Viewpoint Aspect in Inuktitut:
The Syntax and Semantics of Antipassives

by

Bettina Spreng

A thesis submitted in conformity with the requirements
for the degree of doctor of philosophy

Department of Linguistics
University of Toronto

Your file Votre référence
ISBN: 978-0-494-97467-4

Our file Notre référence
ISBN: 978-0-494-97467-4

Viewpoint Aspect in Inuktitut:
The Syntax and Semantics of Antipassives

Bettina Spreng

Doctor of Philosophy

Department of Linguistics
University of Toronto

2012

Abstract

In many languages, antipassive morphology is comprised of aspectual morphology (Polinsky 2008). This thesis presents an analysis of the syntax and semantics of antipassives in Inuktitut by exploring the link between aspectual morphology and antipassive morphology. It resolves the longstanding question as to the factors governing the distribution of the antipassive morpheme, showing that the presence of the antipassive morpheme is determined by the meaning of the construction, i.e. it does not merely change the grammatical function. It is proposed that the antipassive construction has imperfective viewpoint in contrast to the ergative construction. Antipassive morphology is obligatory with punctual telic verbs, i.e. achievements, which are verbs that have perfective viewpoint by default. Antipassive morphology is thus necessary to convey imperfective viewpoint for verbs that are by default perfective.

Using a modified Reichenbachian (Reichenbach 1947) framework, it is shown that imperfective viewpoint does not allow for telic interpretations. Instead, punctuality

determines the types of viewpoint, which coincide with the aspectual meaning of the antipassive marker.

Viewpoint contrasts in Inuktitut are encoded not only in morphology but in changes of case and agreement configurations. They are derived using a version of the Minimalist Program (Chomsky 2008). Imperfective viewpoint can either be default, in which case there is inherent case on the internal argument, or derived through the addition of antipassive morphology, in which case the construction closely parallels a nominative-accusative structure. Perfective viewpoint is encoded through absolutive case on the internal argument, either in an ergative construction or in a canonical intransitive construction with unaccusative verbs.

The thesis provides insight into the relation between case-agreement configurations and aspectual contrasts in language and the nature of those aspectual contrasts. It also provides a new approach to the relation between lexical aspect and viewpoint by considering the role of punctuality.

Acknowledgments

Was lange währt wird endlich gut.

This German saying is a little ambiguous, as it either implies that the longer something takes the better its results will be, or that it is always a good thing when something ends. This thesis took longer than I thought, but if I have learned anything in my life is that the best plans do not always work out the way I want. Fortunately, that also means that I make fewer plans and cherish the ones that succeed more. *Was lange währt*, also means that the number of people that accompanied me during this process, through the interruptions, and unbelievable assurances that this thing will be finished one day, has increased considerably.

Many people have asked me, why Inuktitut of all things? The short answer, because one day during my third year at the University of Stuttgart, I took a course that was called Introduction to Inuktitut and for the first time, I thought that Linguistics could teach me something that I actually wanted to know. If a language can be so different from what I thought I knew, the fact that there should be common ground between them became an intriguing thought all of a sudden. I have to thank my supervisor at the University of Stuttgart Elke Nowak for introducing me to a language that fascinates the morphologist, the part-time syntactician, and the growing semanticist in me.

I am grateful to my long-time friend and one-time collaborator Traude Gugeler, who was just as fascinated with Inuktitut. We wrote our M.A. thesis in tandem in 2 months and I will never forget that crazy summer. Traude, although not in Linguistics anymore, has been a constant friend and a role model in how I would like to work even though my brain is wired very differently from hers.

My year in Ottawa has shown me what Generative Grammar is all about and that it is nothing to be afraid of. They taught me that the answers that lead to more questions can be a lot less frustrating than what I had previously experienced. I am grateful to Helen Goodluck and Marisa Rivero for that. Not to forget my fellow grad student and

newcomer to Canada Eun-Kyong, who showed me during my first year in Linguistics in Ottawa that, compared to coming from South Korea, my so-called culture shock was negligible.

Moving to another country to pursue grad studies means that more often than not, your colleagues also become your friends. Sometimes, that was the best thing that could have happened, and sometimes, it led to some strange relationships. I would be amiss not to mention our little group of Ph.D. students that started in 1999. Kristin, Milan, Do-Hee, Arsalan, and Suzanne. Some of them I do not see nearly as often as I would like and with the others, I hope they are happy. I would not be here without all of them. I would not have survived the first year, the nights at the department, sleeping on the rather questionable sofa, the overnighters for which I was already getting too old, the smoke breaks, the reminders that there might be something beyond deadlines, papers, and articles that I did not understand. Thank you for showing me that I was not the only one who had the occasional doubts that going to grad school might not have been the smartest decision. On the other hand, thank you also for showing me that maybe this was a good decision after all.

Although I am not the collaborative type, it seems, some people put up with me over the years. I thank Midori Hayashi, who became a friend and a collaborator whose work I admire very much. I will always cherish the memories of our trip through Western Europe, hitting three conferences. I am still proud of her for how fearless she ate her way through all the Bavarian and Swabian cuisine. I hope one day we can work together again. Not to forget Mike Barrie, who kept an open mind when I told him that I thought my dialect of German has Noun Incorporation. The trip to the Noun Incorporation Conference in Ottawa was memorable in many ways.

Although we never worked together, at least we worked under one roof for a while. Alex D'Arcy possesses a frightening degree of discipline and drive, and it would be closer to the truth that she worked, and I worked sometimes. I miss her a lot and Facebook is a rather inadequate replacement for being room mates. Still, I guess, partners, children, and careers are more important than boiled egg on bread in the morning.

Manami Hirayama has been a constant friend, someone who actually treated grad studies as a job, at least more than I did. Her calm and reliability reminds me that going through life without drama isn't such a bad thing.

In my later years, where the question became a lot less clear as to whether I should actually finish this monster, Ulyana Savchenko was and is a friend anyone would be lucky to have. I cannot thank her enough for being with me those last years. Bad things would have happened without all that beer and vodka we drank, and all the German and Russian food we ate.

Some people in my life have nothing to do with Linguistics but have been with me regardless. Gregor, Conny, and Uli in Stuttgart stopped asking about "the thing" a long time ago but even if I had never finished, they would still be talking to me. I appreciate that more than they ever know. A special thank you to Conny who, so many years ago, sent me on my way with the words: if you don't try it, you will always wonder what could have been. That thought finally sounded worse than giving up a career in Germany. I thank them all for their sarcasm, for not taking me too seriously, for being my friends throughout the years.

Going even further back, I would like to thank Carmen and Margit from high school (Ringeisengymnasium) who, for one reason or another, felt our trio should stay together even if we do not see each other much these days. Apart from my family, they know me the longest. They do occasionally wonder why the student who insisted on quitting high school after grade 11 to become a hair dresser would stay in school so terribly long. All I can say is, puberty hit hard.

I am thankful for my Toronto friends Lance, Mario, and Ruby, who have invited me into their group and have been a little family away from my own. I hope I can one day be as good a friend. And I seriously hope I will still be able to do a cross-Canada trip by car with 85 like Ruby did.

With that, I come to my supervisor Alana Johns, who I cannot thank enough for everything she has done for me and with me. I have admired her work from afar back in

Stuttgart, and the prospect of working with her was not only exciting but terrifying. It was a relief that she is a lot less terrifying in person. Her insights, her intuitions, and her enthusiasm about linguistics and languages, her ability to draw connections between seemingly unrelated issues are things I admire very much. Never mind that she is a wonderful hostess who can throw a great party and makes sure that everyone has the wine they deserve!

From my committee, I cannot thank Elizabeth Cowper enough for her inspiring work, her insightful comments, and her understanding when I took a break from the programme. From the Generals Paper to the thesis, I could always rely on insightful comments that were to the point and helped shape my own, often wrong assumptions about English.

Diane Massam, who, no matter how confusing my writing and my thoughts are to me and others, always cuts to the point. Among her many gifts, not the least being a terrific linguist is her ability to find the little gem that is buried under mountains of long, drawn-out sentences, half-finished ideas, and unfinished chapters. If I can be only half the teacher she is, I can count myself satisfied.

I would like to thank the faculty of the department of Linguistics, the ones that managed to teach me something, and the ones that I refused to learn from for one reason or another. After all these years, I can now admit that maybe I should have taken one or two Phonology courses after all.

I would like to send a thank you to our financial officer Mary Hsu for support and continued interest in whether she can put one of mine into our thesis cupboard soon. I also would like to thank the former departmental assistant Bill Forrest, who always made me feel welcome.

This thesis would not have been possible without the consultants that shared their language with me over the years. Ida Awa and Saila Michael spent the most time with me and I do not know how to thank them all properly. They taught me so much about fieldwork and their language, and that no matter how often I ask the same question, the answer will not change once you finally get it right. They made Inuktitut come to life for

me after originally coming at it from grammars and secondary sources. Our consultants became one of the main reasons for me to stay in Canada. Thanks to them, I was confronted with a language, not an old dusty grammar book; although I have nothing against old dusty grammar books.

Last but not least, my thanks go to my family. For support and visits, for asking, and sometimes not asking, for understanding and not understanding why I insisted on seeing this through. Angie, my little sister, of whom I'm immeasurably proud, my little brother Reinhard who is the coolest guy in the family, and my parents who I cannot thank enough for getting me on the way and for being there for me.

Mama und Papa, dies ist für Euch.

Table of Contents

List of Abbreviations

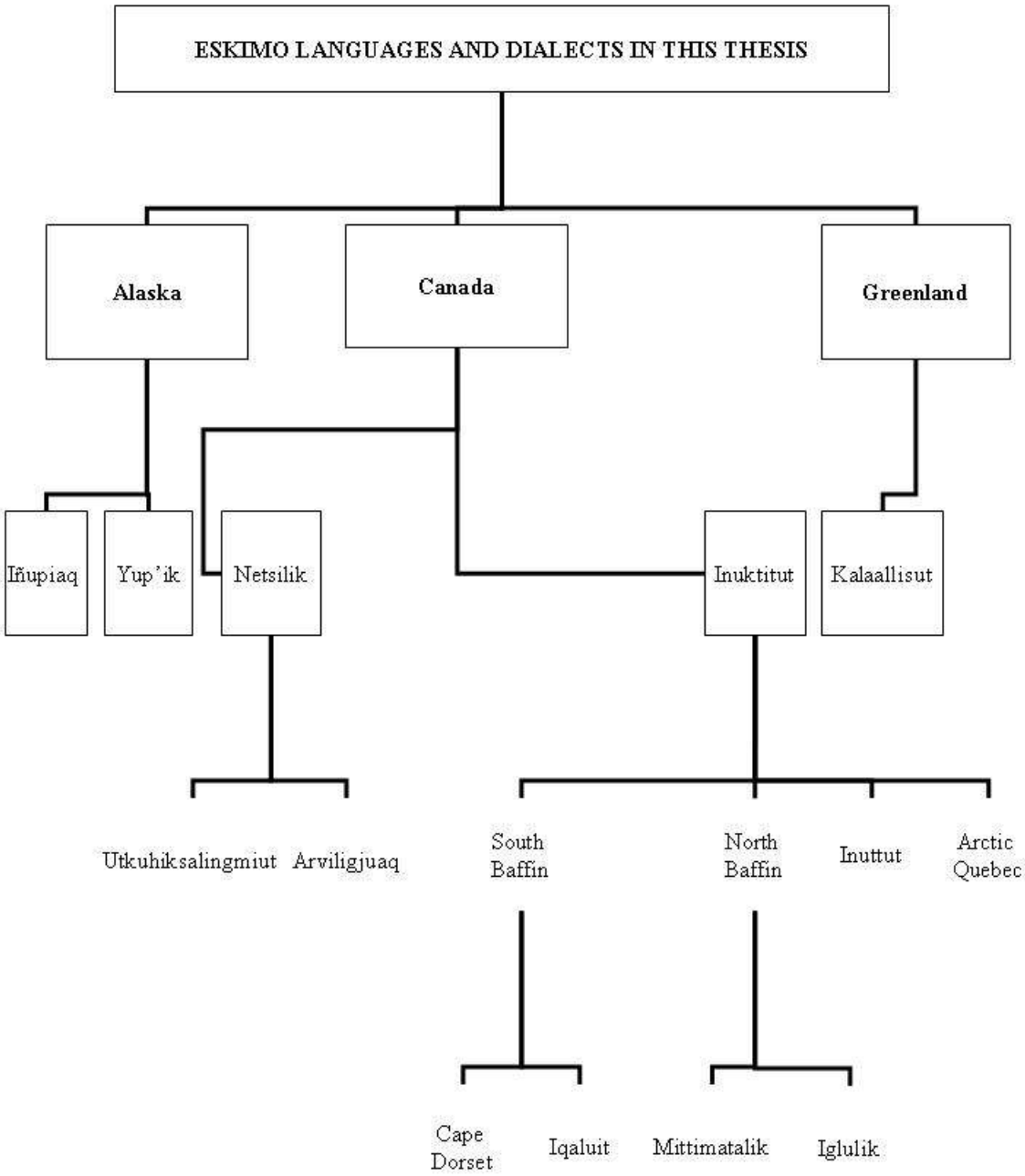
Languages/dialects:

Arctic Quebec	AQ
Cape Dorset Inuktitut	CD
Iglulik	IG
Iñupiaq	IN
Kalaallisut (West Greenlandic)	KA
Labrador Inuttut	LI
Mittimatalik	MI
Netsilik	NK
South Baffin	SB
Utku	UT
Yup’ik	YU

Glosses:

AP/Antip./apass/	
antpass	Antipassive
A/ABS	absolutive case
ACC	accusative case
ALL/allat	allative case
ABL	ablative case
CAUS	causative
DAT	dative
dl	dual
E/ERG	ergative case
imperf/impf	imperfective
INCPT	inceptive
IND	indicative mood
INF	infinitive
INS/instr	instrumental case
INTR	intransitiviser
ITER	iterative
LOC	Locative
MOD	modalis case
NEG	negation
npast	nonpast
obl	oblique
PART/PAR	participial mood
perf/pf	perfective
past/pst	past
PASS	passive
PRES	present
PROL	prolonged
PRT	particle
pl	plural
sg	singular
TR	transitiviser

Eskimo languages/dialects in this thesis



Introduction

1.1 Introduction and goals of the thesis

Two main issues have been discussed in the literature on Eskimo antipassives. Firstly, the distribution of the marker on the verb that occurs with antipassive markers (AP markers) has never been made completely clear. Secondly, the semantics of antipassives (AP's) have been addressed almost exclusively with respect to the semantics of the noun phrases. The verbal semantics have only been described in passing as aspectually different from non-antipassive constructions. The exact nature of that aspectual difference however has not found an analysis yet. The syntax of antipassives has been addressed, but without regard to the distribution of the AP marker.

This thesis aims to provide an analysis of the semantics and syntax of the antipassive construction in Inuktitut, based on an in-depth account of the syntactic and semantic distribution of the antipassive markers.

Firstly, I argue that the distribution of the antipassive marker is based on the argument structure of the verb and its lexical aspect, primarily its punctuality. Counter to most traditional views, I argue that the antipassive marker has semantic content that is required for the overall semantics of the antipassive construction. Furthermore, I will explain why some verbs do not require an antipassive marker.

The distribution of the antipassive markers forms the basis for the second argument of this thesis. I argue that the antipassive construction has the semantics of imperfective viewpoint aspect. The argument is mainly based on the distribution of the AP marker, showing that the aspectual interpretation of the antipassive construction is not based on lexical aspect, i.e. telicity or punctuality but on viewpoint aspect. Only the distribution of the antipassive morphology is based on lexical aspect. I will show that the interpretation of antipassives with antipassive marker is predictable based on the punctuality of the verb and on the aspectual semantics of the antipassive marker.

Thirdly, I argue that the antipassive construction with an antipassive marker is a nominative-accusative construction, while the antipassive construction without antipassive marker is a

conative alternation with object-deleting verbs. I argue that the antipassive marker is responsible for accusative case on the internal argument.

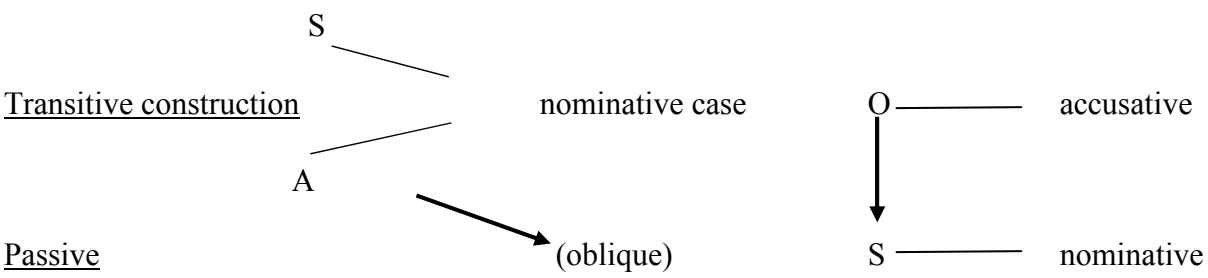
For Eskimo linguistics, this thesis can offer an explanation for the distribution of the antipassive marker, and, based on that, an explanation for the aspectual properties of antipassive constructions.

In general, this thesis also may provide a starting point for further investigations into the verbal semantics of antipassive constructions in other languages. Furthermore, I can show that viewpoint aspect contrasts may be based on differences in case and agreement in a language, not only on morphology, as is the case for English. Data from other languages with case and agreement-based aspectual contrasts show that such contrasts are not restricted to Inuktitut.

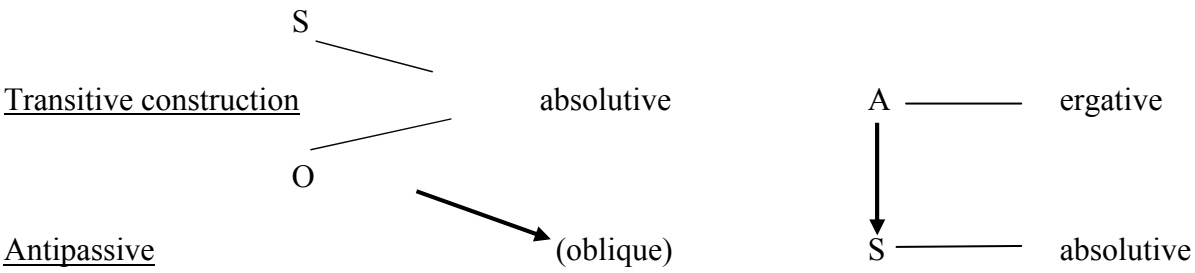
1.2 Syntax and semantics of antipassives

Antipassives are generally described as voice alternations that exist mostly in ergative languages. They are therefore traditionally analysed as derived from transitive ergative constructions (Postal 1977, Heath 1976, Silverstein 1976, Kalmar 1977). In the terminology introduced in Dixon (1979), in ergative languages, the intransitive subject S and the object O pattern together, while in nominative-accusative languages, the intransitive subject S and the transitive subject A pattern together. In passives in nominative-accusative languages, the transitive subject A is demoted to an optional oblique, while O becomes S. With antipassives, the transitive subject A becomes an intransitive subject S, while O is demoted to an oblique or omitted completely. Both passives and antipassives are considered intransitive constructions; their subjects are intransitive subjects.

(1) a. Nominative-accusative languages



b. Ergative languages



The origin of the term "antipassive" can be traced back to an article by Michael Silverstein "Hierarchy of Features and Ergativity", first published in Dixon (1976) and reprinted in Muysken and van Riemsdijk (1986). Silverstein uses the term as a mirror image of the passive construction. The term antipassive here is based on the notion that, while passive demotes the *subject* of a transitive construction, the antipassive demotes the *object* of a transitive construction.

Another view of the antipassive is based on the idea that ergative constructions are in fact obligatory passive constructions (Hale 1970). The term antipassive thus refers to a reversal of that obligatory passive operation. The idea that ergative constructions are basically passive constructions has a tradition in Eskimo linguistics as well (Hammerich 1930, Thalbitzer 1930).

Both of these origin stories have similar implications. The first is that the antipassive (AP) is a detransitivising operation that affects both arguments in terms of case marking and agreement. The second implication is that only ergative languages allow for the construction. Both implications were quickly turned on their head in a famous article by Paul Postal (Postal 1977) who used the term for any kind of detransitivising operation in French where only the object is affected in some way. Blight (2004) takes a similar view and analyses conative alternations, unspecified object alternations, and preposition-drop alternations in English also as AP's. In this thesis, the term antipassive is used only for constructions where *both* arguments are different when compared to the ergative construction. Thus, the AP is a voice alternation just like the passive. This distinguishes the AP from English object alternations since only one argument is affected by the latter.

Most often, the AP has been analysed and described with focus on the properties of the DP's in the construction. Many ergative languages with AP's are said to use the construction when the internal argument O has a low degree of individuation (Polinsky 2008). Individuation is measured in terms of definiteness, specificity, affectedness, plurality, or prominence in discourse.

In Matses, a Panoan language spoken in western Amazonia, the AP is used with either a generic O, or a first person O. In both cases, O is not expressed overtly. In the transitive ergative construction in (2)a, the A argument *opa-n* '*dog*' is marked with ergative case and the O argument *matses* '*people*' is marked with absolutive case. In the AP construction in (2)b, the ergative marked A has become absolutive S *opa* '*dog*', while there is no overt O argument. Furthermore, there is an antipassive marker *-an* on the verb.

(2)

		A	O	
a.	aid	opa-**n**	matses-Ø pe-e-k	active
	that.one	dog-**ERG**	people-ABS bite-NPAST-indic	(transitive)
	'That dog bites people.'			

		S		
b.	aid	opa-**Ø**	pe-**an**-e-k	antipassive
	that.one	dog-**ABS**	bite-**ANTPASS**-NPAST-INDIC	(intransitive)
	'That dog bites.'/ 'That dog always bites me/us/…is biting me/us.'			

c. * aid opa-**Ø** matses-**Ø**/-n pe-an-e-k

(Fleck 2006:559)

In Chamorro, the AP is used or preferred for generic or indefinite O (Cooreman 1994). In the ergative construction in (3)a, the verb agrees with the ergative A argument *i peskadot* '*the fisherman* and the absolutive O argument *i guihan* '*the fish*', which is definite. In the AP construction in (3)b, the verb is marked with AP morphology and there is no agreement morphology. The internal argument is indefinite (as evidenced by the absence of the determiner *i*) or can be omitted.

(3)

a.	Ha-konne'	i	peskadot	i	guihan	[ergative construction]
	ERG.3SG-catch	the	fisherman	the	fish	
	The fisherman caught the fish.					

b. Mangonne' (guihan) i peskadot [antipassive]
AP.catch (fish) the fisherman
The fisherman caught a fish/fish (something).

(Cooreman 1994:54)

These and similar properties of AP's have also been reported for Inuit languages. Kleinschmidt (1852) and Fortescue (1984) claim that an indefinite O is the condition for AP's. Schieberl Manga (1998) argues that the condition for AP's is a non-specific O. Bittner (1987, 1994) argues that the O of an AP has narrow scope reading in contrast to the O in the ergative construction, and Berge (1997) argues that the absence of absolutive case on O correlates to a non-topic O in discourse. Kalmar (1979) argues that specificity and 'givenness' of O is the only difference between AP and ergative construction.

With respect to verbal properties, the conditioning factors for AP's are often said to be tense and/or aspect (Dixon 1994, Kroeber 1987, Polinsky 2008, Spreng 2010, van Valin 1980). The antipassive is said to correlate to durative, imperfective, unbounded, or habitual aspect.[1] Morphologically, most AP's have a dedicated marker on the verb that is homophonous with aspectual markers, reflexives or middle markers. Polinsky (2008) mentions that these markers are diachronically related. For Inuktitut, we will find that these markers are synchronically related.

An example of an aspect-conditioned antipassive can be found in Yucatec Maya. Krämer and Wunderlich (1999) show that verbs in Yucatec Maya are by default either perfective or imperfective. Only the opposite viewpoint is marked overtly. Thus, perfective verbs would be marked as imperfective when used in an imperfective construction while imperfective verbs would be marked as perfective for a perfective reading. Assuming that the verb *héek'* '*break*' is by default perfective (4)a,[2] if it is to be interpreted as perfective in the AP, it needs to be overtly marked in the AP construction in addition to the antipassive and the incomplete marker (4)b.

---

[1] In the course of this thesis, the term *bounded/unbounded* will be used when the exact nature of an aspect is not known or mentioned in the literature. The term 'bounded' thus may refer to telic or perfective aspect, while 'unbounded' may refer to atelic or imperfective aspect.

[2] I am anticipating the discussion on default aspect in chapter 3, section 3.2.3.3.

(4) a. k=n héek?
IMCOMPL=1 breakANTIP
'I am breaking it/something'

b. héek? -n -ah -en
break.ANTIP –N-**PERF** -1
'I have broken.'

(Krämer and Wunderlich 1999:458)

In Yucatec Maya, perfective morphology is used to countermand the imperfective reading of the antipassive. It shows that the construction is imperfective on its own. Cooreman (1994) examines a sample of 19 languages for antipassive properties and reports that the aspectual properties can be found for 11 of them. One example is from Chamorro, where we find the antipassive with an iterative reading.

(5) Mang-galuti gue' ni ga'lago
AP-hit ABS.3sg obl. dog
'He pounded on/repeatedly hit the dog.'

(Cooreman 1994:57)

A similar meaning of AP's in Kalaallisut (West Greenlandic) is noted in Fortescue (1984:86) "[…] the construction has a nuance of repeated habitual action as opposed to the punctual meaning for the transitive equivalent."

The Chamorro examples in (3) and (5) show that both aspectual and nominal semantics of AP's can occur within one language, indicating that these two properties might interact in some way. For example, it is well-known that less-individuated O and unbounded aspect correlate to lesser transitivity crosslinguistically (Hopper and Thompson 1980). More importantly, the opposite correlation is not attested. We may get unbounded aspect with a higher degree of individuation, but no correlation to a lesser degree of transitivity. In English on the other hand, there is no such correlation as the following imperfective example with a definite object illustrates.

(6) He is eating the bread.

AP's thus have nominal and verbal semantic conditions; both of which have been reported for Inuit languages (Fortescue 1984:86). While it is very likely that nominal and verbal properties may interact to serve as conditions for the AP, this investigation focuses on its verbal properties, starting with the distribution of the AP marker and its role in the semantics of the construction.

The AP markers have aspectual equivalents in the Inuit languages (Fortescue 1996a). Therefore, the investigation focuses on whether the semantics of the AP construction has anything to do with aspectual properties. More specifically, the question is whether the difference between an AP and a non-AP construction is aspectual and, if so, what the nature of this aspectual contrast might be. The issue is not simply that the addition of an aspectual marker as an AP marker causes the aspectual interpretation to change. These markers exist outside of the AP construction, while some AP constructions occur without AP marker. This means that they are not solely responsible for the semantics of the AP construction. The hypothesis is that the construction with its particular case and agreement configuration has aspectual properties that other constructions do not have. The AP marker plays a role in those semantics but is not the only reason for them.

In addition, aspect and tense in ergative languages do not just function as conditions for AP's but also for accusative constructions (Dixon 1994). Thus, aspectual contrasts occur invariably in conjunction with differences in case and agreement configurations. This constitutes a major difference from a language like English, where aspectual changes are not necessarily tied to case and agreement changes.

Furthermore, the contrasts have one pattern only. "[…] if a split is conditioned by tense or aspect, the ergative marking is ALWAYS found either in past tense or in perfect aspect." (Dixon 1979:95). This means that the interpretation of AP's or accusative constructions in ergative languages is imperfective or unbounded and never vice versa. This pattern has been reported for Hindi, Basque (Laka 2006), and Georgian among many other languages (Ura 2006, Tsunoda 1981). In the Hindi example in (7), the ergative construction in (7)a is marked with perfective and A is marked with ergative case. The nominative-accusative construction in (7)b is only possible with an imperfective reading.

(7) a Raam-neroTii khaayii thii
Raam-E bread/FEM eat-PERF.FEM was.FEM
'Raam had eaten bread.'

b. Raam roTii khaataa thaa
Raam/MASC bread eat-IMPF.MASC was.MASC
'Raam was eating bread.'

(Laka 2006:177)

These facts cannot be explained by assuming that aspectual morphemes are solely responsible for the change in verbal semantics. The contrasts in case and agreement must play a role and it seems this is a language-independent issue.

The fact that both AP's, whose O is described as oblique, and nominative-accusative constructions in ergative languages, whose O is supposed to be structural accusative show the same kind of pattern with respect to verbal semantics raises a secondary question. Does the case on O have to become oblique for the aspectual change to happen? Literature on the syntax-semantics interface dealing with case-dependent aspectual interpretation in nominative-accusative languages (Borer 1993, 2005, Svenonius 2002a, b, Kratzer 2004a, b, Travis 2000), has long found that changes in case and agreement often correlate to changes in aspectual interpretation in a particular direction. Non-structural case generally corresponds to unbounded, atelic aspect, such as in German (Kratzer 2004a) or Finnish. However, in Finnish, for example, the case that corresponds to the unbounded reading, the partitive, is a structural case (Kiparsky 2001).

Aspect-related case and agreement changes are thus crosslinguistic phenomena not restricted to either nominative-accusative or ergative languages. More interestingly, the unbounded readings always correlate to what would be considered the non-default case on O in the respective language types. That does not mean that every aspect change correlates to voice alternations as the English example shows. However, when it does, the patterns do not conflict.

1.3 Main proposals

Antipassive constructions differ from ergative constructions in that AP constructions have imperfective viewpoint, while ergative constructions have perfective viewpoint. Viewpoint contrasts between ergative and AP constructions are based on their different case and agreement configurations.

Semantically, the AP morpheme facilitates imperfective viewpoint for verbs that are perfective by default. Furthermore, the AP morpheme causes accusative case on the internal argument.

AP constructions with AP marker differ from AP constructions without AP marker in that the latter are imperfective regardless of whether there is an internal argument or not. AP constructions with AP marker can only be imperfective because of the aforementioned accusative case on the internal argument. Thus, case on the internal argument is derived differently for the two types of AP constructions.

In the Inuktitut dialects that are discussed in this thesis, viewpoint aspect is due to an unvalued feature not on INFL or T, but on a lower projection, the object-case checking head *v*. Viewpoint aspect is thus separate from tense projections in such languages. Overall, viewpoint contrasts that are based on differences in case and agreement configurations are determined by a head lower than T in contrast to languages, where inflectional morphology determines viewpoint contrasts.

Viewpoint aspect and lexical aspect are independent from each other. Punctuality determines the type of imperfective aspect we can expect but nothing more. Telicity has no influence on AP constructions in Inuktitut.

1.4 Inuktitut dialects and Eskimo languages discussed in this thesis

Original elicited data are mainly from the Baffin Island dialects of Mittimatalik, Iglulik (North Baffin), and South Baffin. Some data from a fieldtrip to Kugaaruk (Pelly Bay) from the Arviligjuaq dialect of the Netsilik dialect family has also been used. I am immeasurably grateful to my consultants that have helped me over the years. Saila Michael, Raigelee Alorut, and Naulaq LeDrew for the South Baffin Data, Sandra Uvilluk for the Iglulik data, Ida Awa for the Mittimatalik data, Christine and Bonnie Kayartok for the data from Netsilik.

Data from the literature comes from Iñupiaq, Yup’ik, Cape Dorset, Arctic Quebec, Utku, Labrador Inuttut, and Kalaallisut (West Greenlandic).

1.5 Outline

Chapter 2 examines the morphosyntactic distribution of the AP morpheme in Inuktitut and other dialects. Chapter 3 discusses the semantics of the AP construction in contrast to non-AP constructions and the role of the AP morpheme in the semantics of the AP construction. It provides a formal framework for the semantics of viewpoint aspect, a discussion on the relation between lexical aspect and viewpoint aspect in general, and the empirical repercussions of that relation in Inuktitut. Chapter 4 proposes an analysis of Inuktitut sentence structure that derives the semantics of the antipassive construction and the distributional properties of the antipassive morpheme. It further shows the parallels to agreement related viewpoint aspect in other languages. Chapter 6 contains concluding remarks and an outlook on future research into the connection between case-agreement configurations and aspectual contrasts.

Antipassive Morphology

2 Introduction

This chapter addresses the following phenomena. A) AP markers have homophonic equivalents as aspectual morphemes not only in Eskimo languages but in other languages too. I argue that this homophony cannot be accidental and that there is a synchronic relation.

B) While different Eskimo dialects and languages have varying numbers of overt AP markers, all of them are claimed to have a null AP marker, or that there are verbs that do not require an AP marker, depending on whether one's framework allows for null markers. I will argue that the more traditional view, that there is no null marker is the correct one and the verbs that do not take an AP marker are a homogeneous class of verbs with similar argument structure. I therefore also argue that the verbs that take AP markers are also a homogeneous class that differ in their argument structure from verbs that do not require overt AP markers.

C) I argue against the traditional view that the overt AP markers are intransitivising morphemes with no meaning content. I argue instead that they are aspectual morphemes, which have two positional variants: A) the elsewhere variant, which occurs in any construction and with any verb and B) a specified AP marker that is required with certain verbs only in AP constructions. The variants differ in their position in the verbal complex and some of them differ in their phonological properties.

2.1 The antipassive construction in Inuktitut

The Eskimo languages are polysynthetic languages with relatively free word order. Roots are on the left edge of the word, while inflectional morphology is to the rightmost edge of the complex word (Dorais 2010) except for a few enclitics. Thus, all affixes are suffixes. Nouns, verbs, and adjectives can all be roots. Most verbs are roots but a small class is purely affixal (Johns 2007). Example (8) shows a fairly typical form with a nominal root *aliikut* '*entertainment*', a verbal suffix *-lirsur* '*provide*', subsequent nominal and verbal suffixes, some of them derivational, one aspectual *-tar*, one modal *-ssa*, and ending with an enclitic *-li* after the inflection *-paat*. Different

types of affixes are numbered differently according to Fortescue (1983), which lists types of affixes in various numbered groups.

(8) aliikut lirsur **i**[3] llammak ssuaq u nirar tar ssa galuar paat li [KA]
8 **14** 24 26 1 9 18 19 22 Encl.
entertainment provide **½ tr.** one.good.at great be say will sure-but they-him however
(Fortescue 1983:97)

Inuktitut is an ergative language with ergative case marking according to the schema developed in (Dixon 1979, 1994) and outlined in section 1.2. The external argument A is marked with ergative case *-up* and the internal argument O is marked with absolutive case -Ø, as in (9)a. The verbal inflection is a portmanteau morpheme including a mood marker and agreement inflection. The declarative moods are called participial and indicative mood. The indicative mood marker starts with [p] when following a consonant and with [v] when following a vowel (9)b.[4] The participial mood starts with [t] when preceded by a consonant (9)a and with [j] when preceded by a vowel.

Transitive agreement morphology, which cross-references the absolutive and the ergative marked argument for person and number is generally distinguished from intransitive agreement by the first vowel in the agreement morpheme. Transitive agreement has the vowel [a], as in the ergative construction in (9)a, while intransitive agreement has the vowel [u], as in (9)b. This vowel is considered part of the mood component of the agreement morphology.

(9) a. *Ergative*
anguti-up arnaq kunik-taa
man-ERG woman(ABS) kiss-PART.3sg/3sg
'the man kissed the woman'

b. *Intransitive* [MI]
anguti niri-vuq
man(ABS) eat-IND.3sg
'the man is eating'

The ergative case marker is also used to mark the possessor. Traditionally, it has also been labelled as relative case (Kleinschmidt 1852). Based on their behaviour with respect to relativisation and other properties (Creider 1978, Gugeler 1994), S and O, or in other words, the

---

[3] *-i* here is glossed as halftransitive, the traditional term for AP markers. There is no translation.

[4] There is considerable variation across dialects on the use of the participial and indicative mood. Their function and distribution has no bearing on the issues discussed in this thesis. See Johns (1987) for a detailed account.

absolutive marked DP's, pattern together. This led many to posit the absolutive marked DP as the subject (Bittner and Hale 1996a, b, Johns 1987, 1992, Spreng 2006, Schieberl Manga 1998, Murasugi 1992), but see Pittman (2006) or Bobaljik (1993) for a different view.

The antipassive construction (10)b differs from the ergative construction (10)a in the following ways: The external argument *anguti* '*man*' is now marked with absolutive case in (10)b, which, following the terminology introduced in Dixon (1979), makes it an intransitive subject S. The intransitivity of the construction is also shown in the agreement inflection. Agreement in (10)b is only with S. The internal argument O *arna-mik* '*woman*' is marked with the *mik*-case, a case traditionally described as oblique case (Woodbury 1975). Furthermore, O can be omitted.

(10) a. *Ergative* [MI]
anguti-up arnaq kunik-taa
man-ERG woman(ABS) kiss-PART.3sg/3sg
'the man kissed the woman'

b. Antipassive
anguti kunik-*si*-vuq (arna-mik)
man(ABS) kiss-AP-IND.3sg woman-*mik*
'the man is kissing (a woman)/someone'

I use the term *mik*-case for this case until a final analysis of its nature in chapter four, since there is no agreement in the literature on what to call this case. It is labelled as modalis in Kleinschmidt (1852), Nagai (1998, 2006), as comitative in Jensen and Johns (1989) and Nowak (1996), as instrumental in Fortescue (1984) and Bittner (1987), and as accusative in Creider (1978), Bittner (1988), and Bok-Bennema (1991). While most traditional treatments describe this case as oblique, Bittner (1994) and Bok-Bennema (1991) argue that it is an accusative, similar to the accusative case in nominative-accusative languages. There is some phonological variation for this case in the singular form. In South Baffin, the case is *-mit*,[5] in Mittimatalik, it is *-mik*, and in Netsilik, it is *-mi*.

[5] The development to *-mit* in South Baffin has created a situation where it has the same form as the ablative case. Whether this is a case of actual syncretism in that the cases actually have become one, I cannot say at this point since it seems to be a fairly recent development. For now, I assume that the *–mik*-case is different from the ablative.

Like most AP's in other languages, Inuit AP's have special markers on the verb which are homophonous with aspectual markers. The discussion in this chapter will determine whether there is a relation between the AP marker and the aspectual homophone or whether this homophony is purely accidental. The relation is unlikely to be accidental since the same homophony exists in other non-related languages, such as Acoma, Chamorro, Chukchi, Comanche, Diyari, Dyirbal, Godoberi, Gooniyandi, Halkomelem, Hunzib, Jakaltek, Kiowa and others (Polinsky 2008:4). The most common AP marker in Eskimo *-si* in example (10)b, repeated as (11)a, also occurs as an inceptive marker in the ergative construction (12). Furthermore, while some verbs take an overt antipassive morpheme (11)a, for other verbs, the antipassive morpheme is null (11)b (Bok-Bennema 1991, Schmidt 2003, Marantz 1984). Fortescue (1996a:36) mentions that the null marker appears only with "agentive stems" in Kalaallisut. This has also been noted for Central Yup'ik (Miyaoka 1984), and Iñupiaq (Nagai 1998). I will determine in this chapter whether the same distribution holds in Inuktitut.

(11) a. *Antipassive with overt AP morphology*
anguti kunik-**si**-vuq arna-mik [MI]
man(ABS) kiss-**AP**-IND.3sg woman-*mik*
'the man is kissing a woman'

b. Antipassive with non-overt AP morphology
anguti niri-∅-vuq niqi-mik
man(ABS) eat-**AP**-IND.3sg. meat-*mik*
'the man is eating (something)'

(12) anguti-up arnaq kuni-***si***-jaa [MI]
man-ERG woman(ABS) kiss-**INCPT**-PART.3sg/3sg
'the man started to kiss the woman'

2.2 The antipassive morpheme

Inuktitut dialects and other Eskimo languages differ in the number of antipassive morphemes, traditionally known as half-transitives (Kleinschmidt 1852). Furthermore, the accounts on the AP markers even differ within dialects and languages, as shown in (13) for Kalaallisut.

(13) Kalaallisut AP markers

a. Bittner (1987)

-si-	-llir	-(ss)i	-∅	-nnig

b. Fortescue (1996a)

-(s)i	-ler			-nnig

Iñupiaq has four markers *-si-,-:î-, -tnîk,* and *-kłiq* although only the first two are productive. While *-si-* and *:î-* seem to be phonological alternants which are productive as AP markers with patientive verbs, *-tnîk* is restricted to thirty and *-kłiq* to six verbs (Nagai 2006:133).[6] Beaudoin-Lietz (1982) reports on the different intransitivisers depicted in (14) based on descriptions in Kleinschmidt (1852), Bourquin (1891), and Schneider (1967). It is not always clear if some of these are not actually phonological alternants of one suffix. It is also likely that the Labrador Inuttut markers *-si, -i, -tsi* and *-(n)nik* are cognates of Kalaallisut *-(s)i* and *-nnig* and Iñupiaq *-si-,-:î-,* and possibly *-tnîk.* However, a number of overt intransitivisers do not match. Labrador, Inuktitut, and Iñupiaq have no *-ler*, and Kalaallisut has no *-tsi or -ji*.

(14) Intransitivisers (AP markers) in Labrador Inuttut (Beaudoin-Lietz 1982:70)

-si-	-tsi-	-ji-	-(t)łi-	-i-	-(n)ni(k)

For Inuktitut, generally, only one overt AP morpheme *-si* is reported (Jensen and Johns 1989). While the number of overt AP morphemes seems to vary slightly across dialects, most descriptions agree that all dialects have a null AP morpheme (Bittner 1987) or, in other words, verbs that do not show overt AP markers in the AP construction (Kleinschmidt 1852, Fortescue 1996a).

The selection of each AP marker is traditionally described as selected "[…] depending on the verb stem." (Woodbury 1975:27). This statement is based on the discussion in Kleinschmidt (1852). Kleinschmidt classifies verb stems into five classes according to their final segments and their phonological behaviour under suffixation, as shown in (15).

[6] Furthermore, only *-si-* and *:î-* also have an alternative function as an adversative morpheme in Iñupiaq (Nagai 2006:134). The adversative function has not been reported for Inuktitut and will not be discussed any further.

(15) Verb classes in Kalaallisut

class 1:	stem-final [q]	take an overt half-transitive
class 2:	stem-final [k]	
class 3:	stem -final [t]	
class 4:	stem-final vowel	do not take an overt half-transitive
class 5:	stem-final long [e]	

(Kleinschmidt 1852:46-47)

While Woodbury interprets the distribution of AP markers as being partly based on the phonological properties of the verb stem, he suspects that there might be a semantic reason behind it as well (Woodbury 1975:125). Kleinschmidt (1852:112) claims that all verbs of class 3, some of class 1 and 2, but none of class 4 and 5 require overt AP markers in AP constructions. According to this, the question of whether an intransitiviser is necessary for the AP is based on phonology. However, he also notes that verbs that can be half-transitive without a suffix, "[…] are nevertheless transitive according to their inner nature and always include the thought of an object" (Kleinschmidt 1852:156).[7] Thus, whether an AP marker is necessary for a verb or not is based on semantics and Kleinschmidt's quote suggests strongly that the argument structure of the verb may be a factor. Whether verbs of class 4 and 5 form a semantically homogeneous class is not quite clear. Thus, the determination of whether an AP marker is necessary may thus be based on semantics, while the selection of a particular marker may be based on phonology (the stem-final segment).

There are two possible relations to be discussed between the different AP markers based on traditional descriptions of the AP morphology, which I address in the next two sections.

2.2.1 AP markers are detransitivisers

All traditional descriptions refer to the AP morpheme as some sort of detransitivising morpheme with no meaning of its own (Beaudoin-Lietz 1982, Fortescue 1996a, b, Kleinschmidt 1852). If there are various intransitivising markers, including a null intransitivising marker, it is likely that

[7] Translation from the German original.

these various markers might be suppletive allomorphs of one intransitivising morpheme as illustrated in (16).

(16) /Allomorphs/ ⋮ → [Intransitivising Morpheme]

a. Labrador (according to Beaudoin-Lietz 1982)

/-(n)ni(k)/
/-(t)ɬi-/
/-i-/
/-ji-/
/-si-/
/-tsi-/
→ [Intransitivising Morpheme]

b. Kalaallisut (according to Fortescue 1984)

/-si-/
/-lir-/
/-(ss)i-/
/-Ø-/
→ [Intransitivising Morpheme]

If (16) is correct then it seems that the intransitivising morpheme changes the valency of the verb it attaches to, similar to what passive morphology does in a language like English. According to Baker et al. (1989), passive morphology absorbs one of the theta roles of the verb, thus allowing only one argument to get structural case. For the antipassive, this would mean that the presence of an AP marker causes one of the arguments to become oblique or optional, possibly through some sort of theta absorption process.

A relation between the markers as depicted in (16) would explain why AP markers occur in the AP construction, which is traditionally analysed as being derived from a transitive ergative construction (Woodbury 1975). Such an analysis is certainly more elegant than an analysis that would claim that the Inuit languages have a number of unrelated intransitivising morphemes, all with the same function. Thus, if (16) is correct then all that remains to be done is to determine the distribution of the various allomorphs. However, that is where the problem starts. As Fortescue (1996a:35) notes, their "[…] attachment to a given stem is difficult to predict."

2.2.2 AP markers are aspectual markers

What (16) does not explain however is why these markers are homophones of aspectual markers, which do *not* occur in intransitive AP constructions. If (16) is correct, the fact that these markers act as aspectual markers in non-AP constructions is an accident. Even more unlikely, while they are supposed to be meaningless intransitivisers in AP constructions, they have aspectual meaning when they occur elsewhere. It is thus highly improbable that the homophony between AP markers and aspectual markers is an accident since AP markers in other languages also have aspectual homophones (Spreng 2010, Polinsky 2008). If we can answer why AP morphology has homophones that are aspectual morphemes in Inuktitut, we can possibly draw further conclusions for AP morphology in other languages. The reason why the traditional view has prevailed so long is possibly because some of them are obligatory in the AP construction, which shows a reduction in agreement in addition to a non-structural case on the internal argument. However, I will argue that the reason why the AP marker is obligatory for some verbs has nothing to do with transitivity per se but is based in the meaning of the verb.

I thus argue that AP marker and aspectual marker are positional variants of the same aspectual morpheme. Only such an analysis can explain that aspectual markers are used as AP markers, not only in Inuktitut but also on other languages. Each overt AP marker is thus a positional variant of a different aspectual morpheme. I will argue that the occurrence of the aspectual marker as AP marker is determined by different conditions than its occurrence as simple aspectual marker.

An analysis of the AP marker as a positional variant of an aspectual morpheme predicts that the AP marker and aspectual marker show the same meaning. We will see in chapter 3 that that is indeed the case. The analysis also explains why different dialects may vary in the number of AP markers. Under my proposal, it is a simple matter of dialectal variation. Some dialects have different aspectual morphemes, and not all of them are used as AP markers as shown for example in differences in AP markers between Kalaallisut and Inuktitut. While the inceptive morpheme *-llir* is an AP marker in Kalaallisut, it is not in Inuktitut.

One problem with my proposal lies with the null marker. An analysis where one of the AP markers is a null marker only makes sense if we take the traditional view that AP markers are intransitivisers and some verbs take a null or no intransitiviser for some reason. The traditional view would thus predict that verbs like that would be inherently intransitive and thus will not

require an intransitiviser for the AP construction. We will however see that the verbs that do not require an overt AP marker are actually often considered more transitive in that their argument structure is more complex than the verbs that do.

If I am correct however, then we should find that each AP marker contributes aspectual meaning to the AP construction, including the null marker. Since under my proposal, every AP marker, even the null marker is an aspectual marker, the null marker should contribute aspectual meaning. As the investigation will show, the verbs that take no overt AP marker have a completely different distribution from overt markers. We will also find that the null AP marker does not contribute any meaning to the AP construction and the assumption that such a null marker exists must be abandoned. I thus follow the traditional view that certain verbs do not require an AP marker.

The distributional pattern for the AP marker will show that the reason why AP constructions with no overt marker are intransitive has nothing to do with any intransitivising operation. The verbs without overt marker are object-deleting verbs (Levin 1993) that crosslinguistically alternate freely between intransitive and transitive constructions. This means that the properties of AP constructions, particularly the optionality of the internal argument, have nothing to do with AP morphology or some intransitivising operation but with the particular argument structure of those types of verbs. In conclusion, this means that verbs that can alternate freely between transitive and intransitive constructions where the internal object is optional have no AP marker.

While I base the analysis on my findings from Inuktitut, it can be shown that similar distributional patterns are applicable for other Inuit dialects and languages and may justify the same analysis.

I will show in this chapter that

1) Each overt AP marker is a positional variant of an aspectual morpheme.

2) There is no evidence for a null marker.

3) Only object-deleting verbs have no overt AP marker.

4) Verbs with obligatory internal argument require an overt AP marker.

2.3 AP morphology in Inuktitut

The only AP marker *-si* in Inuktitut is the same as the most common AP marker for other dialects as mentioned above. My proposal above also predicts that if the AP marker is a positional variant of an aspectual morpheme, this aspectual morpheme should occur both on AP constructions and in other constructions, similar to what is found for AP markers in other languages (Polinsky 2008). My proposal thus demonstrates that the homophony between aspectual morphemes and AP markers is not accidental. Furthermore, the investigation goes one step further and answers the still open question whether and where the null alternant actually occurs, and what its semantics are. I expect that the statement made for Kalaallisut (Fortescue 1996a:36) that "[…] so-called agentive stems […]"occur with a null marker instead of an overt AP morpheme has some bearing on the distribution in Inuktitut.

2.3.1 *-si*-type verbs

What I call *-si*-type verbs are verbs that, when occurring in the AP construction, require the overt AP marker *-si*, the most used AP morpheme in Inuktitut (Spreng 2001b). In the AP construction, these verbs cannot occur with the null marker, as shown in (17)b and (18)b.

(17) a. Piita nanur-mit quqir-*si*-juq [SB]
Peter(ABS) polar bear-*mik* shoot-AP-PART.3sg
'Peter is shooting a polar bear'

b. *Piita nanur-mit quqir-Ø-juq
Peter(ABS) polar bear-*mik* shoot-AP-PART.3sg
'Peter is shooting a polar bear'

(18) a. Susan kivik-*si*-vuq nutaraa-mik [MI]
Susan(ABS) lift/raise-AP-IND.3sg child-*mik*
'Susan is lifting the baby'

b. *Susan kivik-*si*-vuq nutaraa-mik
Susan(ABS) lift/raise-AP-IND.3sg child-*mik*
'Susan is lifting the baby'

-si-type verbs are either basic two-argument verbs, as in (17), or unaccusative verbs that when used in a two-argument construction, add an agent, such as *surak-* '*break*' in (19), *makpir-* '*open*' in (20), and *aniq-* '*hurt*' in (21). These latter *-si*-type verbs occur without *-si* in canonical

intransitive constructions (19)a, (20)a, (21)a but need *-si* in AP constructions (19)b, c, (20)b, c (21)b, c when the agent is introduced.

(19) a. anautaq surak-tuq [MI]
stick(ABS) break-PART.3sg
'the stick broke'

b. arnaq surak-*si*-juq (anautar-mik)
woman(ABS) break-AP-PART.3sg stick-*mik*
'the woman is breaking (a stick)/something'

c. *arnaq surak-Ø-tuq (anautar-mik)[8]
woman(ABS) break-AP-PART.3sg stick-*mik*
'the woman is breaking (a stick)/something'

(20) a. makpir-tuq [MI]
open-PART.3sg
'it's open'

b. Piita makpir-*si*-juq
Piita(ABS) open-AP-PART.3sg
'Peter is opening something'

c. *Piita makpir-Ø-juq
Piita(ABS) open-AP-PART.3sg
'he's opening something'

(21) a. aniq-tunga
hurt-PART.1sg
'I'm hurt'

b. aniq-*si*-junga
hurt-AP-PART.1sg
'I'm hurting/hitting someone'

c. aniq-Ø-tunga
hurt-AP-PART.1sg
*'I'm hurting/hitting someone'

[8] (19)c without *anautar-mik* '*stick*' would only be grammatical if *arnaq* ' *woman*' was a theme. We would then have the construction as in (19)a without an agent, meaning: '*the woman broke*'

As predicted by my proposal in section 2.2.2, the Inuktitut AP morpheme *-si* also occurs in non-AP constructions. When it occurs in an ergative construction, such as in (22)a, it has inceptive meaning and causes the deletion of a preceding consonant (Spreng 2001b). Inuktitut has a second inceptive marker *-liq* (22)b, d which is most likely the cognate to the Kalaallisut *-l(l)ir* since they both have inceptive meaning. *-liq* always causes the deletion of a preceding consonant.

(22) a. arna-up anautaq suraX-si-vaa[9] [MI]
woman-ERG stick(ABS) break-INCPT-IND.3sg/3sg
'the woman starts to break the stick'

b. arna-up anautaq suraX-liq[10]-paa
woman-ERG stick(ABS) break-INCPT-IND.3sg/3sg
'the woman starts to break the stick'

c. anautaq suraX-si-juq
stick(ABS) break-INCPT-PART.3sg
'the stick is about to break'

d. anautaq suraX-liq-tuq
stick(ABS) break-INCPT-PART.3sg
'the stick is about to break'

As shown in (22), inceptive *-si-* and *-liq* can both occur in the ergative construction. While *-liq* always causes a preceding consonant to delete, for *-si*, this only happens when it occurs in a non-AP construction (Spreng 2001b). The fact that *-si* may delete preceding consonants is also noted in Harper (1979) where consonant-deleting *-Xsi* and non-deleting *-si* are listed as separate dictionary entries.

In order to convey inceptive meaning in the AP construction, an inceptive morpheme must be added after the AP marker. Both inceptive *-si* and inceptive *-liq* can be used to convey inceptive meaning, as in (23)a, b, showing that that inceptive aspect suffix and AP suffix occupy different positions in the verbal complex. In contrast, the ergative construction requires only one

---

[9] The X indicates that the consonant has been deleted. I am following the notation introduced by Beaudoin-Lietz (1982) for consonant deleting suffixes. It is also used in Smith (1978).

