Is Inuktitut a Morphological Argument Language?

- (1) In the following I will discuss grammatical structures of Inuktitut, an Eskimo language spoken in the Canadian Eastern Arctic. Inuktitut is a polysynthetic language exhibiting an exceedingly elaborate verbal inflectional system including polypersonal marking. Furthermore, Inuktitut features free word order and optionality of noun phrases cross-referenced with the predicate. But Inuktitut also exhibits a number of features which seem to contradict the possibility of its being a "pronominal argument language" -- or as I would prefer to express it, a morphological argument language. Most important, there is an elaborate system of case marking, as well as fused possessive and case marking. There is an antipassive construction which seems to prove the existence of syntactic asymmetries. Inuktitut has furthermore been repeatedly discussed with respect to its being an ergative language, a perspective which also depends on its being syntactically configurational. To begin with, I will briefly outline what the characterization of a language as a "morphological argument language" implies. I will then proceed to more closely investigate nominal constituency in Inuktitut. Finally, I will propose an alternative interpretation, based on the fact that Inuktitut is a polysynthetic language.
- (2) In syntactically configurational languages the core arguments of a predicate are expressed by nominal constituents traditionally called "subject" or external argument, and "direct object" or internal argument. The direct object is a complement to the verb, and shows clear asymmetries with the argument highest in the hierarchy, i.e., the subject (external argument). These asymmetries are structural, i.e. they are significant and serve as a means of arranging and differentiating information on the syntactic level; they provide the format of a proposition. It should be emphasized that structural marking of arguments (case) is an epiphenomenon of syntactic position, as is agreement marking. It must be differentiated from semantic case marking (locative, instrumental etc.), which is

characteristic of adjuncts. Adjuncts are not part of the argument structure provided by the verb and consequently do not compete for hierarchy positions. They may be added freely, as the discourse requires. The significance of syntactic configuration is demonstrated by those languages in which structural positions may not remain empty but need to be filled by expletives. But empty positions, their immediate reconstructability, and their structural significance are manifestations of the underlying configuration too: as is the case with assumed zero-marking in a morphological paradigm, it is the potential reconstruction and the contrast with filled in forms which renders phenomena such as pro-drop meaningful and significant. At first glance the fundamental difference between a fully inflecting language, especially a so-called pro-drop language, and a pronominal argument language is hard to discern. It certainly cannot be reduced to the occurrence of polypersonal marking alone. The basic claim that in pronominal argument languages the possibly existing nominal constituents have the status of mere adjuncts, and not of arguments, must be supported by evidence drawn from syntax. Such evidence can be provided primarily ex negativo, by demonstrating that requirements considered essential for syntactic constituency and configurationality are not fulfilled. In pronominal argument languages, it is assumed, no configuration on the syntactic level is generated. Noun phrases under cross-reference may be freely omitted, leaving behind no pro-positions. Consequently, if noun phrases show up at all, they merely have the status of adjuncts, not of arguments. These are realized at the word level, i.e., morphologically, as cliticized or affixed formatives, containing information on the participant(s) involved (first, second, third person(s)). This information often is fused with information on number (singular, dual, plural) and other features familiar from verbal inflectional systems, such as mood. I will argue that the discussion of nonconfigurational syntax, as first put forward by Hale (1983) and subsequently further developed by Jelinek (1984, 1995), and Jelinek and Demers (1994) as a theory of pronominal arguments, should no longer be viewed as an exclusively syntactic issue. The assumption of a nonhierarchical, chainlike syntactic pattern provides a challenge not only to the assumed universality of the basic form of syntax just described, but to the status of syntax as the primary domain of linguistic productivity. If one takes a truly modular model

of grammar as a point of departure, and sets aside any premature assumptions with respect to the mode of interaction between the modules, the possibility of a flat, chainlike syntax loses many of its provocative consequences. Configuration of propositions might then take place elsewhere, e.g., in morphology. The task is, in the long run, to determine the interplay of syntax and morphology with respect to the features which trigger a predominantly configurational syntax--or a predominantly configurational morphology, i.e., polysynthesis.

- (3) Inuktitut features a rich system of polypersonal markers. Contrary to what is to be expected of mere agreement markers, these markers bear stress. Verbal roots are always bound morphemes and need to be supplemented by an inflectional ending; there are no nonfinite verbal forms. Verbal inflection may be either intransitive<sup>1</sup>, i.e., indicate one participant invariably cross-referenced with the absolutive, or transitive, i.e., indicate two participants, whose relation to each other is unmistakably indicated and may never be reflexive. Cross-reference with ergative restricted the İS to transitive AGENT/EXPERIENCER arguments. In addition, the inflectional morpheme contains the features number (singular, dual, plural), with transitives the relation of the participants, and mood. "Mood" refers to the differentiation of independent (nonrelational) from dependent (relational) moods, which are crucial for the setting up of a coherent discourse.<sup>2</sup> Examples (1) and (2) illustrate basic intransitive and transitive verbal complexes, respectively:
- (1) sinippuq

<sup>&</sup>lt;sup>1</sup> Eskimo languages look back on a rather long tradition of grammar writing. Consequently, in some cases terminology must be considered established, as is the case with "transitive" and "intransitive." For a detailed discussion of grammatical terminology, see Nowak 1996a: 51-72. For the history of grammar writing see Nowak 1987, 1999.

