

Antipassive Morphology and Case Assignment in Inuktitut

0 Introduction

Based on findings on the distribution of Antipassive morphology in Inuktitut, I propose in this paper that there are two object cases in the Antipassive construction in Inuktitut. The object case is accusative case and is assigned by *v* when the verb shows overt Antipassive morphology. When there is no overt Antipassive morpheme on the verb, the object case is an inherent case, assigned by the verb. The analysis argues against Bok-Bennema (1991) who suggests that the object case of the Antipassive is always accusative. It also argues against the traditional notion that the Antipassive is a detransitivizing operation, demoting the patient argument of the transitive construction (ergative construction from hereon in this paper) to an oblique case. Instead, the analysis conforms to Bok-Bennema (1991) when the verb requires overt AP morphology and it claims that in the absence of the AP morpheme we have normal intransitive construction without any demotion. I argue that there is no allomorphy between overt and non-overt Antipassive morphology but that there is in fact no zero Antipassive allomorph. I also argue that the Antipassive morpheme is verbal, a view counter to analyses that take the AP morpheme to be an incorporated noun (Baker 1988). The analysis is based on the fact that overt Antipassive morphology is determined by the verb's argument structure and therefore determined in l-syntax (Hale & Keyser 1993).

The paper is organized as follows. Section 1 describes the basic properties of the Antipassive in Inuktitut, section 2 lays out the theoretical framework. Section 3 presents empirical evidence to support the notion that the occurrence of Antipassive morphology is determined by the argument structure of the verb and that the overt Antipassive

morpheme is verbal. Section 4 presents the analysis that distinguishes Antipassive with overt Antipassive morphology and the construction without overt Antipassive morphology in which I then abandon the term Antipassive for this construction, and section 5 provides evidence for the idea that there are two different object cases in the Antipassive. Section 6 closes with concluding remarks.

1 The Antipassive in Inuktitut

Inuktitut has a predominantly ergative case assignment system with an alternative system of case assignment, the Antipassive (AP). Other than many ergative languages, Inuktitut also has a passive construction. The transitive (ergative) and intransitive constructions differ with respect to case assignment and agreement.

As shown in (1), an ergative construction shows ergative case on the agent, absolutive case on the patient, and pronominal agreement in person and number with both arguments on the verb (1a). An intransitive sentence shows absolutive case on the sole argument and the verb agrees with it (1b).

- | | |
|--------------------------------------|------------------------------|
| (1) a. Ergative | b. Intransitive ¹ |
| anguti-up arnaq kunik-taa | anguti niri-vuq |
| man-ERG woman(ABS) kiss-part.3sg/3sg | man(ABS) eat-ind.3sg |
| The man is kissing the woman | The man is eating. |

The Antipassive differs from the ergative construction both in case assignment and overt agreement morphology on the verb.

¹ Gloss: ERG=ergative case; ABS=absolutive case; part.=participial mood; ind.=indicative mood. The mood marker is an obligatory part of the verbal agreement inflection. See Johns (1987, 1992) for a discussion.

Unless otherwise indicated, examples are taken from my fieldwork with Ida Awa, a speaker of Mittimatalik, variety of Canadian Inuktitut spoken in North Baffin. My thanks go to her. Of course, any remaining errors can be blamed on me.

The agent receives absolutive case (like the sole argument in an intransitive sentence or the patient argument in the ergative construction) and the verb shows agreement only with this argument. The patient receives what traditionally has been called an oblique case, the *mik*-case². Example (2a) illustrates that the verb is marked with an AP marker *-si-*. This marker has previously been taken to have a zero allomorph (2b).

- (2) a. *Antipassive with overt AP marker*
 anguti kunik-si-vuq arna-mik
 man(ABS) kiss -AP-ind.3sg woman-mik
 the man is kissing a woman
- b. *Antipassive with non-overt AP morphology*
 anguti niri-Ø-vuq niqi-mik
 man(ABS) eat-AP-ind.3sg. meat-mik
 the man is eating meat

Inuktitut could be called a *pro*-drop language, in the sense that overt pronominal agreement on the verb signals the role of non-overt arguments both in ergative and intransitive sentences.

- | | | | |
|--------|-------------------------|----|----------------|
| (3) a. | kunik-taa | b. | niri-vuq |
| | kiss-part.3sg/3sg | | eat-ind.3sg |
| | s/he is kissing him/her | | s/he is eating |

In the Antipassive construction, there is agreement only with the absolutive argument. Although the verb shows agreement only with the agent argument, the patient argument can also be non-overt. This could mean either that the patient argument is simply not present at all or the patient argument could be represented as object-*pro*.³

² This case has received various names in the literature: modalis, comitative, instrumental. To avoid terminological confusion, I refer to this case as the *mik*-case according to its morphological form in the singular. Examples taken from sources other than my fieldwork are glossed according to the sources.

³ See Spreng (2001a) for a detailed discussion of this issue.

- | | | | | |
|-----|----|--|----|---|
| (4) | a. | kunik-si-vuq
kiss-AP-ind.3sg
s/he is kissing someone | b. | niri-vuq
eat-ind.3sg
s/he is eating something |
|-----|----|--|----|---|

Due to the absence of an overt AP marker, the constructions in (3b) and (4b) look exactly the same. Without the implicit assumption that (4b) contains a non-overt AP marker, the constructions are indistinguishable. On the other hand, (4a) can never occur without *-si-*, whereas (4b) never occurs with *-si-*.

Verbs that do not take overt AP morphology fall into three classes. There are unaccusative verbs that never show a construction similar to the AP with an overt argument in the *mik*-case. They are classic intransitive verbs that are only transitive in the presence of an external argument. These transitivized/causativized unaccusative verbs show overt AP morphology in the AP. The second class is unergative verbs, also never occurring in AP constructions with overt argument in the *mik*-case. The third class is what I call object-permitting verbs, they occur in intransitive constructions and in what has previously been called AP constructions with overt *mik*-case argument. These verbs are basically unergative verbs, allowing an internal argument optionally while always requiring an external argument.