[10] The uvular stop becomes a uvular fricative here before a consonant (Dorais 1986:25).

morpheme to convey inceptive meaning (22). Thus, there are two instances of *-si*, one that deletes preceding consonants when not occurring in an AP construction and one that does not when it occurs in an AP construction.

(23) a. anguti kunik-*si*-liq-puq arna-mik [MI]
man(ABS) kiss-AP-INCPT-IND.3sg woman-*mik*
'the man starts to kiss a woman'

b. anguti kunik-*si*-si-vuq arna-mik
man(ABS) kiss-AP-INCPT-IND.3sg woman-*mik*
'the man starts to kiss a woman'

2.3.2 Null-type verbs

I will call verbs that take the null AP marker null-type verbs. Just like *-si*-type verbs, they can occur in canonical intransitive constructions and in AP constructions. As noted in Fortescue (1984, 1996a), these are agentive verbs, which is confirmed for Inuktitut.[11] When null-type verbs occur with one argument, that argument is an agent.[12] When used with a second argument, a theme is added, as shown in the AP construction in (24)b. Thus, intransitive null-type verbs are unergative verbs, while intransitive *-si*-type verbs are unaccusative.

(24) a. arnaq miqsuq-tuq [MI]
woman(ABS) sew-AP-PART.3sg
'the woman is sewing'

b. arnaq miqsuq-∅-tuq (qarling-nit)
woman(ABS) sew-AP-PART.3sg pant-*mik*.dl
'the woman is sewing (a pair of pants)/something'

Null-type verbs may also occur with *-si* in the AP construction, as shown in (25)a, b. However, when null-type verbs occur with *-si* in the AP construction, it has inceptive meaning (25)a. Furthermore, just like with *-si* in non-AP constructions, the preceding consonant is deleted, both

---

[11] How to classify null-type and *-si*-type verbs independently from their behaviour with respect to AP morphology will be discussed in chapter 3.

[12] Some of them are experiencer verbs. We return to those verbs in chapter 3, section 3.3.

when occurring in an AP construction (25)a or in an ergative construction (25)b.[13] These verbs can also occur with *-liq*. In Inuktitut, *-liq* only occurs when it retains its inceptive meaning, both in ergative and AP constructions. It is not required for AP's and thus functions simply as an inceptive marker. While with *-si*-type verbs, *-liq* occurs together with *-si*, only null-type verbs allow only *-liq* by itself.

(25) a. arnaq miqsuX-∅-si-juq (qarling-nit) [MI]
woman(ABS) sew-AP-INCPT-PART.3sg pant-*mik*.dl
'the woman is starting to sew (a pair of pants)/something'

b. arna-up qarliiq miqsuX-si-vaangik
woman-ERG pant(ABS.dl) sew-INCPT-PART.3sg/3dl
'the woman started to sew a pair of pants'

In the AP construction, null-type verbs thus may occur with consonant-deleting inceptive -X-*si,* or null, while *-si*-type verbs are ungrammatical without overt AP marker *-si*. However, when null-type verbs occur with an overt marker in the AP construction, that overt marker deletes preceding consonants, while the *-si* with *-si*-type verbs does not. This shows that the overt marker -X-*si* is responsible for the inceptive meaning with null-type verbs, not the null marker.

2.3.3 Distribution of *-si* and inceptive -X-*si*

We thus have two functions of *-si;* inceptive X-*si* and AP marker *-si.* Only consonant-deleting -X-*si* occurs in any construction regardless of verb, while the non-deleting AP marker only occurs with *-si*-type verbs in AP constructions. As to their relation to each other, there are two logical options. They could be allomorphs of an inceptive morpheme (26)a, or simply two morphemes that just happen to look the same (26)b. The former alternative requires that they carry the same meaning, while the latter does not.

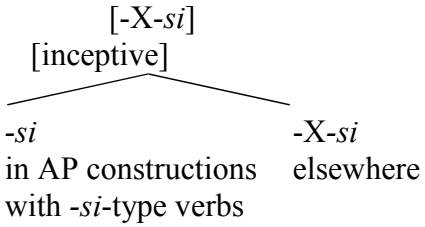
It is however not possible that they are allomorphs of an intransitivising morpheme, since they both should have the intransitivising property and would exhibit that property every time they

---

[13] The verb-final consonant is still deleted despite not being adjacent to the suffix *-si.* This fact indicates that the null marker might not occur there since it is rather unlikely that a phonological process that affects adjacent segments would still apply if the consonant is not adjacent anymore. However, if blocking of that process can happen when the element blocking it is phonologically null, is another question.

occur. However, since they do not exhibit an intransitivising function in transitive ergative constructions, intransitivising is not a property they possess.

(26) a.



b. /-*si*/ AP marker
/-X-*si*/ [INCEPTIVE]

While (26)a explains why these markers are homophones, (26)b assumes the homophony to be accidental. The problem with the latter view is that this "accidental" homophony can be found across the language family and even crosslinguistically (Polinsky 2008). This fact points to a relation and not accidental homophony. A diachronic relation has been put forward in Fortescue (1996a) and Fortescue et al. (1994), arguing that these two suffixes may have a common origin but have developed into different morphemes, thus basing their relation in their common ancestor suffix. According to Fortescue (1996a) and Fortescue et al. (1994), the variants *-i-/-si-* derive from Proto-Eskimo *ðɪ. This proto form developed into [si] after t-final stems, while [ð] was dropped between vowels. The latter variation is not found in the Inuktitut dialects I have investigated.

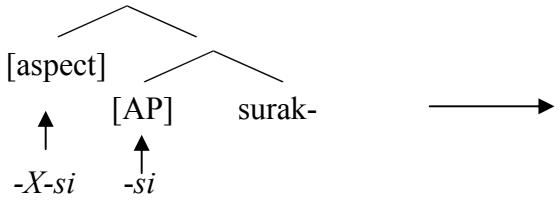
While posing an explanation for within the Eskimo-Aleut family, the problem again is that this supposed accidental homophony occurs not only in the Eskimo-Aleut family. While it is possible that *-si* developed in the same or similar vein within the language family, it is rather unlikely that such an identical development would occur in other, completely unrelated languages. Furthermore, even within the Eskimo language family, this assumes that phonological development happened in an almost identical fashion, which is rather unlikely.

The problem with (26)a is that the variants seem to have different meaning. Whenever *-si* occurs as AP marker, the inceptive meaning seems to be lost. This fact would suggest that X-*si* is a polysemous morpheme whose semantics change depending on its position in the verbal complex. Another problem for (26)a arises when we have both variants occurring in one verbal complex, as in (23)b. A late insertion model, such as Distributed Morphology (Halle and Marantz 1993)

may be able to account for that type of variation. In Distributed Morphology (DM), morphology is determined by the syntax, thus morphemes are nothing but phonological material, i.e. vocabulary items that are inserted into morphosyntactically specified slots that match the feature make-up of the phonological material, i.e. vocabulary items.[14]

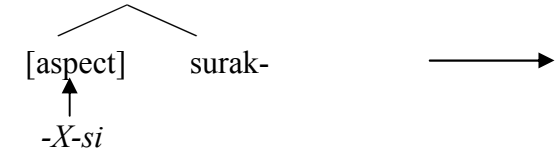
The structures in (27) illustrate the possible derivations. In (27)a, we see a derivation where the AP marker *-si* is inserted based on the properties of the verb. In that case, the final consonant of the verb root is not deleted because the slot into which *-si* is inserted is not an aspect slot. Since there is no preceding consonant for the aspectual -X-*si*, no consonant is deleted despite the fact that it is inserted into an aspectual slot. In (27)b, X-*si* is not inserted into the AP slot, thus consonant deletion occurs since it is inserted into the aspect slot. The same applies to null-type verbs in (28). Only when the inceptive marker is inserted into an aspectual slot, is a preceding consonant is deleted.

(27) a. *-si*-type verbs in the AP construction with inceptive aspect



surak-*si*-*si*-juq (naalauti-mik)
break-AP-INCPT-PART.3sg (radio-*mik*)
'he starts to break (a radio)'

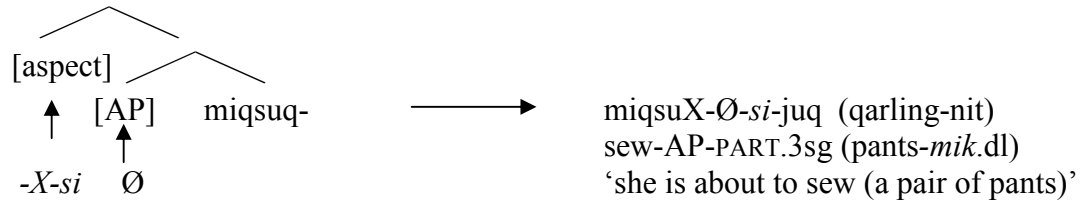
b. *-si*-type verbs in non-AP construction with inceptive aspect



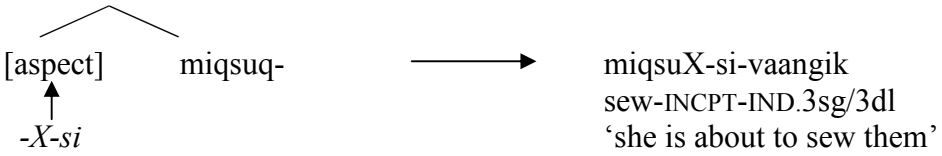
suraX-*si*-jaa
break-INCPT-PART.3sg/3sg
'he starts to break it'

[14] Note that I do not argue for a template for AP morphology. The slots for AP markers are based on hierarchical structure and may occur whenever the argument structure requires it. For example, overtly causativised complex forms also require the AP marker. Furthermore, the aspectual -X-*si* may be inserted whenever necessary to modify an event. This means, it may occur more than once in a sufficiently complex verb form with suffixal verbs, as for example in (8).

(28) a. null-type verbs in AP construction with inceptive aspect



b. null-type verbs in non-AP construction with inceptive aspect



It is possible that the consonant-deleting property of the vocabulary item is blocked when inserted into the AP slot. Blocking might occur because a cycle has been completed, while the aspectual slot is not at the edge of a linearisation cycle (Embick and Noyer 1999). Vocabulary insertion thus may precede or follow a cycle of linearisation, depending on the item that is inserted. Some vocabulary items have a linearisation requirement, i.e. they have to occur before or after another vocabulary item. Others have requirements that depend on their morphosyntactic environment but have no primary linearisation requirements. Their position in linear order may fall out from their morphosyntactic requirements. One way to explain why AP *-si* has no consonant-deleting property is because it is selected structurally, or, in other words, the argument structure of the verb and thus the syntax, determines its occurrence. The fact that it is adjacent to the verb root is thus a result of the syntax and has no bearing on phonology. On the other hand, the -X-*si* variant is inserted to add inceptive meaning and is thus inserted only with respect to the event it modifies, without regard of the argument structure of the verb root. The fact that -X-*si* is not tied to a particular construction or position suggests the likelihood of such a view. The variant x-*si* can be interpreted regardless of its structural environment, while the obscuring of the AP marker's meaning is caused by its additional structural requirements, i.e. having to occur in an AP construction. I will return to the issue and provide a final analysis in chapter 4.

2.3.4 The AP marker *-saq*

Inuktitut has another overt AP marker that is only used as such with *-si*-type verbs. Instead of *-si*, we find *-saq*, which means '*repeatedly*'. In other words, it conveys iterativity.

(29) anguti (arna-mik) kunik-*saq*-tuq ikaralimaamut [MI]
man(ABS) (woman-*mik*) kiss-AP-PART.3sg for.an.hour
'the man is kissing (a woman)(someone) for an hour (making out)'

As shown in (29), it may replace *-si* with *-si*-type verbs in the AP. It behaves like *-si* in that it occurs with *-si*-type verbs. When it is followed by -X-*si*, we get deletion of the preceding consonant. That preceding consonant is the final consonant of *-saq*, as shown in (30)a. The -X-*si* following *-saq* thus cannot be the AP marker. It occurs after the AP marker *-si* (30)c.

(30) a. kunik-saX-*si*-junga [MI]/[SB]
kiss-iter-incpt-part.1sg
'I started to kiss someone (started making out, kissing over and over)'

b. *kunik-saq-*si*-junga
kiss-ITER-AP-PART.1sg
'I started to kiss someone'

c. kunik-*si*-saq-tunga
kiss-AP-ITER-PART.1sg
'I am kissing someone repeatedly'

The ungrammatical example (30)b shows that the *-si* following *-saq* has to be -X-*si*, and not the AP marker *-si.* Thus, *-saq* acts as the AP marker here. When it follows *-si*, it acts as an adverbial-type element, as shown in (30)c. The morpheme *-saq* also behaves like *-si* in that it can also occur in an ergative construction, as shown in (31). Unlike inceptive X-*si* however, it does not cause preceding consonants to delete.

(31) kunik-saq-taa [MI]
kiss-ITER-PART.3sg/3sg
'he kissed her repeatedly (many kisses)'

When *-saq* occurs with a null-type verb, it also means *repeatedly*. However, what makes it more difficult to determine whether there are two versions of *-saq* is that *-saq* retains its meaning

throughout all constructions and does not have different phonological properties when it occurs as an AP marker. However, we do not have an additional class of "*saq*-type verbs". Only null-type verbs can occur with null-marker, while -*si*-type verbs are the same verbs that may occur with -*saq*.

(32) a. niri-Ø-saq-tuq (niqi-mit) [SB]
eat-AP-repeatedly-PART.3sg meat-*mik*
'He is eating (meat) repeatedly (all the time)'

b. niri-*saq*-tuq
eat-repeatedly-PART.3sg
'He is eating repeatedly (all the time)'

We thus have an additional overt AP marker that occurs in AP constructions with -*si*-type verbs, that has the same distribution as -*si*.

2.3.5 -*si* and -*saq*: allomorphs or different morphemes?

The traditional view on AP markers is that they are suppletive realisations of an intransitivising morpheme. While the relation between AP marker -*si* and X-*si* is that they are positional variants of inceptive -X-*si*, the relation between -*si* and -*saq* is unclear. We already know that there is no suppletive relation between null and -*si* since -*si*-type verbs cannot occur with the null marker. -*si*-type verbs and null-type verbs are thus completely distinct classes. We also know that -*si*-type verbs may take -*saq* but not the null marker (33)c.

(33) a. kunik-*si*-junga (Piita-mik) [MI]
kiss-AP-PART.1sg (Peter-*mik*)
'I am kissing (Peter)/someone (making out)'

b. kunik-saq-tunga (Piita-mik)
kiss-AP-PART.1sg (Peter-*mik*)
'I am kissing (Peter)/someone (repeatedly, many kisses)'

c. *kunik-Ø-tunga (Piita-mik)
kiss-AP-PART.1sg (Peter-*mik*)
'I am kissing (Peter)/someone'

However, not all *-si*-type verbs can take *-saq*. The verb in (34) has to have an overt AP marker; thus it is a *-si*-type verb, as seen in (34)c. However, it only allows *-si* as an overt AP morpheme, not *-saq*, as shown in (34)a.

(34) a. *Peter surak-*saq*-tuq (naalauti-mik) [MI]
Piita(ABS) break-AP-PART.1sg radio-*mik*
'Peter is breaking (a radio)/something'

b. Piita surak-*si*-juq (naalauti-mik)
Piita(ABS) break-AP-PART.1sg radio-*mik*
'Peter is breaking (a radio)/something'

c. *Piita surak-Ø-tuq (naalauti-mik)
Piita(ABS) break-AP-PART.1sg radio-*mik*
'Peter is breaking (a radio)/something'

Thus, some *-si*-type verbs allow either *-si* or *-saq.* Based on the verbs I have tested not all *-si*-type verbs allow *-saq*. Moreover, depending on the AP marker, the meaning of the AP construction is slightly different. The meaning of *kunik-saq-tunga* in (35)a is more like *many pecks*, while *kunik-si-junga* (35)b conveys a long, drawn-out make-out session.[15]

(35) a. kunik-saq-tunga [MI]/[SB]
kiss-AP-PART.1sg
'I am kissing someone (many kisses)'

b. kunik-*si*-junga
kiss-AP-PART.1sg
'I am kissing someone (making out, long kissing session)'

The above examples confirm the notion that *-si* is the more common AP morpheme in Inuktitut, a fact that has been attested in the literature not just for Inuktitut but also for Kalaallisut: "The most common morpheme is si (si) […]" (Fortescue 1984:86). Whatever meaning the morpheme *-si* might contribute to the AP construction; it is possibly less specific than the meaning of *-saq*, which is iterative, regardless of what construction it appears in. While *-si*, like be+*-ing* in English, could mean something like *He is about to break the stick* or *he is in the process of*

[15] Note that Inuit kissing is more a rubbing of the noses, although *kunik-* is also used for "Western style" kissing. Traditionally, *kunik-* is the root for '*touch, rub*'.

breaking a stick in (34)b, there is no such ambiguity with *-saq*. I will argue in chapter 3 that this is due to the verbs's lexical aspect but leave the question unanswered for now. We thus find that *-si* seems to be the default AP marker for *-si*-type verbs but *-saq* can be used for some of these verbs as well. The fact that the meaning changes depending on whether *-si* or *-saq* is used strongly suggests that they are different morphemes with different meanings.

2.3.6 Summary: distribution of overt AP morphology

The distribution of the AP morphemes in Inuktitut shows we have different overt markers; *-si* and *-saq* that can alternatively occur in an AP construction and non-AP construction.

(36) Traditional view

a. null
-si ——— [intransitivising morpheme]

b. New analysis for Inuktitut

/-X-*si*/ [inceptive meaning]		/-*saq*/ [iterative meaning]	
-si	-X-*si*	*-saq*	*-saq*
[inceptive?] AP	[inceptive]	[iterative AP]	[iterative]
-si-type verbs	any verb	*-si*-type verbs	any verb
AP construction	any construction	AP construction	any construction

Firstly, *-si* and *-saq* have different meaning from each other. Secondly, when they occur in non-AP constructions, at least *-si* has different phonological properties, while this second characteristic does not apply to *-saq*.

When *-si* occurs in an AP construction by itself, its inceptive meaning seems to be obscured. As we will see in chapter 3, that meaning is not quite as opaque as it seems here.

Looking at the issue from a DM standpoint, we can say that depending on the position and the construction where *-si-* is inserted, it shows different phonological and semantic properties. I thus argue that the fact that *-si* can act either as an AP marker or an inceptive marker shows that the homophony between AP markers and aspectual markers is not accidental. Insertion of the

morpheme into a different position in the AP construction has an effect on the transparency of the meaning of this morpheme and its phonological properties.

The AP markers are thus determined by construction and in turn, by position. While the selectional environment of the AP marker is a *-si*-type verb in the AP construction, the inceptive marker is the default variant, which can occur in any construction or environment and is determined semantically, not structurally.

A late insertion framework for morphology, such as DM can explain this relation. The different phonological properties of -X-*si* and -*si* are the result of insertion into a particular morpheme slot in the syntactic structure. If *-si* is inserted into the AP marker slot the consonant deletion property is blocked. If it is inserted into an aspectual slot, deletion happens. Since any phonological process happens only after linearisation (Embick and Noyer 1999), it is not a condition for insertion but a property of the vocabulary item associated with the particular slot.

The relations that are depicted in (36) account for almost all the distributional facts of AP morphology. They explain why the phonological properties of the same morpheme are different depending on the position and construction they occur in. It explains why the AP morphemes are aspectual markers in the respective language, a fact that has long been noted for other AP morphemes (Dixon 1979). It is the beginning of an explanation why the meaning of the marker is not quite the same depending on which construction it occurs in.

What the analysis cannot explain is why verbs are divided between null-type verbs and *-si*-type verbs. The issue is addressed in the next section.

2.3.7 Overt and null AP morphology

I have argued above that the overt AP marker is a positional variant of an aspectual marker. Therefore, it has no intransitivising function. Furthermore, it can be shown that verbs that occur in the AP construction with an overt marker are distinct from verbs that occur with the null marker. *-si*-type verbs cannot occur with a null marker in an AP construction. Null-type verbs cannot occur with the AP marker variant of the aspectual suffix.

The question why different Inuit dialects have varying numbers of overt AP morphemes, but all of them have a null variant has not seen very much attention in the literature. “Agentive verbs

may thus be regarded as transitive stems taking a Ø half-transitiviser (and non-agentive ones as having a covert passive element when intransitive […]"(Fortescue 1984:86). Fortescue is not the only one to note that there is a semantic difference between *-si-* type verbs and null-type verbs. Nagai (1998, 2006) argues that only patientive stems take an overt AP morpheme in Iñupiaq (Nagai 1998:44), thus confirming the statement made in Fortescue (1984). Beaudoin-Lietz (1982) summarises that only causativised verbs of emotion and change-of-state verbs take overt AP morphemes in Labrador Inuttut (Beaudoin-Lietz 1982:140). While Beaudoin-Lietz (1982) makes no statement regarding the use of the null alternant, it still confirms that the null AP markers are used for verbs that are *not* change-of-state verbs.

I will argue in this section that there is no actual empirical support to propose a null AP marker. While there is no clear evidence against it either, for reasons of simplicity and in the absence of any empirical evidence, I propose that there is no null AP marker in Inuktitut.

(37) Distribution of null and overt markers

	Iñupiaq (Nagai)	**Kalaallisut (Fortescue)**	**Labrador Inuttut (Beaudoin-Lietz)**
null-type verbs	agentive	agentive	perception, agentive
-si-type verbs	patientive	non-agentive?	change-of-state

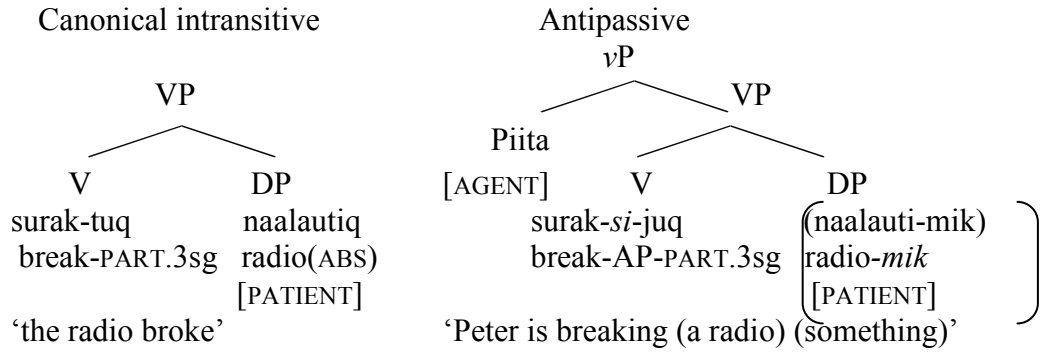
I have shown elsewhere (Spreng 2001) that the argument structure of a verb determines whether it is a *-si*-type verb or a null-type verb. The findings there match the claims that have been made for other dialects (Beaudoin-Lietz 1982, Sadock 1980).

2.3.7.1 The argument structure of null-type verbs

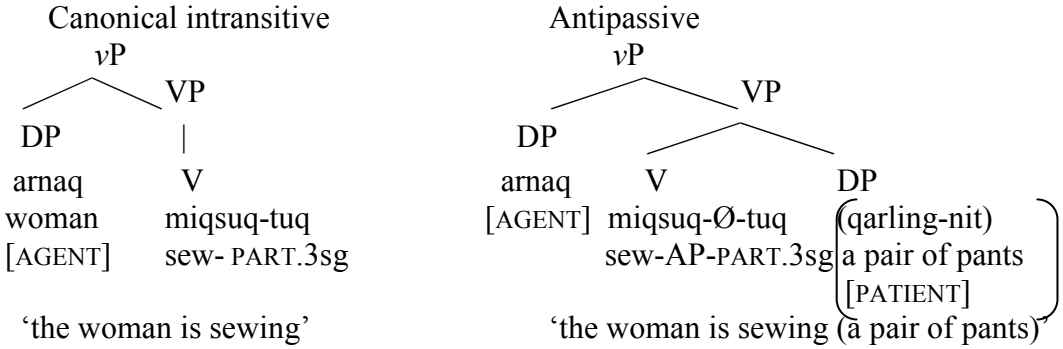
According to the literature, the distribution of overt versus null AP marker is very similar across various dialects, such as Kalaallisut, Labrador Inuttut, Iñupiaq, and Inuktitut. What is called patientive or non-agentive in the descriptive literature, I analyse as verbs that, when used in a canonical intransitive construction, would have a non-agentive *internal* argument, commonly known as unaccusative verbs. Agentive verbs, on the other hand, are verbs that, when intransitive, have a single *external* agent argument. These verbs are known as unergative in the literature (Perlmutter 1978). *-si*-type verbs thus start out as unaccusative verbs, while null-type

verbs start out as unergative verbs. Null-type verbs are thus verbs whose S is an agent, both in the AP and in the canonical intransitive. *-si*-type verbs on the other hand, have a non-agent S in the canonical intransitive and an agent S in the AP. As shown in (38)a,[16] *-si*-type verbs require a non-agent which becomes optional in the AP construction where an agent argument is added. On the other hand, as shown in (38)b, null-type verbs require an *external* agent which does not become optional in the AP, while an optional non-agent argument is added. From an argument structure point of view, the non-agent internal argument is always optional for null-type verbs, while for *-si*-type verbs, the external agent argument is always optional. Most of the null-type verbs can occur without an internal non-agent argument, while the agent argument is necessary. On the other hand, in the argument structure for *-si*-type verbs, it is the *external* agent argument that is optional, and the internal non-agent argument that is obligatory.

(38) a. *-si*-type verbs



b. null-type verbs



[16] The verbal structure has been argued to be a lot more complex than this; see Marantz (1997), Travis (2005), Basilico (2008) for some proposals. The details of the *v*P structure will be addressed in chapter 4. For now, a simple *v*P-VP structure is sufficient to illustrate the differences.

Thus, the internal argument is optional in the AP construction for both types of verbs as the traditional descriptions of antipassives state. However, the optionality of the internal argument is based on different grounds. With *-si*-type verbs, the internal argument is *only optional in the AP construction* (39)b, while it is obligatory in the canonical intransitive (39)a. The only time it can be dropped completely is in the AP construction.

(39) a. **naalautiq** surak-tuq — Canonical intransitive — [MI]
radio(ABS) break-PART.3sg
'the radio broke'

b. Piita surak-*si*-juq (**naalauti-mik**) — AP
Peter(ABS) break-AP-PART.3sg radio-*mik*
'Peter is breaking (a radio)/something'

On the other hand, the internal argument of null-type verbs is *always optional* or must be dropped completely in both AP construction and canonical intransitive. Thus, the optionality of the internal argument is not due to the AP construction.

(40) a. arnaq miqsuq-∅-tuq (**qarling-nit**) — AP — [MI]
woman(ABS) sew-AP-PART.3sg pant-*mik*.dl
'the woman is sewing (a pair of pants)/something'

b. arnaq miqsuq-tuq — Canonical intransitive
woman(ABS) sew-PART.3sg
'the woman is sewing'

The fact that there is no contrast between (40)a and (40)b thus shows that the null marker, just like the overt AP marker cannot have an intransitivising function since the verbs can occur in an almost identical intransitive construction regardless of the AP marker. The only difference between them is the assumed null marker. This strongly suggests that the null marker is not an intransitiviser since the only time we even assume it exists is when the internal argument is overt and marked with *mik*-case.

Beaudoin-Lietz (1982: 140) claims that perception verbs also occur without an overt AP marker, a claim that is supported for Inuktitut, as shown in (41) and (42). When these verbs occur with *-si*, it is the consonant-deleting -X-*si,* not the AP marker, as shown in (42).

(41) a. Piita taku-Ø-juq (nanur-mik) [MI]
Peter(ABS) see-AP-PART.3sg polar bear-*mik*
'Peter sees (a polar bear)/something'

b. Piita taku-Ø-*si*-juq (nanur-mik)
Peter(ABS) see-AP-INCPT-PART.3sg polar bear-*mik*
'Peter is starting to see (a polar bear)/something'

(42) a. Piita tusaq-tuq [SB]
Peter(ABS) hear-PART.3sg
'Peter hears'

b. Piita tusaX-Ø-*si*-juq (nanur-mik)
Peter(ABS) hear-AP-INCPT-PART.3sg polar bear-*mik*
'Peter now hears (a polar bear)/something'

Perception verbs thus behave like agentive verbs with respect to the AP marker. Furthermore, they behave like agentive verbs in that the argument that is optional in the AP construction is the same argument that is missing in a canonical intransitive construction, as shown in (43) and (44). This distinguishes perception verbs from *-si*-type verbs whose internal argument is only optional in an AP construction, but is the obligatory argument in a canonical intransitive construction. Therefore, I argue that perception verbs have the same argument structure as agentive verbs, explaining why they are null-type verbs in Inuktitut. This distribution thus follows the pattern stated in Beaudoin-Lietz for Labrador Inuttut.

(43) a. Piita taku-Ø-juq (**nanur-mik**) [MI]
Peter(ABS) see-AP-PART.3sg polar bear-*mik*
'Peter sees (a polar bear)'

b. Piita taku-juq._____
Peter(ABS) see-PART.3sg
Peter sees.

(44) a. Piita niri-Ø-juq (**niqi-mit**) [SB]
Peter(ABS) eat-AP-PART.3sg meat-*mik*
'Peter is eating meat'

b. Piita niri-juq._____
Peter(ABS) eat- PART.3sg
'Peter eats/is eating'

(45) a. arnaq surak-*si*-juq (**naalauti-mik)** [MI]
woman(ABS) break-AP-PART.3sg radio-*mik*
'the woman is breaking (the radio)/something'

b. **naalautiq** surak-tuq.
radio(ABS) break-PART.3sg
'the radio broke'

It is difficult to argue that these verbs are agentive in the sense that they encode an activity in some sense, since the obligatory argument is not an agent. I keep therefore with the more neutral notion that it is the obligatoriness of the internal argument that is the deciding factor for an overt AP morpheme. Furthermore, there is a meaning difference between the verbs in (45)a and (45)b that does not exist between the verbs in (43)a and b or (44) a and b. This will become more important when I discuss the semantics of the AP construction in chapter 3. This difference indicates that there is an additional semantic component to the distributional properties of *-si-* type verbs and null-type verbs.

An initial survey of the AP morpheme distribution in Netsilik[17] shows the same distribution as Iñupiaq, Inuktitut, Kalaallisut, and Labrador Inuttut. Just like in these dialects, unaccusative verbs with obligatory internal argument (46), and obligatorily transitive verbs (47) are *-si-*type verbs, while perception verbs are null-type verbs (48).

(46) a. nani-ɻaa [NK]
find-PART.3sg/3sg
'he found it'

b. ni-hi-ɻuq
ind-AP-PART.3sg
'he finds something'

c. *nani-ɻuq
find-PART.3sg
'he finds something'

[17] Netsilik belongs to the group of dialects that have the sound [h] instead of [s]. Also, what is [j] in other dialects, is [ɻ], a retroflex in Netsilik. The final consonant of the *–mik* case seems to be missing (47), (48)). This follows a seemingly general pattern of dropping final consonants.

(47) a. Piita-up qimmiq aaniq-taa [NK]
Peter-ERG dog(ABS) hit-PART.3sg/3sg
'Peter hit the dog'

b. Piita aaniq-hi-ɻuk qimmir-mi
Peter(ABS) hit-AP-PART.3sg dog-*mik*
'Peter is hitting the dog'

(48) arnak taku-ɻuq nutarar-mi [NK]
woman(ABS) see-PART.3sg child-*mik*
'the woman sees the child'

This lends further support to the idea that it is the internal argument that is the deciding factor for having an overt AP marker. All null type verbs have obligatory external arguments, or in other words are arguments that are "severed from its head" (Kratzer 1996), while they do not always have an internal argument. On the other hand, -*si*-type verbs always occur with their internal arguments appearing somewhere in the structure.

The last group of verbs that requires discussion are experiencer verbs, or psych verbs. According to Beaudoin-Lietz (1982:140), "causative verbs of emotion" also take overt AP markers. The same is true for Inuktitut only when there is an overt causative marker -*tit*, as shown in (49). Only when a psych verb is overtly causativised do we have an overt AP morpheme (49)b, c.

(49) a. uvannit nagligusuk-tutit[18] [SB]
I-*mik* love-PART.2sg
'you love me'

b. quviasuk-tit-*si*-jutit uvan-nit
happy-CAUS-AP-PART.2sg I-*mik*
'You make me happy'

c. quviasuk-tit-*si*-junga ui-ga-nit
happy-CAUS-AP-PART.1sg husband-1.POSS-*mik*
'I am making my husband happy right now'

[18] Note that the pronoun marked with -*mik*-case is not optional here.

When the stative *quviasuk-* '*happy*' is causativised, it requires an AP morpheme, while that does not happen with *nagligusuk-* '*love*'. The former parallels the pattern of unaccusative verbs, such as *tuqu-* 'die' which, when an argument is added and they are causativised, are *-si*-type verbs (50)b.

(50) a. tuqu-vuq [MI]
dead-IND.3sg
'it is dead'

b. tuqu-t-*si*-vuq
die-CAUS-AP-IND.3sg
'He is killing something'

It is possible that '*nagligusuk-*' 'love' has more of an activity reading than '*quviasuk-*' and thus does not take the AP morpheme. Furthermore, when in the ergative construction (51)a, it requires the transitivising suffix *-gi*, which is not necessary in the AP construction (51)b.

(51) a. Bettina-up nagli-gi-jaa qimmi-ni [MI]
Bettina-ERG love-TR-PART.3sg/3sg dog-POSS.3sg
'Bettina loves her dog'

b. arnaq nagli-gusuk-tuq qimming-a-nik
woman(ABS) love-feel towards-PART.3sg dog-POSS.3sg-*mik*
'the woman loves her dog. ("feels love towards it")'

The root *nagli-* '*love*' does not seem to occur by itself. It is also translated as *pity*. I return to the issue of psych verb in chapter 3. For now, we can state that psych verbs may belong to a single class with respect to the AP marker.

In sum, there is a clear distinction between *-si*-type verbs and null-type verbs. The distinction has to do with their argument structure. *-si*-type verbs have obligatory internal arguments, which occur in every intransitive structure but become optional in the AP construction. Null-type verbs are verbs that have an external argument that occurs in every structure. If an internal argument is added, it is optional in the AP construction. The term internal and external argument is thus more neutral and covers the empirical facts better since verbs of perception, for example, still do not take an overt AP morpheme although it is debatable that these are agentive verbs.

2.3.7.2 Against an aspectual analysis of the null marker

We have seen that overt markers are positional variants of aspectual markers and have no intransitivising function. Therefore, they should show some kind of aspectual meaning. The details of that meaning will be discussed in chapter 3, but at this point, I can show that there is a meaning difference between forms with overt AP marker and canonical intransitives, while there is no meaning difference between canonical intransitives and AP's with null marker. The lack of apparent meaning contrasts further supports the notion that there is no null marker present.

I argue that when null-type verbs in Inuktitut are transitive, they are object-deleting verbs. Keeping in mind that we build our verb structure from the bottom up, I prefer the term object-permitting[19] verbs. Regarding their argument structure, they optionally allow internal arguments.

(52) a. anguti niri-∅-juq (niqi-mik) [MI]
man(ABS) eat-AP-PART.3sg meat-*mik*
'the man is eating (meat)/something'

b. Peter taku-∅-juq (arna-mik)
Peter(ABS) see-AP-PART.3sg woman-*mik*
'Peter sees (a woman)/something'

c. arnaq miqsuq-∅-tuq (qarling-nik)
woman(ABS) sew-AP-PART.3sg pant-*mik*.dl
'the woman is sewing (a pair of pants)/something'

The verbs in (52) are all object-permitting verbs. In English just like in Inuktitut, these verbs occur freely with or without an overt internal argument as shown with the canonical intransitive construction in (53).

(53) a. anguti niri-juq [MI]
man(ABS) eat-PART.3sg
'the man is eating'

b. Peter taku-juq
Peter(ABS) see-PART.3sg
'Peter sees'

---

[19] I am not making any commitment as to whether these are actual direct objects at this point. See chapter 4.

c. arnaq miqsuq-tuq
woman(ABS) sew- PART.3sg
'the woman is sewing'

Between the verb meanings in (52) and the verb meanings in (53), there is no discernible difference. The only difference is in the presence of the internal argument and the null AP marker under discussion.

On the other hand, the meaning difference between canonical intransitives without AP marker and AP constructions with AP marker is considerably more pronounced with *-si*-type verbs. In (54)a, the *-si*-type verb *kapi-* '*stab*' can only be forced for accidental reading in a canonical intransitive construction. Examples (54)b and c are both ungrammatical in a canonical intransitive construction.

(54) a. *Peter kapi-vuq[20] [MI]
Peter(ABS) stab-IND.3sg
'Peter stabbed himself (accidentally, fell onto a knife)'

b. *anguti kunik-tuq
man(ABS) kiss-PART.3sg
'the man kissed (not even possible with an accidental, non-volitional reading)'

c. *Susan kivik-puq
Susan(ABS) lift-IND.3sg
'Susan lifted (also impossible with reflexive reading)'.

(55) a. Peter kapi-*si*-vuq [MI]
Peter (ABS) stab-AP-IND.3sg
'Peter is stabbing someone'.

b. Peter kunik-*si*-vuq
Peter(ABS) kiss-AP-IND.3sg
'Peter is kissing someone'.

[20] (54)a is marginally acceptable with the accidental reflexive reading; but ungrammatical with an active reflexive reading or without any internal patient. It has been reported that these verbs often have reflexive meaning when occurring without overt AP marker (Johnson 1980, Sadock 1980) although the latter reports conflicting results, depending on the verb. That reading is not as readily available in Mittimatalik.

c. Susan kivik-*si*-vuq
Susan(ABS) lift-AP-IND.3sg
'Susan lifted someone'.

(Spreng 2001b:177-178)

The verbs in (54) and (55) are what we may call obligatorily transitive in that they have no intransitive version that is acceptable without *-si*. Therefore, they require an internal argument in their argument structure, which becomes optional in the AP construction. There is thus a clear difference in meaning and grammaticality between constructions with *-si* and constructions when it is absent. The same cannot be said for the contrast between constructions with the assumed null AP marker and canonical intransitive constructions.

Similar contrasts can be shown for *-si*-type verbs that may occur in a canonical intransitive construction. There is a clear meaning difference between an AP construction and a canonical intransitive construction (56).

(56) a. naalautiq surak-tuq — Canonical intransitive — [MI]
radio(ABS) break-PART.3sg
'the radio broke'

b. Piita surak-*si*-juq (naalauti-mik) — AP
Peter(ABS) break-AP-PART.3sg radio-*mik*
'Peter is breaking (a radio)/something'

That is not the case for null-type verbs, as shown in (57). In the canonical intransitive construction in (56)a, the meaning of the verb is different from the meaning in the AP construction in (56)b. I will argue in chapter 3 that the difference between (56)a and (56)b is a difference in viewpoint aspect or (im)perfectivity as is already indicated in the *be-ing* translation. However, for now, the evidence shows clearly that there is a difference, regardless of the nature of that difference. And, as shown again in (57)a and (57)b, the same cannot be said for null-type verbs.

(57) a. anguti niri-juq — Canonical intransitive — [MI]
man(ABS) eat-PART.3sg
'the man is eating'

b. anguti niri-∅-juq (niqi-mik) AP
man(ABS) eat-AP-PART.3sg meat-*mik*
'the man is eating (meat) something'

The marker *-si* thus influences the interpretation of the verb, while the same cannot be said for the null marker, supporting the idea that the null marker does not exist. On the other hand, one could argue that the null marker is a marker for telicity. We would then expect the AP construction with a null marker and an overt internal argument to be telic because the internal argument would be functioning as a measuring-out element (Tenny 1994), while the canonical intransitive construction with null-type verbs would be always be atelic.

However, it is not a null telicity marker but the presence of an internal argument that causes the telic reading as the ergative constructions show. We assume the atelic (58)a to be a canonical intransitive, while the telic (58)b, c is assumed to be an AP with a null telic marker. However, the telicity can just as well be attributed to the presence of the internal argument, measuring out the event, as illustrated by the telic ergative construction in (59). Unless we propose that there is a null telic marker in the ergative construction too, there is no real support for a null telic marker.

(58) a. anguti niri-vuq ikaralimaamut [MI]
man(ABS) eat-IND.3sg for.an.hour
'the man ate for an hour'

b. *anguti niri-vuq palaugaar-mik ikaralimaamut
man(ABS) eat-IND.3sg bread-*mik* for.an.hour
'the man ate bread for an hour'

c. anguti niri-vuq palaugaar-mik ikarami
man(ABS) eat-IND.3sg bread-*mik* within.the.hour
'the man ate bread in an hour'

(59) a. anguti-up palaugaaq niri-vaa ikarami [MI]
man-ERG bread(ABS) eat-IND.3sg/3sg within.the.hour
'the man ate the bread in an hour'

b. *anguti-up palaugaaq niri-vaa ikaralimaamut
man-ERG bread(ABS) eat-IND.3sg/3sg for.an.hour
'the man ate the bread for an hour'

Furthermore, basic atelic verbs like (60) would then be presumed to have a null *atelic* marker if telicity were to be marked with a separate morpheme. Since there is no real contrast between a null telic and a null atelic construction, such a proposal is redundant.

(60) pisuk-tuq ikaralimaamut [MI]
walk-PART.3sg for.an.hour
'he is walking for an hour'

2.3.7.3 Against an analysis of the null-marker as detransitiviser

Alt this point, one could argue that the null marker might be different from the overt markers in that it is the only intransitiviser present. While I have shown that the overt markers have no intransitivising function, the null marker might be the so-called "half-transitive" morpheme. Null-type verbs which are mostly unergative verbs are generally seen as "more transitive" than unaccusative verbs, simply because they automatically project a more complex structure than unaccusative verbs (Hale and Keyser 1993). This idea would point us to an intransitivising function of the null marker. However, the AP construction is just as transitive in the sense of having an external argument as the canonical intransitive construction. Both of them project a *v*P structure. The proposal of a null marker would force us to argue for a null marker in canonical intransitive constructions as well and again, we have no reason why that would be necessary. Recall that the idea of the null marker comes from the idea that the AP construction is derived from the transitive ergative construction via an intransitivising operation, caused possibly by an intransitivising morpheme, i.e. the AP morpheme. Furthermore, the AP construction is in some way "more" transitive than the canonical intransitive in that it allows for the presence of an optional internal argument, which is not a possibility for a canonical intransitive construction. While it is feasible to assume that all intransitive constructions may have a null intransitivising marker, the empirical support is weak.

More importantly, all the null-type verbs I have investigated would fall under what we call object-deleting verbs (Levin 1993) which partake in object alternations. Both Postal (1977) and Blight (2004) argue that such alternations are also AP's. Blight (2004) claims that the unspecified object alternation (61), conative alternation (62), and the preposition drop alternation (63) should be analysed as AP's in English.

(61) a. John ate the rice.
b. John ate.
(Blight 2004:111)

(62) a. John shot the rat.
b. John shot at the rat.
(Blight 2004:113)

(63) a. John climbed the mountain.
b. John climbed up the mountain.
(Blight 2004:114)

The unspecified object alternation would be comparable to an AP construction with null marker. As pointed out, these verbs would be null-type verbs and so far, there is nothing to suggest that they are in any way different from canonical intransitive constructions in Inuktitut. The conative alternation in (62) is an alternation where the change in object case from a structural to an inherent or a prepositional phrase indicates a change in aspect, i.e. some kind of imperfective or non-resultative aspect. This alternation is the one that seems to have more in common with canonical AP's, especially the ones with *-si*-type verbs. In Iglulik, as shown in (64), the meaning change has been explained to me in that sense.

(64) Piita quqir-*saq*-tuq nanur-nit [IG]
Piita(ABS) shoot-AP-PART.3sg polar bear-pl.*mik*
'Peter is shooting at the polar bears ("he keeps shooting, it seems he might be missing")'

The preposition drop alternation has similar semantic properties as the conative alternation in that the result seems a lot less likely than in the canonical transitive construction. It is restricted mostly to verbs or motion, which are also null-type verbs in Inuktitut. However, motion verbs in Inuktitut do not form a canonical AP construction in Inuktitut, since the case on the internal argument is allative, as shown in (65). Motion verbs thus do not form an AP.

(65) Piita aglu-mut kataX-*si*-juq [MI]
Piita(ABS) seal hole-ALL fall-INCPT-PART.3sg polar
'Peter is starting to fall into the seal hole'

However, the fact that only one argument is affected in comparison to the transitive construction disqualifies these alternations for an AP analysis. As illustrated in (66), AP's require that both arguments be affected by the voice alternation compared to the ergative construction. S and A

keep their grammatical function, while only O changes to an oblique (67). The above alternations however only show case changes on the internal argument, as shown in (66) and (67).

(66) Antipassive:
External argument: ERG → ABS
Internal argument: ABS → oblique

(67) English object deletion/alternation
External argument: NOM → no change
Internal argument: ACC → oblique

(Spreng 2010:570)

AP constructions with overt AP morpheme thus differ from AP constructions with null marker in that for the latter the internal argument that is optional in the AP construction is optional *not* because of the AP construction, but because of the argument structure of the verb. For null-type verbs, the reason the internal argument is optional has nothing to do with any alleged intransitivising operation, but with the fact that they are object-permitting verbs. Crosslinguistically, they alternate easily between transitive and intransitive and it is unlikely that they would require an intransitiviser in this language.

On the other hand, with *-si*-type verbs, the optionality of the internal argument is due to the AP construction and not to their argument structure. Their basic argument structure requires this internal argument. With canonical intransitive constructions and ergative constructions, the internal argument is always overt; either as absolutive marked DP or cross-referenced in the verbal agreement.

These findings support the claims for other dialects in that patientive, or in our terminology, verbs with obligatory internal arguments are *-si*-type verbs. What is considered patientive verbs, are verbs with non-agents as obligatory arguments. Internal arguments are never agents, while external arguments are never non-agents.[21] Thus, Fortescue's insight (Fortescue 1996a) that only agentive verbs take the null AP marker is confirmed for Inuktitut. Agentive verbs are verbs with

[21] The external arguments of some psych verbs are formed by merging a nominal root *nagli-* '*love, pity*' with a verbal suffix *-gusuk* '*feel*' in order to be transitive. Others require a causative marker to allow for an external argument such as *quviasuk-* '*happy*. See section 0 for a discussion of those types of verbs with respect to the AP construction.

obligatory agents. Obligatory agents are external arguments. Therefore, these are the exact same verbs that Fortescue pointed out to have a null AP marker. While there is no mention on perception verbs, I would expect that these verbs are also null-type verbs in Kalaallisut.[22]

Moreover, *-si*-type AP's differ considerably in their semantics from their canonical intransitive counterparts, while null-type AP constructions do not. This contrast indicates strongly that there is in fact no null marker. Furthermore, with some *-si*-type verbs, we get ungrammaticality when the marker is absent while again, that is not the case with null-type verbs. Empirically, there is thus no evidence for a null-marker, and the fact that our null-type verbs are verbs that occur easily without an internal argument shows that even if the null marker is a intransitiviser, we would assume it occurs all the time.

2.3.8 Summary: distribution of the AP marker

The above sections have shown that verbs that require an AP marker in the AP construction have a different argument structure from verbs that do not. I have shown that only the AP constructions with overt AP morphology show a semantic difference from their canonical intransitive counterparts. The AP constructions with a so-called null AP marker do not, providing evidence that there is actually no null AP marker. We thus have two types of what have traditionally been called AP constructions. We have a *-si*-type AP construction and a null-type AP construction. I will keep this terminology to distinguish the two types for the remainder of this thesis.

The in-depth examination of the distribution of the AP morpheme has demonstrated that we have nothing to gain by proclaiming a null marker if we have an explanation for its absence. The null alternant does not contribute to the construction's meaning, while it is more likely that the case/agreement configuration in the AP construction has something to do with the change in meaning of the internal argument and verbal semantics.

With object permitting verbs, the internal argument is not optional because of some detransitivising operation or morpheme, but because the argument structure of the verb specifies

---

[22] I will return to perception verbs in section 0 and 3.3.3.

the internal argument as optional. This is true cross-linguistically and therefore to be preferred as an explanation since it takes advantage of crosslinguistic facts and does not account only for this language group.

2.3.9 AP morphemes in Kalaallisut

The previous sections have shown that overt AP morphemes are positional variants of aspectual morphemes. I have also shown that there is no evidence for a null AP marker. This section discusses whether the analysis for Inuktitut analysis can be applied to other dialects. As certain mentions in Fortescue (1996a) already suggested, the distribution between overt and null AP morphology, i.e. the absence of AP morphology might be similar in other dialects.

AP morphemes in Kalaallisut have been described as half-transitives (Kleinschmidt 1852) that have no meaning on their own.[23] Fortescue notes that […] "The three suppletive half-transitive affixes attested in WG[24] (and throughout the Inuit continuum of dialects) are: *-(s)i, -nnig,* and *-ler*." […] with the first one having various allomorphs *-ši*, *-i*, *-si* , "[…] whose attachment to a given stem is difficult to predict […]."(Fortescue 1996a:35). While Fortescue argues that "[…] all the half-transitive morphemes have precisely the same meaning […]"(Fortescue 1996a:34) he does not elaborate what that meaning is. Fortescue thus follows the traditional view that these suffixes are different realisations of some intransitivising morpheme.

Bittner (1987) is the first to propose that the different AP markers are not merely meaningless allomorphs of an intransitivising morpheme, but are different aspectual morphemes in Kalaallisut. She challenges the notion that each verb selects its own AP morpheme (Woodbury 1975:27), showing that many verbs can occur with a number of different markers. The examples in (68) illustrate that one verb can occur with different AP markers, thus showing that the selection of a particular AP marker is not dependent on a particular verb stem. Example (68)a

---

[23] "[…] halbtransitive redewörter: trtvs. stammwort u. intrtvr. anhang der die bedeutung des stammworts nicht weiter verändert, als dass er es der suffixe entledigt […]" (Kleinschmidt 1852:55). "[…] halftransitive verbs: transitive stem and intransitive affix, which does not change the meaning of the stem in any other way than to get rid of the [transitive] suffixes." Translation taken from Beaudoin-Lietz (1982:40). Text in brackets is added to disambiguate the meaning. Kleinschmidt uses the term *suffixes* only for transitive inflectional suffixes.

[24] WG = Kalaallisut. Fortescue claims that these affixes are in essence the same across the Inuit dialects, although mentions that -(s)i only has one allomorph in Yup'ik (Fortescue 1996a:35).

shows a verb *malig-* '*follow*' that ends in a consonant, while the verb *taku-* '*see*' (68)b ends in a vowel. This indicates that the selectional conditions cannot be phonological as suggested in Kleinschmidt (1852) since the same markers occur with phonologically different verb stems. Furthermore, note that the verb-final consonant [g] in (68)a is deleted.

(68) a. ullut tamaasa Jaakumik malissivuq/maliivuq/malinnippuq [KA]
ullut tamaasa Jaaku-*mik* malig-si /(ss)i /nnig-pu-q[25]
days all Jacob-I follow-ap -indic.intr-3sgA
'He followed Jacob every day.'
(Bittner 1987:200)

b. Jesusimik takuvuq /takusivuq /takunnippuq /takullirpuq.
Jesus-*mik* taku-Ø-vu-q/taku-si-vu-q/taku-nnig-pu-q/taku-llir-pu-q
Jesus-INS see-ap-intr.indic-3sgA
'He saw Jesus.'
(Bittner 1987:196)

Bittner argues that all of the AP markers in (68) are compatible with frequentative aspect reading as exemplified by the adverbial phrase *ullut tamaasa* '*every day*' in (68)a. Moreover, the AP markers are not only compatible with a frequentative reading, but are necessary to facilitate that reading. When they are absent, as in the ergative construction in (69), the sentence becomes ungrammatical with a frequentative adverbial.

(69) a. *ullut tamaasa Jaaku malippaa. [KA]
ullut tamaasa Jaaku malig-pa-a
days all Jacob(A) follow-tr.indic-3sgE/3sgA
('He followed Jacob every day.') (Bittner 1987:199)

b. *qassiriariuni atuagaq taanna aturpaa[26]
qassiriariuni atuagaq taa-na atur-pa-a
several.times book-A this-sg.A use-tr.indic.-3sgE/3sgA
('He used this book several times.') (Bittner 1987:200)

---

[25] Note that according to Fortescue (1996a), the affix *-(ss)i* is actually an allomorph of *-(s)i*, thus reducing the variation to only two AP markers in (68)a. However, that does not explain why the two phonological alternants can occur interchangeably. Also note that the orthographic conventions are different. What is written as *-ši* in Fortescue (1996a), is written as *-ssi* in Bittner (1987).

[26] The asterisk for (69)b is missing in the text. I am assuming it is a typo since the translation is in brackets just like the previous ungrammatical examples in the article, see (69)a. The example is also referred to as ungrammatical in the text. I therefore added the asterisk.

Within the framework of Bittner's proposal, the construction has to carry the frequentative reading, not the AP markers. In other words, these AP markers are not frequentative suffixes. If they were, then Bittner's argument that they are different aspectual morphemes would have no grounds. However, despite Bittner's assertion that they are different aspectual morphemes, it is not clear what their different meanings actually are. Furthermore, there is one AP marker that is not compatible with the frequentative meaning. This marker is the inceptive suffix *-llir*. It denotes inceptive aspect in the AP construction (70)a and non-AP construction (70)b. In the AP construction in (70)a, the initial [l] of *-lir* is geminated, which does not happen in the ergative construction in (70)b.

(70) a. uqaatsimik taassuminnga ilisimallirpuq [KA]
uqaasiq-*mik* taa-ssuminnga ilisima-llir-p-uq
word-INS this-sg.INS know -just.beginning.to-intr.indic-3sgA
'He knows this word (has just acquired it)'
(Bittner 1987:201)

b. Jaaku malilirpaa
Jaaku malig-lir-p-aa
Jacob(A) follow-begin-tr.indic.-3sgE/3sgA
'He began to follow Jacob'
(Bittner 1987:200)

The data in (70) supports Bittner's argument that AP markers are different aspectual morphemes in the sense that the meaning of *-llir* is distinct from the meaning of the other AP markers. These same markers occur in both AP construction and ergative construction, supporting Bittner's argument that they are not meaningless intransitivisers but aspectual morphemes. The examples in (70) also show that if *-llir* were an intransitivising morpheme then we would not expect to see it in a transitive ergative construction.

