Relative Clauses in West Greenlandic

A descriptive analysis in terms of Functional Grammar

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una suliassaq annikitsoq ajoquteqannginngitsullu kalaallisut ilinniartitsisunnut pikkoreqisumut Lars Kristoffersenimut ikinngutinnullu allanut Danmarkimiunut Kalaallit Nunaanniluunniit nunaqartunut pigitippara.

Contents:

In this paper, I have tried to give a concise overview of all relevant factors directly involved in one important subdomain of noun modification in West Greenlandic, namely that which can be discerned as restrictive relative clause formation.

An important ground for investigation of this area of West Greenlandic (henceforth WG) grammar I feel, is the lack of attention it has got in traditional works of grammar. This lack is quite understandable, as it is with some right that the grammarians concerned have sometimes stated that relative clauses (henceforth RCs) don't really exist in WG, or at least not as we know them from many Indo-European (henceforth I-E) languages. Relativization is brought about in WG by means of devices that correspond to participle forms in I-E languages. At the same time, these devices, the intransitive and the passive participle, serve other grammatical ends as well besides noun modification. Therefore, factors involved in RC formation are treated in different parts of these grammatical works.

In Kleinschmidt (1851:104 (1991)) and Rasmussen (1888:197 (1971)), one-page chapters lined with examples inform the student of WG about the use of intransitive and passive participles as the principal means to express in WG what is expressed in German and Danish by RCs.

Schultz-Lorentzen (1951:100 (1969)) is even more restricted: he treats the phenomenon by way of a remark about the use of the participial mood. Here he also interprets the transitive participial as a nominal form that can be used in RC formation (*).

In his structuralistically oriented grammar, Bergsland (1955:47) refers to participial constructions as corresponding to I-E relative or temporal clauses in cases where they don't function as complement clauses to 'verba sentiendi et dicendi', and considers the transitive of them as verbal forms. In his work, he translates nearly all transitive participials interlinearily as RCs, but when given, free translations of these all show the semantic differences from relative use, like temporal sense: "the moment that..." and complement status: "(know) that..."(*). Examples that are RCs are invariably intransitive or passive participles.

In his description of WG, which is based on a linguistic model that he at the outset had designed solely for WG, Aagesen (1975:98) treats RC-forming intransitive and passive participles under the same heading of 'describer constituent' as nominal restrictors. He doesn't refer to these deverbal nominals as RCs here but does translate them as such, and remarks that they modify respectively the subject or the object of their own verbal stem.

(*) These notes form the contents of paragraph 0.4.3 of the introduction.

Fortescue (1984) is actually the first who includes a unifying chapter about RC formation. A number of pages is

devoted to RC formation, but it is not an exhaustive account. It is namely due to the properties inherent to the descriptive questionnaire (Comrie and Smith in Lingua 42.1, 1977) his grammar is based on, that explicit formulation of many closely related factors is often to be found in various other places throughout the work. Nevertheless, there is made frequent reference to such places and in part also therefore the work has been my main source of information.

Another point of interest that I have paid attention to is the attention RCs in Eskimo languages (especially Labrador Inuktitut) have got in the discussion around 'Accessibility'. In the theory of linguistic universals, implicational hierarchical scales of accessibility to certain grammatical processes have been proposed and they are thought of as universally valid in natural languages. To the Accessibility Hierarchy for relativization there are found some disputed exceptions, especially in ergative languages. Eskimo is an ergative language and cross-linguistic comparison shows that the Eskimo dialects are relatively speaking rather restricted in their relativization possibilities.

It appears that in WG (the dialect I will concentrate on) only absolutive arguments of a matrix verb can be expressed as head, i.e. the relativized element, of a RC in a relative construction. I will suggest that this is a general property of nominalization in WG.

I do not want to embark upon the general discussion about language universals. My main reason for touching upon the AH is that an explanation for the observations in this respect can be provided by an analysis from the point of view of Dik's (1989) theory of Functional Grammar.

The reader who is interested in expression rules will have to draw his own conclusions. I have not discussed that issue anywhere.

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This work is dedicated to my teacher in Greenlandic, Lars Kristoffersen, and to my other friends in Denmark. I have written it while thinking of them.

Abbreviations in the text

AH	=	Accessibility Hierarchy
B	=	Bergsland (1955)
CB	=	Christian Berthelsen (1980)
D-str	=	Deep structure
F	=	Fortescue (1984)
FG	=	Functional Grammar
GB	=	Government and Binding
I-E	=	Indo-European
K	=	Kristoffersen (1991)
LI	=	Labrador Inuktitut
N	=	(de)nominal affix
NP	=	Noun Phrase
pc	=	personal communication
R	=	Rasmussen (1888)
RC	=	relative clause
RI	=	Rankin Inlet dialect of LI
sg.	=	singular
SL	=	Schultz-Lorentzen (1969)
SOA	=	State of Affairs
V	=	(de)verbal affix
VP	=	Verb Phrase
WG	=	West Greenlandic

2	=	section 2
1.2.4	=	paragraph 2.4 of section 1
(37)	=	example no. 37
(F:46)	=	Fortescue (1984 page 46)

Interlinear notations and symbols can be found in the appendix after the inflectional paradigms.

0 Introduction

The Greenlandic dialects, to wit East and West Greenlandic and Polar Eskimo, are part of the Eskimo dialect continuum that includes Canadian Inuktitut, Iñupiaq, and Alaskan and Siberian Yupik. Eskimo and Aleut are probably related by common ancestry. The Eskimo language roughly has 100.000 speakers, about half of whom have Greenlandic as their native language.

This introduction is a brief sketch of the basic and typologically significant features of West Greenlandic grammar. At the same time it should give the reader an idea of where in the grammar relative clause formation is located. Many of the West Greenlandic facts hold for other (sub-) dialects as well, but comparisons are seldomly made in this thesis.

0.1 Categories

The main categories of West Greenlandic are the substantive Nouns and the Verbs. Next to this, WG has Personal and Demonstrative Pronouns, Demonstrative Adverbs, Numerals and non-inflectionable Particles at its disposal. There are no Adjectives, Articles, Prepositions or Conjunctions.

0.2 Inflection

The nouns have no grammatical gender, they are inflected for number, case and optionally for the possessive relation that they can take part in.

There are 2 numbers: singular and plural. The dual, which was on its way out at the end of the last century, still lives in Polar Eskimo and the dialects outside Greenland.

Nouns can be inflected in 8 cases, of which 6 are 'local'/ 'oblique': Instrumental, Locative, Allative, Ablative, Prosecutive and Equative, and 2 are syntactic argument cases: the Absolutive and the Ergative. The Ergative is used to express the Subject of a transitive verb, the Absolutive to express the Object, or the Subject of an intransitive verb. So Greenlandic has an ergative system. In the present-day literature about WG, the Ergative is usually called Relative, but in order to avoid confusion with a connotation that could arise with the subject of this thesis I will use the term Ergative here.

A possessive relation holding between 2 nouns is expressed by marking the possessor with the same morpheme as is used for the ergative case (and is therefore sometimes called 'genitive' in the literature, or associated with ergativity), the possessum is marked with different forms for person and number corresponding with the status of the possessor, for its own number, and for the case determined by the function of the possessive constituent as a whole in the sentence.

(1)

anguti-p	illu-a	anguti-t	illu-init
man-Erg(Gen)	house-Poss3sAbs	man-Erg(Gen)p	house-Poss3pAblp
'the man's house'		'from the men's houses'	

If a possessor is not expressed by an NP, it is still in a way 'understood' because of the possessive marker on the possessum: illua 'his house', illuinit 'from their houses'.

Again in order to prevent confusion, I will use the term 'Genitive' to indicate that not an ergative case form or relation is intended but a possessor marker.

The verbs are conjugated for person, number and mood, but there is no inflectional marking for tense, nor is there an infinitive.

The intransitive verb is marked inflectionally for person and number of the subject, and the transitive verb shows such agreement with the subject as well as the object. As a result of 'pro-drop', a Greenlandic sentence can consist of a single verb.

Verbal conjugation can be realized in 8 different moods, of which 4 are independent superordinate moods: Indicative, Interrogative, Imperative and Optative; and 4 are subordinate moods: Causative, Conditional, Participial and Contemporative. With respect to their Indo-European equivalents, the superordinate moods speak for themselves. The subordinate ('dependent') moods, however, have equivalents that are less often met. It is characteristic of these moods that they cannot function as matrix verb moods (*). In this respect they are in complementary distribution with the superordinate moods that don't appear in subordinate sentences. The Conditional is termed 'Subjunctiv' by Kleinschmidt (1851), the Causative 'Conjunctiv', and the Contemporative 'Infinitiv'.

The inflectional affixes are often fused into portmanteau morphemes, although sometimes without a great loss of morphological transparence. The total number of possible inflectional variants of a word runs in the hundreds, but there are hardly any irregular forms. The paradigms can be found in the appendix. Inflectional as well as derivational morphology is subject to regular morphophonological alternation. The formal distinction between derivation and inflection is relatively clear.

(*) Actually, this statement is only made to stress the principal difference between these mood types, because subordinate moods do appear as matrix verbs.

0.3 Derivation

Typologically spoken, Eskimo morphology is characterized by a very extensive and productive derivational component, and in consequence, Eskimo is reputed as a polysynthetic language. An Eskimo word has a lexical stem to which by recursive derivation an in principle endless number of suffixes can be attached. Of these suffixes, more than 400 are productive (Greenlandic has two prefixes), and their

meaning often corresponds to what in e.g. Indo-European languages has to be expressed syntactically or by one or more independent lexical morphemes. In contrast with many I-E suffixes, the Eskimo suffixes cannot be historically traced back to lexical roots.

WG suffixes can be denominal or deverbal and nominal or verbal; this implies that there are four grammatical types: N-V, N-N, V-N and V-V. In a recursive process of derivation a word can undergo change of category (N/V) repeatedly. The last-attached suffix determines the categorial status of the word and consequently, the sort of inflection it needs. In general, the last suffix also modifies the rest of the word to its left semantically. That means that relative morpheme order is co-decisive in determining the meaning of the word.

Also the speaker's own attitude towards that which he or she is saying is often expressed in suffixes:

(2)

oqar-tuu-kasip-punga=asiit (Fortescue,1984:296)
say-happen to-subjective colouration-1sInd=as usual
'silly me, I went and spoke out of turn as usual'
(oqartoorpoq is actually lexicalized to 'blurts out')

In Eskimo, incorporation of lexical stems (composition) is, with a few marked exceptions, not possible.

The Greenlandic lexicon contains a small number of word stems in proportion to other languages; according to Bergsland's (1955) synchronic estimation about 1800.

There is a small number of enclitic suffixes that can be attached to the inflected word.

With a few notable exceptions the morphological structure of Eskimo words is:
[stem- + -derivation(s)- + -inflection(s) + =enclitic(s)].

0.4 Syntax

In WG there are many affixes that correspond with change of valency, adjuncts of time, cause etc. in other languages. Word order is not the core of Greenlandic syntax, which is why Greenlandic is also called a nonconfigurational language. The rules for sentence structure are relatively simple and flexible. The most neutral sentence structure is:
[Y S O X V]. Y is a position for sentential adverbial adjuncts of time, manner, location and degree; X can be occupied by oblique arguments or satellites in a 'local' case and by a predicate adjunct as e.g. a subordinate sentence in the contemporative mood, or by a predicate adverbial that modifies the verbal stem alone.

A constituent can consist of a core and one or more modifiers. The internal structure of modified constituents is usually: Dependent - Head, but when the modifier has an adjectival function the order is generally Head - Dependent. These parts for themselves again can be units that consist of a core plus modifiers. In this way, principally every constituent can be extended with modifying nouns,

possessors, relative clauses and/or satellites and subordinate clauses so that very long-winded sentences can be formed with a structure resembling a chinese boxes system. The neutral word order is strongly liable to variation caused by context-determined emphasis (focus), newness (topic), heaviness etc.

0.4.1 Subordination

As already mentioned in 0.2, it is strictly speaking not possible to form a sentence with a single verb in a subordinate mood; the verb conjugated in a subordinate mood can function as the main verb of a subordinate clause at the most. This subordinate clause can then be embedded in one or more embedded subordinate clauses and finally in the matrix clause headed by a verb in one of the superordinate moods. So although a greenlandic sentence can consist of one single verb, it can also be quite complex with several levels of embedding.

To prevent confusion, all subordinate moods have a particular 4th person (sometimes figuratively called the 3rd person reflexive) in their paradigm that is coreferential with the subject of the matrix clause. In this way, a distinction can be made between possible coreferences in cases where other languages often are ambiguous, or have to resort to other than grammatical means:

(3)
qimam-mani niki-nngilaq (Villadsen, 1984:11)
leave-3sS-4sO-Caus move-3sIndNeg
(main clause subject is object in subordinate clause)

(4)
qimam-magu niki-nngilaq
leave-3sS-3sO-Caus move-3sIndNeg
(main clause subject doesn't take part in subordinate clause)

(5)
qimak-kamiuk niki-nngilaq
leave-4sS-3sO-Caus move-3sIndNeg
(main clause subject is also subject in subordinate clause)

'when he had left him, he didn't move'

Fourth person marking is also found in nominal inflection. When the possessor in a possessive construction functions at the same time as the subject of the main clause, the possessum is marked for fourth person:

(6)
anguti-p anaana-mi taku-aa
man-Erg mother-Poss4sAbs see-3sS3sO
'the man(i) saw his(i) mother'

One could make a division of 4 types of clausal sentence parts:

a) Complement clauses (object(/subject)clauses) of e.g. verba sentiendi, indirect speech etc. are in the participial, contemporative (when subject of subordinate sentence is coreferential with subject of main clause) or the causative mood. These are not complements in the same way as nouns are: when the matrix verb is transitive, its

object marker refers to the object clause, but the matrix verb may be intransitive, in which case the complement sentence is not represented in the ending of the matrix verb. Complement clauses usually follow the matrix verb. In (7) and (8), only intransitive matrices are given

(7)

```
    oqar-poq   aggerniar-luni
    say-3sInd  will come-4sCont
   'he said that he will come'
```

For complement clauses of which the speaker is not coreferential with the reported agent, one uses the Participial mood:

(8)

```
    oqar-poq   Piitaq aggerniar-toq
    say-3sInd  Peter will come-3sPart
   'he said that Peter will come'
```

Non-finite complement clauses can be formed with the derivational nominalizing suffix -neq ('to "V"'), a way in which other nominalizing affixes can not, or only with certain verbs, be used. Bergsland (1955) calls the forms that are nominalized with this suffix 'action nouns', and Schultz-Lorentzen (1969) 'abstrakt participium'. A simple example based on Fortescue (1984:44):

(9)

```
    sava-leri-neq             nuanner-ta-qa-aq
    sheep-be occupied with-N  be fun-hab-emf-3sInd
   'it is fun looking after sheep'
```

b) Adjective (Relative) clauses in Greenlandic are not verbal constituents, but nominalized verbs. For relativizing nominalization (of the subject) the intransitive forms of the active participial can be used:

(10)

```
    angut aggiler-soq
    man   approach-3sPart
   'the man who is on his way'
```

For relativization of the object the derivational passive participle (PP) suffix is used:

(11)

```
    angut naapi-ta-ra
    man   meet-PassPart-Poss1sAbs
   'the man that I met' (lit.:"my met man")
```

The relative clause agrees in number and case with its head, whatever the latter's function in the matrix sentence may be:

(12)

```
    angut-ip aggiler-su-p       inuit  taku-ai
    man-Erg  approach-Part-Erg  people see-3sS-3pO-Ind
   'the man who was on his way saw the people'
```

c) Adverbial clauses (time, manner, purpose, cause, condition, result, degree, concession; according to Fortescues (1984) division) are in the contemporative (same subject; usually in adverbial clauses of time), participial, causative or conditional mood. These clauses are usually

placed in a sentence-initial position or right in front of the matrix verb. In this use the contemporative can be compared to the English "-ing" participle. Adverbial clauses are often expressed in combination with certain particles or derivational affixes, and often, adverbial meaning is also carried by derivation alone.

d) Coordinated clauses. Rather than two clauses in the same mood, coordinated by a conjunctional particle, the contemporative mood is used. In this use, the contemporative can be considered as an implicit repetition of the mood of the clause that it is coordinated with, and of which it also copies the person and number agreement. In the example below, the contemporative is coordinated with the head of a subordinate clause:

(13)

,sila=lu alianaa-qi-mmat anore-qar-ani=lu
weather=and be lovely-emf-3sCaus wind-have-4sContNeg=and
piukkoor-poq
be glad for-3sInd
'.., and because the weather was nice and (because) there was no wind he was glad'

The coordinated clause can precede as well as follow the matrix verb, the use of a certain enclitic (here "=lu") is mainly optional. The 4th person marker on the contemporative verb sees to it that the coordinated verb agrees with the subject of the main verb of the (here subordinate causative) clause, sila.