2 The Verbal Projection

The structure of the VP has undergone various modifications within Generative Syntax. Especially since Larson's (1988) proposal for Double Object Constructions with a second VP shell above the basic VP, the view on verbal projections has motivated approaches such as Hale & Keyser's (1993) structural design for argument structure.

It has also led to the view that the external argument⁴ is introduced by a higher functional head *v* (Chomsky 1995 et seq.), promoting the idea that the external argument is not actually an argument of the verb (Marantz 1984, Kratzer 1996, Harley 1995, 1999, and others). Kratzer (1996) has argued that external actually means that it is an argument of an event/causer element, which – when it is overt – can be a Spell-Out of *v*. In general, there seems to be agreement on the idea that the external argument is not an argument of the lexical verb per se. The presence of an external argument is equivalent in some sense to the notion of transitivity. Minimally, it implies that there is a second argument that is required by the verb. However, in the case of unergative verbs, this seems not so obvious.

Unergative verbs behave differently from inherently transitive and unaccusative causativized verbs, in that including a second verbal element represents their argument structure, but the verb as such does not have an internal argument (Harley 1999). Some of them allow optionally for an internal argument, which begs the central question to be discussed in this paper: Is the object in *Peter ate an apple* an argument of the verb in the same sense as the object in *Peter killed the dog*?

This question has been discussed in various ways (see Hale & Keyser 1993, Harley 1995, 1999, Chomsky 1995 for discussion). The dominant point of view is that unergative verbs do not merge with their sole argument but rather that it is always merged with a built-in *v*, i.e. *v* is part of the lexical entry of the verb. This CAUSER/MAKE/DO (Harley 1999) element in *v* always provides an external argument position for the agent. Hale & Keyser (1993) propose an analysis where unergative verbs are always derived via incorporation of a noun into a semantically poor verb on the level of I-syntax. This

⁴ ‘External’: merged in spec of *v*P ; ‘internal’: merged with *V*

however has the following consequence: If an unergative verb is always derived through incorporation of a root into a semantically empty verb, and we assume this semantically empty verb to be v , there is no verbal entry for unergative verbs in the lexicon. This means there is no VP projection in the syntax but a syntactically undetermined $\sqrt{P}$ headed by the root $\sqrt{V}$ that will incorporate.⁵ The optional patient argument for object-permitting verbs is therefore an argument of the root rather than an argument of the verb. Consequently, there are no unergative V's in the lexicon since they are always derived in the syntax (1993).

By providing a slot for the external argument, the presence of v is a necessity for the derivation of unergative verbs, whereas the presence of the internal argument is optional in the case of object-permitting verbs. In contrast, unaccusative V's require an internal argument themselves and may merge subsequently with a functional 'transitivizing' or 'causativizing' v , which in turn merges with an external argument. In this case, the external argument is optional or rather irrelevant for the lexical verb.

An additional property of v is that it can assign accusative case. In accusative languages not all v 's have the accusative feature, for instance in constructions with unaccusative verbs and in passive constructions. There is still some discussion as to whether there actually is a vP projection present when there is no accusative case assignment in those constructions (cf. Rezac 2001, Legate 1998 for a discussion). I assume that the projection of vP is not conditioned by the presence of an accusative feature. For Inuktitut – an ergative language – I propose that v never assigns accusative

⁵ See Harley (1999) for a similar analysis within Distributed Morphology.

case in intransitive and ergative constructions. In other words, *v* has no inherent accusative feature in this language.

A consequence of the proposal that *v* does not assign accusative case is that the derivation of the ergative and the intransitive construction should proceed along the lines of an unaccusative derivation as proposed by Burzio (1986). This means that the argument of the lexical verb always receives subject case in subject position and that there is no equivalent accusative case assignment in the ergative sentence.

Thus, I adopt the idea that absolutive is the case that has to be assigned obligatorily by T, following previous analyses (Levin & Massam 1985, Johns 1992, Bok-Bennema 1991, Bobaljik 1993 and others).

2.1 Case Assignment

Adopting the idea of an obligatory case that must be assigned in a language (Levin & Massam 1985, Bobaljik 1993, Austin & López 1997) I assume this to be absolutive case in Inuktitut.

Although absolutive NPs in Inuktitut originate at the same position as accusative NP's in an accusative language like English, absolutive case has to be assigned in subject position. This accounts for the fact that absolutive NPs pattern together with respect to relativization. According to Creider (1978:95), "... the only noun phrase (NP) position inside the relative clause which may be relativized into is the absolutive."

- (5) a. angut (iksiva-juq) quviasuk-puq
man sit-active participle(he) happy-IND(he)
the man who is sitting is happy (Creider 1978:98)⁶

⁶ Brackets indicate the relative clause. The example is from Kaniqliniq, which is typologically close to the Baffin Island dialects.

This follows straightforwardly from the fact that regardless of the construction, one NP always has absolutive case and the finite verb always agrees with this NP.

Following Johns (1987, 1992), Bok-Bennema (1991), Bittner (1994), Schieberl-Manga (1996), and others, I assume that absolutive case is always assigned by T to Spec,TP. The subjecthood of the absolutive NPs or at least their patterning together with respect to control⁷ and relativization (Creider 1978, Smith 1984, Johns 1987, Bok-Bennema 1991, Gugeler 1994, Bittner 1994) seems to be justified. Consequently, I am assuming T causes agreement and movement to Spec, TP. Movement is caused by a strong EPP feature of T.

I assume further that ergative case is assigned by *v* under spec-head agreement to the specifier of *v*P. This takes into account that the finite verb agrees with the ergative NP. This also implies that the ergative case is a lexical case (Woolford 1997).

For the AP construction, I propose that *v* is occupied by the AP morpheme *-si-* that introduces an accusative feature to *v*. In this case, ergative assignment in the merge position is not possible. The ϕ -features and the strong EPP feature of T require movement of the NP in Spec,*v*P to Spec,TP. In essence, the accusative feature on *v* actually alters the feature make up of *v*, preventing agreement with and ergative case assignment to the NP in its specifier. Instead, it causes accusative assignment to the lower NP. Thus, I take *-si-* to be a verbal element that occupies *v*.