Furthermore, Bittner argues that with the exception of *-llir,* the suffixes including the null marker seem to "[…] mark imperfective aspect of some sort." (Bittner 1987:199, 201). For *-llir*, Bittner notes that the geminate on the version of the affix in the AP construction in (70)a is probably part of a "[…] semi-productive morphological process, involving consonant gemination in verbs, which marks progressive aspect of these verbs […]"(Bittner 1987:200). These two statements are actually contradictions. According to Comrie (1976), both frequentative and progressive aspect are subcategories of imperfective aspect. Thus, the progressive expressed with *-llir* would also be

considered “imperfective aspect of some sort”. However, while Bittner argues that these morphemes are different aspectual morphemes, it is unclear what the different meanings are. If they are all imperfective markers, then why do they not fulfill that function in non-AP constructions? And if each subcategory of imperfective is considered a separate meaning, again, why do these markers not fulfill that function in non-AP constructions?

Bittner’s account explains why the markers can occur in intransitive AP constructions and transitive ergative constructions. However, what Bittner’s account cannot explain is why these aspectual morphemes have frequentative or progressive aspect only when in the AP construction and not in the ergative construction.

(71) Summary of Bittner: Aspectual morphemes
Ergative construction: aspectual reading unclear
-*lir*: morpheme has inceptive aspect
-*si*/-(ss)i/nnig/Ø: meaning unclear

AP construction: possibly frequentative reading except with -*llir*
-*llir*: morpheme has inceptive and progressive aspect because of gemination
-*si*/-(ss)i/nnig/Ø: morphemes have imperfective or frequentative aspect

The fact that gemination of -*lir* for progressive aspect only happens in AP constructions and that only AP constructions are compatible with frequentative aspect strongly suggests that it is not the markers that carry the meaning of frequentative or progressive aspect. If these markers were frequentative or progressive markers, then they should carry that meaning in the ergative construction too. As we have seen in (69) and (70)b, that is not the case. The only aspectual meaning that is carried over from ergative to AP construction is the inceptive meaning of -*lir*.

While Bittner’s account explains why these AP markers seem to be homophones of aspectual morphemes in Kalaallisut and other Inuit languages, it does not explain why these markers are traditionally described as necessary in AP constructions and not for ergative constructions. If they are simply morphemes that carry aspectual meaning, then that meaning could hardly be seen as a requirement of a construction. Furthermore, if they are all some kind of imperfective markers then it is more likely that each of them is an allomorph of an imperfective aspectual morpheme.

Since the ergative construction does not have an imperfective or frequentative reading even *with* one of these markers, it is not the marker that carries imperfective, progressive, or frequentative meaning. This means that the progressive, frequentative, or imperfective reading is forced by the AP *construction*, not the AP *marker*. If this is true, then we have an explanation as to why progressive gemination of *-lir* only happens in AP constructions and not in ergative constructions. As Bittner points out, gemination to indicate progressive happens independently of the morpheme and can be found on verb roots as well (Bittner 1987:200).

(72) /*-si*/ /*-lir*/ /Ø/: imperfective morphemes Bittner's analysis

2.3.9.1 The null marker in Kalaallisut

Recall that the only reason why null AP markers were proposed was under an analysis where AP markers are suppletive allomorphs of an intransitivising morpheme (Fortescue 1996a). Whenever there is no overt AP marker, it is assumed that there is a null allomorph present. Under an analysis where all AP markers are aspectual markers, as proposed in Bittner (1987), a null marker should contribute a different meaning from an overt marker.

Bittner notes that the imperfective meaning can also be ascribed to the null marker, supported by the contrast shown in (73). She notes that while the ergative construction in (73)a can be interpreted as accomplishment or activity, the AP construction in (73)b can only be interpreted as activity. She argues that this supports the notion that the null marker is an imperfective marker.

(73) Activity/accomplishment
a. Jaakup illu taanna sanavaa [KA]
Jaaku-p illu taa-nna sana-pa-a
Jacob-E house(A) this-sg.A build-tr.indic-3sgE/3sgA
'Jacob built/was/is building this house (may but need not have finished')'

Activity
b. Jaaku illumik taassuminnga sanavuq
Jaaku illu-*mik* taa-ssuminnga sana-Ø-pu-q
Jaaku(A) house-INS this-sg.INS build- Ø.ap-intr.indic-3sgA
'Jacob is/was building this house (has not finished it yet)'
(Bittner 1987:202)

While I cannot test these judgements in Kalaallisut, the difference between activities and accomplishments has nothing to do with imperfective aspect regardless of language. Imperfective aspect is grammatical aspect or viewpoint aspect, while the difference between activities and accomplishments is in the realm of lexical aspect or Aktionsart (Vendler 1957). While we will see in chapter 3 that imperfective aspect shows almost always atelic interpretation, this does not mean imperfective viewpoint is the same as lexical aspect, i.e. atelicity. Thus, the contrast in (73) cannot support the idea that the null marker is an imperfective marker like the overt markers. The imperfective properties of the AP construction have nothing to do with the markers, but seem to be inherent in the construction itself, as shown in the previous section. This result conforms to Dixon's statement that AP's have unbounded or imperfective aspect in other languages too (Dixon 1994). Since, for example most Australian languages use reflexive markers as AP markers (Terrill 1997) it is unlikely that they are reinterpreted as imperfective markers. Furthermore, Bittner's whole argument that these markers are aspectual markers is based on the fact that they also occur in non-AP constructions. However, the imperfective meaning is lost in the ergative construction even when these markers are present.

Another argument against the proposal of a null marker comes from its distribution compared to the overt markers. In the literature, there have been several mentions that null intransitivisers only occur with "agentive verbs" (Fortescue 1996a:36). Sadock (1980:304-306) also notes that

> "Many basically transitive verbs, but by no means all, can be used directly as formal intransitives just by affixing intransitive agreement morphemes. In many instances where the English counterpart is an object-deleting verb, the Greenlandic intransitive thus formed has roughly the meaning of the corresponding English intransitive. […] I am not aware of any particular differences in sense between AP's and direct intransitives like (10). It might therefore be possible to regard direct intransitives as AP's with phonologically-null antipassive suffixes." (Sadock 1980:306).

The example (10) referred to in the quote is cited here as (74).

(74) Neqimik nerivunga [KA]
meat-INST. eat-INDIC.-1sg.
'I ate meat.'

(Sadock 1980:305)

Kleinschmidt (1852) also notes that verbs that can be half-transitive without a suffix, "[…] are nevertheless transitive according to their inner nature and always include the thought of an object" (Kleinschmidt 1852:156). If Fortescue's agentive stems, Sadock's object-deleting verbs

and Kleinschmidt's verbs "that include the thought of an object" are to be considered the same type of verb stems, then we have a statement as to the distribution of the null marker. Recall that the proposal of a null marker depends on the analysis of the AP markers as allomorphs of an intransitiviser. If the null markers only occur with object-deleting verbs then they do not really contrast with overt markers. If we do not think of these suffixes as intransitivisers, then, like Kleinschmidt, we might as well assume that there is no suffix.

If we assume that there is a null marker, we depend on the assumption that there is a contrasting overt marker in the same environment. If the null marker contrasts with an overt intransitiviser, then we have evidence that it exists. However, if these overt markers occur in other constructions, then they are not intransitivising markers and have thus nothing to do with the intransitivity of the AP construction. Therefore, the alleged null marker has no empirical basis. On the other hand, if we assume that these markers are aspectual markers, we have to find evidence that the null marker contributes meaning just like the overt aspectual markers. The evidence presented in Bittner (1987) is not convincing.

If the distribution of the null marker is different from the verbs that select for overt markers, then we have no contrast between overt and null markers. If Sadock (1980) is correct that these verbs can be intransitive without any detransitivising operation or marker, positing an intransitivising null marker is redundant.

Furthermore, I would argue that the reason why Bittner (1987) finds that many verbs take many different AP markers is because some of them are not AP markers but the other aspectual variant. *taku-* '*see*', for example, is a null-type verb in Inuktitut and in Kalaallisut, as shown in (75). Assuming the distribution is identical in Kalaallisut; all the overt markers would in fact be the non-AP variants, not the AP markers as illustrated in (76). In that respect, Bittner (1987) is correct in that these are not AP markers, or intransitivisers, but aspectual markers. However, I suggest that the reason why all verbs can take these markers is because with null-type verbs, what we find is not the positional variant with the properties of AP markers, but the variant that is not a requirement for those verbs.

(75) Jesusimik takuvuq/takusivuq/takunnippuq/takullirpuq [KA]
Jesus-*mik* taku-Ø-vu-q/taku-*si*-vu-q/taku-nnig-pu-q/taku-llir-pu-q
Jesus-INS see-ap-intr.indic.3sgA
'He saw Jesus.' (Bittner 1987: 196)

(76) Jesusimik takuvuq/takusivuq/takunnippuq/takullirpuq (suggested analysis) [KA]
Jesus-*mik* taku-Ø-vu-q/taku-Ø-*si*-vu-q/taku-Ø-nnig-pu-q/taku-Ø-llir-pu-q
Jesus-INS see-ap-intr.indic.3sgA
'He saw Jesus.'

While Kalaallisut might be different from Inuktitut, it is problematic to ignore the distribution of the null alternant if we do not know whether the overt morpheme is, in fact, a bona fide AP marker. However, if there is actually no null alternant, then the overt morphemes we do find in the AP constructions presented in Bittner (1987) are not AP morphemes, but simple aspectual morphemes, equal to X-*si* in Inuktitut in examples like (77).

(77) pisuX-*si*-juq [MI]
walk-INCPT-PART.3sg
'he started to walk'

Although I do not have enough conclusive data from Kalaallisut, I suspect that the reason why these verbs occur with any overt aspectual morpheme is that the verbs discussed in Bittner (1987 are mostly null-type verbs. Thus, the overt suffix here is the aspectual variant, not the AP marker variant.

2.3.9.2 Summary

In conclusion, the distribution and relation between the various instances of AP markers in Kalaallisut shows similar patterns to the patterns found in Inuktitut. Counter to the traditional view that all different overt markers are allomorphs of intransitivising morphemes; each overt marker is a positional variant of an aspectual morpheme. My proposal explains the fact that these markers occur in intransitive AP constructions and transitive ergative constructions, but retain some of their original meaning in AP and ergative construction. Furthermore, I claim that the reason why Bittner's data seems to show that all verbs take overt AP markers is because these markers are not the AP marker variant but the aspectual variant. I agree therefore with Bittner's proposal that the AP markers are aspectual markers. However, I claim that there is no null marker and the reason the Kalaallisut data presented in Bittner seems to show that all verbs take all AP markers is because most of the data presented are null-type AP constructions with additional aspectual variants and not bona fide AP markers.

2.3.10 AP morphemes in Labrador Inuttut

The traditional idea that AP morphemes are simply intransitivisers that trigger the intransitive AP construction is investigated in an extensive study on the distribution of intransitivising morphology in Labrador Inuttut in Beaudoin-Lietz (1982). The study examines the distribution of all possible overt intransitivisers in Labrador Inuttut. It provides a classification of verbs according to which intransitiviser they occur with. It further determines which verbs require an intransitiviser when they occur with intransitive agreement. The verb classes are sorted according to:

- whether the verbs can take transitive and intransitive agreement on the root[27]
- if and with which intransitiviser they can occur
- whether they are possible with the passive marker
- and whether they allow for transitivising suffix *-gi*

The last two classes are not relevant for our discussion. Beaudoin-Lietz (1982) considers the intransitivisers *-i*, *-ji*, *-tsi*, *-si*, *-(n)ni(k)*, and *-(t)łi*. For ease of comparison with the Inuktitut discussion, I only consider the results for the intransitiviser *-si*.[28]

The verbs in (78) require an intransitiviser and the verbs in (79) may occur with or without one. The verbs in (78) are thus ungrammatical without an intransitiviser when in an intransitive construction, and the verbs in (79) alternate freely between intransitive constructions with or without intransitiviser.

---

[27] Her study does not discuss whether a null AP marker might be obligatory. This means that verbs that possibly take a null marker are treated as if they do not have an intransitiviser, i.e. AP marker but simply occur with intransitive inflection.

[28] For a complete summary of the results for all intransitivisers see Spreng (2001b:155-190).

(78) a. *atua-vuk[29]
read-IND.3sg

b. *ii-vuk
swallow-IND.3sg
(Beaudoin-Lietz 1982:116)

(79) a. matu-vuk
close-IND.3sg
'It is closed'

b. kapi-vuk
stab-IND.3sg
'he stabbed himself'

c. matu-tsi-vuk
close-INTR.-IND.3sg
'he closes something'

d. kapi-*si*-vuk
stab-INTR.-IND.3sg
'he stabs someone'
(Beaudoin-Lietz 1982:122/125)

The markers in Labrador Inuttut have different phonological properties and somewhat different meaning when they do not occur in AP constructions. The Labrador Inuttut AP morpheme just like the Inuktitut *-si* deletes preceding consonants (depicted with 'X') when not occurring in an AP construction. The example in (80) shows the marker *-si* in an ergative construction where the final consonant [k] of the verb has been deleted. When *-si* occurs in an intransitive construction, deletion does not happen. Furthermore, Beaudoin-Lietz (1982) claims that they only have meaning when not occurring in an AP construction. X-*si* in Labrador thus only carries the meaning of *starting to, process of, now,* in non-AP constructions.

(80) -Xsi- 'now, in the process of, starting to' [30] (allows transitive agreement)

aniX-*si*-vaga
go.out-now-1sg/3sg
I am now going to put it outside
(Beaudoin-Lietz 1982:75)

---

[29] Hyphenation and glosses are added. One problem with the data is that it is not clear whether examples like (78)a, b are generally ungrammatical or just ungrammatical with a reflexive reading. In SB Inuktitut, *read* is a different root and is perfectly acceptable without an intransitiviser, i.e. AP marker. Uqalimaq-tunga [SB]
read-PART.1sg
'I'm reading'

[30] Consonant deletion in Labrador is doubtful according to newer data since verb roots in Labrador Inuttut never end in a consonant (Johns, p.c.) Beaudoin-Lietz is working on the basis of older literature (Kleinschmidt 1852, Bourquin 1891). The fact however remains that they occur also in non-AP constructions, making it unlikely that their sole function is as intransitivisers. Beaudoin-Lietz does remark that for younger speakers, the form of the inflectional paradigm acts as if there was no root-final consonant. (Beaudoin-Lietz 1982:14).

As shown in (80), when *-si* occurs in an ergative construction (with transitive agreement inflection), it has progressive meaning. According to Beaudoin-Lietz, this meaning is not apparent when *-si* is used in an AP construction.[31]

However, we, again have possibly two variants of the same morpheme. In Labrador Inuttut, the marker that occurs in the non-AP construction causes deletion of a preceding consonant, while that does not happen in an AP construction, a fact reminiscent of the Inuktitut variants *-si* and *-X-si*. While the exact phonological properties are different, the important fact is that in both all dialects, the occurrence of an AP marker in different constructions correlates to differing phonological properties.[32]

(81)	Kalaallisut	Labrador Inuttut	Inuktitut
AP construction	*-llir*(gemination)	*-si*	*-si*
non-AP construction	*-lir*	*-Xsi*	*X-si*

The same questions arise. If the meaning is different between *-si* and *-X-si*, are they different morphemes? What type of verbs selects these markers? How different are the meanings really? Unfortunately, the answer is not apparent in Beaudoin-Lietz, since she does not investigate the meaning of AP constructions or the meaning of the intransitiviser in the AP construction. They are listed as different morphemes in Smith (1978:92), where examples show that they differ in whether they delete preceding consonants or not.

However, the parallels to Kalaallisut and Inuktitut are there. We have a possible morpheme that occurs in different constructions and has different phonological properties depending on which construction it occurs in. This fact alone lends more support to my analysis that the AP markers are variants of aspectual morphemes since these apparent intransitivisers occur in transitive

---

[31] Since Beaudoin-Lietz assumes that *-si* and *-X-si* are meaningless intransitivisers, her direction of inquiry does not consider that these might be the same morphemes. Note that the progressive meaning seems to occur in AP constructions as well (see next footnote).

[32] Note that this can only be observed if there are verb roots that end in a consonant. Nothing happens with vowel-final roots.

ani-vuk	ani-*si*-vuk
go.out-ind.3sg	go-out.ind.3sg
he went out	'that person is now going to the outside' (Beaudoin-Lietz 1982:75)

constructions too. Of course, they could just be completely different morphemes. It is however striking, that similar patterns exist in both languages.

2.3.10.1 The null marker in Labrador Inuttut

Beaudoin-Lietz notes that the only verbs that occur with overt intransitivisers, i.e. AP markers, are change-of-state verbs. Verbs that alternate between transitive and intransitive inflection without any overt intransitivisers are stative verbs, "[…] verbs of external agency" […], verbs of perception and information processing […], verbs that show goal orientation (among them verbs of motion) and optional agency […], and "[…] verbs of emotion […]" (Beaudoin-Lietz 1982:140). The group that requires an overt intransitiviser is thus a rather small group compared to the verbs that freely alternate between intransitive and transitive constructions. This again begs the question: Does the possibly large group of other verb types all occur with a null intransitiviser? If null marker and overt intransitivisers were allomorphs of an intransitivising morpheme, as the traditional analysis claims, that would imply that the null marker is the 'regular' allomorph, while the overt ones are irregular or more marked.[33] This is a rather interesting result since it contradicts the widely held view that AP markers are necessary for the AP construction. If it were the case that AP markers are needed for the AP construction, then why is it that seemingly most of the verbs in the language do not take an overt AP marker but an alleged null marker? If the traditional view is correct that the AP marker is always necessary, then it is highly unlikely that that marker would be null.

Null morphemes were proposed in order to account for the presence of the AP construction's case and agreement configuration in the absence of phonological material. On the other hand, Beaudoin-Lietz's statement on which verbs actually require the overt AP marker in Labrador Inuttut suggests that the null marker is a lot more common and a lot less specified with regard to its conditioning environment than the overt variants of the intransitivising morpheme. The overt marker occurs only with a small and very specific group of verbs, while the lexical environment for the null marker includes various different types. It is entirely possible that the most common,

---

[33] Wharram (2003) notes in a footnote that it seems that the Baffin dialects use the null marker more often than Kalaallisut. This would corroborate the view that more verbs occur with no overt AP marker.

i.e. least specified allomorph of an abstract morpheme, here, an intransitivising morpheme is a null allomorph.

2.3.10.2 Summary

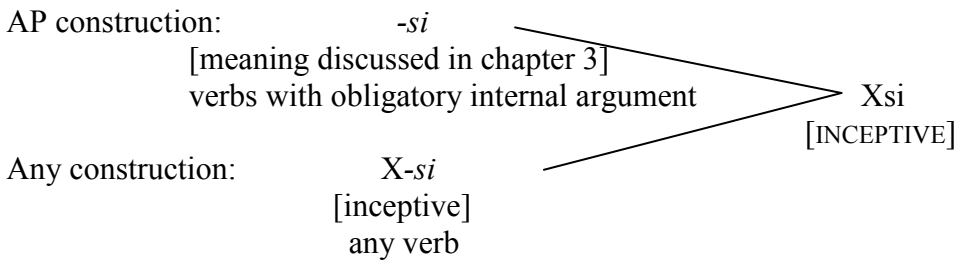
Based on the findings in Beaudoin-Lietz's study and the problems that have been raised in the above sections, I suggest that the patterns of distribution of *-si*-type AP constructions and null-type AP constructions are similar if not identical to the ones found for Inuktitut. Like Inuktitut, the AP markers in Labrador Inuttut show homophonic equivalents to aspectual markers, albeit it is not clear if they share the same meaning.

Again, the analysis that these markers are intransitivisers is not tenable since *-si*-type verbs are semantically different from null-type verbs, thus not sharing the same distribution. Furthermore, under my proposal, there is no null aspectual morpheme or a null intransitiviser. My proposal has the advantage over traditional views that it explains the distribution of the AP marker, and that it can explain why these marker occur both in the intransitive AP construction and in the transitive ergative construction. If they were intransitivisers then there is no explanation why they only fulfill an intransitivising function in the AP construction. If we were to take them as separate morphemes, then we have a no explanation why this homophony happens across all Eskimo languages and also in unrelated languages.

2.4 Summary of AP morpheme distribution

The selection of the overt AP morpheme is not a lexical accident, but is predictable by the argument structure of the verb to which the AP morpheme attaches. Verbs that obligatorily have an internal argument in their argument structure require the AP morpheme in the AP construction. Counter to previous descriptions and assumptions, there is no null AP morpheme or allomorph. Verbs that seemingly occur in an AP construction with null AP morpheme or allomorph are object-permitting verbs that crosslinguistically allow for an optional overt internal argument. The same distribution can be attributed to various other dialects, as shown in the discussion on Kalaallisut and Labrador Inuttut. From a crosslinguistic perspective, it is interesting to note that this distribution is mirrored in other languages, such as Halkomelem (Gerdts and Hukari 2005).

(82) The distribution of *-si* in Inuktitut



This chapter has proposed an analysis of the distribution of AP morphology on the basis of morphological and morphosyntactic grounds. The next chapter discusses what the exact meaning difference is between AP constructions and non-AP constructions. I will further determine the meaning difference between null-type verbs and *-si*-type verbs, providing an explanation as to why *-si*-type verbs require an aspectual marker in the AP construction.

The Semantics of the Antipassive

3 Aspect in Inuktitut

The previous chapter has established the morphosyntactic distribution of the AP morpheme, and I have proposed that the verb's argument structure determines whether an AP morpheme is selected. Only verbs that have an obligatory internal argument, either, because they are unaccusative when intransitive, or because they are obligatory transitive verbs, require an AP morpheme. As shown in section 2.3.7.1, *-si*-type verbs may only occur without an internal argument when in the AP construction. They occur with an internal argument when in a canonical intransitive construction as well as in the ergative construction. Null-type verbs on the other hand, may always occur without an internal argument. Moreover, canonical intransitive and null-type AP construction do not differ at all with respect to the optionality of an internal argument.

Furthermore, I have shown that the AP marker is a positional variant of an aspectual morpheme. Therefore, the question arises why an aspectual morpheme would be necessary for a certain type of construction. This chapter attempts to answer this question.

The investigation answers two questions. Firstly, what are the semantic properties of the verbs that require the AP marker as opposed to the semantic properties of the verbs that do not? Secondly, what semantic property of the AP construction requires *-si*-type verbs to occur with an AP marker, which is not necessary for null-type verbs?

I argue in this chapter that the semantics of the aspectual morpheme are necessary for the semantics of the AP construction for *-si*-type verbs. Since the AP marker is an aspectual marker, I argue that the aspectual properties of the AP construction must be different from the ergative or canonical intransitive construction. This means that since null-type verbs do not require the aspectual marker in the AP construction, they must already be compatible with the aspectual properties of the AP construction. On the other hand, *-si*-type verbs are not compatible with the aspectual properties of the AP construction.

Thus, the AP marker is necessary for these aspectual properties only for *-si*-type verbs. This means that *-si*-type verbs must be aspectually different from null-type verbs. I argue that *-si*-type verbs and null-type verbs since it is the root that selects for the AP marker. Lexical aspect is comprised of two properties, telicity and punctuality (Vendler 1957). Thus, *-si*-type verbs and null type verbs may be distinct in punctuality or telicity or both. Therefore, I am investigating the following hypotheses.[34]

A) *-si*-type verbs and null-type verbs are distinct in telicity. Based on previous attempts to characterise the semantics of AP constructions as atelic (Bittner 1987) or generally unbounded (Dixon 1979), one could therefore assume that the AP marker turns telic verbs into atelic predicates. This hypothesis predicts that only telic verbs require the AP marker.

B) *-si*-type verbs and null-type verbs are distinct in punctuality. This hypothesis predicts that the semantics of the AP require punctual verbs to become durative, or vice versa. Considering the above generalisation made in Dixon (1979) and the pattern observed in other languages that AP constructions tend to be unbounded, it is more likely that the AP marker might turn punctual verbs into durative verbs as previously proposed in Clarke (2009). This hypothesis predicts that only punctual verbs require the AP marker.

If both hypothesis A) and B) turn out to be correct, then both punctuality and telicity determine whether we have a *-si*-type AP or a null-type AP.

With respect to the semantics of the AP construction, I propose, counter to previous suggestions (Bittner 1987), that the semantics of the AP construction differ from the ergative construction not in telicity (Benua 1995), or durativity (Clarke 2009), but in viewpoint aspect. While Bittner (1987) and Benua (1995) suggest that the AP construction is atelic, Clarke (2009) proposes that there is no viewpoint contrast to the ergative construction. Both former proposals follow the general pattern that the "unbounded" member of the contrasting pair is the AP construction (Dixon 1979, Tsunoda 1981, Davison 2004 for Hindi), not the ergative construction. I argue that the AP construction has imperfective viewpoint, while the ergative construction has perfective

---

[34] I am disregarding for now that not only verbs roots, but also causative suffixes require the AP marker and discuss only verb roots.

viewpoint, also following the generally observed crosslinguistic patterns that the AP construction is "unbounded".

I will show that the apparent telicity contrasts between ergative and AP construction are based on the fact that imperfective viewpoints are less compatible with telic judgments. That does not mean that atelic events are imperfective, only that imperfective viewpoints influence telicity judgements. I will show that telicity contrasts can only clearly be observed when we compare two events from a perfective viewpoint, while this is not possible with imperfective viewpoints.

The proposal explains the markedness relations between lexical aspect and viewpoint aspect crosslinguistically (Basilico 2008 for Russian) and more specifically in Inuktitut. For example, in Russian, imperfective roots tend to be atelic and when they are marked with perfective suffixes, they are telic. In English, punctual verbs have a more marked meaning with imperfective viewpoint than durative activities and accomplishments.[35]

For Inuktitut, the proposal explains the semantic distribution of the AP marker and shows why the inceptive marker is the most common AP marker in Inuktitut and other Eskimo languages. I argue that the inceptive marker *-si* and the iterative marker *-saq* make imperfective readings for punctual verbs available. We will see that inceptive and iterative readings are imperfective readings for punctual verbs, not only in Inuktitut but also in other languages.

I thus show that the imperfective has more than just a continuous reading as outlined in Comrie (1976). I will argue that the reason durative verbs do not require an AP marker is because durative verbs are by default imperfective, while punctual verbs are by default perfective. Punctual verbs thus have imperfective readings that are mirrored in the meaning of the AP markers with which they occur. I will show that these imperfective readings are not unique to Inuktitut, but are also available for punctual and other verbs in languages where viewpoint aspect is grammaticised.

Furthermore, I argue that any possible correlation between viewpoint aspect and lexical aspect must be framed as an analysis that takes into account not only telicity but also punctuality, the

---

[35] This is illustrated in the so-called "imperfective paradox" discussed in Rothstein (2004a).

second Aktionsart property outlined in Vendler (1957). I will show that both properties of lexical aspect are necessary to determine the aspectual properties of AP's. The reason why some languages seem to exhibit a one-to-one correlation between perfectivity and telicity is based on the properties of viewpoint aspect. While previous approaches to the relation between lexical and viewpoint aspect argue that telicity determines viewpoint aspect, I argue that there is no such relation. Telicity does not determine viewpoint aspect in any way. Furthermore, I propose that imperfective viewpoint obscures telicity judgements and that telicity contrasts are only observable with perfective viewpoint. Imperfective viewpoint on the other hand obscures telicity contrasts.

While lexical aspect is a property of predicates, viewpoint aspect is an operation that puts a different focus on the properties of events (Smith 1991). In English, for example, the imperfective changes the telicity judgements for the same verb and the same internal argument, as shown in (83)a. The telicity judgements may reverse when using the imperfective in (83)b.

(83) a. He drank the beer in half an hour/*for half an hour. [telic]
b He was drinking the beer for half an hour/*in half an hour. [atelic]

Using the imperfective seems to render the clause atelic, assuming the commonly known adverbial test for telicity is applicable. Telic predicates are taken to be compatible with *"in X time"* adverbials, while atelic predicates are only compatible with *"for X time"*. The same cannot be said for punctual telic verbs, as shown in (84). While the imperfective is unacceptable with the telic adverbial, it is rather questionable with the atelic adverbial. The telicity contrast is thus clear only in the perfective form. I will show that the reason for this lies in the properties of viewpoint aspect and in the approach to telicity one takes.

(84) a. He broke the glass in a second/*for a second. [telic]
b He was breaking the glass *in a second/?for a second. [telic]

While some work on aspect has argued that telic predicates are by default interpreted as perfective and atelic predicates as imperfective (Bohnemeyer and Swift 2004), I argue that the markedness correlation is not between *telicity* and viewpoint, but between *punctuality* and viewpoint aspect. Thus, I argue that it is more likely that punctual verbs are more marked when

used in the imperfective, while durative verbs might be more marked when used with the perfective.

I have shown in chapter 2 that the argument structure of a verb determines the distribution of the AP morpheme. Thus, I argue that punctual verbs in Inuktitut are verbs that require an internal argument. Thus, I can show a connection between lexical aspect and argument structure as previously discussed in Alexiadou et al. (2003). However, where most approaches discuss a connection between telicity and argument structure, I argue that telicity alone is not enough to draw a connection between lexical aspect and argument structure.

I further propose that viewpoint aspect in Inuktitut differs from viewpoint aspect in English in the following properties. Viewpoint contrasts in English is encoded in verbal agreement and tense morphology. In Inuktitut, viewpoint aspect contrasts are dependent on two factors: a) the punctuality of the verb and b) the case and agreement configuration of a sentence. I argue that a) is universal, while b) is part of language variation. For example, while English viewpoint aspect is based on properties of inflectional morphology, Inuktitut viewpoint is based on case and agreement.

The analysis is framed in a modified Reichenbachian (Reichenbach 1947) analysis, partly adopting the analysis in Borik (2002) and Borik and Reinhart (2004), which I modify to account for the Inuktitut viewpoint aspect facts. Viewpoint aspect is defined here as a subset relation between E(vent) time and (R)eference time. In English, tense is a necessary part of viewpoint aspect, leading to the inclusion of the relation between R and (S)peech time as a part of the conditions for viewpoint aspect. We will see that in Inuktitut, tense is not part of viewpoint aspect.

The proposal was inspired by Dixon (1994) who noted that antipassive constructions when present in ergative languages are unbounded in contrast to ergative constructions.[36]

Section 1 in this chapter discusses informal descriptions and classification of viewpoint aspect. Section 2 formalises viewpoint aspect based on English and gives an analysis of the differences

---

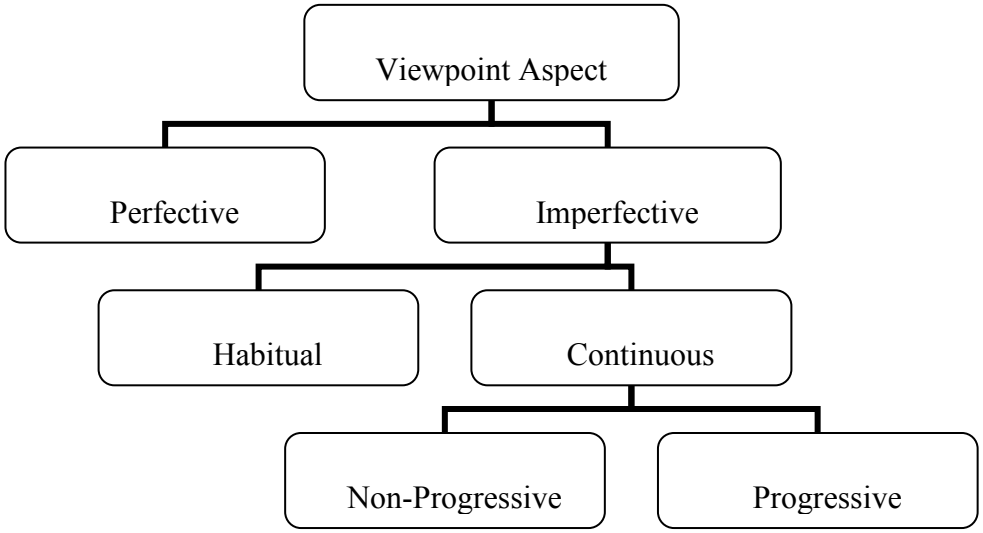
[36] A similar claim has been made for accusative constructions in split-ergative languages (Tsunoda 1981). See also Spreng (2010). I will return to the issue in chapter 4.

to the viewpoint aspect system in Inuktitut. Section 3 discusses the role of the AP morpheme in the meaning of the AP construction. Section 4 provides further empirical support for my proposal that the AP construction is imperfective and discusses the relation between lexical and viewpoint aspect. Section 5 summarises the findings and conclusions of chapter 3.

3.1 Viewpoint aspect

Viewpoint aspect, or grammatical aspect as defined in Comrie (1976), distinguishes between imperfective and perfective viewpoint. Informally, perfective viewpoint aspect means we view an event as a whole from the outside. Imperfective viewpoint means viewing an event from within, while it is ongoing (Smith 1991). While there is only one type of perfective aspect, there are different types of imperfective aspect, which may be subdivided into habitual vs. continuous; the latter of which may be progressive or non-progressive.

(85)



(Comrie 1976:25)

Comrie (1976) points out that the difference between perfective and imperfective is not a difference of completion. When we view an event as perfective, there is an implication that it is completed; however, it is only an implication. Perfective viewpoint does not mean an event is complete and imperfective viewpoint does not mean an event is incomplete. Completion is an objective property of an event, while viewpoint aspect is, literally, a point of view. Point-of-view is informally defined in Smith (1991) as a temporal viewpoint of an event that focuses on

different aspects of its temporal structure. Thus, the contrast between imperfective and perfective viewpoint is its focus. Imperfective viewpoint focuses on the "within" of the event, while perfective viewpoint focuses on the event as a whole, disregarding any progress, internal structure, endpoints, or duration.

The fact that perfective viewpoint implicates completion and imperfective implicates incomplete events has often led to proposals that assume a correlation between viewpoint aspect and lexical aspect; specifically telicity. Since telicity is often analysed in terms of whether an event has an endpoint (Tenny 1994), the correlation seems obvious at first glance. Telic events, i.e. events with an endpoint would be completed, while atelic events, i.e. events without endpoint, would be incomplete. Some works argue that the two are correlated in the sense that atelic events are interpreted as imperfective, while telic events are interpreted as perfective (Van Hout 2000a, Ramchand 2008, Basilico 2008 for Russian). Bohnemeyer and Swift (2004) argue that atelic events would be interpreted by default as imperfective, while telic events would be perfective by default. They allow for the opposite to happen, which means that when atelic events are interpreted as perfective, there is a higher degree of markedness in the morphology. Regardless of the type of relation that is proposed, the agreement seems to be that lexical aspect influences viewpoint aspect, not vice versa.

I will argue that this seeming correlation is not a dependency correlation where telicity determines viewpoint aspect. Instead, I argue that different viewpoints influence our telicity judgements. As Kratzer (2004a) points out, while the three sentences in (86) are compatible with adverbials that supposedly show that the event is atelic, only one of them *can* be atelic.

(86) a. I was shooting the buffalos. a.' I was shooting (at) the buffalos all day.
b. I shot at the buffalos. b.' I shot at the buffalos all day.
c. I shot the buffalos. c,' *I shot the buffalos all day.
(Kratzer 2004a:397)

In a context where a herd of buffalos is running at you and you fire a shot at them to make them turn around, (86)a is incorrect, while (86)b is correct. The reason why the imperfective (86)a is incorrect with the single shot reading, is because the imperfective implies that there is repeated shooting. Furthermore, the implication in this context is also that it took some time (86)b'. Without the adverbial, it could be the case that I was shooting the buffalos until none were left.

With the imperfective (86)a, the reason we judge it as atelic is the imperfective since *all day* is compatible with both *shooting at the buffalos* and *shooting the buffalos*. It is thus independent from the status of the internal argument. The perfective however is only judged as atelic in (86)b because of the PP *at the buffalos*. If the internal argument has accusative case, it has to be telic, as shown in the ungrammatical (86)c'.

These examples show that our telicity judgements are influenced by the viewpoint and not vice versa. Perfective viewpoint treats events as a whole. If the event is viewed as a whole, the implication is that it has ended. If we analyse telicity with respect to the end of events, the clear contrasts may only be seen with the perfective.

Based on data from Mandarin Chinese, Smith (1991) argues that in addition to perfective and imperfective, some languages have a neutral viewpoint. A language has neutral viewpoint when there is no morphosyntactic feature or grammatical morpheme that encodes imperfective or perfective viewpoint, thus requiring contextual, but not grammatical information to disambiguate between viewpoints. Although Mandarin Chinese has perfective and imperfective morphemes, they are not obligatory. In (87)a, none of the viewpoint morphemes is present. Thus, one can answer both questions in (87)b and c, and could receive the imperfective answer in (88)a, the perfective one in (88)b and c, or the neutral one in (88)d. Neither one of the viewpoint morphemes has to be present, indicating that there is no obligatory or default viewpoint aspect feature like in English (Cowper 2005).

(87) a. Zhangsan xiuli yige luyinji
Zhangsan repair one CLtaperecorder
Zhangsam repaired/is repairing a tape recorder.

b. Ta hai zai xiuli ma?
he still ZAI xiuli MA
Is he still repairing it?

c. Ta xiuli-hao-le ma?
He finish-RVC-LE MA
Did he finish repairing it?

(88) a. Ha zai xiuli
still ZAI write
He is still repairing it.

b. Xiuli-le
repair-LE
He stopped (repairing it)

c. Xiuli-hao-le
repair-RVC-LE
He finished (repairing it)

d. Bu zhidao
not know
I don't know

(Smith 1991:364)[37]

Standard German would also be such a language. "[…] German has no equivalent to such verb phrases (i.e. the so-called progressive form) and invariably uses a finite verb form instead […]" (Kufner 1962:72) or more recently, "In one respect, certainly, German is simpler than English: it does not have the progressive aspect." (Fox 2005:199). However, in contrast to Mandarin Chinese, there is no grammatical morpheme at all that indicates viewpoint aspect. There is no grammaticised way to encode viewpoint aspect, which has to be determined by other means, such as adverbs. The example in (89)a has a default reading of continuous imperfective aspect, as in (90)a, but without context, it may just as well be interpreted as habitual, as in (90)b. Note that, counter to Comrie (1976), habitual aspect is considered stative in Cowper (1999)[38] and perfective in Smith (1991).

(89) German: neutral
a. Ich arbeite
I read-PRES.1sg
'I work/I am working'

English: imperfective
b. 'I am working'

English: perfective
c. 'I work'

(90) a. German: imperfective
Ich arbeite gerade
I work-PRES.1sg right now
'I am working right now'

b. German perfective (habitual):
Ich arbeite bei Siemens
I work-PRES.1sg at Siemens
'I work at Siemens'

The verbal inflection in Standard German only encodes tense, person, and number, and unlike in English, viewpoint aspect is not encoded in INFL. In English, simple tenses encode perfective

---

[37] RVC: resultative verb complement; CL: clitic; ZAI: imperfective; LE: perfective

[38] Since imperfective is always eventive in Cowper (1999), statives have no perfective/imperfective contrast. We will see that that might also apply to Inuktitut (section 0).

viewpoint aspect, while any *be+ing* form encodes imperfective aspect.[39] INFL thus always encodes viewpoint aspect in English in some way, while in Standard German, it never does.

We see here that not every language grammaticises the contrast between perfective and imperfective viewpoint. Furthermore, there are also different ways to grammaticise the contrast. While in English, viewpoint aspect is grammaticised through a morpheme that combines viewpoint aspect, tense, and agreement features, and Chinese has special morphemes for viewpoint aspect, I argue that Inuktitut grammaticises the perfective/imperfective contrast through the difference in case/agreement configurations between ergative and AP construction.

Clarke (2009) argues that Inuktitut has neutral viewpoint similar to German since there is no viewpoint component to the verbal agreement morphology and also similar to Mandarin Chinese in that the morphology for viewpoint is optional. She argues that since there is no viewpoint feature on INFL in Inuktitut, the default interpretation is thus also neutral viewpoint. Thus, every clause is by default ambiguous and needs to be disambiguated by context or through non-grammaticised means. Clarke argues that the AP morpheme is a durative morpheme that accomplishes a durative reading, not an imperfective morpheme due to the absence of a viewpoint aspect feature on INFL. The proposal is partly based on the idea that depending on whether there is an actual viewpoint morpheme for one of the viewpoints, the other one is the default interpretation (Cowper 1992).

The AP morpheme is thus a durative morpheme, turning punctual verbs into durative ones. Clarke argues that Inuktitut has no Event feature [Moment] or [Interval] spelled out. While I agree that the AP morpheme is not an imperfective morpheme spelling out an [Interval] feature that cannot be found on INFL, I claim that the marker is necessary for certain types of verbs to enable an imperfective reading that these verbs do not have by default. I argue that as long as the language has both ergative and AP construction, there is no neutral viewpoint in Inuktitut like in German or Mandarin. The absence of viewpoint morphology on INFL is not sufficient evidence that a language has no viewpoint contrast. Viewpoint aspect contrasts are not necessarily tied to verbal morphology on INFL, such as *be+-ing*, but may be grammaticised somewhere else in the

---

[39] I am ignoring present/past perfect in English and Inuktitut, treating any past as if it is one property. See a detailed treatment on present perfect in English and Inuktitut in Hayashi (2010).

agreement system. While I will discuss how agreement-based viewpoint aspect is derived in Inuktitut in chapter 4, it should be noted that a correlation between viewpoint aspect and case and agreement changes is by no means unique to Inuktitut. For example, Finnish object case changes correlate to a change in boundedness (Kiparsky 1998, 2001), indicating that the functional head that is responsible for object case plays a role in aspectual contrasts. Another example is provided by some dialects of German, which show an imperfective viewpoint through case loss on the internal argument (Barrie and Spreng 2009). While it is often assumed that the contrasts in Finnish are telicity contrasts, I will show in chapter 4 that that the contrasts have to do with viewpoint aspect.[40] As shown above in (86), viewpoint aspect does influence telicity judgements, thus making some claims about whether an event is atelic problematic. For example in Finnish, where partitive case is said to be responsible for atelic judgements, it is not clear whether this is because viewpoint has changed to imperfective or because the predicate has become atelic. "As predicted by the Transitivity Hypothesis, the accusative - the case of the totally affected O - gives the clause a perfective or telic value, while the partitive gives it an imperfective or atelic one […]" (Hopper and Thompson 1980:262). The translation of the Finnish examples in (91) would certainly suggest a contrast between perfective (91)a with accusative case and imperfective (91)b with partitive case instead of a telicity contrast.

(91) a. Liikemies kirjoitti kirjeen valiokunnalle.
businessman wrote letter (ACC) committee-to
'The businessman wrote a letter to the committee.'

b. Liikemies kirjoitti kirjettd valiokunnalle.
businessman wrote letter (PART) committee-to
'The businessman was writing a letter to the committee.'

(Hopper and Thompson 1980):262)
(cited from Fromm and Sadeniemi 1956: 120-121)

I argue in this chapter that claims about telicity contrasts might need to be re-examined under the view that imperfective viewpoint may influence telicity judgements when we consider examples as sketched in the beginning of this chapter (repeated here as (92).

---

[40] This has been concluded in Kiparsky (1998).

(92) a. He drank the beer in half an hour/*for half an hour. [telic]
b He was drinking the beer for half an hour/*in half an hour. [atelic]

That my proposal that the ergative construction is perfective while the AP construction is imperfective is headed in the right direction is indicated in that boundedness is often associated with a higher degree of transitivity, as pointed out in Hopper and Thompson (1980). However, whether this correlation is between transitivity and telicity or between transitivity and perfectivity is not yet clear. While I do not claim that agreement-based aspectual changes refer to viewpoint in every language, the correlation between transitivity and viewpoint aspect I am proposing does not contradict the crosslinguistic pattern. Furthermore, if I am correct and imperfective viewpoint disallows telic judgements, then atelic interpretations of constructions with partitive case would be expected.

3.1.1 Imperfective viewpoints

Comrie (1976) suggests various interpretation types for imperfective viewpoints as sketched in (85) above. The first distinction is between habitual and continuous. This captures the difference between an imperfective viewpoint that is possible through iteration, i.e. habitual, and a process that is ongoing but not repeated.

(93) a. He smokes regularly [habitual]
b. He used to smoke [habitual]
c. He is smoking [continuous]

In (93)a, it is implied that the event of smoking (cigarettes, pipes, anything) is repeated. In (93)b, the same is implied. Example (93)c means that at the moment of utterance, there is smoking. Comrie makes a point in noting that habituality is not necessarily iteration. Stative verbs allow a habitual viewpoint without there being any kind of iteration. In (94), we have a habitual viewpoint without any iteration.

(94) The temple of Diana used to stand at Ephesus.

(Comrie 1976:27)

Comrie`s definition of imperfective viewpoints emphasises the durative nature of imperfective viewpoints. Therefore, habitual statives like in (94) are also considered imperfective. This view of habituality conflicts with other approaches to habituality, which argue that habitual aspect is perfective viewpoint (Chierchia 1995) or stative, which means that it does not express a contrast between imperfective and perfective viewpoint (Cowper 1998, 1999). In English, stative verbs when put in an imperfective form, they express very different meaning from their original meaning. Furthermore, Cowper (1999) shows that imperfective viewpoints are always eventive in English, while perfective viewpoints are not necessarily eventive. Thus, statives like (94) would be considered neither perfective nor imperfective. Under a formal analysis of viewpoint aspect, we will see that, while habituality cannot possibly be an imperfective interpretation, there is a possibility that it is perfective. Since habituality is also not a possible default interpretation for the AP as will be discussed in section 3.2.3.3, thus I adopt the notion that habituality is not an imperfective viewpoint for now.

According to Comrie, continuous viewpoints may be distinguished between progressive and non-progressive viewpoints, thus capturing the distinction between ongoing events that imply moving towards some sort of result, i.e. progressive, and ongoing events that do not. For example, when stative verbs are used in the imperfective, they may be coerced into a progressive meaning (95)a that they do not have otherwise (95)b.

(95) a. I'm understanding more about quantum mechanics as each day goes by.
b.* I'm understanding you.

(Comrie 1976:36)

The distinction between continuous and progressive is not distinguished in English, but Mandarin Chinese has two different morphemes to express the distinction. The marker *zhai* in (96) is considered the progressive marker, indicating "[…] an internal interval of a durative situation, and often has the connotations of activity and the temporary associated with non-statives." (Smith 1991:357).

(96) a. Tamen zai da qiu (Activity)
they ZAI play ball
'They are playing ball'

b. Zhangsan zai xie yifeng xin (Accomplishment)
Zhangsan ZAI write one CL letter
'Zhangsan is writing a letter'

(Smith 1991:357)

According to Smith, *zai* is not compatible with stative or instantaneous events, as shown in (97).

(97) a. *Ta zai zing sai pao
he ZAI win race run
'he is winning the race'

b. Lao Wang zai si
Old Wang ZAI die
'Old Wang is dying'

(Smith 1991:357)

A "[…] continuous and stable situation without regard to endpoints […]" (Smith 1991:358) is expressed in Mandarin Chinese with *-zhe.* It occurs with stage-level predicates (98)a, which "[…] present(s) the internal stages of events in a static manner […]" (Smith 1991:359) or with resultatives (98)b, but not with individual-level predicates (98)c.

(98) a. Qiang shang gua-zhe ji zhang huar
wall on hangZHE several CL picture
'Several pictures are hanging on the wall'

b. Women bici shen aizhe, bici yilaizhe
we e.o. deep loveZHE, e.o. relyZHE
'we deeply loved each other, and relied on each other'

c. ??Ta yixian chengzhi-zhe
he always honest
'he is always honest'

(Smith 1991:359)

I suggest that there are three more imperfective viewpoints available for punctual verbs. When punctual verbs are used in the imperfective, they may be interpreted as inceptive (99)a.i, (99)b.i., (99)c.i., iterative (99)a.ii, (99)b.ii, or prolonged (99)c.iii.

(99) a. 'win'
i. They are winning the soccer world cup. (said 5 minutes before the final game ends)
Literally: 'they are about to win the world cup' [inceptive]

ii. They are winning every game. (said at any time during the tournament)
Literally: 'they have been winning every game' [iterative]

b. 'touch'
i. He is touching the painting! (said watching someone about to touch a painting
Literally: He is about to touch it. [inceptive]

ii. He is touching the painting. [iterative]
Literally: He keeps tapping the painting.

iii. He is touching the painting. [prolonged]
Literally: He is stroking it.

c. 'arrive'
We are arriving at Heathrow in five minutes. (said by a pilot before landing commences)
Literally: We are about to arrive in 5 minutes. [inceptive]

i. *He is arriving over and over. [iterative]
(ok with a broken time machine)

ii. He arrives every 5 minutes. [habitual-iterative]
(with a broken time machine)

Some verbs are a little more flexible in their interpretation, such as (99)a, b, while others only allow for an inceptive reading, such as (99)c. The habitual reading of '*arrive*' is only possible with the simple tense, thus providing further support that simple tenses are not imperfective in English.

The imperfective meanings shown in (99) are interpretations of punctual verbs in the imperfective. For Inuktitut, I will show that these meanings are enabled through the AP morpheme with transitive punctual verbs.

3.1.2 Perfective viewpoint

Informally, perfective viewpoint is defined as viewing the event as a whole, disregarding progress, process, iteration, endpoint, or beginning. The notion of perfective aspect is often equalled with the idea of completion or culmination. Comrie (1976) highlights that the notion of "completed" puts unnecessary emphasis on whether the event is actually completed. I follow Comrie (1976) in that respect and take the view that it is only the speaker's viewpoint that

implies that the event is complete, which does not mean that the event is necessarily complete in any possible world. Whether the event is completed or not is neither relevant for perfective nor imperfective viewpoint and can usually be negated.

(100) a. I worked here before and I still do. [perfective]
b. I am working here but I'm done for today. [imperfective]

(100)a has perfective viewpoint interpretation, but the continuation is grammatical. (100)b has an imperfective viewpoint, but the culmination is also grammatical. There is no contradiction between an imperfective viewpoint and the event being finished. Completion is thus not part of the viewpoint aspect interpretation. There is an implication that it has ended but no entailment. This phenomenon may be exemplified in languages with neutral viewpoint, such as Standard German. For example, the verb *ankommen* '*arrive*' in (101)a is a classic punctual and telic achievement verb, but without context, it is either interpreted as imperfective, ambiguous between iterative and habitual, as in (101)c,[41] or future, as in (101)d.[42] It may only be disambiguated by adding an temporal adverb or PP, as in (101)b, c, d. Therefore, even if the contrast is not grammaticised, the telicity of the verb thus does not force any viewpoint.

(101) a. Ich komm-e an
I come-PRES.1sg at
'I arrive/am arriving'

b. Ich komme **gerade** an [inceptive-imperfective]
'I am arriving **right now**.'

c. Ich komme **jeden Tag um 5 Uhr** an [habitual or iterative]
'I arrive every day at 5 o'clock'

d. Ich komme **morgen früh** an. [future]
'I will arrive/am arriving **tomorrow morning**'

---

[41] It seems that the length of the individual event intervals may influence whether we consider something as iterative or habitual. For example: *I smoke* does not entail that there is smoking where basically one cigarette is lit with the next. However, *I am knocking at your door* implies that the event of knocking is iterated at least twice in rapid succession.

[42] This might as well be inceptive. Note that both imperfective and perfective translations are available.

However, lexical aspect may influence what *type* of imperfective reading we have. For example, the progressive reading is only available for the durative telic accomplishment (102)b, while the continuous reading is only available for atelic verbs (103)c. The difference between progressive and continuous seems to be that progressives are formed from durative telic verbs, while continuous imperfectives are formed from durative atelic verbs.

(102) a. Ich bau-e ein Haus
I build-PRES.1sg a(ACC) house(ACC)
'I build/am building a house'

b. Ich baue **gerade** ein Haus [progressive] (during construction)
right now

c. Ich baue **jeden Tag** ein Haus [habitual, iterative]
every day

d. Ich baue **morgen** ein Haus. [inceptive, future]
tomorrow

(103) a. Ich arbeite
I work-1sg.pres
I work/am working

b. Ich arbeite **mit Kindern** [perfective-habitual]
I work with children

c. Ich arbeite **gerade** [imperfective-continuous]
right now

With a language like English, where the viewpoint contrast is encoded in the morphosyntax of INFL, the same is true. Telicity or culmination does not determine the viewpoint aspect. Only the inflection determines what viewpoint aspect we have. Almost any verb can be interpreted as imperfective or perfective (104). However, some verbs are more marked with imperfective than others. It is well-known that stative verbs do not occur as imperfectives except in a few cases (104)g, h, thus paralleling the patterns in Mandarin Chinese which does not allow any imperfective viewpoints with individual -level predicates .

(104) a. I am arriving any moment now. imperfective-inceptive
b. I arrive at the airport every day at 5 pm. perfective-habitual
c. I am building a house. imperfective-progressive
d. I built a house. perfective

e. I am working.	imperfective-continuous
f. I work here.	perfective-habitual
g. I'm loving it.	imperfective-progressive
h. I'm seeing him.	imperfective-continuous

It seems obvious that durative verbs are less marked in the imperfective than punctual verbs. Punctual atelic verbs, i.e. statives (Vendler 1957), are often either impossible or very marked when used in the imperfective. Furthermore, they become eventive, as discussed in Cowper (1998).

(105) Teddy was being stupid. (imperfective event)
(cf. Teddy was stupid. (property))

(Cowper 1998:16)

Punctual telic verbs, i.e. achievements, are also often said to be incompatible or marked in the imperfective, partly because of the relative unacceptability of examples like (106).

(106) a. #Jane is reaching the summit of the mountain.
b. #Mary is spotting her friend at the party.

(Rothstein 2004a:36)

However, as we have seen, numerous achievements are perfectly acceptable in the imperfective (107), introducing the so-called imperfective paradox in that just like accomplishments (108), they are true although they can be interrupted.