0.4.2 The Contemporative and the Participial

There is no sharp distinction between purely adverbial and coordinated contemporative verbs. With this, Fortescue (1984:121) answers for an account of these functions under the common denominator 'co-verbs', to distinguish them from the object function of the contemporative.

The coordinative use of the contemporative can be compared with the omission for convenience sake of the subject in I-E languages. It is characteristic therefore that the transitive contemporative only agrees with the object, because the subject is necessarily understood.

(14)

Ebbe-p aallaat tigu-aa aqissil=lu
Ebbe-Gen gun take-3sS-3sOInd grouse-p=and
ornil-lugit
approach(-4sS)-3pOCont
'Ebbe takes his gun and approaches the grouse'
lit. '...and the grouse, approaching-them' (CB:35)

The contemporative transitive has no subject agreement like other moods (*) and lacks the 4th person, and the contemporative intransitive, that only agrees with the subject, has no 3rd person. The contemporative is often used in impersonal constructions. The complementary distribution with the participial in indirect speech (see: a)) is probably connected with the absence of the possibility of 4th person subject agreement in the latter (**).

(15)
taku-aa ornik-kaa
see-3sS-3sO-Ind approach-3sS-3sO-Part
'he saw that he came towards him'
(16)
taku-aa ornik-kaani
see-3sS-3sO-Ind approach-3sS-4sO-Part
'he(i) saw that he came towards him(i)'
(17)
taku-aa ornil-lugu
see-3sS-3sO-Ind approach(-4sS)-3sO-Cont
'he(i) saw that he(i) came towards him'
(This last one is added for completeness sake, although it is a bit unusual. The (i) index indicates anaphoric reference.)

Here, we have seen that the paradigms of both are defective in different respects, unlike those of the causative and the conditional, that are complete, and that are close to identical with respect to person and number.

Note that the Greenlandic participial qua form corresponds to the Indicative in Polar Eskimo and in most of the dialects in Canada and Alaska.

(*) Although one can come across combinations of 1/2S and 3O markers occasionally (Fortescue,1984:297; Hammerich,1936:68).
(**) Although 4S-3O transitive participial marking that is found in the paradigms of the older grammarians is reported (Fortescue, 1984:35) to appear sometimes in formal/literary style.

0.4.3 Transitive participial RCs

Now we have seen how WG grammar is basically organized, I want to give some reasons for why subordinate transitive participial clauses as referred to in the preface should be excluded from the treatment of RC-formation in this thesis.
Schultz-Lorentzen's RC interpretation of the use of the transitive participial form is also referred to by Fortescue (1984:39, as a 'loose' sense), and Bjørnum (1982:76) but both without clear (as to the latter: convincing) examples. I have chosen to regard this interpretation as figurative at best, on grounds of the fact that transitive participial constructions that are nearly inevitably to be translated as RCs are very rare. When they do occur, I think that it could be due to a relative defectiveness of I-E on this point that one may have to resort to a RC translation; WG seems to have more verbs than I-E that can take complement clauses. In fact, Rasmussens (1888:195) 'proper' (my hedge) translation of the example which is also advanced by Schultz-Lorentzen (1969:100) shows that it is on a par with an object clause, rather than that it should be exemplary of a systematic equivalence of the use of the WG transitive participial and the I-E RC construction:
(18)
qimatu-ni tikip-pai tillittu-p
winter supply-Poss4sAbsp arrive at-3s3pInd thief-Erg

nungu-ngajak-kai
finish-nearly-3s3pPart
'he came to his winter supplies that a thief had nearly emptied'
Rasmussen: 'he came to his winter supplies and found them nearly totally emptied by a thief'

One of Bergsland's (1955:47) examples is mentioned by Aagesen (1985:8) who admits that it is an example '... where a verbal form does occur for once as a RC ...'. It is a RC with a transitive participial head in attributive function and position to a head noun. Aagesen argues that it is an old example (it is recorded in the first half of the 19th century), and that in modern WG a deverbal noun formed by the derivative -saq would be used.

Kleinschmidt also translates many of his transitive participial examples both ways, and Bergsland (1976) rejects the RC interpretations thereof. There certainly are formal indications that suggest of correspondences between certain transitive participial subordinate clauses and RCs, like the plural object marking on the indicative matrix verb in example (18) above (an old one as well), whereas singular would do for a complement clause. I will leave these as intricacies to be hopefully dealt with in future investigation.

0.5 An example

An exemplary sentence from Fortescue (1984:97, from Schultz -Lorentzen,1969:94), in which several of the matters that are discussed above, but no RCs, turn up:

(19)
ippassaq Pavia-p anguta-ata niuertu-p
yesterday Pavia-Gen father-Poss3sErg shopkeeper-Gen
#[1] [a [b 2]] [a
qimmi-i angala-ner-mit qasu-llutil=lu
dog-Poss3sAbsp journey-N-Abl be tired-4pCont=and
[b 3]] [[
kaam-mata ungaluukka-mut iser-til-lugit
be hungry-3pCaus yard-All go in-cause(-4s)-3pCont
4]] [[5]
puisi-p neqa-anik nerler-pai
seal-Gen meat-Poss3sInstr feed-3s3pInd
[a [b 6]] 7]#
'yesterday Pavia's father fed the shopkeeper's dogs, because they were tired and hungry from the journey, with sealmeat, letting them into the yard'
1] particle; 2] subject; 3] object; 4] adverbial clause of 'cause'; 5] coordinate clause modified by directional adjunct; 6] oblique indirect object; 7] matrix clause; [a possessor; [b possessum.

1 Modification

1.1 "Adjectives"

The internal structure of a greenlandic NP can vary from consisting of a single (pro)noun to a complete nominalized clause with multiple embedding that is nevertheless still able to perform as subject, object or oblique object of the matrix verb.

As WG lacks the morphological category of Adjective, modification of nouns has to be brought about in an alternative way.

1.1.1 Derivation

That which is usually expressed in English by means of adjectives often has the status of a derivational nominal affix in WG. Denominal - nominal derivation of illu 'house' is seen in for example:

illuaraq 'little house';
illuinnaq 'just a house';
illorpassuit 'a lot of houses';
illutsiaq 'fairly big house';
illutoqaq 'old house'.

In these examples, noun modification is achieved only by productive derivational means.

1.1.2 Nominal restriction

A principally different type of modification of NP's is achieved through placement of bare nominal constituents in a dependent position. These nouns generally follow the head (the NP concerned), they have to agree with it in number and case, and have an attributive function (Dik,1989:130). They hardly ever 'copy' any derivational marking of the head, however. This is a construction which can be termed 'nominal restriction'.

Verbal stems with adjectival meaning or rather, with attributive sense, have to be nominalized with the help of the intransitive participle, and then follow the head, e.g.:

pualavoq 'is fat', pualasoq 'a fat one'
angut pualasoq 'a fat man / a man who is fat'.

It is also possible to give nouns an attributive sense through a combination of placement in a dependent position and the application of certain derivational affixes as -lik:

(1)
illu qarma-lik
house peat wall-provided with
'a peat-wall house' (F:217)

Some nouns like nutaaq 'new (one)' and alla 'other (one)' have an inherent attributive sense and their attributive function is also expressed by dependent placement.

One could also choose for this paragraph to bear the title 'restrictive apposition'. In that case, apposition has a much wider use in WG than as defined for e.g. English in Quirk & Greenbaum (1973), namely by having to include also

that which corresponds to English adjectives. On grounds of their nominal expression in WG, apposition will at the same time include constructions which correspond to English restrictive relative clauses. Then restrictive apposition in WG must also fulfil an attributive function which generally doesn't allow omission of the head (apart from cases in which it is 'understood' as in par.2.2), and this is precisely what should still be allowed in English restrictive apposition.

Bergsland (1955:38) and Fortescue (1984:49) mention the difficulty to distinguish between nominals with 'adjectival' function, RCs, and nouns in apposition, but they so often use the term 'apposition' for phenomena that involve noun modification (including RCs), that I take this term in their work to generalize over nominal chain constructions of all types.

Maybe one could say apposition fulfils far more functions in WG than in English, but to avoid confusion with its English connotation, I have chosen to use the term only in cases meant as such, like in: ikiortiga tuluk 'my helper the Englishman'; tuluk ikiortiga 'the Englishman my helper' (Fortescue, 1984:115) (but see 2).

That apposition can be semantically quite different from attributive modification will also be clear from the following example of non-restrictive apposition:

(2)

Piitaq sanasoq pikkorip-poq
Peter carpenter be skilled-3sInd
'Peter, the carpenter, is skilled'

Nouns of profession as restrictive modifiers of proper names in this position are normally ungrammatical in WG (Fortescue, 1984:117) and therefore this example cannot be seen as a restrictive attribute or RC. Dik's (1989:126) statement is also clear on this: individuals cannot be restricted. In a restrictive apposition the order seems to be Dependent - Head in WG as well as in English: 'carpenter Peter is skilled', unless the first constituent is taken as head in which case only the non-restrictive sense remains. For non-restrictiveness of RCs, see 1.3.2.

The term 'apposition' is used by Kleinschmidt (1851) and Rasmussen (1888) to refer to local case endings. Hammerich (1936) and Schultz-Lorentzen (1969) use 'appositionalis' to refer to the contemporative mood.

The problem of distinguishing between apposition and juxtaposition, which in WG is expressed by repetition or bare coordination of nominals, is perhaps just as difficult, but not of concern here.

Grammaticalized apposition is explored in De Groot (1989: ch 3.). Perhaps WG can be considered as an 'appositional type language' because of the one-to-one relation between inflectional cross-reference marking ('referential affixation') and its corresponding overt lexical representants.

Bergsland's (1955:37) term nominal subordination actually covers both the above described kind of modification and relativization, which is to be treated hereafter on. Both types create an attributive relation between subordinated and superordinated nominal constituents, and both are subject to the same expression rules that determine the order Head -Dependent (see 2). A nominal modifier is called 'nominal restrictor' in FG terminology. A RC could best be called 'verbal restrictor'.

1.2 Relativization

WG has no adjectives, and no relative pronouns either. These functions are fulfilled by nominals. As implied in the 0.3, all verbs can be turned into nouns and, as shown in the preceding paragraphs, nouns can be used attributively. In consequence, the functional equivalents in WG of English relative clauses, which are NP-modifying attributes as well, can be created through nominalization of the main verb of a subordinate clause. Modification of nominal heads is then expressed by subordinate sentences with intransitive participial mood forms, or with (the possessed forms of) the passive participle derivational affix -saq. In Fortescue (1984) 'Relative Clauses' are also called 'Adjective Clauses'. One could also characterize them, as is partially done in Dik (1989:130), with a more general term covering both the English and the WG type, as 'Attributive'. I will keep to the traditional term 'Relative Clause'.

A RC forms together with its head a 'relative construction' (Lehmann:1984). This construction is a constituent that functions as a term in a predication. When relative constructions are terms, it will be clear that terms can have considerable complexity. The structure of any term can in FG be represented as follows:

(3)

(Ωxi: Φ1(xi): Φ2(xi): ... : Φn(xi))

In this schema, Φ1(xi) is the first 'open predication in xi' (Dik,1989:71) and it is considered as the 'first restrictor' of the term. It is, to be more concrete, the frequently nominal head of a nominal constituent (a NP). All other restrictors function as modifiers of the head. These latter 'non-first restrictors' are attributive elements, usually in the form of adjectives, adpositions, nominals, participials and RCs. Because these non-first restrictors can be not only predicates (verbal as well as nominal and adjectival), but also embedded predications that design States of Affairs (SOA), I follow the proposal of (among others?) De Groot (1989) to let RCs be represented through (ei) ('event') variables. A possible term structure of a relative construction like:

(4)

arnaq suli-soq
woman work-3sPart
'the/a woman who is working'

is: (Ω1xi: arnaq n (xi): (Pr/Pa ei: [suli- v (*xi)Ag] (ei)))

and can be read as: singular entity xi, such that xi is a woman, such that xi has the semantic function of Agent in the SOA (ei) that xi is working before or at the time of utterance of the sentence. 'Pr/Pa' = Present / Past tense predicate (π-)operator; n = nominal; v = verb; Ω = term operator. As WG has no articles, there is no (in)definiteness term operator. In this term structure, there is just a number operator present.

'*' will have to be explained: If there is anything in WG that a Relativization (R) operator could find expression in, it would be the participle morphemes -soq and -saq. Their introduction could be triggered by a R operator in one of the argument slots of the embedded predication. Here, it is indicated by a star as I am not convinced of the necessity of its presence in the underlying term structure of relative constructions in WG. I assume that there are no other deverbal predications than those marked with -soq and -saq that principally occur in non-first restrictor position. They are, so to say, the only type of verbal restictors in WG. Other non-finite deverbal predications such as those ending in -neq (see 0.4.1.a) are considered as nominal restrictors, usually as heads of terms. The category (v) of the predicate of the 'ei' slot in a non-first restrictor position seems enough to assure relativization.

The participial mood has, as indicated earlier, both verbal and nominal functions. In verbal functions (complement- and adverbial clauses), Fortescue (1984) recommends to refer to it as the participial mood. Here it is both transitively and intransitively conjugatable for person and number. In nominal functions, it should rather be called the participle, and here it is generally only marked for the 3rd person (but see 1.2.5) intransitive subject. Nominal use, on the other hand, of the transitive participial forms is not possible (see 0.4.3). When the main verb of the relative clause is transitive, the passive participle has to be used. This passive participle in turn, can never be used as the head of a complement clause (see 0.4.1).

1.2.1 The Participles

Schultz-Lorentzen (1969:50) gives a division of participles that are used nominally, but that are derived from verbs and still 'retain their verbal character':

- Intransitive Participle: -soq/-toq/-tsoq; refers to the one who carries out the 'action' indicated by a formally intransitive verb, a one-place predicate, e.g.:

(5)
niviarsiaraq uerna-kujup-poq
little girl be sleepy-a little-3sInd
'the little girl is a bit sleepy'

(6)
niviarsiaraq uerna-kujut-toq
little girl be sleepy-a little-3sPart
'little girl who is a bit sleepy'

When applied to a transitive verb, a half-transitive affix has to precede the participle (see example (18) below) unless it is intended as reflexive. When the verb is detransitivized, -soq will have a meaning similar to that of the active participle because it refers to the agent of a verb that is semantically still transitive;

- Active Participle: -si/-tsi/-(r)ti/-seq/-teq; refers to the agent of a transitive verb, but is also often attached to the half-transitive derived verb. The resulting noun is called 'agent noun' by Bergsland (1955), and 'nomen agentis' by Hammerich (1936): malippaa '(3sSubj) follows (3sObj)' > malitsi 'supporter'. As this suffix is no longer productive I will not treat it any further;

- Passive Participle (PP): -gaq/-saq/-taq; refers to the second argument of a two-place predicate, e.g. the patient of the action indicated by a formally transitive verb. It can only be attached to transitive verbs and has a passivizing effect:

(7)
nukappiaraq mattup-paa
boy lock in-3s3sInd
'he locked the boy in'

(8)
nukappiaraq mattu-taq
boy lock in-PP
'the boy that was locked in'

A term structure of the latter example looks like:

(9)
(Ω1xi: nukappiaraq n (xi): (πei: [mattu- v (x1)Ag (xi)GoSubj] (ei)))

The grammatical subject of the nominalized verb is often visible in the form of a final possession marker (see also example (15) below). In correspondence with the formal representation of possessors as given in Dik (1980:107), nukappiaraq mattu-ta-ra 'the boy that I locked in' could then be represented formally as:

(10)
(Ω1xi: nukappiaraq n (xi): (πei: [mattu- v (xj)Ag (xi)GoSubj] (ei): {(Ω1xj: [+S-A] (xj))poss} (ei)))

If this subject is then expressed lexically, it will be marked as a possessor (see 3.4). It might be easier to read the above term structure after having understood the nature of possessive relations. The possessive relation is described in necessary detail in 3.3.3 and 3.4;

- Abstract Participle: -neq; is used for non-finite complement clauses (see 0.4.1), and is sometimes called 'gerund' or 'action noun' (Bergsland, 1955). This suffix refers to the 'action' itself that is indicated by the verb. On intransitive verbs, the possessor corresponds to the semantic subject of the verbal stem. In rare cases where it is attached to a transitive verb, the possessor will correspond to an object (with even rarer exceptions), and

the verbal stem can get reflexive or passive sense (see also 3.4 and 3.5).