<sup>&</sup>lt;sup>2</sup> The independent (nonrelational) moods are indicative, nominal participle, interrogative, optative (imperative). Verbal complexes in independent moods constitute singular statements and are viewed as providing the point of reference (matrix) for a dependent (related) statement. The dependent (relational) moods are verbal participle, causal, and conditional. Dependent moods feature a so-called 4th person, indicating nonidentity with a 3rd person of a matrix statement. Both types of moods occur with the transitive and intransitive person marking. For a detailed discussion, see Nowak 1996a:31ff., 107-130, 256-260.

```
Is Inuktitut a Morphological Argument Language?
```

sini(k)--puq sleep -3s.itr.ind 's/he sleeps'

(2) takuvara

taku- -vara

see -1s.3s.tr.ind 'I see him/her/it'

Third person participants may be lexically specified by nominal constituents marked by ergative and/or absolutive case.<sup>3</sup> Ergative marking is restricted to cross-reference transitives and strictly ungrammatical with intransitives. In (3), qimmiq, 'the dog', is the only lexically specified participant with an intransitively marked verb and appears in the absolutive. In (4), the same case marking with a transitively marked verb indicates the PATIENT/THEME. By contrast, the ergative marking of qimmiup in (5) indicates an AGENT/EXPERIENCER. Similarly, the possessive forms qimmima in (6) and qimmira in (7) exemplify the ergative/absolutive distinction.

(3) qimmiq sinippuq

qimmiq -ø sini(k)--puq dog -abs.s sleep -3s.itr.ind 'the dog sleeps'

(4) qimmiq takuvara

qimmiq -ø taku- -vara dog -abs.s see -1s.3s.tr.ind 'I see the dog'

(5) gimmiup takuvaanga

qimmi(q) -up taku- -vaanga dog -erg.s see -3s.1s.tr.ind 'the dog sees me'

(6) gimmima takuvaanga

qimmi(q) -ma taku- -vaanga dog -poss.erg.s see -3s.1s.tr.ind 'my dog sees me'

(7) qimmira takuvara

<sup>&</sup>lt;sup>3</sup> Inuktitut features altogether eight cases, of which three are structural cases, and five are primarily semantic cases. Case marking is always fused with number, i.e., singular, dual, plural, and may be fused with possessive marking, as in (6) and (7) below.

qimmi(q) -ra taku- -vara

dog -poss.abs.s see -1s.3s.tr.ind 'I see my dog'

As I have already indicated above, the issue of whether Inuktitut is a syntactically ergative language has been repeatedly discussed in recent years.<sup>4</sup> It is highly significant that the application of well-known syntactic hierarchy tests such as the investigation of reflexivity, passive and antipassive, incorporation, relative clauses, and anaphoric coreference does not yield a definite answer to the question which of the noun phrases cross-referenced with the verbal complex could possibly be the higher one in hierarchy, i.e., the external argument or subject.<sup>5</sup> This being a rather significant result, Inuktitut in addition exhibits a number of the aforementioned features considered to be characteristic of syntactic nonconfigurationality. Its word order is basically free, noun phrases specifying the predicate as in (3) to (7) are optional, i.e., discourse triggered. There are independent pronouns, but as is predicted for a pronominal argument language, they are employed only in emphatic contexts; third person pronouns are actually deictic and cover a wide range of rather specific localizations in space.<sup>6</sup> Since it is not the case that these pronouns are clitized to the verb, an interpretation suggested by the term "pronominal argument," I will henceforth refer to them as "morphological arguments."

To continue with the list of features pointing at syntactic nonconfigurationality, Inuktitut has very few basic word classes, namely, nouns and a couple of particles (free morphemes), and verbs (bound morphemes). It abounds in affixes, which are categorially determined and fully productive. Affix combinations are open to lexicalization, reanalysis, and shift of meaning. Within a synthetic process, repeated change of category is frequent

<sup>4</sup> Marantz 1984; Johns 1987; Bittner 1988; Bok-Bennema 1991; Nowak 1996a.

5

<sup>&</sup>lt;sup>5</sup> I cannot repeat this discussion here but refer the interested reader to Nowak 1996a:214-230.

<sup>&</sup>lt;sup>6</sup> For a complete list of localizers and deictics, see Dorais 1988:99-107.