⁷ See Wharram (1996) for a critique of this view regarding control and infinitive sentence structures.

The view that the AP morpheme is a verbal element contrasts with many analyses that take the AP morpheme to be a nominal element that incorporates into the verb, absorbing the case the verb usually assigns (Baker 1988, Bittner & Hale 1996a, b, Bittner 1994, Marantz 1984). However, the idea that *-si-* is verbal instead of nominal avoids the problems caused by an incorporation analysis for the AP in Inuktitut.

For instance, noun incorporation in Inuktitut is restricted to a certain class of affixal verbs. These verbs need to incorporate obligatorily not only for morphological but for semantic reasons. (cf. Johns to appear). The verbs that supposedly incorporate the AP morpheme in the AP construction do not belong to the class of verbs that obligatorily incorporate. Another problem with the incorporation analysis lies in the fact that the incorporated noun (i.e. the AP morpheme) attaches to the right of the verb, whereas with incorporating verbs the incorporated noun attaches to the left of the verb. Although word order is relatively free in Inuktitut, morpheme order does not allow much room for variation (Fortescue 1983). On the other hand, the AP morpheme *-si-* behaves like a verbal element in many respects. Verbal inflection as well as verbal postbases that do not change syntactic categories can be attached to it directly. It can also directly precede an aspectual marker.

- (6) anguti kunik-si-lir-puq arna-mik
 man(abs) kiss-AP-icpt.-ind.3sg. woman-mik
 the man starts to kiss a woman

Since it is not plausible to assume that the aspectual marker is a verbalizing element that attaches to a noun I claim that the AP morpheme must be verbal.

3 The Distribution of the Antipassive Morpheme

3.1 Unaccusative Verbs and Causativization

According to Burzio's generalization (Burzio 1986), verbs that do not assign a theta-role to an external argument cannot assign accusative case to their complement, forcing the latter to raise to subject position. Transferring this generalization to Inuktitut, we are faced with the following facts.

As we expect, unaccusative verbs in Inuktitut are usually verbs that have no agent. They cannot occur in the AP with an overt *mik*-NP, whether with overt or with non-overt AP morphology.

- (7) a. Peter sinik-tuq (*nutara-mik).
Peter(ABS) sleep-part.3sg (baby-mik)
Peter is sleeping (the baby).
b. *Peter sinik-si-juq (*nutara-mik)
Peter(ABS) sleep-AP-part.3sg (baby-mik)
Peter is sleeping (the baby).

As expected, they also do not appear in the ergative construction with transitive inflection, unless they appear with a transitivizing morpheme, i.e., some sort of causativizer (8c).

- (8) a. Peter tuqu-si-vuq
Peter(ABS) die-icpt./*AP-ind.3sg
Peter is dying (about to die)/*kills something
b. Peter tuqu-vuq
Peter(ABS) die-ind.3sg
Peter is dead.

- c. Peter qimmiq tuqu(t)-taa⁸
 Peter-ERG dog(ABS) die-caus.-part.3sg/3sg
 Peter killed the dog

English allows causativization of certain unaccusative verbs without overt morphological means of causativization. Well-known examples are *break*, *sink*, *open*, and *drop*. In Inuktitut, these verbs appear in intransitive sentences, in the AP construction, and in the ergative construction and require the overt AP morpheme *-si-*.

- (9) a. Paa matuir-tuq [intransitive]
 door(ABS) open-part.3sg
 the door opens/is open
- b. Peter matuir-si-juq paa-mik [AP]
 Peter(ABS) open-AP-part.3sg door-mik
 Peter opens a door
- c. Peta-up paa matuir-taa [ergative]
 Peter-ERG door(ABS) open-part.3sg/3sg
 Peter opens the door.
- (10) a. anautaq surak-tuq [intransitive]
 stick(ABS) break-part.3sg
 The stick broke.
- b. Peter surak-si-juq anautar-mik [AP]
 Peter(ABS) break-AP-part.3sg stick-mik
 Peter broke the stick
- c. Peta-up anautaq surak-taa [ergative]
 Peter-ERG stick(ABS) break-part.3sg/3sg
 Peter broke the stick

The argument that always occurs is a patient argument. Regardless of whether the sentence is intransitive, in the ergative construction, or in the AP construction, this argument appears in the absolutive case. The agentive argument is optional in the sense

⁸ *-tit-* usually means literally ‘make, cause to, let’, whereas the consonant in (8c) might be a more direct means of causativization (Alana Johns, p.c.).

that the verb may be intransitive. The AP construction with two arguments is possible only with the overt AP morpheme *-si*.

3.2 Inherently Transitive Verbs

This group of verbs occurs in ergative constructions but cannot appear in an intransitive construction except in an AP construction with obligatory AP morphology.

- (11) a. Peter kapi-si-vuq nanu-mik [AP]
 Peter(ABS) stab-AP-ind.3sg polar bear-mik
 Peter stabbed a polar bear.
- b. Peta-up nanuq kapi-jaa [ergative]
 Peter-ERG polar bear(ABS) stab-part.3sg/3sg
 Peter stabbed the polar bear.
- c. *Peter kapivuq⁹ [intransitive]
 Peter(ABS) stab-ind.3sg
 Peter stabbed (himself accidentally, fell onto a knife).
- (12) a. anguti kunik-si-vuq arna-mik [AP]
 man(ABS) kiss-AP-ind.3sg woman-mik
 The man kissed a woman
- b. anguti-up arnaq kunik-taa [ergative]
 man-ERG woman(ABS) kiss-part.3sg/3sg
 The man kissed the woman
- c. *anguti kuniktuq [intransitive]
 man(ABS) kiss-part.3sg
 The man kissed

Concerning the AP morpheme, inherently transitive verbs behave identically to causativized unaccusative verbs such as *surak-* ‘break’, i.e., they require overt *-si-*.

⁹ Siegel (1998) cites Kalmar (1979:17) claiming that the intransitive form *kapi-vunga* ‘I stab myself’ is entirely acceptable. My consultant had the same problems with this form as with *kapi-vuq* ‘he stabbed himself’. This class of verbs is very problematic with an intransitive inflection. Marantz (1984) claims that this type of verbs is necessarily reflexive in Central Arctic, but with a passive reading in Kallaalissut, following Sadock (1980). The ‘accidental’ reading of (13a) would allow both interpretations in Mittimatalik. However, (12c) is entirely unacceptable.