(11)
qimmeq qasu-voq
dog be tired-3sInd
'the dog is tired'

(12)
qimmi-p qasu-ne-ra
dog-Gen be tired-N-Poss3sAbs
'the dog's tiredness'

I will provisionally suggest the following term structure:

(13)
((Ωxi: {πei: [qasu- v (xj)Sf] (ei) -neq n} (xi):
{(Ω1xj: qimmeq n (xj))poss} (xi))

Sometimes it can refer to a person: uillarpoq '(3sSubj) loses her husband' > uillarneq 'widow'. Sentences with this nominalizing suffix cannot be literally translated as relative clauses.

A small but significant fact is that in WG grammatical terminology, Petersen's (1951) coinage for 'subject' is susoq and for 'object' susaq; both are participles applied to the empty stem su- 'what', which is often used in questions.

1.2.2 Verbal nature

The retention of the verbal character of nominalized (relative) clauses is sometimes clearly visible.

In the first place, they can have oblique arguments and adverbial modifiers. In the second example below, the transitive verb naapippaa 'X meets Y', is nominalized with the help of the passive participle and used as a modifier of its own underlying object (which again functions as a matrix subject). An adverbial to the stem of a nominalized verb will intervene between the head and the dependent:

(14)
ippassaq angut naapip-para
yesterday man meet-1s3sInd
'yesterday I met the man'

(15)
angut ippassaq naapi-ta-ra sianiip-poq
man yesterday meet-PP-Poss1sAbs be stupid-3sInd
'the man I met yesterday is stupid'

In the second place, as the transitive participle is not available for RC formation (see 0.4.3), relativization of the subject can only be done with the intransitive participle -soq. The formal valency of transitive verbs can be reduced (reduction of the second argument) by derivational detransitivization with the help of a half-transitive suffix. This implies for WG that the inflectional verbal agreement marker can only represent a subject. (And this means, by the way, that the object, if expressed, must take an oblique case marker.) Even though the verb in the example below is nominalized, when it is

meant to function as an attribute to the noun that underlyingly is its own subject a detransitivizing suffix is still required. The verbal stem is namely still transitive.

(16)
anguti-p naapip-paanga
man-Erg meet-3s1sInd
'the man met me'

(17)
angut uannik naapit-si-voq
man I-Instr meet-Htr-3sInd
'the man met me'

(18)
angut (uannik) naapit-si-soq sianiip-poq
man I-Instr meet-Htr-3sPart be stupid-3sInd
'the man who met me is stupid'

Note then that in WG a formally intransitive verb 'meet' can exist, thanks to this suffix that is called half-transitive (Htr) by among others Kleinschmidt (1851) and Fortescue (1984), but that one also comes across as the 'anti-passive' morpheme (see 3.2.2). Semantically the derived verb is still transitive.

Another indication of the verbal nature of the participles is that all shades of tense, modality and aspect are preserved under -soq and -saq nominalization. These distinctions are generally attained with derivational means: affixes of tense (a few) e.g.: -ssa- future; aspect (about 50 productive (F,1984:277)) e.g: -(gi)jartor- progressive; modality (neither a modest number) e.g: -sariaqar- 'must'. An example of voice and aspect in a RC is found embedded in note 4) of the appendix.

1.2.3 Nominal nature

The actual nominal character of RC's appears from the requirement of agreement in number and case between the RC and its head. In example (19) all nouns that directly modify the absolutive case singular head arnaq are in the absolutive case singular too:

(19)
arnaq ilinniartitsi-soq kalaaleq qasu-soq
woman teach-3sPart Greenlander be tired-3sPart
'a woman who is a teacher who is a Greenlander who is tired'

In the next example, the head is in the locative case, and all modifiers have to agree:

(20)
arna-mi ilinniartitsi-su-mi kalaalli-mi
woman-Loc teach-3sPart-Loc Greenlander-Loc
qasu-su-mi
be tired-3sPart-Loc
'at/with the woman who etc.'

There is never agreement with possessive marking on the head (see also appendix, note 1)):

(21)

ui-ga	tummeqqat-igut	nakkar-sima-soq
husband-Poss1sAbs	stairs-pPros	fall down-perf-3sPart

'my husband who has fallen from the stairs'

Note that this example also illustrates the fact that only the heads of attributive phrases have to agree in number and case with the head, and that their embedded arguments and modifiers keep their own inflection, viz. 'stairs' in the prosecutive case plural.

1.2.4 Nominalization

The indications of verbal nature pointed out above, are to some extent also encountered in nominalizations with -neq (see 3.4) (with certain restrictions on tense and modality) and -ffik 'time/place of' (see 3.3.2). On among others these grounds, Bok-Bennema (1991) treats these deverbal affixes as structurally nearly parallel, and describes their properties in considerable detail. There are some important differences with RC-forming -soq and -saq.

RCs in WG show a high degree of nominality, but at the same time, they have many strongly verbal properties. Mackenzie (1986) has developed a scale on which degrees of nominality / verbality of nominalizations can be measured. Many properties of either nature are listed there, and the more of either of them that a nominalization shows, the more it inclines towards one of the respective natures. Different types of nominalization have different degrees of nominalization. RCs are not included in the subject of his paper, but I will use an only slightly adapted version of Mackenzie's (1986:9) table to illustrate their ambiguity, and that of the abovementioned two nominalizers:

Verbal:	-neq	-ffik	-soq/-saq
1 agreement	no	no	yes*, see 1.2.4
2 modality	±	yes	yes 1.2.2
3 tense	±	±	yes 1.2.2
4 aspect	yes	yes	yes 1.2.2
5 voice	yes	yes	yes 1.2.2, 3.2
6 formal valency	no	±	yes 1.2.1 etc.
7 adverbs	yes	yes	yes 1.2.2
Nominal:			
8 'adjectives'	yes	yes	yes
9 arguments > satellites (*)	yes	yes	yes 3.3, 3.4
10 definite term operator	?	?	? (demonstr.)
11 indefinite term operator	?	?	?
12 plural term operator	yes	yes	yes 1.2.3

± means that this property is found only restictedly, often as a lexicalization.

(*) Here is meant that arguments of the corresponding verbal constructions are expressed as satellites in the nominalization. In WG they can be oblique arguments or, with the exception of -soq, possessors.

* Agreement (verbal) is only found on -soq.

So, in spite of clear indications of category change WG RCs retain an abundance of verbal properties. Many of these properties they share with -neq and -ffik, and some with other nominalizers as well, but not those that are central to the notion RC in WG. I consider the property 'valency' as central here. -soq and -saq are unique in that they can have absolutive case arguments. At the same time these arguments function as heads of the RCs. In the words of Bok-Bennema (1991:239) -soq and -saq 'bind an argument of the verb they attach to'.

Bok-Bennema argues that -ffik also can 'bind an event role'. It is certainly true that -ffik can occur with an overt absolutive 'argument', but I will treat it as an absolutive case time adverbial. The only constructions in WG with the possibility of two independent absolutive case nominals are those that contain time adverbials, or that are of the type treated at the end of 2.1. Further aspects related to -ffik will be treated in 3.3.2. Even if a verb derived by -ffik has an argument, this argument can only have a certain inherent semantic function. Arguments of -soq and -saq can be of any semantic function.

In her impressive GB-oriented work, Bok-Bennema (1991:61) writes in connection to -soq: 'The ambiguity between the nominal and the verbal function of participial forms such as those discussed here has been employed as one of the arguments in favour of a nominalist position with respect to Inuit. According to this position, the semantic head of a clause in Inuit is always a noun.' Bok-Bennema doesn't follow this tradition, and accepts this ambiguity as something that is not exceptional across languages. I feel the same about this issue.

In recapitulating the main inference of the above paragraphs; when we consider the attributive sense of noun subordination in WG, we will have to define the RC in WG, a language without relative pronouns or adjectives, as a subordinate clause with an internal nominalized head, that functions as attribute of an external nominal head which is at the same time an argument of the dependent's verbal stem.

1.2.5 Finiteness

The question of non-finiteness of participles in WG is not at all clear. The WG RCs certainly remind us of participles used as RCs like e.g. in Turkish where they are considered as non-finite (Comrie,1989:142, and see 1.3.1). Also the resemblance of certain non-finite uses of the English -ing and -ed participles, with respective WG -soq and -saq (of which the latter is, like -ed can be in some of its uses, both syntactically and semantically passive), is striking: nukappiaraq erinarsortoq 'the singing boy / the boy who is singing'; imermiutarsuaq toqutaq 'the killed hippopotamus / the hippopotamus that was killed'. This resemblance does not go very far, however; it holds mainly on verbal stems that have not undergone certain derivations like for example passive -neqar- (see 3.2.1).

Still, certain properties of the WG participles are not in

accordance with what we usually expect from non-finite forms.

In the first place, we might already have noticed the frequent instances of (nominal) number agreement in the examples of the RC with its head. This agreement is not determined, as case agreement necessarily is, by the role of the head in the matrix clause.

Also, this congruity in number might just as well be a result of verb agreement (cross-reference) by the verb that is now nominalized, with respect to the number of its underlying argument.

It must be admitted that it is not visible that it is number agreement because of cross-reference of the argument with the now nominalized verb, as it might also be head - RC (head - dependent) agreement as in other attributive constructions (see 1.1.2), or even both.

In the second and more noticeable place comes the non-3rd person agreement of the intransitive participle RC with its 'head':

(22)

(ua-gut) amerikamiu-u-su-gut piili-ute-rpassua-qar-pu-gut
(Pron-1p) American-be-Part-1p car-alienable-many-have-Ind-1p
[Subj/Head [Subord.V/Dep.]] Matrix V
'we Americans have many cars' (F:49) (23)

uagut uttoqqa-a-neru-sugut marluk unik-kaluar-pugut
we old-be-comp-1pPart two remain-but...-1pInd
'we who were the oldest two would have remained' (B:48) (24)

illit ilinniartitsisu-u-tutit
you teacher-be-2sPart
'you (being a) teacher' (F:257)

These examples show that the participial forms agree as to person and person number with their heads, the personal pronouns. These personal pronouns again, agree with the matrix verb, or rather, they are cross-referred to by the matrix verb.

Historically, the intransitive participle comes of course from the verbal participial mood paradigm as the basic mood marker is still visible, but it has become a nominalizing derivational suffix, and in RCs it should be denied any sense of 'modality'. In these respects, the WG participle certainly can be considered non-finite. But as to person and number distinctions, the absence of which according to the notion in Quirk & Greenbaum (1973) also indicates non-finiteness, it is clearly finite. As regards tense distinctions again, the participle is non-finite, but if that would settle the matter, all WG verbs would have to be considered non-finite.

I don't expect that an unquestionable answer is possible here. Maybe the question of (non-)finiteness is not of so much importance in a discussion about constructions that function as RCs, as it might just come down to doubts about what to call our pet here. The only constructions however, that are explicitly characterized in Fortescue (1984) as non-finite are those with the 'abstract' participle -neq, which is called 'absolut infinitiv' by Rasmussen (1888).

Like -saq, -neq even chops off the entire mood marker when attached to a verb. I will return to further parallels between -saq and -neq in 3.4. Also other facts like the frequent impersonal use of 3rd person forms and the relative ease of comprehension of finite verbs as opposed to more complex nominalizations in general (Fortescue,1984:95), speak for a non-finite analysis. Although 1st/2nd person marking seems to be a way to evade these facts, it is relatively marginal and I will act as if WG RCs are non-finite.

Although 1st/2nd person marking is generally lost in oblique cases (Fortescue,1984:257):

(25)
ua-gut kalaali-u-su-gut
Pron-1p Greenlander-be-Part-1p
'we Greenlanders' (F:257)

(26)
ua-tsin-nut kalaali-u-su-nut
Pron-1p-All Greenlander-be-Part-Allp
'to us Greenlanders', (F:257)

the following example was heard by Kristoffersen (pc):

(27)
kalaali-u-sugu-tsinnut
Greenlander-be-1pPart-Poss1pAll
'for us who are Greenlanders'

Even though intransitive participles that are conjugated for person and used as RCs are mentioned in Kleinschmidt (1851, with number inflection including dual), their more frequent present-day use of late must be seen as a recent development in WG (Kristoffersen, pc).

1.3 Language typology

1.3.1 RCs in WG

In his impressive typological classification of RCs across languages, Lehmann (1984:77) mentions also WG. His example:

(28)
puisi piniar-tu-p pi-sa-a
seal hunt-IntrPart-Gen catch-PP-Poss3sAbs
'the seal that was caught by the hunter'

is characterized as: an endocentric relative construction consisting of a nominal head and an attributive clausal co-constituent, the latter of which is classified as an embedded postnominal RC with a non-preceding subordinator.

With 'subordinator', Lehmann means here the 'Verbaffix' -saq (or -soq). It embeds the RC in the 'higher nominal' which consists of the head and the RC. Rcs of the verb affix type generally contain no representant of the head. The syntactic function of the head with regard to the predicate of the RC is expressed ('coded') by the subordinator itself. This is the situation in e.g. Turkish, WG, modern Tibetan, Quechua and Yaqui (Lehmann, 1984:163).

In Keenan & Comrie's (1977) Accessibility Hierarchy (hereafter AH, see 3.1), WG occupies the 'Subject' and the 'Direct Object' position.

Although -tu- in this example is a variant of the stem of -soq, it should not be interpreted as having subordinating function here. piniartoq has the lexicalized meaning of 'hunter (by profession)'. Lehmann calls this sort of lexicalization 'substantivization'. On page 45 he says that a RC without head is not an attribute, but that it constitutes the 'higher nominal' itself. It must be admitted here that the difference with headless RCs is not absolute (see 2.2).

The example above shows relativization of the object. Lehmann observes that it is identical with Turkish object relativization in that the connection between the subject and the predicate of the RC is expressed by a possessive relation (see 3.4) in the same way as happens in Turkish: 'Therefore the nominalized verb of the RC bears possessive suffixes that agree with the agent.'. Apart from the apparent Dependent - Head order in Turkish, the likeness of RC-formation in WG and Turkish is striking indeed:

(29)

Hasan-ın Sinan-a ver-diğ-i patates-i yedim
Hasan-Gen Sinan-Dat give-N-3Poss potato-Acc I ate
'I ate the potato that Hasan gave to Sinan' (Comrie:142)

A WG translation could be:

(30)

naatsiia-mik Hasan-ip Sinan-imut tunniu-ta-anik neri-vunga
potato-Instr Hasan-Gen Sinan-All give-PP-Poss3sInst eat-1sInd

Even the RC-internal order is as in WG: oblique objects of the nominalized predicate such as the allative Sinanimut here intervene between possessor that underlyingly is subject and nominalized verb. Note that the acceptability of this example is not confirmed to me by a native speaker.

An important difference with WG is that the nominalizer in Turkish does not seem to be a passive participle. Comrie's (1989:142) literal translation of the RC part is 'the potato of Hasan's giving to Sinan'. A WG translation would rather be: '(the/a) potato (that is) Hasan's to Sinan given (one)'.

An other difference is the lack of agreement between head and dependent in Turkish. In the WG version, both are marked for e.g. instrumental case, as required by the intransitive matrix verb (and not by the predicate of the RC). Lehmann (1984:187) writes that the 'expression of attribution through agreement of the RC with the head is found in Kaititj, Dyirbal, Hurrian, WG, Yaqui and Shoshoni' and notes that 'in WG there are no adjectives that differ from verbs (participles)'.

Turkish also resembles WG in that there is a complementary distribution between subject relativization and non-subject (as regards WG: second argument) relativization. Compare the above two with the examples below, where the subject of the predicate of the RC is relativized:

(31)
mekteb-e gid-en oğlan
school-Dat go-Part boy
'boy who goes to school' (Lehmann:241)

In the following literal WG translation the verb is marked by the intransitive participle:
(32)
nukappiaraq atuarfim-mut pisut-toq
boy school-All walk-3sPart

Note that this is a rather 'wooden' translation for the sake of comparison. A Greenlander would say it in a different and more elegant way. Many different context- and aspect-dependent expressions are possible. The same will probably hold for Turkish.

Apart from subjects, WG can only relativize second arguments. Other 'non-subjects' can only be relativized in less systematic and rather lexicalized ways (see 3.3.2). In Turkish, it seems to be no problem:
(33)
oğlan-ın git-tiğ-i mektep
boy-Gen go-N-3Poss school
'school that the boy goes (to)' (Lehmann:214)

This probably accounts for the difference mentioned above between WG and Turkish in nominalization strategy. Note that in Turkish, the functional difference of the head in (32) and in (33) is not expressed through formal means but can only be inferred from the semantic relations.

