# Dimensions of Ergativity in Inuit: Theory and Microvariation

by

## Michelle Yuan

Submitted to the Department of Linguistics and Philosophy in partial fulfillment of the requirements for the degree of

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#### **Abstract**

This thesis investigates microvariation in the ergative system of the Inuit dialect continuum, as a window into the theoretical status of ergative alignment, argument licensing, and Agree. The empirical focus of this thesis is on the Inuit varieties in which the canonical ERG-ABS ergative construction has been observed to be relatively weak compared to other varieties, arising in an unusual case alignment that has properties of both ergative and accusative systems (e.g. Johns, 2001, 2006; Carrier, 2017). Consequently, from a typological standpoint, the existence of such variation offers a unique testing ground for examining these grammatical phenomena. While most previous literature on this weaker pattern has focused on the widening distribution of the ABS-MOD antipassive construction, I present novel evidence pointing towards microvariation in the syntax of the ergative construction itself.

The central proposal of this thesis is that the status of ergativity within a given Inuit variety is directly attributable to the underlying status of its object agreement morphology, and that this is the source of variation in case alignment properties across the Inuit dialect continuum. This correlation is revealed by documenting and analyzing several previously unnoticed properties of Inuktitut, the group of Inuit dialects spoken in Nunavut, Canada. In particular, the object-referencing morphemes in Inuktitut pattern like pronominal doubled clitics, diverging from canonically ergative Inuit varieties (e.g. Kalaallisut, spoken in Greenland), whose object-referencing morphemes behave like exponents of true  $\phi$ -agreement. I present a novel analysis of ergativity across Inuit that recasts this  $\phi$ agreement vs. clitic doubling distinction as variation in the syntactic nature of the structurally high ABS object co-occurring with the ERG subject. Specifically, I argue that the modality of ERG case assignment holds constant across all dialects: ERG case is uniformly a dependent case (Marantz, 1991; Baker, 2015), assigned to a nominal in the presence of a second, structurally local nominal element (its case competitor). However, the distribution of ERG case is simultaneously constrained by the nature of its *local case competitor* which is a full ABS DP in robustly ergative varieties such as Kalaallisut, but a pronominal D<sup>0</sup> element in more weakly ergative varieties such as Inuktitut. Variation in the status of ergativity across Inuit is therefore solely determined by the properties of the transitive object, while the properties of the transitive (ERG-marked) subject remain constant.

I then relate the theoretical underpinnings of this proposal to two other major prop-

erties of Inuktitut grammar. First, I argue that clitic doubling is derived by two interacting steps—syntactic movement of a D<sup>0</sup>-element, followed by postsyntactic Merger—and demonstrate that the pronunciation of movement chains is regulated by Merger. Crucially, this same level of interaction can be seen to underlie certain recalcitrant aspects of *noun incorporation* in Inuktitut, in turn motivating a postsyntactic analysis of Inuktitut noun incorporation (cf. Bok-Bennema and Groos, 1988). Second, I argue that clitic doubling is triggered by  $\phi$ -Agree, which in Inuktitut is able to target DPs but not PPs; encountering a PP leads to failed Agree (Bobaljik, 2008; Preminger, 2011, 2014). This is evidenced by hitherto unnoticed interactions between  $\phi$ -Agree and anaphoric objects, which are argued to bear lexical MOD case as an Anaphor Agreement Effect, as well as parallel interactions between  $\phi$ -Agree and antipassive objects, which bear structural MOD Case (cf. Bok-Bennema, 1991; Spreng, 2012).

More broadly, this thesis offers a case study on using microvariation as a methodology for investigating syntactic theory, and vice versa, by treating the Inuit varieties under discussion as minimally-differing points along an otherwise gradient system.

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## **Contents**

1	Intr	oductio	on	15
	1.1	A puz	zling point of microvariation	15
	1.2	Overv	iew of thesis	16
		1.2.1	Chapter 2: Inuktitut morphosyntax	16
		1.2.2	Chapter 3: Object $\phi\text{-agreement}$ vs. clitic doubling across Inuit $$	17
		1.2.3	Chapter 4: A new analysis of ergativity	18
		1.2.4	Chapter 5: The role of Merger in chain pronunciation	19
		1.2.5	Chapter 6: Argument-licensing and case-discrimination	20
2	Ove	rview (	of Inuktitut morphosyntax	22
	2.1	Eskim	o-Aleut, Inuit, and Inuktitut	22
	2.2	Data c	collection and orthographic conventions	24
	2.3	Case a	and agreement	27
		2.3.1	Inventory of cases	28
		2.3.2	Mood-sensitive $\phi$ -agreement	31
		2.3.3	Interaction of case and agreement	32
	2.4	Clause	e structure and the extended <i>v</i> P-domain	36
		2.4.1	The verb complex	36
		2.4.2	The extended $\nu$ P-domain	37
		2.4.3	Morphological vs. syntactic ergativity	41
	2.5	The st	atus of ergativity in Eastern Canadian Inuktitut	44
		2.5.1	Variation in the interpretation of objects	44
		2.5.2	Quantitative research on the antipassive in Inuktitut	47
		2.5.3	Diachronic change or microvariation?	49

	2.6	Chapt	er summary	50
3	Pro	nomina	al clitic doubling in Inuktitut and syntactic microvariation	51
	3.1	Introd	uction	51
	3.2	Object	$\phi$ -agreement vs. clitic doubling	52
		3.2.1	Overview	52
		3.2.2	Tense-variance and mood-variance	55
		3.2.3	Mood-agreement-clitic portmanteaux in Inuktitut	59
	3.3	Interp	retive asymmetries: Object clitic doubling in Inuktitut	63
		3.3.1	The "canonical" Inuit pattern (Kalaallisut)	64
		3.3.2	Microvariation across Inuit: ABS object asymmetries in Inuktitut .	67
		3.3.3	D-linking and pronominal clitic doubling	72
		3.3.4	Parallels with other clitic-doubling languages	75
	3.4	The sy	rntax and semantics of clitic doubling	77
		3.4.1	Clitic doubling (in Inuktitut) is not postsyntactic	78
		3.4.2	Inuktitut pronominal clitics are anaphoric definites	83
		3.4.3	The Matching Principle and cross-linguistic variation	90
	3.5	Extens	sion: Towards a typology of pronominal clitic meanings	93
		3.5.1	Runić's (2014) generalization	93
		3.5.2	An implicational hierarchy	96
	3.6	Chapt	er summary: An agreement/clitic split across Inuit	100
4	Mod	leling e	ergativity across Inuit: Variation in ABS object movement	102
	4.1	Introd	uction	102
	4.2	Previo	us approaches to ERG case	104
		4.2.1	ERG is inherent	104
		4.2.2	ERG is NOM	106
		4.2.3	ERG is GEN	107
	4.3	ERG ca	se in Inuit is dependent	109
		4.3.1	Dependent case and its diagnostics	110
		4.3.2	Interactions with lexical case	114
		4.3.3	Raising to ergative	116
		4.3.4	A brief comparison with Nez Perce	122

	4.4	Variat	ion in case competition: DP vs. D $^0$	124
		4.4.1	Pronominal object shift in Labrador Inuttut and Aleut	125
		4.4.2	Case competition across Inuit	132
	4.5	"Down	nwards" dependent ERG case assignment	134
		4.5.1	High ABS objects as case competitors	134
		4.5.2	Domains of dependent case assignment	138
		4.5.3	A typology of dependent case assignment	141
	4.6	Chapt	er summary: From pronominal clitic doubling to ergativity	143
5	Mor	pholog	gical conditions on chain pronunciation	<b>14</b> 4
	5.1	Introd	luction	144
	5.2	Intera	ctions between movement and Merger	146
		5.2.1	Movement, Merger, and copy spell-out in Inuktitut	146
		5.2.2	Verb doubling	148
		5.2.3	Cliticization and ellipsis in Irish	149
	5.3	The in	nteraction of clitic doubling and copy spell-out	151
		5.3.1	Pronouns are bare $D^0s$	152
		5.3.2	Restrictions on ABS object pronouns in Inuktitut	154
		5.3.3	Overriding copy deletion	157
	5.4	Beyon	d clitics: Merger and copy spell-out in Inuktitut noun incorporation	160
		5.4.1	Overview of Inuit noun incorporation	161
		5.4.2	Inuktitut noun incorporation is postsyntactic	163
		5.4.3	A/ $\bar{\text{A}}$ -movement of incorporated objects	170
		5.4.4	Consequences for phase-based accounts of polysynthesis	177
	5.5	Chapt	er summary: A unified analysis of cliticization and incorporation .	179
6	Case	e-discri	imination, Agree, and licensing	180
	6.1	Introd	luction	180
	6.2	Case-o	discrimination and failed Agree	182
		6.2.1	A Case-Accessibility hierarchy	182
		6.2.2	Failed Agree and derivational timing	184
		6.2.3	Case assignment does not always precede Agree	186
	6.3	Failed	Agree: Lexical MOD case on anaphors	190

		6.3.1	The Anaphor Agreement Effect	191
		6.3.2	Anaphors bear lexical case	193
		6.3.3	A note on case-stacking and haplology	197
		6.3.4	Lexical case and failed Agree	198
		6.3.5	Defective intervention and the nature of Agree	200
	6.4	The er	gative-antipassive alternation: Complementary licensing strategies	205
		6.4.1	Antipassives cross-linguistically	206
		6.4.2	Antipassives beyond monotransitive contexts	207
		6.4.3	Expletive subjects under ECM	211
		6.4.4	Proposal: An optionally Merging Case-assigner	216
		6.4.5	Defective intervention in antipassives	221
	6.5	Extens	ion: Antipassive morphology and the Anaphor Agreement Effect  .	224
		6.5.1	Alternations in antipassive morphology	224
		6.5.2	Inuktitut reflexives are not detransitivized	227
		6.5.3	Failed Agree and contextual allomorphy	230
		6.5.4	A cross-linguistic parallel: The Zulu conjoint/disjoint distinction .	230
	6.6	Chapte	er summary: Case-discrimination and argument licensing	233
	,	I. A T		004
Aj			Last Resort case-licensing	234
	A.1	_	uration 1: Ditransitives	235
	A.2	C	uration 2: <i>lik</i> -nominalizations	237
	A.3	MOD is	not a default case	240
7	Con	clusion	ı	242
	7.1	Summa	ary of thesis	243
	7.2	Broade	er implications	244
		7.2.1	On clitic doubling	244
		7.2.2	On ergativity	245
		7.2.3	On cross-linguistic uniformity	245
	7.3	Open o	questions and next steps	246
		7.3.1	More on microvariation	246
		7.3.2	The loosening semantics of the antipassive construction	

## List of abbreviations

ablative case ABL absolutive case ABS ACC accusative case allative case ALLAT antipassive AP applicative APPL becausative mood BECAUS CAUS causative conditional mood COND CONJ conjunction CTMP contemporative mood dative case DAT demonstrative pronoun DEM.PRON dubitative mood DUB ergative case ERG existential **EXIST** FUT future genitive case GEN IMM.PST immediate past imperative mood IMP inceptive INCP indicative mood IND interrogative mood INT LOC locative case modalis case MOD negation NEG NOM nominative case nominalizer NMLZ passive participle PASS.PART perfective PERF possessive POSS participial mood PART recent past REC.PST

reflexive

REFL

REL	relative case
SIM	simularis case
TR	transitivizer
VIA	vialis case
1/2/3 s/D/P	1st/2nd/3rd person singular/dual/plural

## Chapter 1

## Introduction

This thesis investigates microvariation in the ergative system of the Inuit languages, with focus on the Eastern Canadian varieties of Inuktitut in which the ergative pattern has been observed to be relatively weaker than in other varieties (e.g. Johns, 2001, 2006; Carrier, 2017). The main empirical finding of this thesis is that this variation in the status of ergativity within Inuit is systematically connected to variation in the underlying status of its *object agreement morphology*, i.e. whether this morphology reflects true  $\phi$ -agreement or clitic doubling. I present a novel analysis of ergativity across Inuit that reduces this correlation to variation in case competition for dependent ERG case assignment. Thus, variation in the status of ergativity is entirely independent of the properties of ERG case morphology on the subject, which remain uniform across Inuit, but is crucially tied to the properties of the *ABS object*. Beyond ergativity, the theoretical underpinnings of this proposal offer new insights into the morphophonological conditions on movement chains and the role of argument-licensing in Inuktitut. More broadly, this thesis offers a case study on how microvariation may be used as a lens into syntactic theory, and vice versa, by treating the Inuit varieties under discussion as minimally-differing points along an otherwise gradient system.

## 1.1 A puzzling point of microvariation

Our point of departure is the table in (1):

### (1) Ergativity across Inuit (Johns, 2001)

Kalaallisut (Greenland)	Inuktitut (Nunavut)	Inuttut (Labrador)
Robustly ergative	Less ergative	Weakly ergative

The table in (1) describes variation concerning the grammatical status of ergativity across the Inuit (Eskimo-Aleut) dialect continuum. Of particular interest to us is the idea that ergativity appears to be *weaker* in certain varieties than in others. Two immediate questions arise, which form the basis of this thesis. First, what does it mean, both empirically and theoretically, for the case alignment of a language to vary in strength? Second, how

should we model this variation across Inuit?

To address these questions, I investigate the case and  $\phi$ -agreement system of Inuktitut, the Inuit varieties spoken in Nunavut, Canada, as well as subsequent comparisons with other Inuit varieties. Inuktitut is in an intermediate position between Kalaallisut and Labrador Inuttut along the ergativity spectrum indicated above, and is thus expected to have other grammatical properties that are also intermediate between the two. As such, Inuktitut presents a interesting empirical domain in which to investigate this broader pattern across the Inuit languages.

As I will demonstrate, Inuktitut displays a number of grammatical properties, which have not been documented in the previous literature on the language—and which diverge from previous characterizations of the better-studied variety of Kalaallisut. These grammatical properties in Inuktitut ultimately reveal that the aforementioned variation in ergativity should ultimately be recast as variation in the properties of the *ABS objects* that co-occur with ERG subjects in ergative constructions. I also show that this analysis of ergativity has consequences for several other (seemingly independent) aspects of Inuit grammar. This, in turn, provide new insights into morphosyntactic phenomena crosslinguistically.

More broadly, then, the findings of this thesis have several ramifications for both linguistic typology and syntactic theory. From a typological standpoint, the Inuit languages provide a unique testing ground for examining various grammatical phenomena relating to case,  $\phi$ -morphology, and the interaction between the two. From a theoretical perspective, this thesis offers a case study on how microvariation within related languages can shed light on syntactic theory, and vice versa.

#### 1.2 Overview of thesis

There are four major topics of this thesis, three of which are closely interrelated (Chapters 3-5). Chapter 3 establishes the object  $\phi$ -agreement vs. clitic doubling distinction across Inuit. This distinction forms the basis of Chapter 4, in which I tie object-referencing morphology to variation in ergativity. Chapter 5 also functions as an extension of Chapter 3, covering certain postsyntactic aspects of the system. Finally, Chapter 6 focuses on the interaction between the  $\phi$ -Agree process underlying the object-referencing morphology and MOD case morphology on certain internal arguments.