(107) a. He was dying of disease X when they discovered the new wonder drug
(so he didn't die of disease X).
b. The plane was landing when it exploded in midair (so it didn't land).
c. Jane was just reaching the summit when there was an avalanche (so she didn't reach it).

(Rothstein 2004a:39)

(108) a. Mary was building a house when the council took away the permit, so she didn't build it.
b. Jane was writing a paper on achievements when her analysis collapsed,
so she never wrote it.

(Rothstein 2004a:38)

Both accomplishments and achievements have the same entailment relations between perfective and imperfective viewpoint (109), contrasting with atelic activities (110).

(109) a. Mary is/was building a house DOES NOT ENTAIL Mary built a house.
b. Jane is/was writing a paper DOES NOT ENTAIL Jane wrote a paper.
(Rothstein 2004a:38)

c. he was dying of disease X DOES NOT ENTAIL He died of disease X
d. the plane was landing DOES NOT ENTAIL the plane landed

(110) a. Neta is/was running ENTAILS Neta ran.
b. Dafna is/was singing ENTAILS Dafna sang.
(Rothstein 2004a:38)

The above entailments distinguish telic events from atelic ones. I conclude that telicity does not force any specific viewpoint aspect, while punctuality determines types of imperfective viewpoints. Completion may be a component of the meaning of lexical aspect but not of perfective viewpoint aspect. The reason that perfective viewpoint is associated with telicity has to do with the fact that the event is viewed as a whole. It implies that the event has ended or is completed; however, it is not an entailment, as shown with habitual aspect and the fact that completion can be cancelled. The implication of culmination is based on the viewpoint, not on lexical aspect. For example, in English, where viewpoint is grammaticised, telicity contrasts are usually tested with perfective viewpoints, but do not work in the same way with imperfective viewpoint. That is especially true for durative telic verbs. The only difference between (111)a and (111)b is the viewpoint. As soon as the viewpoint changes to imperfective, the sentence is much less compatible with ‘in 5 minutes’. Assuming that the adverbial test for telicity is valid both for imperfective and perfective viewpoints, it seems that viewpoints change our telicity judgements.

(111) a. I drank the glass of wine in 5 minutes. c. ?I drank the beer for 5 minutes.
b. ?I was drinking the beer in 5 minutes. d. I was drinking the beer for 5 minutes.

3.2 The semantics of viewpoint aspect

If viewpoint influences telicity judgements, then the question arises what exactly is the difference in meaning between viewpoint aspect and lexical aspect. The previous sections have outlined an informal description of viewpoint aspect. The next sections will provide a formal framework to define viewpoint aspect.

3.2.1 Time construal and the event

Guéron (2004) argues that viewpoint aspect is determined by a predication relation between tense and lexical aspect. Tense, i.e. TP provides the assertion time interval that predicates over *v*P, which denotes telicity. She argues that telicity is a spatial configuration expressed in the predication between the verb and its arguments, while viewpoint is a temporal configuration. The assertion time interval is, in other words, tense, and viewpoint is the predication relation between tense and lexical aspect.

In these terms, we have an imperfective viewpoint when the assertion time interval overlaps with a point in time *during* the event time, while for a perfective viewpoint, the assertion time interval is *outside* the event time.

(112) a. Present Imperfective: I am eating. Assertion time: present; event time: present
b. Past Imperfective: I was eating. Assertion time: past; event time: past

c. Past Perfective: I ate. Assertion time: any time except event time; event time: past
d. Present Perfective: I eat. Assertion time: present; event time: any time except present

In (112)a, the assertion time interval is present, and it is identical to the speech time. The event time is present and overlaps with the assertion time interval, which is also present. The implication is that the event time of *eating* may have started before I uttered the sentence and will continue after I said it. The difference to (112)b is that the assertion time is past where the event time overlaps with that interval. The speaker interprets the sentence as ongoing, overlapping with assertion time in the past. In other words, tense provides us with the assertion time interval. In order to get an imperfective viewpoint, the assertion time interval must overlap with the event time (112)b. It is irrelevant for viewpoint aspect when that assertion time interval is. Thus, we can have any viewpoint combined with any tense. The assertion time interval must overlap with the event time for imperfective viewpoint, or, in Guéron's terms, the spatial construal denoted in *v*P. *v*P functions as shorthand for the domain where lexical aspect is computed. Other domain labels have been used, such as Aspect Phrase (Borer 2005) or Inner Aspect (Travis 2010). The details and naming of the domain structure of lexical aspect is discussed in detail in chapter 4. I agree with most of those works in that I assume it to be below the TP.

In the perfective in (112)c, the assertion time interval does not overlap with the event time. The assertion time is the present, i.e. speech time, while the event time is the past. In (112)d, the assertion time is present. However, the event time is any time *except* the assertion time, i.e. speech time. If the assertion time, i.e. speech time, were the same as the event time, we would get imperfective viewpoint, such as in (112)a, b. This fact shows that habitual aspect cannot possibly be imperfective. Sentence (113)a would not refer to an event that is happening during the assertion time interval, i.e. speech time, i.e. present. The only time when (113)b is uttered is during the event time.

(113) a. I smoke regularly [habitual]
b. I am smoking [continuous]

Guéron (2004) argues that the telos of an event or, in other words, whether we think of an event as telic, comes from the interaction between the assertion time and the spatial configuration determined between *v* and the properties of its arguments. Telicity may be a lexical feature of verbs or of predicates, but it can be overridden by the event construal in TP. Thus, time construal or viewpoint aspect may influence telicity. Lexical aspect, i.e. telicity in Guéron's framework, is thus a spatial relation between a predicate and its arguments, while viewpoint aspect is how we view this spatial relation with respect to time.

While I use a different framework to define viewpoint aspect, I follow Guéron (2004) in investigating the hypothesis that event construal, i.e. viewpoint aspect, influences or even overrides telicity judgements to a degree. This does not necessarily mean that telicity is changed, only that the event's properties are viewed through a lens that may not see every aspect of the event.

This hypothesis takes the opposite view from approaches that take viewpoint aspect to be determined by telicity. If there is a relation, I argue that viewpoint may influence telicity judgements, not vice versa.

3.2.2 Morphosyntactic encoding of viewpoint aspect

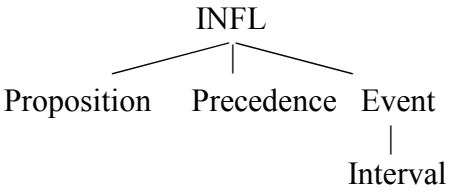
It is a common occurrence in Indo-European languages that the features of grammatical aspect and tense are intertwined in the agreement morphology. They are often expressed in portmanteau

morphemes that include tense, aspect, modality, and person/number features. This is also shown in the fact that the presence of tense correlates with finiteness, i.e. the presence of subject agreement in English. Thus, every INFL morpheme encodes viewpoint aspect together with tense and agreement. Cowper (2005) argues that the default or unmarked viewpoint in English is perfective. While simple tenses and non-finite forms are mostly interpreted as perfective or stative, imperfective viewpoint needs to be marked with *be+–ing*. The idea is that languages may be classified according to which viewpoint is more marked in the morphology. This markedness relation is reflected in a feature hierarchy that houses the features in question. Since verbal inflection in English bundles mood, tense, viewpoint aspect, and agreement feature, all these features need to be ordered according to their markedness relation in the actual marker. I am mostly concerned with the relation between the [EVENT] feature that encodes viewpoint aspect in relation to tense. Cowper illustrates the correlation of viewpoint features with tense features (and others) as a configuration with an [EVENT] feature that has an [INTERVAL] feature as a dependent. Perfective aspect occurs whenever the [EVENT] feature occurs by itself without a dependent [INTERVAL] feature. When the clause is finite, there is a [PRECEDENCE] feature, encoding tense. While tense as such does not influence viewpoint aspect, simple tense often does not just encode tense but viewpoint aspect at the same time. The configuration in (114) shows that the [PRECEDENCE] feature never occurs without an [EVENT] feature. Thus, every tensed, i.e. finite clause has viewpoint aspect, as shown in (114). The feature configuration for the example in (114)a requires simple past tense morphology, while the configuration in (114)b requires *past be+-ing*.

(114) a. Perfective with past tense in English

Winston Churchill won the election.

b. Imperfective with past tense.



The children were eating the ice cream.

(Cowper 2003:16)

On the other hand, the [EVENT] feature may occur without a tense feature, showing that if there is no tense to indicate viewpoint, the system falls back to its default perfective viewpoint. Thus, when there is no tense, i.e. precedence feature, the interpretation is perfective, as shown in (115)a. In order to change to imperfective viewpoint, the [EVENT] feature needs the dependent [INTERVAL] feature and the morphology includes non-finite *-ing*.

(115) a. Perfective no tense

INFL
|
Event — We heard [the dog bark].

b. Imperfective no tense

INFL
|
Event
|
Interval — We heard [the dog barking].

(Cowper 2003:15)

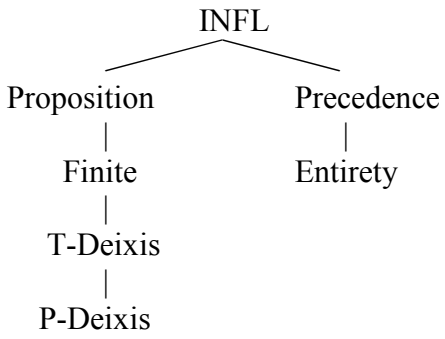
English thus encodes viewpoint aspect in the morphology located in INFL regardless of case or agreement. While the presence or absence of tense marking determines subject case agreement in English, there is still a viewpoint aspect contrast in the absence of tense. However, when there is tense morphology with an inflected *be* that tense morphology encodes tense *and* viewpoint aspect. The dependency relations are shown in (116). Tense is dependent on viewpoint aspect in that all tensed clauses have viewpoint aspect. On the other hand viewpoint is not dependent on tense in that not all clauses with *be+ing* are finite. Tense correlates to agreement in that all inflected forms are finite, while viewpoint aspect does not.

(116) Tense also encodes viewpoint aspect
Agreement requires tense
Agreement does not involve viewpoint aspect

(116) is by no means a universal configuration. Cowper (2005) discusses the feature hierarchy for Spanish in comparison to English and shows that the main clause INFL in Spanish does not have a contrastive [Event] feature with the [INTERVAL] feature as a dependent. Instead, the [PRECEDENCE] feature has a dependent [ENTIRETY] feature, which encodes the difference

between preterite and imperfect in Spanish. Thus, viewpoint contrasts are expressed through a [PRECEDENCE] feature that has a dependent [ENTIRETY] feature. The fact that the [EVENT] feature has no [INTERVAL] dependent in Spanish, while [PRECEDENCE] requires a dependent [ENTIRETY] feature leads Cowper to the conclusion that the default viewpoint is imperfective in Spanish. In contrast to English, past tense is not perfective by default but imperfective, thus requiring the [ENTIRETY] feature for perfective interpretation.

(117) Spanish INFL



(Cowper 2005:21)

For both English and Spanish, tense morphology in INFL includes encoding of viewpoint aspect. For a language like Standard German or Mandarin Chinese with neutral viewpoint, the Spanish configuration may also be a possible configuration, although the intricacies of INFL will not concern us any further. Important here is that the morphological spell-out of viewpoint aspect is based on a feature hierarchy of interpretable features in INFL in English, while it is based on different interpretable features and their dependencies in Spanish. In English and Spanish, tense morphology does not only spell out tense but various other interpretable features. For a language like German, since there is nothing in the agreement/tense morphology to indicate viewpoint aspect, it is unlikely that there is an [EVENT] feature. It is more likely that some viewpoint aspect contrasts are expressed through different types of tenses like in Spanish.[43]

For Inuktitut, I have argued elsewhere that there is no correlation between tense and agreement. As shown in Hayashi and Spreng (2005), tense morphology has nothing to do with agreement or

---

[43] See Vater (1994:69) for a definition of the meaning contrasts between present perfect and preterite in German in a Reichenbachian (Reichenbach 1947) framework that seems to indicate that present perfect indicates past imperfective. However, spoken German generally only uses present perfect for past reference (Sieberg 1989).

case in Inuktitut. It has no subject case effects like English where there is no nominative case when a clause is tenseless. However, it is as obligatory as tense marking in English, German, Japanese, or any other tensed languages (Hayashi 2005b, 2010),[44] while it is not part of the same head as agreement morphology in Inuktitut.[45] I argue here that viewpoint aspect, despite not having obligatory morphology spelled out by INFL, nevertheless is present. It is however not present as an interpretable feature in INFL or T. Only in that sense, does Inuktitut have a neutral viewpoint like German. However, just because there is no [EVENT] feature on INFL, does not mean the contrast is not grammaticised through other means.

3.2.3 Viewpoint aspect: Reference Time and Event Time

Since viewpoint aspect is encoded through an [EVENT] feature on INFL and is part of the tense morphology in English, the interpretation has to refer to tense in general. Similar to Guéron (2004), but using a Reichenbachian framework, I am adopting proposals made in Borik (2002) and Borik and Reinhart (2004) to define viewpoint aspect for Inuktitut in contrast to viewpoint aspect in English. In this framework, the assertion time interval (Guéron 2008) is similar to (R)eference Time. Tense is determined by the relation between R and (S)peech Time. Viewpoint aspect is determined by the relation between R and (E)vent Time. Under this view, the assertion time, i.e. R, is present in (118)a and past in (118)b.

(118) a. I am eating.
b. I was eating.

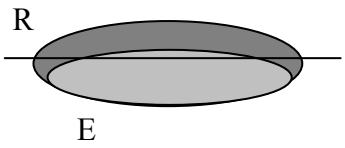
If R = S, we have present tense since the assertion time is at the same time as the speech time which, in the case of speech time, is present. If R precedes S, we have past tense, and if S precedes R, we have future tense. Separately but not completely unrelated, viewpoint aspect is determined by a subset relation between E and R. If E is a subset of R, we have perfective viewpoint and if R is a subset of E, we have imperfective viewpoint.

---

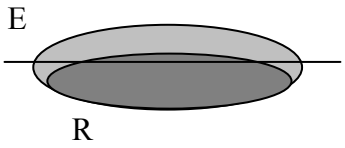
[44] This is counter a previous proposal (Nowak 1994) for Inuktitut.

[45] While mood is part of the agreement morphology in Inuktitut, it is not topic of this thesis. See Johns (1987, 1992) for an analysis.

(119) a. E ⊆ R: Perfective



b. R ⊆ E: Imperfective



In informal terms, R is our viewpoint. If it is outside of E and thus E is a subset of R, we get perfective viewpoint; a viewpoint from outside the Event time. R is thus an interval or point in time from which we view the event or E. The opposite imperfective viewpoint is achieved if R is a subset of E. In this case, E is thus viewed from a point or interval within the event time. For example, in (120)a, R, which precedes S, is outside of E. E here is a point in time because the verb is punctual, making it easily a subset of R. In (120)b, R overlaps with S, thus rendering it present. E begins before R and continues on. Thus, R is a subset of E.

(120) a. 'I arrived yesterday' [perfective]
b. 'I am eating' [imperfective]
c. 'I eat meat' [habitual]

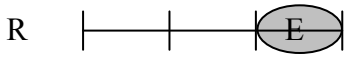
The above definition of viewpoint explains why habitual viewpoint is perfective and not imperfective as Comrie (1976) classifies it. Habitual in (120)c may refer to an event that happens at any time *and* possibly during the time I eat meat, while imperfective in (120)b refers only to an event during which I eat. As soon as R is a subset of E, or in other words, as soon as we say it *during* the event, we say *I am eating meat.*

In Reichenbach (1947), R is not actually defined but used intuitively as a point. According to Hatav (1993), if R is a point and E is an interval, it is impossible to pose E ⊆ R, as in (119)a. In contrast, when E is a point and R is a point, both E ⊆ R and R ⊆ E are logically identical when they overlap. However, they overlap completely which means there is no subset relation.

Furthermore, it is actually not possible to have two points overlap (Hayashi 2005a, 2010, Cowper 1998, 1999).

The problem is solved in Reinhart (1986) where R is defined as a set of intervals, as illustrated in (121). Thus, for E ⊆ R, only one interval of R has to overlap with E. This way, E is a subset of R if E overlaps with just one interval of R.

(121) a. E ⊆ R



E⊆R: ∃R,E,e such that *AT*(e,E) & E ⊆ R (Borik and Reinhart 2004:13)

(121) ensures that there is at least one interval at which *e* holds, but it does not require that all possible intervals at which *e* holds are included in R, counter to Reichenbach who postulated that R should be identical to that interval.

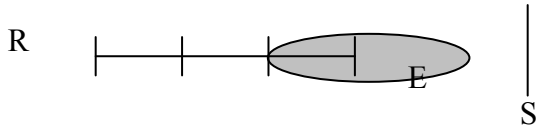
Thus, punctual events may be subsets of R. When E is a point, as in achievement verbs, that point overlaps with a point in one interval of R. However, while the problem of having a point R being a subset of E is solved, Reinhart inadvertently seems to have created another problem with the opposite relation for imperfective viewpoint that states R ⊆ E. It seems counterintuitive for a set of intervals R to be a subset of a punctual E. This problem will be addressed in section 3.2.3.2 and 3.2.3.4.

3.2.3.1 Perfective viewpoint in English

In English, tense marking and viewpoint aspect are intertwined, which means that for viewpoint, both the relation between E and R and the relation between S and R are necessary to encode viewpoint aspect. For example, the morphology for simple past always encodes perfective aspect, while *-ing* encodes imperfective viewpoint but no tense. The only time where there is no tense morphology is in non-finite clauses, which can be either perfective and imperfective depending on whether there is *-ing* morphology or not. Perfective viewpoint is encoded in either the presence or absence of tense morphology, while imperfective viewpoint is encoded in *-ing*.

Thus, the definition of perfective viewpoint aspect in English includes tense, i.e. the relation between S and R, and viewpoint aspect, i.e. the relation between E and R. Both relations are necessary conditions for perfective viewpoint aspect in English. As shown in (122), E is a subset of R in that it partly overlaps with one interval of R. Furthermore, R precedes S.

(122) English: Perfective aspect: $E \subseteq R$ & $S \cap R = \varnothing$ (Borik and Reinhart 2004:18)



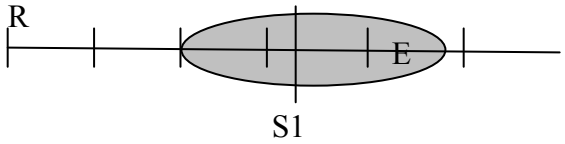
Perfective viewpoint in English has *two* conditions: S and R cannot overlap *and* E has to be a subset of R. For example, in (123)a, both conditions for perfectivity are fulfilled. a) S does not overlap with R since R precedes S, and b) E is a subset of R. In (123)b, again S and R do not overlap since S is any time except the time from when we view the event. Furthermore, R relates to the event E of habitually working at Siemens by default at any time except during E. This does not mean that we cannot say (123)b while working. However, when we do, we do not refer to the E that is happening while we say *I work at Siemens.*

(123) a. I arrived yesterday.
b. I work at Siemens.
c. I used to work at Siemens.

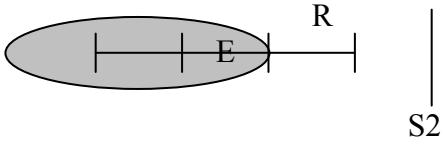
We may have habitual aspect when R and S overlap (123)b, or when they do not (123)a. This constellation is illustrated in (124). A habitual event is a set of one or more intervals E, none of which is a subset of R. In (124), speech time S1 overlaps with E. This means that we worked at Siemens before speech time and will work there after. However, E is a subset of R, which gives us perfective viewpoint. S does not overlap with R. If it did, we would say *I am working at Siemens.* Note that for habitual aspect, S may (S1) or may not (S2) overlap with E, while R may never overlap with S. Thus, the constellation with S1 correlates to present habitual (124)a, while the constellation with S2 shows past habitual (124)b.

(124) English: Habitual Perfective aspect: E⊆ R & S∩R=∅

a. Present habitual: I work at Siemens.



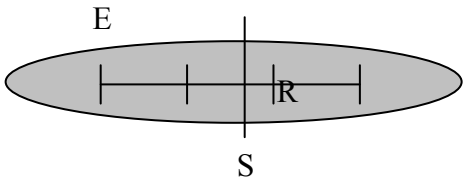
b. Past habitual: I used to work at Siemens.



3.2.3.2 Imperfective viewpoint in English

Imperfective aspect in English requires that at least one of the two conditions for perfectivity must fail to hold (Borik and Reinhart 2004). Recall that the conditions for perfectivity in English are E ⊆ R *and* S∩R= ∅. Failing both conditions is shown in (125). While for all simple tenses and in the absence of tense, i.e. non-finite clause, E is a subset of R, the imperfective is defined as an operation where that relation is reversed. If the relation between S and R for perfective also fails, i.e. they overlap, we also get imperfective.

(125) Imperfective Aspect both conditions for perfectivity fail to hold:
¬E ⊆ R[46] & S∩R≠ ∅ (Borik and Reinhart 2004:18)



(125) captures the intuition that imperfective viewpoint emphasizes that the event is being considered from within in that all of R is a subset of E. When R and S overlap, the only possible interpretation is present imperfective. However, only one condition for perfectivity needs to fail.

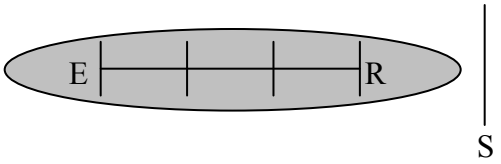
---

[46] ¬E ⊆ R logically implies that E ⊆ R. Otherwise, they would be identical.

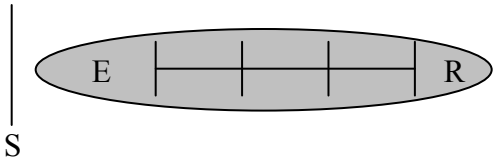
(126) Condition (I) E⊆ R fails:
Imperfective aspect in English: ¬E⊆ R & S∩R = ∅ (Borik and Reinhart 2004:18)

In (126), the first condition for perfective fails to hold. E is not a subset of R, while at the same time, R and S do not overlap. Depending on where R is in relation to S, we get either past (127)a or future (116)b imperfective.

(127) a. He was leaving. S∩R = ∅: R < S



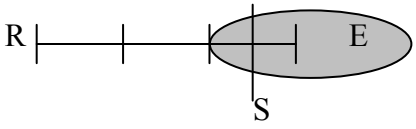
b. He will be leaving. S∩R = ∅: S < R



If the first condition for perfective E⊆ R holds but the second one fails, then we get present imperfective.

(128) Condition (II) S∩R= ∅ fails
Imperfective aspect in English: E⊆ R & S∩R≠ ∅ (Borik and Reinhart 2004:18)

I am eating.



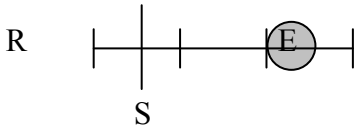
In (128), the second condition for perfectivity S∩R = ∅ fails to hold which means that at least one interval of R and S overlap. Thus, the event is still considered from within, and we get present imperfective.

However, this is where we have a problem if E is punctual. If R is a set of intervals, and E is a point, it is difficult to imagine how a set of intervals may be a subset of a point. Still, most punctual verbs are acceptable in the imperfective.

(129) a. He is breaking the glass
b. He is knocking at the door

One might ask how R can be a subset of E when the actual event time is a point, such as in (129)b. Within this framework, this is not a problem. For the imperfective, only one perfectivity condition needs to fail. If S and R overlap, the overlap with R can be at any point, even outside of E. This gives us an inceptive reading of punctual verbs in the imperfective. The relation between R and E is like for the perfective while R and S overlap at the same time. The examples for inceptive imperfective in (130) all may be said right before the event actually happens. While R and S overlap, as indicated by the present tense marking, the event time is a subset of R.

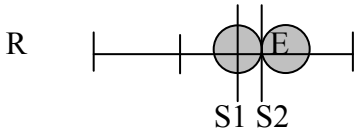
(130) Inceptive imperfective



a. He is breaking the glass
b. He is switching the light on
c. He is leaving the house
d. He is jumping off a cliff

Note that the examples in (130) may also be interpreted as "film-strip reading" (Rothstein 2004a:37) in that they are read as if the event is stretched-out or in slow motion. This does not mean that E is longer than normal, it is only *perceived* as such due to R being a subset of E, as shown in (128). Another reading is the iterative imperfective reading of (129)b. This reading is achieved again if S overlaps with one point of R. This may be any point. Depending on when it is said, it may be before the first knock occurs, which would be inceptive, it may be overlapping with one of the knocks (S1 in (131)), or it may be between knocks (S2 in (131)). Important is only that S overlaps with R.

(131) Iterative imperfective



Imperfective viewpoint aspect treats the event as if E is an interval in various ways, even when the verb is punctual. This does not mean that the lexical aspect of the verb is changed, only that the viewpoint with respect to E changes. The system in Cowper (2005) shows this fact in the presence of an [INTERVAL] feature dependent on the [EVENT] feature. As soon as that feature occurs, *be* +*-ing* is part of the verbal morphology. Recall that viewpoint has nothing to do with the actual durativity or punctuality of the event. It only gives a viewpoint R that can either be a subset of E or not. Thus, '*I am leaving*' may be said before one actually leaves. Thus, R overlaps with S at a point where it does not overlap with E. This means we have a point of view that considers the event of getting to the point of having left.

The question arises as to what happens when we have past imperfective with punctual verbs, such as in (132). R overlaps with the point *when he received a phone call.* R precedes S since the verb is marked with past tense. Thus, condition (II) $S \cap R = \varnothing$ holds, while condition (I) $E \subseteq R$ fails to hold, just as outlined in (127)a. Inceptive imperfective is thus not determined by which condition fails to hold. As long as one of the conditions for perfectivity fails to hold, it is available. The same is true for iterative readings, as in (132)b. R precedes S and thus only condition (I) fails to hold.

(132) a. He was leaving when he received a phone call
b. He was knocking at my door when I received the phone call

Punctual E thus can have R as a subset regardless of the relation between S and R, while when S and R overlap, we have imperfective viewpoint by way of having speech time and reference time overlap.

3.2.3.3 Perfective viewpoint in Inuktitut

While there are *two* conditions for perfective viewpoint, i.e. $E \subseteq R$ and $S \cap R = \varnothing$ in English, I argue that for Inuktitut, there is no tense component to viewpoint aspect. Thus, only one condition for perfectivity $E \subseteq R$ applies. As shown in Hayashi (2005a, b, 2010), past tense marking in Inuktitut is only used for actual past tense marking, not for perfective viewpoint. Non-past marking, i.e. a null morpheme on punctual achievement verbs, is interpreted as "just now" and is not compatible with a past adverbial (133)b.

(133) a. tikit-∅-tuq [SB]
arrive-∅-PART.3sg
'He just arrived'

b. *tikit-∅-tuq ippaksaq
arrive-∅-PART.3sg yesterday
'He arrived yesterday'

c. tiki-lauq-tuq ippaksaq
arrive-PAST-PART.3sg yesterday
'He arrived yesterday'

(Hayashi and Spreng 2005:5)

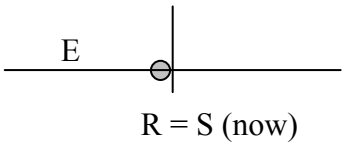
While punctual verbs in English are marked with simple past tense morphology unless they are used with imperfective viewpoint, in Inuktitut, they are not marked with past tense morphology unless actual past tense is expressed. Furthermore, the interpretation is not actual past, only perfective, as the contrasting examples in (133) show. Only the verb marked with the past marker *-lauq* is compatible with the past adverbial *ippaksaq* '*yesterday*'. If there is no past marker, the past adverbial is incompatible. What is translated as past in English, is not past tense in Inuktitut.

Furthermore, regardless of language, due to the punctual nature of achievement verbs, a present reference time and present event time can never overlap (Reichenbach 1947),[47] resulting in past tense marking in English, while in Inuktitut, these verbs are not marked for past tense. If R and E are both points and they overlap, then they are identical, and thus cannot stand in a subset relation to another.

The contradiction between non-past marking, which would have R overlap with S, and E being a subset of R, is resolved by R being pushed ahead by one moment into the post-state of E (Hayashi 2005a, 2010). The absence of the past tense morphemes is interpreted as present, thus S = R. The resulting relation among E, R, and S is E ≤ R = S (≤ indicates that there is no intervening *t* between E and R), which can be schematized as follows:

[47] Similar to Cowper's *Principle of Non-Simultaneity of Points*. Reference time when it equals speech time is considered here a point, not an interval (Cowper 1998, 1999).

(134) Vpunctual + ∅

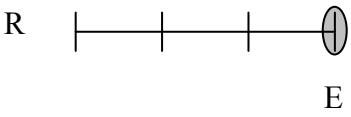


(Hayashi 2005b:128)

This constellation is marked as present tense in Inuktitut, while it is marked as simple past tense in English. What both have in common is that they are interpreted as perfective. While perfectivity in English thus may be marked with simple past, in Inuktitut, it is not.

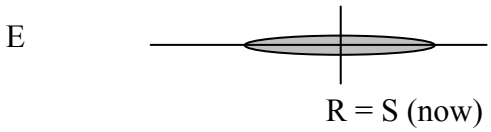
The fact that E and R cannot overlap for punctual verbs leads to a default perfective viewpoint reading based on the condition for perfective viewpoint E $\subseteq$ R. In contrast to Hayashi (2005b), which takes R as a point, I adopt Reinhart (1986) in taking R as a set of intervals, one of which may overlap with E. Thus, by virtue of E being a point and R being a set of intervals, the default relation for punctual verbs is E $\subseteq$ R.

(135) Perfective viewpoint in Inuktitut



On the other hand, durative verbs are always interpreted as overlapping with R since E can properly include R; hence R $\subseteq$ E. If R = S, we get present tense interpretation. This can be schematised as follows.

(136) Vdurative + ∅



(Hayashi 2005b:128)

Punctual and durative verbs in English are thus marked with simple past tense for both perfective and past at the same time. In Inuktitut on the other hand, durative verbs and punctual verbs allow past tense marking only for a past interpretation.

(137) a. jaan mumi-lauq-tuq ippaksaq [SB]
John dance-PAST-PART.3s yesterday
'John danced yesterday'

b. *jaan mumiq-∅-tuq ippaksaq
John dance-∅-PART.3s yesterday
'John danced yesterday'

(Hayashi and Spreng 2005:5)

The simple past tense marker thus works both as a perfective marker and as a tense marker in English, while in Inuktitut, the past tense marker only marks tense, not viewpoint aspect.[48] Thus, the punctual property of the verb is responsible for the default perfective interpretation in Inuktitut, while in English, it is the absence of *be*+*-ing* that is necessary for perfectivity for any verb. With unmarked intransitive verbs in Inuktitut, punctual verbs are interpreted as perfective, while durative verbs are interpreted as imperfective.

Since E is a point with punctual verbs, E is by default a subset of R, thus fulfilling the condition for perfectivity. On the other hand, when E is an interval as with durative verbs, R is by default a subset of E, thus fulfilling the condition for imperfectivity. In a Reichenbachian model, the punctual/durative contrast in Inuktitut is thus defined, as in (138).[49]

(138) Punctual vs. Durative
a. A verb is punctual iff $E \subseteq R$
b. A verb is durative iff $\neg E \subseteq R$

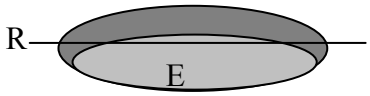
Therefore, the second condition for perfectivity requiring that S cannot overlap with R is not necessary for encoding perfective in Inuktitut. Adding a past tense marker does not change perfectivity or even encode perfectivity. Perfective viewpoint is by default correlated to the punctual nature of the verb, not to the past tense marker. Thus, for Inuktitut perfective, the only condition is that $E \subseteq R$.

---

[48] One could also think of the simple past marker in English as perfective marker in the sense that it does not mark imperfectivity since perfective is the default in English (Cowper 2005).

[49] Note that (138) applies universally. The semantics of punctuality create by default a viewpoint, thus explaining why a punctual verb in a imperfective form is often more marked.

(139) Inuktitut Perfective: $\exists$ E,R,e (*At*(e,E) & E$\subseteq$R)



In (139), we have the same conditions as for the English perfective with the difference that S$\cap$R=$\varnothing$ is not a necessary condition for perfective in Inuktitut. Whether we have an overlap between R and S is not relevant for perfectivity in Inuktitut. The imperfective reading as well as the perfective reading is available with or without past marker, as shown in (140). Both the present and the past tense marked example are translated as simple past. However, in Inuktitut, only the past marked example has an actual past interpretation. (140)b fulfills the condition for perfectivity in English by having no overlap between R and S, while the example (140)a fulfills it by virtue of being punctual.

(140) R= S	R < S	[MI]
a. surak-tuq	b. sura-lauq-tuq	
break-PART.3sg	break-PAST-PART.3sg	
'it broke (just now)'	'it broke earlier today'	

Although all the examples in (140) are translated as simple past in English, in Inuktitut, only (140)b is actually past tense. We get perfective readings regardless of whether R and S overlap. Although the same is true for English, the reasons are different. For English, any form that is not marked *be+-ing* is perfective. In Inuktitut, any verb that is punctual is perfective. This means that default perfective readings are based on inflectional morphology in English, while in Inuktitut, they are based on punctuality. Therefore, it is not surprising that habitual aspect, which is perfective in English, requires a separate morpheme in Inuktitut. In (141), which is a passive construction, the habitual morpheme is necessary to convey habitual aspect. Conclusively, the default perfective viewpoint that is based on the punctuality of the verb excludes habitual aspect.[50]

[50] Further research is necessary to determiner if every verb requires a habitual marker to express habituality.

(141) Inutsiaqattaqujauqattaravit
inuk-tsiaq-u-qattaq-qu-jau-qattaq-gavit
person-nice-be-HAB-tell-PASS-HAB-CTG2sS
'You keep being told to be a nice person'

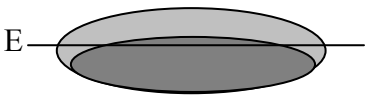
(Swift 2004:29)

The use of a morpheme for habituality indicates that habituality is neither based on the lexical aspect of the verb, nor does it have anything to do with agreement or tense. This suggests that there is no contrast between perfective or imperfective viewpoint when it comes to habituality, mirroring the properties of habituality in English (Cowper 1998, 1999).

3.2.3.4 Imperfective viewpoint in Inuktitut

For Inuktitut, as we have seen, tense is not relevant for perfective viewpoint aspect. In formal terms, it is not a condition for perfectivity that S and R may not overlap. The same is true for imperfective viewpoint aspect in that it is not a condition for imperfectivity that S and R overlap. As soon as the sole condition for perfective viewpoint fails to hold, we get imperfective viewpoint. It is irrelevant whether S and R overlap, precede, or follow each other. Whenever R⊆E we get an imperfective interpretation. When S and R overlap we get present imperfective, when R precedes S we get past imperfective.

(142) Imperfective in Inuktitut: R⊆E



Durative verbs where E is an interval should thus always be interpreted as imperfective by default. This prediction is borne out regardless of tense marking. In (143)a and b, we see present imperfective. For past imperfective, a past morpheme is required, as shown in (144).

(143) a. pisuk-tuq [SB]
walk-PART.3sg
'he is walking'

b. anguti qamuti-mit uniar-tuq
man(ABS) sled-*mik* uniaq-PART.3sg
'the man is pulling the sled'

(144) a. pisu(k)-lauq-tuq [SB]
walk-PAST-PART.3sg
'he was walking'

b. anguti qamuti-mit uniar-lauq-tuq
man(ABS) sled-*mik* uniaq-PAST-PART.3sg
'the man was pulling the sled'

The fact that the relation between S and R has no bearing on viewpoint aspect in Inuktitut suggests that INFL (or T) has no [EVENT] or [INTERVAL] feature in Inuktitut like it does in English. Tense morphology only ever indicates tense. The facts of tense marking in Inuktitut have already suggested that. Another indicator that tense morphology in Inuktitut has nothing to do with any other features is suggested in the fact that it is a different morpheme from agreement morphology, and can even be separated from it. The implications of these facts for the sentence structure in Inuktitut will be discussed in chapter 4.

We have seen in section 3.2.3.2 that the imperfective in English has inceptive, iterative, and prolonged readings for punctual verbs, when compared to the interpretation of durative verbs, which are almost exclusively continuous. The inceptive and iterative readings are achieved by S overlapping at a point of R, which does not overlap with E. Since in Inuktitut, the relation between S and R is not a condition for viewpoint aspect, the question arises how these readings would be achieved. I address this question in the next section.

3.3 The role of the AP morpheme

I have argued above that punctual verbs have perfective viewpoint by default, while durative verbs have imperfective viewpoint by default. I have also proposed that the AP construction has imperfective viewpoint. Together, these proposals make the prediction that when we have a punctual verb in an imperfective AP construction, there is higher degree of markedness. Coming back to the distribution of the AP marker, I thus predict that only punctual verbs require the AP morpheme. I argue against the general proposal in Bohnemeyer and Swift (2004) that the relation between telicity and viewpoint is relevant for Inuktitut morphology. I also argue against the notion that the AP marker is determined by the telicity of the verb.

3.3.1 Telicity and viewpoint aspect: markedness

Taking telicity to be equal to event realisation in that only telic events imply that an event has actually happened,[51] Bohnemeyer and Swift (2004) argue that there is a clear correlation between viewpoint aspect and lexical aspect, which they equal with telicity. The correlation is a markedness relation in that telic predicates are interpreted as perfective, while atelic predicates are interpreted as imperfective by default. For the opposite relation, extra marking is required.

(145) An ideal telicity-dependent aspect system

Predicate **Viewpoint**	**Atelic**	**Telic**
imperfective	Ø	overtly expressed
perfective	overtly expressed	Ø

(Bohnemeyer and Swift 2004:266)

According to the table in (145), a telicity-dependent aspect system requires overt marking of the "opposite" viewpoint to telicity. The claim is that telic verbs or roots are by default interpreted as perfective, while atelic verbs are interpreted as imperfective. For the opposite relation, i.e. that atelic roots would be interpreted as perfective and vice versa, extra morphology is required.[52]

For Inuktitut, the claim is that atelic verbs need to be marked with perfective morphology in order to be interpreted as perfective, while telic verbs need to be marked with imperfective morphology in order to be interpreted as perfective. The data that is presented is cited in (146) and (147). In (146)a, the telic verb is interpreted as perfective and the atelic verb in (146)b is interpreted as imperfective without any extra morphology.

(146) a. Anijuq
ani-juq
go.out-PAR.3.SG
'He/she went out.'

b. Pisuttuq
pisuk-juq
walk-PAR.3.SG
'He/she is walking.'
(Bohnemeyer and Swift 2004:267)

---

[51] See progressive entailments. Only atelic imperfectives entail the perfective: *Mary was driving* ENTAILS *Mary drove*. while *Mary was building a house* DOES NOT ENTAIL *Mary built a house*.

[52] Also, see Borik (2002) for data that does not show a relation between telicity and perfectivity in the sense proposed in Bohnemeyer and Swift (2004).

According to Bohnemeyer and Swift (2004), in order to get the opposite reading, the verbs have to be marked with extra morphology. In (147)a, we find the inceptive morpheme *-liq*, familiar from chapter 2, to achieve an imperfective reading for the telic *ani-* '*go out*' and in (147)b, the atelic *pinasuk-* '*work*' is marked with a suffix meaning '*finished*' in order to achieve a perfective reading.

(147) a. Ani**lir**tuq.
ani-**liq**-juq
go.out-ING-PAR.3.SG[53]
'He/she is (in the process of) going out.'

b. Pinasu**giir**tuq.
pinasuk-**jariiq-**juq
work-TERM-PAR.3.SG
'He/she finished working.'

(Bohnemeyer and Swift 2004:268)

We have found in section 3.2.3.3 that perfective viewpoint is the default for punctual telic verbs only, not for all telic verbs. It is not telicity that has default perfective interpretation, but the punctuality of the verb. *Ani-* '*go out*' is a punctual verb. Furthermore, counter to what Bohnemeyer and Swift (2004) would predict, the telic[54] verb in (148)a is interpreted as imperfective and atelic without extra morphology. Only punctual verbs are more marked with the AP marker in order to get an imperfective reading, as shown in (148)b.

(148) a. sana-junga iglu-mit [SB]
build-PART.1sg house-*mik*
'I am building a house'

b. Piita kapi-*si*-juq nanur-mit
Peter(ABS) stab-*si*-PART.3sg polar bear-*mik*
'Peter is stabbing a polar bear'

Bohnemeyer and Swift (2004)'s proposal further predicts that atelic verbs are marked extra in the ergative construction while being unmarked in the AP construction. It would also predict that

---

[53] ING = ingressive, TERM = terminative, PAR = participial. (Bohnemeyer and Swift 2004:267).

[54] Assuming that *sana-* is an accomplishment.

only telic verbs would be marked with the extra AP marker, while atelic verbs would be unmarked. However, neither prediction is borne out. For the ergative construction, there is no difference in morphological markedness for the telic *kapi-* '*stab*' in (149)a compared to the atelic *uniaq-* '*pull*' in (149)b. There is no extra marking on any verb in the ergative construction.

(149) a. Piita-up nanuq kapi-jaa [MI]
Peter-ERG polar bear(ABS) stab-PART.3sg/3sg
'Peter stabbed the polar bear'

b. anguti-up qamuti uniaq-taa
man-ERG sled(ABS) pull-PART.3sg/3sg
'the man pulled the sled'

As discussed in section 3.2, Inuktitut default viewpoint aspect is dependent on the punctuality of the verb, not the telicity. While Bohnemeyer and Swift (2004) argue that it is telicity that determines the default viewpoint, the data shows that it is the *punctuality* of the verb that determines default viewpoint in Inuktitut. Regardless of whether we think that the AP is imperfective or whether we think it is atelic, Bohnemeyer and Swift (2004) would predict that only telic verbs need additional morphology for the AP construction. This means that only telic verbs should require the AP marker. However, if I am correct and punctuality determines viewpoint aspect and not telicity, then only punctual verbs should require an AP marker in the AP construction.

The data in (150), (151), and (152) confirm my prediction and contradict the markedness proposal made in Bohnemeyer and Swift (2004). While the telic durative verbs in (150) do not take the AP marker, the telic punctual achievement verbs in (151) do.

(150) a. niri-juq niqi-mit [SB]
eat-PART.3sg meat-*mik*
'He is eating meat'

b. Miali utaqinnaq-tuq Piita-mik
Mary(ABS) wait.so.long-PART.3sg Peter-*mik*
'Mary waited for so long for Peter'

(151) a. Piita kapi-*saq*-tuq nanur-mit [SB]
Peter(ABS) stab-AP-PART3sg polar bear-*mik*
'Peter was stabbing a polar bear'

b. quqiq-*saq*-qqau-juq tuktu-mit
shoot-AP-PAST-PART.3sg caribou-*mik*
'He was shooting a caribou'

Furthermore, the data in (152) show that durative telic verbs do not take AP morphology, counter to what we would expect according to Bohnemeyer and Swift (2004). The data shows clearly that the property of lexical aspect that determines markedness with respect to viewpoint aspect is not telicity, but punctuality. Only durative verbs are unmarked in the imperfective, while only punctual verbs are marked in the imperfective. We should also expect a difference in markedness in that atelic verbs would be more marked than telic verbs in the ergative construction. However, as the examples in (152) show, there is no additional morphology, neither for durative atelic roots (152)a, durative telic roots (152)b, nor punctual telic roots (152)c.

(152) a. iglu-mit sana-juq [SB]
house-*mik* buid-PART.3sg
'He's building a house'

b. arnaq miqsuq-tuq (qarling-nit)
woman(ABS) sew-PART.3sg pant-*mik*.dl
'the woman is sewing (a pair of pants)/something'

c. kapi-jaa
stab-PART.3sg/3sg
'He stabbed it'

Furthermore, as discussed in section 3.2.3.3, the default viewpoint for verb roots is determined by punctuality, not by telicity. Only the punctual roots in (153)c, d are by default perfective, while only the durative verbs in (153)a, b are imperfective. The telic durative verb in (153)b is imperfective, while the telic punctual verb in (153)c is perfective. On the other hand, the atelic durative verb in (153)a is imperfective, while the atelic punctual verb in (153)d is stative.

(153) a. pisuk-tuq [durative atelic/imperfective] [SB]
walk-PART.3sg
'He is walking'

b. niri-juq tuktu-mit [durative telic/imperfective]
eat-PART.3sg caribou-*mik*
'He is eating caribou (meat)'

c. anautaq surak-tuq [punctual telic/perfective] [MI]
stick(ABS) break-PART.3sg
'the stick broke'

d. uvan-nit nagligusuk-tutit[55] [punctual atelic/perfective] [SB]
I-*mik* love-PART.2sg
'you love me'

Therefore, there is no relation between telicity and viewpoint aspect, neither a relation of markedness nor a relation where telicity equals viewpoint aspect in some way. Furthermore, the only relation between lexical aspect and viewpoint aspect lies in the default subset relation between R and E. Since E is a point with punctual verbs, it is by default a subset of R, which is a set of intervals. Durative events, i.e. durational R is by default a subset of E, while with punctual events, i.e. non-durational E, E is by default a subset of R.

However, every punctual verb can be interpreted from both a perfective and an imperfective viewpoint. There is no inherent relation between punctuality and perfectivity as such. Also note that durativity does not equal imperfectivity. (Im)perfectivity is the *viewpoint* of an event, not the event time as such. Different viewpoints can be introduced, as part of the inflection, as in English in *work* vs. *working*, or with adverbs, as in the German examples in (154). While the unmarked case (154)a is ambiguous, it is disambiguated with an adverb for imperfective in (154)b and for habitual perfective in (154)c.

(154) a. Ich arbeite [ambiguous]
I work-PRES.1sg currently.
'I work/I am working'

b. Ich arbeite gerade [imperfective]
I work-PRES.1sg currently.
'I am working currently'

b. Ich arbeite immer [habitual]
I work-PRES.1sg always.
'I always work'

---

[55] Note that the pronoun marked with *-mik*-case is not optional here.

The discussion on the distribution of the AP morpheme has shown clearly that defining lexical aspect purely in terms of telicity shows that important generalisations might be missed. The punctuality property is just as important since the semantics and behaviour of punctual telic verbs vs. durative telic verbs are rather distinct. Based on the discussion on viewpoint in Inuktitut and the markedness discussion in this section, correlation between lexical aspect and viewpoint aspect is thus as proposed in (155), in contrast to Bohnemeyer and Swift (2004)'s table shown in (145). To express imperfective viewpoint with punctual verbs, we thus expect more or overt morphology, while with durative verbs, we do not. Telicity does not play a role.

(155) Markedness relation between lexical aspect and viewpoint aspect

Viewpoint	**Punctual**	**durative**
imperfective	marked	unmarked
perfective	unmarked	marked

3.3.2 Homogeneous punctual verbs and the AP morpheme

If punctuality is the only property that determines the distribution of the AP morpheme, then homogeneous punctual verbs, such as statives, perception verbs, and psych verbs should also take the AP morpheme. However, this is not borne out. Only overtly causativised psych verbs take the AP morpheme, while other psych verbs do not. The examples in (156) (repeated from (49)) show that telicity together with punctuality is the deciding factor to select an AP morpheme. Only punctual *and* telic predicates require an AP morpheme. As example (156)c illustrates, this does not only apply to verb roots, but to complex verb forms as well.

(156) a. uvan-nit nagligusuk-tutit [SB]
I-*mik* love-PART.2sg
'you love me'

b. quviasuk-tit-*si*-jutit uvan-nit
happy-CAUS-AP-PART.2sg I-*mik*
'You make me happy'

c. quviasuk-tit-*si*-junga ui-ga-nit
happy-CAUS-AP-PART.1sg husband-1POSS-*mik*
'I am making my husband happy right now'

The fact that durative verbs may occur in an AP construction without any AP morphology while punctual telic verbs require extra morphology is mirrored in English markedness relations as well. While not as clear-cut as in Inuktitut, since *be+ing* has a general imperfective meaning compared to the AP morphemes, durative verbs are much less marked in the progressive than punctual verbs, both telic and atelic punctual verbs. As Cowper (1999) shows, imperfectives are always eventive, which explains why stative verbs are less compatible with imperfective forms. Cowper (1999) argues that grammatical aspect is encoded in the head of an AspPhrase, a projection that stative predicates lack. Regardless of where grammatical aspect is situated, we can assume that since stative verbs have no imperfective/perfective contrast, it follows that they should lack grammatical aspect altogether. It is not entirely clear whether all Inuktitut imperfectives are eventive or whether all AP constructions are eventive. Based on (156)a, it seems that the AP does not automatically turn stative verbs into events like we have with some stative verbs in English (157).

(157) a. He's being stupid. [eventive] (literally, he is behaving in a stupid manner)
b. He is stupid. [generic, habitual]

Furthermore, in the rare cases where stative verbs are used as imperfectives in English, their meaning changes considerably, as shown in (158).

(158) He sees. He is seeing someone

One might argue that the fact that punctual homogeneous verbs, i.e. statives have no AP marker, presents a counter argument for the hypothesis that AP constructions are imperfective. However, all this proves is that AP constructions may not force an eventive reading.[56] Furthermore, the fact that the sole internal argument of an unaccusative verb correlates to the external argument in an AP construction does suggest a certain, shall we say, eventiveness, or activity reading compared to its canonical intransitive construction, as shown in (159) (repeated from (50)). These verbs

[56] Of course, if it were true that imperfectives are universally eventive, then we would have a counterargument. However, that has not yet been shown. A possible counterargument could also be that "He loves me" might actually be eventive in Inuktitut.

add an agent in the AP, suggesting a certain agentive reading that is also prevalent in English imperfectives.[57] Thus, the AP may similarly be eventive in Inuktitut.

(159) a. tuqu-vuq [MI]
dead-IND.3sg
'it is dead'

b. tuqu-t-*si*-vuq
die-CAUS-AP-IND.3sg
'He is killing something'

Furthermore, the fact that statives do not show an imperfective/perfective contrast without losing their stative properties indicates that the same contrast should not occur in Inuktitut. The fact alone that they require overt causative morphology to become transitive, either in an ergative or a *-si*-type AP construction suggests strongly that there is no actual contrast between imperfective statives and perfective ones.

The fact that the default AP marker *-si* is an inceptive marker is explained by the fact that only punctual telic verbs require it. Imperfective inceptive readings are readily available for punctual verbs. While not impossible with durative verbs, it seems to be one of the available readings for punctual verbs while not for durative verbs. While in English, there is no special inceptive morpheme since *be+ing* applies to all verbs, the reading is available for punctual verbs (160)a, b, and also for durative verbs (160)a, b.

(160) a. "When he went over the ledge, we pulled him back. **He wasn't going down**."
Quote by a baseball spectator who prevented another one from falling over the ledge (Toronto Star July 12, 2011)

b. I'm cloaking the ship now. Jacob Carter: Stargate SG-1: Season 4, episode 14 The Serpent's Venom (before pushing a button)

We now have an explanation for the distribution of the AP marker. The inceptive marker *-si* thus serves a similar function as *be+ing* in English in that it enables imperfective readings. While

[57] It has been suggested that imperfectives are more like activities (Vendler 1957).

be+ing marks all imperfective readings, *-si* enables imperfective readings for punctual verbs only. Thus, the inceptive meaning of *-si* is still apparent, albeit disguised as an imperfective. Since the imperfective readings of punctual verbs may be inceptive, it is not surprising that this morpheme acts as an AP marker. It focuses the viewpoint on a point of R that logically precedes E, but at the same time overlaps with E. Inceptive readings of imperfectives are not necessarily responsible for future readings since both are compatible with future adverbials, as shown in (161).

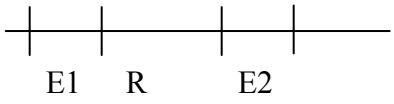
(161) I'm switching the light on now. I'm switching the light on tomorrow.
I'll switch the light on tomorrow.

In general, inceptive forces R into a position where it can be considered a subset of E despite the fact that E is a point.

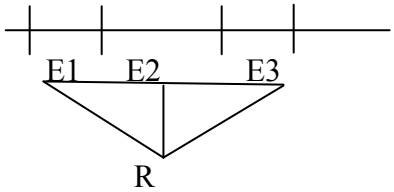
The same can be said for the second AP marker *-saq*, which is an iterative morpheme. While habitual aspect could also be considered iterative, the relation between E and R is different from imperfective iteration. As discussed above, habitual aspect has an E that is always a subset of R, while iterative imperfective has R as a subset of E. Sentence (162)a, refers only to the E that is a subset of R, but not to the E that has R as a subset. Assume, E1 in (162) is Monday and E2 is Wednesday. We could say the sentence on Tuesday, regardless of whether it is our day off or not. However, with imperfective iteration, the only time we would refer to E (162)b is during E or in anticipation of E. In case of the iteration reading, all iterations are treated together as if it was a continuous whole, despite the fact that there is a small pause between each knock.

(162) Habitual Aspect

a. I work here.



b. I'm knocking at your door.



Assuming that the ergative is a perfective, we would thus expect that when using *-saq* with an ergative construction, we would get a habitual reading. This can be confirmed as shown (163). In the ergative construction in (163)a, the stabbing with *-saq* is treated as a habit, while in the AP construction in (163)b it is a repeated stabbing of a polar bear.

(163) a. nanuq kapi-saq-tara [SB]
polar bear(ABS) stab-constantly/repatedly-PART.1sg/3sg
'I always stab the polar bear. (I never use a gun)' "said by someone showing off"

b. kapi-*saq*-tunga nanur-mit
stab-ITER-PART.1sg polar bear-*mik*
'I'm stabbing a polar bear' (poking, repeated stabbing)

3.3.3 The antipassive morpheme as a durative morpheme

Recent data from South Baffin indicates that Inuktitut has no imperfective/perfective viewpoint contrast (Clarke 2009). Clarke (2009) argues that the AP morpheme is a durative morpheme situated in *v*P forcing a durative reading in the AP, and thus explaining the distribution of the AP marker with punctual verbs. The proposal is framed within a feature-geometric approach to INFL (Cowper 2005) arguing that the Inuktitut INFL neither conveys perfective nor imperfective viewpoint aspect but a neutral viewpoint (Smith 1991).