I therefore assume that they behave identical to causativized unaccusative verbs in the AP.

3.3 Unergative Verbs and Object-permitting Verbs

Following Hale & Keyser (1993), I assume unergative verbs to be basically transitive. This means that there is always a higher verbal element v , which merges with the sole external argument but the verb itself has no argument. These verbs are distinct from unaccusative verbs in that regard, since the latter require the sole argument themselves.

- (13) a. Peter pisuk-tuq
Peter(ABS) walk-part.3sg
Peter is walking
- b. Peter ani-juq
Peter(ABS) leave/go out-part.3sg
Peter left/went out

However, some of the semantically agentive unergative verbs allow for a second internal argument. I call these verbs object-permitting verbs. In Inuktitut, these verbs occur in intransitive sentences (14a, 15a), ergative constructions (14b, 15b), and AP constructions (14c, 15c). In the AP construction and in a simple intransitive sentence, crucially they do not show overt AP morphology.

- (14) a. anguti niri-juq [intransitive/AP]
man(ABS) eat-part.3sg
the man is eating (something)
- b. anguti-up niqi niri-vaa [ergative]
man-ERG meat(ABS) eat-ind.3sg/3sg
the man is eating meat
- c. anguti niri-vuq niqi-mik [AP]
man(abs) eat-ind.3sg. meat-mik
the man is eating meat

- (15) a. Peter taku-juq [intransitive/AP]
 Peter(ABS) see-part.3sg
 Peter sees (something)
- b. Peta-up qimmiq taku-jaa [ergative]
 Peter-ERG dog(ABS) see-part.3sg/3sg
 Peter sees/saw the dog
- c. Peter taku-juq qimmi-mik [AP]
 Peter(ABS) see-part.3sg dog-mik
 Peter sees a dog

The AP construction without overt *mik*-NP, and a normal intransitive construction, appear exactly the same on the surface in these cases (14a, 15a). Only the assumption that there is a zero AP morpheme in (14c) and (15c) in combination with the optional *mik*-NP could provide a means to distinguish the AP from the intransitive constructions in (14a) and (15a). This assumption is however by no means substantiated.

Following Hale & Keyser (1993) and Harley (1999), I assume that unergative verbs are derived through incorporation of a noun into a semantically (almost) empty verb. The difference to Baker's (1988) incorporation analysis of the AP lies in the following: there is no AP morpheme that is incorporated into a verbal root but a root element is incorporated into an abstract verbal element, thus forming a verbal root together. Baker's analysis targets only AP constructions with overt AP morpheme in syntax proper whereas this analysis derives unergative and object-permitting verbs.¹⁰ The underlying structure parallels the analytic form of Basque noun-*egin* constructions, which are usually semantically unergative verbs in other languages (Levin 1983). The implication here is that the incorporation does not occur in Basque.

¹⁰ According to Hale & Keyser (1993), this derivation occurs in l-syntax. In this framework, an interesting question would be where the boundary between l-syntax and s-syntax would be located. I will however leave this issue for further research.

- (16) Oso ondo hitz egin duzu
 very good word-sA make 3sA-ukan-2sE
 You spoke very well. (Levin 1983:304)¹¹

Apart from the option of the second argument, the verbs in (14) and (15) are indistinct from intransitive unergative verbs. However, the *mik*-case argument is optional for both. The patient argument is optional in the same sense, as the agent argument is optional for so-called unaccusative verbs.

3.4 Is there a zero AP Morpheme?

In previous literature on the AP morpheme, it has been claimed that the AP morpheme denotes some sort of aspect (Bittner 1987, Benua 1995). However, this claim cannot be supported for Inuktitut. The identical inceptive suffix *-si-* has properties distinct from the AP morpheme *-si-* as shown in (17).

- (17) a. anguti kunik-si-vuq arna-mik
 man(abs) kiss-AP-ind.3sg. woman-mik
 the man is kissing the woman
- b. anguti kunik-si-si-vuq arna-mik
 man(ABS) kiss-AP-icpt.-ind.3sg woman-mik
 the man starts to kiss the woman
- c. anguti kunik-si-lir-puq arna-mik
 man(abs) kiss-AP-icpt.-ind.3sg. woman-mik
 the man starts to kiss a woman
- d. anguti-up arnaq kuni-si-jaa
 man-ERG woman(ABS) kiss-icpt.-ind.3sg/3sg
 the man starts to kiss the woman
 *the man kissed the woman
- e. anguti-up arnaq kuni-lir-paa
 man-ERG woman(ABS) kiss-icpt.-ind.3sg/3sg
 the man starts to kiss the woman

¹¹ 3sA=3rd person singular absolutive; 2sE= 2nd person singular ergative agreement

The inceptive *-si-* can appear in the ergative construction (17d, e) whereas the AP *-si-* cannot. An important difference to note here is that the inceptive *-si-* deletes the preceding consonant of the verb root (17d) just like its equivalent *-lir-* (17e), whereas the AP morpheme does not (17a). In addition, with respect to affix order, the aspectual marker cannot precede the AP marker (17b, c). This conforms to the affix ordering posed by Fortescue (1983). The AP morpheme *-si-* belongs to the group of what he calls “verb-extending affixes”, which precede negation and “sentential affixes” (Fortescue 1983:97). Inceptive *-lir-* and inceptive *-si-* belong to the latter category.¹²

We cannot necessarily assume that the zero AP morpheme differs in the same respect from the aspectual morpheme. However, there is evidence that that there is no deletion of the final consonant of the verb root in the AP construction whereas the aspectual morpheme causes the deletion of the preceding consonant as well in AP constructions with non-overt AP morpheme.