## 1.2.1 Chapter 2: Inuktitut morphosyntax

I start by providing an overview of Inuktitut, the empirical focus of this thesis, as well as the Inuit (and Eskimo-Aleut) languages more broadly. In this chapter, I also establish some basic properties of Inuktitut morphosyntax, such as its ergative case system, its mood-sensitive agreement system, and the sensitivity of Agree relations in Inuktitut to standard locality conditions.

More crucially, this chapter also introduces the microvariation in the status of ergativity across Inuit, which will form the basis of Chapters 3-4 of this thesis. As noted above, the canonically syntactically ergative patterning seen in Inuit varieties such as Kalaallisut have been observed to be weaker in the Eastern Canadian varieties of Inuit, including in Inuktitut. In Kalaallisut, ABS subjects and ABS objects pattern together in a number of ways to the exclusion of Mod objects of antipassive constructions. However, some of these contrasts appear to be absent (or weaker) in Inuktitut and other closely-related varieties, leading to the intuition among researchers that the antipassive construction is the "default" way to express transitive sentences. This, in turn, suggests a broader difference in morphosyntactic alignment across Inuit: whereas Kalaallisut displays a syntactically ergative patterning, Inuktitut and other Eastern Canadian varieties display properties seen in both syntactically ergative systems and accusative systems. I show that this impression is supported by quantitative research on Inuktitut in both experimental and sociolinguistic domains, which show that the antipassive construction is used more preferentially or frequently than the ergative construction.

This observation, however, also raises several questions, to be addressed in Chapter 3 and beyond. How do we model the weaker ergative system of a language like Inuktitut? Moreover, what is the grammatical source of this pattern? Finally, previous literature on this phenomenon have overwhelmingly focused on the properties of the antipassive construction—but do not examine whether the properties of the *ergative construction* are also in flux. This latter topic is addressed in the next two chapters.

## 1.2.2 Chapter 3: Object $\phi$ -agreement vs. clitic doubling across Inuit

In this chapter, I document and analyze another, seemingly independent point of microvariation across Inuit—pertaining to the nature of object-referencing morphology. This chapter sets the stage for the rest of this thesis, whose subsequent chapters build on or refine the analysis of this chapter in various ways.

Focusing on Inuktitut, I identify a number of *interpretive ABS object asymmetries* not found in canonically ergative varieties such as Kalaallisut. As one example, ABS subjects and ABS objects pattern together in Kalaallisut, in that they are obligatorily interpreted as wide scope (Bittner, 1994), (2). In contrast, I demonstrate that, in Inuktitut, only ABS objects are obligatorily interpreted as wide scope, while ABS subjects and MOD objects are semantically ambiguous, (3).

#### (2) Kalaallisut: ABS subjects and objects take wide scope

a. <u>ABS-MOD (antipassive):</u>

**qimmit marluk** arna-nik pingasu-nik kii-si-pput dog.p.abs two.abs woman-p.mod three-mod bite-ap-3p.S 'Two dogs bit three women.'

Available reading: Surface scope only (2 > 3; \*3 > 2)

#### b. <u>ERG-ABS (ergative):</u>

qimmit marluk **arnat pingasut** kii-vaat dog.P.ERG two.ERG women.P.ABS three.ABS bite-3P.S/3P.O 'Two dogs bit three women.'

Available reading: Inverse scope only (3 > 2; \*2 > 3) (Bittner, 1994)

#### (3) Inuktitut: ABS objects take wide scope

#### a. <u>ABS-MOD (antipassive):</u>

**marruuk surusiit** niri-qqau-jut pingasu-**nit** sivalaar-**nit** two.ABS child.P.ABS eat-REC.PST-3P.S three-P.MOD cookie-P.MOD 'Two children ate three cookies.'

Available readings: Surface scope (2 > 3) or inverse scope (3 > 2)

#### b. <u>ERG-ABS (ergative):</u>

marruuk surusiit niri-qqau-jangit **pingasut sivalaat**two.erg child.p.erg eat-rec.pst-3p.S/3p.O three.Abs cookie.p.Abs
'Two children ate three cookies.'

Available reading: Inverse scope only (3 > 2; \*2 > 3) (SB, PG)

Ultimately, I argue that the ABS object asymmetries (including the scope contrast shown above) may all fall under the generalization that ABS objects in Inuktitut are obligatorily interpreted as  $strongly\ D$ -linked. I determine that this D-linking effect arises due to the fact that the verbal morphology cross-referencing ABS objects is pronominal in nature, based on cross-linguistic parallels with other languages with pronominal clitic doubling. In contrast, since ABS objects in Kalaallisut lack such asymmetries, I conclude that Kalaallisut object-referencing morphology is not clitic in nature, but rather expones true  $\phi$ -agreement.

This proposal also has implications for the  $\phi$ -agreement vs. clitic doubling distinction more generally. In particular, the existence of this cross-dialectal split in Inuit offers a novel argument against the usage of certain morphological diagnostics to differentiate between the two (e.g. Zwicky and Pullum, 1983; Nevins, 2011), as the object-referencing morphology is more-or-less identical across Inuit varieties. Instead, this split is evaluated on the basis of the theoretically-grounded assumption that clitic doubling structures contain a semantically contentful  $\mathrm{D}^0$ .

## 1.2.3 Chapter 4: A new analysis of ergativity

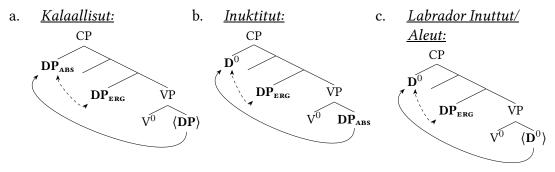
Building on Chapter 3, Chapter 4 continues to develop the core proposal of this thesis—that microvariation in the status of ergativity is directly and systematically tied to the status of object-referencing morphology across Inuit. In particular, I argue for the inverse correlation shown in (4), in which the relative "robustness" of the ergative patterning within an individual Inuit variety decreases as a function of the relative "pronominality" of object-referencing morphology.

(4)	The ergativity-pronominality correlation
\ /	3 1

	Kalaallisut	Inuktitut	Labrador Inuttut
Ergativity	Robustly ergative	Less ergative	Weakly ergative
			(pronouns only)
Obj. morphology	Agreement	Clitic doubling	Pronominal clitic only
			(no doubling)

The Inuit varieties represented in this table thus constitute individual points along an otherwise gradient system. To account for the inverse correlation above, I argue that the  $\phi$ -agreement vs. clitic doubling distinction determines the nature of the *case competitor* for the ERG subject. This supposes that ERG case in Inuit is dependent (Marantz, 1991; Baker, 2015), for which I present novel evidence. In Kalaallisut, the case competitor is a full DP that raises to the clausal left periphery; in Inuktitut (and in more easterly varieties such as Labrador Inuttut), the case competitor is a pronominal D<sup>0</sup>-element, spelled-out as a bound morpheme (clitic). This is shown in (5).

#### (5) Ergativity across Inuit



More broadly, this reveals that microvariation in the properties of the ergative patterning tracks the properties of the *ABS object*, as opposed to any properties of the subject bearing ERG case. As illustrated in (5), the subject's properties remain constant across Inuit.

## 1.2.4 Chapter 5: The role of Merger in chain pronunciation

Chapter 5 explores the ramifications of the present analysis of Inuktitut for the syntax-phonology interface. I demonstrate that the postsyntactic Merger process responsible for creating the clitic regulates the appearance of the movement chain underlying the clitic doubling structure. Merger of an element forces it to be spelled out, as a version of the Stray Affix Filter. If this element happens to be a copy generated by movement, then this may override the language's algorithm regulating chain pronunciation.

This interaction between Merger and copy spell-out is evidenced by two sets of constructions, given in (6):

#### (6) Merger determines spell-out of movement copy

a. Pronominal cliticization:

Jamesi-up **uvanga** taku-qqau-**jaanga**Jamesie-erg 1s.Abs see-rec.pst-3s.S/1s.O
'Jamesie saw me.'

b. *Phrasal movement in NI:* 

ujamik ujami liuq-ta-u-juit necklace.ABS necklace-PST-PASS.PART-be-3P.S 'The necklaces are being made.'

First, as indicated in (6a), this constrains the distribution of clitic-doubled ABS object pronouns in Inuktitut. Crucially, because subject-referencing morphology is not clitic in nature, this yields yet another ABS object asymmetry—now morphological, rather than semantic. And because Inuit varieties such as Kalaallisut lack clitic doubling altogether, the present analysis correctly predicts the absence of such asymmetries in Kalaallisut.

The second set of constructions concerns noun incorporation. Building on Johns (2009), I demonstrate that incorporated objects in Inuktitut—despite surfacing within the verb complex—behave as though they have undergone phrasal movement, based on various syntactic and semantic diagnostics. This is exemplified in (6b). I argue that this pattern is derived by the same effect of Merger on chain pronunciation as we find in the clitic domain. This, in turn, motivates a postsyntactic analysis of Inuktitut noun incorporation, contrary to standard generative treatments of this phenomenon as involving movement (e.g. Baker, 1988; Baker et al., 2005).

## 1.2.5 Chapter 6: Argument-licensing and case-discrimination

The last topic of this thesis concerns the nature of  $\phi$ -Agree, which underlies the clitic doubling process in Inuktitut. Building on Bobaljik (2008), I show that  $\phi$ -Agree is *case-discriminating*, in that only ABS (caseless) nominals are able to be targeted by  $\phi$ -Agree. Moreover, I demonstrate that, following Preminger (2011, 2014),  $\phi$ -Agree may fail in the absence of a viable goal. The empirical basis for these claims comes from the behaviour of anaphors in Inuktitut, which bear obligatory lexical MOD case as an Anaphor Agreement Effect strategy. The presence of an anaphor systematically leads to the loss of object-referencing morphology, as seen below.

#### (7) Object-referencing morphology bled by MOD anaphor

a. <u>S/O morphology with non-anaphoric object:</u>
Taiviti-up **Kiuru** nagli-<u>gi</u>-<u>janga</u>
David-ERG Carol.ABS love-TR-3S.S/3S.O
'David loves Carol.'

b. <u>Only S-morphology with anaphoric object:</u>
Taiviti ingmi-**nik** nagli-gi-juq

David.ABS self-MOD love-TR-3s.S

'David loves himself.'

(NB, AB)

I also extend this discussion to the syntax of antipassive constructions in Inuktitut, as a lens into how nominal-licensing interacts with case-discrimination. I analyze the ergative vs. antipassive alternation in Inuktitut as due to the absence vs. presence of a structural Mod Case-assigning head, ap $^0$ , which may be freely Merged along the extended  $\nu$ P-domain (thus, Mod case morphology has multiple sources). This head is spelled out as antipassive morphology on the verb. This analysis accounts for a number of recalcitrant and underdocumented aspects of Inuktitut antipassives, such as the ability for expletives to be antipassivized.

I additionally argue that, when ap $^0$  encounters a lexical case-marked anaphor, structural Case assignment fails in the same that  $\phi$ -Agree does in (7). As a result, verbal antipassive morphology is systematically blocked when the would-be antipassivized object is anaphoric. Strikingly, a very similar pattern is found in the Bantu language Zulu (Halpert, 2012, 2015b), suggesting a parallel analysis. Following Halpert, I analyze the comings and goings of antipassive morphology as contextual allomorphy, conditioned by the outcome of Agree.

Finally, in the Appendix to this chapter, I identify a pattern of *Last Resort* licensing in Inuktitut, which I analyze as the countercyclic insertion of a P<sup>0</sup> onto unlicensed nominals at the end of the derivation. This P<sup>0</sup> is also realized as MOD case morphology. The Appendix moreover clarifies that, despite the wide usage of MOD case, it is not a default case (cf. Schütze, 2001). In Inuktitut, default case is ABS.

## **Chapter 2**

## Overview of Inuktitut morphosyntax

In this chapter, I present an overview of the morphological and syntactic properties of the Inuit languages, with special concentration on Inuktitut. The purpose of this chapter is mainly to provide background for the rest of this thesis. On the morphological side, I review the case inventory, mood/agreement system, as well as some basic allomorphic processes that take place word-internally. On the syntactic side, I discuss the argument structure and sentence-level structure of Inuit, and establish that Inuit grammar displays a straightforward locality-based system of Agree, which drives both  $\phi$ -agreement and movement processes. Finally, I review previous quantitative literature on the weaker ergative patterning observed in the Eastern Canadian Inuit varieties (e.g. Inuktitut), the empirical focus of much of this thesis.

## 2.1 Eskimo-Aleut, Inuit, and Inuktitut

The Inuit languages are a continuum of generally mutually intelligible dialects spoken across the North American Arctic and Greenland. The Inuit languages comprise part of the Eskimo branch of the Eskimo-Aleut language family, along with Yupik (spoken in parts of Alaska and Siberia) and the now extinct language of Sirenikski. The Aleut branch of the language family is primarily spoken on the Aleutian Islands. Geographically, then, the Eskimo-Aleut language family spans across the Arctic from the easternmost point of Russia to the easternmost parts of Greenland. See Dorais (1990, 2010) and Johns (2010) for detailed overviews of the Inuit languages and the Eskimo-Aleut language family.

The Inuit languages may, in turn, be further divided into four major dialect groups: Iñupiaq, Inuvialuktun, Inuktitut, and Greenlandic. This is illustrated in (1), from Hayashi (2011). As will be further discussed in the next section, this thesis will primarily focus on the varieties of Inuktitut spoken in the Canadian territory of Nunavut, as well as comparisons to existing literature on Kalaallisut, spoken in the western part of Greenland. The bolded languages in (1) indicate the varieties represented throughout this thesis.

#### The Inuit languages (adapted from Hayashi 2011) Alaskan Iñupiaq Western Canadian Eastern Canadian Greenlandic Inuktun Inuktitut Kalaallisut Kivalliq Baffin Quebec-Labrador North Baffin, Nunavik, Kivalliq, Aivilik South Baffin Labrador

(1)

The individual dialects (and dialect groups) of Inuit vary phonologically and syntactically, generally along a gradient moving from west (Alaska) to east (Labrador). Phonologically, for instance, the western dialects tend to be fairly conservative while the eastern dialects tend to be innovative, with the western dialects preserving certain heterogeneous consonant clusters that are not found in the eastern dialects (e.g. Kaplan, 1981; Dorais, 1985, 1986; Bobaljik, 1996; Fortescue et al., 1994, 2011). As I will discuss at the end of this chapter, this is potentially relevant to how we frame the points of *morphosyntactic variation* under investigation in this thesis—i.e. whether this variation may also be characterized as a diachronic change involving a *loss* in ergativity. In parallel with the phonological facts, the western Canadian dialects (and Greenlandic dialects) are generally described as displaying a robust ergative patterning, while the eastern Canadian dialects display a weaker ergative patterning.

