

ON THE SEMANTICS OF THE GREENLANDIC ANTIPASSIVE  
AND RELATED CONSTRUCTIONS

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Abstract:

This study describes a new field method, suited for investigating scope relations — and other aspects of truth conditional meaning — with native speaker consultants who may speak no other language and have no background in linguistics or logic. This method revealed a surprising scope contrast between the antipassive and the ergative construction in Greenlandic Eskimo. The results of this field work are described in detail and a crosslinguistic scope generalization is proposed based on Greenlandic Eskimo, Basque, Polish, Russian, Finnish and English.

[In subsequent work the method described here was refined to avoid interference between minimally contrasting sentences. They should be presented separately, not together. For instance, suppose that (1) and (2) form a minimal pair, where (1) is ambiguous between readings *A* and *B*, and (2) can only mean *B*. That is, if (1) and (2) are presented separately (with unrelated questions in between), the pattern of judgements is (1) = *A, B* and (2) = \**A, B*. But if they are presented together, most consultants focus on the contrast — i.e., the pattern of judgments is (1) = *A, \*B* and (2) = \**A, B*. Fortunately for this particular study, this potential source of error turned out to be harmless. Using the refined method, I still got the same results.]

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1. INTRODUCTION

West Greenlandic Eskimo (WGE) is one of the languages with a so-called antipassive construction. Examples of antipassive sentences are given in (1b) and (2b), together with the corresponding transitive sentences in (1a) and (2a).<sup>1</sup>

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\* Several people have made important contributions to this study. For the data I thank my informants: Karen Recinella in Copenhagen; Hans Kristiansen, Enoch Skade, and Knud Knudsen in Ukkusissat; and Robert Petersen of Ilisimatusarfik in Nuuk. Their thoughtfulness, patience, and sense of humor made my semantic inquiries both interesting and pleasant. At the University of Texas at Austin I thank first of all Irene Heim, for teaching me semantics and for innumerable discussions about the WGE data in this article and related phenomena in other languages. The impact of those discussions on my thinking has been enormous. I have also received helpful comments, advice, or moral support from R. T. Harms, Hans Kamp, Ana Santisteban, C. S. Smith, A. C. Woodbury, and two anonymous reviewers for *IJAL*.

<sup>1</sup> The WGE examples are in modern standard orthography except that I ignore the allophonic distinction between *i* and *e*, and *u* and *o*, using just *i* and *u* throughout. The following abbreviations are used: E = ergative case, A = absolutive case, INS = instrumental case, AP = antipassive suffix.

(1a) *Jaakup ujarak tiguaa*  
*Jaaku-p ujarak tigu-a-a*  
 Jacob-E stone(A) take-TR.INDIC-3SG.E/3SG.A  
 ‘Jacob took stone.’

(1a) *Jaaku ujaqqamik tigusivuuq*  
*Jaaku ujarak-mik tigu-si-vu-q*  
 Jacob(A) stone-INS take-AP-INTR.INDIC-3SG.A  
 ‘Jacob took stone.’

(2a) *Jaakup puuq aavaa*  
*Jaaku-p puuq aa-va-a*  
 Jacob-E bag(A) go.to.get-TR.INDIC-3SG.E/3SG.A  
 ‘Jacob went to get bag.’

(2b) *Jaaku puumik aallirpuq*  
*Jaaku puuq-mik aa-llir-pu-q*  
 Jacob(A) bag-INS go.to.get-AP-INTR.INDIC-3SG.A  
 ‘Jacob went to get bag.’

The antipassive sentences are characterized by the instrumental case on the object and a detransitivizing, so-called antipassive suffix on the verb. The most common antipassive suffixes are *-si*, as in (1b), *-llir*, as in (2b), *-(ss)i*, and *-nnig*. According to the traditional analysis, originally proposed by Kleinschmidt (1851:55), these suffixes are purely syntactic formatives which make the verb intransitive without affecting its semantics. Furthermore, Woodbury (1975:27) and Fortescue (1984:86) claim that every verb selects its own antipassive suffix, so that the

relation between these suffixes is suppletive. In section 2.3, I challenge both of these traditional claims.

Sentences with instrumental object and no suffix on the intransitive form of the verb share the characteristic semantics of sentences with overt antipassive suffixes. I therefore gloss them as containing a  $-\emptyset$  antipassive suffix, as in:

- (3a) *Jaakup illu sanavaa*  
*Jaaku-p illu sana-va-a*  
 Jacob-E house(A) be.building-TR.INDIC-3SG.E/3SG.A  
 ‘Jacob is/was building house.’

- (3b) *Jaaku illumik sanavuq*  
*Jaaku illu-mik sana- $\emptyset$ -vu-q*  
 Jacob(A) house-INS be.building-AP-INTR.INDIC-3SG.A  
 ‘Jacob is/was building house.’

I have on purpose omitted the articles from the English translations of the WGE examples, because the choice of these articles is controversial. According to most scholars of Eskimo (Kleinschmidt 1851, Bergsland 1955, Woodbury 1975, Fortescue 1984, and Sadock 1984), the object of a transitive clause is definite, while its antipassive counterpart is indefinite. These authors would, for instance, gloss (3a) as ‘Jacob is/was building *the* house’ and (3b) as ‘Jacob is/was building *a* house’. Kalmár (1979) points out that the antipassive object can be a proper name, in conflict with the analysis of that object as indefinite. The alternative analysis he proposes does not resolve the conflict. He essentially reformulates the traditional definiteness analysis in terms of Halliday’s notions of ‘given’ and ‘new’ arguments in discourse. A ‘given’ argument is one which is ‘offered as recoverable

anaphorically or situationally’ (Kalmár 1979:77–78 and Halliday 1967:211). A ‘new’ argument is anything which is not ‘given’. In Kalmár’s proposal, the transitive object is claimed to be ‘given’, while the antipassive object is ‘new’. I shall not address this proposal any further because it is too vague to be tested. Another proposal which suffers from the same weakness was made by Johnson (1980). Her claim is that the transitive object is ‘foregrounded’ as well as definite. The antipassive object is claimed to be ‘backgrounded’. I have nothing further to say about these claims either and shall criticize only the traditional definite/indefinite analysis which is still widely accepted.

## 2. SOME PROBLEMS WITH THE TRADITIONAL ANALYSIS

### 2.1. *Antipassive object as indefinite*

It is quite common, in naturally occurring WGE discourse, to find antipassive objects whose phrase structure is quite unlike any of the indefinites recognized in the literature (e.g., Milsark 1977 and Barwise and Cooper 1981). Such objects include proper names (4), pronouns (5), and nouns modified by determiners such as ‘this’ or ‘all’ (6)–(7).

(4) *Jesusimik takuvuq / takusivuq / takunnippuq / takullirpuq*

*Jesus-mik taku-Ø-vu-q / taku-si-vu-q / taku-nnig-pu-q / taku-llir-pu-q*

Jesus-INS see-AP-INTR.INDIC-3SG.A

‘He saw Jesus.’

- (5) *Jaaku ilinnik suqutiginnippuq*  
*Jaaku illit-mik suqutigi-nnig-pu-q*  
 Jaaku(A) you-INS be.interested.in-AP-INTR.INDIC-3SG.A  
 ‘Jaaku is interested in you.’
- (6) *miiqqamik taassuminnga isumaginnissaagut*  
*miiraq-mik taassu-minnga isumagi-nnig-ssa-u-gut*  
 child-INS this-INS look.after-AP-FUT-INTR.INDIC-1PL.A  
 ‘We will look after this child.’
- (7) *atuartunik tamanik uqaluqatiginnissimavuq*  
*atuartu-nik tama-nik uqaluqatigi-nnig-sima-vu-q*  
 student-PL.INS all-PL.INS talk.with-AP-PRF-INTR.INDIC-3SG.A  
 ‘He has talked with all the students.’

Definite descriptions can also occur as objects of antipassive sentences.

- (8) *anguminik aallirpuq*  
*angut-mi-nik aa-llir-pu-q*  
 father-self’s-INS go.to.get-AP-INTR.INDIC-3SG.A  
 ‘He went to get self’s father.’

To maintain the analysis of antipassive objects as indefinite it would therefore be necessary either to generalize some notion of ‘indefiniteness’ to problematical objects, such as those in (4)–(8), or to give up that analysis as a general claim about antipassive objects. Indefiniteness would only be claimed for the objects of those antipassive sentences which do not contain any syntactic or other evidence to the contrary. The second approach is probably more feasible, but it introduces an

otherwise unmotivated split between antipassive objects. Why should the objects of (4)–(8) be treated differently from (1)–(3)? Unless an independent motivation can be found for this distinction, the analysis is suspect.

Further arguments against analyzing antipassive objects as indefinites are given in section 3, which is concerned with the semantics of these objects and of their transitive counterparts.

## 2.2. Transitive objects as definite

The phrase structure of transitive objects in WGE also does not support the traditional claim that they are definite. It is, for instance, quite possible for a transitive object to be an indefinite pronoun (9)–(10) or headed by an indefinite pronoun (11).

- (9) *kinaluunniit uqaluqatigisinnaavat*  
*kina=luunniit uqaluqatigi-sinnaa-va-t*  
 who(A)=ever talk.with-can-TR.INDIC-2SG.E/3SG.A  
 ‘You can talk with somebody / anybody.’

- (10) *arlaat tiguniaruk*  
*arlaat tigu-niar-uk*  
 one(A).of.them take-IMPER-2SG.E/3SG.A  
 ‘Take one of them!’

- (11) *illut taakkua ilaat nuannarigaluarpakka*  
 [*illut taakkua ilaat*] *nuannari-galuar-pa-kka*  
 [houses these some.of.them] like-actually-TR.INDIC-1SG.E/3PL.A  
 ‘I actually like some of these houses.’



Another problem for the traditional analysis of transitive objects as definite and antipassive objects as indefinite is that in discourse contexts where English and other languages with articles would clearly require an indefinite form of the object, in WGE one often finds the transitive (absolutive) form instead of the expected antipassive (instrumental). Consider, for instance, chapter 21, lines 18–19, of the Gospel according to Matthew in the New Testament: ‘Next morning on his way to the city he felt hungry; and seeing *a fig-tree* at the road side he went up to it, etc.’ In the WGE translation of this passage, the clause containing the indefinite is transitive not antipassive:

- (12) *fiiqussuarlu aqqusirnup sanianiittuq*  
 [*fiiqussuaq=lu aqqusirnup saniani=it-tuq*]  
 [fig.tree(A)=and of.road at.its.side=be-INTR.PRT(A)]  
*takugamiuk*  
*taku-ga-miuk*  
 see-COMP-3R.SG.E/3SG.A  
 ‘...and as he saw [fig-tree(A) standing at the side of the road], etc.’<sup>2</sup>

An antipassive version of this clause would have been as in:

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<sup>2</sup> ‘-’ indicates a morpheme boundary within a WGE word, ‘=’ a clitic boundary. Morphological analysis is carried out only to the extent that it is relevant for this article.