- (18) a. Peter pisuk-tuq
 Peter(ABS) walk-part.3sg
 Peter is walking
- b. Peter pisu-si-juq
 Peter(ABS) walk-icpt.-part.3sg
 Peter starts to walk
- c. nunakkuuruti-mik aqut-tuq
 car-mik drive-part.3sg
 he is driving a car
- d. nunakkuuruti-mik aqu-si-juq
 car-mik drive-icpt.-part.3sg
 he is starting to drive a car

¹² Inceptive *-lir* and inceptive *-si* can be found in group 17, (Fortescue 1983:44). AP *-si* or intransitivizing *-si-*, as he calls it, can be found in group 14 (Fortescue 1983:42). According to Fortescue 1983: 97, affixes of group 9-14 precede affixes of group 15-18 (Fortescue 1983:97).

Example (18b, d) illustrate that the aspectual *-si-* causes deletion of the final consonant of the verb root, thus implying that there is no interfering element between root and suffix.

Although the evidence is not too clear that there is no AP morpheme, there is absolutely no evidence that there is a zero AP allomorph present. The latter view has been assumed because the construction with the overt *mik*-case argument looks identical. However, this assumption can in no way account for the fact that the argument structure of the verbs determines the occurrence of the AP morpheme. Only verbs that are inherently transitive and causativized verbs take overt AP morphology; this distribution needs to be accounted for.

4 The AP morpheme and the Verb's Argument Structure: An Account

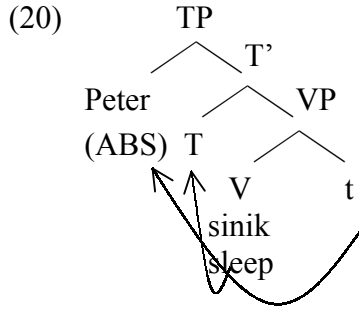
4.1 Antipassive with Causativized Unaccusative Verbs

Consider an unaccusative verb like *sinik-* 'sleep', which takes one argument in Inuktitut.

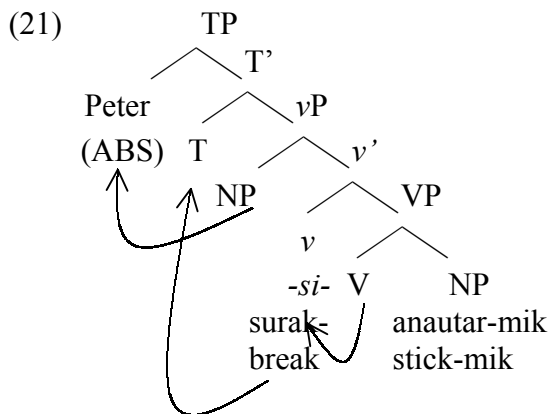
- (19) a. Peter *sinik-tuq*.
 Peter(ABS) sleep-part.3sg
 Peter is sleeping.
- b. *Peta-up *sinik-taa*
 Peter-ERG sleep-part.3/3sg
 Peter is sleeping him/her

The verb merges with its sole argument and projects a VP. The verb moves further to the functional head T, where it assigns absolutive case to the sole NP, which moves to Spec,TP coming from the internal argument position of the VP. In the context of my analysis, we could equally well assume that there is a *vP* projection. It is of no

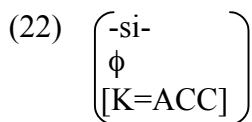
relevance whether there is a *v* or not since there is no external argument. Unaccusative verbs cannot have two arguments and, following Burzio's generalization, they cannot assign accusative case even in accusative languages.



Consider a semantically unaccusative (agent-less) verb such as *surak-* 'break', which can be causativized by overt or non-overt means. As demonstrated in section 3.1 (exp. 10), it occurs in the AP with overt *-si-*. I propose that *v* is occupied by *-si-*, thus the derivation of the AP construction with *-si-* proceeds in the following way: The verb moves up to adjoin to *-si-* and the lower NP receives *mik*-case (accusative case). Finally, movement of the NP in Spec,*v*P to T ensures assignment of absolutive case.



This is based on the following feature make-up of *-si-*.

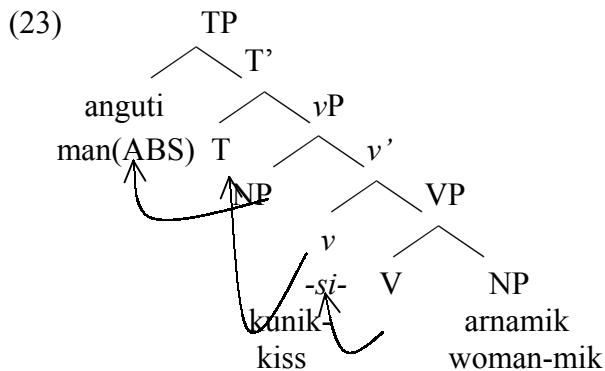


This analysis adopts the view that *mik*-case is an accusative case (Bok-Bennema 1991). Following a structural view of argument structure (Hale & Keyser 1993), we can abandon the notion that the AP morpheme is a nominal that absorbs the verb's case and theta role (Baker 1988) or blocks its theta-assigning feature (Jensen & Johns 1989), notions that are in themselves rather problematic. However, *v* can only assign accusative case when occupied by the AP morpheme *-si-*.

4.2 Antipassive with Inherently Transitive Verbs

Inherently transitive verbs only appear with transitive inflection or in the AP with *-si-*. I therefore analyze these constructions identically to causativized unaccusative verbs.

In the AP construction, *v* is occupied by *-si-*, which assigns accusative case (*mik*-case) to the internal argument, whereas the external argument raises to Spec,TP for absolutive case. In the case of an AP with non-overt patient argument, we could assume that there is actually an object-*pro* that receives *mik*-case, in keeping with the notion that these verbs just like causativized unaccusative verbs obligatorily have an internal argument.