Grammatical and documentary sources on individual varieties of Inuit start as early as Kleinschmidt (1851) on Kalaallisut (West Greenlandic), and also include Bergsland (1955), Woodbury (1981), Fortescue (1984), Lowe (1985), Dorais (1988), Sadock (2003), Nagai (2006), Lanz (2010), Beach (2011), Miyaoka (2012), and others. The Inuit languages have also been central to a number of theoretical studies, which will be further discussed throughout this thesis. Topics that have been investigated include noun incorporation (Sadock, 1980; Bok-Bennema and Groos, 1988; Geenhoven, 1998, 2002; Johns, 2007b, 2009), polysynthesis and wordhood (Smith, 1982; Woodbury and Sadock, 1986; Compton and Pittman, 2010), antipassives (Spreng, 2001, 2006, 2012; Basilico, 2003, 2012), tense and aspect (Clarke, 2009; Hayashi, 2011), wh-questions (Gillon, 1999), and modification (Compton, 2012).

The majority of syntactic research on Inuit has focused on its ergative-absolutive (ERGABS) case patterning and how this patterning relates to the language's antipassive (ABSMOD) patterning (e.g. Creider, 1978; Bittner, 1987, 1994; Johns, 1987, 1992; Bok-Bennema, 1991; Murasugi, 1992, 1997; Allen, 1996; Bittner and Hale, 1996a,b; Manga, 1996; Nowak, 1996; Berge, 1997, 2011; Wharram, 2003; Hallman, 2008; Yuan, 2013). More recently, there has also been a growing body of literature on the weaker ergative patterning seen in the eastern Inuit varieties (Johns, 1999, 2001, 2006; Allen and Schroeder, 2003; Allen, 2013;

<sup>&</sup>lt;sup>1</sup>However, the varieties spoken in Greenland are an exception to this generalization.

Carrier, 2012, 2017; Murasugi, 2014, 2017).

Nonetheless, the Inuit languages remain understudied from the standpoint of syntactic theory, especially taking into consideration cross-dialectal differences. For instance, much of this thesis will be devoted to uncovering specific points of microvariation, based on novel fieldwork on Inuktitut and subsequent comparisons with other Inuit varieties.

## 2.2 Data collection and orthographic conventions

The data in this thesis were elicited during three fieldwork trips to the community of Iqaluit, Nunavut in August 2016, July 2017, and September 2017. Supplementary data were additionally elicited online between December 2017 and May 2018. A total of 18 speakers were consulted, representing 11 different communities in the Baffin Island and Kivalliq regions of Nunavut.

In this thesis, I have labelled these data with each consultant's geographic region and original community. This information is included to control for lexical and (morpho)phonological differences found between individual communities. However, the morphosyntactic and semantic properties of Inuktitut reported in this thesis were verified with multiple speakers and are thus taken to be general facts about the language; points of interspeaker variation are indicated whenever relevant.

#### (2) Phonological variation across Inuit

#### (3) Lexical variation across Inuit

In (4), I provide a map indicating the geographic locations of the communities of Nunavut that my consultants come from, as well as the abbreviations I am using in my example sentences. For instance, based on this legend, the label 'NB, AB' indicates that the speaker who produced that construction is from the community of Arctic Bay, located in the North Baffin region of Baffin Island; similarly, the label 'K, AR' indicates that this sentence was elicited from an Inuktitut speaker from the community of Arviat, located in the Kivalliq region of Nunavut.



Source: https://en.wikipedia.org/wiki/List\_of\_municipalities\_in\_Nunavut

#### List of abbreviated communities (5)

(4)

Kivalliq (K)	North Baffin (NB)	South Baffin (SB)
AR = Arviat	AB = Arctic Bay	IQ = Iqaluit
CH = Coral Harbour	CR = Clyde River	PG = Pangnirtung
RI = Rankin Inlet	HB = Hall Beach	
WC = Whale Cove	IG = Igloolik	
	PI = Pond Inlet	

In this thesis, I follow the standardized Roman orthographic convention for Inuktitut. This convention corresponds fairly straightforwardly to the IPA, except for the following symbols in (6):

#### Non-transparent orthographic conventions (6)

a. 
$$< jj > = /d3/$$

c. 
$$<$$
nng> = /ŋŋ/  
d.  $<$ g> = / $\sqrt{}$ /

$$e$$
.  $\langle \mathbf{r} \rangle = \langle \mathbf{R} \rangle$ 

b. 
$$\langle ng \rangle = /\eta/$$

d. 
$$\langle g \rangle = /v/$$

f. 
$$< &> = /4/$$

For the Kalaallisut examples presented throughout this thesis, I use the orthographic conventions employed by the individual authors cited. As a result, there are a few minor orthographic inconsistencies among the Kalaallisut examples, though these have no bearing on the broader discussion. In some of the literature on Kalaallisut (e.g. Berge, 1997, 2011; Sadock, 2003), the vowels /u/ and /i/ are represented as <o> and <e> respectively, reflecting a phonological process that takes place in the vicinity of uvular consonants. In other sources, this process is not orthographically reflected (e.g. Bittner, 1994; Bittner and Hale, 1996a,b).<sup>2</sup>

In light of this, it is also worth noting that the Labrador Inuttut examples provided in Chapters 4 and 5 also make use of the orthographic symbols <0> and <e>, though in Labrador Inuttut these symbols do not reflect retracted vowels, but rather long vowels (whereas long vowels in Kalaallisut and Inuktitut orthography are simply encoded as double vowels). The orthographic conventions unique to Labrador Inuttut are listed in (7).

#### (7) Non-transparent orthographic conventions in Labrador Inuttut

a.  $\langle e \rangle = /i:/$  b.  $\langle o \rangle = /u:/$  c.  $\langle \hat{a} \rangle = /a:/$  d.  $\langle K \rangle = /h/$ 

In accordance with the standard orthographic conventions, the Inuit data often display various morphophonological processes such as stem-allomorphic alternations. This is exemplified in (8) with the morpheme *-Cuma* 'want,' whose initial consonant is realized depending on the phonological properties of the final segment of the stem to which it attaches. Throughout this thesis, we will see various alternations of this sort.

#### (8) Morphophonological alternations on -Cuma

#### a. <u>Non-uvular C-final stem:</u>

tii-taaq-ti- $\mathbf{guma}$ -jagit

tea-get-caus-want-1s.S/2s.O

'I want to give you some tea.' (cf. tii-taaq-tit-...) (SB, IQ)

#### b. <u>V-final stem:</u>

niri-**juma**-janga

eat-want-3s.S/3s.O

'She wants to eat it.' (cf. niri-) (NB, AB)

#### c. <u>Uvular C-final stem:</u>

atu-ruma-janga

borrow-want-3s.S/3s.O

'She wants to borrow it.' (cf. atuq-) (NB, AB)

The examples in (9) additionally display another type of allomorphy, also commonly found in Inuit and represented orthographically. In these examples, we see that the realization of the antipassive morpheme -(C)i is not sensitive to phonology but is rather conditioned by grammatical properties of the stem to which it attaches (e.g. verb class).

<sup>&</sup>lt;sup>2</sup>Similarly, this process is also found in Inuktitut, though never orthographically encoded.

#### (9) Antipassive morpheme displays allomorphy sensitive to verb type

a. Ø on niuviq- 'buy':
niuviq-Ø-tuq
buy-AP-3s.S
'She bought (something).'
(NB, PI)

b. <u>-si on taqsaq- 'colour':</u>
taqsaq-**si**-juq
colour-AP-3s.S
'He coloured (something).'
(NB, HB)

c.  $-i (+/q/ \rightarrow \varnothing)$  on -niraq 'say': maqu-nira-**i**-junga rain-say-AP-1s.S 'I'm saying that it's raining.' (NB, AB)

Having surveyed some basic aspects of the Inuit languages, the rest of this chapter focuses on the morphosyntactic properties of the language.

## 2.3 Case and agreement

In this section, I discuss the case and agreement system of Inuit (again, with focus on Inuktitut). Inuktitut possesses several case markers and a large inventory of  $\phi$ -agreement paradigms organized based on the mood or clause type of the sentence. This section also overviews the interaction between case and agreement. I show that, despite the complex morphology, the case and agreement system is fairly straightforward from a syntactic perspective. In particular, I characterize the Inuktitut case and agreement system with the following generalizations:

#### (10) Generalizations concerning the Inuktitut case/agreement system

- (i) Nominals display an ergative-absolutive case alignment
- (ii)  $\phi$ -agreement morphology on the verb displays a nominative-accusative alignment

I propose that these generalizations may be captured if each clause comes equipped with two  $\phi$ -probes, regardless of whether they are ultimately exponed. Assuming standard locality conditions on Agree, this means that one of the two  $\phi$ -probes will invariably target the subject, regardless of whether it surfaces as ERG or ABS, while the other will invariably target the highest internal argument, if one is present.

### 2.3.1 Inventory of cases

Descriptively, Inuktitut (along with the rest of the Inuit languages) possesses nine cases, given below in (11):<sup>3</sup>

#### (11) Inuktitut case inventory

	SG	$\mathbf{PL}^4$
Absolutive (ABS)	-Ø	-Ø
Ergative (ERG)	-up	-Ø
Genitive (GEN)	-up	-Ø
Modalis (мор)	-mik/-mit	-nik/-nit
Ablative (ABL)	-mit	-nit
Allative (ALLAT)	-mut	-nut
Locative (Loc)	-mi	-ni
Vialis (VIA)	-kkut	gut
Similaris (sɪм)	-(ti)tut	-(ti)tut

The first three cases—ABS, ERG, and GEN—pattern together to the exclusion of the other case morphemes, in that they encode 'core' grammatical functions. Nominals that bear these cases moreover may be cross-referenced by verbal  $\phi$ -morphology. Note that ERG and GEN case are homophonous.

In contrast, the other six cases are generally taken to be obliques (though the status of MOD case is less clear-cut, as will be discussed below). Accordingly, nominals bearing these cases are unable to be cross-referenced by  $\phi$ -morphology, a point which I will return to shortly. The MOD and the ABL cases have merged for many speakers of Inuktitut, with both cases being realized as -mit/-nit (Dorais, 2010); this is reflected in many of the examples found throughout this thesis. However, since this is a point of interspeaker variation, I will continue to gloss these morphemes separately as 'MOD' and 'ABL' for consistency, i.e. according to their grammatical function rather than their morphological form.

Nominals bearing ABS, ERG, and GEN case are given in (12a-b) and (13); the examples in (12a-b) additionally illustrate Inuktitut's ergative case alignment, with the transitive subject marked with ERG and the transitive object and intransitive subject realized as ABS.

#### (12) Ergative alignment of Inuktitut

a. <u>Transitive verb (ERG-ABS):</u>

Taiviti-**up** surak-tanga **igalaaq**Taiviti-ERG break-3s.S/3s.O window.ABS
'David broke the window.'

(NB, AB)

<sup>&</sup>lt;sup>3</sup>Though only singular and plural variants are given here, the Inuit languages generally display a three-way number system. However, for many speakers of Inuktitut, the dual and the plural systems have morphologically collapsed to plural (Alorut and Johns, 2016).

<sup>&</sup>lt;sup>4</sup>The plural ABS, ERG, and GEN forms are taken here to be morphological zero. It is also common for the plural markers on nouns to be analyzed as the plural variants of these case morphemes.

#### b. <u>Intransitive verb (ABS):</u>

Miali ani-qqau-juq Miali.Abs leave-REC.PST-3s.S 'Miali left.'

(NB, PI)

#### (13) GEN case on possessors

Miali-**up** anaana-nga Miali-GEN mother-Poss.3s/3s 'Miali's mother'

(NB, PI)

Both ERG and GEN case undergo allomorphy, surfacing either as a portmanteau form or as -ta when the nominal also bears possessive morphology, as shown below:

#### (14) ERG/GEN allomorphy in possessive contexts

a. Eva uasaq-si-juq qimmi-nga-**ta** isiga-ngin-nit Eva.ABS wash-AP-3s.S dog-POSS.3s/3S-GEN foot-POSS.3s/3P-MOD 'Eva washed her dog's paws (feet).'

(SB, IQ)

b. anaana-nga-**ta** Jaani nagli-gi-janga mother-poss.3s/3s-erg Jaani.Abs love-Tr-3s.S/3s.O 'His; mother loves Jaani;'

(SB, PG)

The other cases in Inuktitut are illustrated throughout (15):

#### (15) Oblique cases in Inuktitut

a. <u>MOD:</u>

Taiviti surak-si-juq igalaar-**mik** Taiviti.ABS break-AP-3s.S window-MOD 'David broke the window.'

(NB, AB)

b. ABL:

Jaani-**mit** nutaar-nik pinngua-taa-lauq-tunga Jaani-ABL new-MOD toy-get-PST-1s.S 'I got new toys from Jaani.'

(NB, IG)

c. <u>ALLAT:</u>

tuktu-miniq niri-ja-u-qu-jara Jaani-**mut** caribou-meat.Abs eat-part-be-want-1s.S/3s.O Jaani-Allat 'I want the caribou meat to be eaten by Jaani.'

(SB, IQ)

d. *LOC*:

nutaar-mik ilisaiji-taqaq-tuq Nakasu-up Ilinniaving-**mi** new-mod teacher-exist-3s.S Nakasuk-gen School-loc 'There is a new teacher at Nakasuk School.' (NB, IG) e. <u>VIA:</u>

ataata-ga nunakkuruti-**kkut** niuvirvi-liaq-tuq father-poss.1s/3s.ABs car-via store-on.way.to-3s.S 'My father is going to the store by car.' (SB, IQ)

f. SIM:

arnait paa-juit pusikaaq-**titut** women.ABS fight-3P.S cat-SIM 'The women are fighting like cats.'

(SB, Yuan 2015)

As foreshadowed above, whereas the cases presented in (15b-f) are clearly oblique in nature, this is less immediately obvious for MOD case, which in (15a) is used to mark the logical object of an antipassivized verb. In Chapter 6, I will argue that MOD case in Inuktitut serves multiple functions, reflecting multiple modalities of case assignment.

Nonetheless, all of the case morphemes in (15) pattern identically morphologically, to the exclusion of the 'core' cases. In particular, these cases display an interesting type of contextual allomorphy, with the two variants of this allomorphy mapping to the SG vs. PL distinction indicated in (11) above (e.g. -mik vs. -nik for Mod case). The SG variant is found on nominals that are 3rd person, uninflected, and non-anaphoric, while the PL variant surfaces on nominals that are plural, possessed, pronominal, or anaphoric. This is illustrated in (16)-(17) below with Mod case, but the pattern holds for all of the oblique cases. Note that even fossilized, semi-transparent forms such as Mod-marked demonstratives display the basic alternation described; compare (16d) and (17e).

#### (16) Nominal environments for MOD variant -mik

a. qimmir-**mik** dog-мор 'dog' c. kina-**mik** who-MOD 'who'

b. Kiuru-**mik** Kiuru-мор 'Carol' d. uu**mi**nga DEM.PRON.MOD 'this'

#### (17) Nominal environments for MOD variant -nik

a. qimmir-**nik** dog-мор 'dogs' d. ingmi-**nik** self-мор 'self'

b. Miali-up qimmi-nga-**nik** Miali-gen dog-poss.3s/3s-mod 'Miali's dog' e. ukku**ning**a DEM.PRON.P.MOD 'these'

c. uvang-**nik** 1s-MOD 'me' See Yuan (2015) for an analysis of this alternation, based on  $\phi$ -agreement between structurally adjacent heads.

