

INUKTITUT RESTRUCTURING AFFIXES*

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This paper compares three types of affixal verbs in North Baffin Inuktitut. The differences between these affixes are accounted for if we assume that each type is part of a different sized clause (see Wojdak (2005) for a similar restructuring-type approach (Wurmbrand 2001; Cinque 2001) for Nuuchahnulth). This paper also considers the case patterns found with two of the affix types and argues that the affixes can be analyzed as ECM verbs, similar to the analysis proposed by Kayne (2004) for French causatives. The analysis in this paper has implications for how ergative case is viewed in Inuktitut.

The three verbal affix types under consideration are exemplified by *-guma*¹ ‘want’, *-qu*² ‘order’ and *-niraq* ‘say’. These affixes are suffixes that attach to a verbal root. In each construction there is only one portmanteau mood/agreement morpheme indicating that they are a single clause containing two verbal elements (the root and the affix).

- (1) Miali *igla-qu-jara*³
Mary(abs) laugh-order-indic.1sg.3sg.
‘I ordered Mary to laugh.’

The three constructions differ as to whether or not they introduce an agent and whether or not the root verb can host tense morphology. These differences

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¹ According to Grimshaw and Mester (1985) for Labrador Inuttut, other affixes that pattern like *-guma* are *-gasua* ‘attempt’, *-gia* ‘begin’, *-gunna* ‘be able’. I have not yet elicited these morphemes for North Baffin.

² According to Grimshaw and Mester (1985), other affixes of this type are *-gi* ‘consider’ and *-ti* ‘make’. I have not yet elicited these morphemes for North Baffin. Note that I have glossed *-qu* throughout as ‘order’ but this is not entirely accurate since it at times can mean ‘want’ or ‘tell’.

³ All data in this paper is from the author’s fieldwork notes unless otherwise noted.

will be accounted for by associating each construction with a different sized clause.

These affixes have received some attention in the literature. Smith (1982) uses clause-union within the Relational Grammar framework to account for *-guma* and *-qu*. Grimshaw and Mester (1985) propose that the two affixes derive complex verbs in the lexicon. Woodbury and Sadock (1986) argue that a syntactic account is preferable. The *-niraq*-type affix has not been analyzed⁴ but it is noted that this construction type allows two tense morphemes within the same word (Fortescue (1984) for West Greenlandic and Woodbury and Sadock (1986) for the related language Yupik). I analyze *-guma* as a modal verb (see Johns (1999)) and propose that *-qu* takes a *vP* complement and *-niraq* takes a TP complement.

Section 1 contrasts the affix types and accounts for their differences. Section 2 proposes that *-qu* and *-niraq* are ECM verbs and discusses implications of this analysis for how ergative case is assigned in Inuktitut.

1. The Affixal Verbs: A Comparison

In this section we will see that *-guma* does not add anything beyond a desiderative meaning to a clause. *-qu* and *-niraq* constructions both have an additional agent and *-niraq* constructions can have an additional tense specification. These differences are accounted for if *-guma* is a modal verb, *-qu* takes a *vP* complement and *-niraq* takes a TP complement.

1.1 *-guma* as a Modal Verb

In this paper the affixal verb *-guma* ‘want’ is analyzed as a modal verb following Johns (1999). This is therefore not a new analysis of *-guma* but the data for this affix offers a comparison to the other affix types.

-guma can occur with both intransitive and transitive verbal roots. *-guma* constructions are restricted such that the notional agent of *-guma* must be the same as the sole argument of an intransitive verbal root (see (2a) and (2b)) or as the agent of a transitive verbal root (see (2c) and (2d)). We will see that sentences like (2b) and (2d) are grammatical with the other affix types. The affix *-guma* can occur with weather verbs and with non-agentive subjects in some dialects (see Johns (1999)).

- (2) a. Miali igla-**ruma**-juq
 Mary(abs) laugh-want-indic.3sg.
 ‘Mary wants to laugh.’

⁴ But see Pittman (2006) where I provide an account of this affix that is somewhat similar to that proposed herein.

- b. * Miali igla-**ruma**-jara
Mary(abs) laugh-want-indic.1sg.3sg.
'I want Mary to laugh.'
- c. Jaani-up tuktu niri-**guma**-jaa
John-erg caribou(abs) eat-want-indic.3sg.3sg.
'John wants to eat the caribou.'
- d. * Jaani-up niri-**guma**-jaa tuktu Miali-mu
John-erg eat-want-3sg.3sg. caribou(abs) Mary-mut⁵
'John wants Mary to eat the caribou.'