<sup>&</sup>lt;sup>7</sup> Affixes are invariably attached to the right of a root or stem, in a strictly right-headed binary process.

<sup>8</sup> See Fortescue 1992a, 1992b.

Is Inuktitut a Morphological Argument Language?

but strictly rule governed and the final product is unambiguously categorially determined. There are only three lexical conjunctions, namely, ammalu 'and', uvva 'or', and taima, 'and then', all of which have a merely enumerative, not a structuring function. In other words, there is no lexical category "complementizer." Furthermore, all other functional categories are missing on the lexical level: there are no determiners, no copula, no auxiliaries, no adpositions. So the lexical means for creating syntactic configurations are rather limited in the language.

(4) Is there evidence in support of the claim that in Inuktitut nominal constituents as in examples (3) to (7) are merely adjuncts to already complete propositions such as (1) and (2)? Is there additional evidence to that provided by the failing hierarchy tests?

As pointed out before, evidence can be provided primarily ex negativo, by demonstrating that requirements considered essential for syntactic constituency and configuration are not fulfilled. Coordination of two propositions should be possible as a syntactic operation, and it should provide us with information on what has been called the "syntactic pivot," i.e., the prevailing principle of patterning arguments in coordinated structures. As it quickly turns out, the attempted merging of (8.1) and (8.2) to (8.3) is a total failure:

(8.1) anivunga (8.2) takuvagit

> ani- -vunga taku- -vagit see- -1s.2s.tr.ind go.out- -1s.itr.ind 'I go out' 'I see you'

(8.3) \*? anivunga amalu takuvagit

Speakers confronted with (8.3) invariably had great difficulty parsing it. Compare the English equivalents (9.1.) and (9.2) of (8.1) and (8.2) and their merging into perfectly grammatical (9.3):

(9.1) I go out.

(9.2) I see you.

(9.3) I go out and \_\_ see you

<sup>9</sup> See Dixon 1994: 6-18.

It is exactly the omission of the shared argument which creates the junction of the two basically independent utterances. The fact that the position for the argument is provided by syntactic structure, even if it is not filled by a lexical unit, provides for the possibility of leaving it empty in well-defined contexts, and for its immediate reconstruction by speakers of the language. For a speaker of Inuktitut, neither is possible. He or she fails to "reconstruct" an empty position and consequently fails to recognize a shared argument. The immediate conclusion must be that there is no empty slot which might be reconstructed. So the failure to relate the two propositions is not due to missing arguments or underspecified arguments. On the contrary, the arguments are all expressed: 'I go out.' 'I see you'. This is underlined by the fact that lexical pronouns are employed only for emphasis, rendering (10) even more awkward:

(10) \*?? uvanga anivunga amalu taguvatit

```
uvanga anivunga amalu takuvagit
1s go out- -1s.itr.ind and see- -1s.2s.tr.ind
it's me! I go out. and. I see you.
```

Of course, lexical explications of third person arguments are necessary to introduce new discourse referents. Such a lexical specification is a matter of semantic information, but not of syntactic structural position. (11.1) and (11.2) may serve as an example:

```
(11)
(11.1) ikpaksaq Mialiup ilinniaqtitsiji paaqpanga.
ikpaksaq Miali-up ilinniaqtitsiji-øpaaq--panga
yesterday Mary -erg teacher -abs meet -3s.3s.tr.ind
'Mary met the teacher yesterday'
```

(11.2) unnumi uvattinuarniaqtuq

unnu(k)-mi uvattinut<sup>10</sup> -aq- -niaq- -tuq

-

<sup>&</sup>lt;sup>10</sup> It might be argued that uvattinut can be further analyzed as uvatti -nut, emphasizing the 1p.terminalis -nut. Since the absolutive first person plural is uvagut, as is the ergative, we

```
unnu(k) -loc.s 1p.term -go- -future- -3s.itr.nompart evening -in to.us -go- -future- -3s.itr.nompart 's/he will come to us tonight'
```

Note that the sequence of (11.1) and (11.2) does not show any signs of structural connection of the two propositions. It is merely a succession, the interpretability of which may only be drawn from probability and semantic coherence--but not from syntactic structure. Example (8.3) clearly lacks this desired joint reading, because it lacks the appropriate indication of it. Sequences such as (11) are at the fringe of acceptability too. <sup>11</sup> Contrary to what was claimed a couple of years ago, <sup>12</sup> there is nothing like relative clause construction, i.e., syntactic subordination, in Inuktitut. Instead, we find the simple juxtaposition of utterances as has already been shown with (11.1) and (11.2)

(12) nutaraq sinippuq. aanniaqtuq.

```
nutaraq -ø sini(k) -puq. aanniaq- -tuq
child -abs sleep -3s.itr.ind be.sick -3s.itr.nompart
the child sleeps. s/he is sick.
'the child who is sick sleeps'/'the sick child sleeps'
```

(13) takuvara nutaramik aanniagtumik

```
taku- -vara nutara(q) -mik aanniaq- -tu(q) -mik see -1s.3s.tr.ind child -obj be.sick -3s.itr.nompart -obj 'I see the sick child'/'I see the child who is sick'
```

In (12) and (13), both readings are equally likely and equally correct. Any attempt at creating more complex combinations drawing upon the "sharing" of arguments is not acceptable for native speakers.