### 2.3.2 Mood-sensitive $\phi$ -agreement

As already seen above, verbal  $\phi$ -morphology in Inuktitut (and Inuit) targets ABS and ERG arguments. For convenience, I will refer to the morphology cross-referencing ABS subjects in intransitive contexts as 'S' morphology, and the morphology cross-referencing both ERG and ABS arguments as 'S/O.' The S/O morphemes often appear as morphologically opaque portmanteaux, such that the individual  $\phi$ -features of the subject and object cannot be morphologically separated. Below, we see that the 1s S-form *-junga* given in (18a) cannot be discerned in any of the S/O forms in (18b-d), which all cross-reference a 1s subject.

#### (18) S/O portmanteaux are morphologically opaque

a.	taku- <b>junga</b>	
	see-1s.S	
	'I see'	

c. taku-**jagit** see-1s.S/2s.O 'I see you'

b. taku-**jara** see-1s.S/3s.O 'I see it'

d. taku-**jakka** see-1s.S/3p.O 'I see them'

The morphological realization of the argument-referencing forms in Inuktitut/Inuit is determined by certain sentence-level properties of the clause in which they appear. In most Inuit literature, it is assumed that each verb complex bears a particular 'mood'—a convention I adopt here—which corresponds approximately to clause type. As there are nine moods, each S and S/O combination of  $\phi$ -features has up to nine different forms. I illustrate this property with 3s S-morphology below, though see Dorais (1988, 2003) for the full paradigms.<sup>5</sup>

#### (19) Mood-agreement paradigms (from Compton 2012; Dorais 2003)

Моор	2s form	Translation
Participial (PART)	taku-jutit	'you see'
Indicative (IND)	taku-vutit	'you see'
Interrogative (INT)	taku-vit	'do you see?'
Imperative (IMP)	taku-git	'(may you) see!'
Becausative (BECAUS)	taku-gavit	'when you saw; because you see'
Conditional (COND)	taku-guvit	'when you see; if you see'
Dubitative (рив)	taku-mmangaaqpit	'[I wonder] if you see'
Contemporative (CTMP)	taku-llutit/&utit	'you are/were V-ing while seeing'
Incontemporative (INCTMP)	taku-lutit	'you will be V-ing while seeing'

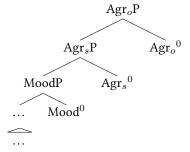
<sup>&</sup>lt;sup>5</sup>Following Compton (2012), I use the mood terminology given in Allen (1996).

Note that there are two declarative moods in Inuit, whose usages are subject to cross-dialectal variation. In Kalaallisut, matrix declarative clauses are in the *indicative* mood, while relative clauses are in the *participial* mood (hence its name). In contrast, the participial mood is much more pervasive in Inuktitut, as it not only marks relative clauses, but is the default matrix declarative mood; the indicative mood, in contrast, has a pragmatically-marked function similar to mirativity (e.g Dorais, 1988; Johns, 2007a). Since the majority of Inuit data presented throughout this thesis consists of monoclausal declarative sentences, I have opted to exclude participial mood in my glosses of Inuktitut data, and indicative mood in my glosses of Kalaallisut data.

Finally, the mood-sensitivity of these morphemes indicates that Inuktitut (Inuit)  $\phi$ -morphology is located in the extended CP-domain, which contains various projecting heads, including heads that encode mood and clause type. This is assumed in much previous literature (Johns, 2007b; Spreng, 2012; Compton, 2016, 2017), and will be adopted here as well. Assuming that this effect is allomorphic, and assuming that allomorphy is local in nature, this means that the heads encoding  $\phi$ -morphology must be adjacent to the head encoding mood (assumed here to be Mood<sup>0</sup>). Moreover, the idea that  $\phi$ -morphology is located in the extended CP-domain with its rightmost position in the complex verb, given the Mirror Principle (which will be discussed further in §2.4).

Concretely, I assume the structure in (20), in which mood and  $\phi$ -agreement form a span of structurally adjacent heads (note that Inuit is right-headed).<sup>6</sup> See Chapter 3 for an analysis of how the mood and  $\phi$ -morphemes are realized as portmanteaux.

#### (20) Mood-agreement in the clausal right-periphery



In (20), the  $\phi$ -morphemes are represented as two separate heads,  $\mathrm{Agr}_s{}^0$  and  $\mathrm{Agr}_o{}^0$ , with the latter c-commanding the former. This will be motivated below.

## 2.3.3 Interaction of case and agreement

#### Ergativity and accusativity

As shown earlier, the Inuit languages display an ergative-absolutive case alignment. In (21), we moreover see that ergative constructions alternate with antipassive constructions.

<sup>&</sup>lt;sup>6</sup>Although the structure below reflects the right-headedness of Inuit, I will sometimes represent the trees as left-headed, for illustrative clarity.

#### (21) Ergative vs. antipassive alternation in Inuktitut

a. <u>Ergative (ERG-ABS):</u>

Taiviti-up surak-tanga igalaaq Taiviti-erg break-3s.S/3s.O window.Abs

'David broke the window.'

(NB, AB)

b. *Antipassive (ABS-MOD):* 

Taiviti surak-<u>si</u>-juq igalaar-**mik** Taiviti.ABS break-AP-3s.S window-MOD 'David broke the window.'

(NB, AB)

The Inuit languages have additionally been characterized as displaying an ergative-absolutive alignment in its *agreement* system (e.g. Bobaljik, 2008), presumably because the S and S/O forms are morphologically distinct, which, in turn, arises due to the portmanteau nature of the S/O morphemes.

However, not all S/O combinations surface as portmanteaux, at least in Inuktitut.<sup>7</sup> When the object is 3s, we often find two separate morphemes which individually cross-reference the ERG subject and the ABS object (which is uniformly cross-referenced by the morpheme -uk). This is shown below with four different moods:

#### (22) 3rd person object morpheme -uk

a. taku-vaa taku-va-**uk**see-INT.3s.S see-INT.3s.S-3s.O
'Does he/she/it see?' 'Does he/she/it see it?'

b. taku-luni taku-luni-**uk**see-CTMP.3s.S see-CTMP.3s.S-3s.O

'While he/she/it shall see' 'While he/she/it shall see it'

c. taku-mmat taku-mma-**uk**see-CAUS.3S.S see-CAUS.3S.S-3S.O
'Because he/she/it sees' 'Because he/she/it sees it'

d. taku-li taku-li-**uk**see-IMP.3s.S see-IMP.3s.S-3s.O
'May he/she/it see!' 'May he/she/it see it!'

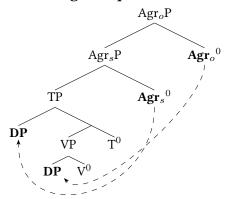
Crucially, these contexts reveal that the agreement system in Inuktitut displays a *nominative* accusative alignment. As seen above, the same S-form is used to encode both ABS subjects and ERG subjects, with a distinct O-form being used to encode ABS objects.

<sup>&</sup>lt;sup>7</sup>It is not clear to me at this time whether the patterns shown here for Inuktitut extend to other Inuit varieties such as Kalaallisut.

#### The nature of $\phi$ -Agree: The Activity Condition and case discrimination

The pattern seen above additionally establishes the point made earlier that each clause in Inuktitut contains two  $\phi$ -probes, labelled as  $\mathrm{Agr}_s{}^0$  and  $\mathrm{Agr}_o{}^0$ , respectively. Assuming the Mirror Principle (Baker, 1985), as well as a right-headed structure, we may further conclude that  $\mathrm{Agr}_o{}^0$  c-commands  $\mathrm{Agr}_s{}^0$ , since its exponent appears further to the right in the verb complex. As schematized in (23), this configuration yields nested dependencies (cf. Murasugi, 1992), with  $\mathrm{Agr}_s{}^0$  targeting the highest argument in the clause (the subject) and  $\mathrm{Agr}_o{}^0$  targeting the next highest argument (often the object, though see below).

#### (23) Nested Agree dependencies

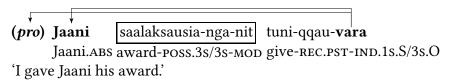


The nested dependencies seen above are expected assuming standard locality conditions on Agree such as Attract Closest (Chomsky, 1995, 2000), and assuming that probing takes place as soon as each Agreeing head is Merged.

Moreover, the derivation above supposes that  $Agr_o^0$  is able to skip past the DP in Spec-TP in order to access the VP-internal DP. As I discuss in greater detail in Chapter 6, this is due to the Activity Condition (Chomsky, 2000, 2001), such that DPs in a successful  $\phi$ -Agree relation are rendered *inactive*—i.e. invisible—for the remainder of the derivation. In other words,  $\phi$ -Agree between  $Agr_s^0$  and the subject DP allows it to be overlooked by  $Agr_o^0$ ; the closest *active* DP to  $Agr_o^0$  is therefore the highest internal argument.

Because each clause contains only two  $\phi$ -probes, this means that, in constructions with more than two arguments, only two of these nominals may be cross-referenced on the verb. In accordance with the aforementioned locality conditions on Agree, it is the two highest arguments that are consistently targeted, as shown below. The lower arguments not cross-referenced are often realized as Mod. This latter point is set aside for the most part in this thesis, though discussed in the Appendix of Chapter 6.

#### (24) $\phi$ -probes target two highest arguments



Finally, I argue that *every* clause in Inuktitut comes equipped with two  $\phi$ -probes, even ones that only bear S-morphology. Following Preminger (2011, 2014),  $\phi$ -Agree may *fail* in the absence of a viable goal, so long as probing is attempted. In intransitive constructions, the sole nominal (the ABS subject) is cross-referenced by  $\mathrm{Agr}_s{}^0$ , which probes first. Because such constructions lack a second argument for  $\mathrm{Agr}_o{}^0$  to target,  $\mathrm{Agr}_o{}^0$  is not exponed.

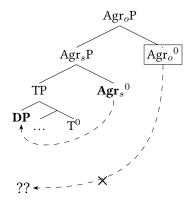
Similarly, because only ABS and ERG arguments may be targeted for  $\phi$ -Agree processes, this is why antipassive (ABS-MOD) constructions also only display S-morphology. These configurations are schematized in (25a-b) for now, and will be assumed throughout this thesis. Concrete evidence for this system of Agree will be presented in Chapter 6.

#### (25) Absence of object-referencing morphology = failed Agree

#### a. Intransitive:

Miali ani-qqau-juq Miali.Abs leave-rec.pst-3s.S 'Miali left.'

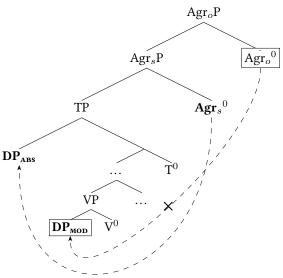
(NB, PI)



#### b. *Antipassive*:

Taiviti surak-si-juq igalaar-**mik** Taiviti.ABS break-AP-3s.S window-MOD 'David broke the window.'

(NB, AB)



Thus, in Inuktitut we see that the behaviour of *inactive* DPs (i.e. DPs that are already Agreed with) differs from that of DPs that are inaccessible to  $\phi$ -Agree processes to begin with. Whereas the former is bypassed, the latter causes the relevant  $\phi$ -probe to fail.

To summarize, I have shown that, while Inuktitut displays an ergative-absolutive case alignment, its  $\phi$ -agreement system follows a nominative-accusative alignment. With these basic properties in place, I now turn to the clause structure of the language.

## 2.4 Clause structure and the extended vP-domain

In this section, I present properties of the clause structure of Inuktitut and overview certain  $\nu$ P-level constructions that will figure prominently in this thesis.

### 2.4.1 The verb complex

The Inuit languages are characterized as *polysynthetic*, in that most grammatical information may be encoded within the verb complex as bound morphology (Fortescue, 1980; Mahieu and Tersis, 2009; Mithun, 2009). As a result, verbs can express propositional-level content. As shown in (26), the basic template of an Inuit verb complex consists of a root at the left edge of the word, followed by a series of optional suffixes, then  $\phi$ -morphology at the right edge of the word ( $\phi$ -morphology may, in turn, be optionally followed by a small class of adverbial enclitics).

(26) Template of verb complex 
$$\sqrt{\text{ROOT}} - (\dots) - \text{Agr} (= \text{CL})$$

The order of morphemes within the complex word generally follows the Mirror Principle (Baker, 1985), such that the morphemes further to the right occupy a structurally higher position in the tree. This is illustrated in the verb complex given in (27). Recall that the fact that  $\phi$ -morphology is found at the right-peripheral portion of the verb converges with the idea that its locus is in the extended CP-domain.

#### (27) Inuit verb complexes obey the Mirror Principle

```
kivik-sima-qatta-rataaq-tara lift-perf-repeatedly-imm.pst-1s.S/3s.O [[[[[\sqrt{\text{Verb}}] Asp ] Adv ] Tns ] Agr ] 'I kept lifting it (just now).' (NB, AB)
```

Whereas word-internal morpheme order is quite rigid, sentence-level word order is relatively free. Though Inuit is predominantly SOV, speakers often produce sentences with other word orders (e.g. SVO). Throughout this thesis, various other word order permutations will be shown in passing, though I will assume that these are the result of scrambling,

with no bearing on the core grammatical relations being encoded.

Beyond the extended CP-domain, another important portion of Inuit clause structure for the purposes of this thesis is the extended vP-domain. This is because Inuit possesses a wide range of vP-level processes that may, in turn, be used to diagnose structural relations and other broader aspects of the grammar.

#### 2.4.2 The extended vP-domain

As stated above, Inuit has a number of productive vP-level valency-increasing operations, which may introduce an additional argument into the structure. Generally, these arguments surface as ABS and are accordingly cross-referenced by object  $\phi$ -morphology. Below, I overview two relevant processes that will figure prominently in this thesis: high applicativization and what I will call -gi-transitivization.

# High applicatives

High applicatives in Inuktitut are encoded with the applicative morpheme *-Cuti*, whose initial consonant is phonologically conditioned by the final segment of the verbal stem preceding it. Applicativization involves the introduction of a core applied argument. In (28a), we see that, in the absence of an overt applicative morpheme on the verb, such arguments are oblique, bearing ALLAT case. In contrast, (28b) demonstrates that the presence of applicative morphology corresponds to the promotion of the applied argument, which now surfaces as ABS.

#### (28) Introduction of an applied argument

# a. Baseline:

Jaani piruqsiar-taa-qqau-juq Miali-**mut** Jaani.ABS flower-get-REC.PST-3S.S Miali-ALLAT 'Jaani got Mary flowers.'

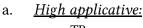
#### b. *Applicative*:

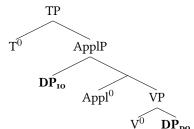
Jaani-up piruqsiar-taa-ruti-qqau-**janga** Miali
Jaani-erg flower-get-APPL-rec.PST-3s.S/3s.O Miali.ABs
'Jaani got Mary flowers.'