The affix *-guma* does not add an argument to the construction. It is non-thematic and Johns concludes that it is a modal verb. I situate this affix in a functional projection between the TP and *vP* of a mono-clausal structure.

1.2 A Comparison of *-qu* and *-niraq*

The affixes *-qu* and *-niraq* do have an argument structure. They add an agent of ordering/saying to the construction:

- (3) a. Miali igla-**qu**-jara
Mary(abs) laugh-order-indic.1sg.3sg.
'I ordered Mary to laugh.'
- b. Jaani-up kapi-**qu**-jaa tuktu Miali-mu
John-erg stab-order-indic.3sg.3sg. caribou(abs) Mary-mut
'John ordered Mary to stab the caribou.'
- c. Miali igla-**niraq**-tara
Mary(abs) laugh-say-indic.1sg.3sg.
'I said that Mary laughed.'
- d. Jaani-up kapi-**niraq**-taa tuktu Miali-mu
John-erg stab-say-indic.3sg.3sg. caribou(abs) Mary-mut
'John said that Mary stabbed the caribou.'

These affixes thus contrast with *-guma* by introducing an external argument.

They also select a thematically saturated complement (a *vP*) (see arguments for an embedded agent in section 2).

⁵ The status of this case morpheme will be discussed later in the paper. It appears on the oblique agent of the passive and on indirect objects. It is sometimes referred to as the allative. I have glossed it as '-mut' throughout.

The affixes *-qu* and *-niraq* contrast with each other in one way. Constructions with *-niraq* allow two tense morphemes whereas constructions with *-qu* only allow one. Tense in Inuktitut is normally found between the verbal stem and the mood/agreement portmanteau morpheme, as in (4).

- (4) Jaani-up kapi-**lauq**-taa tuktu
 John-erg stab-dist.past-indic.3sg.3sg. caribou(abs)
 ‘(Last week) John stabbed the caribou.’

In the *-qu* construction tense can only be found between *-qu* and the inflectional portmanteau morpheme (this is true of the *-guma* construction as well).

- (5) a. Jaani-up kapi-**qu-lauq**-taa tuktu Miali-mu
 John-erg stab-order-dis.past-indic.3sg.3sg. caribou(abs) Mary-mut
 ‘(Last week) John ordered Mary to stab the caribou.’
- b. *Jaani-up kapi-**lauq-qu**-jaa tuktu Miali-mu
 John-erg stab-dis.past-order-indic.3sg.3sg. caribou(abs) Mary-mut

A tense morpheme can be found on either side of *-niraq*. It is also possible to have two tense morphemes, one before *-niraq* and one after.⁶

- (6) a. Jaani-up kapi-**nira-lauq**-taa tuktu Miali-mu
 John-erg stab-say-dis.past-indic.3sg.3sg caribou(abs) Mary-mut
 ‘(Last week) John said that Mary stabbed the caribou.’
- b. Jaani-up kapi-**laung-niraq**-taa tuktu Miali-mu
 John-erg stab-dist.past-say-indic.3sg.3sg caribou(abs) Mary-mut
 ‘(Last week) John said that Mary stabbed the caribou.’
- c. Jaani-up kapi-**qau-nira-lauq**-taa
 John-erg stab-.past-say-dis.past-ind.3sg.3sg.

 tuktu Miali-mu
 caribou(abs) Mary-mut
 ‘Last week John said that Mary was eating the caribou.’

Assuming that the presence of tense morphology is diagnostic of a tense projection, we can conclude that *-qu*, which cannot be preceded by a tense morpheme, (5b), selects a complement smaller than TP. Note that morpheme order in Inuktitut is inverse to merge order. Thus the tense morpheme in (5a) is

⁶ I have not yet determined whether or not there is a meaning difference depending on where the tense morpheme is found. I also have not yet discovered the correct contexts for using two tense morphemes, as in (6c).

situated higher than *-qu*. The unavailability of a tense morpheme between *-qu* and the verbal root indicates the lack of a tense projection below *-qu* and thus the lack of a tense projection in the complement. I conclude that *-qu* takes a *vP* complement – the complement is thematically saturated but does not have tense specifications.