- (13) *fiiqussuarmillu aqquisirnup sanianiittumik*  
 [fiiqussuaq-mik=lu aqquisirnup saniani=it-tuq-mik]  
 [fig.tree-INS=and of.road at.its.side=be-INTR.PRT-INS]  
*takugami*  
*taku-Ø-ga-mi*  
 see-AP-COMP-3R.SG.A  
 ‘...and as he saw [fig-tree(INS) standing at the side of the road], etc’

The use of the transitive, rather than the antipassive, object for a clearly indefinite noun phrase is also common in native WGE discourse which does not involve translation.

### 2.3. Antipassive suffixes

As already mentioned, the antipassive suffixes traditionally have been thought of as suppletive syntactic formatives that have no effect on the semantics of the verb.

There is clear evidence that the suffixes are not suppletive but are in fact different morphemes. My informant accepted many verbs with each of the commonly occurring antipassive suffixes. For instance, *tusar-* ‘hear’ can take any one of the five commonly occurring antipassives:  $-\emptyset$  yields *tusarpuq*; *-si*, *tusarsivuq*; *-llir*, *tusarlirpuq*; *-(ss)i*, *tusaavuq*; and *-nnig*, *tusarnippuq*. The same holds for *qinir-* ‘look around for’ which likewise has five antipassive forms: *qinirpuq*, *qinirsivuq*, *qinirlirpuq*, *qiniivuq*, and *qinirnippuq*. Another example is *naammattuur-* ‘come across, meet’, for which we get *naammattuurpuq*, *naammattuursivuq*, *naammattuurlirpuq*, *naammattuuivuq*, and *naammattuurnippuq*. Most WGE verbs accept all but one or two antipassive suffixes. The suffix most likely to be rejected is *-llir*. An example of a verb that accepts all antipassive

suffixes except *-llir* is *malig-* ‘follow’, which has four antipassives: *malippuq*, *malissivuq*, (*\*malillirpuq*), *maliivuq*, and *malinnippuq*. The verb *tuqut-* ‘kill’ has three antipassives: *tuqutsivuq*, *tuqussivuq*, and *tuqunnippuq*. The *-llir* antipassive is ungrammatical (*\*tuqullirpuq*), and the  $-\emptyset$  form (*tuquppuq*) is interpreted not as antipassive ‘kill (something)’ but as reflexive ‘kill oneself’. In general, it is an exception rather than the rule that a verbal stem is incompatible with some antipassive suffix. This clearly shows that we are not dealing with suppletion but with separate suffixes.

There is also evidence that these suffixes in fact do affect the semantics of the verb, for instance, its aspect. My data on aspect are not sufficiently systematic to warrant any firm conclusions, but tentatively I propose the following analysis.

The suffixes *-si*, *-(ss)i*, and *-nnig* mark imperfective aspects of some sort. For instance, with an accomplishment verb like *tuqut-* ‘kill’, the transitive form entails that the patient is dead, whereas the *-si*, *-(ss)i*, and *-nnig* antipassives are compatible with the victim being almost but not quite dead yet. Similarly, for the verb *iqqut-* ‘bring inside’, the transitive form entails that the agent has come in with the patient, while for the *-(ss)i* antipassive my informants suggested a situation with a double door to the house (e.g., for better insulation), and that the agent has come in through the outer door but not yet through the inner one.

Another effect of these three suffixes is that they allow a frequentative interpretation with verbs whose transitive form obligatorily refers to just one event.<sup>3</sup>

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<sup>3</sup> To make a single-event verb frequentative, an explicit frequentative suffix such as *-tar* has to be added to the stem. This suffix does not affect the transitivity of the verb. For instance, (14a) is ungrammatical, while (i) is acceptable:

For instance, the transitive form of *malig-* ‘follow’ or *atur-* ‘use’ is ungrammatical with frequentative specifiers such as ‘every day’ or ‘several times’. The *-si*, *-(ss)i*, and *-nnig* antipassives of these verbs are acceptable with such specifiers.

- (14a) \* *ullut tamaasa Jaaku malippaa*  
*ullut tamaasa Jaaku malig-pa-a*  
 days all Jaaku(A) follow-TR.INDIC-3SG.E/3SG.A  
 (‘He followed Jacob every day.’)
- (14b) *ullut tamaasa Jaakumik malissivuuq / maliivuuq / malinnippuuq*  
*ullut tamaasa Jaaku-mik malig-si / -(ss)i / -nnig-pu-q*  
 days all Jaaku-INS follow-AP-INTR.INDIC-3SG.A  
 ‘He followed Jacob every day.’
- (15a) \* *qassiriarluni atuagaq taanna aturpaa*  
*qassiriarluni atuagaq taanna atur-pa-a*  
 several.times book(A) this(A) use-TR.INDIC-3SG.E/3SG.A  
 (‘He used this book several times.’)
- (15b) *qassiriarluni atuakkamik taassuminnga atursivuuq / atuivuuq / aturnippuuq*  
*qassiriarluni atuagaq-mik taassu-minnga atur-si / -(ss)i / -nnig-pu-q*  
 several.times book-INS this-INS use-AP-INTR.INDIC-3SG.A  
 ‘He used this book several times.’

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- (i) *ullut tamaasa Jaaku malittarpaa.*  
*ullut tamaasa Jaaku malig-tar-pa-a*  
 days all Jacob(A) follow-HAB-TR.INDIC-3SG.E/3SG.A  
 ‘He followed Jacob every day.’

The *-llir* antipassive probably marks some kind of inceptive aspect. One of the fully productive inceptive suffixes in WGE is *-lir*, illustrated in:

- (16) *Jaaku malilirpaa*  
*Jaaku malig-lir-pa-a*  
 Jacob(A) follow-begin-TR.INDIC-3SG.E/3SG.A  
 ‘He began to follow Jacob.’

The language also has a semiproductive morphological process, involving consonant gemination in verbs, which marks progressive aspect of those verbs.

- (17a) *qaamavuq* ‘be light’ (e.g., day, color)  
*qaammarpuq* ‘be in the process of getting light’ (e.g., days in the spring after winter darkness)
- (17b) *saamavuq* ‘be kind, gentle’  
*saammarpuq* ‘calm down after a quarrel or after having been angry’

My tentative hypothesis is that the antipassive *-llir* is a progressive form of the inceptive *-lir*. It would then mean roughly ‘be just beginning to’. Some of my informant’s semantic intuitions about *-llir* antipassives support this interpretation. For example:

- (18a) *atuagaq taanna aturpaa*  
*atuagaq taa-nna atur-pa-a*  
 book(A) this-SG.A use-TR.INDIC-3SG.E/3SG.A  
 ‘He used / is using this book.’

- (18b) *atuakkamik taassuminnga aturlirpuq*  
*atuagaq-mik taa-ssuminnga atur-llir-pu-q*  
 book-INS this-SG.INS use-just.beginning-INTR.INDIC-3SG.A  
 ‘He’s just now asking whether he can use this book.’

- (19a) *uqaasiq taanna ilisimavaa*  
*uqaasiq taa-nna ilisima-va-a*  
 word(A) this-SG.A know-TR.INDIC-3SG.E/3SG.A  
 ‘He knows this word (has known it for a while).’

- (19b) *uqaatsimik taassuminnga ilisimallirpuq*  
*uqaasiq-mik taa-ssuminnga ilisima-llir-pu-q*  
 word-INS this-SG.INS know-just.beginning-INTR.INDIC-3SG.A  
 ‘He knows this word (has just acquired it).’

The antipassive *-llir* is a single-event suffix. It is incompatible with frequentative specifiers such as ‘every day’.

- (20) \* *ullut tamaasa atuakkamik taassuminnga aturlirpuq*  
*ullut tamaasa atuagaq-mik taa-ssuminnga atur-llir-pu-q*  
 days all book-INS this-SG.INS use-*llir*-INTR.INDIC-3SG.A  
 (‘Every day he asks whether he can use this book’.)

Finally, there is some evidence that the antipassive *-Ø* is also an imperfective aspect marker. For instance, the verb *sana-* ‘build’ can be interpreted either as an accomplishment or as an activity in its transitive form but only as an activity in its *-Ø* antipassive form.

(21a) *Jaakup illu taanna sanavaa*  
*Jaaku-p illu taa-nna sana-va-a*  
 Jacob-E house(A) this-SG.A build-TR.INDIC-3SG.E/3SG.A  
 ‘Jacob build / was building / is building this house (may but need not have finished).’

(21b) *Jaaku illumik taassuminnga sanavuuq*  
*Jaaku illu-mik taa-ssuminnga sana-Ø-va-a*  
 Jacob(A) house-INS this-SG.INS build-AP-INTR.INDIC-3SG.A  
 ‘Jacob was building / is building this house (has not finished yet).’<sup>4</sup>

Let me summarize the problems that have been pointed out in sections 2.1–2.3 for the traditional analysis of the WGE antipassive. First, the phrase structure of object arguments in WGE is not constrained in ways that would be expected if the antipassive object was necessarily indefinite and its transitive counterpart definite. Any noun phrase in WGE, whether weak or strong in Milsark’s sense, can be the object of an antipassive or transitive sentence. Second, transitive formulation is often used in WGE discourse contexts which clearly show that the object is indefinite. According to the traditional analysis, an antipassive formulation would

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<sup>4</sup> At first sight it might seem that no difference in aspect needs to be posited between the transitive verb in (21a) and its -Ø antipassive form in (21b). Instead, one could say that the instrumental noun phrase is obligatorily interpreted as partitive, i.e., ‘some of this house’ in (21b). Note, however, that in other antipassive sentences we have to allow the instrumental NP to refer to the whole object, not just some part of it. For instance, in (8), the agent fetches all of his father, not just a piece. To account for the contrast between (21a) and (21b) it is therefore necessary to assume a difference in aspect.

be expected in those contexts. Third, the claim that the antipassive suffixes are suppletive is incorrect. They are separate morphemes, not suppletive forms of one morpheme. Finally, it is not true that these suffixes affect only the transitivity but not the semantics of the verb. They affect, for example, the aspect of the verb. This is of interest because there is evidence that imperfective, inceptive, and frequentative aspect markers can detransitivize verbs also in other, genetically unrelated languages, such as Finnish (Raible 1976) and Polish (Bittner, forthcoming).