(NB, PI)

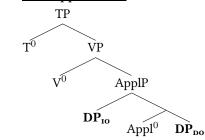
I now show that these are indeed high applicative constructions, in the sense of Pylkkänen (2002, 2008). This means that the applicative head semantically relates the argument it introduces in Spec-ApplP to an event denoted by the VP, given the structure in (29a). This contrasts with the structure of low applicatives, given in (29b), in which the applicative head relates the applied argument (its specifier) directly to the direct object (its complement).

# (29) High and low applicative structures





#### b. <u>Low applicative:</u>



(NB, AB)

According to Pylkkänen (2002, 2008), these structures predict several distinct properties of high and low applicatives; two of them are presented here. First, because low applicatives strictly relate an applied argument to a direct object, low applicatives cannot be formed from verbs that do not take a direct object, such as unergative verbs. In contrast, because high applicatives relate an applied argument to an event, we do not expect to find such restrictions to surface. Additionally, Pylkkänen argues that low applicatives necessarily encode a transfer of possession between the external argument and the applied argument. Therefore, low applicatives cannot be built on stative verbs. Again, high applicatives are not predicted to display this property, since high applicatives do not denote such a relationship.

As shown in (30)-(31) below, Inuktitut applicative constructions are able to be formed from unergative and stative verbs, confirming that they are indeed high applicatives, with the structure given in (29a) above.

# (30) High applicative formed over unergative verb

- a. **inngi**-ruma-junga sing-want-1s.S 'I want to sing.'
- b. **inngi**-ruti-juma-jara Taiviti sing-APPL-want-1s.S/3s.O David.ABs 'I want to sing for David.'

High applicative formed ever stative work

# (31) High applicative formed over stative verb

 a. nutaralaaq tigumiaq-tara baby.ABS hold-1s.S/3s.O 'I am holding the baby.'

b. Ulak nutaralaar-mik **tigumia-**ruti-jara
Ulak.ABS baby-MOD hold-APPL-1s.S/3s.O
I am holding the baby for Ulak.' (K, CH)

Moreover, these constructions contrast with true low applicatives, which are shown by Carrier (2016) to exist independently in Inuktitut. These are essentially double object constructions which do not bear overt applicative morphology on the verb. In (32), we

see that these constructions may not be formed with unergative or stative verbs. Thus, I conclude that low applicative constructions in Inuktitut have the structure given in (29b).

# (32) Low applicatives in Inuktitut

#### a. <u>Double object construction:</u>

Jaani-up Miali tujur-taa pirutsiar-nit Jaani-erg Miali.Abs send-3s.S/3s.O flowers-мор 'Jaani sent Miali flowers.'

#### b. \**Unergative verb*:

\*Jaani-up Miali uqallar-(gi)-jaa Jaani-ERG Miali.ABS talk-TR-3S.S/3S.O Intended: 'Jaani is talking on behalf of Miali.'

#### c. \*Stative verb:

\*Jaani-up Miali tigumiaq-taa puur-mit Jaani-erg Miali.Abs hold-3s.S/3s.O bag-мор Intended: 'Jaani is holding Miali the bag.'

(SB, Carrier 2016)

#### -gi-transitivization

The second valency-increasing process that will frequently surface in this thesis is what I refer to as '-gi-transitivization.' Inuit has a morpheme -gi, which attaches to otherwise intransitive predicates such as psych-predicates, adjectival predicates, and certain noun incorporation constructions. When present, it triggers an ERG-ABS case frame and S/O  $\phi$ -morphology. This is shown in the pairs of examples below.

# (33) -gi-transitivization on nagli- 'love'

a. Taiviti nagli-gusuk-tuq Kiuru-mik David.Aвs love-feel-3s.S Carol-мор 'David loves Carol.' *Lit.:* 'David feels love for/towards Carol'.

(NB, AB)

# b. Taiviti-up **Kiuru** nagli-<u>gi</u>-janga David-ERG Carol.ABS love-TR-3s.S/3s.O

'David loves Carol.'

(NB, AB)

# (34) -gi-transitivization on piu- 'good'

a. iglu-vit taqsa-nga piu-juq house-poss.2s/3s.GEN colour-poss.3s/3s.ABs good-3s.S 'The colour of your house is good/nice.'

<sup>&</sup>lt;sup>8</sup>Carrier (2016) additionally shows that double object constructions in Inuktitut display Oehrle's Effect (Oehrle, 1976; Harley, 2002), in that the indirect object must encode a possessor and may not encode a location.

b. piu-gi-jara taqsa-nga iglu-vit
good-TR-1s.S/3s.O colour-poss.3s/3s.ABs house-poss.2s/3s.GEN
'I like the colour of your house.'

Lit.: 'I have the colour of your house as good/nice.' (NB, IG)

# (35) -gi-transitivization on noun-incorporating -u-quuji- 'seems to be'

Jaani igvi-u-quuji-juq
 Jaani.ABS 2s-be-seem-3s.S
 'Jaani looks like you.'

(NB, IG)

b. Jaani-up uvanga-u-quuji-<u>gi</u>-jaatit
Jaani-ERG 1s-be-seem-TR-3s.S/2s.O

'Jaani thinks that you look like me.'

Lit.: 'Jaani considers you as looking like me.'

(NB, IG)

Aside from the case/agreement facts, the fact that these examples are transitivized is evidenced by their ability to undergo additional valency-decreasing (i.e. detransitivizing) processes that would otherwise not be permitted to apply directly to these predicates. For instance, (36) demonstrates that -gi-transitivized predicates may be passivized. Similarly, as discussed by Beach (2011), reciprocals may only be formed on transitive stems; (37) shows that they may be formed on -gi-transitivized stems.

# (36) Passivization of -gi-transitivized verbs

a. kina-limaat piu-**gi**-nngit-taatigut who-all.erg good-tr-Neg-3s.S/1p.O 'No one likes us.'

Lit.: 'No one has us as good.'

 b. piu-gi-ja-u-nngit-tugut good-tr-pass.part-be-neg-1p.S 'We are not liked.'
 Lit.: 'We are not had as good.'

(NB, IG)

# (37) Reciprocals may be formed on gi-transitivized verbs

a. \*nalli-gusu-**uti**-juuk love-feel-RECP-3D.SIntended: 'They love each other.'

 b. nalli-gi-uti-juuk love-TR-RECP-3D.S 'They love each other.'

(Beach, 2011)

The -gi morpheme is not well-studied in the previous literature, in spite of its high frequency and the productive nature of -gi-transitivization. As far as I am aware, Beach's (2011) grammar offers the only relatively detailed characterization of its distribution and function. Beach describes -gi as a "transitive verb stem forming suffix" and glosses it as

TR accordingly, a convention I adopt here. In what follows, I assume that -gi spells out a transitive  $v^0$  that introduces an argument.

As noted earlier, high applicative constructions and *-gi-*transitivization constructions will often surface in this thesis, in order to test various aspects of Inuktitut clause structure. Additional properties of both constructions will thus be uncovered throughout this thesis.

# 2.4.3 Morphological vs. syntactic ergativity

Finally, the Inuit languages are considered to be *syntactically ergative*, as opposed to simply morphologically ergative. The notion of morphological ergativity refers to a pattern in which the intransitive subject and transitive object receive the same ABS case morphology (or, in head-marking languages, are exponed by a common agreement slot), to the exclusion of the ERG transitive subject. Syntactically ergative languages are also morphologically ergative, but display certain additional clause-level properties distinguishing ABS subjects and objects from ERG subjects (Tada 1993; Dixon 1994; Bittner and Hale 1996b; Manning 1996; Legate 2008; Coon et al. 2014; see also Deal 2016b and Polinsky 2017 for recent overviews). Thus, in many such languages, ABS objects are taken to occupy the same structural position that ABS subjects would otherwise occupy, e.g. Spec-TP. Although early approaches to syntactic ergativity took ABS objects to be *base-generated* in subject position (e.g. Levin, 1983; Marantz, 1984; Johns, 1992), more recent work has treated this high position as a *derived position* (Bittner and Hale, 1996a,b; Manning, 1996; Aldridge, 2008b; Ershova, 2018).

The contrast between syntactic and morphological ergativity may be illustrated with reference to the Mayan language family. The Mayan language family notably distinguishes between so-called *high-ABs* and *low-ABs* languages, which correspond to the syntactically vs. morphologically ergative distinction (Bricker, 1977; Tada, 1993; Coon et al., 2014). The morphological position of the ABs agreement marker offers a particularly straightforward diagnostic. In high-ABs languages, the ABs marker surfaces adjacent to aspect, whereas in low-ABs languages, the ABs marker surfaces on the verb. Additionally, in high-ABs languages, the ABs agreement marker is unavailable in non-finite clauses; conversely, no such restriction occurs in low-ABs languages. These properties are illustrated in (38)-(39) with Q'anjob'al (high-ABs) and Chol (low-ABs), respectively.

# (38) Q'anjob'al: High-ABs objects unavailable in non-finite clauses

a. Basic transitive clause:

Ch-in y-il[-a'] ix Malin ASP-1ABS 3ERG-see-TV CL Maria 'Maria sees me.'

# b. Non-finite clause:

\*Chi uj [ hin y-il ix Malin ]
ASP be.able.to 1ABS 3ERG-see CL Maria
Intended: 'Maria can see me.' (Coon et al., 2014)

#### (39) Chol: Low-ABS objects available in non-finite clauses

#### a. <u>Basic transitive clause:</u>

Choñkol k-mek'-**ety**PROG 1ERG-hug-2ABS
'I am hugging you.'

# b. *Non-finite clause*:

Mejl [ i-k'el-**oñ** be.able.to 3ERG-see-1ABS 'She can see me.'

(Coon et al., 2014)

This typological split between ergative languages may also be diagnosed by the presence or absence of an  $\bar{A}$ -extraction restriction on ERG subjects. In high-ABS languages, ERG subjects are unable to undergo  $\bar{A}$ -movement (e.g. wh-movement, relativization, focus fronting), though there are no such restrictions on ABS subjects or objects; in order to express a proposition containing an extracted transitive subject, an antipassive construction (or some equivalent) must be used instead. In contrast, low-ABS languages do not display this effect. This is once again illustrated with Q'anjob'al and Chol. In Q'anjob'al and other high-ABS Mayan languages, the "Agent Focus" construction is used to circumvent the  $\bar{A}$ -extraction restriction (Tada, 1993; Stiebels, 2006; Coon et al., 2014; Erlewine, 2016), as shown in (40d).

# (40) Q'anjob'al: ERG subjects cannot undergo $\bar{A}$ -extraction

#### a. Intransitive ABS subject:

 $\mathbf{Maktxel}_i$  max way-i \_\_i who ASP sleep-ITV 'Who slept?'

#### b. *ABS object:*

**Maktxel**<sub>i</sub> max y-il[-a'] naq winaq  $_{-i}$  who ASP 3ERG-see-TV CL man 'Who did the man see?'

#### c. <u>Transitive ERG subject:</u>

\*Maktxel<sub>i</sub> max-Ø y-il[-a'] \_<sub>i</sub> ix ix who ASP-3ABS 3ERG-see-TV CL woman *Intended:* 'Who saw the woman?'

Grammatical as: 'Who did the woman see?'

# d. AF-ed ABS subject:

Maktxel max-ach il-**on**-i who ASP-2ABS see-AF-ITV 'Who saw you?'

(Coon et al., 2014)

# (41) Chol: No $\bar{A}$ -extraction restriction on ERG subjects

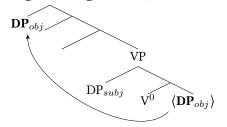
**Maxki**<sub>i</sub> tyi **y**-il-ä jiñi wiñik  $_{-i}$  who ASP 3ERG-see-TV DET man 'Who saw the man?'

(Coon et al., 2014)

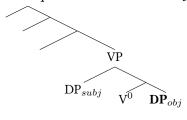
With these properties in place, we now turn to syntactic ergativity in the Inuit languages. As I will discuss in greater detail below, ABS objects in ergative constructions are often characterized as semantically wide scope or specific, in contrast to MOD objects in antipassive constructions. This has led to the now fairly standard assumption that ABS objects in Inuit occupy a structurally high position (e.g. Spec-TP or Spec-CP), such that they take syntactic scope over other nominal arguments, as well as various sentence-level operators such as negation (e.g. Murasugi, 1992, 1997; Bittner, 1994; Bittner and Hale, 1996a,b; Manga, 1996; Spreng, 2006, 2012). Conversely, MOD objects remain in situ within the *v*P-domain. This is schematized in (42), adapted from Bittner (1994).

# (42) Structure of ergative and antipassive constructions in Inuit

#### a. *Ergative: High ABS object:*



#### b. <u>Antipassive: In situ MOD object:</u>



The idea that the Inuit languages are syntactically ergative predicts that they should display the  $\bar{A}$ -extraction restriction seen above for Q'anjob'al. As shown in (43), this is borne out, with the caveat that this restriction is only seen in relative clauses (and not wh-questions).

# (43) Inuktitut: Relativization restriction on ERG subjects

#### a. *Intransitive ABS subject:*

nanur-jjuaq [ \_\_abs angi-juq ] polar.bear-big.abs big-part.3s.S 'a big polar bear that is so big'

(Compton, 2012)

#### b. *ABS object*:

nanur-mit [ Jaani-up \_\_abs taku-janga ]-nit polar.bear-mod Jaani-erg see-part.3s.S/3s.O -mod 'the polar bear that Jaani saw'

(Yuan, 2013)

# c. <u>Transitive ERG subject:</u>

\*angut [\_ERG nanuq kapi-jaa ]
man.ABS polar.bear.ABS stab-PART.3s.S/3s.O

Intended: 'the man that stabbed the polar bear' (Johns, 2007a)

#### d. Antipassive ABS subject:

angut [\_ABS nanur-mik kapi-si-juq] man.ABS polar.bear-MOD stab-AP-3s.S 'the man that stabbed the polar bear'

(Johns, 2007a)

In light of these data, a new question arises once we consider the fact that the ergative patterning in certain Inuit varieties has been observed to be weaker than in others. Clarifying what exactly this entails will be a major part of this thesis. I will ultimately argue that *all* Inuit varieties are syntactically ergative, in that there is a structurally high nominal element c-commanding the ERG subject. However, we find variation in the *nature* of this nominal element.

# 2.5 The status of ergativity in Eastern Canadian Inuktitut

The rest of this chapter focuses on variation in the ergative case patterning displayed in Inuktitut and other Eastern Canadian varieties of Inuit. As noted above, the relative robustness of the ergative patterning in a given variety of Inuit seems to be correlated with the properties of the antipassive construction in that variety. In the Eastern Canadian varieties, the antipassive construction has a fairly wide distribution, yielding the impression that the ABS-MOD antipassive construction is the default construction used to express transitive sentences. This, in turn, has led researchers to suggest that the case alignment of these varieties is both ergative *and* accusative in nature.

Most previous literature on this topic has focused on the properties of the antipassive object, as I will discuss below.

# 2.5.1 Variation in the interpretation of objects

Earlier, I presented Inuktitut examples illustrating the ergative vs. antipassive alternation, repeated here as (44). The English translations under these data were loosely translated as identical ('David broke the window'), reflecting speakers' intuitions.

#### (44) Ergative vs. antipassive alternation in Inuktitut

# a. <u>Ergative (ERG-ABS):</u>

Taiviti-up surak-**tanga igalaaq**Taiviti-erg break-3s.S/3s.O window.Abs 'David broke the window.'