Since *-niraq* can be preceded by a tense morpheme, its complement is bigger than the complement of *-qu* and minimally contains a TP. Only one mood/agreement portmanteau morpheme is permitted in this construction. This morpheme is arguably diagnostic of a CP layer since it encodes the clause type (a different paradigm is used for questions, etc.). Thus, the complement is at least as big as a TP but not as big as a CP. Further evidence that the complement is smaller than a CP comes from recent work by Compton and Pittman (2006) and Compton (2006) whereby word boundaries are found to indicate CP and DP phase boundaries in Inuktitut (see Chomsky 2001 on phases). The fact that *-niraq* is always part of a larger verbal word indicates that there is a single CP phase in the construction. I propose that the complement of *-niraq* is a TP.

The three constructions discussed in this section differ in terms of clause size. *-guma* is a modal verb, *-qu* takes a *vP* complement and *-niraq* takes a TP complement. We will now look at the case patterns found in these constructions.

2. Case patterns

In this section we will consider the case pattern that is found with *-qu* and *-niraq*. We will see that this pattern argues for a view of ergative case as structural case assigned by CP-TP in Inuktitut.⁷ This approach is contra the view that ergative case is inherent case associated with agent-hood (a merge position in the specifier of *vP*) (see Woolford 2006 and references therein).

The case patterns found in the *-qu* and *-niraq* constructions are identical and can be described as follows: the agent of the ordering/saying is in ergative case (*Jaani-up* in (3b) and (3d)); the sole argument of an intransitive complement is in absolutive case (*Miali* in (3a) and (3c)); the patient of a transitive complement is in absolutive case (*tuktu* ‘caribou’ in (3b) and (3d)); the agent of a transitive complement is in *-mut* case, sometimes referred to as allative (*Miali-mu* in (3b) and (3d)). This final descriptive point is of particular importance. Here we have what appears to be an agent and it does not and cannot surface with ergative case.

- (7) *Jaani-up **Miali-up** kapi-qu-jaa tuktu⁸
 John-erg Mary-erg stab-order-indic.3sg.3sg. caribou(abs)

⁷ I am making no claims about ergative case cross-linguistically beyond the claim that ergative as structural case is an available option. Ergative languages seem to operate in very different ways which has prompted many authors to view it as epiphenomenal (see Johns 2000 for an overview of ergativity and Woolford 2006 for evidence that ergative in inherent case in other languages).

⁸No order of these elements is grammatical.

Is the embedded agent truly an argument of the complement and not of *-qu/-niraq* (i.e. are these instead control constructions)? It is most clear that *Miali-mu* is the embedded agent in the *-niraq* constructions where the translation is ‘John said that Mary stabbed the caribou.’ John did not say anything to Mary but instead he said something to the speaker. The situation with *-qu* is less clear. However, note that when the complement clauselet is passivized, a translation of *-qu* as ‘want’ is preferred. Thus, the sentence would not mean ‘John ordered the caribou to be killed by Mary’ but ‘John wants the caribou to be killed by Mary.’⁹ If *-qu* was a control verb we would expect a translation whereby the caribou is being given an order (that is, the truth conditions for an active and a passive embedded clauselet would be different).

That we have an agent that cannot surface with ergative case points to the likelihood that ergative is not inherent agent-related case in Inuktitut. It is also intriguing that it is in the absence of a CP projection that we find an agent that is not ergative. I propose that ergative case in Inuktitut is related to CP. There is only one CP in these constructions and thus only one ergative argument (regardless of how many agents there are). I assume following Chomsky (2004) (among others) that TP inherits phi-features from CP and thus a TP without a CP cannot check features or assign case. Ergative case is assigned in Inuktitut when features are checked by a T that is selected by CP.

2.1 Structural Case in Inuktitut

This subsection explains the details of how I assume case assignment functions in Inuktitut. Ergative is structural case assigned by CP-TP. Absolutive case is structural case assigned by *v*P. Structural case is assigned when a DP checks phi-features merged in T/*v*. In a language like Inuktitut, if there is only a single set of phi-features in the numeration, the features must merge as soon as possible, thus on *v* and not T. This theory of ergativity is identical to the one argued for in Pittman (2005) to account for Inuktitut switch-reference facts and in Bejar (2003) for ergativity generally and is similar to that proposed by Bobaljik (1993) for Inuktitut and Massam (2001) for Niuean. Following Bejar (2003) and Rezac (2003), I assume that *v*P searches its complement for a match. If it does not find one, it expands its search domain to include its specifier. The sole argument of an unergative or of an unaccusative verb thus surfaces with absolutive case. This combined with the merging of phi-features as soon as possible captures Levin and Massam’s (1985) insight that absolutive is the case that must be assigned in each derivation.