I agree with Clarke that there is no [EVENT] feature on INFL or T in Inuktitut. As argued in section 3.2.3.4, there is no correlation between tense and viewpoint aspect in Inuktitut like there is in English. The relation between S and R is not relevant to viewpoint aspect in Inuktitut, while it is part of the conditions for perfectivity in English.

Based on the idea that viewpoint aspect has to be encoded on INFL and since that is not apparent in Inuktitut, Clarke proposes that the AP morpheme is not an imperfective morpheme but something more of a durative morpheme.

While I agree that the AP marker has the effect of enabling a viewpoint where R is a subset of E, this does not mean it is a durative morpheme. That would be akin to saying *be+ing* is a durative morpheme. Such an analysis disregards the actual meaning of the various AP markers, especially for *-si,* which is not a durational marker but an inceptive marker. Furthermore, if the AP construction were just a durative construction, then it should be both telic and atelic. As we will

see in section 3.4, that is not the case. Furthermore, durativity, as we have seen above, has an imperfective viewpoint by default. Thus, even if the AP marker were a simple durative marker, it would still force an imperfective viewpoint.

While I agree that viewpoint aspect is not part of the morphology expressing INFL features, I argue that viewpoint aspect in Inuktitut is based on case and agreement configuration. While other aspectual morphology may always override the default viewpoint, I argue that the AP marker is not exclusively a durative marker. Clarke's proposal that the AP morpheme is a durative morpheme cannot explain why it is the inceptive morpheme that functions as a default AP morpheme in Inuktitut. Furthermore, neither inceptive *-si* nor iterative *-saq-* have a different meaning from their original meanings as inceptive or iterative markers. While *-si*, as the default marker seems to have a more general use similar to *be+ing* in English, it does not actually make the event durative. If that were the case, then we would get progressive meaning or continuous meaning, which we get preferably with *-saq*, as shown in (164)

(164) Piita kunik-*saq*-tuq [SB]
Peter(ABS) kiss-ITER-par.3sg
'Peter is kissing someone' ("English kissing: making out")

The sole absence of imperfective morphology on INFL is not sufficient evidence for the absence of a grammaticised contrast. In Inuktitut, viewpoint aspect contrasts are a side effect of case and agreement configurations on both *v*P and INFL since they correlate with case and agreement changes on both arguments, corresponding to feature checking constellations for both functional heads. While INFL is thus certainly neutral as to viewpoint aspect in Inuktitut, *v* is not.

From an diachronic point of view, it should be noted that the ergative construction is disappearing rapidly in the Eastern dialects of Inuktitut and can now be elicited only in restricted contexts (Hallman 2008a, b, Johns 2006). Geographically speaking, the ergative is a much more marked construction in an Eastern dialect like Labrador Inuttut than in a Western variant like Iñupiaq. For example, Johns (1999) shows that the acceptability of names in object position in AP constructions is completely acceptable for Labrador while disputable in other dialects.[58]

[58] It has been noted as acceptable in Arctic Quebec by Johnson (1980:17).

(165) atâtsia-nga tiki-kasâ-li-gatta [LI]
grandfather-3sPoss/s-abs arrive-kasa-li-gatta

Kiuja-kKu-ji-lu-nginami Francesi-*mik*
cold-want-AP-as-neg.because.3refl.s Frances-mod.s.[59]

Kamutik box-iup iluane-ttu-*mik* uKa-nia-tlu-ni….
sled-abs box-rel.s inside.be-intr.PART.mod.s say-n.fut.-LLU-3refl.s

Her grandfather, seeing we were nearly home and not wanting Frances,
who was in the sled's box, to get cold, said….
[Them Days Magazine/1985 March]
(Johns 1999:82)

This pattern weakens with the more Western dialects of Inuktitut and other Eskimo languages (Johns 1999, 2001a, 2001b, 2006). With the disappearance of the ergative construction, the language is starting to lose the viewpoint contrast that is conveyed through the contrast with the AP construction. Recent data from South Baffin suggest some ambiguity in AP constructions between imperfective and perfective viewpoint. In *-si*-type AP constructions, the reading may be perfective since it cannot be cancelled, as shown in (166).

(166) a. *anguti quqiq-*si*-juq tuktu-*mit* kisiani quqiq-*si*-lau-nngit-tuq [SB]
man(ABS) shoot-AP-PART.3.sg caribou-*mik* but shoot-AP-PAST-NEG-PART.3sg
'the man just shot caribou but didn't shoot any'

b. I was shooting caribou, but I was interrupted (so I didn't shoot any)

The imperfective reading is however salvaged with the use of *-saq* where the cancellation is possible, as shown in (167).

(167) a. anguti quqiq-*saq*-tuq tuktu-mit [SB]
man(ABS) shoot-repeatedly-PART.3.sg caribou-*mik*

kisiani quqiq-*si*-lau-nngit-tuq
but shoot-AP-PAST-NEG-PART.3sg
'the man is shooting caribou but hasn't shot any'

---

[59] *mik*-case is glossed as modalis. It is the object of *kiuja-kKu* '*cold-want*'.

The more recent data from SB thus indicates that imperfective viewpoint may be achieved purely by inserting an appropriate morpheme, in this case *-saq*. However, when there is an ergative construction, only the perfective reading is possible for that construction, which applies to any type of verb, as shown in (168)b.

(168) a. niri-juq [SB]
eat-PART.3sg
'she is eating'

b. niri-jara
eat-PART.3sg/3sg
'she ate it'
'*she is eating it'[60]

The fact that only the AP construction with *-si* type verbs and not the ergative construction may be ambiguous as to viewpoint aspect shows clearly that Inuktitut, although possibly on its way to being a language that encodes viewpoint contrasts purely with morphology, still encodes it in the agreement system to a degree. The recent data also still supports the idea that punctual verbs are by default interpreted as perfective since only these verbs now allow for a perfective reading of the intransitive AP construction.

Another argument against the notion that the AP marker is a durative marker comes from its meaning as inceptive morpheme. The meaning of *-si* is more specific than simply extending that duration of the event like it could be argued for *be+ing*. It may be iterative (169), prolonged (170), or inceptive (171).[61]

---

[60] Clarke (2009:301) cites an example with the opposite reading to support her claim. I could not elicit the same reading. I would not necessarily consider the comment to be conclusive as perfective reading.
Aapu nigi-jara
apple.abs eart-part.1s/3s
'I'm eating an apple'
'*I ate an apple.'
Speaker's comments: ''It sounds like the apple is gone.''

[61] The fact that *-si* is cross-dialectally the most common AP marker indicates a certain underspecification in its meaning; also supported by the fact that it is usually only translated as '*start to*' when it is not the AP marker (see chapter 2, section 2.3.3.

(169) a. kapi-*si*-juq [SB]
stab-AP-PART.3sg
'He is poking someone'

b. kapi-jara
stab-PART.1sg/3sg
'I stabbed him'

(170) a. aqtuq-*si*-juq [SB]
touch-AP-PART.3sg
'he is stroking someone'

b. aqtuq-tanga
touch-PART.2sg/1sg
'you touched me'

(171) a. naalauti surak-tuq [IG]
radio(ABS) break-PART.3sg
'the radio broke/is broken'

b. surusiq irmusi-mik surak-*si*-juq
child(ABS) cup-*mik* break-AP-PART.3sg
'the child is breaking the cup'

In South Baffin, Mittimatalik, and Iglulik, the iterative reading can also be achieved with the alternative AP morpheme -*saq* (examples repeated from (31)).

(172) a. anguti kunik-*saq*-tuq ikaralimaamut [MI]
man(ABS) kiss-AP-PART.3sg for.an.hour
'the man is kissing someone for an hour (making out)'
literally: kissing repeatedly

b. aqtuq-*saq*-tuq
touch-AP-PART.3sg
'He is repeatedly touching someone' ("like tapping with your finger") [SB]

c. angut quqir-*saq*-tuq qimmir-*mit* [IG]
man(ABS) shoot-AP-PART.3sg dog-*mik*
'the man is shooting a dog' ("he keeps pulling the trigger")

The AP morpheme thus creates a circumstance where the punctual nature of the verb is circumvented to facilitate an imperfective reading. Unlike in English, this only happens for punctual verbs, not for durative verbs.

One more argument against a purely durative analysis comes from the distribution of the actual durative marker *-a*. While it has not received any attention as AP marker in the literature, it is used to form a 'prolonged' reading with punctual statives including perception verbs, such as *tusaq* '*hear*'. According to Harper (1979:8), the suffix *-a* '*prolongation of action*' is attached to verb roots.

(173) a. aanniajuq
aanni-a-juq
hurt-PROL-PART.3sg
'he is ill'

b. tusa-a-juq
tusa(q)-a-juq
hear-prol-PART.3sg
'he listens'

c. kataajuq
kata(q)-a-juq
fall-PROL-PART.3sg
'it falls from a height'

d. nilliajuq
nilli(q)-a-juq
make.noise-PROL-PART.3sg
'It makes a prolonged noise; it plays (e.g. a record)
(Harper 1979:8)[62]

If we compare them to examples from SB without *-a*, we get the punctual stative readings in (174)a, b in contrast to (173)a, b and the contrasts between (174)c and (174)d.

(174) a. aniq-tunga
hurt-PART.1sg
'I am hurt'

b. kataq-tuq [SB]
fall-PART.3sg
'he just fell'

repeated from (42)
c. Piita tusaq-tuq [SB]
Peter(ABS) hear-PART.3sg
'Peter **hears'**

repeated from (199)
d. miqsuq-tillunga qarling-nit tusa-a-juq naalauti-mit [SB]
sew-CONJ.1sg pant-*mik*.dl hear-PROL-PART.3sg radio-*mik*
'while I am sewing pants he is **listening** to the radio'

The fact that there is a morpheme that is used for "prolongation of action", which has not been reported as AP marker for any dialect yet provides further support that the semantics of the AP are not just about duration. Furthermore, duration indicates that the event holds for an interval,

[62] I added hyphenation and glosses.

which cannot be said for an inceptive or iterative viewpoint. What seems stretched out is not the actual event time E. While it is entirely possible that this might be another AP marker for perception verbs, which are punctual and durative like psych verbs, at this point, I do not have sufficient data to confirm. The sole reason why this was not reported as AP marker might simply be due to the fact that it only attaches to roots that rarely seem to occur in transitive constructions unless overtly causativised, as shown in (175). The sentence in (175)a is not an AP construction since the second DP is in allative case. The ergative construction in (175)b is ungrammatical.

(175) a. Piita aglu-mut kataX-*si*-juq [MI]
Peter(ABS) sea hole-ALL fall-INCPT-PART.3sg
'Peter is starting to fall into the seal hole'

b. *kataX-*si*-jaa[63]
fall-INCPT-PART.3sg/3sg
*'he started to fall it'

If I am correct in that the AP construction is imperfective, it is not surprising that the AP morpheme is only necessary for punctual verbs. As discussed in 3.2.3.4, imperfective viewpoint requires that R is a subset of E. Since E is a point when it comes to punctual verbs, R can only be a subset if E is perceived as lengthened or the focus of R is shifted. Adding meaning via a morpheme that creates an E that adds an interval in some sense, we create a circumstance where R can be a subset of E. The same interpretation is achieved in English, only without a specific morpheme. In Inuktitut, -*si* fulfills the role of English -*ing* although it is more specific in meaning, due to its origin as an inceptive marker. Note that the filmstrip reading or slow-motion reading for achievements in English (Rothstein 2004a) does not mean that the event actually takes longer.

Iterative -*saq* renders E as repeated interval, creating an E that has many intervals, thus creating a circumstance where R can be a subset of at least one of all the intervals of E. The prolonged or incompletive readings render E as somehow "stretched out" compared to R. While *aqtuq*- by default means a "*quick touch*", *aqtuq-si-vuq* means something like *a longer touch*, again, making the inclusion of R in E possible. The inceptive readings are interesting in that respect. Informally,

---

[63] The root is originally *kataq*-.

we could say that R, i.e. our point-of-view anticipates E, enabling us to refer to it even before it actually starts with respect to S. We get a very similar interpretation with some punctual verbs in English. However, *-si* is not as unspecified in meaning as *be+ing* is in English.

The AP morphemes thus do not render the event durative; it only enables an R that is a subset of E. Imperfective viewpoint does not mean that the event is durative; it only looks that way from the standpoint of an R that is a subset of E.

3.3.4 Summary

Viewpoint aspect as defined in the above sections is defined as a subset relation between Event time and Reference time. We have two basic viewpoints, perfective and imperfective. Perfective viewpoint is $E \subseteq R$, while imperfective viewpoint is $R \subseteq E$. In English, perfective viewpoint includes a second condition, $S \cap R \neq \varnothing$. This second condition accounts for the fact that past tense also indicates perfective viewpoint.

Inuktitut tense morphology has nothing to do with viewpoint, which means that only the subset relations between E and R determine viewpoint aspect. Viewpoint aspect is by default rendered by the punctuality of the verb. Punctual verbs are by default perfective because they are by default $E \subseteq R$. If E is a point, it is automatically a subset of R, but when E is durative, R is automatically a subset of E, thus fulfilling the condition for perfective and imperfective respectively. Considering the relevance of punctuality for tense marking and default viewpoint aspect in Inuktitut, I discuss in the next section its relation to the other lexical aspect feature telicity, and whether there is any direct correlation to viewpoint aspect.

The distribution of the AP marker further shows that only punctual telic verbs, or in other words, achievements, require the AP marker. The reason is because the default punctual verbs require an extra marker to denote imperfectivity since their default viewpoint is perfective. The fact that statives, i.e. atelic punctual verbs do not take the AP marker indicates that these verbs have no viewpoint contrast.

3.4 Lexical aspect and viewpoint aspect

Previous approaches on the semantics of the AP construction have argued that the AP construction is atelic (Benua 1995) counter to my proposal that the AP is imperfective. Similar telicity effects have been reported in Bittner (1987), although they are termed imperfective there.[64] I argue here that the apparent telicity contrasts between AP and ergative construction are due to various following factors. Firstly, one problem lies with the endpoint or delimitation approach (Tenny 1994) to telicity relying solely on adverbial tests. I will show that, as discussed in the literature, delimitation and adverbial tests are generally unreliable tools to determine telicity.

Many approaches to the relation between lexical aspect and viewpoint aspect claim that telicity determines viewpoint in some way, either as a markedness relation, as proposed in Bohnemeyer and Swift (2004),[65] or that telicity equals perfectivity.

Counter to both, I argue A) that punctuality determines the *type* of viewpoint aspect we find in languages but telicity has no influence; and B) that viewpoints influence telicity judgements. Based on the above definition of imperfectivity, the fact that R is a subset of E, endpoints or any points may not be determined, which means that a particular point cannot be determined for verbs in the imperfective. Thus, we only observe telicity contrasts with perfective forms in a language.

Most recent work on aspect discusses telicity within two main approaches; firstly the endpoint or culmination approach (Ramchand 1997, Travis 2000, Krifka 1998, Smith 1991), and secondly a focus on change-of-states (Borer 2005, Rothstein 2004a). Most of them are based on the original analysis of verb classes as described in Vendler (1957). I argue here that the correlation between lexical aspect and viewpoint aspect should be discussed considering not only telicity but also punctuality, as the discussion on the distribution of the AP morpheme has demonstrated. Telicity by itself is insufficient to determine aspectual properties in languages. Consideration of the

---

[64] See also discussion in section 2.3.9

[65] See the discussion above in section 3.3.1.

punctuality feature with respect to viewpoint aspect provides further insights into the nature of the relation, between lexical and viewpoint aspect.

(176) Vendler's description of the four verb classes (emphasis added)

a. Activities: A was running at time *t,* which means that time instant *t* is on some **time stretch** during which A was running.

b. Accomplishments: A was drawing a circle at *t,* which means that the time instant *t* is on a specific **time stretch** in which A drew that circle.

c. Achievement: A won a race between t_1 and t_2 means that the **time instant** at which A won that race is between t_1 and t_2.

d. States: A loved somebody from t_1 to t_2, means that at any **instant** between t_1 and t_2, A loved that person.

(Vendler 1957:149)

Following many previous works (Rothstein 2004a, b, Filip 1997, 2000, Bennett and Partee 1978, Dowty 1979, 1986, Reinhart 1986 among many others), lexical aspect is thus determined by two properties: homogeneity and punctuality. Punctuality distinguishes verbs that are specified for a point in time (176)c and d) but not for an interval (176)a and b). The punctual verbs in (177) are thus incompatible with a time interval. The atelic or homogeneous punctual verb in (177)a, albeit stative, still is not compatible with a time interval. The non-homogeneous, or telic verb in (177)b only lasts for a moment in time and thus is also not compatible with a time interval adverbial.

(177) a. *I hated my colleague from beginning until the end
b. *I recognised my friend from beginning until the end

Homogeneity or telicity refers to whether verbs denote events that hold for *different* points or intervals. Telic verbs denote events that hold for one point or interval, while atelic verbs denote events that hold for more than one point or interval. If we take the punctual verbs from (177), the atelic one in (178) holds for different points in time, while the telic one in (178)b does not.

(178) a. I hated my colleague yesterday and I hated my college the day before yesterday
b. *I recognised my friend yesterday and I recognised my friend the day before yesterday

Durative verbs denote events that last for an interval, which means they can be specified for an interval, thus they are compatible with an interval adverbial, as in (179).

(179) a. I drove a car between 2 pm and 6 pm
b. I built a Lego house from 2 pm to 6 pm

Durative telic verbs thus hold for one interval, while atelic verbs hold for more than one interval. Vendler's approach implies the subinterval approach to telicity, which states that the different intervals for which atelic verbs hold, must be subintervals of each other, as shown in (180).

(180) a. I drove a car between 2 pm and 6 pm → I drove a car between 2 pm and 3 pm
b. I built a Lego house from 2 pm to 6 pm ↛ I built a Lego house from 2 pm to 3 pm

Punctual telic verbs thus are compatible with points in time and hold for that one point in time. Punctual atelic verbs are compatible for points in time but hold for more than one point in time.

Durative telic verbs are compatible for time intervals and hold for that one interval. Durative atelic verbs are compatible for time intervals and hold for different time intervals, which are subintervals of each other.

It should be noted that not every subinterval is relevant (Dowty 1979) to evaluate the homogeneity of a predicate. For example, for the verb *run,* the subinterval interval that only consists of lifting a leg is not relevant in that sense. This ensures that, for example, the sentence *Mary was running in the park for two hours* holds even if Mary took a break and sat on a bench for 5 minutes. Furthermore, the predicate *was lifting a leg* refers to a different event from *was running in the park*.

Homogeneity is not only a property of verbal expressions but is also a distinguishing feature of nominals, as has often been noted in the literature (Bach 1986, Krifka 1989, Jackendoff 1987, Filip 1997 among many others). The parallels are clear. Both the parts and the sum of the denotation of *wine* equals *wine*, while a part of *a glass of wine* is not the same as *a glass of wine*. The same is true for homogeneous verbs. While the parts and the sum of *dance* are described as *dance*, parts of *build a house* cannot be described with the same predicate as the sum of the denotation for *build a house*. Note that both distinctions are not perceived as properties of real

world objects or events, but properties of the respective linguistic expressions used to denotate those objects or events.

While there is no shortage of tests to determine telicity, testing for viewpoint aspect is a little more difficult. However, some work on aspect argues that there is a correlation between lexical aspect and viewpoint aspect, generally arguing that lexical aspect influences viewpoint aspect (van Hout 2000b, Basilico 2008, Ramchand 2004). Once the nature of this relation is determined, it can be used to determine whether the contrast between AP and ergative construction is a contrast of viewpoint aspect.

One approach argues that telic verbs are said to be perfective, while atelic verbs are said to be imperfective. Thus, the assumption is that the lexical and viewpoint aspect are identical to each other. A lot of work defending this position is based on Russian prefixation where the data indeed suggests that there is a close correlation between perfectivity and telicity (Basilico 2008).

Another approach argues that although viewpoint aspect and lexical aspect are different, there is a markedness relation. These types of approaches tend to argue that telic predicates are by default perfective, while atelic predicates are by default imperfective. If the opposite happens, extra morphology is required (Bohnemeyer and Swift 2004).

Both types of approaches assume that lexical aspect is in some sense more basic, and that viewpoint aspect is in some way dependent on or derived from telicity. I argue that the relation between viewpoint aspect and telicity is reverse in that the viewpoint affects telicity judgements. However, that does not necessarily mean that the telicity is different. I argue that viewpoint does not actually change telicity, but by way of focusing on different aspects of an event, may treat such an event differently from its base meaning. The proposal is based on the definition of imperfective viewpoint. Recall that with imperfective viewpoint, R is a subset of E. In informal terms, this means that R cannot “see” the end of an event or the beginning. Thus, it cannot specify a particular point or interval for which E should hold.

Consider the following contrast in (181). When we use the perfective in (181)a, the predicate behaves as telic, while when used in the imperfective, it is treated as atelic (181). Why would that be? If telicity determined perfectivity, then the judgements should not change and the telic event of drinking the beer should be telic regardless of the viewpoint aspect. Instead, the data in

(181) suggests that the viewpoint aspect determines or at least influences telicity. Furthermore, if telic predicates determine perfectivity, we would expect an imperfective form with a telic verb to be more marked than an atelic predicate with an imperfective.

(181) a. Peter drank the beer in 5 minutes./*for 5 minutes
b. Peter was drinking the beer *in 5 minutes/for 5 minutes

One might argue that this happens only with durative telic predicates since it is the endpoint that determines telicity for those verbs. Since R does not see the endpoint in imperfectives, telic judgements are not possible.

However, the data suggests that this is only partly true. If we use a punctual telic achievement verb, we have the following contrast. In the perfective version (182)a, the contrast is as expected; the sentence is only compatible with '*in a second*'. However, the imperfective disallows any adverbial that introduces any time frame. While on its own, there is nothing wrong with the sentence, but with the adverbial it is ungrammatical (182)b.

(182) a. Peter broke the window within a second/*for a second
b. Peter was breaking the window *within a second/*for a second

If telicity were a uniform concept that is computed before viewpoint aspect, then why would it change depending on the viewpoint? The expected telicity contrasts only occur with perfective viewpoint, not with imperfective viewpoint. In the imperfective, accomplishments seem to become atelic, while achievements need to be coerced either with a "slow-motion" or "film-strip" reading (Rothstein 2004a:37) in order to make them acceptable with longer time frames but impossible with short ones.

The question thus arises, is the predicate always atelic in the imperfective, meaning, does the imperfective viewpoint make all events atelic? Or does imperfective viewpoint simply obscure the telicity of a predicate? And why would perfective viewpoint not override the telicity of a predicate? I attempt an answer in the next sections.

3.4.1 The endpoint approach to telicity

The above discussion on lexical aspect has taken the view that telicity is non-homogeneity. A large portion of the literature on aspect however, discusses telicity with respect to endpoints (Verkuyl 1972) and/or delimitation (Tenny 1994). The idea behind this approach to telicity is that telic events are temporally bounded, delimited, measured, or have endpoints in some way. Some verbs are delimited or measured-out by their direct objects; others are delimited in other ways.

In the literature on the semantic difference between the AP and the ergative construction, it has been argued that the internal argument is indefinite (Fortescue 1984) or non-specific (Schieberl Manga 1998). A non-specific object is then not able to function as a delimiter (Benua 1995), which leads to the AP construction to be atelic.

The problem with this approach to lexical aspect is two-fold. First, it ignores the second lexical aspect feature, punctuality, in essence treating durative and punctual telic verbs as identical. However, punctual telic verbs and durative telic verbs behave rather differently. As discussed in the previous section, the telicity of a punctual verb can only be evaluated at the point at which it happens. In other words, the evaluation point and E are identical. However, with durative verbs, the evaluation point is not identical to E. It is at the end of E, not identical to E. This would not be a problem if the two types of verbs behaved identically. However, they do not. For example, the type and presence of an internal argument influences telicity in different ways depending on whether the verb is durative or punctual.

The durative verb in (183) is very much dependent on the presence of its internal argument for telicity. It seems it needs an internal argument that is small or specific and thus provides an endpoint in itself (183)a in order for the event to be judged as telic. Note that the atelic judgement is still not completely unacceptable (183)a.

(183) a. He ate an apple ?for an hour/in an hour
b. He ate a delicious five course-meal for an hour/in an hour
c. He ate for an hour/*in an hour

However, if the internal argument is in some way larger or less specific, it is completely acceptable with “for an hour” (183)b. Furthermore, if there is no internal argument, the predicate

is undoubtedly atelic (183)c. Punctual telic verbs however, behave differently. Regardless of the presence of a direct object, they are only acceptable with “in an hour”, indicating that the telicity of a punctual verb is of a different nature than the telicity of a durative verb, just as Vendler (1957) discusses.

(184) a. He stole a car *for an hour/in an hour
b. *He stole *for an hour/*in an hour

Furthermore, delimitation is not even a reliable indicator of telicity. As shown in Hatav (1993, 1997), de Swart (1998), Smollett (2005), delimited predicates actually behave like atelic predicates under most testing conditions. Thus, the argument that the internal argument in an AP cannot function as a delimiter loses much of its appeal.

The problem however is that if all AP constructions are imperfective, and all imperfectives are atelic, then the only empirical support we have for the AP to be imperfective is the distribution of the AP marker. While this is good empirical language internal support, external tests to determine whether the AP is imperfective or simply atelic are necessary.

3.4.2 Conjunction tests

The conjunction test takes advantage of the fact that when two events are conjoined; the conjunction of telic predicates is interpreted as sequential (185)a, while conjoined atelic predicates are interpreted as simultaneous, as in (185)b. Although it is difficult to drink and eat at the same time, the implication is that the person took a bite, drank, ate again, etc. However, the default reading for (185)a is that first, he broke the window and then he left the building.

(185) a. He broke the window and left the building [sequential]
b. He ate and drank [simultaneous]

Reinhart (2003) argues that telic events introduce a new R, while atelic events do not. They have their own R, so to speak, at which they are true. However, atelic events are true at more than one

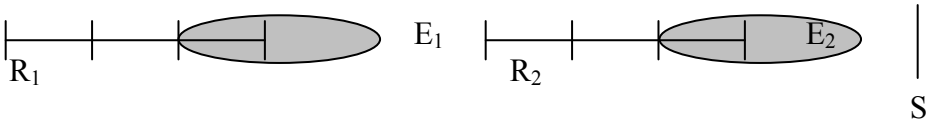
interval, thus they do not introduce a specific R.[66] Recall, telic predicates hold for one point or interval. Now why would telic events be sequential, while atelic events are not? Reinhart argues that what is delimited in telic events is not E but R. Thus, because telic events may only be true for one point, a new R is automatically introduced for any possible successive event. On the other hand, atelic events do not delimit R, thus any interval of R can be the R for more than one atelic event (186).

(186) Sequence (R-time movement) generalization:
a) Given the current R-time R_i, for each new e_j, $E_j \subseteq R_i$ (notated:$[_{ri}\ E_j]$).
b) An R-time R_i is current, until a new R_{i+1} is introduced.
c) A telic event introduces a new R-time, R_{i+1}. (atelic events do not.)
d) Temporal delimiters introduce a new R-time

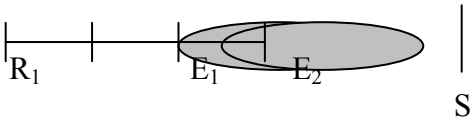
(Reinhart 2003:8)

In (187)a, we conjoin two telic events. Since the first event introduces a second R_2, this R_2 enters a different relation to E_2 compared to the relation between E_1 and R_1. The same happens in (187)c. In (187)b, we conjoin two atelic events. Since only one R is introduced, it enters a relation with both E_1 and E_2, allowing them to overlap. The same happens in (187)d despite the fact that the second event introduces a second R_2.

(187) a. He ate the apple and left [sequential]
telic and telic

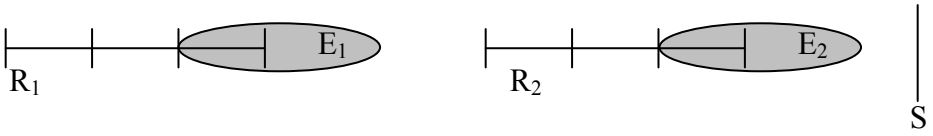


b. He worked and played [simultaneous]
atelic and atelic

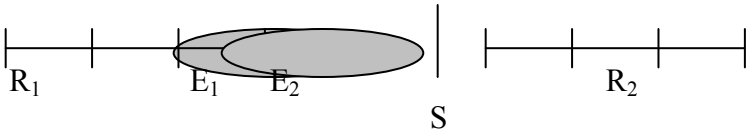


[66] Based on a previous implementation in Krifka (1989, 1992).

c. He left and played soccer [sequential]
telic and atelic



d. He worked and ate the apple [simultaneous]
atelic and telic

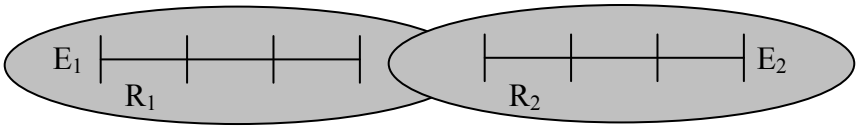


This means that this is the only test where delimited events like *eat an apple* behave like telic events. If it is true for Inuktitut that only the conjoining test can distinguish durative telic verbs from atelic verbs, we will have a reliable test to see whether the AP is atelic. However, if my proposal is correct and the AP is imperfective, we still have a problem. As outlined above, imperfective viewpoint does not allow telic judgments.

Based on Reinhart (2003), we can now explain why telic judgments are incompatible with imperfective viewpoint. Recall imperfective viewpoint means that R is a subset of E. Even if a telic event introduces a new R, this R is still a subset of E. A sequence with an originally telic verb in the imperfective would introduce a new R which in turn is a subset of the second E. However, neither of them have one specific interval that determines E. Thus, even though we have a telic predicate, it cannot be viewed as such since any interval or point of R_1 and R_2 overlaps with some E, thus making the event look like it is atelic.

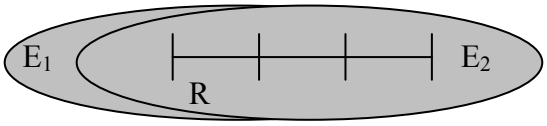
(188) Conjoined events with imperfective viewpoint

a. Simultaneous reading with telic imperfectives



I'm eating an apple and hitting the ball for hours

b. Simultaneous reading with atelic imperfectives



I'm eating and drinking all day long

Based on (188), we should thus expect that if we conjoin two events with imperfective viewpoint, they should always be interpreted as simultaneous. This is borne out, as shown in (189). When we put the above sentences from (187) into the imperfective, all conjunctions are simultaneous.

(189) a. He was eating the apple and he was leaving [simultaneous]

b. He was working and he was playing [simultaneous]

c. ?He was leaving and he was playing soccer [simultaneous]

d. He was working and he was eating the apple [simultaneous]

The conjoined events are all interpreted as simultaneous; moreover, putting the achievement as the first event is rather odd. So, despite telic events introducing a second R, that second R is obscured by the imperfective viewpoint. Thus, neither event behaves as a telic event.

Putting the first event in the perfective and the second event in the imperfective, the readings seem rather problematic. The same happens when we put the first event in the imperfective and the second one in the perfective.

(190) First event perfective, second event imperfective

a. ?He ate the apple and he was leaving

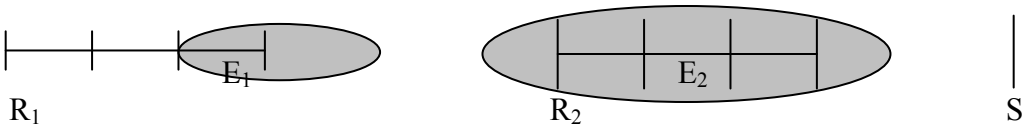
b. ?He worked and he was playing

c. ?He left and he was playing soccer

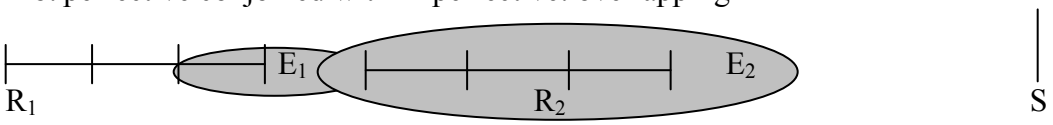
d. ?He worked and he was eating the apple

The problem with the combinations in (190) is that it is not clear whether E_1 and E_2 overlap. This may be the reason why these combinations are so odd. Furthermore, it also indicates that it is not telicity that interferes with the sequential/simultaneous reading. If telicity was the sole reason for the sequential readings, then (190)a and c should be interpreted as sequential.

(191) a. perfective conjoined with imperfective: not-overlapping



b. perfective conjoined with imperfective: overlapping

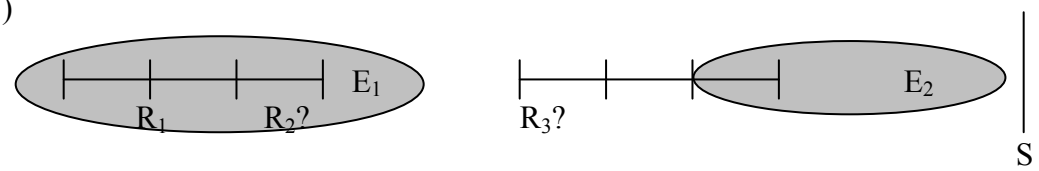


If we reverse the combination, we get a sequential reading, if the first event is formed with a telic durative verb, but a simultaneous reading, when we have the first event with an atelic durative verb. When the first event is formed with an atelic durative verb and the second one is too, it is odd, although a simultaneous reading would be preferred (192)b. If the first event is a punctual telic verb, and the second one is a durative telic one, the combination seems odd again.

(192)	a. He was eating the apple and left	?[simultaneous]
	b. ?He was working and played	?
	c. ?He was leaving and played soccer	?
	d. He was working and he ate the apple	?[simultaneous]

The problem with the combinations in (192) is since the perfective may provide an R for the imperfective, if the imperfective comes first, it already has an R. However, they do not form a relation like two perfectives or two imperfectives. The imperfective obscures the telicity of an event since the second R that is automatically introduced may still be a subset of E_1, as in (193).

(193)



What does that mean for Inuktitut? To test the hypothesis that the AP construction is imperfective, we should expect that two conjoined AP constructions should be read as simultaneous. Two ergative constructions should be sequential. Putting the ergative construction first should give ambiguous results, and putting the AP construction first should give us equally ambiguous if not ungrammatical results.

However, if the difference between AP and ergative construction is only based on telicity, then we should get the following results. If the ergative construction is first, the conjoined events are interpreted as sequential and when the AP construction is first, the events should be simultaneous.

3.4.2.1 Conjoined events in Inuktitut

Conjoining events in Inuktitut is different from English in that they are formed with conjunctive clauses. Conjunctions like *amalu* '*and*' are disfavoured. Conjoined events are usually formed with the conjunctive mood *–tillu,* which, as Hayashi (2005b) points out, is best translated as '*when*' when we have simultaneous readings. Sequential vs. simultaneous readings are determined by the punctuality of the verb and tense marking. As shown in (194), two punctual events are always interpreted as sequence in that the event in the conjunctive clause precedes the event in the matrix clause. In that case, the matrix clause must be marked with past. The past tense in the matrix clause has scope over the conjunctive clause in that it does not need past tense marking. The event in the conjunctive clause automatically precedes the event in the matrix clause because the event in the matrix clause is punctual.

(194) a. miali ani-∅-tillugu jaan ani-**qqau**-juq [SB]
Mary leave-**PRES**-CONJ.3s John leave-**PAST**-PART.3s
'When Mary left, John left'

b. **PAST** [Mary leave **PRES** [John leave]]

(Hayashi 2005b:132)

On the other hand, when two durative events are conjoined, they are interpreted as simultaneous, as shown in (195).

(195) a. jaan niri-∅-tillugu miali uqalimaa-**lauq**-tuq
John eat-**PRES**-CONJ.3s Mary read-**PAST**-part.3sg
'When John was eating Mary was reading'

b. **PAST** [Mary be reading **PRES** [John be reading]]

(Hayashi 2005b:131)

The event of the conjunctive clause is simultaneous to the one in the matrix clause by virtue of them both being durative. Therefore, the conjunctive clause is not marked for past tense. In order to express a sequence with two durative verbs, the perfective marker *-anik* in the conjunctive clause ensures that the event in the matrix clause precedes the event in the conjunctive clause.

(196) a. miali mumi-**anik**-∅-tillugu niri-lauq-tuq
Mary dance-**PERF-PRES**.CONJ.3s eat-PAST-part.3sg
'After Mary danced, she ate.'

b. **PAST** [Mary eat **PRES** [**PERF** [Mary dance]]]

(Hayashi 2005b:133)

Hayashi (2005b) notes that it is possible to have a sequential reading without *-anik*, but *-anik* is strongly preferred. The reason is that the past tense marker *-lauq* does not entail that an event has ended, as the example in (197) shows. This property distinguishes *-lauq* from the simple past tense in English, which, by virtue of also encoding perfective aspect, provides a stronger implication that an event has indeed ended. Thus, while the Inuktitut entailment is entirely possible but not preferred in (197)a, it is not in English. With *-anik*, the event has ended (197)b.

(197) a. jaan ilinniaqti-u-**lauq**-tuq.
John student-be-PAST-PART.3s
jaan ilinniaqti-u-Ø-juq suli
John student-be-PRES.PART.3s still
'John was a student. John is still a student'

b. *jaan ilinniaqti-u-**anik**-Ø-tuq.
John student-be-**PERF-PRES**-PART.3s
jaan ilinniaqti-u-Ø-juq suli
John student-be-PRES-PART.3s still
'John was a student. John is still a student'

(Hayashi 2005b:134)

In order to express a sequence where the event in the conjunctive clause precedes the matrix clause, regardless of punctuality, the conjunctive clause includes the negation *-nngit*, as shown in (198). Literally, it is the past tense that is negated in the conjunctive clause, expressing something akin to the sentence in (198). This sentence is true if there is a past time t at which *Mary danced* is true at t and there is no past time such that if *she ate* is true at t' then t' is before t. Or in other words, *Mary ate* is true and *Mary danced* is not true at the same time which entails that *Mary ate* happens before *Mary danced*.

(198) a. miali mumi-**lau-ngit-**tillugu niri-**qqau-**juq
Mary dance-**PAST-NEG**-CONJ.3s eat-**PAST-**PART.3s
'Before Mary danced, she ate.'

b. **PAST** [Mary eat ¬ **PAST** [Mary dance]]

(Hayashi 2005b:132)

For us, this means that in order to have a sequential reading we need a time sequence in that order. For my purposes I need to show that if the matrix clause is ergative, it should precede the event in the conjunctive clause if that event is negated.

According to Hayashi (2005b), two punctual events are interpreted in sequence, while two durative events are interpreted as simultaneous. I have argued above that punctual verbs are by default perfective, while durative verbs are by default interpreted as imperfective. The discussion in Hayashi (2005b) thus gives as an initial way of testing whether the same applies to ergative and AP constructions. Note that *-tillu* only occurs with intransitive agreement, which means that the embedded conjunctive clause can never be an ergative construction. This means that the event in the conjunctive clause, unless it is a canonical intransitive clause with a punctual verb, should always be simultaneous to the event in the matrix clause. This is indeed borne out, as shown in (199). Regardless of whether the conjunctive clause is in a *-si*-type AP construction or a null-type AP construction, the events are always simultaneous when the matrix clause is also in an AP construction.

(199) a. *-si*-type AP conjunctive AND *-si*-type AP matrix clause → [simultaneous]

quqir-*si*-tillunga kunik-*saq*-tui [SB]
shoot-AP-CONJ.1sg kiss-AP-3pl
'**while** I am shooting they are kissing'

b. *-si*-type AP conjunctive AND null-type AP matrix clause → [simultaneous]

quqir-*saq*-tillunga tuktu-mit miqsuq-tuq qarling-nit [SB]
shoot-AP-CONJ.1sg caribou-*mik* sew-PART.3sg pant-*mik*.dl
'**while** I am shooting caribou she is sewing pants'

c. null-type AP conjunctive AND null-type AP matrix clause → [simultaneous]

miqsuq-tillunga qarling-nit tusa-a-juq naalauti-mit [SB]
sew-CONJ.1sg pant-*mik*.dl hear-PROL-PART.3sg radio-*mik*
'**while** I am sewing pants he is listening to the radio'

d. null-type AP conjunctive AND *-si*-type AP matrix clause → [simultaneous]

i. miqsuq-tillunga qarling-nit kunik-*saq*-tui [SB]
sew-CONJ.1sg pant-*mik*.dl kiss-AP-PART.3pl
'**while** I am sewing pants they are kissing'

ii. pisuk-tillugu quqiq-*saq*-tuq
walk-CONJ.3sg shoot-AP-PART.3sg
'he was walking **while** shooting'

Thus, the conjunction does not allow sequential readings unless the conjunctive clause and the matrix clause are canonical intransitive constructions with a punctual verb. The only other way to get a sequential reading where the event in the matrix clause precedes the event in the conjunctive clause is with the help of tense marking, as discussed in Hayashi (2010). In order to determine whether the ergative behaves like a punctual and therefore like a perfective, we further expect that conjoined events with an ergative construction in the matrix clause and a canonical intransitive punctual event in the conjunctive clause and are interpreted as sequential. This prediction is also borne out since the ergative behaves like a punctual verb, as shown in (200).

(200) *punctual conjunctive* AND *ergative matrix* → [sequential]

a. tuqu-tillugu taku-jara [SB]
die-CONJ.3sg see-PART.1sg/3sg
'I saw that he **had** died'
E2 E1

b. tikitillugu tuqu-tara
arrive-con.3sg kill-PART.1sg/3sg
'I killed him **after** (when) he arrived'
E2 E1

Extrapolating the results from Hayashi (2005b) by taking punctual to be perfective and durative to be imperfective in canonical intransitive constructions, we can determine whether the AP and the ergative construction behave like the punctual and durative intransitives. As the data in (199) and (200) shows, the sequential reading is only possible with a punctual conjunctive clause and an ergative matrix clause, thus confirming that the ergative behaves like a punctual event and thus has perfective viewpoint. Using the AP construction in the conjunctive clause has shown that when punctual verbs are used the AP conjunctive clause they behave like a canonical durative intransitive, thus providing further evidence that the AP is an imperfective.

The conjunction test cannot conclusively determine whether the contrast is a telicity contrast. As Hayashi points out, without tense marking, whether conjunctive clauses have sequential or a simultaneous reading depends on punctuality, not on telicity.

However, as discussed above, imperfectives in general behave like atelic predicates, which would not give us any other results as for the viewpoint contrasts. As Hayashi has shown, it is punctuality that determines the behaviour with conjunctive clauses, not telicity.

3.4.3 Progressive entailments

Another test for telicity is progressive entailments. According to these, only atelic predicates hold the non-progressive entailment, as shown in (201). Thus, under the endpoint-approach, we would expect delimited predicates to have the same entailment relations, as in (201)b.[67]

(201)	a. Mary was driving a car	ENTAILS	Mary drove a car
	b. Mary was building a house	DOES NOT ENTAIL	Mary built a house
	c. Mary was shooting the bear	DOES NOT ENTAIL	Mary shot the bear

For our tests to determine the aspectual nature of the Inuktitut AP construction, this means, we can make the following predictions.

[67] The fact that telic imperfectives differ from atelic imperfective in that respect indicates strongly that viewpoint does not actually change telicity but only obscures it.

If the AP is imperfective, we should get entailment relations between ergative and AP construction mimicking the entailment relations for in the progressive tests shown in and between ergative and AP construction.

If the contrast between AP and ergative construction is only a telicity contrast then the ergative construction should always entail the AP construction. Thus, we should always get the entailment relations, as in (201)a.

If the AP is imperfective, then we should get the entailments in (202)a, b, c. If the entailments mirror the ones between perfectives and imperfectives in English, we have further empirical support for the hypothesis that the AP is imperfective, independent from the AP morpheme distribution.

(202) a.	null-type AP		ergative
	He is pulling a sled	ENTAILS	He pulled the sled
b.	null-type AP (with telic verb)		ergative
	He's building a house	DOES NOT ENTAIL	He built a house
b.	*-si*-type AP		ergative
	He is breaking a window	DOES NOT ENTAIL	He broke the window

3.4.3.1 AP and ergative: entailments

If my hypothesis that the AP construction is an imperfective is correct we should get the entailment relations as depicted in (202). As shown in (203), these are indeed borne out. The examples show that the entailment correlations between AP and ergative mirror the same between imperfective and perfective in English. The AP construction with durative atelic predicates in (203)a, b entail the ergative constructions. The durative verb *sana-* does not entail the ergative construction, thus behaving like a telic predicate and mirroring the relation between progressive telic predicates and their perfective counterparts in English. The punctual telic verb in (203)d also behaves like a telic verb in that it does not entail the ergative construction. If the AP was solely an atelic construction, then only (203)a, b should have an entailment relation.

(203) a.	uniaq-tunga qamiuti-mit	ENTAILS	uniaq-tara qamuti [SB]
	pull-PART.1sg sled-*mik*		pull-PART.1sg/3sg sled(ABS)
	'I am pulling a sled'		'I just pulled a sled'

b. utaqqi-junga Saila-mit ENTAILS utaqqi-jara Saila
wait.for-PART.1sg Saila-*mik* wait-for-PART.1sg/3sg Saila(ABS)
'I'm waiting for Saila' 'I waited for Saila'

c. sana-juq iglu-mit DOES NOT ENTAIL sana-jara iglu
work.on-PART.3sg house-*mik* build-PART.1sg/3sg house(ABS)
'I'm working on a house' 'I built a house'

d. quqir-*si*-juq tuktu-mit DOES NOT ENTAIL quqir-tara tuktu
shoot-AP-PART.3sg caribou-*mik* shoot-PART.1sg/3sg caribou(ABS)
I'm shooting (at) caribou 'I shot caribou'

Thus, we have further empirical support that the contrast between AP and ergative is a viewpoint contrast, not a telicity contrast.

3.4.4 Atelic antipassives in other dialects

Another proposal that AP constructions are atelic is based on data from Yup'ik. Benua (1995) argues that the change in case for the internal argument correlates to atelic aspect in Yup'ik. The claim is that the AP construction denotes atelic or irresultative aspect in Yup'ik, an Inuit language spoken in Alaska. Note that the cited examples show no overt AP morpheme.

(204) a. Lucy-m Mary-q utaqallrua [YU]
Lucy-erg Mary-abs wait for-PST-ind.3-3s
Lucy waited for Mary (Mary showed up)

b. Lucy-q Mary-mek utaqallruuq
Lucy-abs Mary-am wait for-PST-ind.3s
Lucy waited for Mary
(Mary did not necessarily appear)

(Benua 1995:33)[68]

The same sentences yield a different reading in Mittimatalik. There is no indication as to whether the person someone was waiting for appeared, regardless of construction, as shown in (205).

---

[68] Actually, there seems to be some confusion as to whether telic, resultative, or completive are the same concepts. In Benua (1995:37) telic, completive, and resultative aspect seem to be treated identically. *-am* is the gloss for the case marker for the internal argument in the AP, most likely equalling *-mik*-case in Inuktitut.

(205) a. Lucy utarqi-lauq-tuq Mary-mik [MI]
Lucy(ABS) wait-PAST-PART.3sg Mary-*mik*
'Lucy waited for Mary' (Mary probably showed up)

b. Lucy utarqi-lauq-tuq Mary-mik kisiani Mary tiki-lau-ngimmat
Lucy(ABS) wait-PAST-PART.3sg Mary-*mik* but Mary(ABS) arrive-PAST-BECAUS.3sg
'Lucy waited for Mary, but/because Mary showed up' (although it took her very long)

c. Luci-up Mary utarqi-lauq-tanga
Lucy-ERG Mary(ABS) wait for-PAST-PART.3sg/3sg
'Lucy waited for Mary' (no sense as to whether Mary showed up)

I suggest that telicity and resultativity should not be treated equally. Whether the waiting was successful does not make it telic. Even if there is a strong implication that Mary showed up, it has nothing to do with telicity. It implies that it might have ended by the time Mary showed up. While some languages may encode the difference between different types of endpoints as perfective, there is no empirical support for that in Eskimo.

Furthermore, the contrast shown in (204) and (205) seems more one of length of event, not of telicity. Whether someone showed up or not has nothing to do with the telicity of the event of waiting. Mary appearing is not part of the description of the event, but an implicature we apply through our real world knowledge. We however need to describe the linguistic expressions, not real world events. Benua cites further examples from Kalaallisut to support her claim.

(206) a. Jaakup Aana tuqup-p-aa [KA]
J. A.-ABS kill-ind-3/3
Jacob kills Ann
(Ann is already dead)

b. Jaaku Aanamik tuqu-ssi-v-uq
J.-ABS A.-INS kill-AP-ind-3
Jacob kills Ann
(Ann is not dead yet, but almost)

(Bittner 1987, 1988:68, fn6)

Again, whether Ann is dead or not has nothing to do with telicity. The implication is that Anne might not be dead is stronger in the AP construction in (206)b based on the fact that R is a subset of E and thus cannot "see" the result or supposed end of the killing; however, this is not necessarily an indicator of telicity but of imperfectivity, as discussed in the previous section.

3.5 Summary of chapter 3

The relation between viewpoint aspect and lexical aspect, as discussed above, can be summarised as follows. Imperfective viewpoint, which has R as a subset of E is not compatible with telicity in the sense that neither endpoints nor single points can be determined with an imperfective viewpoint. Telicity can only be evaluated with perfective viewpoints. Since perfective viewpoint treats E as a subset of R, E can be defined with respect to R. For imperfective viewpoint, E cannot be defined with respect to R since R is a subset of E.

The relation between viewpoint aspect and punctuality has been determined in section 3.2 as a relation of markedness. Punctual events are by default treated from a perfective viewpoint, while durative verbs are by default treated as imperfective. Telicity does not play a role here. This does not mean that punctual verbs can only be interpreted as perfective or durative verbs only as imperfective. However, we may expect punctual verbs to be more marked when used with an imperfective viewpoint. This prediction is borne out in the distribution of the AP marker in Inuktitut. Only punctual telic verbs require an AP marker. Again, telicity contrasts have no bearing on the distribution of the AP marker.

I have argued in this chapter that the AP construction forces an imperfective reading of the sentence. This confirms the notion that has often been noted in the literature that AP constructions seem to convey some sort of unbounded aspect (Polinsky 2008). Since imperfective viewpoint is not compatible with telic judgements, we seem to get atelic readings with most AP constructions. I have shown that this is not due to an actual telicity contrast between AP and ergative construction but due to imperfective viewpoint obscuring telicity, thus allowing only atelic judgements.

Empirically, the strongest support of the analysis of the AP as imperfective is the distribution of the AP marker. In chapter 2, we have seen that it only occurs with verbs that require an internal argument. In this chapter, we have seen that verbs with such an argument structure are punctual verbs. If the AP construction were based on a change in telicity, we would expect that only telic verbs occur with an AP marker. However, the class of verbs that require an AP marker is restricted to punctual telic verbs. An analysis favouring a telicity contrast between ergative and AP construction has no explanation why only punctual verbs require an AP marker. My proposal

on the other hand can explain why an inceptive marker and an iterative marker occur obligatorily in the AP construction, facilitating imperfective readings as known for other languages for punctual verbs. They facilitate iterative, inceptive, or prolonged readings of punctual verbs, thus enabling R to be a subset of an iterated, anticipated, or longer E. These morphemes can of course be used in any construction, as shown in chapter 2, and for any verb, but are obligatory for punctual verbs in the AP construction. Thus, the AP morpheme distribution is determined by the punctual feature together with telicity.

The definition of viewpoint aspect as the relation between E and R within a Reichenbachian framework accounts for both the AP morpheme distribution and the tense morpheme distribution in Inuktitut. It explains why only punctual verbs have an AP morpheme and the crosslinguistic intuition that AP constructions have an imperfective, i.e. unbounded reading.

Further telicity tests show that there is no clear telicity contrast between AP and ergative construction in Inuktitut but support the viewpoint aspect analysis. I have shown, counter to previous discussions in the literature that, viewpoints influence telicity judgements. I have also demonstrated that a correlation between viewpoint and lexical aspect is only observable between punctuality and viewpoint, not between telicity and viewpoint. Punctuality influences the type of viewpoint a predicate may express to be the default.

Thus, depending on AP morpheme and/or verb, we find that the AP morpheme facilitates various imperfective readings for punctual verbs, showing why durative verbs do not have an AP morpheme. Thus, the feature [PUNCTUAL] plays a role in both AP morphology and AP semantics.

The distribution of the AP morpheme and the investigation into the verbal meaning of the AP has shown that, especially when it comes to lexical aspect, both features need to be taken into consideration when evaluating event semantics. The concept of telicity as an *end*point is only meaningful when we consider durative verbs; punctual verbs are telic by virtue of being instantaneous.

4 Agreement-based viewpoint aspect

The previous chapter has shown that the semantics of the AP construction is imperfective. It could also be demonstrated that the AP marker is an aspectual morpheme whose distribution is determined by these semantics. While intransitive punctual verbs are by default perfective, intransitive durative verbs are by default imperfective. In order to get the imperfective viewpoint for the AP construction, punctual telic verbs require the AP marker.

On the other hand, ergative constructions are perfective. The ergative construction is perfective without any difference in morphology between durative and punctual verbs. This means that whenever the agreement morphology is transitive, the viewpoint is perfective regardless of the punctuality of the verb, as shown in configuration C and E in the table in (207). Intransitive agreement with the external argument always coincides with imperfective viewpoint (configuration B, D, F in (207)), except for punctual verbs in a canonical intransitive construction without AP marker (configuration B in (207) where the agreement is with the internal argument.