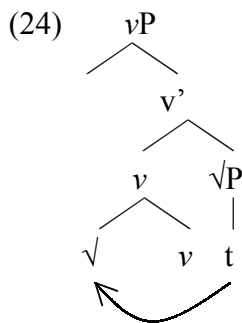


4.3 Antipassive with Object-permitting Verbs

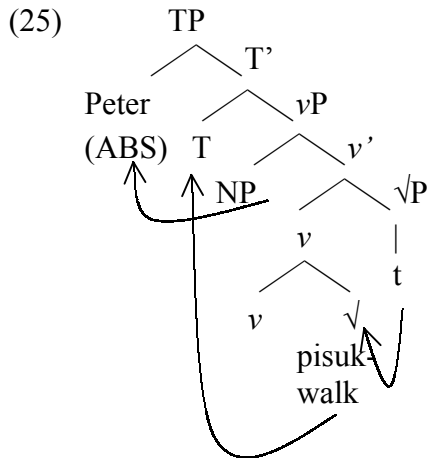
As already mentioned, according to Hale & Keyser (1993) unergative verbs are derived via incorporation of a noun into a higher verbal head at the level of I-syntax.

Working within a later model of Minimalism, this means – and this is more or less generally agreed upon – that unergative verbs always project vP where v requires the so-called external argument. I am adopting Harley's (1999) analysis that modifies Hale & Keyser's proposal for the derivation of unergative verbs.

A semantically simple (almost empty) verb v merges with a $\sqrt{P}$ headed by $\sqrt{}$, which in turn obligatorily incorporates into v to create a syntactic category verb. Note that if these verbs need to be derived in syntax, they cannot be lexical verbs with an entry in the lexicon.



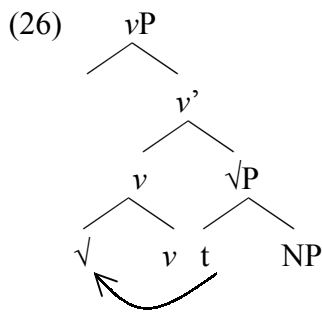
The external argument is merged with the v - $\sqrt{}$ complex. In an intransitive sentence, this argument moves to Spec,TP to receive absolutive case since v - $\sqrt{}$ in this intransitive sentence has neither an ergative case feature nor an accusative case feature due to the absence of *-si-*.



If these verbs have a second argument, we are faced with a predicament. The question is whether it is the incorporated $\sqrt{\text{ }}$ that merges with this argument prior to incorporation or whether it is the $v\text{-}\sqrt{\text{ }}$ complex. The optionality of this NP is due to the fact that the root does not have argument structure. The verb is derived through incorporation and has no lexical entry. If we keep the notion that a verb's argument structure is a structurally represented lexical property *niri-* 'eat' has no lexically defined argument structure since it has no lexical entry. A sentence *nirivuuq* 'he is eating' is entirely grammatical. Therefore, I assume that the optional patient argument merges optionally with the root. Implied in this assumption is the idea that this root has no argument structure, so if there is a second overt NP, it merges with the root. This optionality is represented in the fact that it can be omitted. In contrast, the patient argument of an unaccusative verb can never be left out since it is required obligatorily by the lexical verb. On the other hand, the derived unergative/object-permitting verb does not require an internal argument. In this case, only v requires an argument. Thus, extensions of the lexically determined argument structure of the verb are caused by v through causativization for unaccusative verbs. In the case of object-permitting verbs, the

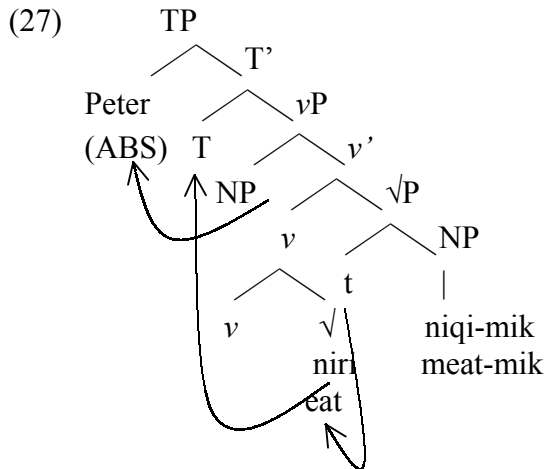
extension is not an extension of the argument structure of the derived verb but rather an optional merger with the root.

For the derivation of the AP, if we assume that there is a zero AP allomorph present in v with the same features as *-si-*, the derivation should proceed in the same manner as the derivation of AP construction with *-si-*. Hence, the internal argument receives accusative case from v . However, v in this case is occupied by a v - $\sqrt{\text{ }}$ complex. We would have to assume that the root incorporates to the zero AP morpheme that occupies v which also needs to be occupied by some semantically poor verbal element. An analysis that assumes that there is no AP morpheme present makes no such prediction. In fact, unless occupied by *-si-*, v has no accusative case feature at all.



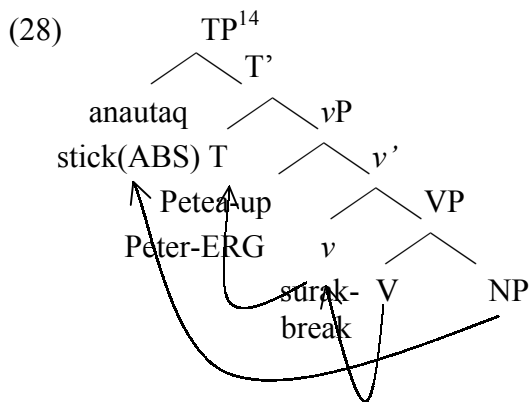
Since v has no accusative case feature just like in the ergative and the intransitive construction the higher argument raises to Spec,TP to receive absolutive case in both AP and intransitive construction. The internal argument however receives *mik*-case inherently from the $\sqrt{\text{ }}$ - v complex.¹³ The difference to the AP construction with causativized unaccusative verbs is that *mik*-case is assigned inherently. This accounts for the optionality of the lower NP based on the absence of an accusative feature in v .

¹³ Previously, inherent case was taken to be a lexical property of the verb. However, since there is no lexical verb, the notion of inherent case must be redefined for these verbs.



4.4 Ergative Construction

The ergative construction, differs from the AP in the following respects: *v* is not occupied by *-si-* and is therefore unable to assign accusative case. It has an ergative case feature, thus assigning ergative case under spec-head agreement, whereas the internal NP raises to Spec,TP to receive absolutive case.