In *-qu* and *-niraq* constructions, the higher agent checks phi-features and is assigned ergative case in the matrix TP (the one that is selected by the sole CP in the construction). The patient of the complement checks phi-features and is

⁹ I have yet to determine for certain whether or not this is due to the pragmatics but this fact holds for all of the sentences that I have elicited thus far.

assigned absolutive case be vP (this patient will always be within the complement of v and thus will always match and value the v probe). The embedded agent is in *-mut* case, which is explained in the following subsection.

2.2 The Embedded Agent and *-mut* case

In Pittman (2006) I argued that the embedded agent surfaces with *-mut* case because there are only two structural case positions but three DPs in the construction. There is the structural case position of the matrix CP-TP and the structural case in the embedded vP . Since there is no intermediate CP (the complement is smaller than a CP) there is no intermediate projection in which a third structural case can be assigned. The lower agent therefore must be merged into the derivation with the oblique *-mut* case. The derivation will otherwise crash due to a DP that has not been case-licensed.

I further argued that the reason *-mut* case is the one that surfaces on the agent is because this is an agent related case: it is the case that appears on the oblique agent of a passive.

- (8) tuku kapi-**jau**-juq (Miali-**mu**)
 caribou(abs) stab-passive-indic.3sg. Mary-mut
 ‘The caribou was stabbed by Mary.’

However, there is a problem with the analysis in Pittman (2006): there is a difference between the *-mut* marked DP in the passive and the *-mut* marked DP in the *-niraq/-qu* constructions. In the passive, this argument is optional and is truly oblique. In the *-niraq/-qu* construction, this argument is not optional.

- (9) *Jaani-up kapi-**niraq**-taa tuku
 John-erg stab-say-part.3sg.3sg. caribou(abs)
 Intended: ‘John said that the caribou was stabbed.’

The *-mut* marked DP in (3b) and (3d) is perhaps then more similar to the *-mut* marked indirect objects found in some dialects of Inuktitut.

- (10) Anguti-up titiraut nutarar-mut tuni-vaa
 man-erg¹⁰ pencil child-allat give-ind.3sg.3sg.
 ‘The man gives.gave the pencil to a/the child.’
 (Johnson 1980, Central Arctic Eskimo)

The case pattern found in the *-qu/-niraq* constructions is then remarkably similar to what we see with French causatives where the embedded agent is in the same case as is found on indirect objects (see Kayne 1975; 2004; Rouveret and Vergnaud 1980). French indirect objects are in dative case (they follow the

¹⁰ Johnson (1980) glosses ergative as genitive and absolutive as $-\emptyset$

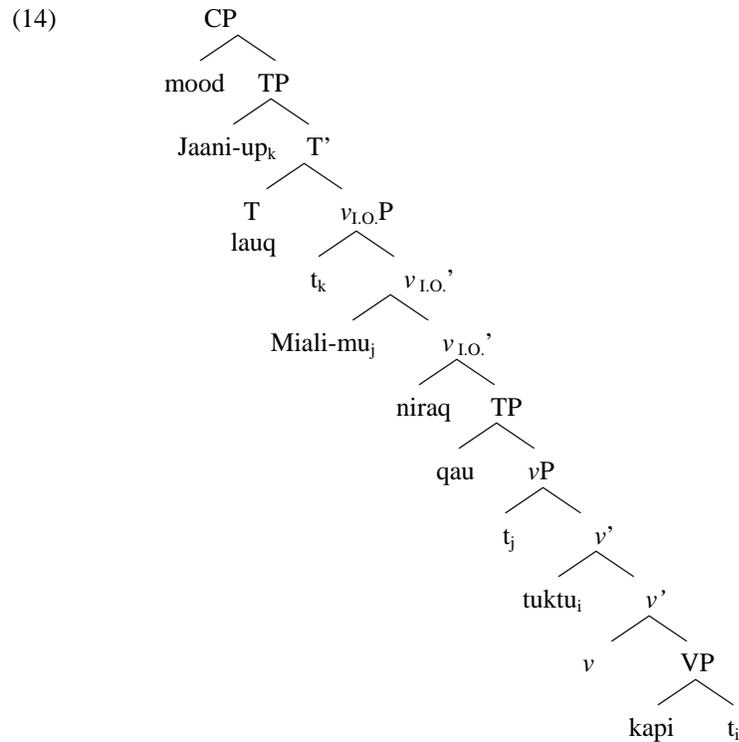
For the *-qu* and *-niraq* constructions, the light verbs cannot satisfy the EPP ROOT feature and the verbal root in the embedded clause is instead the goal of the probe. The constructions in this paper are thus a form of verb-incorporation.¹⁴

The tree in (14) shows how case is assigned for the sentence in (6c) repeated here as (13). Note that the EPP ROOT movement is not shown in (14).