### 3. SCOPE ANALYSIS

Although the antipassive suffixes are separate morphemes, morphosyntactically and semantically they form a natural class. Their characteristic morphosyntax is that they combine with transitive verbal bases, making them intransitive, and the object argument of the detransitivized verb gets the instrumental case. Within the WGE verb, the antipassive suffixes are constrained to occur before suffixes corresponding to sentential operators such as negation (22), tense and aspect (23)–(24), modals of necessity and possibility (expressed as suffixes in WGE) (25), and other mood operators, such as the conditional, interrogative, imperative, and contingent, which in WGE are part of the obligatory verbal inflection. No suffix in WGE, in particular no antipassive suffix, can follow the mood part of the inflection (26)–(27).

- (22a) *tusarsinnqilaq / tusarlinnqilaq / tusaannqilaq / tusarninnqilaq*  
*tusar-si / llir / (ss)i / nnig-nngit-la-q*  
 hear-AP-NEG-NEG.INDIC-3SG.A  
 ‘He didn’t hear (INS).’



- (22b) \**tusanngitsivuuq* / \**tusanngillirpuq* / \**tusanngissivuuq* / \**tusannginnippuuq*  
*tusar-nngit-si / llir / (ss)i / nnig-pu-q*  
 hear-NEG-AP-INTR.INDIC-3SG.A
- (22c) \**tusanngitsilaaq* / \**tuanngillirlaaq* / \**tusanngissilaaq* / \**tusannginnillaaq*  
*tusar-nngit-si / llir / (ss)i / nnig-la-q*  
 hear-NEG-AP-NEG.INDIC-3SG.A
- (23a) *tusarsissaaq* / *tusarlissaaq* / *tusaassaaq* / *tusarnissaaq*  
*tusar-si / llir / (ss)i / nnig-ssa-pu-q*  
 hear-AP-FUT-INTR.INDIC-3SG.A  
 ‘He will hear (INS).’
- (23b) \**tusassasivuuq* / \**tusassallirpuq* / \**tusassasivuuq* / \**tusassannippuuq*  
*tusar-ssa-si / llir / (ss)i / nnig-pu-q*  
 hear-FUT-AP-INTR.INDIC-3SG.A
- (24a) *tusarsisimavuuq* / *tusarlirsimavuuq* / *tusaasimavuuq* / *tusarnissimavuuq*  
*tusar-si / llir / (ss)i / nnig-sima-pu-q*  
 hear-AP-PRF-INTR.INDIC-3SG.A  
 ‘He has heard (INS).’
- (24b) \**tusarsimasivuuq* / \**tusarsimallirpuq* / \**tusarsimasivuuq* / \**tusarsimannippuuq*  
*tusar-sima-si / llir / (ss)i / nnig-pu-q*  
 hear-PRF-AP-INTR.INDIC-3SG.A

- (25a) *tusarsisinnaavuq / tusarlirsinnaavuq / tusaasinnaavuq / tusarnissinnaavuq*  
*tusar-si / llir / (ss)i / nnig-sinnaa-pu-q*  
 hear-AP-can-INTR.INDIC-3SG.A  
 ‘He can hear (INS).’
- (25b) *\*tusarsinnaasivuq / \*tusarsinnaallirpuq / \*tusarsinnaasivuq / \*tusarsinnaannippuq*  
*tusar-sinnaa-si / llir / (ss)i / nnig-pu-q*  
 hear-can-AP-INTR.INDIC-3SG.A
- (25a) *tusarsiguni / tusarliruni / tusaaguni / tusarnikkuni*  
*tusar-si / llir / (ss)i / nnig-ku-ni*  
 hear-AP-COND-3SG.A  
 ‘If he hears (INS), ....’
- (25b) *\*tususini / \*tusalirini / \*tususini / \*tusalinnini*  
*tusar-ku-si / llir / (ss)i / nnig-ni*  
 hear-COND-AP-3SG.A
- (26a) *tusarsivit / tusarlirpit / tusaavit / tusarnippit*  
*tusar-si / llir / (ss)i / nnig-pi-t*  
 hear-AP-INTERROG-2SG.A  
 ‘Did you hear (INS)?’
- (26b) *\*tusarpisit / \*tusarpillirit / \*tusarpisit / \*tusarpinnit*  
*tusar-pi-si / llir / (ss)i / nnig-t*  
 hear-INTERROG-AP-2SG.A

The distributional constraint that the antipassive suffixes have to occur before all the (other) sentential operators in WGE follows also from the information given in

Fortescue (1980), although he does not state the generalization in this way. I shall assume that the  $-\emptyset$  antipassive suffix is subject to the same distributional constraint as overt antipassive suffixes.

The order of suffixes in WGE indicates their scope. A suffix has scope over everything to the left in the same word. (Though see Fortescue 1980 for a different and more complex analysis.) For instance, in the examples below, the inceptive *-lir* has scope over the modal of necessity *-tariaqar* in (28a) but is within the scope of that modal in (28b).<sup>5</sup>

(28a) *atuartariaqalirpuq*  
 [atuar-tariaqar]-lir-pu-q  
 [study-have.to]-begin-INTR.INDIC-3SG.A  
 ‘He began to have to study.’

(28b) *atualirtariaqarpuq*  
 [atuar-lir]-tariaqar-pu-q  
 [study-begin]-have.to-INTR.INDIC-3SG.A  
 ‘He had to begin to study.’

My analysis of the characteristic semantic contrasts between antipassive sentences (with any antipassive suffix) and the corresponding transitive sentences in WGE is an extension of this general observation about the morphology of the language. My claim is that the antipassive object always takes narrow scope with

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<sup>5</sup> For readers unfamiliar with Eskimo it may be helpful to note that by reading the morpheme-by-morpheme glosses of WGE words from right to left they can get an intelligible, if not always colloquial, translation into English.

respect to sentential operators such as negation, tense and aspect, modals, etc., that is, the same class of operators which, if expressed by suffixes obligatorily follow and hence take scope over the antipassive suffix. My claim is not tied to suffixal morphology. If a sentential operator is expressed by an independent adverbial phrase, the antipassive object also takes narrow scope. It also takes narrow scope relative to world-creating predicates, such as ‘believe’, ‘say that’, ‘look for’, etc., expressed by verbal bases or suffixes immediately preceding the antipassive suffix. By contrast, the transitive object obligatorily takes wide scope in the above contexts, that is, relative to sentential operators and world-creating predicates.

When the operators covered by the above scope claims are expressed by suffixes, then one way of looking at my claims is that the antipassive morpheme allows the operator suffixes to extend their scope beyond the word boundaries of the verb and take scope over the antipassive object in the instrumental case. Transitive verbs, on the other hand, are always scope islands. The scope of any sentential operators and world-creating predicates contained in those possibly complex verbs is limited to the verb only, excluding the transitive object in the absolutive case outside the verb.

The scope difference which I am claiming is illustrated for a modal of necessity in (29) and for a world-creating predicate (‘believe’) in (30).

- (29a)    *atuartut*    *ilaat*    *ikiurtariaqarpara*  
           *atuartut*    *ilaat*    *[ikiur]-tariaqar-pa-ra*  
           of.students one.of.them(A) [help]-must-TR.INDIC-1SG.E/3SG.A  
           ‘I must help one of the students.’  
           ≡  $\exists x[x \text{ is one of the students} \ \& \ \textit{it is necessary that} \ (\text{I help } x)]$

- (29b) *atuartut ilaannik ikiuisariaqarpunga*  
 [atuartut ilaat-mik ikiur-(ss)i]-tariaqar-pu-nga  
 [of.students one.of.them-INS help-AP]-must-INTR.INDIC-1SG.A  
 ‘I must help one of the students.’  
 ≡ *it is necessary that* ( $\exists x$ [*x* is one of the students & I help *x*])
- (30a) *Jaakup siumukkurmiuq ajugaassasuraa*  
*Jaaku-p simukkurmiuq [ajugaa-ssa]-suri-pa-a*  
 Jaaku-E member.of.*Siumut*(A) [win-FUT]-believe-TR.INDIC-3SG.E/3SG.A  
 ‘Jacob believes that member of *Siumut* will win.’  
 ≡  $\exists x$ [*x* is a member of *Siumut* & Jacob believes that (*x* will win)]
- (30b) *Jaaku siumukkurmiumik ajugaassasurinnippuq*  
*Jaaku [simukkurmiuq-mik ajugaa-ssa]-suri-nnig-pu-q*  
 Jaaku(A) [member.of.*Siumut*-INS win-FUT]-believe-AP-INTR.INDIC-3SG.A  
 ‘Jacob believes that member of *Siumut* will win.’  
 ≡ Jacob believes that ( $\exists x$ [*x* is a member of *Siumut* & *x* will win])

Note that the traditional analysis in terms of definiteness would have nothing to say about the contrast between the transitive sentence in (29a) and the antipassive in (29b). The scope analysis, on the other hand, makes a clear semantic prediction which I have tested with a native informant and found to be correct.

Example (30) illustrates one of the many contexts where the definiteness analysis and the scope analysis make similar but not identical predictions. Translating the common NP object ‘member of *Siumut*’, embedded under ‘believe’, in the (a) sentence as definite would give effectively wide scope to that object. This much is in agreement with the scope analysis and with the informant’s intuitions.

But it would also carry the presupposition, appropriate for English definites but not for WGE absolutes, that the relevant member of *Siumut* is already familiar to the listener. In WGE, the transitive sentence (30a) can also be used if the listener has no previous knowledge of the *Siumut* member referred to by the absolute object (cf. the passage from the New Testament in example (12)).