The Turkish 'subject strategy' (a participle) can also be applied to the 'genitive attribute' (possessor) of the subject of the RC, notes Lehmann (1984) on page 241. An example is found on page 52, where he also notes more accurately: 'In this construction can the head, apart from subject, also be genitive attribute of the subject.':
(34)
oğl-u mekteb-e gid-en adam
son-3Poss school-Dat go-Part man
'man whose son goes to school' (Lehmann:52)

In 3.3.3, the corresponding construction in WG will turn out to be almost exactly the same. I will however argue that, at least for WG, this construction consists of three separate and differing types of modifying relations, and that it is not a case of possessor relativization.

1.3.2 Non-restrictive RCs

In the typological literature, RCs are often divided into two main groups: restrictive Rcs and non-restrictive Rcs. Whereas restrictive Rcs 'serve to delimit the potential referents' (Comrie: 1989:138) of their heads, and use presupposed information to identify the referent of the NP, non-restrictive Rcs add new information about an already identified referent. (Non-restrictive Rcs are also called

'appositive' in Lehmann (1984), though without any connection with 'Apposition'.) Comrie illustrates the distinction with the following examples:

restrictive RC:
'the man that I saw yesterday left this morning'

non-restrictive RC:
'Fred/the man, who had arrived yesterday, left this morning'

Comrie excludes non-restrictive Rcs from his definition of Rcs partially because he considers them as typologically irrelevant. Whereas the semantic and pragmatic difference between restrictive RCs and non-restrictive RCs is big, a formal distinction is rather rare across languages, except for the intonation break in the latter. Comrie's grounds for not considering the non-restrictives as RCs thus lies in the nature of his approach of language typology. His definitions of language universal phenomena are based on functional ('/semantic/cognitive') notions, rather than on (language specific) syntax. In the case of RCs this means on the one hand that the notion RC is narrowed down to restrictive RCs. On the other hand this enables him to generalize over:

a) restrictive attributive adjectives:
'the good students all passed examination'

b) non-finite (participial) constructions:
'passengers leaving on flight 738 should proceed to the departure lounge'

c) finite restrictive RC:
'students who are good...'
'passengers who are leaving on flight 783...'

This generalization is, as we have seen, justified by the facts of WG as well. WG has both a) and b) but I have narrowed the subject of this thesis further down to b) (see the definition at the end of 1.2.3).

Fortescue (1984:50) mentions the possibility to form what corresponds to a non-restrictive RC in WG. The same participle construction used as a restrictive RC can have a non-restrictive reading. The only difference then, is that the RC is 'more likely to have its own intonational contour'. A restrictive sense can be emphasized by particles as kisimi 'only', a non-restrictive sense can hardly be emphasized by particles. Both because RCs in WG are mainly restrictive and because the aspect of FG that they should shed some light on is term restriction, I have excluded non-restrictive modification from the subject of this thesis.

Another distinction which is made in Comrie (1989) and Lehmann (1984) is between embedded and adjoined (Lehmann: 'angeschlossene') RCs. Adjoined RCs are often mentioned in connection with certain Australian languages (for an investigation from FG perspective, see Zimmermann:1985).

They differ from embedded RCs in that they are not immediate constituents of the matrix clause with a nominal syntactic function (Lehmann, 1984:274). Comrie (1989:144) excludes them from his account because they have more uses than just relativization and, what is important to note in connection with WG, they are ambiguous as to these uses. Zimmermann's (1985:9) example from Warlbiri, which is also found in Comrie and Lehmann, shows this:

(35)
ngatjulu-rlu rna yankiri pantu-rnu kutja-lpa ngapa nga-rnu
I-Erg Aux1sg emu spear-Prf Comp-Aux water drink-Prf
'I speared the emu which was drinking water'
'I speared the emu while it was drinking water'

Warlbiri has no separate category for RCs. Although the RC interpretation of this adjoined construction is restrictive (most adjoined RCs are), non-restrictive embedded clauses can also be ambiguous. Lehmann (1984:272) shows this with an example from Latin:

(36)
amant te-d omne-s mulier-es,...qui sis tam pulcher
love3pInd 2s-Acc all-p woman-p Rel3s 2sConj so beautiful
'all women love you, you who are so beautiful'
'all women love you, because you are so beautiful'

Apart from its non-restrictive relative sense, this construction in Latin has an adverbial causative sense as well, being a combination of a relative pronoun and a conjunctive verb.

Fortescue (1984:50) says that, in WG, rather than the participle, the causative mood can be interpreted as a non-restrictive RC. As shown in 0.4.1, this mood heads verbal clauses that are subordinated to a matrix verb, and has several uses. Fortescue's example then shows the same ambiguity that also characterizes the adjoined RC in Warlbiri and the non-restrictive embedded example from Latin:

(37)
kalaalli-t qallunaatut oqalus-sinnaa-gamik paasi-ssa-vaat
Greenlander-p Danish speak-can-4pCaus understand-Fut-3p3sInd
'Greenlanders, who can speak Danish, will understand him'

to my intuition, it could also be interpreted as:
'As Greenlanders can speak Danish they will understand him'

The construction in this example falls outside of the definition of RCs I have suggested for WG at the end of 1.2.4 because it is not a nominal attribute. Furthermore, adjoined RCs do not exist in WG as far as I know.

2 Constituent order

Just as nouns in apposition to head nouns and other nominal modifiers, the RC follows the head: arnaq kalaaleq 'Greenlandic woman / the woman who is a Greenlander', kalaaleq arnaq 'female Greenlander / the Greenlander who is a woman'. When the RC is topicalized, it gets emphasis; the order RC-head is marked (see Fortescue,1984:109):

(1)

nunaqarfin-nit assigiinngitsu-neer-su-t
settlement-pAbl various-be from-3sPart-p
meeqqa-t 14(fjorten)-it missa-at
child-p 14-Genp about-Poss3pAbs (F:109)
'fourteen-year-old children from various settlements'

(i.e. 'those from various settlements (who are) 14-year old children)

Note that the copula can also be used to paraphrase simple attribution as a relative clause 'to emphasize the relative sense: arnaq kalaali-u-soq or kalaaleq arna-a-soq' (Fortescue, 1984:51).

2.1 Verbalized head

When the head of a RC is 'incorporated' as an object in verbalizers like -qar- 'have', -tor- 'eat/drink', -lior- 'make', -si- 'buy/find' etc., the modifying RC either follows or precedes the derived verb as a formal oblique object in the instrumental case.

(2)

kaffi kissar-toq > kissar-tu-mik kaffi-sor-put
coffee be hot-3sPart be hot-3sPart-Instr coffee-drink-3pInd 'hot coffee' 'they drank hot coffee' (F:83)

This is not object-incorporation, as the verb is just formed by denominal derivation.

The constituent in the instrumental case has no adverbial status here. When an agent would be overtly expressed, kissartumik would not appear in sentence initial position which is generally reserved for sentential adverbials (see 0.4) but it would stand in a position between the subject and the verb. Then it is formally still unclear that it is no predicate adverbial. The same ambiguity can be found in other languages. E.g. in Dutch, the sentence:

(3)

Jan liep vrolijk weg
John walked happy(ly) away

is ambiguous in this respect as well. vrolijk can function as an predicative adjunct:'John walked away being happy' or as an adverb: 'John walked away happily ('in a happy manner')'.

On semantic grounds, sentence (2) is not ambiguous; no literal translation like 'they drank coffee in a hot way' is possible.

Every nominal constituent has to be in some case, and if it is not represented in a verbal agreement marker it will have to be in one of the local cases, the most neutral of

which is the instrumental (see also example (10)). In example (2) above, the verb is intransitive and cannot represent more than one argument in its inflection, here 'they'. A literal translation could be: 'they coffee-drank with the hot one'.

Although the oblique object formally is a satellite of the verb, semantically it is still an attributive phrase to the nominal stem of the derived verb, or more in FG terms; modifier of a noun in a verbal complex.

A possible term structure of kaffi kissartoq in (2) could be like (4) in 1.2:

(4)

(Ωxi: kaffi n (xi): (πei: [kissar- v (xi)Sf] (ei)))

The verbalizing derivation by -tor- 'drink' applies to the whole complex term, but internalizes only its head:

(5)

πei: [{wxj: kaffi n (xj)-sor- v}
(Ωxi: [-s-a] (xi))AgSubj]
(Ωxj: 0 n (xj): (πej: [kissar- v (xj)Sf] (ej))) (ei)

Here, we see the RC as an empty headed second restrictor. The first argument of the verbal stem of the modifying RC that is 'absorbed' in the term-predicate is indicated by the symbol (xj). This RC-structure differs from headless RCs, that will be treated in 2.2.

It can be assumed that this is a case of term-predicate formation. Kristoffersen (1991:19) writes that verb-incorporating affixes like -qar- and -u- 'are most adequately seen as involving term-predicate formation rules'.

The attributive status of the modifier can often still be seen in the number agreement with the head even though the latter has lost its own nominal inflection:

(6)

pinner-su-nik pane-qar-poq
beautiful-Part-pInstr daughter-have-3sInd
'he has beautiful daughters' (K:17) (7)
København-mi amerlasu-nik putumajuit-su-nik
Copenhagen-Loc many-pInstr sober-Part-pInstr
qallunaa-qar-poq
Dane-have-3sInd
'in Copenhagen there are many sober Danes'

Note that in this latter example (based on F:180), the first word does not modify qallunaat 'Danes', but is a sentential adverbial. It would be in the locative case singular anyway if the RC head wasn't verbalized. Other modifying constituents that are not 'underlyingly' in the absolutive case, namely, remain unchanged when the head occurs verb-internally as in (9):

(8)

umiarsuar-nut talittarfik nutaaq angi-soq
ship-pAll harbour new be big-3sPart
'a/the big new harbour for ships'

(9)
angi-su-mik nutaa-mik umiarsuar-nut talittarfe-qar-poq
be big-Part-Instr new-Instr ship-pAll harbour-have-3sInd
'there is a big new harbour for ships'

In both examples here, umiarsuaq 'ship' is unceasingly in the allative case.

These constructions can be evaded by the attachment of the verbalizing affix to the empty stem pi-. The affix -qar- forms a one-place predicate, and can take an object in the instrumental case. This object in (10) corresponds to the head of the RC in (8) and (9), talittarfik 'harbour'. The instrumental marking of any 'absolutive' modifiers of this object like angisoq 'big / one who is big' is now a matter of head-dependent agreement again:

(10)
umiarsuar-nut talittarfim-mik angi-su-mik pe-qar-poq
ship-pAll harbour-Instr be big-Part-Instr e.s-have-3sInd
'there is a big harbour for ships'

Note that the examples (8) through (10) are based on an example in Fortescue (1984:83).

When the head is derived verbally by a copula like -u- 'be' and -nngor- 'become', modifiers must follow the verb in the absolutive case:

(11)
Piitaq sanasu-u-voq pikkoris-soq
Peter carpenter-be-3sInd be skilled-3sPart
'Peter is a competent carpenter'

Denny (1988:255) interprets this construction as 'appositive' on grounds of these properties, but I doubt that the interpretation in WG is 'appositive' with regard to semantic criteria (see 1.1.2) that would yield: 'Peter is a carpenter, a skilled one'. (For a restrictive appositive interpretation, the whole structure of (11) would have to be reanalyzed: 'Peter the skilled one is carpenter'. That is certainly no possible reading here.)

Furthermore, and as far as I know, this construction is only possible with copula morphemes and with morphemes of naming and calling where the verb precedes the noun as well (compare to example (16): ateqarpoq Annemarieke 'she is called Annemarieke'). Like the other derivation with -qar- in example (6), the modifier in (11) agrees in number with the head.

Along with sentences containing absolutives that indicate time, and the construction in example (44') in the appendix, these are the only sentence types in WG that allow two independent absolutive constituents.

2.2 Headless RC

We have seen that RCs partake in the same type of hypotactical construction as attributive noun modification. In fact most of the syntactic relations in WG are subordinating relations where only the main constituent cannot be left out. Ultimately, the verb is the only indispensable constituent of a grammatical sentence, as

arguments can (and actually should, when not emphasized) be 'pro-dropped', because of the agreement marking on the verb.
Still, many RC's can be considered as headless since participial forms can be used as independent arguments of the matrix verb:

(12)

alla-ninngaanniit nassiun-neqar-tut
other-pAbl send-passive-3pPart
'(things) sent from elsewhere' (F:52)

A headless version of (4) would be just kissartoq 'hot thing /one' / 'one which is hot'. For a contrast with the empty headed version, I will propose the following term structure for headless RCs:

(13)

(Ωxi: (πei: [kissar- v (xi)Sf] (ei)))

It is the first restrictor of the term phrase, but it has at the same time a verbal stem. It is a verbal first restrictor and it does not function as a modifier here. Still, this term structure differs from the one of the nominalization by the abstract participle -neq (see 1.2.1) in that here in (13) the referent of (xi) is also the referent of the first argument of the deverbal predicate. In (13) of 1.2.1, it is not. This difference will be further explicitated in 3.5.

Even example (15) above in 1.2.2 can be seen as a headless RC as its head can easily be left out:

(14)

naapi-ta-ra sianiip-poq
meet-PP-Poss1sAbs be stupid-3sInd
'the one I met is stupid'

With derivational N-N affixes as -lik 'provided with', -liaq 'made' etc., headless RC-like constructions can be made:

(15)

(illoqarfik) Tasiusa-mik ati-lik
village Tasiusaq-Instr name-provided with
'a place called Tasiusaq' (based on F:52)

-lik can periphrased more 'analytically' as a RC by the combination -qartoq 'one who has...':

(16)

(pukkitsormioq) Annemarieke-mik ate-qar-toq
Dutchman/woman Annemarieke-Instr name-have-3sPart
'a (Dutch)woman called Annemarieke'

For some headed examples with -lik see appendix note 2).

2.3 Heavy shift and discontinuity

Due to heaviness or depending on stylistic considerations, (especially nominal) constituents are frequently placed after the verb:

(17)

ilaasu-ssa-t ilaga-at kalaalli-t
passenger-futN-Ergp have among-3p3pInd Greenlander-p

sorsunnersuu-p nalaani Danmarki-mi najugaqar-sima-sut
war-Gen during Denmark-Loc live-perf-3pPart
'a number of Greenlanders that had lived in Denmark during the (2nd world-)war were among the passengers'

or even split up, in leaving their head behind on its neutral position (In this example, the matrix verb is impersonal, and the split object of the intransitive subordinate verb stands in the instrumental case all the way.):

(18)

suli=li nuannaartunar-neru-voq nukappiaraq ataaseq
still=but be enviable-comp-3sInd boy one
[S]
pukaale-rsuar-minn=gooq imertarfi-usar-suar-mik
cup-big one-Instr=quote glass-lookalike-big-Instr
[[O] RC]
tuni-neqar-mat pikkorin-nerpaann=gooq ukiu-t tamaasa
give-pass-3sCaus be skilful-sup=quote year-p all
subord.V] [
akissarsia-ri-sartaga-annik,
prize-have as-habPassPart-Poss3pInstr
heavy O RC]
tullianik ajorsa-raangamik ajugaa-su-mut
next time lose-every time 4pCaus win-3sPart-All
[
tunniute-qqit-ta-ga-annik.
present-again-hab-PP-Poss3pInstr
heavy O RC2] (Villadsen, 1984:10)
'But it was even more enviable when a boy was given a big cup, looking like a big dramglass, that is said to be had as a prize by the most skilled ones of every year, and that every next time they lose is handed over again to the winner' (19)

tusagaq amiilaarnartoq illoqarfim-mut anngup-poq
news frightening town-All reach-3sInd
[[H] D]
Juulu-kkut ila-asa=lu
Juulut-and family-Genp relatives-Poss3s/pGenp=and
[possessor
annilaar-utigi-sa-at
fear-have as reason for-PP-Poss3pAbs
[possessum D]]
'the frightening news which Juulut and his family had feared, reached the town' (F:198)

When the head is verbalized by -qar-, its modifiers either precede or follow in the instrumental case; when it is derived by a copula like -u- 'be', however, modifiers must follow the verb in the absolutive case (see 2.1).

An example in Fortescue (1984:195) shows that heavy RC constructions can also be fronted, but as he adds that in the example this is at the same time closely related to discourse-determined emphasis, heaviness cannot be the reason. Heavy shift takes place only because of the internal complexity of constituents, that on functional grounds would be expected in other places. Alternative

placement due to heaviness is by definition without pragmatic or semantic reasons.

2.4 Coordination of Rcs

From some of the examples above, it can be inferred that a term phrase can consist of a head and several attributive modifiers. The usually heavier RCs are placed later in the sequence and can be provided with a conjunctional element. This can serve ease of comprehension when the beginning of the next complex modifier is indicated, and it can also express a coordinative sense.