Consider next (14) and (15):

- (14) John took his blanket
- (15) He took John's blanket

are not dealing with a straight forward matter of case marking here.

<sup>&</sup>lt;sup>11</sup> See Nowak 1996a:226-229.

<sup>&</sup>lt;sup>12</sup> See Creider 1978, Smith 1984, and the discussion in Nowak 1996a:221-225.

While in (14) "John" might take his own blanket, as well as "his" or "her's", i.e., somebody else's blanket, such an ambiguity is not possible in (15). To account for the fact that in languages like English, "he" and "John" in (15) can never be coreferent, it must be assumed that the elementary asymmetry between the two noun phrases is responsible for this constraint. A given noun phrase must be interpreted as noncoreferential with any distinct nonpronoun to which it is higher in the syntactic hierarchy. This condition allows coreference in (14), but prevents coreference in (15). Such asymmetries can no longer be assumed if (15) or its equivalent allows a coreferential reading. This is the case with lnuktitut, as (16) shows:

(16)

(16.1) Jaaniup qipingatiguvanga

Jaani -up qipik -nga tigu- -vanga

John -erg blanket-4poss.abs take -3s.3s.tr.ind

'John took his/her blanket'

The default reading of (16.1) certainly is 'John took his blanket', but 'he took John's blanket' is also possible.

(16.2) [Jaaniup qipinga]<sub>abs</sub> tiguvanga

Jaani -up qipik -nga tigu- -vanga

J. -poss blanket-4s.poss.abs take -3s.3s.tr.ind

[John'sblanket-4s.poss.abs]<sub>abs</sub> s/he took it

's/he took John's blanket'

Such a reading can also be found in (17), where two constituents marked ergative are present neither of which is cross-referenced with the morphological argument that is a candidate for ergative cross-referencing:

(17) Jaaniup anaanangata atinga nalligijanga

Jaani-up anaana-ngata ati(k)-nga nalligi-janga

-

<sup>&</sup>lt;sup>13</sup> This is equally expressible in terms of c-command: the subject c-commands the direct object, but not vice versa.

<sup>&</sup>lt;sup>14</sup> As Baker (1996:45-47) shows, this is the case with Mohawk. See also his allusions to Southern Tiwa, Lakhota, and Navajo (1996:48).

John-erg mother-4s.poss.erg. name-4s.poss.abs love-3s.3s.tr.ind S/he loves John's mother's name

Compare (16) and (17) to (18), a sequence taken from a story about a naughty little girl, which provides additional evidence for a noncross-referential reading of the ergative:

## (18) niunganik animi tigumijaqtuq

niu-nganik ani -mi tigumijaq-tuq leg-3s.poss.obj brother.of.a.sister -3s.poss.erg grab-3s.itr.nompart his leg her brother's she grabs 'she grabs her brother's leg'

Ambiguities as in (16) and (17) are due to their being transitives, offering cross-reference with the ergative as the default reading. The reduction of morphological arguments to one excludes this reading, as in (18). Such a reduction can structurally accomplished by forcing intransitive inflection, as in (19) and (20):

## (19) Jaaniup qipinganik tigusivuq

Jaani -up qipik -nganik tigu- -si- -vuq J.-poss blanket -4s.poss.obj. take -ap- -3s.itr.ind [John's blanket-4poss]obj s/he took 'S/he took John's blanket'

### (20) Jaani qipinganik tigusivuq

J. -ø qipik -nganik tigu- -si- -vuq J. -abs blanket -4s.poss.obj take -ap- -3s.itr.ind Johni blanket-4poss hei took 'John took his/her blanket'

In Inuktitut arguments are specified within the verbal complex, morphologically, and they can never be omitted. There are no nonfinite forms. The lexical specifications which may appear externally to the verbal complex do not occupy a syntactically significant position in terms of syntactic asymmetry. It is only if such an elementary asymmetry can be reconstructed that empty slots may be assumed. Consequently, if such a reconstruction fails, one can infer that no underlying asymmetries are present.<sup>15</sup> The fact that

<sup>15</sup> I strongly disagree with Baker (1996) who assumes that "the Theta Criterion must still be

morphological arguments may also introduce new discourse referents is proven by first and second person arguments, where a lexical specification is never required, as demonstrated by (10). Apparently, besides simple juxtaposition no way to syntactically combine statements exists; configuration of complex utterances is not achieved by "syntactic" operations. As stated above, the conjunctions such as ammalu, 'and', have no syntactic function. The fact that there are no complementizers, likewise points to the restricted nature of the syntactic component. This analysis is supported by what have been called "stranded" or "external" modifiers. In (21), being the beginning of her life story told by an old lady, maqruungnik 'two' modifies incorporated ukiuq 'winter'. Its peculiar status as a syntactic constituent is further emphasized by the fact that it is not marked by -guuq, an affix indicating reported events, also frequently used to refer to traditional knowledge, indicating past.