(NB, AB)

# b. Antipassive (ABS-MOD):

Taiviti surak-<u>si</u>-juq igalaar-**mik** Taiviti.авs break-ар-3s.S window-мор 'David broke the window.'

(NB, AB)

In fact, as noted earlier, ergative and antipassive constructions in the Inuit languages are standardly taken to be *semantically distinct*. This manifests in a few different ways, depending on the particular Inuit variety under consideration (as well as the analysis). However, most research on Inuit has characterized ABS objects in ergative constructions and MOD objects in antipassive constructions as displaying opposite interpretive properties (Fortescue, 1984; Bittner, 1987, 1994; Manga, 1996; Berge, 1997, 2011; Wharram, 2003; Hallman, 2008; Johns and Kučerová, 2017).

In Kalaallisut, for instance, it has been argued extensively by Bittner (1994) that ABS objects are obligatorily wide scope, while MOD objects are obligatorily narrow scope. This contrast is repeated below as (45):

# (45) Kalaallisut: ABS subjects and objects take wide scope

a. <u>ERG-ABS (ergative):</u>

qimmit marluk **arnat pingasut** kii-vaat dog.p.erg two.erg women.p.abs three.abs bite-3p.S/3p.O 'Two dogs bit three women.' *Available reading:* Inverse scope only (3 > 2; \*2 > 3)

b. ABS-MOD (antipassive):

**qimmit** marluk arna-nik pingasu-nik kii-si-pput dog.P.ABS two.ABS woman-P.MOD three-MOD bite-AP-3P.S 'Two dogs bit three women.' *Available reading:* Surface scope only (2 > 3; \*3 > 2) (Bittner, 1994)

In a series of papers, Johns (1999, 2001, 2006) observes that the semantic restrictions on the antipassive object appear to be looser in Eastern Canadian varieties of Inuit, including Inuktitut and Labrador Inuttut. While Johns limits her discussion to the distribution of definite DPs such as proper names, this thesis will focus instead on quantificational objects. As demonstrated in (46), antipassivized MOD objects in Inuktitut are not necessarily narrow scope, but may take *wide scope* over ABs objects (see also Beach 2011). As a result, the ergative and antipassive constructions are not in complementary distribution in Inuktitut, unlike in Kalaallisut. Rather, the ergative and antipassive constructions have overlapping meanings, with both permitting inverse scope readings.

# (46) Inuktitut: MOD objects may take wide scope

# a. <u>ERG-ABS (ergative):</u>

marruuk surusiit niri-qqau-jangit **pingasut sivalaat** two.erg child.p.erg eat-rec.pst-3p.S/3p.O three.abs cookie.p.abs 'Two children ate three cookies.'

Available reading: Inverse scope only (3 > 2; \*2 > 3)

#### b. <u>ABS-MOD (antipassive):</u>

marruuk surusiit niri-qqau-jut pingasu-nit sivalaar-nit two.ABS child.p.ABS eat-REC.PST-3P.S three-p.mod cookie-p.mod 'Two children ate three cookies.'

Available readings: Surface scope (2 > 3) or inverse scope (3 > 2) (SB, PG)

In more recent work, Johns (2017) additionally observes that, in comparing individual varieties of Eastern Canadian Inuit, an intriguing contrast between Inuktitut and Labrador Inuttut emerges. In particular, Labrador Inuttut differs from Inuktitut (and other Inuit varieties) in that the antipassive construction seems to be the *default* construction that speakers use to encode transitive sentences. The ergative construction is generally only used when the object is pronominal, as shown in (47).

# (47) Labrador Inuttut: ergative patterning appears with pronominal object

a. Antipassive: Full DP object

John asiu-ji-laut-tuk **jaika-mi-nik** John.ABS lose-AP-PST-3s.S jacket-POSS.REFL-MOD 'John lost his jacket'

# b. <u>Ergative: Pronominal object:</u>

...siagolittilugu pulesi-**up** nagvâ-laut-**tanga** tunu-a-ni ilinniavi-up ...later police-erg find-pst-3s.S/3s.O back-poss-mod school-gen 'and later the police found it behind the school.' (Alana Johns, p.c.)

As hypothesized by Johns (1999, 2001), given that the semantics of the antipassive object are fairly flexible, the antipassive construction is expected to be used *more frequently* by speakers of these dialects than the ergative construction. Simultaneously, if the ergative construction is distributionally restricted, as especially evident from the Labrador Inuttut data in (47), then we expect it to be used infrequently by speakers. These two predictions are summarized in (48), as the Frequency Inferential Principle.

#### (48) Frequency Inferential Principle

Increased restriction(s)  $\longrightarrow$  Decline  $(X_n \to X_{n-m})$ Decreased restriction(s)  $\longrightarrow$  Incline  $(X_n \to X_{n+m})$ where m can be any number greater than 0 (Johns, 1999)

In the rest of this chapter, I summarize previous research that demonstrates that these predictions are borne out quantitatively. I first establish, based on experimental evidence

from Murasugi (2017), that antipassive MOD objects are indeed scopally ambiguous in Inuktitut. I then discuss sociolinguistic evidence from Carrier (2012, 2017), which further corroborates this idea.

# 2.5.2 Quantitative research on the antipassive in Inuktitut

There is ample quantitative evidence converging on the idea that the interpretive properties of the antipassive object in Inuktitut (and other Eastern Canadian Inuit varieties) are relaxed. As noted above, this is demonstrated through experimental studies by Murasugi (2014, 2017) and through variationist and corpus studies by Carrier (2012, 2017).

Murasugi (2014, 2017) presents a series of experiments that demonstrate that Johns' (1999, 2001, 2006, 2017) intuition is correct—MOD objects of antipassive constructions in Inuktitut are indeed semantically more flexible than previously assumed, in contrast to standard characterizations of these objects as obligatorily narrow scope.

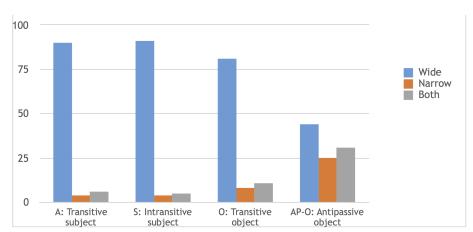
Murasugi's (2017) study had 20 participants, all of whom were speakers of Inuktitut (additionally, 19/20 spoke a Baffin variety). The participants were presented with a series of potentially ambiguous transitive sentences and were asked to choose the correct interpretation of the sentence based on pictures illustrating each possible meaning. For instance, the sentence in (49) could plausibly be interpreted (based on its English translation) either with the ERG subject taking scope below or above negation.

# (49) Example of scope-ambiguous sentence

ullumi **qajaqtuqtu-up atausi-up** ikaa-lau-<u>nngit</u>-taa tasiq today kayaker-erg one-erg cross-pst-neg-3s.S/3s.O lake.Abs 'Today one kayaker didn't cross the lake.' *Available readings*:  $\neg > \exists$  or  $\exists > \neg$  (Murasugi, 2017)

Murasugi found that, whereas ERG subjects, ABS subjects, and ABS objects all overwhelmingly were indicated by speakers as scoping above negation,<sup>9</sup> the results for MOD objects of antipassive constructions were more mixed. This is shown in (50).

<sup>&</sup>lt;sup>9</sup>In Chapter 3, I show that ERG and ABS subjects need not take wide scope relative to other nominals. For example, according to my data, MOD objects may scope over ABS subjects in antipassive constructions. I did not systematically test the scope of nominal arguments relative to negation, so cannot compare my results with the ones shown here.



# (50) Results from Murasugi (2017)

Whereas Murasugi provides experimental evidence corroborating Johns' observation that MOD objects are scopally ambiguous, Carrier (2012, 2017) further confirms this idea based on sociolinguistic evidence. Carrier (2017) presents a distributional (frequency-based) analysis of ergative and antipassive constructions, based on narrative data collected from speakers of North Baffin Inuktitut and Nunavik Inuttitut (spoken in Nunavik, Quebec). 10

Consider the table presented in (51). Whereas ABS objects in ergative constructions were overwhelmingly definite in the corpus (365/380 tokens), MOD objects were both definite (239/439 tokens) and indefinite (200/439 tokens). Put differently, as indicated in the table, 40% of definite objects were MOD rather than ABS. These findings corroborate the idea that the semantic restrictions on the antipassive are looser in Inuktitut than in other Inuit varieties such as Kalaallisut, as well as the experimental findings from Murasugi (2017).

(51)	Construction type and	patient definiteness	(Carrier, 2017)
\ /	J 1	1 3	· / /

	ANTIPASSIVE		ERGATIVE		
Patient definiteness	#	%	#	%	Total
Definite	239	40	365	60	604
Indefinite	200	93	15	7	215
Total	439	54	380	46	819

This finding, in turn, is consistent with a previous study on Nunavik Inuttitut by Carrier (2012). In this study, speakers were asked to narrate *The Pear Film* and *The Frog Story*. The sentences in the narrations were then coded according to their structure. As shown

<sup>&</sup>lt;sup>10</sup>The objective of Carrier's (2017) study is far more nuanced than summarized here. The community of Resolute Bay, Nunavut, was created in the 1950s after Inuktitut-speaking populations from North Baffin Island and Nunavik were forcibly relocated to this new community. As Carrier discusses, the first generation of speakers born in Resolute Bay therefore speak a new Inuktitut dialect that is based on a mixture of the two parent dialects. Carrier's study investigates the sociolinguistic and grammatical properties of this newlyformed dialect.

below, the frequency of antipassive constructions overwhelmingly surpassed that of ergative constructions. While the skew could be partly attributed to the nature of the stories in question, it is unlikely that that is the entire picture.

# (52) Type of constructions in narratives (Carrier, 2012)

Type of construction	#
Ergatives	12
Antipassives	117
Intransitives	125

Altogether, Carrier's (2012, 2017) findings again show that the antipassive construction in Eastern Canadian varieties of Inuit such as Inuktitut and Nunavik Inuttitut is measurably used at a higher frequency than the ergative construction. Again, this is because the antipassive (MOD) object in these varieties is semantically flexible, able to encode a wider range of interpretations than the ABS object of the ergative constructions. Looking across two different dialects, Carrier's results moreover reveal that the antipassive construction appears more frequently in the dialect considered to be linguistically more innovative than the more conservative dialect.

# 2.5.3 Diachronic change or microvariation?

The observation that the ergative patterning is weaker in certain Inuit varieties than in others has led some researchers to characterize this variation as a *diachronic change*. Under this view, the gradient in ergativity shown above, repeated as (53), reflects a gradual loss of the ergative patterning, with Labrador Inuttut being the variety that is furthest into this syntactic change, and Kalaallisut being the most linguistically conservative (Johns, 1999, 2001; Carrier, 2012, 2017). Similarly, the rising distribution of the antipassive construction across varieties would, under such a view, be recast as a diachronic shift towards an accusative system from a purely syntactically ergative one.

#### (53) Ergativity across Inuit (Johns, 2001)

Kalaallisut (Greenland)	Inuktitut (Nunavut)	Inuttut (Labrador)
Robustly ergative	Less ergative	Weakly ergative

However, it is not immediately obvious that the pattern seen in (53) truly reflects an *ongoing change*, rather than simply cross-dialectal variation, in the absence of the relevant historical data. The evidence required to make such a claim might include dialectal differences between older and younger speakers of Inuktitut or Labrador Inuttut, such that the older speakers have a more robustly ergative grammar (closer to that of Kalaallisut) than the younger speakers. I do not know if such studies already exist, but this would be an important avenue for future research.

# 2.6 Chapter summary

In this chapter, I presented an overview of the morphological and syntactic properties of Inuktitut. I reviewed aspects of Inuktitut morphology, such as its case inventory, mood/agreement-system, and various allomorphic processes taking place across morpheme boundaries within the word. I also discussed the clause level structure of Inuktitut.

Finally, and most crucially to the rest of this thesis, I provided a summary of previous research on microvariation in the status of ergativity across Inuit, and showed that most of this literature has focused on the properties of the MOD object of antipassive constructions as a proxy for evaluating the status of ergativity. We saw evidence suggesting that the antipassive construction in Inuktitut and other closely related varieties exhibit a number of semantic properties that diverge from the "canonical" pattern seen in Kalaallisut. Whereas MOD objects in Kalaallisut are described as obligatorily narrow scope (e.g. Bittner, 1994), this is not the case for the Eastern Canadian varieties of Inuit, in which the semantics of the antipassive object appear to be looser.

However, what has been left unaddressed thus far concerns whether we find microvariation in the grammatical properties of the *ergative construction*. In particular, while it is clear that the semantics of the antipassive object differs across Inuit, it is far from clear from the previous literature whether this corresponds to a *tightening* of the restrictions on the ABS object of the ergative construction.

In the next two chapters, I show that this is a gap in these previous studies. The Inuit languages *do* exhibit variation in the grammatical properties of the ergative construction. As I will show, this variation may be specifically pinpointed to the properties of the high ABS object c-commanding the ERG subject. Thus, the status of ergativity across Inuit not only tracks the semantic interpretation of the MOD object, but actually *more closely* tracks the structural position of the ABS object.

# **Chapter 3**

# Pronominal clitic doubling in Inuktitut and syntactic microvariation

This chapter identifies a number of morphosyntactic and semantic properties of Inuktitut that diverge from previous characterizations of Inuit, especially of Kalaallisut. I argue that these clusterings of properties are due to a single difference across Inuit varieties: in Inuktitut, the morphemes cross-referencing ABs objects are the product of *clitic doubling*, whereas in Kalaallisut the same morphology is  $\phi$ -agreement. I additionally argue that the pronominal clitics in Inuktitut are obligatorily interpreted as *anaphoric definites*, and explore the cross-linguistic implications of this idea. Finally, this chapter sets the stage for the rest of the dissertation, whose subsequent chapters all build on the  $\phi$ -agreement vs. clitic doubling distinction argued for here.

# 3.1 Introduction

In Chapter 2, I presented an overview of Inuit morphosyntax, focusing on case, agreement, and clause structure, and discussed microvariation pertaining to the status of ergativity in the Eastern Canadian varieties (e.g. Johns, 2001, 2006, 2017; Carrier, 2012, 2017; Murasugi, 2014, 2017). This discussion raised two interrelated questions. First, a *theoretical* question: how do we model this weaker patterning in Inuktitut? And, second, a *comparative* question: how exactly does Inuktitut's grammar differ from that of more robustly ergative varieties?

To address these questions, this chapter starts by charting various hitherto unnoticed properties of Inuktitut that diverge from previous characterizations of Inuit, mainly based on the literature on Kalaallisut (Sadock, 1980, 2003; Fortescue, 1984; Bittner, 1987, 1994; Geenhoven, 1998). Strikingly, these differences are all localized to nominal arguments in *ABS object position*, suggesting that the answers to the above questions lie in the analysis of these arguments. I propose that the crucial distinction concerns whether ABS objects are cross-referenced by  $\phi$ -agreement (as in Kalaallisut) or pronominal clitics (as in Inuktitut). In Inuktitut, clitic doubling—analyzed here as a movement chain consisting of a full DP and a pronominal D<sup>0</sup>—constrains the interpretation and distribution of the DP associate; in

contrast, these effects are wholly absent in Kalaallisut, in which there is no clitic doubling.

