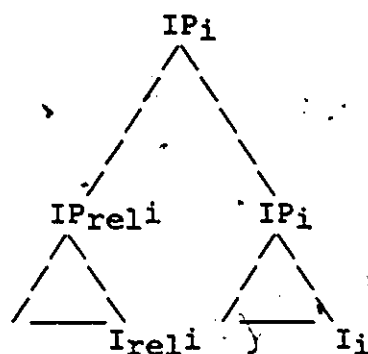
As mentioned above, Finer (1985, 47) points out that in most languages with switch reference, the switch-reference marker also denotes temporal dependency of the adverbial clause on the matrix clause.⁴⁹ He interprets this as evidence that these morphemes "clearly have a COMP-like quality." He further assumes that COMP and I form a discontinuous element which heads CP (or S'). In the analysis argued here, there is no COMP node. The dependency of the adverbial clause on the matrix clause derives from the semantics of the dependent moods (causative, conditional, etc.), which is morphologically marked by the relative marker following the I in the adverbial clause. We can interpret this dependency as a form of coindexing between the I of the

⁴⁸ Bok-Bennema does not discuss this question, which would seem to be a problem under the analysis that the object gets case from I, unless primitive grammatical relations are assumed.

⁴⁹ In point of fact, Finer considers Eskimo to be an exception to this generalization, since the same-subject marker (fourth person agreement) is morphologically distinct from the dependency marker.

adverbial clause and the matrix clause. This form of coindexing can be viewed as the reverse of subcategorization.⁵⁰ In the former, the dependent element coindexes the matrix clause, while in the latter, the matrix clause coindexes the complement clause (see Rivero and Sainz 1986). I will assume that the semantic dependency marker on the adverbial clause produces a coindexing relation between that clause and the matrix clause, as shown in (37).

(37)



Since I_{rel} is head of IP_{rel} , the entire clause bears this index. The index, which is a dependency marker is then linked to the clausal node IP which immediately dominates it. As head of the adjunct complex, I is also part of this chain of coindexation. The purpose of this coindexation is not to form an antecedent relation with the agreement between the two clauses. If this were the case, we would expect to find that fourth person agreement on the adverbial clause could take as an antecedent either the agent or the patient agreement of the matrix clause, since both are in I of the matrix clause at the level at which fourth person agreement is linked. Under this view, we would not be able to predict the ungrammaticality of (38).⁵¹

⁵⁰ Bouchard (1984) proposes a rule ASSUME CASE which reverses the directionality between the governor and the governee.

⁵¹ Actually, example (38) is ungrammatical with any reading. The fourth person indicates that the argument of the adverbial clause is identical in reference to the highest argument in the matrix clause. Since *Miuri* is the highest argument in the matrix clause, the sentence is anomalous with the reading where John = Mary. This may be a Principle C violation. The correct predicate for the gloss in (38) is *itirmat*.

(38) *Jaani itir-ami Miuri-up kuni-gaa
 John(abs) come in-when4sg. Mary-rel.
 kiss-part.3sg./3sg.

'When John came in Mary kissed him'
 (John = him)

Thus, agreement to agreement binding does not explain the observed asymmetry between the arguments of the transitive clause with respect to binding of fourth person.

Instead, I propose that fourth person agreement is A' to A binding,⁵² and that the asymmetry between the two arguments of the matrix clause results from the fact that the one argument is higher than the other.⁵³ The coindexation between the relative marker on the adverbial clause and the I of the matrix clause serves to void the barrierhood⁵⁴ of the IP_{rel}, and the IP with respect to government.⁵⁵ This effectively allows the agreement marker of the adverbial clause to seek an antecedent outside of its governing category. The coindexing allows it to search for an argument anywhere within IP. The first potential antecedent is the agent of a transitive clause, or the theme of an intransitive clause. This is the correct result.

A prediction of this analysis is that, where a coindexing relation is not made between the mood of the adverbial clause and the mood of the matrix clause, fourth person agreement cannot hold. This prediction turns out to be true, as is shown by the

⁵² After all, it is in the nature of agreement to form a relation with arguments.

⁵³ *Finer* avoids this problem under his assumption that Eskimo is a nominative-accusative language, and that object/verb agreement occurs prior to subject/VP agreement. This means that c-command will not hold between matrix object agreement and any argument in the adverbial clause. The analysis of Eskimo transitivity argued in this thesis does not allow for such an explanation. Agent agreement is assumed to take place prior to patient agreement, which accounts for the order of agreement. This would lead to the incorrect prediction that only the patient agreement of a transitive construction should be a potential binder of arguments in an adverbial clause.

⁵⁴ See *Rivero and Sainz (1986)* for a demonstration of how coindexation voids barrierhood in a number of languages.

⁵⁵ Note that this coindexation is uni-directional in that it goes from the dependency marker outwards. This does not permit the agreement of the matrix clause to seek an antecedent in the adverbial clause.

example in (39), where the matrix clause is a nominal clause. Recall (as stated in Chapter 5, section 5.3.1) that nominal clauses do not contain the node I.

- (39) a. Jaani ataata-ga anaana-m-nik
 nuliq-taar-mat/*ami
 John(abs) father-poss1sg
 mother-poss1sg-comit
 wife-acquire-because3sg./*4sg.

'John is my father because he married
 my mother' (John = he)

- b. Jaani giggigtaq-tuq anaana-m-nik
 nuliq-taar-ami
 John(abs) jumped up and down-part.3sg.
 mother-poss1sg.-comit
 wife-acquire-because4sg.