As for the antipassive (30b) sentence, translating the instrumental object as indefinite would give a strong preference for narrow scope readings, again in approximate agreement with the scope analysis and with the facts of WGE. The English translation with the indefinite object would in fact have two narrow scope readings — one represented by the rough logical translation in (30b), and one with the object getting still narrower scope, inside the future operator, as in:

- (31) Jacob *believes* that (it will be the case that  
 $\exists x[x \text{ is a member of } Siumut \ \& \ x \text{ wins}]$ )

The difference between the two narrow scope readings, (30b) and (31), is that in (30b) Jacob believes that there already is at least one member in the *Siumut* party and that one of those already existing members will be the winner. In (31), on the other hand, *Siumut* could be a brand-new party with no members at the time of speaking. Jacob's belief is that, at some future time, the party will have at least one member and that one of those future members will win. The English sentence *Jacob believes that a member of Siumut will win* allows both of these narrow scope readings. Both of them would also be allowed by the scope analysis. For (30b), the world-creating predicate immediately to the left of the antipassive suffix *-nnig* is *-suri* 'believe'. For (31), it would be the complex predicate *ajugaa-ssa-suri-* 'believe to win in the future'. I have only tested that the reading in (30b) is available for this particular antipassive sentence. The readings obtained for other antipassives, which

I am about to present, suggest that the extra-narrow scope reading in (31) should also be possible. For the sentence in (30b) then, the traditional analysis of antipassive objects as indefinite would make predictions similar to the scope analysis.

It is, however, by no means always true that the definiteness analysis and the scope analysis agree in their scope predictions. For instance, when the subject of the clause embedded under ‘believe’ is not a common noun as in (30) but a definite description as in (32), the predictions are quite different.

(32) Jacob *believes* that the president of the United States will always be a Republican.

A.  $\exists x[x$  is the president of the United States

& Jacob *believes* that ( $x$  will always be a Republican)]

B. Jacob *believes* that (it will always be the case that

$\exists x[x$  is the president of the United States &  $x$  is a Republican])

The English definite NP, in contexts such as (32), has two readings. One is the so-called referential reading. It is semantically equivalent to giving the definite description ‘the president of the United States’ wide scope with respect to the world-creating predicate ‘believe’, as in the logical translation (32A). That is, there is a particular person who is currently the president of the United States (i.e., Mr. Reagan), and Jacob believes that that person will always be a Republican, even when he no longer is the president. The second reading of the definite description in (32) is called attributive (Donnellan 1966). It amounts to giving the definite NP narrow scope with respect to ‘believe’ and to the future operator ‘will’, as in the logical translation (32B). On this reading, Jacob’s belief is not about a particular person but about all the future presidents of the United States. Jacob believes that

whoever will be the president at some time in the future, that person at that time will be a Republican. This reading does not entail anything about the political affiliation of that person at times when (s)he is not the president.

If the traditional definiteness analysis is correct, then the WGE equivalent of (32) should be transitive, as in:

- (33) *Jaakup Amerikamiut naalakkirsuisunut siulittaasuq*  
*Jaaku-p* [Amerikamiut naalakkirsuisunut siulittaasuq]  
 Jacob-E [of.Americans for.their.government leader(A)]  
*Republikaniujuaannassasuraa.*  
*Republikani-u-juaanna-ssa-suri-pa-a*  
 Republican-be-continuously-FUT-believe-TR.INDIC-3SG.E/3SG.A  
 Lit. ‘Jacob believes(TR) that leader(A) of American government  
 (i.e., the president) will always be a Republican.’

The readings of the WGE sentence in (33) should be just like for the English sentence in (32), that is, both wide and narrow scope interpretation of the definite description should be possible.

(34) Predicted by the definiteness analysis:

- (33) = *A, B*  
 A.  $\exists x$ [*x* is the president of the United States  
 & Jacob *believes* that *x* will always be a Republican]  
 B. Jacob *believes* that it will always be the case that  
 $\exists x$ [*x* is the president of the United States & *x* is a Republican]

By contrast, the scope analysis predicts that only the wide scope reading (A) will be available for the transitive WGE sentence in (33).



(35) Predicted by the scope analysis:

(33) =  $A, *B$ ,

where  $A$  and  $B$  are as in (34).

According to that analysis, an antipassive form of the sentence (e.g., (36)) must be used to render the narrow scope interpretation (34b).

(36) *Jaaku Amerikamiut naalakkirsuisunut siulittaasumik*

*Jaaku [Amerikamiut naalakkirsuisunut siulittaasuq-mik]*

Jacob(A) [of.Americans for.their.government leader-INS]

*Republikaniujuaannasurinnippuq.*

*Republikani-u-juaanna-ssa-suri-nnig-pu-q*

Republican-be-continuously-FUT-believe-AP-INTR.INDIC-3SG.A

Lit. 'Jacob believes(AP) that leader(INS) of American government

(i.e., the president) will always be a Republican.'

Before I present systematic evidence for the scope analysis, a word is in order about the elicitation methods. Most of the data were collected during my fieldwork in Copenhagen in July and August 1986. My informant was a woman in her late thirties, born and raised in the Ummannaq district of West Greenland. In addition to her native WGE she could speak Danish, Italian, English and German. Although we spoke only in WGE during the elicitation sessions, her rich language background may have contributed to the unusual acuity of her semantic intuitions and her willingness to think about her language from unconventional points of view. Otherwise, she was not a trained linguist, just an intelligent and articulate person.

During the elicitation sessions, I would present her with two sentences at a time — an antipassive and the corresponding transitive. The sentences were written down in standard WGE orthography, and the informant was invited to correct any mistakes. She would then be asked, in WGE, whether she perceived any semantic difference between them. Typically, the answer was no, or some vague comment, but occasionally this question led to unexpected and interesting data which I discuss elsewhere (Bittner, forthcoming). After these preliminary questions, the informant was presented with several scenarios (*A*, *B*, *C*, etc.) designed to distinguish between wide and narrow scope readings. For instance, for the transitive and the antipassive equivalents of ‘I have to help one of the students’ in (29), the ‘wide scope’ scenario was that there is some particular student, say Suulut, who has problems and I have to help him. The ‘narrow scope’ scenario was that all the students have problems but I only have to help one of them, any old one — could be Suulut, or Peter, or Jacob, whoever. As long as I help one I have done my share; the other teachers will take care of the rest. The scenarios were explained verbally in WGE and briefly written down in WGE to help the informant focus on the relevant differences between them. For the sentences in (29), my record is as in (37) below. For the convenience of the readers unfamiliar with WGE I provide English translations, but these were not included during the elicitation sessions to avoid irrelevant bias in the data. Care was of course taken not to use the test sentences in the description of the scenarios — another potential source of bias.

(37a) *Atuartut ilaat ikiurtariaqarpara.* = *A*, \**B*

‘I have to help(TR) one(A) of the students.’

(37b) *Atuartut ilaannik ikiuisariaqarpunga.* = *A*, *B*

‘I have to help(AP) one(INS) of the students.’

- A. *atuartuq aalajangirsimasuq, suurlu Suulut*  
 ‘fixed student, for instance, Suulut’
- B. *atuartuq kinaluunniit, aalajangirsimanngitsuq*  
 ‘any old student, not fixed’

I would then for each sentence and each scenario ask, still in WGE, ‘If this is what I have in mind, can I use this sentence?’.<sup>6</sup> If the informant seemed uncertain, the scenarios would be described again at this point and the sentence repeated. A sample of responses is given in (37). Either sentence can be used for scenario A; only the antipassive can be used for scenario B, and that scenario represents that preferred reading of the antipassive sentence.

The fact that the transitive sentence is compatible only with scenario A, but not with B, clearly shows that the transitive object must take wide scope with respect to the modal of necessity *-tariaqar*. Since the antipassive is compatible with scenario B, the antipassive object must be allowed to take narrow scope with respect to that modal. Whether it can also take wide scope cannot be determined from the data in (37), because scenario A could be seen as a special case of the narrow scope reading.<sup>7</sup>

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<sup>6</sup> In WGE, e.g., ‘*A-tut isumaqartinniarukku, (1) atursinnaavara?*’

<sup>7</sup> Very roughly, the logical analysis of the wide scope interpretation is that there is some student such that, in every possible world in which I fulfill my obligations, I help that student. In the narrow scope interpretation, it is only required that, in every possible world in which I fulfill my obligations, there be some student or other whom I help. It does not have to be the same student in every one of those worlds, but it could of course happen to be the same student. In that special case, the narrow scope interpretation corresponds to scenario A, just like the wide scope

Some of the data come from my fieldwork in Ukkusissat, a small village in the Uummannaq district of West Greenland, where I spent two years 1982–84 as a schoolteacher. There, I worked mainly with three informants, all monolingual and all hunters, aged from about thirty to sixty. At that time, I used a less sophisticated version of the elicitation method described above but obtained data compatible with my findings in Copenhagen. Finally, a few of the examples were obtained through correspondence with a native WGE linguist.

In the remainder of this section, I present systematic evidence for the proposed scope analysis, illustrating it for a variety of sentential operators and world-creating predicates. For the sake of brevity, each type of scope contrast is illustrated for only one or two antipassive suffixes. The scope facts are the same for all antipassive suffixes. The scenarios are given in English translation only.

### 3.1. *Negation*

Native intuitions such as those in (38) show that transitive objects in WGE obligatorily take wide scope with respect to the negation operator *-nngit*, while their antipassive counterparts are restricted to narrow scope.

- (38a) *suli uqaasia puiunngilaa.* = *A*, \**B*  
*suli uqaasia [puiur]-nngit-la-a*  
 yet his.utterance(A) [forget]-NEG-NEG.INDIC-3SG.E/3SG.A

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interpretation. In the more general case, where the students differ in different worlds, it corresponds to scenario *B*, not available for the wide scope interpretation.

(38b) *suli uqaasianik puiunnngilaq.* = \*A, B

*suli [uqaasia-nik puiur-Ø]-nngit-la-q*

yet [his.utterance-INS forget-AP]-NEG-NEG.INDIC-3SG.A

‘He<sub>1</sub> had not yet forgotten his<sub>2</sub> utterance.’

A. He<sub>2</sub> had uttered several things. He<sub>1</sub> had forgotten all of them but one.

B. He<sub>2</sub> had uttered several things. He<sub>1</sub> had not forgotten any of them, still remembers everything.

The sentences from (38a) and (38b) are analyzed in (39a) and (39b), respectively.

(39a)  $\exists x[x \text{ is an utterance of his}_2 \ \& \ \textit{not} \ \text{yet} \ (\text{he}_1 \ \text{has} \ \text{forgotten} \ x)]$

(39b)  $\textit{not} \ \text{yet} \ (\exists x[x \ \text{is} \ \text{an} \ \text{utterance} \ \text{of} \ \text{his}_2 \ \& \ \text{he}_1 \ \text{has} \ \text{forgotten} \ x])$

When negation is lexicalized as part of a complex operator, for instance, *-junnaar* ‘no longer’, the transitive object must take wide scope relative to the whole complex. The antipassive object can take narrow scope. This is illustrated in (40) and analyzed in (41).