This conclusion has ramifications for our understanding of the  $\phi$ -agreement vs. clitic doubling distinction. Although it has been suggested that *all* instances of apparent object  $\phi$ -agreement are actually doubled clitics (Woolford, 2008; Nevins, 2011), the existence of both options in Inuit is evidence that this claim is too strong. Moreover, the fact that Kalaallisut and Inuktitut make use of the same *morphological forms* constitutes a novel argument against the usage of certain morphophonological or allomorphic diagnostics to distinguish between  $\phi$ -agreement and clitic doubling (Zwicky and Pullum, 1983; Nevins, 2011). Instead, the empirical observations pointing towards this difference across Inuit varieties rely on the theoretically-grounded assumption that clitic doubling structures contain a pronominal D<sup>0</sup>.

I organize this chapter as follows. In §3.2, I present an overview of the  $\phi$ -agreement vs. pronominal clitic doubling distinction, as well as some issues with its application to Inuit. Crucially, I demonstrate that there is no theoretical basis for excluding pronominal clitics from participating in allomorphic and other morphological processes, thus undermining previous morphological diagnostics for this distinction. In §3.3, I argue that ABS objects in Inuktitut undergo clitic doubling, based on a number of interpretive ABS object asymmetries in the language; in particular, I show that quantificational ABS objects in Inuktitut are obligatorily interpreted as strongly D-linked. In contrast, the absence of these asymmetries in Kalaallisut entails the absence of clitic doubling. §3.4 presents an analysis of clitic doubling based on Baker and Kramer (2016), wherein clitic doubling involves phrasal movement, followed by a syntactic operation, Reduce, which converts the higher DP to a pronominal D<sup>0</sup>. I then demonstrate that pronominal clitics in Inuktitut must be interpreted as anaphoric definites, and extends this observation to the Matching Requirement observed in clitic doubling structures across languages (cf. Suñer, 1988). Finally, §3.5 situates this idea within a larger cross-linguistic typology of pronominal clitic meanings.

# 3.2 Object $\phi$ -agreement vs. clitic doubling

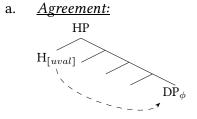
This section examines diagnostics for  $\phi$ -agreement vs. clitic doubling, in light of recent literature seeking to reanalyze many apparent instances of the former as the latter. I also discuss the role of the Inuit languages in this debate, given that Inuit object-referencing forms fail most canonical (i.e. morphological) diagnostics for clitichood.

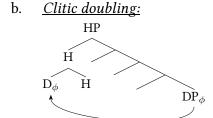
#### 3.2.1 Overview

Verbal agreement morphology is commonly analyzed as the morphological reflex of  $\phi$ -feature valuation of a probing head H<sup>0</sup> by a  $\phi$ -bearing goal, the result of Agree (Chomsky, 2000, 2001). In contrast, clitic doubling is the co-occurrence of a reduced pronominal element (a clitic) with a full DP associate. Moreover, unlike the surface-similar phenomena of Clitic Left- and Right-Dislocation, the full DP is assumed to be in its base-generated po-

sition, not topicalized or otherwise dislocated, and the doubled clitic is generally optional. Although analyses of clitic doubling differ in their specific implementations, it is often argued that clitic doubling is derived by movement; i.e. the clitic and its associate form the head and tail of a movement chain (Torrego, 1988; Uriagereka, 1995; Anagnostopoulou, 2003; Arregi and Nevins, 2012; Harizanov, 2014; Baker and Kramer, 2016, to appear). The structural difference between  $\phi$ -agreement and clitic doubling is represented in (1). At this point, I am agnostic about the exact analysis of clitic doubling, though I will return to this later.

# (1) $\phi$ -agreement vs. clitic doubling





Historically, clitic doubling has often been discussed in the context of European languages, for instance Romance languages or languages of the Balkans (see, for instance, Anagnostopoulou 2006 and references therein). Some canonical examples of clitic doubling are given in (2), from Romanian and Greek:

# (2) Canonical object clitic doubling

a. Romanian:

(II) văd pe Ion him.cl see.1s pe John 'I saw John.'

(Farkas, 1978)

b. *Greek*:

(ton) idhame to Jani 3MS saw.1P the John.Acc 'We saw John.'

(Philippaki-Warburton et al., 2004)

Recently, however, it has been claimed that many cases of what has been standardly assumed to be object  $\phi$ -agreement should actually be analyzed as object clitic doubling (e.g. Woolford, 2008; Preminger, 2011; Nevins, 2011; Kramer, 2014; Anagnostopoulou, 2016). In many of these analyses, it is further proposed that languages exhibit a *split* between the morphology cross-referencing subjects and objects: whereas subject-referencing morphology is genuine  $\phi$ -agreement, object-referencing morphology is uniformly the product of clitic doubling, even if they do not on the surface resemble the more canonical instances of clitic doubling shown in (2).

An example of such a language is Amharic, as discussed by Kramer (2014). Kramer

<sup>&</sup>lt;sup>1</sup>Against this, however, Sportiche (1993, 1996) takes pronominal clitics to be generated in their surface position, while Bleam (2000) takes an intermediate approach that incorporates both analyses.

(2014) argues that the object-referencing morphology found in (3a) has the same underlying structure as the Bulgarian and Romanian clitics above, despite surface appearances. This is due to various observable differences between the subject- and object-referencing morphemes. For example, whereas the former is obligatory, suggestive of genuine  $\phi$ -agreement, the presence of the latter is *optional*, appearing in (3a) but not (3b). Moreover, the contrast above also shows that whether the object-referencing morpheme surfaces depends on the semantic properties of the associate DP; non-specific, indefinite objects cannot undergo clitic doubling, as shown in (3b). This kind of semantically-determined optionality is a common feature of canonical clitic doubling (Suñer, 1988; Dobrovie-Sorin, 1990; Anagnostopoulou and Giannakidou, 1995; Gutierrez-Rexach, 2000; Anagnostopoulou, 2006; Franks and Rudin, 2005; Kallulli, 2008; Kramer, 2014; Baker and Kramer, to appear, a.o.).

# (3) Amharic: Object clitic doubling

a. <u>Definite/specific object → clitic doubling:</u>
Almaz doro wät'-u-n bäll-atʃtʃ-ɨ**w**Almaz.F chicken stew-DEF.M-ACC eat-3Fs.s-3Ms.o
'Almaz ate the chicken stew.'

b. <u>Indefinite/non-specific object → no clitic doubling:</u>
 Almaz doro wät' bäll-at∫t∫(\*-iw)
 Almaz.F chicken stew eat-3FS.S-3MS.O
 'Almaz ate chicken stew.'

(Kramer, 2014)

This conclusion that Amharic object-referencing morphemes have the structure of pronominal clitics is somewhat at odds with more traditional literature on the affix vs. morphophonological clitic distinction (e.g. Zwicky and Pullum, 1983). In this literature, doubled clitics are expected to be more phonologically independent than exponents of  $\phi$ -agreement (which are, in turn, assumed to be affixes). For example, English possessive -s is very unselective in what it attaches to, an indication of clitichood, (4). However, as argued by Nevins (2011), it is unclear whether any single bound morpheme can simultaneously pass all diagnostics for clitichood (i.e. exhibit complete morphophonological separation from its stem). In apparent opposition to its clitic-like behaviour, English possessive 's also displays allomorphy, triggered by the morphophonological properties of the stem it attaches to.

# (4) English: possessive 's behaves like a clitic

- a. [Mary]'s mom just arrived.
- b. [The student I reprimanded earlier]'s mom just arrived.

# (5) English: possessive 's also subject to stem-triggered allomorphy These cats' [kæts / \*kætsəz] collars are extremely glittery.

Instead, Nevins proposes various morphosyntactic diagnostics to distinguish between pronominal clitics and genuine  $\phi$ -agreement. The first two, *person-complementarity* and

omnivorous number effects, are not relevant to Inuit. Person-complementarity is essentially the Person-Case Constraint (the PCC), which bans  $\phi$ -feature combinations of ditransitive internal arguments in which one of the arguments is 1st/2nd person (Perlmutter, 1971; Bonet, 1991, 1994; Béjar and Rezac, 2003, a.o.). Although Johns and Kučerová (2017) propose that certain varieties of Inuit display this effect, Compton (2018) shows that the pattern seen in these varieties is not the result of the PCC.<sup>2</sup> Omnivorous number effects, to my knowledge, are not attested in Inuit. Moreover, it is not obvious that omnivorous agreement is specific to clitic doubling, as it also appears in languages with  $\phi$ -agreement (e.g. Preminger, 2011, 2014). For these reasons, I concentrate instead on Nevins' third diagnostic, *tense-variance*.

# 3.2.2 Tense-variance and mood-variance

The diagnostic of tense-variance is meant to exploit the idea that, since agreement expones  $\phi$ -features on a functional head (e.g.  $T^0$  for subject  $\phi$ -agreement), it might be expected to interact with other features on that head. This explains why the surface realization of  $\phi$ -agreement often co-varies with tense.<sup>3</sup> Conversely, pronominal clitics— $D^0$ s that adjoin to their host (again, often  $T^0$ , at least in many Indo-European languages)—are predicted to be invariant. This contrast is borne out in Spanish:

# (6) Spanish: Tense-(in)variance in subject-vs. object-referencing morphology

- a. **Lo** compr**ó** 3s.ACC bought.3s 'She bought it.'
- b. **Lo** compr**ará**3s.Acc will.buy.3s
  'She will buy it.'

Kramer (2014) observes that Nevins' diagnostic is also borne out in Amharic, converging with her other arguments for object clitic doubling. As shown below, the realization of subject-referencing morphology is sensitive to aspect, consistent with a  $\phi$ -agreement treatment. Conversely, the object-referencing morphemes are invariant, not only for aspect (shown here), but also for voice and mood.

<sup>&</sup>lt;sup>2</sup>Specifically, Johns and Kučerová (2017), citing Johns (1996), observe that the Labrador Inuttut varieties often require switching to the indicative mood from the standard participial, when the object of an ergative construction is 1st/2nd person (regardless of the  $\phi$ -features of the ERG subject). According to this line of argumentation, this restriction is indicative of the clitic status of the object-referencing morphology. However, Compton (2018) notes that this effect appears to be a *general restriction* on 1st/2nd person  $\phi$ -morphology. Crucially, the indicative mood is also used in these varieties when the *intransitive subject* (cross-referenced by subject  $\phi$ -morphology) is 1st/2nd person as well.

<sup>&</sup>lt;sup>3</sup>More precisely, Nevins (2011) proposes that, if a given argument-referencing morpheme displays tensevariance, it must be genuine φ-agreement; if it does not, then it is not suggestive in either direction. Thus, while this diagnostic is agnostic as to what the *absence* of tense-variance might indicate, it argues unidirectionally that tense-variant morphemes are exponents of φ-agreement.

# (7) Amharic: TAM-(in)variance in subject-vs. object-referencing morphology

<u>Perfect:</u>a. säbbär-ä-ñn<u>Imperfect:</u>yi-säbr-äñn

break.perf-3ms.s-1s.o 3ms.s-break.impf-1s.o

b. säbbär-*ä*-**h** *y*i-säbr-i**h** 

break.perf-3ms.s-2ms.o 3ms.s-break.impf-2ms.o

c. säbbär-ä-w vɨ-säbr-äw

break.perf-3ms.s-3ms.o 3ms.s-break.impf-3ms.o

(Kramer, 2014)

Building on this discussion of morphological variance, Compton (2016) argues that Inuit presents a counterexample to the hypothesis that object-referencing morphemes across languages are pronominal clitics rather than genuine  $\phi$ -agreement. Compton argues that Nevins's (2011) tense-variance diagnostics may extend beyond the TP-domain, if the relevant argument-referencing morphemes are hosted on a different head. In Inuit, this morphology is in the extended CP-domain (see Chapter 2) and displays *mood-variance*, in that its realization is morphologically conditioned by mood or clause type. This is shown in (8)-(9). In these examples, the initial mood-marking C(V) sequence (participial/declarative *-ja* in (8) and interrogative *-v* in (9)) triggers *suppletive allomorphy* on the argument-referencing portions of these forms. As a result, the declarative and interrogative paradigms bear no resemblance to each other. Note also that the argument-referencing morphemes in these constructions are *morphologically opaque*, encoded as subject/object portmanteaux such that one cannot discern from them the individual  $\phi$ -features of the subject and object.

#### (8) *Inuit declarative endings*

- a. taku-qqau-**jara** see-rec.pst-1s.S/3s.O 'I saw her.'
- b. taku-qqau-**jait** see-rec.pst-2s.S/3s.O 'You saw her.'
- c. taku-qqau-**jarma** see-REC.PST-2S.S/1s.O 'You saw me.
- d. taku-qqau-**janga** see-REC.PST-3s.S/3s.O 'She saw her.'

# (9) Inuit interrogative endings

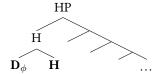
- a. taku-qqau-**vigu** see-rec.pst-int.1s.S/3s.O 'Did I see her?'
- b. taku-qqau-**viuk** see-rec.pst-int.2s.S/3s.O 'Did you see her?'
- c. taku-qqau-**vinga** see-rec.pst-int.2s.S/1s.O 'Did you see me?'
- d. taku-qqau-**vauk** see-rec.pst-int.3s.S/3s.O 'Did she see her?'

Given this mood-variance, Compton (2016) argues that the patterns shown above pass Nevins's (2011) diagnostic for genuine  $\phi$ -agreement as opposed to clitic doubling. Fur-

thermore, as this variance affects the collective realization of subject and object features in portmanteaux, Compton concludes that the object-referencing portions of these portmanteaux cannot be clitic in nature.

However, it is not obvious why the presence of tense- or mood-variance necessarily entails that the relevant morphemes cannot be pronominal clitics. If clitics are adjoined to a functional head, as in (10). then they are both structurally and linearly adjacent to their hosts, and thus should be sufficiently local to be subject to allomorphy.

# (10) Clitic and host are structurally local



First, it is already known that clitics can trigger allomorphic effects on other adjacent clitics. This is illustrated below with Spanish, though see Arregi and Nevins (2012) and others for further cross-linguistic instantiations of this. In Spanish, ditransitive constructions that require both ACC and DAT clitics undergo an obligatory morphological effect, wherein the DAT clitic is replaced by the reflexive form, (11) (Perlmutter, 1971; Bonet, 1991, 1995; Nevins, 2007). This pattern, dubbed the *spurious* 'se' effect in much literature, is generally assumed to be morphological in nature. Nevins himself (in Nevins 2007) suggests that this effect is derived from a morphological impoverishment rule applying in the context of another clitic.