(21) ... taimaguuq maqruungnik ukiuqarliq ungaguuq ... "it was told, when I was two years old..."

```
taimaguuq
```

taima: + particle "...and then..." -guuq: aff, terminal, discourse "reported event"

maqruuk: +N "two"

-nik: objective, dual

ukiugarlig ungaguug

-liq-:  $aff[+V_], +V$  "progressive"

- unga: 1s vpart itr

-guuq aff, terminal, discourse "reported event"

As can be seen magruungnik is the only constituent not marked with -guuq, while even taima, indicating the beginning, continuation, and end of a narrative, is so marked: magruungnik quite obviously is perceived as being "part" of ukiuq, even though the latter is

met syntactically, and hence these NPs must exist, although they may be phonetically empty..." (1996:16). To me, such an assumption would only be justified if the phonetically empty constituents could be shown to be structurally present. Otherwise this assumption amounts to empty scaffolding for the sake of uniformity.

incorporated, rather than as an independent discourse constituent.

(5) So how is the creation of complex utterances achieved? How is what seems to be case marking, to be interpreted? The only means of merging utterances is by morphological marking. As has been briefly mentioned before, each verbal mood contains a feature specifying whether or not it has such connecting capacities, and it is this feature which forces a differentiation into two distinct classes. Indicative, imperative/optative, and interrogative paradigms are explicitly nonrelating, employed in independent statements. The so-called dependent or subordinate moods inherit a feature [+ relating]. The verbal participle, which has already been introduced in (21), constitutes a relation of simultaneity between events. Accordingly, (22) is the desired equivalent of (8.3). Sentence (23) demonstrates the fourth person, indicating the nonidentity of participants. The two other moods establish a causal relation, as in (24) and (25), or a conditional relation, as in (26).

(22) anitsunga takuvagit

```
ani- -tsungataku- -vagit
go.out -1s.itr.vpart see -1s.2s.tr.ind
'going out I see you'
```

(23) anitilugu angutiup takuvanga

```
ani- -tilugu angut(i)-up taku- -vanga
go.out -4s.itr.vprt man -erg see -3s.3s.tr.ind
```

'the man sees him going out'

(24) qiuqama isiqpunga

qiu- -gama isiq- -punga feel.cold -1s.itr.caus come.in -1s.itr.ind 'because I feel cold I come in'

(25) tikimmat qaujimajunga

tiki(t)- -mat qaujima- -junga

<sup>\*</sup>going out the man sees him

arrive -4s.itr.caus know -1s.itr.npart

'I know that s/he arrived'

## (26) tusargukku takuniagtara

tusar- -gukku taku- -niag- -tara

hear -1s.3s.tr.cond see -future- -1s.3s.tr.ind

if I hear it I will see it

'if/when I hear it I will see it'

(27) pulaaniaqqaugaluarakkit kisiani sininnirrama 'although I was intending to visit you, I fell asleep' (Harper 1979:91)

pulaa-niaq-qqau-galuaq-rakkit visit-fut-past-although-1s.2s.tr.caus 'although I was intending to visit you'

kisiani: only

sini(k)-niq-rama sleep-past<sup>16</sup>-1s.itr.caus 'I fell asleep (unintentionally)'

In (27), both verbal complexes are in the relational mood causal, the background information "I did not come" is not mentioned at all, it would be redundant for both speaker and hearer. This sentence demonstrates, as does (25), that the labelling of the "causal" mood is to be taken cum grano salis; the causal relation may be rather remote. While the conditional clearly has a reading with regard to future events, as can be seen in (26), 17 the causal mood is employed regularly in contexts of nonsimultaneity. Any coherent discourse must employ these moods, and their importance is emphasized even in the oldest documents on Eskimo languages. Furthermore, it should be noted that these moods behave

\_

The affix -niq- which usually is glossed as 'past', additionally contains the meaning 'unintentionally', 'unconsciously'. For a discussion of temporal affixes in Inuktitut, see Nowak 1994.

The conditional has an equally broad range of meaning, as can be seen, e.g., in lexicalized qauppat 'tomorrow', to be analyzed as qau 'light, daylight' -pat 4s.itr.cond, 'if/when...'

exactly like the nonrelating, independent ones with respect to argument structure and case assignment: they may be transitive as well as intransitive, cross-referencing noun phrases marked ergative and absolutive.