The chief means for coordination in general are enclitic suffixes like =lu 'and', =li 'but', =luuniit 'or' that are generally attached to the first constituent of every coordinated phrase, conjunctional particles like aamma 'and', kisianni 'but' that appear between the coordinated phrases, and the contemporative mood (see 0.4.1.d)).

(20)

anorersuaq sialul=lu	anorersuaq aamma sialuk
storm rain=and	storm and rain
'storm and rain'	'storm and rain'

Coordination of nouns is commonly done with enclitics, and the same holds for modifying nouns (including RCs) (here an example with =lu):

(21)

qinngu-a	tikik-kusu-ta-ralua-ra
bottom-Poss3sAbs	arrive-desire-PP-but...-Poss1sAbs

tutto-qa-ratarsinnaa-ner-anil=lu ilimagi-sa-ra
reindeer-have-can easily-N-Poss3sInstr=and expect-PP-Pos1sAbs
'the (fjord's) bottom that I actually wished to arrive at and where I expected it to be likely that there were reindeer'

(note the application of deverbal -galuaq to the (by me assumed) nominally derived word by -saq) (Brandt, p.7,l.8)

Coordination in the sense of 'and' of nouns is also possible with the contemporative, provided they are verbalized by a copula or have a verbal stem, like those of RCs:

(23)

miki-vallaa-rani=lu	angi-vallaa-nngit-soq
be small-too-4sContNeg=and	be big-too-not-3sPart
'not too small and not too big'	(F:130)

This can perhaps be seen as a further indication of the verbal nature of WG RCs, or at least of their verbal origin.

3 Accessibility to relativization

We have seen in paragraph 1.2.3 above that the dependent has to agree with the head as to the person, number and case marking as required by the matrix verb. In fact, any nominal constituent in the matrix clause whatever its function, can be relativized as long as there is agreement. Therefore, the head + RC modifier can constitute the matrix subject, direct or indirect object or any other nominal function. (see e.g. (19) in 2.3) On the other hand, the head cannot have just any function within the RC.

3.1 Earlier work

It is claimed in two articles by Creider (1978) and Smith (1984) on RC in (dialects of) Labrador Inuktitut, an Eastern Eskimo dialect that is close to WG in many respects, that there are limits to what positions can be 'relativized into'. As these two excellent articles are the only publications known by me that solely deal with RC in Eskimo, and as the discussion they engage in touches on the universal validity of the Accessibility Hierarchy as developed in Keenan & Comrie (1977), I feel that it is necessary to go into the matter a little.

When deriving RCs from underlying syntactic structures (as is done in Generative and Relational Grammar) it is clear that not all positions in these structures are accessible to the transformations that yield a head and a dependent RC, or according to the terminology of Creider and Smith, not all positions inside the RC are relativizable 'into'.

One of Creider's conclusions even is that the only NP that can be relativized into is an Absolutive NP. This implies that a reservation can be made against Keenan & Comrie's AH which states that accessibility to RC formation across languages is subject to the following implicational hierarchy:

S < DO < IO < OBL < GEN < OComp.

Among the most important properties of this hierarchy are:

1) In all languages that have RC formation, it is possible to relativize subjects;
2) If a language can relativize any position lower on the hierarchy, all higher positions can be relativized;
3) The lower one gets on the hierarchy, the less frequent are constructions in which these positions are relativized.

Now, if Creider is right in his Absolutive Constraint, then in the LI dialect of Rankin Inlet, Eskimo being an ergative language, objects of transitive constructions are easier relativizable than subjects as only subjects of intransitive verbs can be relativized, in which case the abovementioned properties of the AH are violated. The way for presuming this exception to the AH was already paved by researchers of ergative languages, among which Woodbury (1975, but I did not have access to this work) on (South) Greenlandic. Keenan and Comrie discuss these possible counterexamples and the proposal for an alternative Ergative Hierarchy in their article, and point out that although

Woodbury claims that absolutives are more accessible than ergatives, ergatives can in general be relativized.

Smith (1984) agrees on this point, and claims further that Creider's and Woodbury's conclusions are based on an incorrect interpretation of the facts (in particular of the passive participle), and presents an alternative analysis of the forwarded examples that does not conflict with the AH. He points out that all initial subjects and objects are relativizable because all RCs are or become intransitive nominals, and claims that all of Creider's transitive examples are in fact detransitivized.

The cause of Creider's mistake is that he failed to recognize the affix -jak/tak (the LI equivalent of WG -saq) as the passive participle. He interpreted it as a transitive (Creider: 'active') participial mood marker, and the presence of a so called ergative subject with -jak/tak constructions strengthens Creider in his assumption that they are transitive RCs.

As noted in 0.2, the ergative case marker indicates the subject, if expressed, of a transitive verb as well as the possessor, if expressed, in possessive constructions. A possessor further triggers possessive marking on the possessum. So a possessor is represented in two ways: as an ergative (genitive) NP, and as a possessive marker indicating person and number of the possessor: Kaali-p illu-a 'Karl's house-his' (i.e. 'Karl's house').

And as noted in e.g. 1.2 and 1.2.1, the transitive participial cannot be used as a RC and relativization of subjects or objects of transitive verbs involves detransitivization of that verb or a passive participle respectively. In the latter instance, the underlying subject can be expressed as a possessor of the RC-noun that modifies the object. A possessor always triggers possessive marking on the nominal(ized) possessum.

In such instances of possessor expression, the RC that modifies the object indicates person and number of the possessor that coincides with the underlying subject of its verbal stem. This is further dealt with in 3.4 below, and the paradigmata for possessive marking on the possessor can be found in the appendix.

Now, Creider does recognize that the ergative marker has both of the functions referred to above, and also that the RC must be a nominalization. However, he has not taken the formal passive status of this nominalization into account, nor the formal genitive status of the possessor in most cases , and according to Smith (1984), neither has Woodbury (1975). The reason for this is that a possessor is marked with a morpheme homophonous with that of a transitive subject, and that they have taken the latter syntactic status to be reflected formally by this morpheme. The following of one of Creiders LI examples ((23)) will illustrate the problem, the second morpheme translation is added as the correct one:

(1)
natsi-up taku-ja(-)a angut niqi-mik niri-vuq
seal-Erg see-3s3sActPart man meat-Acc eat-3sInd
seal-Gen see-PassPart-Poss3s man meat-Acc eat-3sInd
'the man that the seal saw ate the meat'

Smith rightly conceives of the affix -jak/tak as a passive participle and treats the underlying subject as an optionally 'raised' possessor of a nominal constituent. (see 3.4).

Smith's analysis divides relativization into 3 separate processes:
1) Lexical insertion of -juk/tuk as subject and -jak/tak as object at Deep Structure;
2) Detransitivizing transformational rules Passive (which 'removes' a subject), Anti-passive (which removes an object) and (optional) Possessor Raising;
3) Incorporation of the main verb of the RC into -juk/tuk or -jak/tak, that both are affixed in subject position at Surface Structure, verb incorporation yielding a nominal structure here.

In Smith's analysis, verb incorporation is limited by an independently motivated constraint on syntactic affixation, the Detransitive Complement Constraint on Affixal Clause Union (DCC), that says that a complement verb can't be removed by rule and morphologically attached to another constituent if its clause contains more than one nuclear term (= first or second argument).
This means that embedded verbs (VPs) that are complement clauses of the matrix verb at D-structure have to be intransitive before 'clause union' can apply. 'Clause union' is what happens when the embedded verb loses its complement status either in cases of:
a) incorporation in a higher verb. This is called 'verb-to-verb raising' and is in traditional terms treated as deverbal-verbal derivation by affixes like morphological causative with -ti- and imperative with -kqu- (see 3.2.3 below; our WG -tit- and -qqu-);
b) incorporation into a nominal constituent in the sentence, which is normally conceived of as deverbal-nominal derivation.
'B)' also includes RC-formation. At D-structure, the RC is analyzed as a complement clause, functioning as an argument of the matrix verb. It has an embedded 'S-node' and -juk/tuk or -jak/tak in the embedded subject or object positions respectively , coreferent by semantic interpretation with a matrix verb argument dominating the embedded VP.
When the transformation of relativization is applied, the verbal head of the embedded 'S' is incorporated into the embedded participle. Verb incorporation is an independent rule which requires Chomsky-adjunction of the verbal base to the 'N-node' headed by the participle, and which thereby 'prunes' the embedded verb's S-node. The result is clause union.
Now, the abovementioned DCC constrains all forms of clause

union. The D-structure complement verb must be or be made intransitive, by 'intermediate transformational processing' like antipassive etc. that has to put all arguments but one 'en chômage'. Thereafter, verb incorporation turns the RC into a nominal structure. As LI and WG matrix verbs cannot have more than one argument in one of the two main cases absolutive and ergative, clause union would cause problems if the incorporated verb is transitive. The main surface effect of the DCC is the prevention of such a 'relational dilemma'.

To understand relativization if the RC is a transitive complement clause at D-structure, something must be said about lexical insertion of -juk/tuk. This is an intransitive participle, here treated as an absolutive element with affix status, that is inserted into embedded subject position at D-structure This insertion is subject to a non-ergative condition. This means that the same transitive RC is non-ergative at D-structure Here, Smith anticipates a hypothesis to come, that all LI grammar is non-ergative at D-structure.

The fact that -jak/tak is lexically inserted into an embedded coreferent object position at a non-ergative D-structure, and affixed in subject position at S-structure is caused by the passive rule that advances objects to subjects and puts the original subject in the Terminalis case (which is normally used for the indirect object; Creider: 'Allative', like its WG equivalent, although it can also be used in Rankin Inlet instances where WG uses the Instrumental) with 'chômeur' status. In WG, the original subject is generally put in the Ablative case (see 3.2.1).

In this way, detransitivization is not an ergative-avoiding strategy that feeds relativization, but it is independently required by the DCC. So there is no need to even say that relativization into ergatives is or is not (made) possible, because it is always applied to non-ergative constructions, and it is necessarily accompanied by detransitivization.

With this line of reasoning Smith generalizes over direct and indirect relativization, which allows him to analyze RCs as intransitive and non-ergative, making an 'Absolutive' constraint on relativization beside the point, and a separate Ergativity Hierarchy unjustified. This analysis holds for WG as well.

As to the data, and within the transformational framework, Smith's analysis is justifiable, and impressive besides. The view that affixes can project syntactically has been held already for some time by several grammarians (for WG since Rischel, 1971), and the possibility to analyze a vast array of grammatical function changing phenomena as incorporation is further developed by among others Baker (1988).

An important objection to the analysis outlined above is

that it is not in accordance with the 'surface' facts of WG. In FG terms, a RC cannot be analyzed as a complement verb at D-structure. So, the predicament remains that a verb still needs to be detransitivized before its subject is accessible to relativization. This makes a 'transitive' object easier to relativize than a 'transitive' subject, which is a threat to the AH.

From a FG point of view however, RC formation and concomitant processes described or referred to above can be linked in another way, and also in a way that is more in line with the spirit of Keenan & Comrie's (1977) last chapter. There, the AH is expected to be valid for more than only RC formation, namely for grammatical processes in general. A connection between grammatical and cognitive accessibility is anticipated (as being treated in TFG2) in Dik (1989:38).

In the following paragraphs, I will describe the perspective changing processes in WG.

3.2 Processes involving change of perspective in WG

Because of the different possible effects of the same grammatical relation shifting suffixes (esp. the double transitivizers) that represent changes of 'voice' of the verb, I will first show them at work in the respective separated processes.

3.2.1 Passive

The principal means to a creation of a passive construction is the derivational suffix -neqar-. It derives intransitive passive verbs from transitive active verbs, and the goal object is assigned subject function. The underlying agent may optionally appear as an oblique object in the ablative case.

(2)
inuit nanoq taku-aat
people-Erg bear see-3p3sInd
'the people saw the polar bear'

(3)
nanoq (inun-nit) taku-neqar-poq
bear (people-Abl) see-pass-3sInd
'the polar bear was seen (by the people)' (F:265)

As there is no semantic change involved in (3), -neqar- seems to be a 'form' morpheme rather than a 'content' morpheme. In FG terms, this means that in (3) the term with the semantic function Goal is assigned Subject function while the predication is left unaltered. This implies that WG is a language with 'Subject assignment'.

-saa-, the combination of the passive participle -saq with copulative intransitive -u- 'be', is lexicalized to having a stative passive sense 'is V-ed'. Its use is a bit antiquated: unitsippaa 'she stops him' > unitsitaavoq 'he is stopped' / 'he remains'. Its subject may appear in the ablative case: kiffamit sanasaavoq 'it is made by the

servant'(SL:97), or may be expressed as a possessor (see 3.4).

A pseudopassive can be formed with the intransitive use (and therefore usually reflexive, see 3.2.2.3) of the double transitive (see 3.2.3) suffix -tit- 'let/cause'. The agent can optionally appear in the allative case:

(4)

qimmip	kii-vaa	>	(qimmi-mut)	kii-sip-poq
dog-Erg	bite-3s3sInd		(dog-All)	bite-cause-3sInd
'the dog bit him'			'he got (himself) bitten (by a dog)'	

(F:265)

3.2.2 Detransitivization

Verbs can be detransitivized apparently without semantic change by the use of half-transitive ('antipassive') suffixes as -(s)i- and -nnig-. This morpheme seems to be a clear example of an affix with just a grammatical status. It modifies the predicate only insofar as to reduce its cross-reference potential. It can be utilized to 'prepare' a transitive predication for nominalization, but also for further verbal derivations. The most noticeable effect is that the subject is in the absolutive case. The underlying goal can optionally be expressed in the instrumental case, although often with a despecified or de-emphasized and sometimes even indefinite sense:

(5)

qulleq	ikin-nia-ruk	> quller-mik	ikit-si-nia-rit
lamp	light-try-2s3sImp	lamp-Instr	light-Htr-try-2sImp
'light the lamp'		'light a lamp'	

(R:159)

I interpret the dynamic passive -neqar- and the half-transitive -(s)i- as overt grammatical markers of perspectivization and detransitivization respectively. This view is not entirely unproblematic, as 'demotion' to satellite status of the goal object implies non-object assignment. This again would imply that WG has assignment of object, a syntactic function that is argued to be irrelevant in WG in Kristoffersen (1991). Then the transitive verb should be represented in its different voices as follows (the square brackets indicate case marking):

Pred v transitive	(x1)+Subj	(x2)+Obj
Pred v passive	(x1) [Obl]	(x2)+Subj
Pred v halftransitive	(x1)+Subj	(x2) [Obl]

On the other hand it could well be possible that there is some semantic change involved in halftransitivization. In that case the verb would be derived by a predicate formation rule of halftransitivization:

input:	Pred v	(x1)AgSubj [Erg]	(x2)Go [Abs]
output:	Pred v	(x1)AgSubj [Abs]	(x2)-Go [Obl]

The oblique argument could have the semantic function of Reference, 'with regard to', and its expression is somewhat more optional than that of the oblique argument in (6) below.

Although the latter analysis seems the most acceptable,

this is an issue that requires more investigation, and that I will avoid by looking at it from a different angle in 3.3.1.

3.2.2.1 Definiteness

It is not merely justifiable to see the half-transitive derivation as a way, by lack of an article, to make the object indefinite. In the first place, (in)definiteness can be attained by various other means, as clefting, word order, demonstrative elements etc. In the second place, in Greenlandic, there is transitivity as such. The semantic valency of a verb does not depend directly on its (in-) transitivity. Even though a transitive verb may be detransitivized and have a formally optional object in the instrumental (or other oblique) case, this object is often semantically indispensable in non-anomalous sentences:

(6)
Jensi-mik ate-qar-punga aamma København-mi najugaqar-lunga
Jens-Instr name-have-1sInd and Copenhagen-Loc live-1sCont
'I'm called Jens and I live in Copenhagen'

Although a verb is obligatorily marked for one or two arguments, the lexical presence of these in the sentence can lead to unnecessary emphasis. The same can be the case with the presence of an oblique object in the allative. Note that in all sentences illustrating the dative shift constructions below (15-20), the omission of allative objects is easier than of instrumental objects, in that it involves less semantic change.

Instrumental case objects of verbs nominalized by -neq and of transitive verbal bases of RCs are not indefinite or non-specific (see Fortescue (1984:250)).

The combination of a passive participle morpheme with the intransitive -qar- 'have' has a despecifying effect on the object of the verbal base, which can then appear in the instrumental case:

(7)
assam-miu-mik taku-sa-qa-nngil-aq
hand-dweller-Instr see-PP-have-not-3sInd
'there was nothing to be seen in his hands' (F:267)
(lit. 'something in his hands etc.')