(207) Case and Agreement configurations and Viewpoint Aspect

	Verb type	**Agreement**	**External argument**	**Internal argument**	**Viewpoint**
A	Punctual	Intransitive	N/A	Absolutive	perfective
B	Punctual	Intransitive	Absolutive	(*Mik*-case)	imperfective
C	punctual	Transitive	Ergative	Absolutive	perfective
D	durative	Intransitive	Absolutive	N/A	imperfective
E	durative	Transitive	Ergative	Absolutive	perfective
F	durative	Intransitive	Absolutive	(*Mik*-case)	imperfective

In this chapter, I discuss how the computational system derives the respective viewpoints. The analysis accounts for the properties in (207). It explains the fact that punctual verbs in AP constructions are interpreted imperfective because of the AP marker *-si*, while durative verbs are not. Furthermore, the analysis explains the fact that the viewpoint changes depending on which argument has absolutive case. Whenever the internal argument has absolutive case, the viewpoint is perfective, while whenever the external argument has absolutive case, the viewpoint is imperfective.

The analysis has to account for these facts in Inuktitut and possibly for AP constructions in other ergative languages. As observed in Dixon (1979, 1994), Tsunoda (1981), and others, the following pattern seems to exist throughout the distributions of AP's in ergative languages (Spreng 2010).

Ergative languages with an aspectually conditioned split or AP construction have bounded aspect with ergative-absolutive constructions, while nominative-accusative or antipassive constructions show unbounded aspect.

The analysis does not depend on the ergativity of the language. Agreement-based aspectual changes can also be observed in nominative-accusative languages (Borer 1993). Moreover, it seems that imperfective viewpoint or, in more general terms, unbounded aspect is encoded through a loss of agreement and/or a non-default case on the object in general (Kiparsky 1998). Thus, the object case that is responsible for imperfective aspect is the non-default case, i.e. accusative or oblique in ergative languages, and dative or any other non-accusative case in nominative-accusative languages.

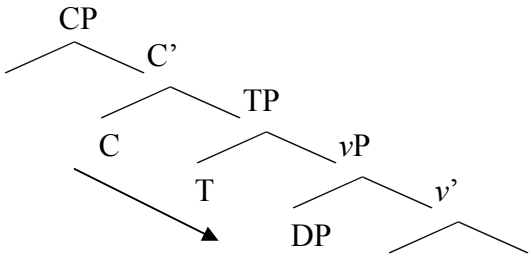
Since, regardless of the language, it is the case of the object that may influence aspectual interpretation crosslinguistically, I propose that the crucial property of languages with agreement-based viewpoint changes lies with the object-case checking head little *v*.

I therefore propose that an [INTERVAL] feature on *v* enables *v* to check case with the internal argument. I argue that by default, *v* does not check case with an internal argument in Inuktitut. Thus, the [INTERVAL] feature is responsible for the change in object case associated with changes in viewpoint. To account for the fact that the viewpoint aspect change is associated with *object* case, I propose that the [EVENT] feature is located not on TP but lower on *v*.

4.1 Main proposals

In the course of this chapter, I will argue that tense and, therefore T, does not inherit φ-features from C in Inuktitut. This means that T does not participate in any Agree relation, which leads to T never merging with a specifier (208). The head that probes to form an Agree relation with an argument to check absolutive case is always C.

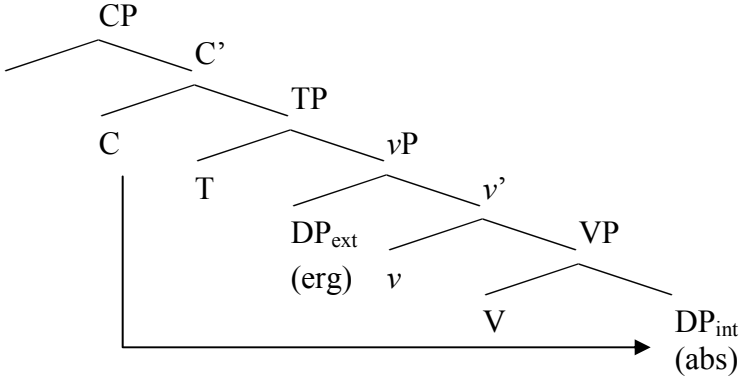
(208) Upper portion of the clause



Ergative constructions, as shown in (209), derive in an identical manner, regardless of the type of verb involved. I will argue that ergative case in Inuktitut is inherent case, and is the result of merger with *v*. Furthermore, I will argue that in Inuktitut, *v* by default does not check case with an internal argument.

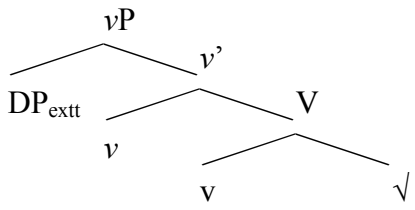
Therefore, *v*P by default does not form a phase, allowing C to probe to the internal argument to form an Agree relation with that argument. This means that the internal argument gets absolutive case.

(209) Ergative construction



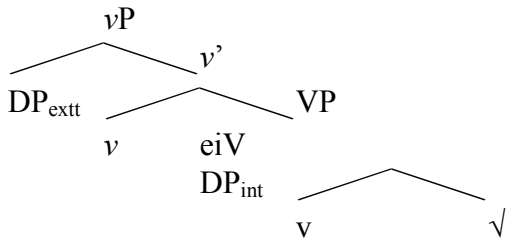
The lower portion of the clause is distinguished by the punctuality of the verb. Durative intransitive verbs, as discussed in chapter 2, are unergative verbs, i.e. verbs with obligatory external argument. The structure in (210) follows Kratzer (1996) in that unergative verbs are verbs whose sole argument is an external argument of a light verb *v*. I further follow Marantz (1997, 2001) assuming that lexical heads are the result of a category-less root merging with a category-determining head. This category-determining verbal head has the durative property by way of being verbal. In essence, if something is verbal, it is by default durative. This also means it is by default imperfective, which, in turn, also means it is by default eventive (see chapter 3). Thus, we draw a close parallel between eventiveness and the category verb.[69]

(210) Intransitive durative verbs



When durative verbs are transitive (211), V merges with an internal argument, as discussed in chapter 2, thus accounting for the fact that the optionality of the internal argument is due to the argument structure of the verb, and not due to the AP construction.[70]

(211) Durative verbs: Transitive



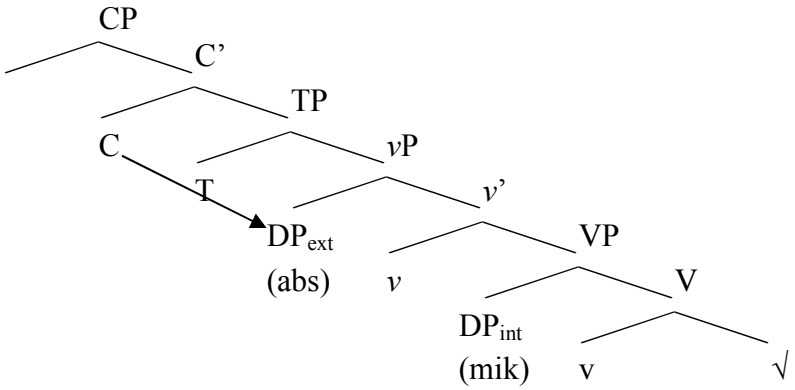
---

[69] In a language like English, stative verbs are verbs and behave accordingly, while adjectives are of a different category, the spelled-out roots in Inuktitut are as predetermined in that way.

[70] If we assume that verbs are the sum of their properties, i.e. punctuality and telicity, then it is possible that durative verbs may be distinguished between telic verbs that require an internal argument and atelic verbs that do not. I will not delve into that distinction any further since telicity has no impact on the interpretation of the AP, as discussed in chapter 3.

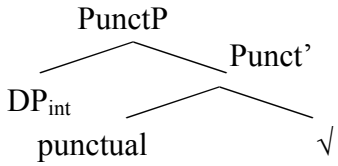
I will argue that the *mik*-case with durative verbs in the null-type AP is assigned inherently upon merger since the default for *v* is that it has no φ-features or case-features in Inuktitut. C thus agrees with the external argument, which results in absolutive case for that argument.

(212) Antipassive with durative verbs



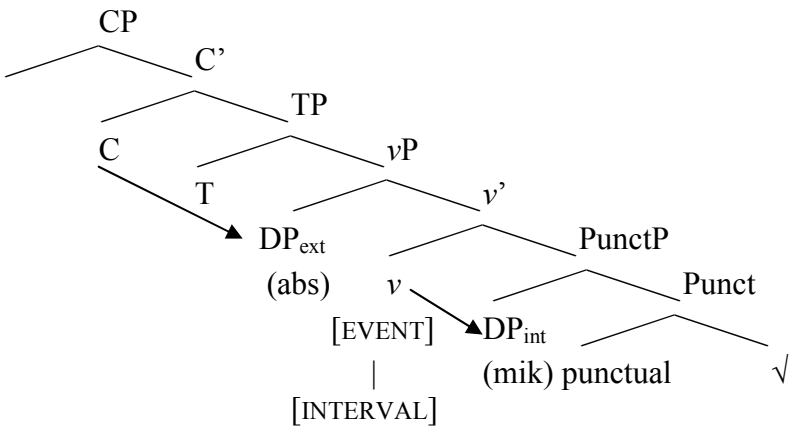
Punctual verbs are verbs that have an obligatory internal argument, as discussed in chapter 2. When they are unaccusative, they do not merge with a light verb (213). I will argue that their roots do not merge with a verbal head but a punctual head. Punctual verbs become actual verbs only when they merge with a light verb, which then merges with an external argument. The reason is because most atelic punctual verbs are stative and may be adjectives in Inuktitut when intransitive.

(213) Intransitive punctual verbs



I will argue that the reason why the internal argument has *mik*-case is because *-si* enables case checking with the internal argument. This results in an Agree relation between *v* and the internal argument comparable to a nominative-accusative construction. Thus, the only time *v*P forms a phase is with a *-si*-type AP construction. In this construction, C probes to the external argument, which results in absolutive case on the external argument.

(214) Antipassive with punctual verbs



The key elements of the structures I am arguing for are the following:

I. *v* only checks structural accusative case in AP constructions with *-si*.

II. *-mik*-case is the spell-out of two different case checking processes: accusative with *-si*-type AP construction and inherent case in every other instance.

III. Ergative case is inherent case.

IV. Punctual verbs are not verbs until merging with an external argument-introducing light *v*.

(I) accounts for the fact that an external argument has absolutive subject case only in the *-si*-type AP construction and the null-type intransitive construction.

(II) restates the fact that *mik*-case is not only used for theme-type arguments but also for instruments. It further accounts for the fact that null-type AP constructions allow other cases than *mik*-case, while *-si*-type AP constructions never do.

(III) accounts for the fact that ergative marked DP's are external arguments, but they almost never behave like subjects in Inuktitut.

(IV) accounts for the fact that punctual verbs, especially statives, may be adjectives in Inuktitut.

The analysis needs to be independent from considerations of ergativity. Previous work on event interpretation and the connection to object case in nominative-accusative languages has

unearthed that these languages also show a correlation between aspectual readings and the case of the direct object. Finnish is the best-known example, where using the partitive instead of the accusative case for the object renders the event unbounded (Kiparsky 1998, 2001, 2005). Various analyses on how these contrasts are derived show that a non-structural case on the object often correlates with atelic readings (Kratzer 2004a). Kratzer (2004a) argues that this is due to a [TELIC] feature on the object case-checking head *v*, which cannot be checked by a non-structural case. On the other hand, the partitive case in Finnish is a structural case just like the accusative case. Thus, the non-default case on the object that corresponds to unbounded aspect does not necessarily have to be a non-structural case (Kiparsky 2001).

It should be emphasized that my proposal is that viewpoint contrasts *may* be rendered by object case alternations. I do not propose that all languages have the means to do so, as is clearly shown in English. Moreover, not every language encodes viewpoint aspect as a grammatical feature in the sense that it is expressed in every instant. As shown in Smith (1991) for example, Mandarin Chinese has neutral viewpoint in *addition* to morphology that encodes perfective and imperfective. English on the other hand, has default viewpoint that is expressed even in the absence of tense/viewpoint morphology (Cowper 2005). While Mandarin Chinese shows constructions that are ambiguous, English does not. Furthermore, aspect contrasts rendered by object case alternations also are not necessarily always viewpoint aspect contrasts. As argued in Kratzer (2004a), the aspectual contrasts found in German or Finnish are telicity contrasts, not viewpoint contrasts.

I suggest that if object case alternations are associated with viewpoint aspect, there is most likely no correlation of viewpoint aspect morphology and tense morphology, such as in English. The reason is that if viewpoint aspect correlates to the case of the internal argument, the feature correlated to viewpoint aspect may not be located in any of the higher formal projections, such as TP or CP.

4.2 The structure of the Inuktitut sentence: basic assumptions

Most analyses of ergativity in Eskimo assume that the language group is syntactically ergative and take the absolutive DP to be the subject, equalling absolutive case with nominative case (Bittner 1994, Murasugi 1992, Johns 1992, among others) regardless of whether the absolutive

occurs in an ergative construction or in any other construction. This is based on two main properties. Firstly, absolutive DP's pattern together with respect to relativisation and contrast to the ergative marked DP (Creider 1978, Smith 1984, Johns 1987, 1992, Bok-Bennema 1991, Bittner 1994, Schieberl Manga 1998, Wharram 1996, 2003, Gugeler 1994).[71] According to Creider (1978:95), "… the only noun phrase (NP) position inside the relative clause which may be relativized into is the absolutive." As shown in (215), the DP *angut* '*the man*' is absolutive, which makes it a possible candidate to be the head noun.

(215) angut (iksiva-juq) quviasuk-puq
man sit-active participle(he) happy-IND(he)
'the man who is sitting is happy'

(Creider 1978:98)[72]

General practice and previous analyses take the absolutive DP always to be checked with T. Subject case checking is due to unvalued φ-features on T, previously thought of as inherent to T. It has been shown in Chomsky (2008) that the φ-features previously assumed to be associated with T are actually inherited from C, thus accounting for languages where C agrees with the subject (Bayer 1984). The reason why there is φ-feature inheritance in English is partly because agreement and tense correlate to each other. In English, when the clause is finite, i.e. has tense, there is subject case. When the clause is non-finite, i.e. has no tense, there is no subject agreement. I will argue that this does not happen in Inuktitut because tense morphology has no correlation to agreement. This means that instead of T, it is C that sends a probe to find a goal with which to value uninterpretable φ-features in Inuktitut.

4.3 No C-T feature inheritance in Inuktitut

As shown in chapter 3, tense correlates to agreement and thus to subject case in English. In Inuktitut, tense has nothing to do with agreement. I propose therefore that in Inuktitut, agreement

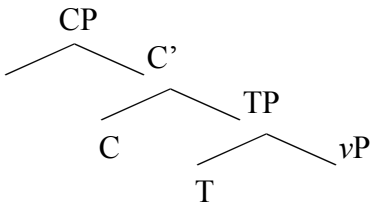
---

[71] See Bobaljik (1993), Pittman (2006) for a different view.

[72] Brackets indicate the relative clause. The example is from Kaniqliniq, which is a typological and geographical neighbour to the Baffin Island dialects.

and tense are two separate projections.[73] I further propose that because there is no correlation between the presence of agreement and tense, Inuktitut TP does not inherit φ-features from C. Thus, no argument merges in a specifier position of TP, as illustrated in (216).

(216)



Initial support for my proposal comes from morpheme order in Inuktitut. In contrast to English, the tense morpheme is not part of an agreement morpheme and can be separated from agreement morphology by negation, as shown in (217)b.

(217) a. kunik-tau-**lauq**-tunga Piita-mut [SB]
kiss-PASS-PAST-PART.1sg Peter-ALL
'I was kissed by Peter (earlier today)'

b. kunik-tau-**lauq**-***nngit***-tunga Piita-mut
kiss-PASS-PAST-NEG-PART.1sg Peter-ALL
'I was not kissed by Peter' (earlier today)

(Hayashi and Spreng 2005:1)

If T were to inherit φ-features from C, the question is how features are inherited through a negation projection. Feature inheritance (Chomsky 2008) means that there cannot be any Agree relation until C is introduced into the computation. Negation in Inuktitut is in a fixed position adjacent to the agreement morphology, regardless of its scope. The examples in (218) are ambiguous unless disambiguated by contextual information.

(218) a. kata-gasua-nngit-tuq [SB]
fall-try-NEG-PART.3sg
'he tries not to fall/he doesn't try to fall'

---

[73] This was initially suggested in Hayashi and Spreng (2006).

b. kata-nngit-tuq
fall-NEG-PART.3sg
'he doesn't/didn't fall'

Assuming there is a negation projection, it always occurs adjacent to the agreement projection, which means that in every instance T merges with negation, which then subsequently merges with C. While there seems to be no explicit adjacency requirement for two heads, where one inherits features from another, the implication is that the head merging with the next is the one that inherits, such as in T-C inheritance, and also *v*-V inheritance discussed in Chomsky (2008).

Feature inheritance allows us to distinguish between raising and control verbs in that raising constructions have T that does not inherit φ-features, while control verbs do. If I am correct and there is never feature inheritance in Inuktitut, we would predict that Inuktitut does not have that distinction; in fact, there should be no non-finite clauses.

It has been argued that Inuktitut is actually tenseless (Nowak 1994) which in Cowper (2005)'s terms means that it lacks a Deixis/Finite feature on INFL. If this were true, then we would have an explanation why viewpoint aspect is not correlated to tense marking in Inuktitut. If there is no feature, then there is no grammatical tense, hence no correlation to viewpoint aspect. However, Hayashi and Spreng (2005), Hayashi (2010) demonstrate that tense is a grammatical feature in Inuktitut. Tense morphology in Inuktitut is not optional as previously argued (Nowak 1994), but its distribution is different from past tense marking in English.

For English and other Germanic languages, it is generally taken for granted that only finite sentences have tense (Wiltschko 2003). Thus, finiteness is considered the presence of agreement and tense at the same time. However, that does not have to be a universal property.

In Inuktitut, finiteness cannot be associated with the presence of tense morphology. Conjunctive sentences marked with *–llu-* have traditionally been analysed as non-finite (Lowe 1985, Bobaljik 1993, Bittner 1994, Murasugi 1992, Harper 1974, Manning 1996). These clauses, however, may be marked for tense, which distinguishes them from non-finite clauses in a language like English.

While it has been argued that tense morphemes in these clauses are no more than time adverbials (Nowak 1994), which means that they do not count as inflectional tense markers, Hayashi

(2005a, 2010) demonstrates that their interpretation is clearly determined under the scope of the matrix tense. The example in (219) shows the scope relation between the two tenses. The matrix past tense has scope over the subordinate tense; therefore, S1 (the embedded clause) is interpreted as simultaneous with respect to the time of John's eating, the matrix event in S2. This yields the simultaneous interpretation of the embedded eventuality as the matrix event, which results in the translation with *when* or *while*. The same holds for a constellation, where the event of the embedded clause is after or before the event of the matrix clause.

(219) When S1, S2

S1 S2

a. jaan niri-∅-tillugu miali uqalimaa-lauq-tuq
John eat-PRES-CONT.3s Mary read-PAST-PART.3sg
'When John was eating Mary was reading'

b. PAST [Mary read PRES [John read]]

(Hayashi 2005b:131)

Hayashi (2005b) shows clearly that tense morphology that appears in the conjunctive clause functions as relative tense (Comrie 1985, Ogihara 1996), playing an essential role to determine the temporal order of the matrix and subordinate eventualities.

Thus, the so-called non-finite conjunctive clause is marked for tense, which leaves us with the conclusion that finiteness has nothing to do with tense marking in Inuktitut. As shown in Cowper (2002), Inuktitut is not the only language that has tense-marked clauses that may be non-finite. For example, West Flemish has non-finite clauses that still are marked for tense. Haegeman (1985) argues that these "personal infinitives" have tense, but no agreement, as shown by the fact they can be modified by a temporal adverbial, such as *gisteren* '*yesterday*' (220).

(220) a. [Mee ik da gisteren te zeggen][74] hee-se dat hus gekocht
with I that yesterday to say has-she that house bought
['Because of my saying that yesterday] she has bought that house.'

[74] Brackets added.

b. Voor gie da te krygen goa-je vele moeten veranderen
for you that to get go-you much must change
'In order to get that you'll have to change a lot.'

(Haegeman 1985:125)

Portuguese, on the other hand, has untensed non-finite clauses, as shown in (221), where the auxiliary is marked for agreement. Here, non-finiteness is taken to be the presence of agreement combined with the absence of tense.

(221) o Manel pensa [$_{CP}$ ter-emi [$_{IP}$ amogos t_i levado o livro]
the Manel thinks to.have-Agr his friends taken the book
'Manel thinks that his friends have taken the book'

(Raposo 1987:98)

However one would analyse the Portuguese or West Flemish constructions, they show that finiteness is only equivalent to the presence of tense and agreement in a language like English. Such a correlation cannot be observed crosslinguistically.

Based on the findings in Hayashi (2005b), one might ask whether the tensed conjunctive clause is truly non-finite in the sense of having no subject agreement. Johns and Smallwood (1999) demonstrate that conjunctive clauses display properties of non-finite clauses as well as properties of finite clauses. One of the properties that indicate non-finiteness would be that conjunctive clauses do not allow ergative case assignment.[75] Despite the transitivity of the conjunctive clause, only the internal argument is cross-referenced on the verb *taku-* '*see*'. What would be agreement with an ergative argument is not expressed in the agreement morphology. In the example in (222), agreement on the verb in the conjunctive clause is with the internal argument '*it*', which would be marked with absolutive case if it were a DP.

(222) taku-tlu-**gu** tusâ-laut-taga [LI]
see-llu-3s hear-d.past-intr.part.1s/3s
'While I saw it, I heard it.'

(Johns and Smallwood 1999:161)

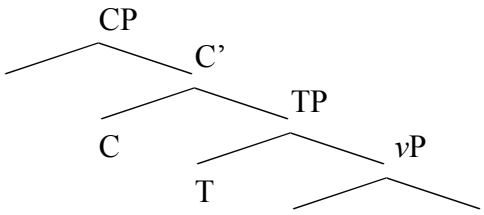
---

[75] This applies to relative clauses as well (see Creider 1978, Johns 1987, Gugeler 1994).

Thus, if we assume that ergative case is the subject case, the argument for conjunctive clauses to be non-finite seems conclusive, as argued in Bobaljik (1993). However, as will be argued in detail in later sections of this chapter, ergative case is not a reliable indicator for subjecthood in Inuktitut. Empirically, it is unlikely that ergative case is even a structural case in Inuktitut and other ergative languages, as shown in Spreng (2006), Massam (2006), Legate (2006), Wharram (1996), Woolford (2004, 2006, 2008), and many others. For now, I assume that the absence of ergative case is not a reliable indicator to determine whether there is subject agreement.

If there are no non-finite clauses in Inuktitut, then we should not expect a T that varies between one that is responsible for subject agreement and one that does not. If T is never responsible for subject agreement, then we do not expect any variation here. Furthermore, if C has unvalued φ-features universally, then these features will always need to be valued. In the case of Inuktitut, that means that there is always agreement morphology on the verb in some way as we have seen with the conjunctive clauses. Furthermore, since tense has no correlation to agreement, it cannot merge with a specifier, as shown in (223). Whatever DP gets absolutive case, it is through an Agree relation with C, not T.[76]

(223)



4.4 Case and *v* in Inuktitut

The proposal made above in section 4.3 makes a further prediction. If there is no variation with respect to φ-feature agreement in C, agreement-based viewpoint aspect cannot be based on feature variation in C. As adopted in section 4.2, and outlined in section 4.3 above, the only variation with respect to subject agreement lies thus in which argument becomes the subject. However, whether the external argument or the internal argument will check case with C has

[76] The analysis in Bittner and Hale (1996a, b), which is based on the idea that C is the functional equivalent of case (K) shows similar elements of structural case assignment, especially for the absolutive. Their analysis however, differs from mine in its treatment of ergative case.

nothing to do with the feature-make-up of C. Either argument is a possible candidate to value the φ-features of C.[77] Thus, we can predict that that agreement-based viewpoint aspect has nothing to do with features on C.

If viewpoint aspect is correlated to certain case/agreement configurations and has nothing to do with subject agreement, then it is *v* that is the locus of agreement-based viewpoint contrasts. I argue that viewpoint aspect is correlated to an interpretable but unvalued [INTERVAL] feature that exists only with *-si*-type AP constructions on *v* in Inuktitut. Following Pesetsky and Torrego (2004), who argue along similar lines for tense feature valuation through subject agreement, I take [INTERVAL] to be interpretable because the meaning of *-si*, but unvalued when it merges in *v*. It can only be valued through an Agree relation with the internal argument. Another analysis that follows similar lines is in Svenonius (2002a), who argues that case is nothing but the reflection of interpretable tense or Aktionsart features. However, I argue that in Inuktitut, it is not telicity, but the feature [INTERVAL] that is responsible for *mik*-case in Inuktitut.

I argue that *mik*-case is thus similar to an accusative in that it is the result of an Agree relation of *v* with the internal argument. In this instance, *v* carries an [INTERVAL] feature, which is valued through an Agree relation with the internal argument. On the other hand, *mik*-case is inherent case when it occurs with any other construction. It thus mirrors properties of dative case in German in that it behaves like structural case in some instances, while in others it behaves like inherent case. Inherent *mik*-case is the result of merger with a verb, which carries an [INTERVAL] feature, i.e. a durative verb. This explains the properties of *mik*-case marked arguments in that depending on the properties of the *v* that later merges with the VP, the internal argument may either be marked with *mik*-case or get absolutive case through an Agree relation with C. Like dative case with dative verbs in German, it may not correlate to a subject position. On the other hand, it may become a subject whenever it is a theme (see section 4.4.4). I take that to mean that inherent case is spelled out if there is no other case-checking formal head that is able to form an Agree relation.

---

[77] Although I argue in Spreng (2005) that first and second person external arguments never establish an Agree relationship. That claim has to be modified in that it is only applicable for cases without any previous discourse where the reference of the external argument has been established. See Hallman (2008b) for the complete pattern.

Since perfective or bounded viewpoint crosslinguistically correlates to the default case on the internal argument (accusative in nominative-accusative languages and absolutive in ergative languages), I also assume that the default for *v* in Inuktitut is that *v* does not check case with the internal argument. This stands in contrast with nominative-accusative languages, where the default assumption is that *v* checks case with the internal argument, unless it is passive. This way, we can pinpoint the opposite correlation between viewpoint aspect and object case when comparing nominative-accusative languages and ergative languages. In nominative-accusative languages, case checking with the internal argument correlates to bounded aspect, while in Inuktitut it correlates to unbounded, i.e. imperfective aspect.

(224) Perfective viewpoint and default *v*

Ergative language:	default *v* [-accusative] → perfective viewpoint
Nominative-accusative language:	default *v* [+accusative] → perfective viewpoint

The pattern outlined in (224) is only a very superficial picture; the exact aspectual differences may allow for variation. However, the main correlation stands.

The traditional definition of the AP as a derivation from the default ergative, similar to the traditional view of the passive being a derivation of the active sentence, takes the object case to be an oblique (Postal 1977, Heath 1976, Silverstein 1976, Hale 1970). For the Eskimo languages, Bok-Bennema (1991) has argued for Kalaallisut that the object case in the AP is actually an accusative, effectively classifying Kalaallisut as a split-ergative language.

Nominative-accusative languages that encode aspectual contrasts through changes in object case are taken to encode telicity contrasts (Kratzer 2004a). Furthermore, the telicity contrast is either encoded in two different structural cases (Finnish), or in an alternation between structural and inherent case (German, English). The question thus arises whether the two alternative object cases are structural cases or whether there is an alternation between structural absolutive and possibly oblique *mik*-case. I argue for Inuktitut that imperfective viewpoint is always associated with *mik*-case. However, the reason why we have *mik*-case is different. For durative verbs, it is a default, i.e. inherent case simply because durative verbs are imperfective by default. For punctual verbs, it is accusative case, based on the feature make-up of *v*, not of the lexical verb. If *mik*-case is always accusative case, then we lose the insight that durative verbs are by default imperfective,

while punctual verbs are not. If *mik*-case were never accusative case, then the correlation would be something like the telicity alternation in English, where the atelic interpretation correlates to non-structural case.

However, as discussed in chapter 3, the contrast between AP and ergative construction is not in telicity but in viewpoint aspect. Therefore, I propose that the *mik*-case with durative verbs is inherent case. This proposal accounts for the fact that the difference between having a *mik*-case marked internal argument or not does not change the viewpoint aspect for durative verbs. The only time viewpoint aspect changes, is when the case on the internal argument is absolutive case. The *mik*-case thus makes no difference to viewpoint aspect for durative verbs. Furthermore, this proposal also accounts for the fact that the canonical intransitive and the null-type AP construction have identical telicity judgements, which contrasts with the telicity contrasts in languages like English. If telicity contrasts are universally correlated to the contrast between structural and non-structural case like in English or German, then this proposal also accounts for the fact that canonical intransitive and null-type AP are always atelic. If the internal argument has *mik*-case, it is atelic, while when it is marked with absolutive in the ergative construction we get a telicity contrast that does not occur between a null-AP with or without internal argument (225).

(225) a. niri-juq
eat-PART.3sg
'he is eating'

c. niri-juq niqi-mik
eat-PART.3sg meat-*mik*
'he is eating meat'

c. niqi niri-jaa
meat(ABS) eat-PART.3sg/3sg
'he ate meat'

Thus, one prediction of this proposal is that whatever case is on a non-external DP with durative verbs, it will not change viewpoint aspect (see section 4.4.4).

I further propose that *mik*-case with punctual verbs, i.e. overt antipassives, is accusative case. Thus, I can account for the fact that the default viewpoint changes only when these verbs allow the internal argument to have *mik*-case. If yes, we have a non-default imperfective viewpoint interpretation for punctual verbs, caused by non-default case on the internal argument.

(226) a. naalautiq surak-tuq
radio(ABS) break-PART.3sg
'the radio broke'

b. surak-*si*-juq naalauti-mik [MI]
break-AP-PART.3sg radio-*mik*
'he is breaking the radio'

I will thus argue that the *mik*-case has properties of both inherent and accusative case, and is accusative only when checked with a *v* with an [INTERVAL] feature. Thus, the correlation is determined by the fact that *mik*-case may alternate between being checked with *v* or not.[78]

Inherent case in Minimalism has been analysed as assigned by prepositions where the DP bearing inherent case has inert φ-features (Boeckx 2003). Earlier approaches take inherent case as assigned under theta marking (Chomsky and Lasnik 1995). In recent work, inherent case is assigned upon Merge (Seely et al. in press).

I take inherent case to be a case that is a default spell-out based on the head the DP merges with. In traditional terms, certain theta roles are spelled out as *mik*-case, allative *-mut*, etc. upon initial Merge, following the idea that heads theta-mark their complements (Chomsky and Lasnik 1995). On the other hand, I take structural case to be an outcome of an Agree relation between a head that carries uninterpretable features that need to be matched and thus valued by a DP carrying matching features. Structural case is thus a reflex of uninterpretable or unvalued features of a functional head and may override inherent case since it does not change or value any features that DP already carries. Thus, case may be morphologically identical even if it is the result of different case assigning operations (McFadden 2004).

Mik-case thus behaves similarly to accusative case in German. It has properties of inherent case as well as structural case (McFadden 2004, Wegener 1985, 1986). Accusative case is on direct objects, as in (227)a, it can be assigned by prepositions, as in (227)a, or it is used for temporal DP's, as in (227)c. Accusative case is thus the spell-out of an Agree relation with different functional heads, such as *v* in (227)a, or P in (227)b, or upon merger with V in (227)c.

(227) a. Ich liebe dich
I love-PRES.1sg you(ACC)
'I love you'

b. Ich denke an dich
I think at you(ACC)
'I think of you'

c. Dies-en Abend bleibe ich daheim
this-ACC evening stay-PRES.1sg I(NOM) home
'I stay home this evening'

---

[78] Crosslinguistically, telic aspect correlates with accusative case. One outcome of my analysis is thus that because Inuktitut *v* does not by default check case, the correlation with aspect is reversed.

Thus, the morphological spell-out of a case may be identical even when it is the result of a different case checking operation.

I argue therefore, that something similar happens with *mik*-case in Inuktitut. It is similar to accusative case in that it is checked against uninterpretable φ-features in *v*, when that *v* carries an [INTERVAL] feature. When *v* does not carry an [INTERVAL] feature, *mik*-case is the result of merging with V.

The next sections will show that *mik*-case has properties of both inherent and accusative case depending on whether the construction has an AP marker or not. Previous approaches have not made a difference between *-si*-type AP's and null-type AP's. The discussion thus introduces this new element for an analysis of AP constructions in Inuktitut.

4.4.1 The *mik*-case is both inherent and structural: theta roles

The term oblique is used in traditional grammar or any approach that thinks of voice alternations like the AP as derived from an underlying structure. Traditionally, this makes the *mik*-case seem a result of a transformation. While, like inherent cases, it is tied to the original theta role the verb assigned to the *mik*-case bearing DP, like structural cases, it is predictable in how and where that DP gets case.

In recent minimalist terms (Chomsky 2000, 2001, 2004a, 2008), lexical or inherent case is taken to be checked by a DP in its merge position, or checked by a prepositional head (Boeckx 2003). If the *mik*-case is an inherent case, we would take the suffix *–mik* as a postposition of some kind that checks an unvalued feature against its goal DP.

Empirically, the preposition analysis is a rather problematic solution to account for the *mik*-case. The least of its problems is the fact that there is no evidence that Inuktitut has prepositions at all. While we could take the suffix as a postposition,[79] there is the additional fact that the *mik*-case, when it is not used for instruments in non-AP constructions, is always used for themes. For example, in ditransitive structures that are AP's, it is invariably used for themes (228), while in

[79] Previously proposed by Schieberl Manga (1998).

other constructions, it is used for instruments (229), the topic of a story (230) (Nagai 2006), or the modifier to an incorporated noun (231).[80]

The contrast in (228) shows that the *mik*-case is not a default case for ditransitive constructions that is used if absolutive and ergative case are not available anymore. While the ditransitive AP construction in (228)a has the theme *titirauti* '*pencil*' with the *mik*-case, the ditransitive ergative construction uses the allative case, and not the *mik*-case for the goal *nutaraq* '*child*' in (228)b. Thus, when there is a theme in a non-ergative construction, that theme is always marked with *mik*-case. This shows that *mik*-case cannot be oblique in the traditional sense as *the* inherent case that is used under a voice alternation.

(228) a. angut titirauti-mik nutara-mut tuni-*si*-vuq [SB]
man(ABS) pencil-*mik* child-ALL give-AP-IND.3sg
'the man gave the pencil to the child'

b. anguti-up titirauti nutara-mut tuni-vanga
man-ERG pencil(ABS) child-ALL give-IND.3sg/3sg
'the man gave the pencil to the child'
(Nowak 1996:198/199)

In the Iñupiaq sentence (229)a, the *mik*-case (glossed as modalis) is used for the instrument *saumia-nik* '*her left hand*', similar to the Kalaallisut example in (229)b where the instrument *savi-mik* '*knife*' is marked with the *mik*-case (also glossed as modalis).

(229) a. Uumiŋagguuq saumianik itna paksraqugaa [IN]
Uumiŋa-gguuq saumik:anik itna paksrak-qu+kaa
PR.MOD.S=HS left.hand.-MOD.3SS this.way dig-want_to.V-IND.3S3S
'He wanted her to dig with her left hand.' (18:66)
(Nagai 2006:45)

b. Savi-mi-nik kapi-vaa [KA]
knife-his-mod stab-ind,3sg3sg
'He stabbed it with his knife'
(Bok-Bennema 1991:257)
(taken from Fortescue 1984:162)

---

[80] The latter is likely tied to a theme theta role since the incorporated noun is usually, although not exclusively, a theme (Johns 2007).

In the examples in (230), the *mik*-case marks the "topic of the story" (Nagai 2006:45),[81] which is *iłuuqiñiġmik* '*blackfish*' in the Iñupiaq example in (230)a and *angalanira-nik* '*his journey*' in Kalaallisut in (230)b.

(230) a. Unipchaaqtuallaŋniaqtuŋa uvva iłuuqiñiġmik [IN]
unipchaaq-tuaq-llak+niaq+tuŋa uvva iłuuqiñiġ-*mik*
tell.a.story-slowly-long-will-IND.1S PR.ADV blackfish-MOD.S
'I am going to tell a story about a blackfish.' (17:1)
(Nagai 2006):45

b. Hansi angalanira-nik apir-aat [KA]
Hansi-nom journey,his-mod ask-ind3pl,3sg
'They asked Hansi about his journey.'
(Bok-Bennema 1991:258)
(taken from Fortescue 1984:92)

According to Johns (2007), in the incorporation example from South Baffin in (231)a, the *mik*-case marked DP functions as a location modifier, while in the Kalaallisut example in (231)b, the modifier with *mik*-case modifies an incorporated noun that is a theme.

(231) a. tuktu-qaq-tuq Nunavung-*mit* [SB]
caribou-have/exist-intr.PART.3s. Nunavut-Loc.[82]
'There are caribou in Nunavut'
(Johns 2007:548)

b. Kissartu-mik kavvi-sur-put [KA]
hot-*mik* coffee-drink-IND.3.pl
'They drank hot coffee.'
(Bok-Bennema 1991:258)
(taken from Fortescue 1984:83)

---

[81] Interestingly, that is also one of the uses for accusative in German, but only with the verb '*geht um*' '*goes around/on*', indicating that it is inherent accusative in this instance in German.

Es geht um einen Frosch.
it(NOM) go-PRES.3sg about a(acc.sg) frog(acc.sg)
'It is about a frog.'

[82] South Baffin has conflated the case marker for mik (traditionally called modalis), ablative *–mit*, and locative *-mi* to *–mit*. However, from other dialects we know that it is the *mik*-case that is used for adjuncts of incorporated nouns.

While this is not the place to account for all occurrences of *mik*-case[83], I suggest that taking it as a postposition might not be the right way to account for the *mik*-case in AP constructions. While Schieberl Manga (1998) accounts for the non-specificity of the DP in AP's with such an analysis, it provides us with no explanation why this case is so closely associated with imperfective aspect. Whenever the internal theme argument is marked with *mik*-case, we get imperfective aspect.

The Inuktitut *mik*-case is thus used for themes in AP constructions. It may also be used for instruments; however, that does not happen in the AP construction. Allative case and even absolutive are used for instruments in both AP and ergative construction, as shown in (232). In the ergative construction in (232)a, we find the patient/theme in the absolutive case and the instrument in the allative case. In the AP in (232)b, it is the theme that carries *mik*-case even if the absolutive DP is not a prototypical agent but an instrument.

(232) a. Piita-up ani-qqau-jaanga ujarang-mut [SB]
Peter-ERG hit-PAST-PART.3sg/1sg rock-ALL
'Peter hit me with a rock'

b. ujaraq uvan-nit aniq-*si*-juq
rock(ABS) I-*mik* hit-AP-PART.3sg
'the rock hit me'

Instruments thus do not always require *mik*-case, while themes have to be *mik*-case marked, unless we have an ergative construction. Like with an accusative, it is the theme/patient role that is marked with *mik*-case in the AP construction.

4.4.2 Structural *mik*-case without overt agreement morphology

In contrast to the ergative and the absolutive case, the *mik*-case behaves like any other inherent case in that the verb never shows agreement with the DP bearing the *mik*-case. This applies to any instance of *mik*-case, whether it appears in an AP construction or not. In ergative constructions on the other hand, agreement morphology always indicates agreement with both the absolutive and the ergative marked argument. This seems to indicate that *mik*-case is not a

[83] I will ignore the use 'topic of a story'.

structural case since there is no agreement in comparison with the ergative construction. I argue, however, that despite the absence of morphological agreement, *mik*-case marking may be the result of an Agree relation with the internal argument.

The example in (233) shows that *mik*-case is a requirement for *wh*-words that were moved from any non-external argument position (Gillon 1999), as shown in (233), where both *wh*-words are marked with *mik*-case. This indicates that themes and other DP's, such as goals, may be marked with *mik*-case before being moved; indicating further that there are two different instances of *mik*-case. Note that agreement on the verb crossreferences with the absolutive kina 'who' in (233).

(233) Kina kitu-*mik* su-*mik* aittui-va [MI]
who who-acc what-acc give-3sg.intr.interr
Who gave what to whom?

(Gillon 1999:23)[84]

An indicator that *mik*-case is similar to accusative in a *-si*-type AP construction is shown in Spreng (2001a). In a sentence where the implicit non-overt object is modified, case marking on the modifier shows *mik*-case , as in (234).[85] This indicates that the object-*pro* (Rizzi 1986, Spreng 2001a) is present since modifiers usually agree in case with the modified element (235).

(234) Tungujurtu-*mik* ii-*si*-vunga [MI]
it is green-instr. swallow-AP-IND.1sg
'I swallowed something green'

(Spreng 2001a:343)

(235) ammaluk-tuq saaq katak-tuq kipparit-tur-mut saar-mut [SB]
round-DEC.3SG(**ABS**) table(**ABS**.SG) fall-DEC.3SG square-dec-**ALLAT**.SG table-**ALLAT**.SG
'The round table fell onto the square table.'

(Compton 2011:4)

---

[84] Gillon (1999) glosses all instances of *mik*-case as acc(usative). I assume the aforementioned conflation (see footnote 82) with ablative and locative case has not happened in Mittimatalik in 1999, thus assuming they are both actual *mik*-case.

[85] Glossed as instrumental in Spreng (2001a), which follows the traditional idea that it is an instrument.

Furthermore, the non-overt internal argument may be recovered in a passive construction, as shown in (236). The context of the examples is a conversation. In (236)a, the person is making a statement, while (236)b shows an agreeing reply indicating that some, but not all, has been painted.[86]

(236) a. Amiar-*si*-junga
paint-AP-PART.1sg
'I am painting something'

b. kisukiaq amiar-tau-nnir-tuq [MI]
something paint-pass-apparently-PART.3sg
'Something has apparently been painted'
(Spreng 2001a:343)

The so-called optional argument is thus not optional in the sense that it is completely absent in -*si*-type AP's. While Inuktitut is a pro-drop language, this does not mean that it cannot specify the internal argument. If that is true, then that non-overt pronoun requires case. I take that to be accusative case.

Spreng (2005) further shows that -*si*-type AP's allow overt pronouns, and when they occur, they have to be marked with *mik*-case (237). Since in isolation the AP construction is obligatory when the external argument is 3rd person, the internal argument must be expressed somehow.[87] Thus, the internal argument is not optional in the same sense as it is with null-type AP constructions. As discussed in chapter 2, the optionality of the internal argument in -*si*-type AP constructions is different from the optionality of the internal argument in constructions with null-type verbs. It appears that when the internal argument is absent in null-type AP constructions, it is truly absent, both structurally and phonologically. On the other hand, in -*si*-type AP constructions, the optionality of the internal argument is only phonological, while it is still present in the structure.

(237) aqtuq-*si*-juq *(illin-nit)
touch-AP-PART.3sg you-*mik*
'(s/he-abs) is touching/touched you'
(Spreng 2005:220)

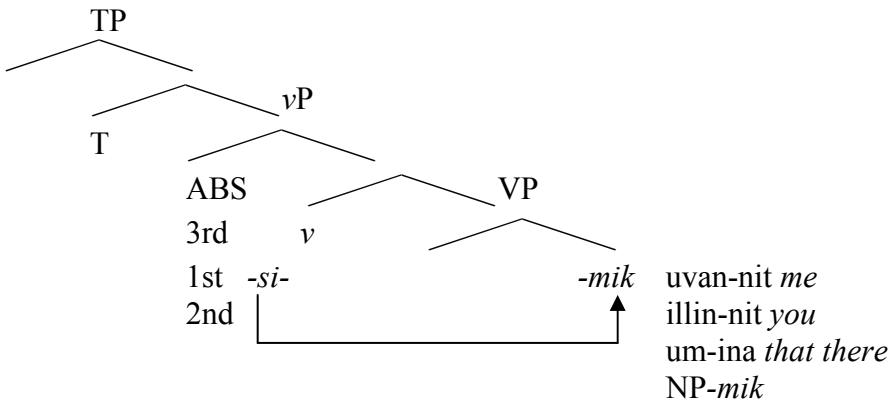
---

[86] *amiaq-* is used for painting walls, not pictures.

[87] See section 4.5.2 for the complete pattern.

Thus, overt and non-overt themes are marked with *mik*-case despite the absence of any overt agreement morphology on the verb.

(238) Antipassive with *-si-:* nominative-accusative



(Spreng 2005:222)

The same restrictions do not apply to null-type AP constructions. Third person agents are acceptable with null-type verbs, such as *uqalimaq-* '*read*' (239). Furthermore, null-type AP's occur with just a non-case marked adverbial (239)c.

(239) a. uqalimaq-taa [SB]
read-PART.3sg/3sg
'he read it (just now)'

b. uqalimaq-tuq
read-PART.3sg
'he is reading (something)'

c. uqalimaq-tuq umina
read-PART.3sg that there
'he is reading that there'

Bok-Bennema (1991) also argues for West Greenlandic that the *mik*-case in the AP is an accusative, although not making a distinction between *mik*-case with null-type AP constructions and *mik*-case with *-si*-type AP constructions. She argues that the complement of the causative is always marked with *mik*-case in West Greenlandic. The same holds for SB, as shown in (240). Note AP constructions with causative markers require *-si*, supporting the idea that it is *-si* that is responsible for *mik*-case on *nutara-mik* '*child*'.

(240) juuna nutara-mik ini-mi-ni sini-tit-*si*-vuq [SB]
John(ABS) child-*mik* room-*LOC*-POSS.3sg sleep-CAUS-AP.IND.3sg[88]
'John$_i$ made the child$_j$ sleep in his$_{i/j}$ room'

Note that *mik*-case is not at all available in ergative constructions, as shown in (241), which also indicates that the causative is not responsible for *mik*-case.

(241) nutara-up arna-mut angut aktuq-ti-taa
child-ERG woman-ALL man(ABS) touch-CAUS-3sg.3sg
'the child made a woman touch the man'
(Jensen and Johns 1989:211)

The fact that *mik*-case is not available here indicates that it can only be inherent when the external argument has absolutive case. Punctual verbs like *aktuq- touch*' have no way to merge with an internal argument that retains that case except in the AP.

Despite the apparent lack of overt morphology on the verb indicating agreement with the *mik*-case marked DP, we thus find some evidence that there is agreement with an internal argument in *-si*-type AP constructions but not with null-type AP constructions.

4.4.3 The *mik*-case is structural: passives

Structural case and inherent case are traditionally distinguished by whether they can correspond to subjects in passives. This argument is not applicable to every inherent case; hence the distinction between quirky case in Icelandic, where dative marked arguments may become subjects, and dative marked arguments in German, which never do.

Inuktitut also has a passive. The difference between a passive and an ergative construction is that agreement is only with one argument, i.e. the absolutive marked one and there is a passive morpheme. The argument that is marked ergative in the ergative construction is marked with allative case (242)b in the corresponding passive. Clearly, the *mik*-case is not the go-to oblique

[88] Counter to general usage in SB, my consultant used the indicative mood here.

case for every voice alternation. More importantly, even in a passive, it would not be used for an agent-type argument, as shown in the ungrammatical (242)c.

(242) a. anguti-**up** arnaq kunik-taa [MI]
man-ERG woman(ABS) kiss-PART.3sg/3sg
'the man kissed the woman'

b. arnaq kunik-tau-juq anguti-**mut** [MI]
woman(ABS) kiss-PASS-PART.3sg man-ALL
'the woman was kissed by the man.'

c. *arnaq kunik-tau-juq anguti-**mik** [MI]
woman(ABS) kiss-PASS-PART.3sg man-*mik*
'the woman was kissed by the man.'

In some dialects, there is no difference in case for the agent between the ergative construction and the passive. The only difference between ergative and passive construction is the reduction in agreement and the passive morpheme in the passive construction. We thus have intransitive agreement in (243)b, while the case morphology stays the same. Just like with a transitive ergative construction, as in (243)a, the agent is marked ergative and the theme or internal argument is absolutive. The only difference between a transitive ergative construction and the passive in (243)b is that agreement is now only with the absolutive DP, not with both DP's, as in (243)a. Whatever analysis we may apply to the passive, it is obvious that the *mik*-case is not some default oblique case in voice alternations, as shown in the ungrammatical (243)c, d.

(243) a. anguti-**up** arnaq kunik-taa [IG]
man-**ERG** woman(ABS) kiss-PART.3sg/3sg
'the man kissed the woman'

b. arnaq kunik-tau-juq anguti-**up**
woman(ABS) kiss-PASS-PART.3sg man-**ERG**
'the woman was kissed by the man'

c. *arnaq kunik-tau-juq anguti-**mit**
woman(ABS) kiss-PASS-PART.3sg man-***mik***
'the woman was kissed by the man'

d. *arna-**mit** kunik-tau-juq anguti
woman-*mik* kiss-PASS-PART.3sg man(ABS)
'the woman was kissed by the man'

In a causative AP construction with three arguments, the *mik*-case is again used only for the theme (244). Despite it being an AP construction with the agent in the absolutive instead of the ergative case, we find that the *mik*-case may not occur twice in a causative construction (244)b. Furthermore, despite the absence of overt ergative case we have transitive agreement in (244)a.

(244) a. Piita quqir-*si*-ti(t)-qqau-jara qimmir-**mik** [MI]
Peter(ABS) shoot-AP-CAUS-PAST-PART.1sg/3sg dog-*mik*
'I made Peter shoot the dog'

b. Piita niuvir-tit-*si*-juq Mary-mut qajar-**mit**
Peter(ABS) buy-CAUS-AP-PART.3sg Mary-ALL qajar-*mik*
'Peter is selling Mary the kayak'

c. *Piita niuvir-tit-*si*-juq Mary-**mit** qajar-**mit**
Peter(ABS) buy-CAUS-AP-PART.3sg Mary-*mik* qajar-*mik*
'Peter is selling Mary the kayak'

Note that all causative ditransitive constructions are *-si*-type AP constructions due to the causative *-tit* requiring *-si*. Even causative ditransitive AP constructions with null-type verbs have the theme argument in the *mik*-case, as shown with the causativised *niri-* '*eat*' in (245).

(245) niri-tit-*si*-juq nutara-mit [SB]
eat-CAUS-AP-PART.3sg child-*mik*
'she is feeding the child' lit.: making him/her eat

With non-causative ditransitive constructions, the agreement is intransitive, and again, there is only one instance of the *mik*-case both in Iñupiaq (246) and in Inuktitut (247). Furthermore, it is only ever available for themes regardless of construction (246), (247).

(246) a. Aŋun akuqtu-i-ruq aglaŋ-nik taata-miñiñ [IN]
man receive(p)-Anti-Ind3Sg letter-ModPl father-Abl3RSgSg
'Man received letter(s) from his father.'

b. Aŋun tuni-*si*-ruq aquppiuta-*mik* aġna-mun
man sell(p)-Anti-Ind3Sg chair-ModSg woman-TerSg
'Man sold chair to woman.' (Nagai 1998:55/57)[89]

[89] Gloss for the case on *aquppiuta-mik* is missing in the source and is added here.

(247) a. Piita tuni-*si*-jjuq Mary-mut qajar-mit [SB]
Peter(ABS) give-AP-PART.3sg Mary-ALL kayak-*mik*
'Peter gave Mary the kayak'

b. *Piita qajar-mit tuni-*si*-juq Mary-mit[90]
Peter(ABS) kayak-*mik* give-AP-PART.3sg Mary-*mik*
'Peter gave Mary the kayak'

More evidence for the *mik*-case being an accusative comes from a construction with a passive morpheme *and* an AP morpheme, mimicking a passive AP construction. Along the same lines as a passive in a nominative-accusative language, the internal argument with a *mik*-case in the AP construction would correspond to absolutive case in the passive AP construction. The absolutive marked DP would occur as another case, probably an ablative or even an ergative. In traditional terms, if we apply a passive transformation to an AP construction, we would expect the DP that is marked with *mik*-case to correlate to absolutive in the ergative construction. This prediction is borne out, as shown in (248)b. The internal argument *naalauti-mik* 'radio' in (248)a receives absolutive case when we add the passive morpheme *-tau*[91] in (248)b. An imperfective passive is impossible with the agent in ergative case (248)c, but it is compatible with the agent in allative case (248)b. We can conclude from (248)b that this is a passive AP construction. Thus, we have further evidence that the *mik*-case is a structural case.

(248) a Piita surak-*si*-juq **naalauti-mik** [AP] [SB]
Peter(ABS) break-AP-PART.3sg radio-*mik*
'Peter is breaking a radio'

b. **naalauti** surak-*si*-tau-juq Piita-**mut** [passive]
radio(ABS) break-AP-PASS-PART.3sg Peter-ALL
'the radio is being smashed by Peter'

c. *naalauti surak-*si*-tau-juq Piita-**up**
radio(ABS) break-AP-PASS-PART.3sg Peter-ERG
'the radio is being smashed by Peter'

---

[90] The fact that three-argument AP constructions seem not to allow any type of dative movement also indicates that the preposition analysis is on the wrong track if we follow the idea that only languages with prepositions allow the kind of dative movement we know from English.

[91] Phonological alternation of *-jau*.

On the other hand, the *mik*-case cannot be used for instruments at all in passives, as shown in data from SB.[92] In (249), the instrument *ujaraq* '*rock*' occurs with allative in the passive in (249)a, but cannot be marked with *mik*-case , as shown in the ungrammatical (249)b.

(249) a. aniq-tau-qqau-junga ujarang-mut Piita-up [SB]
hit-PASS-PAST-PART.1sg rock-ALL Peter-ERG
'I got hit with a rock by Peter'

b. *aniq-tau-qqau-junga ujarang-mit Piita-up
hit-PASS-PAST-PART.1sg rock-*mik* Peter-ERG
'I got hit with a rock by Peter'

It seems that when the theme argument is overt, it has to be marked with *mik*-case, which then requires intransitive agreement with the absolutive, as in (250)a. The *mik*-case is thus not available for instruments (250)b, not even in ergative constructions (250)b, and has to be marked with allative case -*mut* (250)c.