All in all, there is ample evidence for Inuktitut being a morphological argument language. Not only are arguments expressed morphologically, but the structuring of discourse, the joining of propositions is achieved by morphological means as well. Yet two possible sources of counterevidence still need to be discussed. The first is the existence of antipassive and its peculiarities, the other is the existence of strict case marking.

(6) Adopting a syntactic perspective, the investigator is left with a bewildering array of facts concerning the syntactic structure of Inuktitut. As has been pointed out, (structural) "case" is a notion tied to syntactic asymmetry. It has also been shown that no asymmetry can be confirmed between the lexical specifications of the core arguments, marked by ergative and absolutive, cross-referencing the morphological arguments. These noun phrases may be omitted freely. On the other hand, there are instances of obligatoriness with respect to the noun phrases marked objective in antipassives as in (20), repeated below as (28), and a specific class of verbal roots, 18 as in (29). It is also true of what may be called "displaced agents" of causatives, as shown in (30). Either we are left with a most peculiar syntactic structure allowing several "subjects" and two different types of direct objects which calls for major revisions of syntactic theory, or we will have to look for an explanation in terms of a synthetic representation. Inuktitut is a polysynthetic language, a fact that as yet has been touched upon only in passing, but which surely provides the key for a plausible explanation and homogeneous description. Its primary characteristic is its richness and unlimited productivity in the domain of morphology, which sets it apart from Indo-European languages, even those featuring well-developed word-formation devices. In the light of the fact that besides word-internal productivity, (synthesis), discoursestructuring features likewise are systematically provided by morphological devices--see (21)

<sup>&</sup>lt;sup>18</sup> For a detailed discussion, see Nowak 1996a:126-141.

to (27)--it seems to be appropriate to make a fresh start and describe Inuktitut from a morphological perspective, considering its structure in terms of synthetic processes. While work on verb classes, affix classes, argument precedence, etc., still is in its infancy, the basic morphological regularities are known. In the following I will outline a reanalysis based on the polysynthetic structure of Inuktitut.

(28)
Jaani qipinganik tigusivuq

Jaani-øqipik -nganik tigu- -si- -vuq J. -abs blanket -4s.poss.obj take -ap- -3s.itr.ind Johni blanket-4poss hei took 'John took his/her blanket'

## (29) takuvuq piqatimik

taku- -vuq piqati -mik see -3s.itr.ind friend -obj.s. 's/he sees a/the friend'

# (30) takutittanga piqatimut

taku- -tit- -tanga piqati -mut see -cause- -3s.3s.tr.ind friend -term.s 's/he causes the friend to see him/her/it'

In (28) to (30) the NPs marked objective (-mik, -(vowel)nnik, -nik) and terminal (-mut, - (vowel)nnut, -nut)<sup>19</sup> are obligatory, their omission renders the utterances incomplete. These noun phrases are not in a cross-reference relation with the morphological arguments, but are still linked to the inherent argument structure of the root. Let us first examine what happens in sentences (28) and (29). Both tigu- 'take', and taku- 'see' are transitive roots, specified for two core arguments, one of which is assigned the semantic role AGENT, the other the rather fuzzy role THEME. In the default case, both arguments and their roles are realized by transitive inflection, as in (31) and (32):

(31) tiguvanga tigu--vanga

-

<sup>&</sup>lt;sup>19</sup> The dual involves a reduplication of the final vowel of the preceeding root or stem.

Is Inuktitut a Morphological Argument Language? take -3s.3s.tr.ind 's/he takes it'20

(32) takuvanga taku- -vanga

see -3s.3s.tr.ind 's/he sees it'

In (31) and (32), the arguments of the root freely percolate and agree with the default structure provided by transitive inflection. In (28), the antipassive affix -si-, in contrast, is specified for just one argument and one semantic role: it triggers intransitive inflection to account for the single argument, but contrary to default role assignment it is also specified for the semantic role AGENT.<sup>21</sup> While the AGENT role of the root is able to percolate to the synthetic form, the conflicting THEME is not.22 It cannot be expressed by a morphological argument anymore, since the only one available is occupied by AGENT. The same applies to taku- 'see' in (29), exemplifying a class of verbal roots which may be inflected transitively as well as intransitively while preserving their inherently transitive argument structure. But since THEME may not be deleted in Inuktitut, it must be "exported." As demonstrated in (28) and  $(29)_{,}$ **THEMES** exported are consistently marked

\_\_\_

<sup>&</sup>lt;sup>20</sup> If these arguments are lexically specified, the AGENT argument is coindexed via the ergative, the THEME argument via the absolutive.