(40a) *qajaq aturunnaarpaa.* = A, \*B

*qajaq [atur]-junnaar-pa-a*

kayak(A) [use]-no.longer-TR.INDIC-3SG.E/3SG.A

(40b) *qaannamik aturunnaarpuq.* = A, B

*[qajaq-mik atur-Ø]-junnaar-pu-q*

[kayak-INS use-AP]-no.longer-INTR.INDIC-3SG.A

‘He no longer uses kayak.’

A. One particular kayak.

B. Any kayak at all..

(41a)  $\exists x[x \text{ is a kayak \& it is } \textit{no longer} \text{ the case that (he uses } x)]$

(41b) it is *no longer* the case that ( $\exists x[x \text{ is a kayak \& he uses } x]$ )

The characteristic scope contrast between transitive and antipassive objects does not depend on the morphological realization of the sentential operator as a suffix. It obtains also when negation is lexicalized as part of an independent adverb such as *aatsaat* ‘only then’, with is logically equivalent to ‘then but *not* before’. Example (42), analyzed in (43), illustrates this point.

(42a) *aatsaat puisi takuaa.* = A, \*B

*aatsaat puisi [taku]-pa-a*

only.then seal(A) [see]-TR.INDIC-3SG.E/3SG.A

(42b) *aatsaat puisimik takuvuq.* = \*A, B

*aatsaat [puisi-mik taku-Ø]-pu-q*

only.then [seal-INS see-AP]-INTR.INDIC-3SG.A

‘Only then did he see seal.’

A. A particular seal which he had heard had been caught or which somebody else had seen and pointed out to him. He had seen other seals in his life.

B. This was the first seal he had ever seen in his life. He had never seen any other seals before.

(43a)  $\exists x[x \text{ is a seal \& then but not before (he sees } x)]$

(43b) *then but not before* ( $\exists x[x \text{ is a seal \& he sees } x]$ )

Both in the wide scope interpretation (43a), of the transitive (42a), and in the narrow scope interpretation (43b), of the antipassive (42b), *before* covers the longest possible interval of time when the proposition in the scope of *before* could have been true but was not. In (43a), the proposition is (he sees  $x$ ), where  $x$  is a particular seal. The operator *before* is therefore taken to refer to the longest possible interval, preceding the instant denoted by *then*, which the referent of ‘he’ could have seen that particular seal but did not. Typically that interval is taken to begin when the referent of ‘he’ first became aware of the seal’s existence, for instance, when he had heard that it had been caught or when somebody else pointed it out to him. This wide scope reading corresponds to scenario A. In (43b), the proposition in the scope of *before* is that the referent of ‘he’ sees any seal at all. The earliest possible time when he could have done that is normally taken by native informants to be the day when he was born. The interval covered by *before* is therefore from the birth of the subject referent until the instant, denoted by *then*, when he sees the first seal in his life. In this narrow scope interpretation it is thus required that it be the first seal in the subject referent’s life. In the wide scope interpretation it is possible but not required.

The interpretation of *before*, as covering the longest possible interval prior to *then* when the proposition in its scope could have been true but was not, follows I think from general pragmatic principles for interpreting negation and need not be stipulated. Note, for instance, that in sentences such as (44), *two months* is interpreted as the longest interval preceding *now* when John failed to write.

(44) John hasn’t written for two months.

The sentence would be true if John had in fact failed to write for the past ten years, but there is a pragmatic principle against interpreting it in that way. One hopes that these principles can be formulated generally enough to apply also to other temporal operators in the context of negation, such as *before* in (43).

### 3.2. Tense and aspect

Tense marking is not obligatory in WGE. The unmarked form of the verb is interpreted as nonfuture and is compatible with specifiers such as ‘last year’ or ‘right now’ but not with ‘tomorrow’.

- (45) *siurna / massakkurpiaq / \*aqagu aturpara.*  
*siurna / massakkurpiaq / \*aqagu atur-pa-ra*  
 last.year / right.now / \*tomorrow use-TR.INDIC-3SG.E/3SG.A  
 ‘I used it last year / I am using it right now / \*I will use it tomorrow.’<sup>8</sup>

One way of looking at WGE verbs is that they assert the existence of an event or situation of a particular kind, without specifying its temporal location. If the event does not exist yet, in the past or present, but will exist in the future, then a future suffix such as *-ssa* is obligatory.

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<sup>8</sup> *aqagu* is ungrammatical in the context of (45) only if it is interpreted as ‘tomorrow’. This word can also be used in the sense of ‘the next day’ and would then be acceptable, as in:

- (i) *aqagu aturpara.*  
*aqagu atur-pa-ra*  
 the.next.day use-TR.INDIC-1SG.E/3SG.A  
 ‘I used it the next day.’



- (46) *aqagu atussavara.*  
*aqagu atur-ssa-pa-ra*  
 tomorrow use-FUT-TR.INDIC-1SG.E/3SG.A  
 ‘I will use it tomorrow.’

The future operator *-ssa* occurs not only on verbs, as in (46), but also on nouns, as in (47), that is, it combines with anything which is semantically a predicate.

- (47) *nuliassara*  
*nulia-ssa-ra*  
 wife-FUT-my  
 ‘my future wife, e.g., my fiancée’

When the operator *-ssa* is on the verb, as in (48), then the transitive object is obligatorily outside the scope of *-ssa*, while the antipassive object takes narrow scope. This is predicted by the scope analysis and, for some NPs, also by the traditional definiteness analysis.

- (48a) *atisassaarniarfik ammassavara* = *A, \*B*  
*atisassaarniarfik [ammar]-ssa-pa-ra*  
 clothes.shop(A) [open]-FUT-TR.INDIC-1SG.E/3SG.A
- (48b) *atisassaarniarfimmik ammaassaanga* = *A, B*  
*[atisassaarniarfik-mik ammar-(ss)i]-ssa-pu-nga*  
 [clothes.shop-INS open-AP]-FUT-INTR.INDIC-1SG.A  
 ‘I will open clothes-shop.’

A. A particular already existing shop to which I have a key.

B. There is no such shop yet. I am going to start up a new one.

(49a)  $\exists x[x \text{ is a clothes-shop} \ \& \ \exists t(t \text{ is in the future} \ \& \ \text{I open } x \text{ at } t)]$

(49b)  $\exists t(t \text{ is in the future} \ \& \ \exists x[x \text{ is a clothes-shop} \ \& \ \text{I open } x \text{ at } t])$

If the future operator occurs on the object, then the time  $t$  which it binds automatically takes the same scope as that object — that is, wide if the object is transitive, narrow if it is antipassive.

(50a) *angirnissani*                      *aalajangirpaa.*                      = A, \*B  
*angir-niq-ssa-ni*                      [*aalajangir*]-*pa-a*  
to.consent-GER-FUT-self's(A) [fix]-TR.INDIC-3SG.E/3SG.A

(50b) *angirnissaminik*                      *aalajangirpuq.*                      = A, B  
[*angir-niq-ssa-mi-nik*                      *aalajangir-Ø*]-*pu-q*  
[to.consent-GER-FUT-self's-INS fix-AP]-INTR.INDIC-3SG.A

Lit. 'He fixed self's future consenting.'

A. He decided that he will say 'yes' and fixed the day for it,  
e.g., May 20.

B. He decided that he will say 'yes' but has not fixed the day yet.

Because of the extra variable for time in the object, it is not clear just how to write the logical translation of (50). The analysis I envisage is to treat *aalajangir*- 'fix, decide' as a world-creating predicate. The wide scope interpretation, of the transitive (50a), would be roughly that there is some particular time  $t$  in the future (May 20 in scenario A) and a particular form  $x$  of  $y$ 's consent ('yes') such that, in

every possible world in which *y* sticks to his plans, he will use the consent form at that future time. The narrow scope interpretation, of the antipassive (50b), would only require that, in every world in which *y* sticks to his plans, there be some future time *t* and some form *x* of *y*'s consent such that he will use *x* at *t*. But it could well be different times in different planning worlds, if *y* has not yet fixed the date for his consent, as in scenario *B*. Alternatively, it could happen to be the same time, if he has already determined the date, as in *A*, the scenario shared with the wide scope interpretation.

While WGE has little in the way of tense morphology, there is a wealth of aspectual suffixes such as the frequentative *-tar*, perfective *-sima*, inceptive *-lir*, *-qqi* 'again', etc. Like all sentential operators, these suffixes occur after the antipassive slot in the verb. The by now familiar scope contrast is again in evidence, as illustrated for *-tar* in (51) (analyzed in (52)) and for *-qqi* in (53) (analyzed in (54)).

(51a) *arnaq franskiq*  
*arnaq franskiq*  
 woman(A) French(A)  
*angirlaattarpaa.* = *A*, \**B*  
 [angirlaat]-tar-pa-a  
 [come.home.with]-HAB-TR.INDIC-3SG.E/3SG.A

(51b) *arnamik franskimik*  
 [arnaq-mik franskiq-mik  
 [woman-INS French-INS  
*angirlaassisarpuq.* = *A*, *B*  
 angirlaat-(ss)i]-tar-pu-q  
 come.home.with-AP]-HAB-INTR.INDIC-3SG.A

‘He often comes home with French woman.’

A. It’s always the same woman.

B. Different women on different occasions.

(52a)  $\exists x[x \text{ is a French woman \& often (he comes home with } x)]$

(52b) *often* ( $\exists x[x \text{ is a French woman \& he comes home with } x]$ )

(53a) *ilinniartitsisug uqaluqatigiqqippaa.* = A, \*B

*ilinniartitsisug [uqaluqatigi]-qqig-pa-a*

teacher(A) [talk.with]-again-TR.INDIC-3SG.E/3SG.A

(53b) *ilinniartitsisumik uqaluqatiginniqqippuq.* = A, B

*[ilinniartitsisu-mik uqaluqatigi-nnig]-qqig-pu-q*

[teacher-INS talk.with-AP]-again-INTR.INDIC-3SG.A

‘He talked again with teacher.’

A. Same teacher as the last time.

B. Different teacher from the last time.

(54a)  $\exists x[x \text{ is a teacher \& again (he talked with } x)]$

(54b) *again* ( $\exists x[x \text{ is a teacher \& he talked with } x]$ )

Just as for negation operators, the characteristic transitive / antipassive scope contrast obtains not only when the aspectual operator is a suffix but also when it is an independent adverbial such as ‘every day’ in (55).