3.2.2.2 Other semantic changes

A certain group of verbal bases is neutral to (in-) transitivity, and no detransitivizing operation is obligatory to make the object oblique. These verb stems can be either agentive and have the same subject in both constructions: neqi nerivaa 'he eats the meat'; neqimik nerivoq 'he eats some meat', or non-agentive, of which the object corresponds to the subject of the intransitive variant (Fortescue:85):

(8)
savik ator-paa > savik ator-poq
knife use-3s3sInd knife use-3sInd
'she uses the knife' 'the knife is being used'

In such cases, a formal detransitivizer must be used to keep the transitive sense:
(9)
savim-mik atu-i-voq
knife-Instr use-Htr-3sInd
'she uses a knife'

The intransitive suffix -nar- 'be such as to' attached to intransitive verbs creates a new impersonal subject and to transitive verbs it advances the object to subject status or, when creating an impersonal subject again, puts the object in the instrumental case: qasuvoq 'he is tired' > qasunarpoq 'it is tiring'; ajorpaa 'he can't do it' > ajornarpoq 'it is difficult'.

3.2.2.3 Reflexive

Many verbs are semantically transitive to the extent that they, when used intransitively, have reflexive (or reciprocal or passive) sense: toquppaa 'he kills him' > toquppoq 'he kills himself', and:
(10)
immi-nut oqar-figa-aq
self-All talk-trans-3sInd
'he talks to himself'

3.2.3 Transitivization / valency increase

A small group of suffixes are so called 'double transitive' (Kleinschmidt,1851): -tit- 'cause, let'; -qqu- 'ask, want, tell to'; -sar- 'get, try, cause to'; -t(s)aali(or)- 'prevent from'.
They can be attached to intransitive verbs and introduce a new subject as in (11)-(12). At the same time, object status is assigned to the subject of the underived verb:
(11)
Piitaq aqissi-mik neri-voq
Peter grouse-instr eat-3sInd
'Peter eats a grouse' (whatever grouse)
(12)
Hansi-p Piitaq aqissi-mik neri-sip-paa
Hans-Erg Peter grouse-Instr eat-let-3s3sInd
'Hans lets Peter eat a grouse'

When they are attached to transitive verbs the agent subject of the verbal base becomes the patient object of the derived verb and is in the allative case. The goal object remains unaffected:
(13)
Piita-p aqisseq neri-vaa
Peter-Erg grouse eat-3s3sInd
'Peter eats a grouse' (a certain grouse)

(14)
Hansi-p aqisseq Piita-mut neri-tip-paa
Hans-Erg grouse Peter-All eat-let-3s3sInd
'Hans gets a grouse (to be) eaten by Peter'

Note in this example, that due to morphophonological variation, the verb is not ambiguous as regards which argument is oblique. In most cases however, the verb is ambiguous, e.g.: ilinniartippaa '3sg. teaches him/her' or '3sg. teaches it'; atuaqquaa '3sg. tells him/her to read' or '3sg. orders it to be read', and we cannot tell from its form whether it is derived from the intransitive basic predicate atuarpoq '3sg. reads' or from the transitive atuarpaa '3sg. reads it' respectively.
Certain in-/detransitive verbs can be used transitively with causative or benefactive sense (Fortescue,1984:270).

3.2.4 Other relation shifting processes

As the allative, like the absolutive, is regarded (F:89) to have a more specific sense than the instrumental, it is involved in constructions that remind of 'dative shift'. The main suffix involved here is -(ss)ut(i)- 'with/for/with respect to' (here called '-uti-').
It can be attached to a 3-place predicate and it leaves the subject intact, but has either:
a patient (goal) object in the absolutive and an oblique object in the allative:
(15)
Ole Piita-mut savin-nik tuni-si-voq
Ole Peter-All knife-pInstr give-Htr-3sInd
'Ole gave knives to Peter'
(16)
Ole-p Piitaq savin-nik tuni-vaa
Ole-Erg Peter knife-pInstr give-3s3sInd
'Ole presented Peter with knives'
(17)
Ole-p saffit Piita-mut tunni-up-pai
Ole-Erg knives Peter-All give-with respect to-3s3pInd
'Ole gave the knives (away/) to Peter'

where the direct object is advanced, or:
a beneficiary object in the absolutive with an oblique object in the instrumental:
(18)
Ole Piita-kkun-nut Sisimiu-niin-ner-minik oqaluttuar-poq Ole Peter-cum suis-All S.-be at-N-Poss4sInstr tell-3sInd
'Ole told about his stay in Sisimiut to Peter and his fellows (19)
Ole-p Sisimiu-niin-ni-ni Piita-kkun-nut oqaluttuar-aa
Ole-Erg S.-be at-N-Poss4sAbs Peter-c.s.-All tell-3s3sInd
'Ole told (of) his stay in Sisimiut to Peter and his fellows' (20)
Ole-p Piita-kkut Sisimiu-niin-ner-minik oqaluttu-up-pai
Ole-Erg Peter-c.s. S.-be at-N-Poss4sInstr tell-wrt-3s3pInd
'Ole told Peter and his fellows about his stay in Sisimiut'

in which case the indirect object is advanced.

The basic predicate frame of a transitive verb is often

idiosyncratic as to which object is to be cross-referred to. Some (derived) verbs can after context mark direct or indirect object, e.g.: akilerpaa 'pays him / it'. It is not clear to me whether they should be regarded as having different predicate frames.

With verbs of communication, there is a hardly productive tendency of -uti-, to introduce an indirect (recipient) object in its verbal agreement marking. With other verbs (movement, transferring) a direct object is often introduced.

-uti- has different functions. Generally, it is applied to intransitive bases. When applied to 1- or 2-place predicates it introduces a new argument through valency increase. This is mostly an absolutive beneficiary argument, but sometimes an argument with the semantic function instrument or even comitative is introduced. Beneficiary: naammassivoq 'it is finished' > naammassiuppaa 'he finished something for him', comitative: tikippoq 'he has arrived' > tikiuppaa 'he has brought it / arrived with it'. When it is intransitively inflected it can express a reciprocal relation. These derivations by -uti- are clearly instances of predicate formation in that they give the predicate an extra benefactive etc. sense.

Now, the application of -uti- in the instances described above in (17) and (20) creates a difference in placement of the arguments, a difference in their case marking, and it represents what can be seen as an 'object voice' on the verb. If -uti- did not involve semantic change here, these facts could be explained in terms of alternative object assignment. The main objection to that explanation, however, is that these (and all other) applications of -uti- are highly lexicalized, which means that predicates bearing this suffix should be stored in the lexicon. Also therefore it is rather questionable whether these applications constitute any proof for object assignment in WG.

Note then, that it is unclear whether these constructions should be called 'dative shift', or the suffix 'applicative'.

Furthermore, according to the use of this latter notion in Dik (1989) an applicative suffix is generally considered to mask beneficiary (or later in the SFH) objects, and not goal objects, whereas in example (17) a goal (in the FG sense of Patient) object is masked.

3.3 Strategies for RC formation

3.3.1 First and second argument relativization

The relation-shifting processes described above can be combined by recursive application as they are essentially triggered by derivation. For this reason any of the above described processes can precede RC formation, e.g.(18) in 1.2.2 and (10) in 2.1, and, as a consequence, feed it; the only requirement being that the verb is formally intransitive when its subject is about to be relativized.

Only one process appears to be relativizing and passivizing at the same time prior to the derivation as a verbal (stative) passive (see 3.2.1), and that is the purely derivational -saq that nominalizes transitive verbs and relativizes objects. Two factors indicate that this derivation can be seen as a 'relation-shifting' process: the subject of the underlying predicate can be consigned to an oblique case or it can get possessor status (see 3.4); the object keeps its absolutive marking while no independent ergative-marked argument is possible.

Even though the morphological passive -neqar- has an intransitive verb as its output, to claim that the passive participle -saq is a detransitivizer might go too far because after all, it is a nominalizer. The argument that the result of the further derivation with -u- 'be' > -saa- (see 3.2.1) is intransitive is invalid as this is a copula construction in essence, with which an exclusively intransitive verb can be derived from any noun. Even if -saa- is synchronically considered as a lexicalized combination in the sense that it is fixed, it also has a lexicalized sense (stative). Furthermore, it is not fully productive anymore.

Although the input verb is required to be formally transitive, -saq, as a nominalizing affix, should formally be valency obliterating rather than valency decreasing. Most unlike -neq and -ffik (see 1.2.4) and other nominalizing affixes, however, -saq does appear to retain formally reduced valency, even without further derivation by copula.

Here I will give two further examples of derivational processes as sketched above that can feed relativization:

When a -saq is preceded by a double transitivizer (see 3.2.3), it relativizes the object of the derived verb. Analogous to both examples under (8) in 3.2.2.2:

(21)
savik ato-qqu-sa-a
knife use-tell to-PP-Poss3sAbs
'the knife he told (someone) to use',
or 'the knife he wanted to be used' respectively.

When the grammatical subject of the 'pseudopassive' (see 3.2.1) is relativized, all inherent relations, such as reflexive and the embedded allative agent, remain unaffected: (22)
nukappiaraq qimmi-mut kii-sit-toq pulaar-para
boy dog-All bite-cause-3sPart visit-1s3sInd
'I visited the boy who had been bitten by a dog' (F:52)

Almost none of these latter type processes can be considered as strategies that feed relativization because they all have a derived predicate as output. The fact that they all modify the verb semantically implies that they involve predicate formation. This means that the relation shifting morphemes here are not 'voice' markers whose only function is to indicate that the predicate is presented from the perspective of a certain argument. They derive a predicate with a different meaning and argument structure.

They can feed RC-formation, but their accessibility-improving properties with respect to certain arguments is only a side-effect of their derivational output.

The only relation shifting processes that could perhaps be seen as strategies to feed relativization is the half-transitivizing construction with -(s)i- in 3.2.2 and the dynamic passive with -neqar- in 3.2.1. This is only possible if -(s)i- and -neqar- are understood as voice markers.

As we may have noted, by the way, it would not be a hindrance to relativization of objects of transitive verbs if -neqar- were the marker of a predicate formation rule because they can be relativized anyway by -saq.

It would be more problematic, however, for the relativizability of subjects of transitive verbs if -(s)i- is a marker of a predicate formation rule. In that case, any verb that is derived intransitively with this half-transitive morpheme, would represent a predicate that is different from its transitive base. This would make it impossible to relativize transitive subjects without a preceding predicate formation rule.

A way out of this problem could be to regard these affixes as 'markers of predicate formation rules of perspectivization' as Kristoffersen (1991:20) does. In that case, WG should be characterized as a language to which syntactic functions are irrelevant as it has no subject or object assignment, while at the same time it can 'promote' or 'demote' arguments without semantic change. This could be an intermediate position, and apparently, then only first and second arguments can be relativized, and halftransitivization and passivization can be successfully argued to be 'strategies' to make these arguments accessible to RC-formation.

I will not go into the problem of the relevance of syntactic functions in WG. My approach will be to adopt a refined use of the notion 'strategy'. This is not a very sophisticated approach as it is just a matter of terminology.

If WG has the category subject in the FG sense, -si- and -neqar- are not seen as predicate forming derivations, and can serve syntactic function assignment. Whether or not this is the case, I have dubbed these derivations as 'narrow strategy'. As a narrow strategy is characterized by the fact that there are no interpretational difficulties involved, and as 'underlying' ergatives seem to pose no problem for relativization, I take these considerations to be related and suggest that the AH can be preserved.

As it is more debatable whether WG has object assignment, the 'dative shift'-like construction with -uti- that was discussed in 3.2.4 will have to be seen as a strategy that clearly requires predicate formation, which is why I have called that a 'broad strategy'. Also the stative and the pseudopassive, and the construction of example (30) are seen as broad strategies.

In the above sections I have shown that:
- relativization of intransitive subjects is done with the Intransitive Participle -soq;
- relativization of transitive objects is done with the Passive Participle -saq, leaving a subject to be expressed as an oblique argument or through a possessive construction;
- relativization of transitive subjects is possible with the same morpheme -soq, but only after detransitivization. Any lexically present absolutive object becomes oblique;
- relativization of transitive objects can also be done with -soq, but only after passivization. Any lexically present subject becomes oblique;
- the latter two points show that it could be debatable whether WG has subject assignment, as they involve what Kristoffersen (1991) argues to be predicate formation rather than just a different perspectivization of the same SOA;
- even if WG lacks the category subject in the FG sense, ergative subjects form no threat to the AH;
- WG apparently lacks object assignment. Consequently, indirect objects are relativizable with some difficulty.

3.3.2 Oblique argument relativization

There are no formal strategies available to relativize 'into' any oblique argument. Therefore it is not transparent for example how to say in WG 'the town that/in which/where I lived (in)'. To express that, one would have to resort to what from an English perspective can be called 'periphrastic' constructions like 'the town that was my dwelling place'.

There is a possibility, however, to use a possessed V-N suffix -ffik 'place/time of' that is attached to intransitive verbs (if -ffik is attached to transitives, it gets a reflexive or passive meaning and in the latter case, a possessor will correspond to an underlying object (see also 3.4)) and that produces nouns:

(23)

isip-poq	isi-ffi-a
fall in water-3sInd	fall in water-place of-Poss3sAbs
'3sg falls into the water'	'place where 3s fell into'(R:101)

-ffik can be further derived as a transitive verb by denominal -gi- 'have as' which can be attached to any noun: illu 'house' > illu-gaa 'she has it as house' (in the sense of:'it is her house') (-gaa is a contraction of -gi- and the 3sIndicative marker -vaa).

The transitivizing V-V combination -ffi-gi- means thus: 'have as place/time (and sometimes: person) of'. This combination can be attached to intransitive verbs and agrees verbally also with an object that would otherwise be in the allative case:

(24)

Aqissia-mut	oqar-punga	Aqissiaq	oqar-fi-ga-ara
Aqissiaq-All	talk-1sInd	Aqissiaq	talk-.. of-have as- 1s3sInd

'I talked to Aqissiaq'

When the verb derived by -ffigi- in turn is nominalized by a (always possessed) Passive Participle, (semantic) 'relations other than subject/object between the head and the relative element' (Fortescue, 1984:53) can be expressed:

(25)

angut iser-figi-sa-ra
man go in-have as place of-PP-Poss1sAbs
'the man to whom I went in' (F:53)

These suffixes are no mere relation shifters in the sense described in 3.2. Derivation by -ffik involves semantic change just like other deverbal nominalizers as -gajooq 'one who often V-s', -paluk 'sound of V-ing', -(t)siiaq 'something left to V', -ssut 'means/cause/reason for V-ing', -useq 'way of V-ing' etc., and sometimes they can also be derived further with -gi- and -saq to produce a relativization of an oblique argument:

(26)

savik toqut-si-ssuti-gi-sa-a
knife kill-Htr-means for-have as-PP-Poss3sAbs
'the knife with which he killed' (F:54)

To my intuition, the corresponding non-relative and underived construction could be something like:

(27)

savim-mik toqup-paa
knife-Instr kill-3s3sInd
'he killed him with a knife'

Probably in connection with the fact that the oblique cases are often used in a strictly grammatical sense, or for other semantic functions as well (see appendix), however, the instrument can be expressed more productively with the help of a subordinate clause:

(28)

savi-ni ator-nagu nanoq toqup-paa
knife-Poss4s use-(4s-)3sContNeg polar bear kill-3s3sInd
'he killed the bear without (using) his knife' (F:215)

Often, it is not even possible to say what 'underlying' case marker ('preposition') on the object could have been masked by the affix -ffigi-, and often there seems to be no underlying object at all, as the 'object' in a corresponding non-relativized construction would be a subordinate clause or an adverbial. What to think of for example:

(29)

nasa-ar-fi-gi-vaa
cap-remove-place/time of-have as-3s3sInd
'3sg takes his cap off before 3sg' ? (based on F:92)

Most likely, it would require a time adverbial in the absolutive case here, or a non-finite nominalization by -neq in the absolutive case, as a cross-referred object, if overtly expressed.

Because of the requirements on the kind of verb that -ffik can be attached to, and the semantic change involved, there are far more restrictions on the use of -ffik than of -soq or -saq. The above goes to show that it is reasonable to

assume that the verbal stem in the examples has undergone a process of predicate formation before relativization of the object. This means that affixes as these cannot be used as stricto sensu strategies to feed relativization.

Furthermore, there are so many lexicalized applications of -ffik that only native speakers are able to use it productively.

Still, it must be admitted that -ffik can be used as a way to express what the English can by relativization of an oblique object. Or, as it could also be said, in this way WG can express what would require oblique relativization in English.