<sup>&</sup>lt;sup>21</sup> It has been repeatedly argued that ergative languages need a device for making AGENT NPs accessible in intransitive (single argument) constructions. See Dixon (1996:207-213), du Bois (1987). For a detailed discussion of antipassive in Inuktitut see Nowak 1996a:132-134, 267-277. It should be noted that the labels for semantic roles employed here are to be taken in a rather broad sense. There is a fundamental contrast between AGENT, also covering EXPERIENCER and possibly some other, vaguely "agentive" semantic roles on the one side, and THEME on the other. THEME is decidedly nonagentive and also covers PATIENT.

<sup>&</sup>lt;sup>22</sup> It must be kept in mind that synthesis in Inuktitut is a strictly right-headed, binary process. As far as I can see at present, there are no exceptions to this rule.

[+objective]. Similary, exported AGENTs are consistently marked [+terminalis],23 as can be seen in (30). As said before, the initial root, taku-24, 'see', is specified for two arguments, one of which is assigned the semantic role EXPERIENCER, the other THEME. The affix -tit- 'cause somebody to do something' is specified for AGENT itself, but is transparent for THEME. As is always the case, the argument structure of the affix takes precedence, so the AGENT of the root is blocked from percolation, while the THEME is not. Being specified for two arguments, -titagrees with transitive inflection, the AGENT argument being the one introduced by the affix, while the THEME of the root may percolate. The AGENT of the root is exported and linked to the synthetic complex by terminalis case. This linking of exported arguments to objective marking and to terminalis/ablative marking is a fairly regular process. The suppressed AGENT of passives may be realized externally too and as is to be expected, is marked by terminalis/ablative:

### (33) pigatimut takujaujutit

piqati -mut taku- -jau- -jutit friend -term see -pass- -2s.itr.nompart you were seen by a/the friend

Since all reference to thought about and spoken about events is established via affixation, an accumulation of participants and semantic roles may be the consequence. Consider (34)

<sup>&</sup>lt;sup>23</sup> In some dialects the ablative (-mit, -(vowel)nnit, -nit) is used instead of the terminals. If this abstract use conflicts with the original, semantic reading, the semantic reading wins out and the alternative case, terminalis or ablative, respectively, is employed.

With respect to argument structure and role assignment, verbal roots can be roughly arranged into four different classes. One of these classes covers roots behaving like taku-.

```
Is Inuktitut a Morphological Argument Language? 
-gasugi-/-rasugi- + V [V_+ - gasugi-/-r]Vtr^{25} 
 tr: AGENT - THEME (transparent) 
'think that'
```

which is transitive, and transparent for THEME. See (35), where both arguments, the THEME inherited from the root, and the AGENT introduced by the affix, are realized.

(35) aanniarasugijara
aannia(q)- -rasugi- -jara
be.sick -think.that- -1s.3s.tr.ind
'I think that s/he is sick'

In (36), -niraqtau- is a lexicalized combination of -niraq- 'someone said' and -jau-/-tau-, the passive affix, which here triggers the restriction to a single argument, intransitive. As can be seen from (36.2), the "one who says" is exported and linked by the terminalis (or ablative)

(36.1) tikiniraqtauvutit

```
tiki(t)- -niraqtau- -vutit
arrive- -s.o.said.itr- -2s.ind.itr
'someone said you have arrived'
```

(36.2) Jaanimut tikiniragtauvutit

```
John -mut tiki(t)- -niraqtau- -vutit
John -abl arrive- -s.o.said.itr- -2s.ind.itr
'John said that you have arrived'
```

In cases of role accumulation or the reduction of available morphological argument positions, the export of the "other" argument is structural; i.e., it is not idiosyncratic but absolutely predictable. In some cases as in (28) to (29), it is even obligatory. So what has been called "case" is not an epiphenomenon of syntactic position, but a morphological coindexing, or linking device exhibiting a strict correlation with semantic roles. To avoid

\_

<sup>&</sup>lt;sup>25</sup> Apart from a phonetic specification, this is a complete representation of the affix -gasugi-/-rasugi- It is to be read as "verbal affix, selecting verbal bases, exhibiting a distributional variation, generating a verbal stem; transitive: AGENT - THEME."

confusion, it should be labelled accordingly. If a hierarchy can be observed, it is a hierarchy of arguments inherent in root and affix, but not in syntactic position. As far as I can see at present, the deletion of a core argument THEME is not possible. The objective marker -mik has only a very weak semantic reading "instrumental," but is first and foremost open for 'displaced' THEME, never for AGENT. With the locative markers terminalis and ablative, on the contrary, which are open for AGENT, the locative reading takes immediate precedence in cases of conflict.

A representation in morphological, synthetic terms turns out to be perfectly consistent. It offers a very plausible explanation for the apparent lack of syntactic asymmetries. It might even be pointed out that the asserted linking of arguments by morphological marking is also to be found in syntactically configurational languages. It then is distinguished from structural case and described as lexical case, i.e., case inherently connected to the argument structure of the verb. While this must remain an exceptional and idiosyncratic matter in syntactically configurational languages, such a procedure can easily be structural, in the sense of regular and predictable, in polysynthetic languages.