- (13) Jaani-up kapi-qau-**nira**-lauq-taa
 John-erg stab-.past-say-dis.past-ind.3sg.3sg.

tuktu Miali-mu
 caribou(abs) Mary-mut
 ‘Last week John said that Mary was eating the caribou.’

¹⁴ However, note that if the analysis proposed in Compton and Pittman (2006) and Compton (2006) is instead adopted, the affixal status of these verbs is due to the fact that the construction only involves a single CP phase. The EPP ROOT feature could still be maintained to account for the inverse morpheme order but see Compton (2006) for an alternative.



2.3 ECM and Ergativity

I have argued that the constructions discussed in this paper support a view of ergative case as structural case in Inuktitut. The reason I have given is that the embedded clauselet has an agent but that this agent does not surface in ergative case. It therefore cannot have inherent agent case. Instead, it seems that the appearance of an ergative marked DP is correlated with the presence of a CP. Ergative is therefore structural CP-TP case.

However, given the ECM raising approach adopted here, one might suppose that the agent is assigned inherent ergative case but then raises to the matrix clause where it is additionally assigned *-mut* case (and then surfaces with *-mut* case). This is not a possible scenario given that non-structural case is generally shown to be preserved under A-movement (see Woolford 2006 and reference therein). In Icelandic, goals have dative case even when the sentence is passivized:

- (15) a. Þeir skiluðu Maríu bókinni
 They returned Mary-dat book-the-dat
 'The returned the book to Mary.'

- b. Maríu var skilað Þessari bók
 Mary-dat was returned this book-dat
 ‘Mary was returned this book.’

Therefore, it is not possible that the agent of the embedded clauselet is ever assigned inherent ergative case. If it was assigned inherent ergative case, we would expect it to surface with ergative case, even if it has undergone raising to a case position.

As an aside, if we think of the above A-movement test as not pertaining strictly to A-movement but instead to a DP entering into a phi-feature checking relation, a similar conclusion can be drawn regarding the Inuktitut antipassive. (16a) is a transitive clause and (16b) is an antipassive. In (16b) we see that the agent surfaces with absolutive case.

- (16) a. Miali-up kapi-jaa tuktu
 Mary-erg stab-part.3sg.3sg. caribou(abs)
 ‘Mary stabbed the caribou.’
- b. Miali kapi-si-juq (tuktu-mi)
 Mary(abs) stab-AP-part.3sg (caribou-com)
 ‘Mary stabbed (of the caribou).’

This is expected under the analysis of case adopted in this paper. In the antipassive, the patient is arguably merged with oblique case. There is one set of phi-features in the numeration. These phi-features will merge on vP (recall that vP always has phi-features in Inuktitut). v probes its complement and does not find a match. It therefore expands its search domain to include its specifier. The agent is then assigned absolutive case. If we instead view ergative as inherent case, we would expect the agent to be assigned ergative case when it is merged and this case should be preserved.

3. Conclusion

This paper has compared three types of affixal verb constructions found in Inuktitut. The differences between them are accounted for if we assume that each affix-type is situated in a different sized clause: *-guma* is a modal verb found in a basic intransitive/transitive clause, *-qu* selects a vP complement and *-niraq* selects a TP complement. The case patterns found in the *-qu* and *-niraq* constructions are attributed to the affixes’ status as ECM verbs, thus assimilating the constructions to a well-known phenomenon in other languages.

The analysis also involved an account of ergative as structural case associated with CP-TP for Inuktitut. This analysis is contra much work on ergative case cross-linguistically as either inherent case or as case associated in some way with vP . Instead, here I am analyzing Inuktitut as essentially a nominative-accusative language. The only difference is that in Inuktitut, vP always has phi-features whereas in an accusative language CP-TP always has

phi-features. Intriguingly, I reached a very similar conclusion when investigating the bi-clausal switch-reference system in Inuktitut (Pittman 2005). It therefore appears that thorough examinations of complex constructions can inform how we view more simple/basic constructions in the language.

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