'John jumped up and down because he
 married my mother' (John = he)

The example in (39a) shows that coreference between an adverbial clause and a nominal clause can only be expressed by means of the pronominal third person. The anaphoric fourth person is ungrammatical. Compare (39a) with (39b), which shows anaphoric agreement between an adverbial clause and a regular clause. Example (39a) is evidence that the coindexing between the mood of the adverbial clause and the mood of the matrix clause is necessary to allow fourth person agreement to seek an antecedent outside its governing category.⁵⁶

As mentioned above, it is not my intention to give a complete accounting of the phenomenon of fourth person in Eskimo. Such a task is well beyond the scope of the present work. My goal has been to show that fourth person agreement does not pose a problem for the analysis of transitivity which is argued in this thesis. I believe I have shown this to be so. That the "possessed" noun of the transitive construction is required to move to I by the adjacency restriction (70) of Chapter 5 accounts for the fact that the relative argument moves to a higher position in the transitive construction only, a

⁵⁶ The example in (39a) is also predicted under Finer's analysis of fourth person as A' to A' binding, since the lack of I means there is no A' antecedent.

position in which it can serve as the antecedent of fourth person agreement. Moreover, it has been shown that the analysis of transitivity in Eskimo as inter-referential predication provides a natural explanation for the obligatory disjoint reference observed in the agreement markers of the transitive clause, even though one of the agreement markers is an anaphor.

6.4 Summary

In this chapter, I have addressed a number of aspects of Eskimo grammar which support the analysis of Eskimo transitivity argued in Chapter 5. It has been shown that that analysis provides a simple account of the facts of relative constructions in Eskimo. It has also been shown that other aspects of the grammar, such as the resemblance between duplex and adverbial clause agreement are not evidence against the nominalist position, as claimed by Bergsland (1962), but a natural consequence of the fact that they both involve agreement attaching to a relative marker, although under distinct circumstances. Finally, the most serious of the arguments against a nominalist analysis of transitivity in Eskimo, fourth person, has been explained by the necessity of the relative argument to move to a higher position in order to preserve its relation to the clause to which it is linked by inter-referential predication. In addition, the fact that fourth person patients or agents can never bind an antecedent within their own clause is a direct prediction of an analysis of transitivity that is based on inter-referential predication, but not of one based on the verb governing a direct object.

Chapter VII

FURTHER REMARKS

As mentioned in Chapter 1, there exists a tension between the goal of explanation based on a theory of linguistic universals, and the particular grammar of a language. Woodbury (1986a) points out that many Eskimo scholars have strived to present the language "in its own terms." In the preceding chapters, we have seen that this may be achieved without sacrificing explanation. The grammar of Eskimo presented in this thesis is a unique description of a language, and yet the terms of the description, predication, noun, verb, etc., are all from the terminology of universal grammar. Moreover, each of the syntactic and lexical processes mentioned are found in other languages. Starting from the simple assumption that Eskimo lacks the syntactic category V, we have seen that an account is provided for the similarity between Eskimo transitive clauses and possessive constructions, as well as the structure of relative constructions in that language. This analysis underscores the fact that transitivity must be treated as a series of interlocking properties, rather than a single phenomenon.

If the claim that predicates in Eskimo are a defective category is correct, we should find other instances in the grammar where an account will be provided on the basis of this same assumption. For example, it is a well-known fact about Eskimo that word-internal "transitivity", or what is known as noun-incorporation consists of a small fixed set of predicates, e.g. *-qaq-* 'have', *-u-* 'be', *-siuq-* 'hunt', etc.. Perhaps there is a commonality to their lexical entries which accounts for why they behave differently from other predicates. For example, one might speculate that they involve predicates

that do not assign the role goal, and thus cannot be linked to the transitive participle.¹ Related to this question is the requirement that this view of transitivity be integrated with all word-internal "syntax", e.g. causatives, etc., as described in Woodbury (1981) and (1986b).

Another issue which deserves further attention is the contrast in referentiality between intransitive and transitive predicate nominals. If this distinction is correct, we should find other instances where the two are distinguished on this basis.² Moreover, the status of the intransitive as both non-referential and nominal should be clarified.

One of the major claims of this thesis is that the direct object cannot be assigned an agent role. We have seen that the position which parallels direct object in languages like English is in fact word-internal in Eskimo. It would be interesting to examine this proposal in terms of first language acquisition. There has been little research in this area, with the exception of Fortescue (1985b).

While the grammar of the Eskimo language has been shown in general to be composed of well-established linguistic universals, one property has been introduced which is not a member of that set. This is the concept of semantic dependency.³ Semantic dependency was first introduced in Chapter 5 to partially explain the means by which the possessor receives its thematic role.⁴ Later, in Chapter 6, this concept was again brought into play to explain the temporal relation between the event of the adverbial clause and that of the matrix clause.⁵ It was suggested that semantic depen-

¹ It remains to investigate more closely the semantics of the incorporating morpheme *-siuq-* 'hunt', which appears to belie this generalization.

² We might also investigate whether this difference can be captured by the aspectual analyses proposed by Vendler (1967), etc., which often revolve around a notion of "definiteness".

³ Semantic dependency is not a new idea. What is perhaps new is the suggestion that it mirrors subcategorization.

⁴ Predication is the other crucial factor.

⁵ It might prove worthwhile to investigate an account of some of the switch-

dependency operates in the reverse manner as subcategorization. This idea is sketchy and needs both formal and empirical substantiation. It may well be that, like the nominal clause described by Woodbury (1986a), this is one of the aspects of Eskimo grammar which, rather than lending support to the set of linguistic universals, instead suggests one. Instead of a state of tension, we might characterize the relation between the grammar of a language and linguistic theory as that of symbiosis.

reference phenomena discussed in Finer (1984) and (1985) using this idea. Recall that Finer states that temporal dependency is characteristic of switch-reference.

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