(250) a. *Piita uvannit aniq-*si*-qqau-juq ujarang-mit [SB]
Peter(ABS) I-*mik* hit-AP-PAST-PART.3sg rock-*mik*
'Peter was hitting me with a rock'

b. *Piita-up ani-qqau-jaanga ujarang-mit
Peter-ERG hit-PAST-PART.3sg/1sg rock-*mik*
'Peter hit me with a rock'

c. Piita-up ani-qqau-jaanga ujarang-mut
Peter-ERG hit-PAST-3sg/1sg rock-ALL
'Peter hit me with a rock'

The data thus supports the proposal that the *mik*-case shows more properties of structural accusative case when there is -*si* than properties of inherent case.

4.4.4 *Mik*-case is inherent case

Inherent case may behave differently when comparing so-called active and non-active constructions. For example, the so-called inherent dative does not correlate to a nominative

[92] In SB, the *mik*-case is never used as instrument (A. Johns, p.c.), further supporting the idea that the *mik*-case has more in common with accusative than inherent case.

subject with the canonical passive in German (251)b, contrasting with the Icelandic quirky case. However, the non-canonical *kriegen/bekommen* '*got*' passive allows datives to be nominative subjects when dative is used for the indirect object (251)c. Only the datives that occur with so-called dative verbs disallow any "raising to subject". The classic inherent dative case in (252) never allows that.

(251) a. Ich habe dem Junge-n drei Hemd-en geschenkt
I have-PRES.1sg the(DAT) boy-DAT three shirt-ACC.pl gift-PART
'I have given the boy three shirts'

b. *Der Junge wird drei Hemd-en geschenkt
the(NOM) boy(NOM) become-PRES.3sg three shirt-ACC.pl gift-PART
'the boy is given three shirts'

c. Der Junge hat drei Hemd-en geschenkt bekommen
the(NOM) boy(NOM) have-PRES.3sg three shirt-ACC.pl gift-PART got
'the boy got (given) three shirts'

(252) a. Ich habe dem Junge-n geholfen
I have-PRES.1sg the(DAT) boy-DAT help-PART
'I have helped the boy'

b. *Der Junge wird geholfen
the(NOM) boy(NOM) become-PRES.3sg help-PART
'the boy was helped'

c. *Der Junge bekommt geholfen
the(NOM) boy(NOM) get-PRES.3sg help-PART
'the boy got helped'

Comparing the dative in ditransitive constructions to the Inuktitut *mik*-case in null-AP constructions, the *mik*-case may correlate to an absolutive subject even if it is not checked with *v*. Furthermore, when it is an actual inherent case as it is in (253)a b, it never occurs with absolutive case (253)c, d.[93]

(253) a. pisu-qatigi-juq qimmir-mit [SB]
walk-do.with-PART.3sg dog-*mik*
'he is walking with the dog'

[93] The use here indicates a further use as comitative, required by the suffix *-qatilik*.

b. iglu-mut pisuk-tunga
house-ALL walk-PART.1sg
I'm walking to the house'

c. *qimmiq pisu-qatigi-juq
dog(ABS) walk-do.with-PART.3sg
'the dog is walking with'

d. *iglu pisuk-tunga
house(ABS) walk-PART.1sg
'I'm walking to the house'

Mik-case thus exhibits both properties of accusative and properties of the dative in ditransitive constructions in German. Furthermore, it also shows properties of prototypical inherent case, as shown in (253).

4.4.5 Summary

The *mik*-case's behaviour in the *-si*-type AP and in the passive, its close ties to the theme role in the AP, and the fact that it never occurs twice in a three-argument AP construction, strongly suggest that it is closer to a structural object case than to an oblique case in those constructions. Furthermore, some data from SB also indicate that it is not used for instruments anymore, suggesting that it has lost this function completely in this dialect.[94] On the other hand, verbs that do not occur with *-si*-type AP constructions may still occur with a DP in the *mik*-case , although it may not correspond to an absolutive in a corresponding passive or ergative construction.

I therefore follow previous analyses for Kalaallisut, such as Bittner (1994), Bok-Bennema (1991) in that I conclude that the *mik*-case is a structural case, just like an accusative. However, I depart from those approaches in that this analysis only applies to *mik*-case in *-si*-type AP constructions.

---

[94] The fact that I argue that *v* does not normally check accusative case with the internal argument forces me to think of inherent case in a different way from the classic definition. The classic definition of inherent case states that it is a case that is more or less randomly associated with a type of verb and theta role, thus disallowing accusative case, such as dative verbs in German. Since I argue that the Inuktitut *v* does not check case with the internal argument by default, inherent case on an internal argument is also the default circumstance. Thus, inherent case is not a case that is closely tied to a verb but is actually a default that is spelled-out unless overridden by structural case that is checked through an Agree relationship. This would explain that the same spelled-out case never occurs twice in a sentence.

Only then do we have a *v* that enables case checking with an internal argument. Every other instance of *mik*-case, being it in null-type AP's or any other use, is inherent case.

4.5 The ergative case

Most literature on Eskimo does not analyse the ergative case as subject. As Kalmar notes, "[…] of all of the subject properties listed in Keenan (1976) [60], none applies to the Ø-case noun of the ergative clause without also applying to the up[95] noun." (Kalmar 1979:121).

As argued for in the previous sections, an analysis of ergativity in Inuktitut needs to account for the fact that in the unmarked case, i.e. without additional aspectual morphology, the viewpoint interpretation of the ergative construction is perfective. Davison (2004) accounts for a similar aspect split in Hindi by arguing for a [perfective] feature on *v* that is responsible for the correlation of perfective aspect and the presence of ergative case. However, as Woolford (2008) points out, a feature on the case assigner that equals only one property of a construction may lead to overgeneration. For our case, it also ignores the fact that perfective viewpoint aspect, albeit having a strong correlation to the ergative construction, is not restricted to it. Intransitive constructions with punctual verbs are interpreted as perfective by default. I argue that punctuality is not based on perfectivity per se since only telic punctual verbs are interpreted as perfective in Inuktitut. Since these verbs are mostly unaccusatives, I would have to argue for an extra *v* that houses the perfectivity feature, requiring an analysis that claims that punctual verbs merge with a perfective *v*, while durative verbs do not. Since punctuality is at the very core of what a verb may be, and I would argue that it is not something correlated to a projection associated with external arguments, I am reluctant to adopt such an analysis. Furthermore, we can unify the fact that perfectivity is associated with absolutive case on all types of verbs much more elegantly. Perfectivity is thus not based on any agreement with the ergative marked DP, but on the fact that the internal argument has absolutive case.

(254) Aspect and Agreement correlation

Perfective viewpoint:	**Ergative construction**	**Punctual intransitive**
Imperfective viewpoint:	**AP construction**	**Durative intransitive**

[95] Kalmar (1979) refers here to the ergative suffix *-up*.

I also argue that the ergative case is not a structural case in the Inuit variants I have examined. The basis for this proposal lies in its behaviour in passives, its person restrictions, and its restrictions to certain theta roles.

4.5.1 Ergative is not structural: passives

Just like with the *mik*-case, I argue here that the behaviour of the ergative marked DP shows properties of inherent case rather than structural case when compared with its behaviour in a passive construction, again following the classic view that only arguments with structural case have a different case in a passive.

Cournane (2007) shows that in passives in Cape Dorset Inuktitut, the agent may either have the allative *–mut* [96] or the ergative *–up* on the agent DP. Both the ergative morpheme *-up* and the allative *-mut* may appear on the agent of a passive construction. In a canonical ergative construction, the verb shows agreement morphology with the ergative DP. When the ergative is used in a passive construction, agreement is shown only with the absolutive DP. Furthermore, the passive morpheme seems to determine which case appears on the agent DP. In contrast to the dialects I have examined which have only one passive marker, Cape Dorset Inuktitut has two passive morphemes.

The examples in (255) show that passive constructions with the passive morpheme *–zavininga* occur with ergative case on the agent. Passive constructions with the passive morpheme *-zaviniq* appear with *-mut* case marking on the agent in (256). Both passive constructions have intransitive agreement.

(255) a. kii-**za**-vini-**nga** qimmi-**up** [CD]
bite-PASS- REALIS-GEN.1sg dog-ERG
"I got bitten by a dog" (just now)

b. *kii-za-vini-nga qimmi-mut
bite-PASS- REALIS-GEN.1sg dog-DAT

c. kii-**za**-vini-**q** qimmir-**mut**
bite-PASS-REALIS-3sg dog-DAT

---

[96] Cournane (2007) glosses the allative *-mut* as dative.

d. *kii-za-vini-q qimmir-up
bite-PASS-REALIS-3sg dog-ERG

(256) a. kii-**zau**-qqau-zunga qimmir-**mut** [CD]
bite-PASS-PAST-1sg dog-DAT
"I got bitten by a dog" (earlier today)

b. *kii-**zau**-qqau-zunga qimmir-**up**
bite-PASS-PAST-1sg dog-ERG (Cournane 2007:9)

Cournane points out that the morpheme could be the same underlying passive morpheme (Beach 2003). Whether that is the case or not, the data clearly illustrates that the ergative case is not restricted to ergative constructions and does not have to be the result of an Agree relation. This is not only a singular occurrence with one dialect; the Baffin variants show a similar pattern (257).

(257) a. surak-tau-juq titirauti Piita-up [SB]
break-PASS-PART.3sg pencil(ABS) Peter-ERG
'the pencil was broken by Peter'

b. qimmiq quqir-tau-juq Piita-up [IG]
dog(ABS) shoot-PASS-PART.3sg Peter-ERG
'the dog was shot by Peter'
(Spreng 2005:218)

The fact that the external argument has the same case in the passive indicates that the ergative is not a structural case.

4.5.2 Person restrictions

Some of the Baffin dialects of Inuktitut do not allow the ergative construction under the following conditions: if the verb is punctual and the external argument is third person, the antipassive construction is the only permissible construction. The ergative construction is ungrammatical under these conditions (258)f, g.

(258) Person combinations allowed with the ergative [SB, IG]
ERG/ABS
1/2; 1/3
2/1; 2/3
*3/1; *3/2; *3/3 obligatory AP construction

a. 1/2	b. 1/3
aqtuq-tagit	aqtuq-tara Piita
touch-PART.1sg/2sg	touch-PART.1sg/3sg Peter(ABS)
'(I-ERG) touched you'	'(I-ERG) touched her/Peter'
c. 2/1	d. 2/3
aqtuq-tanga	aqtuq-tait Piita
touch-PART.2sg/1sg	touch-PART.2sg/3sg/Peter(ABS)
'(you-ERG) touched me'	'(you-ERG) touched her/Peter'
e. 3/1	f. 3/1
aqtuq-*si*-juq uvan-nit	*aqtuq-taanga
touch-AP-PART.3sg me-*mik*	touch-PART.3sg/1sg
'(s/he-ABS) is touching me'	's/he touched me'
g. 3/2	h. 3/2
aqtuq-*si*-juq illinnit	*aqtuq-taatit
touch-AP-PART.3sg you-*mik*	touch-PART.3sg/2sg
'(s/he-ABS) is touching you'	's/he touched you'

(Spreng 2005:218)

The examples in (258) show that if the external argument is third person, the ergative construction is strongly dispreferred. This means that ergative case is not spelled out since double agreement, as we find it in ergative constructions, is only possible with 1st and 2nd person external arguments.

Note that this applies only to verbs that require the antipassive morpheme and only to sentences in isolation.[97] Consequently, there is no overt DP that occurs with the ergative case. Therefore, while there is still morphological agreement cross referencing 1st and 2nd person, there is no ergative case spelled out.

4.5.3 Theta roles

On a more general note, the ergative case in Inuktitut is closely tied to the agent proto-role (Dowty 1991), a characteristic that is more reminiscent of an inherent or lexical case than structural case. Besides agents in two-argument constructions, ergative case marks possessors

[97] For contexts when this is still allowed, see Hallman (2008b).

(259), causers (260), and experiencers (261). Experiencers require an extra morpheme *-gi* meaning "1) be X in relation to someone or something; (2) use, treat or consider as one's X (*with noun stems*); (3) consider to be X (*with adjective stems*); (4) feel or express X towards "(Briggs et al. in progress). Thus, the experiencer in the ergative case is only possible when adding such a relational morpheme enabling an experiencer verb in a transitive construction.[98]

(259) arna-up nasa-a
woman-rel.2 hat-3s.poss
'The woman's hat'
(Johns 1987:46)

(260) niri-ti-tara nutaraq [SB]
eat-CAUS-PART.1sg/3sg child(ABS)
'I just fed the child'

(261) Bettina-up nagli-gi-jaa qimmi-ni [MI]
Bettina-ERG nagli-gi-jaa dog-POSS
'Bettina loves her dog'

(262) quvia-**gi-**řai[99] [UT]
happy-related.to-IND.3sg/3pl
He likes them; they make him feel happy (quvia-)
cf. quviahuktuq 'he is happy"; quvianaqtuq "it is pleasant"
(Briggs et al. in progress)

The fact that the ergative is generally tied to "high" theta roles indicates that it may not be a structural case. It never occurs with a "low" theta role, or, in Dowty's terms, theme-proto role. That provides a clear contrast to the *mik*-case, which never occurs in an agent-proto-role and always in a theme-proto role in AP constructions.

4.5.4 Summary

Empirically, there is evidence to support the idea that ergative case is not a structural case, or at least is in transition to becoming a lexical case. Thus, regardless of the treatment of ergativity in Inuktitut in the past, this fact has to be taken into account. Furthermore, the evidence that the

---

[98] Recall that psych verbs can only occur with causative morphemes in the AP (section 3.3, example (131))

[99] Gloss is not in the original entry and is added here.

mik-case has more in common with an accusative than with an oblique case in the *-si*-type AP construction, shows that the varieties of Inuktitut discussed here are on their way to becoming a more nominative-accusative type language.

4.5.5 Ergative construction

Spreng (2005, 2006) shows that some of the differences between the ergative and the AP construction originate in person restrictions for ergative constructions. The proposal made there and that I intend to sustain here is that *v* never checks case unless it is *mik*-case in a *-si*-type AP construction. Thus, *v* in Inuktitut differs from *v* in nominative-accusative languages in that it checks accusative case *only* in the AP.

The analysis in Spreng (2005, 2006) does not consider that T in Inuktitut does not actually agree with an argument, since it lacks φ-features altogether. Conceptually, the fact that that agreement is with the internal argument (except for the AP construction) poses some problems assuming the phase impenetrability condition (PIC) and phases in general (Chomsky 2001, 2004b) since that would assume that *v*P is not a phase.

Chomsky (2000) postulates that T-Agree only happens once the complement of the phase head *v* is discarded, so as to ensure that Agree happens with the closest argument, i.e. external argument, and to prevent agreement with the internal or non-local argument. When *v* checks case with the internal argument, then its complement is discarded once T merges with C, preventing a probe from T penetrating the *v*P phase.

As has been pointed out, the phase impenetrability condition (PIC) would be violated in languages where T does agree with a lower argument, such as in Icelandic. It also relies on the assumption that unaccusative verbs have no *v*P phase, in order to allow the probe to reach the lower argument. Part of the problem is resolved in Chomsky (2001, 2004b), stipulating that phase transfer is delayed when *v* does not check case with the lower argument. Thus, unless we have an AP construction, *v* never checks case with the internal argument, thus allowing T to probe to the internal argument.

A problem with delayed transfer, as discussed in Chomsky (2004b), is that we need to answer the question why *v* would not agree with the lower argument in the ergative construction.

Furthermore, delayed transfer supposedly constitutes an exception to normal phasehood in the computational system. However, in Inuktitut, it would be the opposite. *v*P would be only a phase in the *-si*-type AP because only then does T agree with the external argument thus making *v*P a phase only in exceptional circumstances. As discussed above, the Baffin Island data I based this thesis on show that it is the ergative construction that is becoming the exceptional construction, while the AP is becoming the more common construction, thus supporting the idea that because phasehood is becoming the default for *v*P, AP constructions become less restricted.

The proposal in Chomsky (2008) that T inherits features from C poses a further problem for the PIC and also for the delayed phase transfer solution, as discussed in Seely et al. (in press). If T does not inherit any features until merging with the next phase head C, then it cannot possibly value case on a lower DP. However, once it merges with C, the "lower phase" is discarded and T has nothing to agree with. For a solution, Seely et al. (in press) propose the principle (263) for phase transfer.[100]

(263) Transfer removes the phase-head-complement PHC
if and only if the head of PHC values Case

(Seely et al. in press:1)

If I follow (263), then the fact that *v* only ever checks *mik*-case with the internal argument, leaves *v*P and the internal argument available for T to probe and value case in the ergative construction. Again, this means that *v*P is only a phase when there is an AP construction, while the ergative construction constitutes an exception to "normal" computation. The principle in (263), if understood as a general principle, would predict that an ergative language like Inuktitut and a nominative-accusative language, which has no T agreement with internal arguments, would thus differ in the ability of *v* to check case.

The previous analyses in Spreng (2005, 2006) also do not take into account that T does not actually bear φ-features in Inuktitut. While for a language like English, tense and agreement are combined in the same head, agreement, i.e. φ-features, are unlikely to be inherent to T in

---

[100] In fact, Murasugi (1992:72) (partly based on denBesten (1985)'s proposal that German and Dutch have no INFL and nominative is assigned by a [+tense] C) proposes that C carries a [±finite] feature associated with nominative case which is a precursor to the idea that C is actually the bearer of φ-features.

Inuktitut since tense does not correlate to agreement and case. This fact supports the proposal in Chomsky (2008) that T does not inherently bear φ-features, but inherits them after merger with C. In Inuktitut, as outlined in Hayashi and Spreng (2006), T is a separate head from C since it has nothing to do with agreement. Thus, one problem with respect to a probe from T is not a problem for Inuktitut. T is not a probe, which means that there is no problem with the fact that once it merges with C, there is no goal available anymore. However, that does not mean we do not have a problem for a probe from C. The moment T merges with C, the only way C can find a goal for Agree is through delayed transfer or the condition proposed in Seely et al. (in press), assuming that inherent ergative case is the trigger for not discarding the phase head complement.

A further problem arises with respect to the actual nature of the ergative and the *mik*-case. Spreng (2006) proposes that *v* checks ergative case with its external argument upon merging with a DP in its specifier position. Thus, ergative case is an inherent case as defined in Woolford (2004, 2006). The analysis has inadvertently preserved the PIC by arguing that the ergative case is not a structural case (following Woolford 2004, 2006). Woolford argues for a three-way distinction between lexical, inherent, and structural case, defining non-structural cases as outlined in (264).

(264) a. Non-Structural Cases
(i) Lexical Case: Idiosyncratic, lexically selected case
(ii) Inherent Case: Case inherently associated with θ-role licensing

b. Arguments
(i) Idiosyncratic Lexical Case is limited to T arguments
(ii) The more regular Inherent Case is limited to A and G arguments[101]

c. Licensers
(i) Only lexical heads (e.g. V, P) may license idiosyncratic lexical case.
(ii) Only little/light *v* heads may license inherent case.

(Woolford 2004:3-4)

According to (264), ergative case is thus an inherent case. When merging with *v*, the ergative marked DP is always an agent or causer, and I argue that it is licensed by *v*.

---

[101] A argument: Agent argument, T Argument: Theme Argument; G Argument: Goal Argument (Woolford 2004). The problem with the association of inherent case and a particular theta role is a little problematic since accusative case is rarely associated with anything but the theme theta role in simple transitive constructions.

The question is then: does inherent case, as defined in Woolford (2004, 2006), count as a case that prohibits phase transfer, as proposed in Seely et al. (in press)? And does checking the *mik*-case enable phase transfer?

As discussed above, the ergative DP is almost exclusively an agent.[102] Assuming it always merges with the spec position of *v*P, it fulfills the generally assumed definition of inherent case in Minimalism (Legate 2008) and the classification in Woolford (2006). Therefore, it should fulfill the condition for delayed transfer. Assuming that the condition for valuing case in (263) refers to structural case, i.e. accusative, we thus have no problem with the PIC in the ergative construction. The derivation of the ergative construction thus looks like outlined in (266). The external argument merges in Spec*v*P and gets ergative case. The internal argument merges with V. *v* does not check accusative case with the internal argument, thus leaving C to probe down to the internal argument, establishing an Agree relation.

My proposal accounts for the properties of the ergative marked DP in ergative constructions and its behaviour under passivisation. The problem with the analysis is that it is unclear why ergative is checked and assigned upon merger only in ergative constructions. It is unclear why this does not happen in null-type AP constructions. One possible answer could be that the durative feature of *v* prevents an ergative case from being checked upon merger. However, since durative verbs also occur in ergative constructions, this is not a sufficient solution. My analysis explains why it is available for absolutive case checking, but not entirely, why it is available for ergative case checking. Another solution could be that every external argument has ergative case by default, which can be overridden when C probes down. However, in that scenario, the ergative case-marked DP is only an inaccessible goal for Agree with C when we need it to be.

One solution for canonical ergative constructions at this point could take advantage of the fact that only ergative constructions have double agreement. When C has double agreement, it cannot override ergative case on the external argument. This could mean that there is partial agreement with both arguments in ergative constructions. Since the agreement morphology in ergative constructions cross-references person and number for both arguments, ergative case would be a

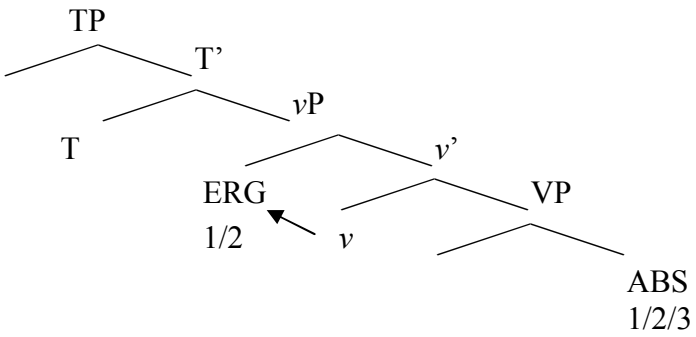
---

[102] Its function as possessor does not bear on the issue.

reflection of fact. The φ-features of C are only partially matched by the external argument, and may still probe further to the internal argument. However, such an analysis would call the status of the ergative case as inherent in question. The evidence discussed in the previous sections illustrates very clearly that the ergative case has very few properties of structural case.

An alternative is proposed in Spreng (2005), which is based on the person restrictions for ergative constructions apparent in SB. The ergative construction is only possible when the external argument is first or second person in clauses with punctual telic verbs. This means that any overt DP would have absolutive case. Ergative constructions thus would not show an overt DP. This means that the merger with *v* only creates some sort of spec-head agreement with its non-overt external argument (265).

(265) Ergative



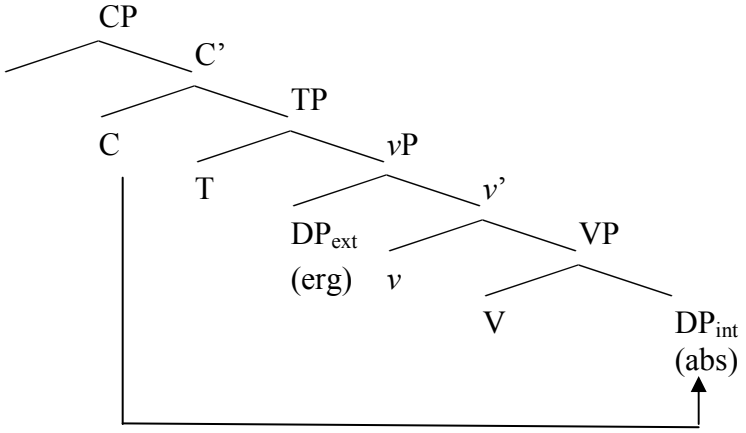
(Spreng 2005:223)

While this solution retains the properties of ergative as a case checked upon merger, the problem here is that agreement morphology in Inuktitut is only one morpheme at the end of the verbal complex. Double agreement cannot really be separated into agreement for each argument. Furthermore, the person restrictions are only observable in isolated cases for a small class of verbs; thus, the analysis covers only a very restricted range of ergative construction.

I have no completely satisfactory solution at this point. The issue is not unique to Inuktitut, but has been acknowledged in previous approaches, where ergative case has been analysed as inherent (Legate 2006, 2008). At this point, I can only speculate that part of the problem of finding an overall solution for the behaviour of the ergative DP may be that it is structural in some instances and inherent in others. Both the passive constructions with ergative agents and the person restrictions are very recent developments and have not been attested before (Hayashi

and Spreng 2005, Spreng 2005, Cournane 2007 for Cape Dorset Inuktitut). I leave a final solution therefore for future research and retain the proposal for the canonical ergative construction as depicted in (266).[103]

(266) Ergative construction



4.6 *v*P and *mik*-case

I argue that agreement-based viewpoint aspect contrasts and the resulting case-agreement configurations are due to variation in *v*. The viewpoint interpretations of non-ergative constructions are thus a direct result of differing case-agreement configurations, brought about by variations in the feature make-up of *v*.

The above discussion on the PIC applies for a simple *v*P-VP structure, assuming that only a case checking head is a phase-head. The idea that the verb phrase is a lot more complex than initial considerations in generative grammar suggest can be traced back to Larson (1988). Various and numerous proposals have taken up the idea, and it is now a well-established axiom for proposals of clausal architecture.

For now, I use the term *v* as a general shortcut for any verbal projection. The projection of *v*P has always been viewed as a bridge between the traditionally called 'lexical domain' of argument structure by providing a position for an external argument, and the syntax proper by being

---

[103] Note that I leave the question of whether the absolutive DP moves to specCP unresolved since it has no bearing on the goals of the analysis. There are various arguments for and against movement of the absolutive DP (Bittner and Hale 1996a, b, Johns 1987, Wharram 1996, Pittman 2006).

responsible for case and agreement of the internal argument. Over the years, various projections between the 'lexical' VP and the 'syntactic' TP have been proposed to account for aspectual properties (Borer 1993, 2005, Harley 2005, Travis 2010, Travis 2005), or voice alternation and valency issues (Pylkkänen 2002, Murasugi 1992, Kratzer 1996, Bowers 2001, 2002 among many others). On the one hand, we have a somehow hermaphroditic creature *v* that is based on traditional lexical properties, on the other hand, we have very specialised projections, responsible for voice alternations and/or aspectual contrasts.

I argue that agreement-based viewpoint aspect contrasts and the resulting case-agreement configurations are due to variation in *v*. Following very loosely Kratzer (2004), Guéron (2004, 2008), I argue that changes in viewpoint aspect may be based on case alternations revolving around the functional head responsible for object case. In an ergative language like Inuktitut, that leads to changes in case on both DP's. In nominative-accusative languages on the other hand, only object DP's show different case depending on aspectual interpretation. For a language like German, it has been proposed that object case alternations affect telicity of the construction (Kratzer 2004). I will also show that agreement-based viewpoint contrasts can also be observed, even when only one argument is affected.

I further argue that the verbal structure has to include the punctuality feature, since it influences argument structure positions and properties along with higher telicity properties. This leads us back to the conclusions drawn in chapter 2, that verbs with an obligatory internal argument require an AP morpheme, tying it together with the insight that only punctual verbs require the AP morpheme.

In languages where case changes do not correspond to changes in viewpoint aspect, such as English, we still find that case changes, such as the conative alternation, cause aspectual alternations (267). Thus, the alternations are due to the lack/presence of a feature on the case checking functional head that has something to do with telicity, since both punctual and durative verbs partake in such alternations. However, the imperfective combined with the lack of accusative case renders the sentence atelic, indicating that this is not a means to change viewpoint aspect in English, only telicity. As shown in (267), only the sentence with accusative case displays the expected correlation between telic and atelic aspect. With the PP, it is atelic, while with accusative case, it is telic.

(267) a. John was shooting the rat.
DOES NOT ENTAIL John shot the rat.

b. Johns was shooting at the rat.
ENTAILS John shot at the rat.

b. John was cutting the bread.
DOES NOT ENTAIL John cut the bread.

c. John was cutting at the bread.
ENTAILS John cut at the bread.

Case changes thus do not automatically change viewpoint aspect. A lack of accusative case in one language may influence telicity, as in English, or viewpoint, as in Inuktitut, depending on whether a language has agreement-based viewpoint aspect. As we have seen, English viewpoint aspect contrasts are purely based on verbal inflection but not on agreement.

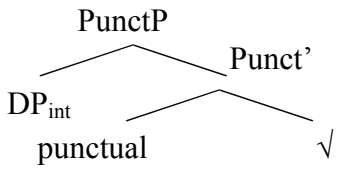
4.6.1 The structure of *v*P in Inuktitut

I argue here that the initial difference between verbs lies in the punctuality feature. It determines AP morphology and default viewpoint aspect. Punctuality is consistent in that punctual verbs are verbs that have obligatory internal arguments. They may be transitive or intransitive, but when they are intransitive, they are unaccusative. On the other hand, durative verbs are verbs that have no such requirement. They may be transitive or intransitive, but when intransitive, they are unergative (see section 2.3.7.1). I follow loosely Embick (2004) and Basilico (2008) in that aspectual differences between verbs are based on the timing of merger with an aspectual feature.

4.6.1.1 Punctual verbs

I argue that in Inuktitut, punctual verbs are derived by a root merging with a punctual head, deriving a punctual phrase, which then merges with the internal argument (268). This argument then gets absolutive case through Agree with C. When intransitive, there is no *v*P.

(268) Intransitive punctual verbs



The reason why this is not categorised as verb phrase at this point is because both achievements and stative verbs are punctual verbs. In Inuktitut, punctual atelic statives may become either verbs or adjectives, as shown in (269). The roots *taki-* '*tall*' and *nait-* '*short*' behave like a

modifier in (269)a, while the root *nait-* '*short*' behaves like a predicate in (269)b. They only become verbs once they select an argument, as the structure in (268) predicts.

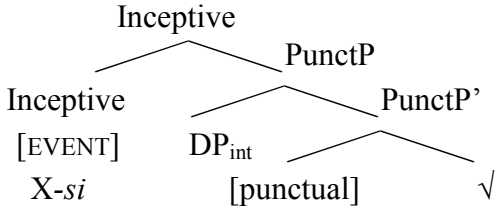
(269) a. anguti taki-juq taku-qqau-juq arnar-mit nait-tu-mit3
man tall-PART.3sg see-REC.PAST-PART.3sg woman-OBL.sg short-PART-OBL.3sg
'The tall man saw the short woman.'

b. ii, kisiani ilisaiji taki-nngit-tuq
yes but teacher(ABS.SG) tall-NEG-DEC.3SG
'Yes, but the teacher isn't tall.'

(Compton 2011:4, 9)

PunctP may further merge with any number of aspectual heads, such as an inceptive head, as discussed in chapter 2. In that case, it does not form a phase.

(270)



Thus, we get the difference between the non-eventive (271)a and the eventive (271)b. Only (271)b would have the structure in (270).

(271) a. tuqu(t)-tuq
dead-PART.3sg
'he is dead'

b. tuquX-*si*-juq
dead-INCPT-PART.3sg
'he is dying'

These verbs become transitive by merging with a *v,* which then merges with an external argument. This may happen without overt morphology (272)a, or with overt causative morphology (272)b, c.

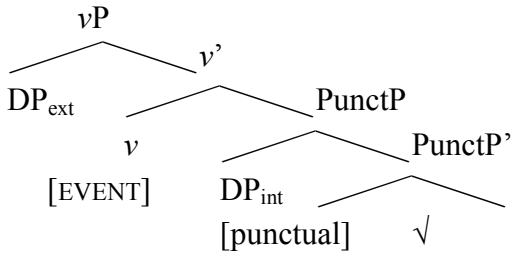
(272) a. naalautiq surak-tuq
radio(ABS) break-PART.3sg
'the radio broke'

Piita-up naalautiq surak-taa [MI]
Peter-ERG radio(ABS) break-PART.3sg/3sg
'Peter broke the radio'

b. nanuq tuqu-juq	Piita-up nanuq tuqu-**t**-(t)uq
nanuq(ABS) dead-PART.3sg	Peter-ERG polar bear(ABS) die-**CAUS**-PART.3sg
'the polar bear died/is dead'	'Peter killed the polar bear'
c. quviask-tunga	quviasuk-**tit**-*si*-junga ui-ga-nit [SB]
happy-PART.1sg	happy-**CAUS**-AP-PART.1sg husband-1POSS-*mik*
'I am happy'	'I am making my husband happy right now'

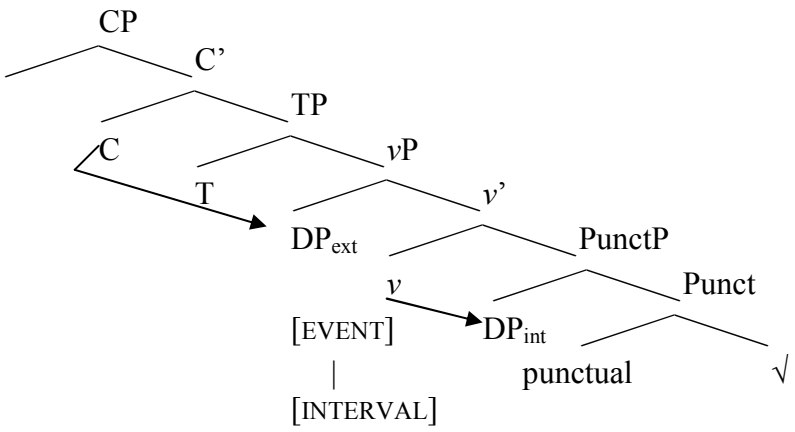
Punctuality is neither changed to durativity by viewpoint aspect or case, as discussed in section 4.6, or properties of internal arguments, as discussed in chapter 3. When punctual verbs are transitive, they then merge with the light *v.* This light *v* may also carry an [EVENT] feature.

(273) Transitive punctual verbs



By default, *v* does not check case with the internal argument in Inuktitut, regardless of whether they are transitive or intransitive. The only time *v* checks case with the internal argument is, when PunctP merges with a *v* that carries an [INTERVAL] feature. The default properties are thus overridden when the [EVENT] feature has a dependent [INTERVAL] feature. This [INTERVAL] feature, albeit interpretable since *-si* is an aspectual morpheme, is unvalued by virtue of being in *v*. Agree with the internal argument results in valuing the [INTERVAL] feature, in *mik*-case on the internal argument, and imperfective viewpoint.

(274) Antipassive with punctual verbs



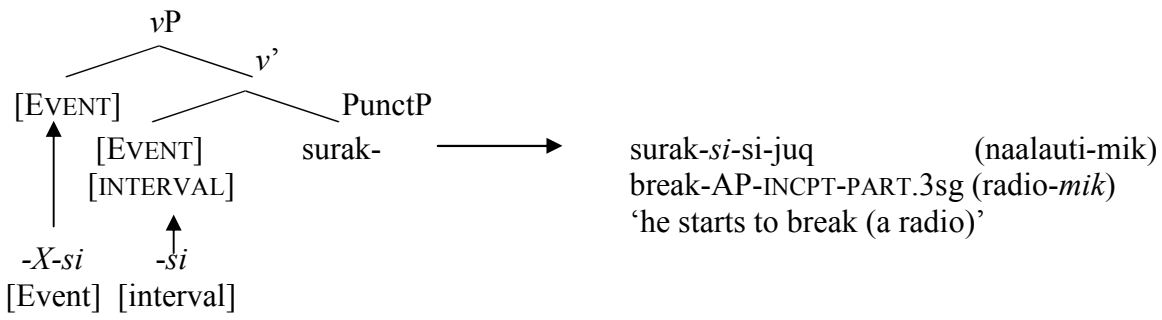
Structure (274) thus shows how punctual verbs have an AP marker enabling imperfective viewpoint through accusative case checking on the internal argument. *v*P thus forms a phase, allowing C to probe to the external argument, resulting in absolutive case for that argument.

4.6.1.2 AP with *-si* and X-*si*

Recall that in chapter 2 we have determined that there are two different slots for *-si*, depending on whether the slot allows for the deletion of preceding consonants. I argue here that this analysis can be maintained, except for one difference. The AP marker slot is in *v*, which carries an unvalued [EVENT] feature. The only time we get accusative case is when PunctP merges with an [INTERVAL] feature.

Thus, when *-si* occurs as its default version X-*si*, it has nothing to do with case checking. Distributed Morphology (Halle and Marantz 1993, 1994, Halle 1997) states that features of the slot and features of the vocabulary items must match. They do here in both cases, except that the [INTERVAL] feature closer to the root must be valued through Agree before it can be spelled out. No such requirement exists for the aspectual slot.

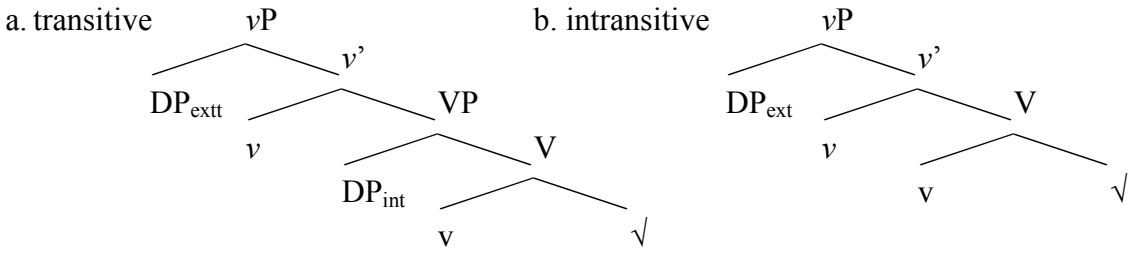
(275) a. *-si*-type verbs in the AP construction with inceptive aspect



4.6.1.3 Durative verbs

Durative verbs, on the other hand, are activities and accomplishments. As established in chapter 2, these are null-type verbs and cannot be adjectives. Thus, I argue that their roots merge with a v-head and become verbs. As verbs, they are by default eventive. When unergative, these types of verbs merge an external argument in the specifier of *v*P, as proposed in Kratzer (1996). To avoid terminological confusion, I re-label the verb as V. When transitive, they merge with an internal argument (276)a. If not, they immediately merge with a light *v* (276)b.

(276) Durative verbs



Just like with punctual verbs, *v* carries an interpretable [EVENT] feature and thus does not agree with the internal argument. However, the optional internal argument gets inherent case upon merger with V, thus accounting for the default imperfective reading of durative verbs. Unless C probes down to agree with that argument, that case may be spelled out as *mik*-case. Note that depending on the verb or the theta role, this case does not have to be *mik*-case, as shown in (277) (repeated from (65)). In (277)a, *aglu-mut* '*sea hole*' is a goal and is thus marked with the allative case *-mut*. Note that X-*si* is not responsible for that case. Without it, we get *mik*-case in (277)b.

(277) a. Piita aglu-mut kataX-*si*-juq [MI]
Piita(ABS) seal hole-ALL fall-INCPT-PART.3sg
'Peter is starting to fall into the seal hole'

b. imiuti qattaq-tuq sar-mit [SB]
glass(ABS) fall-PART.3sg table-*mik*
'the glass falls from the table'

Inuktitut thus differs from a language like English or German where the case on the internal argument directly correlates to different telicity readings in that there are two different cases. *mik*-case with *-si* thus parallels the accusative, while *mik*-case , when assigned inherently upon merger with V, equals any other inherent case. While a [TELICITY] feature on *v* is responsible for accusative case checking in Finnish or German, it is the [INTERVAL] feature that causes viewpoint aspect alternations in Inuktitut.

I thus follow loosely Kratzer (2004) in that I take telicity to be an interpretable feature of *v* that in nominative-accusative languages checks the uninterpretable [ACCUSATIVE] feature on the internal argument. Checking this feature with the closest DP results in accusative case on that DP. In its absence, we expect an atelic interpretation, such as in English (278)a, or German (278)b.

(278) a. John shot at the rat atelic
b. John schoß auf die Ratte atelic

If telicity is an interpretable feature on *v* that checks against an uninterpretable [ACCUSATIVE] feature on the internal argument, then we have a ready explanation why telicity is tied to accusative case in language like English, German, or Finnish. If the [TELIC] features checks accusative case with the internal argument, the event is telic. If there is no accusative checking, then the event is atelic. Only a *v* that is possibly telic thus allows for the telicity contrasts. This means we have a way to account for the telicity contrasts that are only observable with perfective viewpoint.

In Inuktitut, the facts are reversed. I argue above that *mik*-case is accusative case in that is checked with *v*. However, as discussed in chapter 3, *mik*-case correlates with imperfective and thus atelic readings. We have two options for how to account for the difference to nominative-

accusative languages. A) The correlation between accusative and telic readings does not apply in Inuktitut. B) The correlation is reversed.

I argue that since *v* carries no [TELIC] feature in Inuktitut, there is no telicity contrast observable in Inuktitut. For example, there are no clear telicity contrasts between accomplishments and activities. Thus, case checking with an internal argument cannot be the locus of variation. They are always imperfective, which means that they are always read as atelic even when they are not (279). This means that there is no direct correlation between the presence of a *mik*-case marked internal argument and the absence thereof. Thus, the *mik*-case is not a structural case and is not checked against *v*, but is assigned inherently upon merge with V.

(279) a. niri-junga ikaralimaamut
eat-PART.1sg for.an.hour
'I'm eating for an hour'

b. niri-junga niqi-mit ikaralimaamut
eat-PART.1sg meat-*mik* for.an.hour
'I'm eating meat for an hour'

Consequently, telicity contrasts may be attributed to the difference in viewpoint. As discussed in chapter 3, only perfective viewpoints allow for telicity contrasts. Thus, in Inuktitut, only if *v does* check accusative case, can we observe a telicity contrast. This means that whenever *v* is occupied with the AP marker *-si*, we get an atelic reading as predicted for the AP construction, because *v* checks case with the internal argument. When *v* merges with VP, *mik*-case is checked upon merger with V, also only allowing an atelic reading, while *v* does not check accusative case.

As a result, telicity contrasts are not based on the presence of an internal argument, but on its merge position and the way on how it gets case. Thus, viewpoint aspect is a side-effect of case and agreement on *v*, while still accounting for the fact that all constructions with *mik*-case tend to be interpreted as atelic. Depending on whether *v* checks case with the internal argument, we get telic or atelic readings.

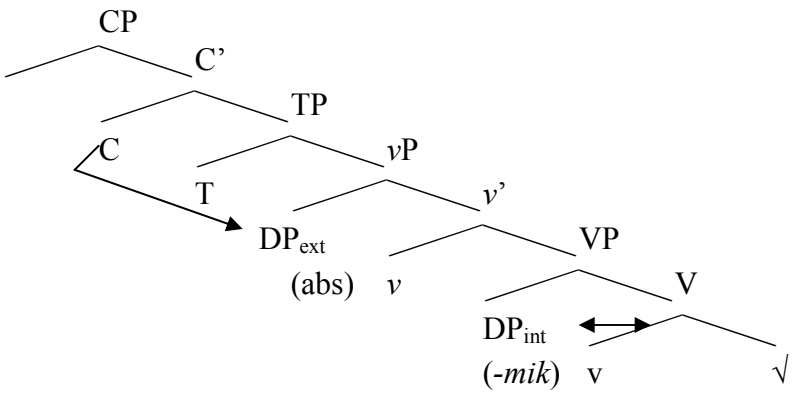
Imperfective readings, and accordingly, telic readings are the result of *mik*-case being checked like an accusative by an Agree relation with the [INTERVAL] feature on *v*. When *mik*-case is 'assigned' inherently by V, we also get atelic readings. However, they are based on the durative property of these verbs, and not on any case.

I have proposed in Spreng (2005, 2006) that *mik*-case is only comparable to structural accusative when it correlates with a *v* that is inhabited by *-si*. If it is universal that telicity is determined by accusative case, then *mik*-case with durative verbs is not an accusative.

Indirect support for this argument comes from Guéron (2004, 2008), arguing that the internal arguments of action verbs are instruments. They lexically incorporate an instrument feature that "[…] selects, by metonymy, a direct object in VP construed as the body the instruments impacts on, and a subject in Spec*v*P construed as the Manipulator of the instrument." (Guéron 2008:1818). If the internal arguments of durative verbs are instruments, then the *mik*-case, which is used for instruments, is thus checked inherently when merging with V. The proposal accounts also for the fact that these "arguments" are optional in that they are not necessary for the verb to form a grammatical sentence. While Guéron's proposal accounts for telicity contrasts based on the properties of internal arguments, I argue that in Inuktitut, where telicity contrasts with intransitive durative verbs cannot be observed because they are imperfective, this has nothing to do with telicity. For these verbs, there is no alternation between accusative and non-accusative and thus no contrast between telic and atelic interpretations. The only time a telicity contrast can be observed is between ergative construction and non-ergative construction.

Thus, we have an explanation why the correlation between telicity and accusative case only occurs with perfective viewpoint and why durative verbs are imperfective in intransitive constructions. There is no contrast based on whether *v* checks accusative case or not. For these verbs, *v* never checks accusative case and they always retain their imperfective reading unless overridden by a probe from C, resulting in absolutive case on that argument and thus an ergative construction. That is the only time the imperfective reading is overridden. Otherwise, merger of an internal argument results in spelling out any case except absolutive on this argument, without any changes in telicity or imperfectivity.

(280) Null-type antipassive with durative verbs



So far, we have determined the correlation between ergative case and perfective viewpoint, and *mik*-case and imperfective viewpoint. The correlation between absolutive case and viewpoint is outlined in (281). When it comes to absolutive case, viewpoint aspect depends on which argument has absolutive case.

(281) Arguments and their case responsible for default viewpoint

i. Perfective aspect = absolutive on the internal argument
ii. Imperfective aspect = absolutive on the external argument

The correlations outlined in (281) call into question the initial assumption (section 4.2) that the absolutive DP is the subject and has its case always valued by INFL. If *v* has an Agree relation with the internal argument, resulting in absolutive case, we would have to assume that it carries φ-features. However, the fact that all overt agreement morphology in Inuktitut is just one morpheme also suggests that all φ-agreement happens with C. Thus, we can keep the modified analysis from Spreng (2006) that absolutive case is always checked via an Agree relation with C.

4.6.2 Summary

I have proposed an analysis of agreement-based viewpoint aspect that accounts for the following properties of AP constructions, canonical intransitive constructions, and ergative constructions in Inuktitut.

In Inuktitut, T does not correlate to finiteness, φ-features, or subject case. Thus, it does not inherit φ-features from C and is completely inert with respect to case and agreement. Agree relations are thus established with φ-features from C.

Ergative constructions have absolutive case on the internal argument. Since the ergative case on the external argument is inherent case, the probe from C can thus reach the internal argument because *v* does not constitute a phase. Thus, the PIC is not violated.

Punctual verbs neither constitute verbs nor events, unless they merge with *v*. They are also free to merge with an adjective-forming head. This explains the parallels between stative punctual verbs and predicative adjectives in Inuktitut. I would thus not expect durative verbs to form predicative adjectives, unless overtly marked.

Whenever punctual verbs occur in the AP construction, they require an AP marker to facilitate imperfective viewpoint readings. Their punctual property accounts for the fact that in earlier stages of derivation, their category is undetermined; they may be verbs or adjectives.

v with the AP marker results in accusative case on the internal argument, which is the goal of an Agree relation with C in every instance except for the AP construction. C probes to the external argument since *v* constitutes a phase only in the AP construction.

Durative verbs have no viewpoint contrasts nor telicity contrasts between canonical intransitives and AP constructions. Since the *mik*-case makes no difference to viewpoint aspect and may be replaced with another inherent case, the *mik*-case on the optional internal argument, it is not a structural case, but is inherent instrumental case that is checked by V upon merger.

However, as suggested in Clarke (2009), and by the properties of *mik*-case either being accusative or inherent, there seems to be a development where the ergative construction is disappearing, which means that the agreement-based viewpoint contrast disappears. This would mean that viewpoint contrasts is simply encoded with an interpretable [INTERVAL] feature in *v*, similar to Clarke (2009), which would then lack the uninterpretable case feature. The development goes together with the ergative construction being used less and less and under more and more restricted conditions (Johns 2006). This also means that viewpoint contrasts are becoming less pronounced between the constructions

However, what to do with dialects that are more conservative compared to SB? Recall, that the traditional view of the AP is that there is reduction in agreement and the internal argument receives oblique case, while the ergative case is considered a structural case. In more conservative dialects and earlier data of Eskimo, the ergative case always changes to allative under passivisation, thus supporting the view that it is a structural case. Furthermore, the contrast between perfective and imperfective interpretation is much more stable in conservative dialects, than in data elicited in the last two years, as discussed in chapter 3, section 3.3.3. What would an analysis look like in order to account for both stages of development?

With the proposed analysis, I am able to account for both stages of Eskimo, drawing a correlation between the status of ergative case and the properties of *mik*-case with respect to the semantic properties of the constructions, i.e. ergative construction and AP construction they represent.

Since the only constant is the distribution of the AP marker across dialects and developmental stages, the status of the ergative case and the *mik*-case may be different.

I suggest therefore for conservative dialects that the internal argument may check absolutive case with *v*, while ergative case is checked with C in ergative constructions. The AP construction thus differs from the ergative construction in that the Agree relation between *v* and the internal argument does not occur, thus forcing an oblique or inherent case on that argument. The AP marker *-si* might carry a feature that disallows checking structural case with the internal argument. It is likely that in such cases, *-si* is an imperfective morpheme, carrying an imperfective feature that prohibits an Agree relation with an internal argument. The difference between a more conservative dialect and the data examined in this thesis thus lies in the status of the *mik*-case and the ergative. While *mik*-case is on its way to possibly becoming a full-fledged accusative, the ergative case turns into a non-structural case. Their respective developments are thus tied together. The ergative case's development would not occur without the development of the *mik*-case.

Thus, *mik*-case would then always be an oblique case in every instant, thus being responsible for imperfective readings for both types of verbs and accounting for the traditional view that the case on the internal argument is an oblique.

4.7 Agreement-based viewpoint: nominative-accusative languages

Aspectual contrasts that correlate to the case on the internal argument are well-known for nominative-accusative languages. For example, in Finnish, aspectual contrasts are encoded through the case on the object. Accusative case is associated with telic aspect, while partitive case is associated with atelic aspect (Svenonius 2002b). In contrast to the Inuktitut patterns, the only argument that is affected by the case change is the internal argument, while apparently not affecting viewpoint.

The question I will address in the next sections is if telicity contrasts are tied to changes only on the internal argument in nominative-accusative languages, does that mean that we get viewpoint contrasts only when both arguments are affected by case changes? I will use some discussions on Finnish case alternations as it seems to be the best-studied language in that respect.

4.7.1 Finnish partitive/accusative alternations

The best-known example of agreement-based aspect changes is possibly Finnish. It shows a case alternation on the internal argument that corresponds to changes in aspect interpretation. It does not seem entirely clear whether this causes telicity or viewpoint aspect changes.

According to Kiparsky (1998), aspectually unbounded verbs assign partitive case to all their objects. A partitive bare plural object is ambiguous between a definite and an indefinite reading, as shown in (282).

(282) a. etsi-n karhu-a / kah-ta karhu-a / karhu-j-a
seek-1Sg bear-Part / two-Part bear-Part / bear-Pl-Part
'I'm looking for the (a) bear / (the) two bears / (the) bears'

b. etsi-n #karhu-n / #kaksi karhu-a / #karhu-t
seek-1Sg bear-Acc / two-Acc bear-Part / bear-PlAcc
'I'm looking for the (a) bear / two bears / the bears'

(Kiparsky 1998:268)

As argued in chapter 3, imperfective viewpoint would not allow telic judgements, which indicates that the bounded-unbounded contrast, associated with accusative and partitive case

described in (282), may indicate that the partitive case here is responsible for an imperfective viewpoint. I would expect *etsi-* '*seek*' to be a durative verb. Therefore, the fact that these verbs only assign partitive case would explain their consistent interpretation. They cannot assign accusative because they are by default imperfective.

On the other hand, the aspectually unbounded example with partitive case in (283)a denotes an activity, while the example in (283)b denotes an accomplishment. That may indicate that these examples have imperfective viewpoint, since accomplishments in the imperfective often read like activities instead of accomplishments, because the result is backgrounded and the end of the event is invisible to R, as shown in the contrast in (284).

(283) a. Ammu-i-n karhu-a / kah-ta karhu-a / karhu-a
shoot-Pst-1sg bear **Part** / two-**Part** bear-Part / bear-Pl-**Part**
'I shot at the (a) bear / at (the) two bears at (the) bears'

b. Ammu-i-n karhu-n / kaksi karhu-a / karhu-t
shoot-Pst-1sg bear **Acc** / two-**Acc** bear-Part / bear-Pl-**Acc**
'I shot the (a) bear / two bears / the bears'

(Kiparsky 1998:267)

On the other hand, it could simply be a telicity contrast, such as in the conative alternation in English, with the difference that the internal argument is still present.

(284) a. He was shooting a bear DOES NOT ENTAIL He shot a bear
b. He shot a bear ENTAILS A bear was shot

Kiparsky notes that only the example with accusative case in (283)b entails that the bear is dead. This interpretation stands in contrast to the English translation, which only *implies* that the bear is dead. In English, the perfective only entails that a shot was fired and hit the target, while in Finnish, the meaning is more akin to '*shoot dead*'

The examples with partitive case in (283)a, on the other hand, imply that the shot missed, mirroring the English contrasts in (285). Only (285)b entails that John missed, while neither (285)a nor its entailment mean that the rat is dead.

(285) a. John was shooting the rat
DOES NOT ENTAIL John shot the rat

b. Johns was shooting at the rat
ENTAILS John shot at the rat

The Finnish example with partitive case in (283)a thus mirrors both (285)b and its entailment. The distinction suggests that we are dealing with more than a telicity contrast. The question, however, arises if this contrast is due to a change in viewpoint or in lexical aspect. Recall that only perfective viewpoints allow a telicity contrast. Bounded predicates, such as '*ammu-* '*shoot*', can receive a durative or iterative reading, which then correlates with partitive case on the internal argument. On the other hand, some so-called unbounded verbs, such as *omista* '*own*', in (286) also alternate between partitive and accusative, thus showing that telicity is not the determining factor which case we find on the internal argument.