Another example with -ffik shows its corresponding 'periphrastic' force in English in a literal translation:

(30)

```
    qeqertaq tulu-it      inu-il=lu
    island   English-Genp Eskimo-Genp=and

    naape-qatigii-ffi-at
    meet-do together with-place of-Poss3pAbs

    ullu-mi Clavering O-imik  ate-qar-poq
    day-Loc Clavering O-Instr name-have-3sInd
```

'the island where/on which the English and the Eskimos met (eachother) is today called Clavering O'

(lit: 'the island that was the English' and Eskimos' meeting place is today called Clavering O')

3.3.3 Possessor relativization

The way in which possessors can be relativized is restricted to short unambiguous clauses. In these constructions the possessum seems to be in apposition to an absolutive case 'possessor' to which the possession marker refers semantically (F:115):

(31)

```
    [savi-up   ipu-a          ] qisuk     >
     knife-Gen shaft-Poss3sAbs  wood
```

'a knife-shaft of wood'

(32)

```
     savik    [ipu-a            qisuk]
     knife     shaft-Poss3sAbs  wood
```

'a knife whose shaft is of wood'

In the first example, qisuk modifies the whole possessive complex, which is a canonical possessive construction (see 0.2 and 3.1), and in the second qisuk modifies only ipua directly, the resulting complex of which in turn is an attribute to savik.

The same possessive relation is possible between a head and a relative construction as is shown in this example from Olsen (1974):

(33)

```
    angut pani-a             siorna    uillar-toq
    man   daughter-Poss3sAbs last year become widow-3sPart
 [[[   H1] D1           H2] [D3       [D2      H3]]]
```

'the man whose daughter became a widow last year'

An overt possessor marker, the ergative in genitive function, would yield a construction of minimal formal contrast that corresponds semantically (and formally) to (31):

(34)

```
    anguti-p pani-a             siorna    uillar-toq
    man-Gen  daughter-Poss3sAbs last year become widow-3sPart
  [[D1      [             H1]] [D2      [D1      H2]]]
   'the man's daughter who became a widow last year'
```

Example (33) seems to be an exception to the AH, where now a gap has to be assumed, namely that of the inaccessibility of 'indirect' and 'oblique objects'.

One could regard construction (33) as 'real appositive' (see 1.1.2) instead of possessive on the simple formal ground that there is no genitive marker on the head, but the situation is not as simple as that.

Even though appositions are endocentric, i.e. they have a head, the head should be able to be left out without change of meaning, as both parts each can have the same reference as the whole. If the head of (33), angut, is left out, however, the sentence will get the same meaning as (34). In (34), namely, the head is pania. An answer to the question 'Who did you see?' would in relation to (33) be 'The man.' and in relation to (34) 'His daughter.'. What is it exactly that has happened here?

As can be seen by the symbols H (Head) and D (Dependent) in the lines that indicate the scope relations in the examples, (33) has three heads, two of which internal, and (34) has two heads. (34) is a canonical relative construction with a head and a RC. (33) contains a canonical relative construction with a head and a RC, that is at the same time placed in a dependent position to a head noun angut. This (33) is the same type of non-appositive construction as described in 1.1.2. (33) is a complex case of nominal restriction in which is embedded a relation of verbal restriction.

But there is more. One could namely also say that (34) is a relative construction with an embedded possessive construction, and that (33) is a possessive construction with an embedded relative construction.

This means that (33) consists of an entanglement of what amounts to three different types of nominal constructions:

- possession
- relativization
- nominal modification

whereas (34) has only the first two.

What is head in (33), H1, is a dependent in (34), D1, which can easily be left out without change of meaning. But if the head is left out in (33), it cannot be 'understood', as the sentence would otherwise be ambiguous (Who did you see?). The head of a RC, on the other hand, would in that case be 'understood'.

The absence of genitive marking of the possessor in (33)

'creates' a situation of nominal modification, while at the same time the presence of possessum marking creates a possessive relation. The presence of possessor marking in (34) however, confirms only its complicity to the possessive relation. When the possessor is absent altogether, nothing changes for (34), as the possessive relation is also indicated on the possessum. For (33) it would mean absence of the head, and therefore, the impossibility of a nominal restriction relation. (33) without a head would be identical with (34) without a possessor, and would have the same meaning as (34) whether the latter has an overt possessor or not.

Another indication of the difference between (33) and (34) can be inferred from their agreement properties. If both complex nominals function as the subject of a transitive verb, a minimal opposition between the heads (panik 'daughter') of the RCs arises because of the homophonousness of the ergative and the genitive marker of the modified head (35) and the dependent possessor (36) (angut 'man') respectively:

(35)
anguti-p pani-a siorna uillar-tu-p taku-aanga
man-Erg dr-Poss3sAbs l.year b.widow-Part-Erg see-3s1sInd
'the man whose daughter became a widow last year sees me'

(36)
anguti-p pani-ata siorna uillar-tu-p taku-aanga
man-Gen dr-Poss3sErg l.year b.widow-Part-Erg see-3s1sInd
'the man's daughter who became a widow last year sees me'

So the nominal dependent in (35) corresponds in case to the head angut, but not necessarily in number (this observation stems from Aagesen (1985:7)) as in (37):

(37)
anguti-p pani-i siorna uillar-tu-t taku-aanga
man-Erg dr-Poss3pAbsp l.year b.widow-Part-Ergp see-3s1sInd
'the man whose daughters became widows last year sees me'

With the heads of RCs, however, there does have to be correspondence in number, viz. (38):

(38)
anguti-p pani-isa siorna uillar-tu-t taku-aannga
man-Gen dr-Poss3sErgp l.year b.widow-Part-Ergp see-3p1sInd
'the man's daughters who became widows last year see me'

The internal complexity of the dependent relative construction that modifies angut attributively has the effect of genitive relativization in an English translation, but as the only relativized element in both cases is the subject, pania, of the embedded nominalized verb, I don't expect that (33) will be a problem for the AH.

A better translation of (33) could be: 'the man his daughter who became a widow last year', like that of (32): 'a knife its wooden shaft'.

Because of my lack of access to informants I cannot guess whether these views have much psychological reality, but they do allow me to exclude (33) from the range of relativization possibilities in WG. This prevents violation

of the AH where otherwise a gap would have to be assumed, namely that of the inaccessibility of 'indirect' and 'oblique objects'.

The central issue of this paragraph has been to observe the difference between a case of nominal restriction (that looks like an appositive construction) where the semantic possessor is the head, and a relative construction, where the semantic possessor is a satellite. Consequently, there is no possessor relativization in WG.

3.4 Argument expression as a possessor

When a transitive verb is nominalized it is either overtly detransitivized, in which case it can appear as a RC-modifier of the previous subject, or it gets passive sense and will be a RC-modifier of the late object.

Being a nominal constituent, a RC can be involved in possessive relations. At the same time, the possessor of a deverbal noun can stand in an argument relationship to the verbal base, and its appearance is termed 'possessor raising' by Smith (1984).

Possessor expression is optional and the possessor coincides with the subject of a nominalized verb, whether the latter is transitive (in LI and WG nominalized with -jak/-tak and -saq respectively) or intransitive (in WG and LI nominalized with -neq) (NB that (40) is not a RC):

(39)
nanoq Piita-p toqu-ta-a
bear Peter-Gen kill-PP-Poss3sAbs
'the bear killed by Peter' (Peter's killed one) (F:53)

(40)
piniartu-p teriannia-mik aallaa-nnin-ner-a
hunter-Gen fox-Instr shoot-Htr-N-Poss3sAbs
'the hunter's shooting of a/the fox' (F:213)

In both cases possessor marking by the 'genitive' morpheme, and 'possessive agreement' with the possessum are needed independently of the argument relations. This implies that the ergative morpheme is not an ergative case marker here, but that its function resembles that of a genitive.

As a verb nominalized with the intransitive participle -juk/tuk; -soq/toq is coreferential with its own subject, its optional possessor never will be, e.g.: ilinniartitsisora 'my teacher'. Possession of intransitive participle forms is only possible, however, when they are lexicalized like this example, but note that a tendency might be observed in modern WG to express the object as a possessor in the following construction which is an alternative to example (18) in 1.2.2

(41)
angut naapi-tsi-so-ra sianiip-poq
man meet-Htr-Part-Poss1sAbs be stupid-3sInd
'the man who met me is stupid' (K:pc)

When the subject is not raised as a possessor of -saq, it may be represented as an oblique argument:

(42)
nanoq Piita-mit toqu-taq (F:53)
bear Peter-Abl kill-PP
'the bear killed by Peter'

The expression of the logical agent subject in the ablative case is also possible with the stative passive, the dynamic passive (although a bit less commonly) and its intransitive participials but, apparently, not with -neq. This might be due to the usual abstract sense of -neq, and maybe also in part to avoid confusion with the WG comparative construction.

Nominalizer -neq is usually attached to intransitive verbs: (43)
anguti-p toqut-si-ner-a
man-Gen kill-Htr-N-Poss3sAbs
'the man's killing (of someone)' (F:46)

It can only then be attached directly to a transitive stem when the subject of the matrix verb is coreferent with the now understood subject of the nominalized verb (see also appendix note 3). If a possessor is expressed in this case, it will correspond to the object of the nominalized verb:
(44)
Kaali-p tako-qqin-ni-ssa-a qilanaare-qa-ara
Kaali-Gen see-again-N-fut-Poss3sAbs be glad-very-1s3sInd
'I'm very much looking forward to (I) see Kaali again'

Note by the way, that in consequence the antecedent of the Poss3sAbs morpheme in (44) has a different syntactic function than that of the same in (43). Compare also to: angutip toqunnera 'the killing of the man'.

An illustration of the possible complexity of phrases headed by a verb that is nominalized with -neq is found in note 4) in the appendix.

3.5 RC formation and nominalization

Now, taking all the facts and visions presented in the previous chapters into account, I want to make a structural comparison between RC formation and nominalization in WG. In this respect it is important to pay attention to the argument structure of these derived constructions and how they behave under accessibility improving strategies. I will let 'nominalization' be represented by -neq and -ffik.

The first resemblance between these two phenomena is the realization of a clause structure as a term structure.

The argument of a one-place predicate 'the woman is tired' which is rendered in WG as arnaq qasuvoq:
(45)
πei: [qasu- v (arnaq)SfSubj] (ei)

can be relativized with the help of -soq. A relative construction version arnaq qasusoq 'the woman who is tired' has the following simplified term structure:

(46)
(Ωxi: arnaq n (xi): (πei: [qasu- v (xi)SfSubj] (ei)))

The first argument of the same predicate can be expressed as a possessor when the verb is nominalized by -neq. arnap qasunera 'the woman's tiredness' is a nominalization:

(47)
(Ωxi: {πei: [qasu- v (x1)Sf] (ei) -neq n} (xi):
{(Ωx1: arnaq n (x1))poss} (xi))

More simplified term structures will make things clearer (in these, arguments to which subject is not assigned are possessors or oblique satellites and this is indicated by additional round brackets);

(45')
Pred v (x1)
(46')
(x1: [Pred v (x1)])
(47')
(xi: [Pred v ((x1))] {(x1)poss} (xi))

The difference between term structures (46') and (47') lies in the referents of (x1) (woman) and (xi) (tiredness). A related difference is created by the fact that (47') has no formal valency: its underlying argument has to be expressed as a possessor, if at all. Without an overt possessor in the curly brackets, (47') would mean 'her tiredness' in the sense of 'her being tired'.

When the predicate is a two or more-place predicate it is always the second argument that is relativized by -saq. A relative construction version of angut toquppaa 'she killed the man':

(48)
πei: [toqut- v ([-S-A])AgSubj (angut)GoObj] (ei)

is angut toqutaq 'the man who was killed', and has the following term structure:

(49)
(Ωxi: (angut) n (xi): (πei: [toqut- v (x1)Ag
(xi)GoSubj] (ei)))

and that of the corresponding nominalized version, angutip toqunnera 'the killing of the man' is:

(50)
(Ωxi: {πei: [toqut- v (x1)Ag (x2)Go] (ei) -neq n} (xi):
{(Ωx2: angut n (x2))poss} (xi))

or simpler:

(48')
Pred v (x1) (x2)
(49')
(x2: [Pred v ((x1)) (x2)])
(50')
(xi: [Pred v ((x1)) ((x2))] {(x2)poss} (xi))

The resemblance between (49') and (50') is the demotion of the first argument in both cases. This is indicated with the round brackets again. The two cases correspond in the fact that the goal argument has become in a way (as if by

default) the promoted element of the underlying predicate. This can be explained by the observation that both nominalizations have acquired a passive sense, and that the first arguments have disappeared into the background. In (49') the first argument can only be expressed by a possessor, whereas the second argument is still in the absolutive. In (50') the first argument cannot even be expressed at all (as I have never seen the ablative case used in a complex NP like (50'), see 3.4) whereas the second argument can still be expressed as a possessor. Here, however, we have arrived at an important difference.

(50') has lost its formal valency totally. Also the second argument has to be expressed as a satellite. Hence the double round brackets. The fact that a possessor in (49') would be the referent of the underlying first argument (see (10) in 1.2.1 for a term structure), and that it is in (50') the referent of the second argument has not been at issue in this paragraph, by the way, but in 3.4.

The central difference lies again in the actual referents of the term structures. In (49') it is the second argument of the embedded predicate; in (50'), it is the action itself that the predicate gives expression to. Note further that the application of -neq to bare transitive verbs is not very productive.

When it is the subject of a polyvalent predicate that has to be relativized, -soq must be used, and a strategy of half-transitivization is required in advance. Niviarsiap angut toquppaa 'the girl killed the man' can be half-transitivized by -(s)i-: niviarsiaq angummik toqutsivoq which yields a predicate structure like (compare to (48)):

(51)
πei: [toqutsi- v (niviarsiaq)AgSubj (angut)Go] (ei)

Now the object is demoted to satellite status and is in the instrumental case, the subject is absolutive, and can be relativized by its predicate: niviarsiaq angummik toqutsisoq 'the girl who killed the man':

(52)
(Ωxi: (niviarsiaq) n (xi): (πei: [toqutsi- v (xi)AgSubj (angut)Go] (ei))

The nominalized version, niviarsiap angummik toqutsinera 'the girl's killing of the man' can be represented as follows: (53)
(Ωxi: {πei: [toqutsi- v (x1)Ag (angut)Go] (ei) -neq n} (xi): {(Ωx1: niviarsiaq n (x1))poss} (xi))

Here I will give the simplified term structures:

(51') (compare to (4.'))
Pred-Htr- v (x1) ((x2))

(52') (compare to (5.'))
(x1: [Pred-Htr- v (x1) ((x2))])

(53') (compare to (6.'))
(xi: [Pred-Htr- v ((x1)) ((x2))] {(x1)poss})

The general difference between these derivations is the fact that in (46), (49) and (52), the predicates are embedded in- and modify their argument, and in (47), (50)

and (53) the predicates head their argument that has satellite status. The correspondences are diathetic: (46), (47), (52) and (53) all have active sense, and (49) and (50) both have passive sense.

The impossibility to relativize other elements than absolutives seems to be an inherent property of nominalization in WG. '...; predicating means assigning properties and relations to [..] entities.', writes Dik (1989:111). If a term is deverbal, it obviously keeps its predicating abilities to some extent, but its ability to make a typically verbal connection with one or more or between two or more separate entities has gone astray. The loss of formal verbal valency is characteristic of this.

In WG this loss is met by the fact that for example the underlying valency of nominalized verbs can find expression in ways that are characteristic for the nominal category. In the case of -neq, this is done by possessors and oblique arguments, like in (53).

In the case of RCs this loss is partial as the underlying verb has preserved its absolutive first or second argument. This seems to be a retained verbal property of RCs. The main nominal characteristic of RCs seems to come from the fact that the predicative relation is cast in the mould of a nominal modification relation. This can be seen from their status as a second restrictor in a term structure with their absolutive argument as a first restrictor.

The main constituent parts of complex term structures, the head and the dependent, are in essence nominals in their most neutral form, which is the absolutive case. Non-absolutive cases of nouns always originate in requirements that a relationship to verbs poses on nouns. Apart from possessive relations (where the ergative -p is not considered as a case marker) cases of modifying nouns are not required by the head nouns. Nouns can have non-absolutive modifiers in WG but then only as rudiments, so to say, of their underlying verbal nature, or as adverbs. Otherwise, nominal modifiers of nouns are always in the same case as the nouns they modify. This is an agreement requirement in WG, as a modifying dependent is essentially a constituent part, with its head, of a complex term. Because it depends on the function of the complex term as a whole with regards to the matrix verb, the cases that the separate constituent parts of the complex term get are the same.