¹⁴ The tree structure in (37) renders a ABS-ERG-V word order in contradiction with the basic word order ERG-ABS-V in the ergative construction. Although ABS-ERG-V is possible this might indicate the fact that the structure is probably right-headed as proposed by Schieberl-Manga (1996). Another indication for this is that verb-initial clauses are ungrammatical in any construction. However, I leave the structure left-headed since it has no bearing on the analysis. However, it might indicate that the ergative NP might move higher (see Wharram 1996 for a proposal.)

The lower argument raises to Spec,TP to receive case, since T cannot assign case to the higher NP in Spec,vP due to the ergative feature on *v*. The strong EPP feature of T requires movement to its specifier position and the patient argument therefore receives absolutive case.

Little *v* has thus the same feature make up in the AP and the intransitive construction for these verbs, which accounts for the fact that in absence of the second argument the so-called AP construction and the so-called intransitive sentences look exactly the same. In both constructions, *v* has no ϕ -features and no case feature. It simply does not assign accusative case. However, T behaves alike in all constructions, assigning absolutive case to its specifier position, thus accounting for the fact that the verb always agrees with the absolutive NP, regardless of the construction.

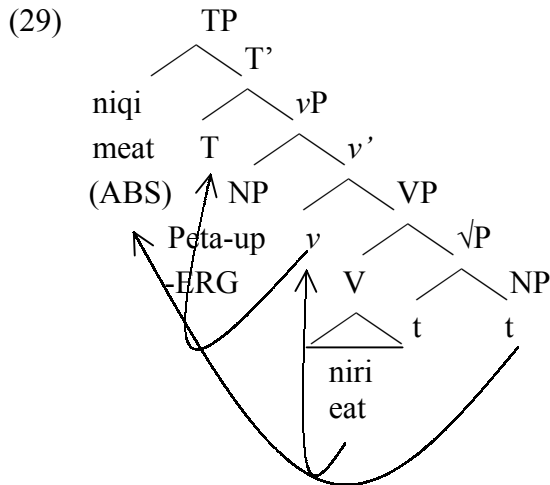
Intransitive constructions and AP constructions with no AP morpheme thus look and derive identically, whereas AP constructions with overt AP morphology derive in an identical fashion to, for example, a transitive sentence in an accusative language.

Thus, we have an explanation for why object-permitting verbs do not have an overt AP morpheme in the AP. In fact, they do not allow an AP morpheme at all.

However, this analysis necessarily begs the question why *v* has an ergative feature in ergative constructions with object-permitting verbs. Assuming that the initial derivation to get from a syntactically unspecified root to a verbal category is identical in ergative and intransitive construction, an account is needed to explain why there is no inherent case assignment to the lower NP but ergative case assignment to this NP, which needs to move up to merge in the specifier position of vP.

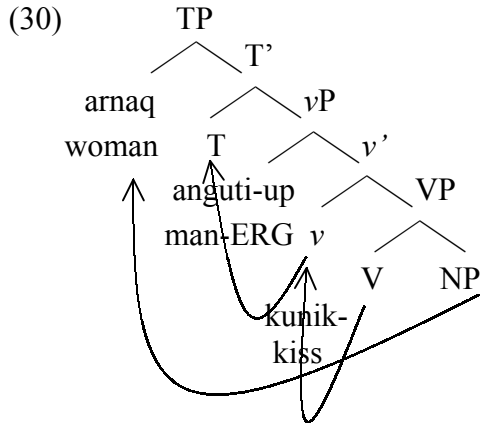
I am assuming that the ergative construction requires a φ -complete v due to the agreement facts, something that is not rendered in the derivation. Therefore, the derived verbal complex is in fact the VP, merging subsequently with a φ -complete v . In the intransitive construction, as well as in the AP construction, no subsequent merge with a φ -complete v occurs whereas this is necessary for the ergative construction since we have not only case assignment but overt agreement with the NP that receives ergative case. This subsequent merger with a φ -complete v happens only with object-permitting verbs which actually derive the category V, thus effectively creating a syntactic category V in the syntax. Note that these verbs *require* an external argument but it is required by v not by the verbs themselves.

Causativized unaccusative verbs on the other hand are lexical verbs as such, thus merging with a v that is φ -complete with an accusative case feature due to *-si-* or with a φ -complete v that has an ergative case feature.



In the ergative construction, the external argument is merged with v , whereas the internal argument is required to merge with the verb. v assigns ergative case under spec-

head agreement whereas the internal argument raises to Spec,TP to receive absolutive case.



5 The *mik*-case: Accusative and Inherent Case

For the above derivation and the distinction that has been made between AP with *-si-* and an intransitive construction, some external evidence is in order, why there are two different *mik*-cases, one of them accusative, and the other assigned inherently.

One independent fact is that traditionally, the *mik*-case has been shown to have different functions in Inuktitut. It can function as an instrumental, a goal, or marks a patient argument in the AP. Consider the examples for the former from Iñupiaq.

- (31) a. Aḡuti-m tuqut-kaa aḡnaq saviḡ-mik
 man kill(p)-Ind3Sg3Sg woman knife-ModSg¹⁵
 ‘Man killed woman with a knife.’
- b. Aḡun tuyuq-tuq nauria-nik aana-miñun.
 man send(a)-Ind3Sg flower-ModPl mother-Ter3RSgSg
 ‘Man sent flowers to his mother.’ (Nagai 2001:14)

¹⁵ Gloss in Nagai (2001): Ter: terminalis case; Mod: *mik*-case; Abl: ablative case; R: possessive; (a) agentive stem (my object-permitting); (p) patientive stem (my causativized unaccusative). (cf. Nagai 2001:viii)

Assuming accusative as structural case assigned by v , we do not expect two accusative cases in one sentence when the verb is marked with the AP morpheme. Evidence comes from Double Object Constructions (DOC) in Iñupiaq, a variety of Western Inuit, spoken in the inland villages along Kobuk River in Alaska. A ditransitive AP construction with overt AP morpheme must have the second object in a case other than the *mik*-case. On the other hand, AP ditransitive constructions without overt AP morpheme allows both objects in the *mik*-case.