(55a) *ullut tamaasa irinarsurtuq tusarpaa.* = A, \*B

*ullut tamaasa irinarsurtuq tusar-pa-a*

days all singer(A) [hear]-TR.INDIC-3SG.E/3SG.A

(55b) *ullut tamaasa irinarsurtumik tusarsivuuq.* = A, B

*ullut tamaasa [irinarsurtuq-mik tusar-si]-pu-q*

days all [singer-INS hear-AP]-INTR.INDIC-3SG.A

‘Every day he hears singer.’

A. Same singer every day.

B. Different singers on different days.

(56a)  $\exists x[x \text{ is a singer \& every day (he hears } x)]$

(56b) *every day* ( $\exists x[x \text{ is a singer \& he hears } x]$ )

### 3.3. Modals of necessity and possibility

One example containing the modal of necessity *-tariaqar* has already been given in (29). For other modals, the transitive / antipassive scope contrast is illustrated in (57) and (59) below.

(57a) *inuk avammukartuq*

*inuk avammukar-tuq*

person(A) head.seaward-INTR.PRT(A)

*naapissinnaavara.*

= A, \*B

*[naapit]-sinnaa-pa-ra*

[meet]-can-TR.INDIC-1SG.E/3SG.A

- (57b) *inummik avammukartumik*  
*inuk-mik avammukar-tuq-mik*  
 [person-INS head.seaward-INTR.PRT-INS  
*naapitsisinnaavunga* = *A, B*  
*naapit-si]-sinnaa-pu-nga*  
 meet-AP]-can-INTR.INDIC-1SG.A

‘I can meet person (who’s) heading seaward.’

- A.* I know that there is one person heading seaward, and it is that person  
 I think I can meet.  
*B.* I don’t know that there is anybody heading seaward. I am just hoping  
 there might be.

- (58a)  $\exists x[x \text{ is a person \& } x \text{ is heading seaward \& possibly (I meet } x)]$   
 (58b) *possibly* ( $\exists x[x \text{ is a person \& } x \text{ is heading seaward \& I meet } x]$ )

The wide scope interpretation (58a), of the transitive (59a), is roughly that there is a particular person who is heading seaward such that, in some of the physically possible worlds, I will meet this person. This corresponds to scenario *A* in (57). The narrow scope interpretation (58b), of the antipassive (57b), requires only that, in some of the physically possible worlds, there be some person heading seaward that I will meet. It does not have to be the same person in every one of those worlds, and in the remaining physically possible worlds there might not be any such person at all. This corresponds to scenario *B* in (57). Note that scenario *A* represents also a special case of the narrow scope interpretation. This accounts for it being a possible reading of the antipassive sentence.

Example (59) and its analysis in (60) are closely parallel to (57) and (58).

(59a) *tuttursuaq takugunarpara.* = A, \*B  
*tuttursuaq [taku]-gunar-pa-ra*  
 large.reindeer(A) [see]-probably-TR.INDIC-1SG.E/3SG.A

(59a) *tuttursuarmik takunnigunarpunga.* = A, B  
*[tuttursuaq-mik taku-nnig]-gunar-pu-nga*  
 [large.reindeer-INS see-AP]-probably-INTR.INDIC-1SG.A

‘I probably saw large reindeer.’

A. Particular reindeer, e.g., one that Jacob had seen and told me about.

B. I just think that what I saw was a large reindeer. I am not really sure.

(60a)  $\exists x[x \text{ is a large reindeer \& probably (I saw } x)]$

(60b) *probably* ( $\exists x[x \text{ is a large reindeer \& I saw } x]$ )

### 3.4. *Other mood operators*

Some modals are expressed in WGE not as optional suffixes but as part of the obligatory verbal inflection. These include the conditional mood, the contingent mood (‘whenever’), the imperative, the interrogative, and a few others whose semantics is less clear. The transitive / antipassive scope contrast is found with all of these inflectional mood operators, just like with the suffixal ones. Once again, the morphosyntactic category of the operator — suffix, inflection, or independent adverbial — has no bearing on the scope possibilities of the object argument. What matters is the semantic type of the operator, namely, that it applies to (the denotation of) a sentence.

For the conditional mood operator *-ppa*, the transitive / antipassive scope contrast is illustrated in (61) and analyzed in (62). Note that the object in the English paraphrase of both sentences would be definite.

- (61a) *ikiurtissani aappagu,*  
*ikiurti-ssa-ni [aa]-ppa-gu*  
 assistant-FUT-self's(A) [go.to.get]-COND-3SG.E/3SG.A  
*ajunnginnirussaaq.* = A, \*B  
*ajunnginniru-ssa-pu-q*  
 be.better-FUT-INTR.INDIC-3SG.A

- (61b) *ikiurtissaminik aallirpat,*  
*[ikiurti-ssa-mi-nik aa-llir]-ppa-t*  
 [assistant-FUT-self's-INS go.to.get-AP]-COND-3SG.A  
*ajunnginnirussaaq.* = A, B  
*ajunnginniru-ssa-pu-q*  
 be.better-FUT-INTR.INDIC-3SG.A

‘If he goes to get his future assistant, it will be better.’

A. Jacob is going to have Peter as his future assistant. If Jacob goes to fetch Peter, it will be better.

B. Jacob doesn't know yet whom, if anybody, he's going to have as his assistant. It will be better if he goes out to get one.

(62a)  $\exists x[x \text{ is } y\text{'s future assistant \& if } (y \text{ goes to get } x), \text{ then it will be better}]$

(62b) *if* (y goes to get (y's future assistant)), *then* it will be better)



In the wide scope interpretation (62a), of the transitive (61a), there is a particular person  $x$  (Peter, in scenario *A*) who is  $y$ 's future assistant in the actual world. The conditional asserts that any possible world in which  $y$  goes to get that person is better than the worlds representing realistic alternatives. In the narrow scope interpretation (62b), of the antipassive (61b), the antipassive form of *aa-llir* 'go.to.get-AP' is analyzed as a world-creating predicate. The antecedent of the conditional picks out those possible worlds in which the agent  $y$  goes somewhere to engage in an activity which will end successfully just in case he gets his future assistant. The whole conditional says that every world where  $y$  goes off to do that is better than the alternative worlds. Nothing is claimed about the availability of a future assistant for  $y$  in the actual world, nor even in any of the possible worlds where he goes out to look for one. In those worlds where  $y$ 's search for an assistant ends successfully, he might find different assistants in different worlds. No particular person need therefore be referred to by the object of the antipassive verb. The narrow scope interpretation corresponds to scenario *B* in general or to *A* as a special case.

Example (63), analyzed in (64), illustrates the transitive / antipassive scope contrast in the context of the contingent mood operator *-kaannga*. Note again that English would have a definite object in both the transitive and the antipassive sentences.<sup>9</sup>

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<sup>9</sup> The definite description 'his paddle' in (63) is closely parallel, in its wide and narrow scope interpretation, to 'the president of the United States' in (32)–(36).

- (63a) *iputini* *qatsukkaanngagu,*  
*iput-ni* [qatsut]-kaannga-gu  
 kayak.paddle-self's(A) [get.tired.at]-whenever-3SG.E/3SG.A  
*angutaata illaatigisarpaa.* = A, \*B  
*angut-ata illaatigi-tar-pa-a*  
 father-his.E laught.at-HAB-TR.INDIC-3SG.E/3SG.A

- (63b) *iputiminik* *qatsussigaanngat,*  
*[iput-mi-nik qatsut-(ss)i]-kaannga-t*  
 [kayak.paddle-self's-INS get.tired.at-AP]-whenever-3SG.A  
*angutaata illaatigisarpaa.* = A, B  
*angut-ata illaatigi-tar-pa-a*  
 father-his.E laught.at-HAB-TR.INDIC-3SG.E/3SG.A

‘Whenever he got tired at his paddle, his father laughed at him.’

A. He always used the same paddle when out in his kayak.

B. He used different paddles on different occasions.

(64a)  $\exists x[x \text{ a paddle of } y \ \& \ \textit{whenever} (y \text{ gets tired at } x) (y\text{'s father laughs at } y)]$

(64b)  $\textit{whenever} (\exists x[x \text{ a paddle of } y \ \& \ y \text{ gets tired at } x]) (y\text{'s father laughs at } y)$

The contingent ‘whenever’ expresses the subset relation between two sets of times. Any time the proposition which is the first argument of ‘whenever’ is true, the proposition in the second argument is also true. Given this, it should be clear how the analysis in (64) corresponds to the informant’s intuitions in (63).

The transitive / antipassive scope contrast in the context of the polite imperative *-niar* is exemplified in (65) and analyzed in (66).

(65a) *nakursaq aaniaruk!* = *A, \*B*

*nakursaq [aa]-niar-uk*

doctor(A) [go.to.get]-IMPER-2SG.E/3SG.A

(65b) *nakursamik aallirniarit!* = *\*A, B*

[*nakursaq-mik aa-llir*]-niar-it

[doctor-INS go.to.get-AP]-IMPER-2SG.A

‘Go to get doctor!’

*A.* A particular doctor, e.g., Peter Jensen.

*B.* Any doctor at all — Peter Jensen, Jacob Skade, whoever.

(66a)  $\exists x[x \text{ is a doctor \& } I \text{ request (you go to get } x)]$

(66b) *I request (you go to get (doctor))*

In (66), the imperative mood operator is analyzed as a world-creating predicate. The wide scope interpretation (66a), of the transitive (65a), says that there is some particular doctor such that, in every possible world where my request is fulfilled, you go to fetch that doctor. This corresponds to scenario *A* in (65). The narrow scope interpretation (66b), of the antipassive (65b), is less stringent. It only requires that, in every world where my request is fulfilled, you go to engage in an activity which will end successfully just in case you get some doctor. I will be satisfied no matter which doctor you get for me, or even if you do not get any as long as you go out to look for one. This corresponds to scenario *B* in general or to *A* as a special case. The rejection of *A* by the informant as a possible reading of the antipassive may be due to conversational implicature, which tends to be particularly strong in requests such as (65).

Finally, for the interrogative mood *-pi*, the characteristic transitive / antipassive scope contrast is illustrated in (67) and analyzed in (68).

(67a) *puisi takuviuk?* = *A, \*B*  
*puisi taku-pi-uk*  
 seal [see]-INTERROG-2SG.E/3SG.A

(67b) *puisimik takuvit?* = *\*A, B*  
*puisi-mik taku-Ø-pi-t*  
 [seal-INS see-AP]-INTERROG-2SG.A

‘Did you see seal?’

*A.* The person who’s asking knows that there is a seal, e.g., because he has seen it himself. He’s asking whether the addressee has also seen it.

*B.* The person who’s asking doesn’t know whether there are any seals around. He hasn’t seen any himself.