For a homogeneous representation all that is needed is

- \_\_\_\_\_a general rule accounting for affixation as a right-headed, binary process
- a general rule specifying default hierarchy of semantic roles
- specifications of each lexical entry (roots and affixes, as well as grammatical markers such as morphological argument markers and linking markers) in terms of a subcategorization frame
- a general rule specifying the linking of lexical specifications to their morphological arguments
- a rule specifying the linking of exported arguments.

Although in this paper only the very first steps have been taken for the informal formulation of these rules,<sup>26</sup> it seems to be promising to further pursue such an approach. In the long run it is not only a coherent representation for a single language, Inuktitut, which is at stake. It is the interface between the morphological domain and the syntactic domain

\_

<sup>&</sup>lt;sup>26</sup> See also Nowak 1996b.

and the delineation of those features which trigger syntactic configurationality as opposed to morphological configurationality, i.e., polysynthesis.

#### **Abbreviations**

abl: ablative; abs: absolutive; aff: affix; ap: antipassive affix; caus: causal mood; cond: conditional mood; d: dual; erg: ergative; fut: future; ind: indicative; itr: intransitive; loc: locative; nompart: nominal participle; p: plural; pass: passive affix; poss: possessive; s: singular; term: terminalis; tr: transitive; vpart: verbal participle.

#### References

Baker, Mark (1996). The Polysynthesis Parameter. New York, Oxford: Oxford University Press.

Bittner, Maria (1988). Canonical and Non-Canonical Argument Expressions. PhD Dissertation, Dep. of Linguistics, University of Texas, Austin.

Bok-Bennema, Reineke (1991). Case and Agreement in Inuit. Berlin: Foris.

Creider, Chet (1978). The syntax of relative clauses in Inuktitut. Etudes/Inuit/Studies 2: 95-110.

Dixon, Robert (1994). Ergativity. Cambridge: Cambridge University Press.

Dorais, Louis-Jacques (1988). Tukilik. An Inuktitut Grammar for all. Inuit Studies Occasional Papers 2. Association Inuksiutiit Katimajiit Inc. Groupes D'Etudes Inuit Et Circumpolaires (GETIC) Quebec: Universite Laval.

du Bois, J. (1987). The Discourse Basis of Ergativity. Language 63, 805-855.

Fortescue, Michael (1992a). The Development of morphophonemic Complexity in Eskimo Languages. Acta Linguistica Hafniensia 25: 5-27.

- (1992b). Morphophonemic Complexity and Typological Stability in a Polysynthetic Language Family. International Journal of American Linguistics 58: 242-248.

Hale, Ken (1983). Warlpiri and The Grammar of Non-Configurational Languages. Natural Language and Linguistic Theory 1. pp. 5-47.

Harper, Kenn (1979). Suffixes of the Eskimo Dialects of the Cumberland Peninsula and North Baffin. National Museums of Man Mercury Series. Canadian Ethnology Service Paper No. 54. Ottawa: National Museums of Canada.

Jelinek, Eloise and Richard Demers (1994). Predicates and Pronominal Arguments in Straits Salish. Language 70/4: 697-736.

Jelinek, Eloise (1995). Quantification in Straits Salish. In Emmon Bach, Eloise Jelinek, Angelika Kratzer and Barbara Partee (eds), Quantification in Natural Language, Vol 2, 487-540. Dordrecht: Kluwer.

- (1984). Empty Categories, Case, and Configurationality. Natural Language and Linguistic Theory 2: 39-76.

Johns, Alana (1987). Transitivity and Grammatical Relations in Inuktitut. PhD. Dissertation, University of Ottawa.

Marantz, Alec (1984). On the Nature of Grammatical Relations. Cambridge/Mass.: MIT Press.

Nowak, Elke (1999). The "Eskimo Language" of Labrador. Moravian Missionaries and The Description of Labrador Inuttut 1733 - 1891. Etudes/Inuit/Studies 23/1,2 (to appear).

- (1996a). Transforming the Images. Ergativity and Transitivity in Inuktitut (Eskimo). Berlin/New York: Mouton de Gruyter.
- (1996b). Die Organisation komplexer Aussagen. In: Wenn die Semantik arbeitet. Festschrift für Klaus Baumgärtner, herausgegeben von Gisela Harras und Manfred Bierwisch. Tübingen, S. 29-56.
- (1994). Tempus und Temporalität in Inuktitut. In: Tense Systems in European Languages. Edited by Rolf Thieroff and Joachim Ballweg. Tübingen, S. 295-310.
- (1987). Samuel Kleinschmidts 'Grammatik der grönländischen Sprache'. Hildesheim: Olms.

Smith, Lawrence (1984). On the Non-ergativity and Intransitivity of Relative Clauses in Labrador Inuttut. Syntax and Semantics 116: 289-316.

February 1999