(286) a. omista-n #karhu-a / #kah-ta karhu-a / karhu-j-a
own-1Sg bear-**Part** / two-Part bear-Part / bear-Pl-Part
'I own the (a) bear / (the) two bears / bears'

b. omista-n karhu-n / #kaksi karhu-a / karhu-t
own-1Sg bear-**Acc** / two-Acc bear-Part / bear-Pl-Acc
'I own the (a) bear / two bears / the bears'

(Kiparsky 1998: 269)

Kiparsky (1998) concludes that in Finnish, the partitive case marks imperfective aspect on the VP level since it is checked within the VP, which parallels my proposal for the *mik*-case. Kiparsky's proposal thus implies that viewpoint aspect may be encoded on different levels in the clause; again, mirroring my proposal that viewpoint aspect is not tied to TP or CP only.

It further supports the idea that aspectual contrasts that are caused by case changes on the internal argument do not have to be restricted to telicity. Viewpoint may be affected even when only one argument changes case.

4.7.2 German object case alternations: conative alternations

The description of the meaning contrast in the examples in (286) taken from Kiparsky (1998) suggests a closer parallel to an agreement-based aspect alternation in German, discussed in Kratzer (2004). According to Kratzer (2004), the aspectual alternation is both a telicity

alternation and a viewpoint alternation.[104] Example (287)a with accusative case on the object entails that there are mittens, while (287)b only *implies* that there might be some mittens. This mirrors the correlation in English between imperfectives with telic and atelic predicates.

(287) a. Sie hat tagelang Fausthandshuhe gestrickt.
she has for-days mittens-**ACC** knit
She has knit mittens for days. [atelic, perfective]

b. Sie hat tagelang an Fausthandschuhen gestrickt.
she has for-days at mittens-**DAT** knit
She was knitting mittens for days. [atelic, imperfective]

(Kratzer 2004:392)

The entailments shown in (288) suggest that the contrast is a viewpoint contrast as much as a telicity contrast. Only in (288)b, there are no mittens.

(288) a. ?Sie hat tagelang Fausthandshuh-e gestrickt und keinen einzigen fertiggestrickt
she(NOM) has for-days mittens-**ACC.pl** knit and no one complete-knit
'She has knit mittens for days and finished not even one'

b. Sie hat tagelang an Fausthandschuh-en gestrickt und keinen einzigen fertiggestrickt
she(NOM) has for-days at mittens-**DAT.pl** knit and no one complete-knit
'She was knitting mittens for days and finished not even one'

Furthermore, when we use the conjunction test without temporal frames, we find that regardless of the case on the object, we always get ambiguous readings for the example with accusative case. As discussed in chapter 3, German has no viewpoint aspect on INFL. We can thus predict that in a sentence with default accusative, we should get both a simultaneous and a sequential reading depending on which viewpoint we take. This prediction is borne out for (289)a, which allows both sequential and simultaneous readings. On the other hand, the example with dative case only allows simultaneous readings, further suggesting that the contrast is just a telicity contrast.

---

[104] Kratzer defines (im)perfectivity more in terms of (ir)resultativity. While there may be some overlap, the definition departs from a purely temporal view of viewpoint aspect, introducing a non-temporal component. As determined in chapter 3, I suggest that both of the examples in (287) may be either imperfective or perfective and it is only from an imperfective viewpoint that it is relevant whether there are mittens or not.

(289) a. Als ich sie besuch-te hat sie Fausthandschuh-**e** gestrickt
when I her(ACC) visit-PAST.1sg, has she(NOM) mittens-**ACC.pl** knit
When I visited her, she was knitting mittens. [simultaneous/
'she was knitting mittens before I visited her' sequential]

b. Als ich sie besuchte, hat sie an Fausthandschuh-**en** gestrickt
when I her(ACC) visit-PAST.1sg, has she(NOM) at mittens-**DAT.pl** knit
'when I visited her, she was knitting mittens' [simultaneous]

Simple case alternations thus only support telicity contrasts for German, supporting the analysis in Kratzer (2004).

4.7.3 Noun incorporation in German

Although German has no interpretable viewpoint aspect feature on INFL like English, it may grammaticise viewpoint aspect. German has a means to force imperfective readings by way of case and agreement changes on the internal argument. If we consider non-Standard German data (Krause 2002), we find that there is a grammaticised way to encode imperfective that has nothing to do with T or INFL, but everything to do with agreement with the internal argument. The intransitive examples in (290) show a construction where the auxiliary *sein* '*be*' combines with an infinitival lexical verb, which is preceded by a fused preposition *am* '*at.the*' that seems to show remnants of dative case.

(290) a. er war die ganze Zeit am Schreien
he was the whole time at.the screaming
'He was screaming the whole time'

b. sind's am Kochen?
are-you at/the cooking?
'Are you cooking?'

c. di warn da am renovieren
they were there at/the renovating[105]
'They were renovating there'

(Krause 2002:23-25)

---

[105] The more accurate gloss here would be the infinitive forms *scream*, *cook*, *renovate*. The present participle form in German is *schreien**d**, kochen**d**, renovieren**d***.

The examples in (290) are only possible as imperfectives, not just as atelic predicates. They are rather problematic with any time frame that is more specific than '*the whole time*', as shown in (291).

(291) a. #er war von 5 bis 6 am Schreien
he was from 5 to 6 at.the screaming
'He was screaming from 5 to 6'

b. #sind's von 5 bis 6 am Kochen?
are-you from 5 to 6 at.the cooking?
'Are you cooking from 5 to 6?'

c. #di warn da von 5 bis 6 am renovieren
they were there from 5 to 6 at.the renovating
'They were renovating there from 5 to 6'

Barrie and Spreng (2009) show when these constructions are transitive, the internal argument is incorporated. The internal argument *Bücher* '*books*' is preferred in the plural form, it is ungrammatical with any determiner, and it has no case, as shown in (292).[106]

(292) a. Ich bin am (*diese) Bücher verkaufen.
I be1.sg.PRS. PRT[107] (*these) books sell
'I'm selling books.'

b. Ich verkaufe (diese) Bücher.
I sell (these) books
'I'm selling (these) books/I sell (these) books.'

(Barrie and Spreng 2009:377)

The contrast between the "progressive" construction in (292)a and (292)b is not a telicity contrast, as shown in (293). The sentences that are neutral with respect to viewpoint can be interpreted as atelic (293)a and telic (293)b. However, the imperfective sentences are only compatible with the atelic PP den *ganzen Tag lang* '*the whole day long*' (293)c, while when used

---

[106] Note that case marking is primarily noticeable on the determiner in German. Also, the plural form does not mean that any books are sold. It is unspecified whether one, more than one, or any books are sold.

[107] PRS = present. PRT= particle stands for the gloss '*at.the*' in (Krause 2002), see examples (290).

with *innerhalb eines Tages* '*within a day*' (293)d, the only possible reading is '*a day from now*', thus indicating inceptive imperfective viewpoint, but not telic aspect.

(293) a. Ich verkauf-e dies-e Büch-er den ganz-en Tag lang
I sell-PRES.1sg these-ACC.pl books-ACC.pl the(ACC) whole-ACC day(ACC) long
'I'm selling (these) books/I sell (these) books.' all day long

b. Ich verkauf-e dies-e Büch-er innerhalb ein-es Tag-es
I sell-PRES.1sg these-ACC.pl books-ACC.pl within a-GEN day-GEN
'I'm selling (these) books/I sell (these) books within a day'

c. Ich bin den ganz-en Tag lang am Bücher verkaufen.
I be(PRES.1sg) the(ACC) whole-ACC day(ACC) long PRT books sell-INF
'I'm selling books all day long'

d. Innerhalb ein-es Tag-es bin ich am Bücher verkaufen.
within a-GEN day-GEN be(PRES.1sg) I(NOM) PRT books sell-INF
'I'm selling books within a day Lit.: Within a day I'll be selling books'

To apply the progressive test, we find that neither atelic nor telic verbs entail the non-progressive (294)a, b. The reason is that *Bücher* '*books*' is completely non-referential. The meaning of this progressive is more similar to the English *strawberry picking* (294)c.

(294) a. Ich bin am Bücher verkaufen DOES NOT ENTAIL Ich verkauf-te Bücher
I be(PRES.1sg) PRT books sell-INF. I sell-PAST.1sg books(ACC)
'I'm selling books' 'I sold books '

b. Sie ist am Männer küss-en DOES NOT ENTAIL Sie hat einen Mann geküßt
She be(PRES.1sg) PRT men kiss-INF she has a man(ACC) kissed
'I am kissing men' 'she kissed a man'

c. I was strawberry picking DOES NOT ENTAIL I picked strawberries.

Obviously, it is the accusative case that, when it seems to be lacking, forces the imperfective reading, which makes the viewpoint aspect contrast based not on T, but on *v* in German as well. Furthermore, like with any imperfective viewpoint, it obscures telicity contrasts, as discussed in chapter 3. Note that it is not actually accusative case that, when absent, forces the imperfective reading. Some so-called dative verbs may be used in this construction too, as shown in (295).

(295) a. Ich bin am Kind-ern helfen[108]
I be(PRES.1sg) PRT child-DAT.pl help-INF
'I'm helping children'

While in the ergative language Inuktitut, the ability to check case with an internal argument correlates to imperfective viewpoint, in the nominative-accusative language German, it is the *in*ability to check case with an internal argument. Thus, unlike the conative alternations, viewpoint aspect is based on agreement changes in German. While the internal argument in Inuktitut still has case, the only way to change viewpoint based on the case of the internal argument is through the absence of case in German.

4.7.4 Passives and aspect

While I have argued that it is more likely that viewpoint aspect contrasts only affect internal arguments in nominative-accusative languages, there is some evidence that voice alternations may affect aspectual interpretations in nominative-accusative languages. For example, the difference between the default *Vorgangspassiv*, i.e. dynamic passive, and *Zustandspassiv*, i.e. stative passive, shows similarities to the AP in Inuktitut. The dynamic passive in German is formed with a modal *werden* '*become*' that is also used for future tense like 'will' in English.

(296) a. Das Abendessen ist gegessen.
the(NOM) evening meal(NOM) be(PRES.3sg) eaten
'the evening meal is eaten'

b. Das Abendessen wird gegessen.
the(NOM) evening meal(NOM) become(PRES.3sg) eaten
'the evening meal is being eaten'

Both punctual and durative verbs may form the passive with *werden*, and both types of verbs show the difference in viewpoint depending on the auxiliary. The passive with *sein* '*be*' has a resultative reading, implying either that the meal is over or that there is no more food, while the

---

[108] They are not very common however. Only activities seem to allow this construction. Since many dative verbs are psych verbs, this is not entirely surprising. *Ich bin dir am glaub-en
I(NOM) am you(DAT) PRT believe-INF
'I am believing you'

passive with *werden* implies that we are in the middle of eating dinner, or about to eat dinner. It may be used as an order to a child during or before dinner. Thus, INFL in the passive may have different properties from INFL in the active.

The use of '*become*' in the passive is reminiscent of the inceptive marker *-si* in Inuktitut. Both have similar meaning that corresponds to the light verb meaning [become], and both correspond to imperfective meanings. While in Inuktitut, [become] is necessary for punctual verbs in a construction where both arguments have a different case from the ergative construction, in the German passive, the different auxiliaries disambiguate viewpoint.

The difference between viewpoints thus lies in the auxiliary similar to the English contrasts. Consequently, the viewpoint contrast has nothing to do with the voice alternation here. One might ask why INFL carries an [EVENT] feature in the passive, while it does not seem to do so in the active in German. In essence, we can adopt a similar analysis to English, as proposed in Cowper (2005). I suggest that INFL is inhabited with '*werden*' only when there is an [INTERVAL] feature. This feature is interpretable, just like in English, and allows imperfective readings not only in the passive but, in what we call future tense as well. Thus, '*werden*' is ambiguous between inceptive imperfective and future tense in German. While without the adverb, the interpretation could be at any time after S(peech) time, it is perfectly acceptable with the adverb *jetzt* '*now*', just like the English imperfective. Both active and passive *werden* are ambiguous between an inceptive imperfective and future tense reading. On the other hand, this is not possible with the stative passive with *sein* '*be*'. Only the inceptive reading with *jetzt* '*now*' is possible. Note that English future tense and inceptive imperfective are not ambiguous.

(297) a. Wir werden jetzt/morgen essen
we(NOM) become-PRES.1pl now/tomorrow eat-INF
'we will eat now/tomorrow'

b. Das Abendessen wird jetzt/morgen gegessen
the(NOM) evening meal(NOM) become-PRES.3sg now/tomorrow eaten
'the evening meal is being eaten now/tomorrow'

c. Das Abendessen ist jetzt/*morgen gegessen
the(NOM) evening meal(NOM) be-PRES.3sg now/tomorrow eaten
'the evening meal is eaten now/*tomorrow'

However, it would certainly be beneficial to investigate the aspectual properties of passives and other voice alternations in other unrelated languages. As discussed in chapter 3, aspectual contrasts are not always observable based on one verb form and one case configuration. Taking aspectual contrasts in voice alternations into account might open a wider testing ground for aspectual contrasts.

4.8 Aspect splits in other ergative languages

As concluded in section 4.4.5, *mik*-case in *-si*-type AP's Inuktitut is accusative. However, the traditional view of AP constructions is that the case on the internal argument is an oblique. A look at different ergative languages, however, shows that it is not necessarily the question as to whether the object case in the non-ergative construction is structural or not. What all ergative languages that have an aspectually determined split in their agreement system have in common is that ergative constructions have bounded, perfective, past interpretations. One example is Yucatec Mayan. Here the antipassive construction also correlates to imperfective aspect as shown with the incomplete particle. To get a perfective reading in the antipassive, extra perfective morphology is required, as shown in (298)b (repeated from (4).

(298) a. k=n héek?
INCOMPL=1 breakANTIP
'I am breaking it/something'

b. héek? -n -ah -en
break.ANTIP–N-PERF-1
'I have broken.'

(Krämer and Wunderlich 1999:458)

Another example is Georgian, where the ergative construction has the aorist simple past tense (299)a and a nominative-accusative configuration with other tenses (299)b. While aorist is classified as tense, its aspectual reading compared to the nominative-accusative configuration shows striking parallels to the Inuktitut patterns.

(299) a. vano-m daaxrco rezo
cano-Erg 3s.3s.drowned Rezo
'Vano drowned Rezo'

b. vano axrcobs rezo-s
Vano(Nom) 3s.3s.be.drowning Rezo-Acc
'Vano is drowning Rezo'

(Bittner 1991:21)
(cited from Murasugi 1992:200)

Although this thesis has focused almost exclusively on the verbal semantics of the AP construction, the correlations of imperfective or unbounded interpretations with a loss of referentiality of the internal argument are prevalent in Inuktitut. The same or similar issues can be found among other languages as well. In Hindi, for example, the accusative configuration occurs with non-specific objects (300)b), which do not show agreement, while the absolutive DP in the ergative construction is specific and agrees with the verb (300)a). Note that the ergative construction in (300)a also requires the perfective verb form, indicating that there is a correlation between a lower degree of reference on the internal argument and imperfective viewpoint, similar to what was found for German noun incorporation.

(300) a. Raam-ne kitaab parhii
Raam-ERG(M) book (F) read (PERF F SG)
'Ram read the book.'

b. Raam ek kitaab parhegaa
Raam (M) a book (F) read (FUT M SG)
'Ram will read a book.'

(Mahajan 1992:511)

Trask (1979) develops a typology of ergativity splits that distinguishes between splits based on properties of the subject in an ergative language and splits based on verbal properties, such as tense and aspect. The typology presumes that a language may only have one type of split. As we have seen from the restrictions on ergative case in section 4.5.2, a language might combine nominal and verbal properties to interact with splits in the agreement system. Furthermore, as discussed for Inuktitut, properties of internal arguments, such as plurality, definiteness, or specificity may influence the aspectual interpretations we have observed. I thus conclude that splits are based on the interaction of verbal and nominal properties.

4.9 Summary

We have seen that agreement-based viewpoint aspect contrasts can always be attributed to properties of the functional head that may or may not check structural case with the internal argument. While in an ergative language like Inuktitut, where both arguments are affected, in a nominative-accusative language only the internal argument is affected.

While there is considerable variation across languages as to how agreement-based viewpoint is established, two main tendencies are observed.

(301) Crosslinguistic properties of agreement-based viewpoint aspect

i. Perfectivity correlates with a higher degree of transitivity.
ii. Structural case on the internal argument correlates with perfectivity or boundedness. In ergative languages, that case is absolutive case, while in nominative-accusative languages, that case is accusative case.
iii. The case on the internal argument that is associated with imperfective viewpoint may exhibit properties of inherent case to varying degrees.

Agreement-based viewpoint aspect contrasts can be found across languages. I have shown that properties of the object case checking head may determine different viewpoints. Viewpoint aspect is thus not solely determined by morphology on INFL, as previously implied in Smith (1991).

The type of aspectual contrast that interacts with the agreement system is based on various parameters. For example, some languages exhibit viewpoint contrast through alternation of two different structural cases on the internal argument, such as Finnish, while others require the complete loss of object case to encode that contrast, such as in German.

5 Conclusions

This thesis has explored the morphology, syntax, and semantics of antipassives in Inuktitut.

The investigation has shown that the AP marker has a predictable distribution. The distribution is determined by the argument structure of the verb, which in turn coincides with its aspectual property. Verbs that have an obligatory internal argument require the AP marker. Semantically, only punctual telic verbs require the AP marker. The investigation has shown that there is no null AP marker and durative verbs do not have an AP marker in the AP construction.

I have proposed that the AP construction has imperfective viewpoint, which further explains why the most common AP marker is an aspectual inceptive marker. The marker is necessary to facilitate the imperfective reading of punctual verbs. My proposal thus explains why the AP marker occurs only with punctual telic verbs. Furthermore, the thesis answers the question on the distribution of the AP marker, and why the inceptive marker is the most common AP marker in all Eskimo dialects. Inceptive is one of the imperfective readings available to punctual verbs, not only in Inuktitut but crosslinguistically. The longstanding question on the distribution of the AP marker is thus answered.

I have also provided support for the idea that telicity contrasts are not observable for imperfective viewpoints, thus shedding light on the interaction between lexical aspect and viewpoint aspect.

The semantic properties of the AP construction are based on a system where viewpoint aspect is not based on morphology, but is the outcome of certain case/agreement configurations. This system is called agreement-based viewpoint aspect. As the discussion on German and Finnish has shown, Inuktitut is not the only language that has agreement-based viewpoint. At this point, I cannot predict if it is always viewpoint aspect that is affected by case changes. The observed correlations between viewpoint and lexical aspect should warrant further investigation into what type of aspect is affected by differing case/agreement configurations.

Furthermore, I have proposed that the case on the internal argument in -*si*-type AP constructions is accusative case. My proposal differs from previous accounts in that there is accusative case only in -*si*-type AP constructions but not in null-type AP constructions. Previous accounts do not make that distinction.

I have proposed that there is no φ-feature inheritance from C to T in Inuktitut since tense has no correlation with agreement like it does in English.

This thesis has focused almost exclusively on the verbal semantics of antipassives. However, considering the semantics of nouns in antipassives, I would predict that there is a correlation between the semantics of nouns and aspectual properties in antipassives. Initial reflection would indicate that the semantics of objects in imperfective constructions might be comparable to the semantics of the partitive marked objects, as in Finnish.

I have demonstrated the importance of the punctuality property for aspect research, especially regarding the relation between lexical and viewpoint aspect. I have shown that telicity is impossible to compare to atelicity when R(eference) time is a subset of (E)vent time, i.e. when we have imperfective viewpoint. I hope this insight might instigate a closer look at aspect relations in other languages.

I have put the question on the synchronic distribution of the AP marker in Eskimo to rest and I hope this thesis might inspire similar research for AP morphology in other languages.

References

Alexiadou, Artemis, Anagnostopoulou, Elena, and Everaert, Martin eds. 2003. *The Unaccusativity Puzzle: Explorations of the Syntax-Lexicon Interface*. Oxford: Oxford University Press.

Asuilaak: Inuktitut Living Dictionary, Dictionnaire Vivant. Department of Culture, Language, Elders and Youth.

Bach, Emmon. 1986. The Algebra of Events. *Linguistics and Philosophy* 9:5-16.

Baker, Mark, Johnson, Kyle, and Roberts, Ian. 1989. Passive Arguments Raised. *LI* 20: 219-251.

Barrie, Michael, and Spreng, Bettina. 2009. Noun incorporation and the progressive in German. *Lingua* 119:374-388.

Basilico, David. 2008. The syntactic representation of perfectivity. *Lingua* 118:1716-1739.

Bayer, Josef. 1984. COMP in Bavarian Syntax [Mar.]. *Ling. Rev.* 3:209-274.

Beach, Matthew. 2003. Asymmetries between Passivization and Antipassivization in the Tarramiutut Subdialect of Inuktitut. In *Proceedings of the LFG03 Conference*, eds. M. Butt and T. Holloway King. Stanford: CSLI Publications.

Beaudoin-Lietz, Christa. 1982. Aspects of Certain Intransitivizing Postbases and of a Transitivizing Postbase in Labrador Inuttut, Memorial University of Newfoundland: M.A. thesis.

Bennett, Michael, and Partee, Barbara. 1978. *Toward the logic of tense and aspect in English*. Bloomington, Indiana: Indiana University Linguistics Club.

Benua, Laura. 1995. Yup'ik Antipassive. In *Papers from the 31st Regional Meeting of the Chicago Linguistic Society, I: The Main Session; II: The Parasession on Clitics*, ed. Audra Dainora, I: 28-44. Chicago, IL: Chicago Linguistic Society.

Berge, Anna Mary Sophia. 1997. Topic and Discourse Structure in West Greenlandic Agreement Constructions, University of California at Berkeley: Doctoral Dissertation.

Bittner, Maria. 1987. On the Semantics of the Greenlandic Antipassive and Related Constructions. *IJAL* 53:194-231.

Bittner, Maria. 1988. Canonical and Noncanonical Argument Expressions, University of Texas at Austin: Doctoral Dissertation.

Bittner, Maria. 1991. Basic Case Features. Ms. Rutgers University.

Bittner, Maria. 1994. *Case, Scope, and Binding*. Dordrecht: Kluwer Academic Publishers.

Bittner, Maria, and Hale, Ken. 1996a. The Structural Determination of Case and Agreement [Winter]. *Linguistic Inquiry* 27:1-68.

Bittner, Maria, and Hale, Ken. 1996b. Ergativity: Toward a Theory of a Heterogeneous Class [Fall]. *Linguistic Inquiry* 27:531-604.

Blight, Ralph Charles. 2004. Head Movement, Passive, and Antipassive in English, University of Texas: Doctoral Dissertation.

Bobaljik, Jonathan David. 1993. On Ergativity and Ergative Unergatives. *MITWPL* 19.

Boeckx, Cedric. 2003. *Islands and chains. Stranding as resumption*. Amsterdam: John Benjamins.

Bohnemeyer, Jürgen, and Swift, Mary. 2004. Event Realization and Default Aspect. *Linguistics and Philosophy* 27:263-296.

Bok-Bennema, Reineke. 1991. *Case and Agreement in Inuit* vol. 38: Studies in Generative Grammar. Berlin New York: Foris Publications.

Borer, Hagit. 1993. The Projection of Arguments. *University of Massachusetts Occasional Papers in Linguistics* 17:19-47.

Borer, Hagit. 2005. *Structuring Sense*. Oxford: Oxford University Press.

Borik, Olga. 2002. Aspect and Reference Time, Universiteit Utrecht: Dissertation.

Borik, Olga, and Reinhart, Tanya. 2004. Telicity and Perfectivity: Two independent Systems. In *Proceedings of LOLA 8 (Symposium on Logic and Language)*, eds. L. Hunyadi, G. Rakosi and E. Toth, 13-34. Debrecen, Hungary.

Bourquin, Theodor. 1891. *Grammatik der Eskimo - Sprache*. London: Moravian Mission Agency.

Bowers, John. 2001. Predication. In *The Handbook of Contemporary Syntactic Theory*, ed. Mark Baltin & Chris Collins, 299-333. Malden, Mass.; Oxford,: Blackwell.

Bowers, John. 2002. Transitivity. *LI* 33:183-224.

Briggs, Jean, Cook, Conor, and Johns, Alana. in progress. Dictionary of Utkuhiksalingmiut Postbases http://homes.chass.utoronto.ca/~inuit/UIDP/index.html.

Chierchia, Gennaro. 1995. Individual-Level Predicates as Inherent Generics. In *The Generic Book*, eds. Gregory N. Carlson and Francis Jeffry Pelletier, 176-223. Chicago, Il: University of Chicago Press.

Chomsky, Noam, and Lasnik, Howard. 1995. The Theory of Principles and Parameters. In *The Minimalist Program*, 13-127. Cambridge, MA: MIT Press.

Chomsky, Noam. 2000. Minimalist Inquiries: The Framework. In *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*, ed. Roger Martin, 89-156. Cambridge, MA: MIT Press.

Chomsky, Noam. 2001. Derivation by Phase. In *Ken Hale: A Life in Language*, ed. Michael Kenstowicz, 1-52. Cambridge, MA: MIT Press.

Chomsky, Noam. 2004a. Three factors in language design. Ms.

Chomsky, Noam. 2004b. Beyond Explanatory Adequacy. In *Structures and Beyond*, ed. A. Belletti, 104-131. Oxford: Oxford University Press.

Chomsky, Noam. 2008. On Phases. In *Foundational Issues in Linguistic Theory: Essays in Honor of Jean-Roger Vergnaud*, eds. Robert Freidin, Carlos P. Otero and Maria Luisa Zubizarreta, 133-166. Cambridge, MA: MIT Press.

Clarke, Sarah. 2009. The Manifestation of Viewpoint Aspect in Inuktitut. *Studia Linguistica* 63:292-322.

Compton, Richard. 2011. Explaining the lack of intersective strictly-attributive adjectives in Inuit. Paper presented at *Semantics of Under-represented Languages in the Americas 6*, University of Manchester.

Comrie, Bernard. 1976. *Aspect*: Cambridge Textbooks in Linguistics. Cambridge: Cambridge University Press.

Comrie, Bernard. 1985. *Tense*. Cambridge, Mass.: Cambridge University Press.

Cooreman, Ann. 1994. A Functional Typology of Antipassives. In *Voice: Form and Function*, eds. Barbara Fox and Paul- J. Hopper, 49-88. Amsterdam: John Benjamins.

Cournane, Ailis. 2007. Two Passive Markers in Cape Dorset Inuktitut? Ms. University of Toronto.

Cowper, Elizabeth. 1992. Inner tense and the realization of aspect. *McGill Working Papers in Linguistics* 7:105-112.

Cowper, Elizabeth. 1998. The Simple Present Tense in English: A unified treatment. *Studia Linguistica* 52:1-18.

Cowper, Elizabeth. 1999. Grammatical Aspect in English. *The Linguistic Review* 16, 3:205-226.

Cowper, Elizabeth. 2002. Finiteness. Ms.

Cowper, Elizabeth. 2003. Parameters of INFL: English Aspect and Spanish Tense. Ms. University of Toronto, Ms.

Cowper, Elizabeth. 2005. The Geometry of Interpretable Features: INFL in English and Spanish. *Language* 81:10-46.

Creider, Chet. 1978. The Syntax of Relative Clauses in Inuktitut. *Etudes/Inuit/Studies* 2:95-110.

Davison, Alice. 2004. Structural case, lexical case, and the verbal projection. In *Clause Structure in South Asian Languages*, eds. V. Dayan and A. Mahajan, 199-225. Dordrecht: Kluwer.

de Swart, Henrietta. 1998. Aspect Shift and Coercion. *Natural Language & Linguistic Theory* 16:347-385.

denBesten, H. 1985. The ergative hypothesis and free word order in Dutch and German. In *Studies in German Grammar*, ed. J. Toman, 23-64. Dordrecht: Foris.

Dixon, R. M. W. ed. 1976. *Grammatical Categories in Australian Languages*. Canberra: Australian Institute of Aboriginal Studies.

Dixon, R. M. W. 1979. Ergativity. *Language: Journal of the Linguistic Society of America. Los Angeles, CA* 55:59-138.

Dixon, R. M. W. 1994. *Ergativity*. Cambridge, Mass: Cambridge University Press.

Dorais, Louis-Jacques. 1986. Inuktitut Surface Phonology: A Trans-Dialectal Survey. *IJAL* 52:20-53.

Dorais, Louis-Jacques. 1990. *Inuit Uqausiqatigiit: Inuit languages and dialects*. Nunatta Campus: Arctic College.

Dorais, Louis-Jacques. 2010. *The language of the Inuit: syntax, semantics, and society in the Arctic*. Montreal: McGill-Queens University Press.

Dowty, David. 1979. *Word meaning and Montague Grammar: The semantics of verbs and times in generative semantics and in Montague's PTQ*. Dordrecht: Reidel.

Dowty, David. 1986. The effect of aspectual classes on the temporal structure of discourse: semantics or pragmatics? *Linguistics and Philosophy* 9:37-61.

Dowty, David. 1991. Thematic Proto-roles and Argument Selection. *Language* 67:547-619.

Embick, David, and Noyer, Rolf. 1999. Locality in Post-Syntactic Operations. In *Papers on Morphology and Syntax, I: Cycle One; II: Cycle Two*, ed. Karlos Arregi, 265-317. Cambridge, MA: MIT Press.

Embick, David. 2004. On the Structure of Resultative Participles in English. *Linguistic Inquiry* 35:355-393.

Filip, Hana. 1997. Integrating telicity, aspect and NP semantics: the role of thematic structure. In *Approaches to Slavic Linguistics III*, ed. Jindrich Toman. Ann Arbor, Mich.: Slavic Publications.

Filip, Hana. 2000. The Quantization Puzzle. In *Events as Grammatical Objects: The Converging Perspectives of Lexical Semantics and Syntax*, eds. Carol Tenny and James Pustejovsky, 39-96. Stanford, CA: CSLI Publications.

Fleck, D. W. 2006. Antipassive in Matses. *Studies in Language* 30:541-573.

Fortescue, Michael. 1983. A Comparative Manual of Affixes for the Inuit dialects of Greenland, Canada, and Alaska. *Meddelelser om Gronland* 4.

Fortescue, Michael. 1984. *West Greenlandic*: Croom Helm Descriptive Grammars. London: Croom Helm.

Fortescue, Michael, Jacobson, Steven, and Kaplan, Lawrence. 1994. *Comparative Eskimo Dictionary: With Aleut Cognates* vol. 9: Research Paper. Fairbanks, Alaska: University of Alaska.

Fortescue, Michael. 1996a. West Greenlandic half-transitive affixes in a diachronic perspective. In *Cultural and social research in Greenland 95/96: Grønlandsk kultur- og samfunds-forskning: essays in honour of Robert Petersen*, eds. Brigitte Jacobsen, Claus Andreassen and Jette Rygaard, 34-44. Atuakkiorfik, Nuuk: Ilisimatusarfik.

Fortescue, Michael. 1996b. Tense, Mood and Aspect: Grammaticalization in West Greenlandic and Chuckchi. In *La Dynamique dans la Langue et la Culture Inuit*, eds. Nicole Tersis and Michèle Therrien, 151-169. Paris: Peeters.

Fox, Anthony. 2005. *The Structure of German*. New York: Oxford University Press.

Fromm, Hans, and Sadeniemi, Mattis. 1956. *Finnisches Elementarbuch*. Heidelberg: Winter.

Gerdts, Donna, and Hukari, Thomas. 2005. Multiple Antipassives in Halkomelem Salish. *Proceedings of the Twenty-sixth Annual Meeting of the Berkeley Linguistics Society*:51–62.

Gillon, Carrie. 1999. When *Wh*-Words Move and Why: A Case Study in Inuktitut, University of Toronto: M.A. thesis.

Guéron, Jacqueline. 2004. Tense Construal and the Argument Structure of Auxiliaries. In *The Syntax of Time*, eds. Jacqueline Guéron and Jacqueline Lecarme, 299-328. Cambridge, Mass.: MIT Press.

Guéron, Jacqueline. 2008. On the Difference between Telicity and Perfectivity. *Lingua* 118:1816-1840.

Gugeler, Traude. 1994. Relativkonstruktionen in Inuktitut, Universität Stuttgart: M.A. thesis.

Haegeman, Liliane. 1985. INFL, COMP and nominative Case assignment in Flemish infinitivals. In *Features and Projections*, eds. Peter Muysken and Henk van Riemsdijk, 123-137. Dordrecht: Foris.

Hale, Ken. 1970. The Passive and Ergative in Language Change: The Australian case. In *Pacific linguistic studies in honor of Arthur Capell* eds. S.A. Wurm and D. Laycock, 757-781. Sidney.

Hale, Kenneth, and Keyser, Samuel-Jay. 1993. On Argument Structure and the Lexical Expression of Syntactic Relations. In *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*, eds. Kenneth Hale and Samuel-Jay Keyser, 53-109. Cambridge, Mass.: MIT Press.

Halle, Morris, and Marantz, Alec. 1993. Distributed Morphology and the Pieces of Inflection. In *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*, eds. Kenneth Hale and Samuel Jay Keyser, 111-176. Cambridge, MA: MIT Press.

Halle, Morris, and Marantz, Alec. 1994. Some Key Features of Distributed Morphology. *MITWPL* 21:275-288.

Halle, Morris. 1997. Distributed Morphology: Impoverishment and Fission. *MITWPL* 30:425-449.

Hallman, Peter. 2008a. A Categorial Distinction between Stative and Eventive Verbs. Ms. UCLA.

Hallman, Peter. 2008b. Definiteness in Inuktitut. Ms. University of California, Los Angeles.

Hammerich, L.L. 1930. Nexus, Subjekt und Objekt, Aktiv und Passiv. In *A Grammatical Miscellany: Offered to Otto Jespersen on his Seventieth Birthday*, 299-317. Copenhagen: Levin & Munksgaard.

Harley, Heidi. 2005. How do verbs get their names? Denominal Verbs, Manner Incorporation and the Ontology of Verb Roots in English. In *The Syntax of Aspect: Deriving Thematic and Aspectual Interpretation*, eds. Nomi Erteschik-Shir and Tova Rapoport, 42-64. Oxford: Oxford University Press.

Harper, Kenn. 1974. *Some Aspects of the Grammar of the Eskimo Dialects of Cumberland Peninsula and North Baffin Island*: National Museum of Man Ethnology Division Mercury Ser.; 15: Ottawa : National Museums of Canada, 1974.

Harper, Kenn. 1979. *Affixes of the Eskimo Dialects of Cumberland Peninsula and North Baffin Island*: National Museum Mercury Series. Ottawa: National Museum of Man.

Hatav, G. 1993. The Aspect System in English: An Attempt for a Unified Analysis. *Linguistics* 31:209-237.

Hatav, Galia. 1997. *The Semantics of Aspect and Modality*. Amsterdam: John Benjamins.

Hayashi, Midori. 2005a. Tense in Inuktitut. Ms. University of Toronto.

Hayashi, Midori. 2005b. 'Before' and 'After' in Inuktitut. *University of British Columbia Working Papers in Linguistics: Proceedings of the Workshop on the Structure and Constituency of the Language of the Americas 10, University Toronto, Feb. 2005*:123-135.

Hayashi, Midori, and Spreng, Bettina. 2005. Is Inuktitut tenseless? *Proceedings of the 2005 Annual Meeting of the Canadian Linguistics Association*.

Hayashi, Midori, and Spreng, Bettina. 2006. The Syntax of Tense: Evidence from Inuktitut. Ms.

Hayashi, Midori. 2010. The Structure of Multiple Tenses in Inuktitut, University of Toronto: Doctoral Dissertation.

Heath, J. 1976. Antipassivization: a functional typology. *Proceedings of the Second Annual Meeting of the Berkeley Linguistics Society*:202-211.

Hopper, Paul J., and Thompson, Sandra A. 1980. Transitivity in Grammar and Discourse. *Language* 56:251-299.

Jackendoff, Ray. 1987. The Status of Thematic Relations in Linguistic Theory. *Linguistic Inquiry* 18:369-411.

Jensen, John T., and Johns, Alana. 1989. The Morphosyntax of Eskimo Causatives. In *Theoretical Perspectives on Native American Languages*, ed. Donna B. Gerdts, 209-229. Albany: State University of New York.

Johns, Alana. 1987. Transitivity and Grammatical Relations in Inuktitut, University of Ottawa: Doctoral dissertation.

Johns, Alana. 1992. Deriving Ergativity [Winter]. *Linguistic Inquiry* 23:57-88.

Johns, Alana. 1999. The Decline of Ergativity in Labrador Inuttut. *MITWPL* 17:73-90.

Johns, Alana, and Smallwood, Carolyn. 1999. On (non-)finiteness in Inuktitut. *Toronto Working Papers in Linguistics* 17:159-170.

Johns, Alana. 2001a. Ergative to Accusative: Comparing Evidence from Inuktitut. In *Grammatical Relations in Change*, ed. Jan-Terje Faarlund, 205-221. Amsterdam, Netherlands: Benjamins.

Johns, Alana. 2001b. An Inclination towards Accusative. *Linguistica Atlantica* 23:127-144.

Johns, Alana. 2006. Ergativity and Change in Inuktitut. In *Ergativity: Emerging Issues*, eds. Alana Johns, Diane Massam and Juvenal Ndayiragije, 293-311. Dordrecht: Springer.

Johns, Alana. 2007. Restricting noun incorporation: root movement. *Natural Language & Linguistic Theory* 25:535-576.

Johnson, Marion R. 1980. *Ergativity in Inuktitut (Eskimo), in Montague Grammar and in Relational Grammar*: Indiana University Linguistics Club. Bloomington, Indiana.

Kalmar, Ivan. 1977. The Antipassive in Inuktitut. *Etudes Inuit* 1:129-142.

Kalmar, Ivan. 1979. The Antipassive and Grammatical Relations in Eskimo. In *Ergativity: Towards a Theory of Grammatical Relations*, ed. Frans Plank, 117-143. London: Academic.

Keenan, Edward L. 1976. Towards a Universal Definition of 'Subject'. In *Subject and Topic: Symposium on Subject and Topic, Univ. of CA, Santa Barbara, March, 1975*, ed. Charles-N. Li, 303-333. New York: Academic.

Kiparsky, Paul. 1998. Partitive Case and Aspect. In *The Projection of Arguments: Lexical and Compositional Factors*, eds. Miriam Butt and Wilhelm Geuder, 265-307. Stanford, CA: Center for the Study of Language and Information.

Kiparsky, Paul. 2001. Structural Case in Finnish [May]. *Lingua: International Review of General Linguistics* 111:315-376.

Kiparsky, Paul. 2005. Absolutely a Matter of gradience: The Semantics of Structural Case in Finnish. In *CLS 41*. University of Chicago.

Kleinschmidt, Samuel. 1852. *Grammatik der grönländischen Sprache mit theilweisem einschluss des Labradordialects*. Berlin: Reimer.

Krämer, Martin, and Wunderlich, Dieter. 1999. Transitivity alternations in Yucatec and the correlation between aspect and argument roles. *Linguistics* 37:431-479.

Kratzer, Angelika. 1996. Severing the External Argument from Its Verb. In *Phrase Structure and the Lexicon*, ed. Johan Rooryck, 109-137. Dordrecht: Kluwer Acad.

Kratzer, Angelika. 2004. Telicity and the Meaning of Objective Case. In *The Syntax of Time*, eds. Jacqueline Guéron and Jacqueline Lecarme, 389-423. Cambridge, MA: MIT Press.

Krause, Olaf. 2002. *Progressiv im Deutschen: Eine empirische Untersuchung im Kontrast mit Niederländisch und Englisch* vol. 462: Linguistische Arbeiten. Tübingen: Niedermayer.

Krifka, Manfred. 1989. *Nominalreferenz und Zeitkonstitution. Zur Semantik von Massentermen, Individualtermen, Aspektklassen*. München: Wilhelm Fink Verlag.

Krifka, Manfred. 1992. Thematic relations as links between nominal reference and temporal constitution. In *Lexical Matters*, eds. Ivan Sag and Anna Szabolcsi, 29-53. Stanford: CSLI.

Krifka, Manfred. 1998. The Origins of Telicity. In *Events and Grammar*, ed. Susan- D. Rothstein, 197-235. Dordrecht: Kluwer.

Kroeber, Paul D. 1987. Antipassives and the Differentiation of Progressive Aspect in Southern Interior Salish. In *Native American Languages and Grammatical Typology: Papers from a Conference at the University of Chicago, April 22, 1987*, ed. Paul D. Kroeber, 75-89. Bloomington: Indiana Univ. Ling. Club.

Kufner, Herbert L. 1962. *The Grammatical Structure of English and German*. Chicago: The University of Chicago Press.

Laka, Itziar. 2006. Deriving Split Ergativity in the Progressive: The Case of Basque. In *Ergativity: Emerging Issues*, eds. Alana Johns, Diane Massam and Juvenal Ndayiragije, 173-195. Dordrecht: Springer.

Larson, Richard K. 1988. On the Double Object Construction. *LI* 19:335-391.

Legate, Julie. 2006. Split Absolutive. In *Ergativity: Emerging Issues*, eds. Alana Johns, Diane Massam and Juvenal Ndayiragije, 143-171. Dordrecht: Springer.

Legate, Julie. 2008. Morphological and Abstract Case. *Linguistic Inquiry* 39:55-101.

Levin, Beth. 1993. *English Verb Classes and alternations: A preliminary investigation.* Chicago: University of Chicago Press.

Lowe, Ronald. 1985. *Siglit Inuvialuit Uqausiita Ilisarviksait: Basic Siglit Inuvialuit Eskimo Grammar*: C.O.P.E. Inuvik.

Mahajan, A. 1992. The Specificity Condition. *Linguistic Inquiry* 23:510-516.

Manning, Christopher. 1996. *Ergativity: Argument Structure and Grammatical Relations*. Stanford: CSLI Publications.

Marantz, Alec. 1997. No Escape from Syntax: Don't Try Morphological Analysis in the Privacy of Your Own Lexicon. *University of Pennsylvania Working Papers in Linguistics* 4:201-225.

Marantz, Alec. 2001. Words. Ms.

Marantz, Alec P. 1984. *On the Nature of Grammatical Relations*.vol. 10: Linguitic Inquiry Monographs Cambridge: MIT Press.

Massam, Diane. 2006. Neither Absolutive nor Ergative is Nominative or Accusative: Arguments from Niuean. In *Ergativity: Emerging Issues*, eds. Alana Johns, Diane Massam and Juvenal Ndayiragije, 27-46. Dordrecht: Springer.

McFadden, Thomas. 2004. The Position of Morphological Case in the Derivation: A Study on the Syntax-Morphology Interface, University of Pennsylvania: Doctoral Dissertation.

Miyaoka, Osahito. 1984. On the So-Called Half-Transitive Verbs in Eskimo. *Etudes/Inuit/Studies* 8:193-218.

Murasugi, Kumiko. 1992. Crossing and Nested Paths: NP Movement in Accusative and Ergative Languages, MIT: Doctoral Dissertation.

Muysken, Pieter, and van Riemsdijk, Henk C. 1986. *Features and Projections* vol. 25: Studies in Generative Grammar. Dordrecht: Foris.

Nagai, Tadataka. 1998. The oblique case in the three-place antipassive construction in Upper Kobuk Iñupiaq, University of Tokyo: Masters thesis.

Nagai, Tadataka. 2006. Agentive and Patientive Verb Bases in North Alaskan Iñupiaq, University of Alaska: Doctoral Dissertation.

Nowak, Elke. 1994. Tempus und Temporalität in Inuktitut. In *Tense Systems in European Languages*, ed. Rolf Thieroff, 295-310. Tübingen: Niemeyer.

Nowak, Elke. 1996. *Transforming the Images: Ergativity and Transitivity in Inuktitut*. Berlin: Mouton de Gruyter.

Ogihara, T. 1996. *Tense, Attitudes, And Scope*. Dordrecht: Kluwer Academic Publishers.

Perlmutter, David M. 1978. Impersonal Passives and the unaccusative hypothesis. *Proceedings of the Fourth Annual Meeting of the Berkeley Linguistics Society*:157-189.

Pesetsky, David, and Torrego, Esther. 2004. Tense, Case, and the Nature of Syntactic Categories. In *The Syntax of Time*, eds. Jacqueline Guéron and Jacqueline Lecarme, 495-538. Cambridge, Mass.: MIT Press.

Pittman, Christine. 2006. Inuktitut restructuring Affixes. *Proceedings of CLA 2006*.

Polinsky, Maria. 2008. Antipassive Constructions. In *The World Atlas of Language Structures online*, eds. Martin Haspelmath, Matthew S. Dryer, David Gil and Bernard Comrie. Munich: Max Planck Digital Library.

Postal, Paul. 1977. Antipassive in French. In *Proceedings of NELS 7*, 273-313. Massachusetts Institute of Technology: MIT Press.

Pylkkänen, Liina. 2002. Introducing Arguments, MIT: Doctoral Dissertation.

Ramchand, Gillian. 1997. *Aspect and Predication: The semantics of argument structure*. Oxford: Clarendon Press.

Ramchand, Gillian. 2004. Time and the Event: The Semantics of the Russian Prefixes. Ms.

Ramchand, Gillian. 2008. Perfectivity as aspectual definiteness: Time and the event in Russian. *Lingua* 118:1690-1715.

Raposo, Eduardo. 1987. Case Theory and Infl-to-Comp: the Inflected Infinitive in European Portuguese. *Linguistic Inquiry* 18:85-109.

Reichenbach, Hans. 1947. *Elements of Symbolic Logic*. New York, London: The Free Press, Collier-MacMillan.

Reinhart, Tanya. 1986. States, events and reference time. Paper presented at *MIT Lexicon project*.

Reinhart, Tanya. 2003. Semantic Aspect and the Tense/Aspect System. In *LAGB Autumn Meeting*. University of Oxford.

Rizzi, Luigi. 1986. Null Objects in Italian and the Theory of pro [Summer]. *Linguistic Inquiry* 17:501-557.

Rothstein, Susan- D. 2004a. *Structuring events: a study in the semantics of lexical aspect*. Malden, Mas.: Blackwell.

Rothstein, Susan- D. 2004b. Derived Accomplishments and Lexical Aspect. In *The Syntax of Time*, eds. Jacqueline Guéron and Jacqueline Lecarme, 539-554. Cambridge, Mass.: MIT Press.

Sadock, Jerrold. 1980. Noun Incorporation in Greenlandic: A Case of Syntactic Word Formation. *Language* 56: 300-319.

Schieberl Manga, Louise. 1998. An Explanation for Ergative versus Accusative Languages: An Examination of Inuktitut, University of Ottawa: Doctoral Dissertation.

Schmidt, Bodo Kappel. 2003. West Greenlandic Antipassive. *Tromsoe Working Papers on Language and Linguistics* 31:385-399.

Schneider, Lucien R. P. 1967. *Grammaire Esquimaude du Sous-Dialecte de l'Ungava*. Québec: Ministère des Richessses naturelles, Direction générale du Nouveau-Québec.

Seely, T. Daniel, Epstein, S. D., and Kitahara, H. in press. Structure Building that Can't Be. In *Ways of Structure Building*, eds. M. Uribe-Etxebarria and V. Valmala. Cambridge: Cambridge University Press.

Sieberg, Bernd. 1989. Zur Unterscheidung der Tempuskategorien Perfekt und Imperfekt. *Zeitschrift für deutsche Philologie* 108:85-96.

Silverstein, Michael. 1976. Hierarchy of Features and Ergativity. In *Grammatical Categories in Australian Languages.*, ed. R. M. W. Dixon, 112–171. Canberra: Australian Institute of Aboriginal Studies.

Smith, Carlota S. 1991. *The Parameter of Aspect* vol. 43: Studies in Linguistics and Philosophy. Dordrecht: Kluwer Academic Publishers.

Smith, Lawrence. 1978. *A survey of the derivational postbases of Labrador Inuttut* Ottawa: National Museums of Canada.

Smith, Lawrence R. 1984. On the Nonergativity and Intransitivity of Relative Clauses in Labrador Inuttut. In *The Syntax of Native American Languages*, ed. E.D. Cook & D. Gerdts, 289-315. New York: Academic Press.

Smollett, Rebecca. 2005. Quantized Direct Objects don't delimit after all. In *Perspectives on Aspect*, eds. Henk Verkuyl, Henriette De Swart and Angeliek Van Hout, 41-60. Dordrecht: Springer.

Spreng, Bettina. 2001a. Antipassive and Distributed Morphology: The case of object-pro. *Proceedings of CLA 2000: Cahiers Linguistiques d'Ottawa*:339-346.

Spreng, Bettina. 2001b. Little *v* in Inuktitut: Antipassive Revisited. *Linguistica Atlantica* 23:155-190.

Spreng, Bettina. 2005. Third person arguments in Inuktitut. *UBCWPL* 17:215-225.

Spreng, Bettina. 2006. Antipassive Morphology and Case Assignment in Inuktitut. In *Ergativity: Emerging Issues*, eds. Alana Johns, Diane Massam and Juvenal Ndayiragije, 247-270. Dordrecht: Springer.

Spreng, Bettina. 2010. Conditions on Antipassives. *Language and Linguistics Compass*.

Svenonius, Peter. 2002a. Icelandic Case and the Structure of Events. *Journal of Comparative Germanic Linguistics* 5:197-225.

Svenonius, Peter. 2002b. Case is Uninterpretable Aspect. *Proc. of Perspectives on Aspect, Utrecht 2002*.

Swift, Mary D. 2004. *Time in Child Inuktitut: a developmental study of an Eskimo-Aleut language*: Foreign Language Study. Berlin: Mouton de Gruyter.

Tenny, Carol L. 1994. *Aspectual Roles and the Syntax-Semantics Interface* vol. 52: Studies in Linguistics and Philosophy. Dordrecht: Kluwer Acad.

Terrill, Angela. 1997. The Development of Antipassive Constructions in Australian Languages. *Australian Journal of Linguistics* 17:71-88.

Thalbitzer, William. 1930. The Absolutive and the Relative in Eskimo. In *A Grammatical Miscellany offered to Otto Jespersen on his Seventieth Birthday*, 319-329. Copenhagen: Levin & Munksgaard.

Trask, R.L. 1979. On the Origins of Ergativity. In *Ergativity: Towards a Theory of Grammatical Relations*, ed. Frans Plank, 385-404. London: Academic.

Travis, Lisa. 2000. Event Structure in Syntax. In *Events as Grammatical Objects: The Converging Perspectives of Lexical Semantics and Syntax*, eds. Carol L. Tenny and James Pustejovsky, 145-186. Stanford, CA: CSLI Publications.

Travis, Lisa DeMena. 2005. Articulated vP's and the Computation of Aspectual Classes. In *Aspectual Inquiries*, eds. P. Kempchinsky and R. Slabakova, 69-93. Dordrecht: Springer.

Travis, Lisa deMena, Lisa. 2010. *Inner Aspect: The Articulation of VP*.vol. 80: Studies in Natural Language and Linguistic Theory. Dordrecht: Springer.

Tsunoda, Tasaku. 1981. Split-case marking patterns in verb-types and tense/aspect/mood. *Linguistics* 19:389-438.

Ura, Hiroyuki. 2006. A Parametric Syntax of Aspectually Conditioned Split-Ergativity. In *Ergativity: Emerging Issues*, eds. Alana Johns, Diane Massam and Juvenal Ndayiragije, 111-141. Dordrecht: Springer.

Van Hout, Angeliek. 2000a. Projection based on event structure. In *Lexical Specification and Insertion*, eds. P. Coopmans, M. Everaert and J. Grimshaw, 403-427. Amsterdam: John Benjamins.

Van Hout, Angeliek. 2000b. Event Semantics in the Lexicon-Syntax Interface. In *Events as Grammatical Objects: The Converging Perspectives of Lexical Semantics and Syntax*, eds. Carol L. Tenny and James Pustejovsky, 239-282. Stanford: CSLI Publications.

van Valin, Robert D. jr. 1980. On the distribution of passive and antipassive constructions in universal grammar. *Lingua* 50:303-327.

Vater, Heinz. 1994. *Einführung in die Zeit-Linguistik*. Hürth-Efferen: Gabel.

Vendler, Zeno. 1957. Verbs and Times. *The Philosophical Review* 66:143-160.

Verkuyl, H.J. 1972. *On the Compositional Nature of the Aspects*. Dordrecht: Reidel.

Wegener, Heide. 1985. Ergativkonstruktionen im Deutschen. In *Akten des 19. Ling. Kolloquiums Vechta 1984, I. Grammatik, Semantik, Textlinguistik*, ed. Wilfried Kurschner, 187-197. Tübingen: Niemeyer.

Wegener, Heide. 1986. Gibt es im Deutschen ein indirektes Objekt? *Deutsche Sprache: Zeitschrift für Theorie, Praxis, Dokumentation* 14:12-22.

Wharram, Douglas. 1996. In the Event of an Event: A Minimalist Account of Subjects, Memorial University of Newfoundland: M.A. Thesis.

Wharram, Douglas. 2003. On the Interpretation of (Un)certain Indefinites in Inuktitut and Related Languages, University of Connecticut: Doctoral Dissertation.

Wiltschko, Martina. 2003. On the Interpretability of Tense on D and Its Consequences for Case Theory [July]. *Lingua: International Review of General Linguistics* 113:659-696.

Woodbury, Anthony C. 1975. Ergativity of Grammatical Processes: A Study of Greenlandic Eskimo, University of Chicago: M.A.

Woolford, Ellen. 2004. Lexical Case, Inherent Case, and Argument Structure. Ms.

Woolford, Ellen. 2006. Case-Agreement Mismatches. In *Agreement Systems*, ed. Cedric Boeckx, 299-316. Philadelphia: John Benjamins.

Woolford, Ellen. 2008. Aspect Splits as Parasitic Marking. In *Optimality Theory and Minimalism: Interface Theories*, eds. Hans Broekhuis and Ralf Vogel, 39-72. Potsdam: Universität Potsdam.