(68a)  $\exists x[x \text{ is a seal \& } I'm \text{ asking whether (you saw } x)]$

(68b)  $I'm \text{ asking whether } (\exists x[x \text{ is a seal \& you saw } x])$

Like the imperative, the interrogative mood operator can also be analyzed as a world-creating predicate. The wide scope translation (68a), of the transitive (67a), says roughly that there is some particular seal such that, in every possible world where I get my questions answered, I will find out whether you saw that seal. This corresponds to scenario *A*. The narrow scope translation (68b), of the antipassive (67b), requires only that, in every world in which I get my questions answered, I find out whether you saw any seal at all. This corresponds to scenario *B*. In

general, the proposition which is the scope of the interrogative operator is the one whose truth or falsity is to be determined by the answer to the question.

### 3.5. *The distributive operator*

Sentences with plurals generally have two kinds of readings — group or distributive. For instance, (69) can mean either that the boys played together as a group or that each of them played on his own.

(69) Two boys played in the park.

A. [two boys]<sub>1</sub> [<sub>1</sub> played<sub>1</sub> in the park]

B. [two boys]<sub>1</sub> [<sub>1</sub> DIS [<sub>2</sub> played<sub>2</sub> in the park]]

The group reading can be represented as in (69A), where 1 is a variable ranging over groups and the property of playing in the park is attributed to some group of two boys. The distributive reading can be derived from the group reading by means of an optional distributive operator DIS. This operator analyzes groups into individual members and attributes the property in its scope — in (69B), the property of playing in the park — to each value of the variable 2 which ranges over those members. In WGE, the distributive operator is one of the operators covered by the scope generalization proposed in this article. The transitive object obligatorily takes wide scope relative to this operator. The antipassive object takes narrow scope.<sup>10</sup>

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<sup>10</sup> This analysis of examples with plurals was suggested to me by Irene Heim.

(70a) *cigaretti ikippaat.* = A, \*B

*cigaretti [ikit]-pa-at*

cigarette(A) [light]-TR.INDIC-3PL.E/3SG.A

(70b) *cigarettimik ikitsipput.* = A, B

*[cigaretti-mik ikit-si]-ppu-t*

[cigarette-INS light-AP]-INTR.INDIC-3PL.A

‘They lit cigarette.’

A. What they lit was just one cigarette for the whole group.

B. They lit a cigarette each.

(71a)  $\exists x_3(x_3 \text{ is a cigarette} \ \& \ \text{they}_1 [{}_1 \text{ DIS } [{}_2 \text{ lit}_{(2,3)} x_3]])$

(71b)  $\text{they}_1 [{}_1 \text{ DIS } [{}_2 \exists x_3(x_3 \text{ is a cigarette} \ \& \ \text{lit}_{(2,3)} x_3)]]$

The wide scope interpretation (71a), of the transitive (70a), says that there is some particular cigarette ( $x_3$ ) such that each member ( $x_2$ ) of the group ( $x_1$ ) lit that cigarette. Even if the members do not cooperate in the lighting process, there is still only one cigarette for the whole group. In the narrow scope interpretation (71b), of the antipassive (70b), each member ( $x_2$ ) of the group ( $x_1$ ) has the property of lighting some cigarette ( $x_3$ ). Normally it will be a different cigarette for each member, as in scenario B. But it could also happen to be the same cigarette, yielding scenario A again as a possible reading for the antipassive sentence. Note that the contrast in (70) poses a problem for the definiteness analysis, while it represents just another instance of the scope analysis proposed in this article.

### 3.6. World-creating predicates

One example of the transitive / antipassive contrast in the context of world-creating predicates has already been given in (30) for the predicate ‘believe’. Other world-creating predicates, expressed by suffixes adjacent to the antipassive morpheme, lead to similar contrasts; for instance, *-nirar* ‘say that’ in (72) or *-rusug* ‘want’ in (74).

- (72a) *Jaakup siumukkurmiuq*  
*Jaaku-p siumukkurmiuq*  
 Jaaku-E *Siumut.member(A)*  
*ajugaassanirarpa.* = A, \*B  
 [ajugaa-ssa]-nirar-pa-a  
 [win-FUT]-say.that-TR.INDIC-3SG.E/3SG.A

- (72b) *Jaaku siumukkurmiumik*  
*Jaaku [siumukkurmiuq-mik*  
 Jaaku(A) [*Siumut.member-INS*  
*ajugaassaniraavuq.* = A, B  
*ajugaa-ssa]-nirar-(ss)i-pu-q*  
 win-FUT]-say.that-AP-INTR.INDIC-3SG.A

‘Jacob said that member of *Siumut* will win.’

A. Peter is a member of *Siumut*. Jacob said: ‘Peter will win.’

B. Jacob said: ‘Some member of *Siumut* will win. I don’t know who, but they are strong enough to win.’

(73a)  $\exists x[x \text{ is a member of } Siumut \ \& \ \text{Jacob said that } (x \text{ will win})]$

(73b)  $\text{Jacob said that } (\exists x[x \text{ is a member of } Siumut \ \& \ x \text{ will win}]$

The set of worlds ‘created’ by the predicate ‘say that’ in (72) is all those possible worlds in which what Jacob says is true. In the wide scope translation (73a), of the transitive (72a), there is some particular member of *Siumut* (Peter in scenario A) such that, in every world conforming to Jacob’s claims, that *Siumut* member will win. Jacob does not have to say, or even know, that the person in question is a member of *Siumut*. He might know him simply as Peter, or Anna’s husband, or that guy over there, or under some other description. The narrow scope translation (73b), of the antipassive (72b), requires only that, in every world conforming to Jacob’s claims, there be some (current) member of *Siumut* who will win. It does not have to be the same member in every one of those worlds, but it could happen to be the same member. Hence the compatibility of the antipassive both with scenario *B* and, as a special case, *A*.

(74a) *angakkuq naapikkusukkaluarpara.* = *A, \*B*

*angakkuq [naapit]-rusug-kaluar-pa-ra*  
 sorcerer(A) [meet]-want-actually-TR.INDIC-1SG.E/3SG.A

(74b) *angakkumik naapitsirusukkaluarpunga.* = *A, B*

*[angakkuq-mik naapit-si]-rusug-kaluar-pu-nga*  
 [sorcerer-INS meet-AP]-want-actually-INTR.INDIC-1SG.A

‘I would actually like to meet sorcerer.’



A. I have heard that Jacob is a sorcerer. I would like to meet him.

B. I don't know yet whether there are any sorcerers in the world. If there are sorcerers, I would like to meet any one of them. But maybe there aren't any.

(75a)  $\exists x[x \text{ is a sorcerer} \ \& \ \text{I actually want that (I meet } x)]$

(75b) I actually want that ( $\exists x[x \text{ is a sorcerer} \ \& \ \text{I meet } x]$ )

The set of possible worlds created by the predicate 'want' in (74) is all those worlds where things are the way I want them. The wide scope interpretation (75a), of the transitive (74a), says that there is some particular sorcerer such that, in every world conforming to my desires, I meet that sorcerer. This corresponds to scenario A. The narrow scope interpretation (75b), of the antipassive (74b), requires that, in every possible world conforming to my desires, there be some sorcerer whom I meet. It could happen to be the same sorcerer in every one of those worlds, and he might even happen to be the sorcerer Jacob from the actual world. This special case again yields scenario A. But it could also happen that the actual world does not conform to my desires, and there are no sorcerers in it at all, while there are some, and I meet them, in my desire worlds. This more general case corresponds to scenario B, the preferred reading of the antipassive sentence.

The causative *-tit* is likewise a world-creating predicate which gives rise to transitive / antipassive scope contrasts, as in (76) (analyzed in (77)).

- (76a) *ujarliriarturtuq*  
*ujarliriartur-tuq*  
 go.out.to.search.for.sbd-INTR.PRT(A)  
*aallartippaa.* = A, \*B  
 [aallar]-tit-pa-a  
 [go.out]-cause-TR.INDIC-3SG.E/3SG.A

- (76b) *ujarliriarturtumik*  
 [ujarliriartur-tuq-mik  
 [go.out.to.search.for.sbd-INTR.PRT-INS  
*aallartitsivuuq.* = A, B  
 aallar]-tit-si-pu-q  
 go.out]-cause-AP-INTR.INDIC-3SG.A

Lit. 'He caused (someone) going to search for (people) to go out.'

A. Jacob goes out to search for people as his job, e.g., he is a member of a mountain rescue team. He was the one who got sent out.

B. Anybody could have been sent out. The person who got sent does not search for people as his profession but only now that he got sent out to do so.

(77a)  $\exists x[x \text{ goes out to search for people \& he caused that } (x \text{ went out})]$

(77b) he *caused that* ( $\exists x[x \text{ goes out to search for people \& } x \text{ went out}]$ )

World-creating predicates need not be suffixes in WGE. They can also be expressed by verbal bases, such as *utaqqi-* 'wait for', *ujar-* 'look for', *pisariaqar-* 'need', *piumaniru-* 'prefer', etc. For *utaqqi-*, the transitive / antipassive scope

contrast is illustrated in (78) and analyzed in (79). Note that the object would be definite in the English paraphrase of both the transitive and the antipassive sentences in (78).

(78a) *akissutissaa utaqqivara.* = *A, \*B*

*akissut-ssa-a [ ]utaqqi-pa-ra*  
 answer-FUT-his(A) [ ]wait.for-TR.INDIC-1SG.E/3SG.A

(78b) *akissutissaanik utaqqivunga.* = *\*A, B*

[*akissut-ssa-a-nik*] *utaqqi-Ø-pu-nga*  
 [answer-FUT-his-INS] wait.for-AP-INTR.INDIC-1SG.A

‘I am waiting for his answer.’

*A.* I know that he is going to answer, what, and when.

*B.* I don’t know whether he is going to answer, what, or when. He might never answer me.

(79a)  $\exists x, t[t$  is in the future &  $x$  is  $y$ ’s answer at  $t$  & I *wait for* (I get  $x$  at  $t$ )]

(79b) I *wait for* ( $\exists x, t[t$  is in the future &  $x$  is  $y$ ’s answer at  $t$  & I get  $x$  at  $t$ )]

The set of possible worlds created by the predicate ‘wait for’ in (78) is all those worlds in which I get everything I am waiting for (at the appointed hour if my expectations are that specific). The wide scope translation (79a), of the transitive (78a), says that there is a particular time and a specific answer from the person  $y$  such that, in every world conforming to my expectations, I get that answer at that time. This corresponds to scenario *A*. The narrow scope interpretation (79b), of the antipassive (78b), is less demanding. It says that, in every world conforming to my expectations, I get some answer from  $y$  at some time or other, but it could be

different answers and different times in different expectation worlds, corresponding to my uncertainty about them in scenario *B*. It could also happen that the actual world does not conform to my expectations, and in that world I fail to get any answer from *y*. This possibility is also allowed for in *B*.