- (32) a. *Aṅun akuqtu-i-ruq* *aglaṅ-nik* *taata-miñiñ*
 man receive(p)-Anti-Ind3Sg letter-ModPl father-Abl3RSgSg
 ‘Man received letter(s) from his father.’
- b. *Aṅun tuni-si-ruq* *aquppiuta-mik* *áḡna-mun*
 man sell(p)-Anti-Ind3Sg chair woman-TerSg
 ‘Man sold chair to woman.’ (Nagai 2001:55, 57)
- (33) *Aṅun simmiq-ø-suq* *makpiḡaa-nik* *áḡna-mun*[/*áḡna-miñ*]
 man exchange(a)-Anti-Ind3Sg sheet-ModPl woman-TerSg/woman-AblSg
 Man exchanged book(s) with woman. (Nagai 2001:53)

Although Nagai (2001) does not make a distinction between aspectual and Antipassive morpheme for Iñupiaq and Iñupiaq might have more than one AP morpheme, the same analysis as for Inuktitut should hold whereas the verbs classes might be divided along different lines. Consider (34).

- (34) a. *Aṅun uqaq-ø-tuq* *nukatpia-mun*
 man talk to(a)-Anti-Ind3Sg young man-TerSg
 ‘Man talked to young man.’
- b. *Aṅun uqaq-nik-tuq* *nukatpia-mik*
 man talk to(a)-Anti-Ind3Sg young man-ModSg
 Man started talking to young man. (Nagai 2001:30)

Obviously, the when the verb shows an overt suffix after the verb root, the meaning is inceptive. In addition, Nagai's classification of which verbs allow which AP markers coincides roughly with the classification I am proposing. Nagai's "agentive stems" (Nagai 2001:27) are unergative and object-permitting verbs in my system and are the only ones that allow a zero AP suffix (Nagai 2001:25).

- (35) a. *Aṇun tamuq-ø-tuq* *paniqtu-mik*
 man chew(a)-Anti-Ind3Sg dried fish-ModSg
 Man chewed dried fish.
- b. *Aṇun tamuq-si-tuq* *paniqtu-mik*
 man chew(a)-Anti-Ind3Sg dried fish-ModSg
 Man took bite of dried fish. Man tasted dried fish. (Nagai 2001:29)

Examples (34) and (35) demonstrate clearly that *-nik-* in (34b) and *-si-* in (35b) are not AP morphemes but the inceptive 'start to' just like in Inuktitut. Although Nagai mentions "agentive" stems that allow for non-overt and overt AP morphemes as well as different overt morphemes, it seems as if these are in fact aspectual morphemes.

- (36) a. *Aṇun qia-ø-ruq* *iḡñig-miñun* [/iḡñig-miñik]
 man cry for(a)-Anti-Ind3Sg son-Ter3RSgSg/son-Mod3RSgSg
 Man cried for his son.
- b. *Aṇun qia-sri-ruq* *iḡñig-miñik* [/iḡñig-miñun]
 man cry for(a)-Anti-Ind3Sg son-Ter3RSgSg/son-Mod3RSgSg
 Man started to cry for his son

In addition, (36) shows that the *mik*-case can be replaced by other oblique cases only when the verb has no overt AP morpheme. With the absent AP morpheme, the *mik*-case NP is not a patient. When there is an overt postbase, it is an aspectual morpheme, not an AP morpheme. With verbs with no AP morpheme, the objective case can either be the *mik*-case, the modalis, or the terminalis.

5.1 Summary

The above analysis crucially depends on the notion that v differs in its feature make up depending on the kind of construction and the argument structure of the verb. Case assignment is predominantly determined by features

Little v is identical for unergative/object-permitting verbs in the previously AP construction and the intransitive construction. In fact, these constructions only differ in the optionally present lower NP. On the other hand, unaccusative and causativized verbs differ in the AP and the intransitive construction, due to a v that only occurs when there is an additional higher argument. In case of inherently transitive verbs, this is also the case, probably also due to a causativizing element in v that is however obligatory for these verbs in contrast to causativized unaccusative verbs. The difference between the ergative construction on the one hand and the AP and the intransitive on the other is that v is ϕ complete and has an ergative case feature whereas in the AP, it has an accusative feature due to the AP morpheme.

An analysis that assumes that there is always an AP morpheme, either zero or overt needs to assume identical derivations. However, this cannot explain the distribution of the overt versus the non-overt version of the AP morpheme. Therefore, an analysis that contains as a crucial feature that there is in fact no alternation can not only explain the morphological alternation – or rather, that there is in fact none – but also the fact that this so-called alternation depends crucially on the verb's argument structure.

6 Conclusion

The examination of the distribution of the AP morpheme in Inuktitut has produced the following results. The AP morpheme has no zero allomorph and occurs

only with verbs that have an external argument due to overt or non-overt causativization. The AP morpheme is a verbal element that assigns accusative case, thus causing a syntactic derivation that is different from the ergative construction and intransitive construction. With respect to parameterization, we can conclude that *v* in the predominantly ergative languages like Inuktitut lacks the ability to assign accusative case. In Inuktitut, accusative case is assigned only by an AP morpheme *-si-* that occupies the head of *vP*.

In contrast to many previous approaches to ergativity, the above conclusions were reached through a close examination of the distribution of the AP morpheme. Firstly, this examination shows that the AP marker is distinct from the aspect marker as previously claimed (Bittner 1987). It also illustrates that the previously assumed alternation between zero and overt AP marker can be supported only by circumstantial evidence. The empirical evidence supports also the alternative view, i.e. that there is no alternation. The proposed analysis explains why the alternation is closely related to the argument structure of the verb. The alternative, namely that there is alternation can of course explain why the object becomes an oblique. However it can neither explain why the supposed alternation correlates to the argument structure of the verb nor why other cases than the *mik*-case are possible only without the overt AP morpheme. An analysis claiming that there is alternation would have to stipulate this correlation.

The above proposal provides an account for the fact that the distribution of the overt AP morpheme coincides with verbs that display identical argument structure, thus it is able to predict the occurrence of the AP morpheme in Inuktitut.

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