The grammar of WG is fairly consistent in the difference between nouns and verbs, and as it lacks the categories adjective and preposition, assigning properties to entities is done either by verbal predication or nominal modification. At the same time, WG grammar is very flexible in that the recursive faculty of derivation guarantees that a noun or a verb can be created any time the syntactic circumstances require such. In such a language there does not really seem to be any need to relativize 'into' ergatives or other.

4 Evaluation

However unjustified the choice may be, I have abstracted away from the fuzziness of the border between subject assignment and predicate formation that the facts of WG seem to display. Instead, and for the sake of relativization, I have adapted the notion 'strategy' here, leaving the issue of syntactic function assignment and predicate formation open for further investigation. An important contribution to this is made by Kristoffersen (1991).

Whether or not a strategy that makes arguments accessible to relativization is at the same time a process of predicate formation; if there is no clear semantic change involved in the latter it will count as a valid strategy in the narrow sense. Namely, although relativization is only possible with absolutive arguments, there still seem to be no greater difficulties involved in producing and understanding constructions that are derived by strategy to relativize previously ergative arguments.

For certain other predicate formation rules preceding relativization, like the one in the application of -uti- in 3.2.4 that 'advances' an oblique argument, I have used the notion 'strategy' in a broader sense. Even though they probably involve no object assignment, they do make one of the arguments of the verbal stem accessible to relativization.

The difference between the narrow and the broad strategy, then, is that the latter involves semantic change of the predicate. One of these changes, for example, is the benefactive sense 'do something for someone' induced by -uti-. It can occur even though the predicate formation rule involved does not necessarily increase the formal valency of the verb (see (20) in 3.2.4). In cases where the predicate formation rule that introduces the affix also introduces an argument that was not yet there with the underived predicate, e.g. a comitative, it will not count as a strategy. Some of these affixes were treated as a separate class in 3.2.3.

Restrictive RC formation originates in the wish to restrict a set of potential referents of the head. Almost any nominal constituent in the matrix sentence can be head of a RC. Because the WG RC is a form of nominalization, it shares certain limitations with other nominalizations. This explains that WG RCs are limited in the possible relations their verbal stems take part in with their heads. Therefore, there has to be made use of whatever strategies available.

The limitations hinted at here, and dealt with in 3.5, are

those that direct (without strategies) RC-formation shares with other nominalization processes. This can be inferred from the fact that possessor expression of nominalizations and absolutive modification of RCs are eachother's parallels: If the predicate is monovalent, one can only relativize its first argument. In the same way, it is only the first argument that can be a satellite in the form of a possessor of a one-place predicate that is nominalized with

-neq or -ffik. If the predicate is polyvalent, it is only possible to relativize the second argument directly, and the same holds in a way for -neq and -ffik: when attached to a transitive verb (which happens rarely), the possible possessor will express a second argument. The impossibility to relativize anything else but underlying absolutive (as WG is an ergative language) arguments can then be expected to originate in the argument reducing properties of nominalization.

-soq and -saq don't share with -neq or -ffik the possibility of being attached to respectively transitive and intransitive verbs. On the other hand, they still have valency of themselves, which is something that -neq and -ffik lack. Therefore RC-formation seems to be a separate kind of nominalization in WG; RCs can have an external head to which they are placed in a dependent position. This is a very frequently used hypotactical construction in WG that shares its modifying force with bare nominal restriction as described in 1.1.2. The main difference with the latter lies in the overt and inherent verbal properties of RCs.

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APPENDIX Tables for Mood, Case and Possession

Verbal Inflection

IND	INTR	TR 1	2	3	1	2	3	NEG	nngiC	FUT	ssa
1	vunga	...	vakkit	vara	...	vassi	vakka	nngilanga		ssaanga	
2	vutit	varma	...	vat	vatsigut	...	vatit	nngilatit		ssaatit	
3	voq	vaanga	vaatit	vaa	vaatigut	vaasi	vai	nngilaq		ssaaq	
1	vugut	...	vatsigit	varput	...	vassi	vavut	nngilagut		ssaagut	
2	vusi	vassinga	...	varsi	vatsigut	...	vasi	nngilasi		ssaasi	
3	pput	vaannga	vaatsit	vaat	vaatigut	vaasi	vaat	nngillat		ssapput	

INT	INTR	TR 1	2	3	1	2	3	NEG	FUT	
1	vunga	...	vakkit	vara	...	vassi	vakka	nngilanga	ssaanga	
2	vit	vinga	...	viuk	visigut	...	vigit	nngilatit	ssavit	
3	va	vaanga	vaatit	vaa	vaatigut	vaasi	vai	nngila	ssava	
1	vugut	...	vatsigit	varput	...	vassi	vavut	nngilagut	ssaagut	
2	visi	visinga	...	visiuk	visigut	...	visigit	nngilasi	ssavisi	
3	ppat	vaannga	vaatsit	vaat	vaatigut	vaasi	vaat	nngillat	ssappat	

IMP	INTRANS	TRANS 1	3	1	3	(NEG has the
2	g/rit	nnga	g/ruk	ts/(r)tigut	kkit	same forms
1	sa/rt/tta	...	tigu	...	tigik	as NEG CONT)
2	g/ritsi	ss/(r)singa	siuk	tigut	sigik	

OPT	INTR	TR 1	2	3	1	2	3
1	l/rl/llanga	...	g/lakkit	lara	...	lassi	lakka
3	li	linga	lisit	liuk	lisigut	lisi	ligit
1	(lata)	...	latsigit	larput	...	lassi	lavut
3	lit	linnga	lisit	lissuk	lisigut	lisi	lisigik

CAUS	INTR	TR 1	2	3	4	1	2	3	4	
1	gama	...	gakkit	gakku	ganni	...	gassi	gakkit	gatsik	
2	gavit	gamma	...	gakku	ganni	gatsigut	...	gakkit	gatsik	
3	r/mat	mmanga	mmatit	mmagu	mmani	mmatigut	mmasi	mmagit	mmatik	
4	gami	gaminga	gamisit	gamiuk	...	gamisigut	gamisi	gamigit	...	
1	gatta	...	gatsigit	gatsigu	gatsinni	...	gassi	gatsigit	gatsik	
2	gassi	gassinga	...	gassiuk	gassinni	gatsigut	...	gassigit	gatsik	
3	mmata	mmannga	mmatsit	mmassuk	mmanni	mmatigut	mmasi	mmatigik	mmatik	
4	gamik	gaminnga	gamitsit	gamikku	...	gamisigut	gamisi	gamikkit	...	

COND	INTR	TR 1	2	3	4	1	2	3	4	
1	guma	...	gukkit	gukku	gunni	...	gussi	gukkit	gutsik	
2	guit	gumma	...	gukku	gunni	gutsigut	...	gukkit	gutsik	
3	ppat	ppanga	ppatit	ppagu	ppani	ppatigut	ppasi	ppagit	ppatik	
4	guni	guninga	gunisit	guniuk	...	gunisigut	gunisi	gunigit	...	
1	gutta	...	gutsigit	gutsigu	gutsinni	...	gussi	gutsigit	gutsik	
2	gussi	gussinga	...	gussiuk	gussinni	gutsigut	...	gussigit	gutsik	
3	ppata	ppannga	ppatsit	ppassuk	ppanni	ppatigut	ppasi	ppatigik	ppatik	
4	gunik	guninnga	gunitsit	gunikku	...	gunisigut	gunisi	gunikkit	...	

PART	INTR	TR 1	2	3	4	1	2	3	4	
1	sunga	...	gikkit	giga	ginni	...	gissi	gikka	gitsik	
2	sutit	gimma	...	git	ginni	gitsigut	...	gitit	gitsik	
3	soq	gaanga	gaatit	gaa	gaani	gaatigut	gaasi	gai	gaatik	
1	sugut	...	gitsigit	gipput	gitsinni	...	gissi	givut	gitsik	
2	susi	gissinga	...	gissi	gissinni	gissigut	...	gisi	gitsik	
3	sut	gaannga	gaatsit	gaat	gaanni	gaatigut	gaasi	gaat	gaatik	

CONT	INTRANSITIVE		TRANSITIVE	
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
1	r/lunga	r/nanga	llunga	nanga
2	llutit	nak	llutit	nak
3	...	...	llugu	nagu
4	lluni	nani	...	...
1	lluta	nata	lluta	nata
2	llusi	nasi	llusi	nasi
3	...	...	llugit	nagit
4	llutik	natik	...	...

Nominal Inflection

CASE MARKERS	SG.	PL.
Absolutive	0	t
Ergative	p	t
Locative	mi	ni
Instrumental	mik	nik
Allative	mut	nut
Ablative	mit	nit
Equative	tut	tut
Prosecutive	kkut	tigut

Some of their main functions:

Abs	Intransitive Subj; Obj; Time Adv.	
Erg	Transitive Subj; (Genitive Possessor)	
Loc	Locative Adv.	('in/at/with/on')
Ins	Oblique Obj; Instrument/Manner/Means Adv.	('with')
All	Indirect Obj; Obl.Subj('by'); Purpose/Motion Adv.	('to')
Abl	Comp.Obj.; Agent in Passive; Source; Motion Adv.	('from')
Equ	Equat.Obj.; Comparative Manner/Degree Adv.	('like/than')
Pros	Path/Medium; Motion Adv.	('through/over')

The combined marking of Person and Number, Number, and Case on the Possessum:

POSS	ABS.SG	PL	ERG.SG	PL	LOC.SG	PL	INSTR.SG	PL
1	g/ra	kka	(m)ma	ma	nni	nni	nnik	nnik
2	t	tit	p/vit	vit	nni	nni	nnik	nnik
3	a	i	ata	isa	ani	ini	anik	anik
4	ni	ni	(m)mi	mi	mini	mini	minik	minik
1	r/pput	vut	tta	tta	tsinni	tsinni	tsinnik	tsinnik
2	r/ssi	si	ssi	ssi	ssinni	ssinni	ssinnik	ssinnik
3	at	at/i	ata	isa	anni	in(n)i	annik	anik
4	rt/tsik	tik	(m)mik	mik	minni	minni	minnik	minnik

	ALL.SG	PL	ABL.SG	PL	EQ.SG	PL	PROS.SG	PL
1	nnut	nnut	nnit	nnit	ttut	ttut	kkut	kkut
2	nnut	nnut	nnit	nnit	ttut	ttut	kkut	kkut
3	anut	anut	anit	init	atut	asut	a(ti)gut	isigut
4	minut	minut	minit	minit	misut	misut	migut	migut
1	tsinnut	tsinnut	tsinnit	tsinnit	tsitut	tsitut	tsigut	tsigut
2	ssinnut	ssinnut	ssinnit	ssinnit	ssisut	ssisut	ssigut	ssigut
3	annut	anut	annit	init	atut	asut	atigut	isigut
4	minnut	minnut	minnit	minnit	missut	missut	mikkut	mikkut

For the morphophonological processes involved in the inflection (and derivation) of the different stem types, the reader is referred to the literature.

Some notes on the examples

The examples are all in the modern WG orthography that was adopted in 1973. This is not a pure phonemic spelling and it reflects the change of /u/ and /i/ to [o] and [e] respectively when they precede /q/ or /r/.

Of the examples given without reference to a source, none is confirmed by a native speaker.

All nouns without case indications are in the absolutive.

The plural and the ergative case forms of the -saq - allomorph -gaq are -kkat and -kkap respectively. Also oblique case markers are attached to the form -kka-, but the absolutive possessive endings only partially so.

In the interlinearization of the examples, the possessive portmanteau morphemes are represented according to the following frame:

[Poss...Person...singular or plural...Case...(plural)]

-Poss3sAbsp- means: 3rd person singular possessor,
plural possessum,
absolutive case
-Poss3pErg- means: 3rd person plural possessor,
singular possessum,
ergative case subject of transitive verb

Note that the ergative marker either can indicate that the possessum functions as the subject of a transitive verb, or that the possessum functions as a possessor again itself. I have kept them apart with the notion genitive in the latter instance:

-Poss3pGen- means: 3rd person plural possessor,
singular possessum,
possessum is possessor on a less deep level of embedding

Both cases are called 'double dependency', see note 1) last example.

Interlinear notations and symbols

Abl = Ablative case
Abs = Absolutive case
Acc = Accusative case
Act = active participle
Adv = adverbial
Ag = agent
All = Allative case
Aux = Auxiliary
Caus = Causative mood
comp = comparative
Comp = Complementizer
Cond = Conditional mood
Cont = Contemporative mood
c.s. = cum suis
D = dependent
DO = direct object
Dat = Dative case
ei = event SOA
emf = emphatic marker

Erg = Ergative (Relative) case (& genitive marker)
Equ = Equative case
e.s = empty stem
f = arbitrary predicate
4 = fourth person for switch reference and reflexivity
Fut = future aspect
hab = habitual aspect
Gen = genitive marker (homophonous with ergative case)
H = head
Htr = half-transitive / antipassive morpheme
Imp = Imperative mood
Ind = Indicative (Declarative) mood
Instr = Instrumental case
Int = Interrogative mood
Intr = intransitive
IO = indirect object
Loc = Locative case
n = nominal category
& = 'infinite' number ('n')
N = Nominalizer
Neg = Negative / Negation
Obl = oblique object
OComp = object of comparison
Opt = Optative mood
p = plural
π = predicate operator
Part = Participial / Participle
pass = passive voice
Poss = possessive marker
PP = passive participle
Prf = perfect
Pron = pronoun
Pros = Prosecutive (Perlative) case
O = object
Rel = relative pronoun
s = singular
S = subject
[-S-A] = minus speaker, minus addressee (3rd person)
SF = certain semantic function
sup = superlative
Tr = transitive
v = verbal category
w = term operator
wrt = with-respect-to morpheme -uti-
xi = entity
0 = zero
- = morpheme boundary
= = post-inflectional enclitic particle

Notes

Note 1) (see 1.2.3)

although both head & dependent can have possessum markers:

kaluti-kka nassaari-sima-sa-ni nittar-pai
tow tool-Poss1sAbsp find-perf-PP-Poss4sAbsp show-3s3pInd
'he showed my tow-tools that he had found' (Brandt:18)

which sometimes results in double dependency:

(immaqa=mi tassani toqu-ssa-galuar-para)
maybe=strength. there kill-fut-but...-1s3sInd
('yes, maybe I would kave killed him there...')

pani-ata asa-sa-ma inerti-nngik-kaluar-panga
daughter-Poss3sErg love-PP-Poss1sErg forbid-neg-but-3s1sCond
'...if his daughter that I loved hadn't forbidden me' (Brandt:14)
(lit.: '...if his daughter who was my loved one hadn't forbidden me')

Note 2) (see 2.2)

qaqqa-mut Inussum-mik ati-lim-mut tikip-put
mountain-All Inussuk-Inst name-provided with-All arrive-3pInd
'They have arrived at the mountain called Inussuk'

umia-t kalaalli-nik kuisimanngitsu-nik inuttal-lit
boat-p Greenlander-pInstr heathen-pInstr crew-provided with-p
'a boat with pagan Greenlanders'

Note 3) (see 3.4)

The same holds for the small group of verbal stems that can 'co-operate' with a verb nominalized by -neq, although for a slightly different reason. The main verb typically expresses inability (saper-), ignorance (nalu-), habitual negation (ajor-), etc, but its inflectional marking refers to, and is determined by the underlying argument(s) of the nominalized verb (but not to the absolutive case deverbal nominal ending in -neq itself!).
(44')
qiman-ni-ssa-ra sape-ramiuk (Brandt:15)
leave-N-future-Poss1sAbs be capable-4s3sCaus
'because she could not cope with (she) having to leave me'

Apparently, this property of these verbs is not at work in the following:
(43')
qiman-neqar-ni-ssa-ra nalu-nngilaa
leave-passive-N-fut-Poss1sAbs know not-3s3sNegInd
'she knew I was going to be left' (my near being left)

The characteristic of these combinations is that -neq has not eradicated the valency of its verbal stem. The main finite verb can be said to have relatively less semantic content here, a bit like a auxiliary verb in I-E languages.

Note 4) (see 3.4 and 1.2.2)

RC as allative object to a verb nominalized with -neq:

qularnanngit-su-mik ujara-alu-kasin-nut
be certain-N-Instr stone-a lot of-subjective colouring-All

paarnaquti-nik qaller-neqar-sima-su-nut tuper-sima-ne-ra
heather-Instr cover-pass-perf-N-All raise tent-perf-N-Poss1sAbs

'the place i had raised my tent (which) doubtlessly was a
blinkin' bunch of stones that had been covered with heather'
lit.: "my doubtlessly having raised a tent onto a damned lot
of stones that etc." (Brandt, p8,l10)