There is evidence suggesting that, in WGE, all antipassive predicates are world-creating, even if their transitive counterparts denote purely extensional predicates. The sets of worlds that the antipassives create are subjective worlds of the agent — worlds in which things are as he perceives them or intends them to be. Example (80) illustrates this point.

(80a) *illuigaaq qimappaa.* = *A, \*B*  
*illuigaaq [ ]qimat-pa-a*  
 hunting.hut(A) [ ]leave-TR.INDIC-3SG.E/3SG.A

(80b) *illuikkamik qimatsivuuq.* = *A, B*  
 [illuigaaq-mik] *qimat-si-pu-q*  
 [hunting.hut-INS] leave-AP-INTR.INDIC-3SG.A

‘He left hunting hut.’

*A*. What he left was a real hunting hut.

*B*. What he left could have been a tent, or cave, or anything else he had used as a hunting hut.

(81a)  $\exists x[x \text{ is a hunting hut \& he left } x]$

(81b) he left (...hunting hut...)

The transitive object in (80a) is clearly outside the scope of the verb, since the referent must be a hunting hut in the actual world. Hence the logical translation in

(81a). The analysis of the antipassive sentence (80b) is more difficult. It is clear, however, that the antipassive object must be in the scope of the verb, since the antipassive sentence does not commit the speaker to the existence of any hunting huts in the actual world. In the incomplete translation (81b), I have not carried the analysis beyond this observation about the scope of the antipassive object.

More systematic research is required to determine whether all antipassive predicates in WGE are intensional, similar to ‘wait.for-AP’ in (78b), and ‘leave-AP’ in (80b). If my tentative hypothesis, that they are intensional, is confirmed, then the antipassive objects in most of the preceding examples should have even narrower scope than I have given them in this article. This would not affect the points illustrated by these examples.

#### 4. GENERALIZATION TO OTHER LANGUAGES

There are many languages which, like WGE, allow an argument of the verb to be expressed in two alternative ways. One way is by an NP in a structural case (absolutive, ergative, nominative, or accusative) which is predictable from the type of the argument — subject or object — and the case system of the language. I shall call this argument expression ‘the parametric alternant’. The second way to express the same argument is by some other kind of phrase, for instance, oblique. My term for this other argument expression is ‘the nonparametric alternant’.

For instance, in Basque, another language with an ergative case system (though of a rather unusual type, see Levin 1983), verbal arguments whose parametric alternants are in the absolutive case — that is, transitive objects and intransitive subjects — can also be expressed in an oblique, so-called *zerik* (z) case. Just like the instrumental objects in WGE, these nonparametric argument expressions in Basque are triggered by sentential operators. In WGE, the sentential operators

which trigger the antipassive are aspectual. In Basque, the operators which trigger the nonparametric zerik case are negation, conditionals, interrogatives, and exclamatives (deRijk 1972 and Levin 1983). The parallel extends to the scope relations. Just like in WGE, the parametric (absolute) argument in Basque is restricted, to judge by the available data, to take wide scope with respect to sentential operators. Its nonparametric (zerik) alternant can, and possibly must, take scope under those operators.

(82a) *Ez dut ikusi ikaslea.* (Levin 1983:ex.6.41)

NEG [3SG.A-HAVE-1SG.E see] student-A

‘I didn’t see a / the student.’

≡ *x* is a student & *not* (I saw *x*) (my analysis)

(82a) *Ez dut ikusi ikaslerik.* (Levin 1983:ex.6.40)

NEG [3SG.A-HAVE-1SG.E see student-Z]

‘I didn’t see any students / a single student.’

≡ *not* ( $\exists x$ [*x* is a student & I saw *x*]) (my analysis)

(83a) *Etorri da gizona?* (Levin 1983:ex. 6.42)

[come 3SG.A-BE] man-A

‘Did the man come?’

≡ *x* is a man & *I am asking whether* (*x* came) (my analysis)

(83a) *Etorri da gizonik?* (Levin 1983:ex. 6.43)

[come 3SG.A-BE] man-Z

‘Did the man come?’

≡ *I am asking whether* ( $\exists x$ [*x* is a man & *x* came]) (my analysis)

In Polish, an accusative language, there is an alternation involving the subject argument of any verb. It affects subjects which minimally consist of a numeral between two and four and a masculine human noun, e.g., ‘two boys’, ‘three drunken soldiers’, ‘four men who were here yesterday’. In the parametric alternant, the subject argument is in the usual nominative case and has all the syntactic properties of a subject. In the nonparametric alternant, the subject expression is phonologically ambiguous between the genitive and the accusative case (G/A) and shares a number of syntactic properties with objects. Once again, the scope facts are as in WGE and Basque. The parametric, nominative alternant obligatorily takes wide scope with respect to sentential operators such as tense, aspect, modals, etc. The nonparametric geno-accusative alternant is restricted to narrow scope (Bittner, forthcoming). This is illustrated for the tense and aspect operator ‘always will’ in (84).

(84a) *Moi dwaj koledzy zawsze beda dobrymi kucharzami.* = A, \*B  
 my two friends always will.be good cooks  
 (N, PL, MASC) (3PL)

(84b) *Moich dwoch kolegow zawsze bedzie dobrymi kucharzami.* = A, B  
 my two friends always will.be good cooks  
 (G/A, PL, MASC) (3SG)

‘My two friends (or two of my friends) will always be good cooks.’

A. Mietek and Piotr, who are my friends now, will always be good cooks.

B. I like good food so I’m going to make sure that I always have two friends who are good cooks.

The so-called genitive of negation in Polish and Russian provides other examples of nonparametric argument expressions. As usual, these expressions are triggered by a sentential operator, viz. negation. The affected arguments are d-structure objects, that is, transitive objects or unique arguments of unaccusative verbs, e.g., ‘be (somewhere)’, ‘remain’, etc. In Russian, arguments of derived unaccusatives, such as passives, can also get the genitive case under negation. Except for transitive objects in Polish, the nonparametric alternant, with the genitive case, is optional. The negation makes this alternant available but is compatible also with the usual parametric expressions of potentially genitive arguments — accusative case for transitive objects, nominative for the unique arguments of unaccusative verbs. The by now familiar scope contrast is again in evidence. The parametric alternants, in the accusative or nominative case, are restricted to wide scope relative to negation and, at least in Polish, to other sentential operators such as tense, aspect, modals, etc. My data for Russian are incomplete. The nonparametric arguments, in the genitive case, obligatorily take scope under these operators. Example (85) illustrates the contrast in the context of an interrogative operator in Polish. The negation is included to license the nonparametric, genitive alternant in (85b).

- (85a) *Ile lat juz u nas*  
 how.many years already by us  
*nie byl legat papieski?* = A, \*B  
 not was legate papal  
 (3SG, MASC) (N, SG, MASC)



- (85b) *Ile lat juz u nas*  
 how.many years already by us  
*nie bylo legata papieskiego?* = A, B  
 not was legate papal  
 (3SG, NEUT) (G, SG, MASC)

‘How many years has the papal legate not been to visit us?’

- A. Mr. P. is the papal legate now, and I am asking how many years he has not been to visit us.
- B. I am asking how many years were such that whoever was the papal legate that year did not come to visit us.

Finnish is another language with a parametric / nonparametric alternation affecting d-structure objects. The nonparametric expressions of these objects are in the partitive case (P). They are triggered by several sentential operators including negation and imperfective or frequentative aspect. The parametric expressions are, just like in Polish and Russian, in the accusative case for transitive objects or in the nominative case for single arguments of unaccusative verbs. The available data (e.g., Fromm 1982 and Raible 1976) are compatible with the hypothesis that the scope facts in Finnish are just like in WGE, Basque, Polish, and Russian. That is, the parametric alternants obligatorily take wide scope with respect to sentential operators such as negation, aspect, interrogatives, etc. Their nonparametric alternants can, or must, take narrow scope. Example (86), taken from page 162 of Fromm’s grammar of Finnish, illustrates the scope contrast in the context of the aspectual operator *jo* ‘already’. The translations into German are Fromm’s; the logical analysis is mine.

(86a) *matkustajat ovat jo laivassa*  
 passengers(N) are already on.ship  
 ‘die Fahrgäste sind schon auf dem Schiff’  
 $\equiv \exists x$  [ $x$  is a group of passengers & *already* ( $x$  is on the ship)]

(86b) *laivassa on jo matkustajia*  
 on.ship is already passengers(P)  
 ‘auf dem Schiff sind schon Fahrgäste’  
 $\equiv$  *already* ( $\exists x$  [ $x$  is a group of passengers &  $x$  is on the ship])

In English, nonparametric argument expressions occur, for instance, in the postverbal position of *there* insertion constructions. These nonparametric alternants are available for single arguments of unaccusative verbs when the argument is ‘weak’ in the sense of Milsark (1977) or Barwise and Cooper (1981). The parametric, preverbal expression is usually also possible for these arguments. Once again, we find that the parametric alternant obligatorily takes wide scope with respect to sentential operators such as negation, tense and aspect, modals, etc. Its nonparametric counterpart is confined to narrow scope.

(87a) Four cups aren’t in the cupboard.  
 $\equiv \exists x$ [ $x$  is a group of (at least) four cups  
 & *it.is.not.the.case.that* ( $x$  is in the cupboard)]

(87a) There aren’t four cups in the cupboard.  
 $\equiv$  *it.is.not.the.case.that* ( $\exists x$ [ $x$  is a group of (at least) four cups  
 &  $x$  is in the cupboard])

Based on evidence such as the above from WGE, Basque, Polish, Russian, Finnish, English, etc., I propose the following cross-linguistic generalization.

(88) *The Scope Generalization*

If an argument can be expressed either by an NP in the Case predicted by the parameter settings for the language or by some other kind of phrase, then the parametric alternant will obligatorily take wide scope with respect to sentential operators, such as negation, tense, aspect, modals, distributive operators, etc., while the nonparametric alternant will be permitted to take scope under these operators. It may in fact be restricted to take narrow scope.

It is beyond the scope of this article to propose a theory which would account for the descriptive generalization in (88). I leave this as a puzzle for future linguistic analysis.

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