# (11) Spanish: Spurious se effect on DAT/ACC clitic clusters

a. DAT clitic:

**Le** doy esto 3s.DAT I.give this 'I give this to him.'

b. ACC clitic:

Lo ve 3s.Acc he.sees 'He sees him/it.'

c.  $\underline{DAT + ACC \ clitic \rightarrow spurious \ se}$ :

**Se lo** doy REFL 3S.ACC I.give 'I give it to him.'

(Bonet and Harbour., 2012)

Allomorphy between a pronominal clitic and its host is also attested. In Yimas, for example, the argument-referencing morphemes are analyzed by Yuan (2017a) as doubled clitics, given that they are optional, their occurrence being determined by information structural

considerations such as topicality and givenness, (12) (cf. Foley, 1991).4

# (12) Yimas: Argument-referencing morphemes are optionally doubled clitics

# a. Full doubling pattern:

kacmpt payum **ya-mpu**-yamal-wat canoe.VIII.PL man.PL VIII.PL.ABS-3P.ERG-carve-HAB 'The men usually carve the canoes.'

#### b. <u>Partial doubling pattern:</u>

m-n **impa**-tay-mpi-kwalca-k paympan DEM-SG 3D.ABS-see-SEQ-rise-IRR eagle 'He, the eagle, saw them both and took off.'

# c. *No doubling pattern:*

num-n-mat Kampramanan wapal-k villager-obl-pl place name climb-irr 'The villagers climbed Kampramanan.'

(Foley, 1991)

As seen in (13), these clitics also interact with other elements (e.g. complementizers and mood markers) in or near  $C^0$ , the head to which they are adjoined (Foley, 1991; Phillips, 1993, 1995; Yuan, 2017a).

# (13) Yimas: $C^0$ triggers allomorphy on adjacent clitics

#### a. Baseline:

**pu**-ŋa-tay 3P.ABS-1S.DAT-see 'They saw me.'

#### b. <u>Allomorphic ABS clitic displacement:</u>

namat [m-Ø-ŋa-tpul-c-um]
person.pl rel-(3p.abs)-1s.dat-hit-perf-3p
'the people who hit me'

(Foley, 1991)

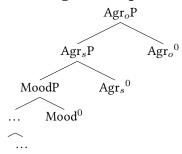
If clitics are in principle not excluded from displaying allomorphy triggered by adjacent clitics or adjacent heads, then why would they not be expected to display tense- or mood-variance? Indeed, I will show below that we may derive mood-variance in Inuktitut using fairly standard postsyntactic processes operating on structurally adjacent heads.

<sup>&</sup>lt;sup>4</sup>Indeed, Foley (1991) describes them as *pronominal affixes*, in line with Jelinek (1984), and says the following (p. 233): "Thus far, I have been discussing referents which are old or established information and can therefore be indicated by a pronominal affix. What about new information, characters or props now just being introduced in the discourse? These can appear with or without a pronominal affix [...] [(12c)] has an intransitive verb, *wapal*-'climb', with no pronominal affixes [...] These examples all come from running texts in which these nouns are just being introduced or re-introduced after a longish gap. They are new information."

# 3.2.3 Mood-agreement-clitic portmanteaux in Inuktitut

In Inuit, as shown above, the portmanteau argument-referencing morphology consists of (at least) three subcomponents: mood, subject-referencing morphology, and object-referencing morphology. Given that mood seems to consistently surface as a C(C)V cluster at the left edge of these morphemes, we may conclude that the head hosting mood is structurally lower than the head(s) cross-referencing the  $\phi$ -features of the subject and object. We also saw in Chapter 2 that, under certain moods, object-referencing morphology does not appear within a portmanteau, surfacing instead at the right edge of the word. Based on these factors, I assume the following syntax for the articulated left periphery of the clausal spine:

# (14) Mood-agreement portion of Inuit clausal spine



The structure given in (14) represents how the clausal spine should look if both subject-referencing and object-referencing morphology were exponents of genuine  $\phi$ -agreement. I first sketch an analysis of how to derive portmanteaux given the tree in (14), and then extend the analysis to a clitic doubling structure, which will look slightly different.

#### Spanning and portmanteaux

In previous literature, portmanteaux have been accorded a number of morphological analyses, for instance arising via Fusion (Halle and Marantz, 1993; Cable, 2005), contextual allomorphy (Fenger, 2018), Vocabulary Insertion at non-terminal nodes (Neeleman and Szendrői, 2007; Radkevich, 2010), or Spanning (Svenonius, 2012; Merchant, 2015). For the purposes of this thesis, I will adopt a spanning analysis, as spans allow us to make sense of the Inuit mood-agreement morphology fairly straightforwardly, though the Inuit data may also be compatible with the other approaches listed above. The notion of a 'span' refers to a series of contiguous, structurally adjacent heads within an extended projection (Grimshaw, 2000, 2005). Given that the Inuit mood and argument-referencing nodes in (14) are all

<sup>&</sup>lt;sup>5</sup>One could further decompose these portmanteaux to four subcomponents, depending on one's analysis of the vowel that surfaces immediately to the right of mood. As discussed in Chapter 2, in at least some moods the realization of the vowel is predictable, tracking the number of arguments being cross-referenced (Spreng, 2012; Yuan et al., 2016). Whereas Spreng (2012) considers this vowel to be part of the mood component of the portmanteau, Yuan et al. (2016) suggest that it may underlyingly constitute its own syntactic head.

<sup>&</sup>lt;sup>6</sup>In most other parts of this thesis, however, I will simply represent the left periphery as CP.

within the clausal left-periphery, we may assume that they fall within the extended CP-domain.

Under a spanning analysis, a single exponent may be inserted into a span of multiple heads within an extended projection, thus deriving portmanteau forms. An illustration is presented below from Greek. As discussed by Merchant (2015), the realization of Greek verb stems often expones voice and aspect features. Given an extended vP-domain that contains the following series of heads: V-v-Voice-Asp-T, this creates the following list of non-trivial spans:

# (15) Greek spans in the extended vP-domain

```
<V, v> <v, Voice> <Voice, Asp> <Asp, T> <V, v, Voice> <v, Voice, Asp> <Voice, Asp, T> <V, v, Voice, Asp> <v, Voice, T> <V, v, Voice, Asp, T>
```

While not every span in (15) is realized with a unique exponent in Greek, the empirical observation is that many of the spans in (15) *are* exponed. Merchant provides several such constructions; a few are exemplified in (16) below. Moreover, there are no forms in Greek that spell out non-contiguous (i.e. non-local) heads (e.g. \*<V, Asp> to the exclusion of v and Voice).

# (16) Greek: Verbal morphemes realize spans

```
a. <<u>\( \bar{V}, \( v, \) \) Voice> + \( \lambda \) sp> + \( \lambda \) *\( \bar{O} \) *\( \bar{O} \) *\( \lambda \) *\( \lamb</u>
```

Applying this idea to Inuit mood and argument-referencing portmanteaux, we predict the following series of non-unary spans in (17). I now suggest that all of these spans are exponed in Inuit (including the unary <Mood> and <Agr $_o>$  spans $^9$ ).

<sup>&</sup>lt;sup>7</sup>Each individual head also constitutes a trivlal, one-membered span.

<sup>&</sup>lt;sup>8</sup>This verb complex is actually open to two possible interpretations under the present theory. As Merchant (2015) notes, we may also parse it as:  $\langle V, v \rangle + \langle Voice, Asp \rangle + \langle T \rangle$ .

 $<sup>^9</sup>$ The unary <Agr $_s>$  span, as far as I am aware, does not have its own exponent in Inuit. Given the theory of spans set up above, it would only ever surface in a sequence consisting of three unary spans: <Mood>, <Agr $_s>$ , and <Agr $_o>$ .

# (17) Inuit mood-agreement spans

a. <Mood,  $Agr_s$ ,  $Agr_o>$  b. <Mood,  $Agr_s>$  c. <Agr $_s$ ,  $Agr_o>$ 

The span given in (17a) is often found in Inuit, appearing for instance under the interrogative mood. The examples in (18) serve to demonstrate that the subcomponents of the portmanteaux under the interrogative mood are fairly opaque, save from the initial consonant /v/, and are thus most naturally analyzed as exponing all three heads at once. Similarly, the span <Mood,  $Agr_s$ > may be detected in the constructions in which object-referencing morphology is realized outside of the portmanteau form, as given in (19) (in these cases, <Agr\_o> also forms its own span). Finally, I suggest that the span <Agr\_s,  $Agr_o>$  is found in the dubitative mood; as shown by Dorais (1988), all of the forms in the dubitative-agreement paradigm begin with the sequence -*mmanga* followed by either subject-referencing morphology (<Agr\_s>) or a portmanteau subject/object-referencing form (<Agr\_s, Agr\_o>). The latter may be seen in (20c). In the examples below, the non-unary spans are boxed.

# (18) < *Mood, Agr<sub>s</sub>, Agr<sub>o</sub>> portmanteaux*

a. taku-**vagit** see-INT.1s.S/2s.O 'Do I see you?' b. taku-vigu see-INT.1s.S/3s.O 'Do I see him/her/it?' (Dorais, 1988)

# (19) <*Mood,* $Agr_s > portmanteau + <$ $Agr_o >$

a. taku-**&uni** see-CTMP.3s.S 'While she sees' b. taku-**&uni**-uk see-CTMP.3s.S-3s.O 'While she sees it' (Dorais, 1988)

# (20) <Mood> + <Agr<sub>o</sub>> portmanteau

a. taku-**mmanga-t** see-dub-3s.S '(I wonder) if she sees'

b. taku-**mmanga-rma** see-dub-1s.S '(I wonder) if I see'

c. taku-**mmanga-**kku see-DUB-1s.S/3s.O '(I wonder) if I see her'

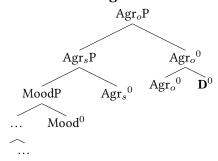
(Dorais, 1988)

<sup>&</sup>lt;sup>10</sup>Throughout the examples below, the non-boxed, bolded morphemes are given to provide evidence for the spans I am proposing.

# Mood-agreement-clitic complexes as spans

Moving on now to clitic doubling, recall that the core proposal of this chapter is that, unlike Kalaallisut (which presumably has the structure given in (14) above), the object-referencing morphemes in Inuktitut are pronominal clitics. I argue that, prior to Vocabulary Insertion, the mood-agreement-clitic complex has the structure as in (21). This structure is nearly identical to the one above, except that (21) contains an additional  $D^0$ -element adjoined to  $Agr_o^{~0}$ . <sup>11</sup>

# (21) Clitic doubling structure in Inuktitut



I take  $\operatorname{Agr}_o{}^0$  not to represent head hosting the object's  $\phi$ -features, but rather as a place-holder for the probe that triggers clitic movement to begin with. This is necessary, given that we have established in Chapter 2 that clitic doubling in Inuktitut is driven by Agree. The question that arises here is whether the pronominal  $\operatorname{D}^0$  may 'count' as part of the same span as the other heads. Recall that spans may only be formed within a given extended projection in the sense of Grimshaw (2000, 2005); according to Grimshaw's theory, each head within an extended projection is related via *selection*. Therefore, we may reword this question by asking if  $\operatorname{D}^0$  and  $\operatorname{Agr}_o{}^0$  form any sort of selection-based relationship.

I propose that this is plausible, given the idea that *selection itself is Agree-based* (Rizzi, 2008; Donati and Cecchetto, 2011; Müller, 2017; Yuan, 2017b). This idea takes External Merge to involve an Agree relation between a head  $\rm H^0$  in the workspace and a root phrase in the existing derivation. If selection is fundamentally an Agree relation, then logically a pronominal clitic that is targeted by some head (here,  $\rm Agr_{\it o}^{\it o}$ ) should be eligible to participate within the same span as this head.

Thus, I have shown that pronominal clitic doubling structures are theoretically compatible with portmanteau morphology. Under a spanning analysis, for instance, the pronominal  $D^0$  clitic may be analyzed as occurring within the same span (extended projection) as its clitic host, and is thus eligible to be spelled out as part of a single morpheme exponing the entire span. As mentioned earlier, the mood-sensitive nature of Inuktitut pronominal object clitics may also be captured under the other analyses of portmanteaux summarized above, provided that these approaches also regard the pronominal clitic to be sufficiently local to its host head; however, I will leave a more detailed consideration of these alterna-

 $<sup>^{11}</sup>$ Note that (21) is meant to represent what the clitic doubling structure looks like in the postsyntactic component, after Merger takes place, so that the pronominal D<sup>0</sup> is adjoined to its host, Agr $_o$ <sup>0</sup>. This idea will be clarified later in this chapter, as well as in Chapter 5.

tions for future research.

To sum up, this section offered arguments against morphological diagnostics for the  $\phi$ -agreement vs. clitic doubling distinction. As I noted, traditional analyses (à la Zwicky and Pullum 1983) are heuristic in nature, and presuppose a set of morphological differences between the two that are not necessarily borne out. Similarly, Nevins's (2011) approach ultimately does not offer a clear predictor for whether a given morpheme (either  $\phi$ -agreement or clitic) may interact with structurally adjacent heads. On this basis, I argue that it is generally more fruitful to frame diagnostics distinguishing  $\phi$ -agreement and clitic doubling around the *structural* and *derivational* relationship between the referencing morpheme and its associated argument. If clitic doubling involves a syntactic dependency between a pronominal D<sup>0</sup> and a co-indexed DP, then the pronominal status of the clitic should have consequences for the distribution and interpretation of the DP, as already illustrated above. Such effects are unambiguously expected not to correlate with the presence of genuine  $\phi$ -agreement, which are semantically vacuous.

In the next section, I will show below that this logic can be straightforwardly applied to varieties of Inuit, with welcome results. A close examination of Inuktitut will reveal several previously unnoticed patterns concerning the distribution and interpretation of ABS objects, i.e. the arguments cross-referenced by object-referencing morphology. Crucially, I will argue that these patterns follow from an analysis that takes the object-referencing morphemes to be instances of  $pronominal\ D^0$ , doubling—and constraining the interpretation of—their ABS object associates. Thus, though Inuktitut passes morphological tests for object  $\phi$ -agreement, the morphemes in questions are actually clitics. I also show that these patterns are absent in other varieties of Inuit such as Kalaallisut, suggesting that object-referencing morphemes in Kalaallisut are exponents of genuine  $\phi$ -agreement, not pronominal clitics. In other words, Inuit displays a cross-dialectal split in the nature of object-referencing morphology. The existence of this split, in turn, undermines the utility of relying on morphological diagnostics (including tense- and mood-variance), since the relevant morphemes in Inuktitut and Kalaallisut are morphologically identical.

# 3.3 Interpretive asymmetries: Object clitic doubling in Inuktitut

This section presents several semantic "ABS object asymmetries" in Inuktitut—that is, contrasts between ABS objects and all other arguments in the language (including ABS subjects). The exact nature of these contrasts, and the very fact that they distinguish ABS objects in particular, are highly reminiscent of *object clitic doubling*. This conclusion is drawn in light of striking parallels with constructions identified as clitic doubling in less familiar languages. Conversely, the absence of these asymmetries in other Inuit varieties such as Kalaallisut suggests the absence of clitic doubling. Thus, the Inuit languages display a split in the underlying status of their object-referencing morphemes.

While this section (and the rest of this chapter, more generally) focuses on interpretive asymmetries, Chapter 5 will also introduce morphosyntactic asymmetries that further corroborate the object  $\phi$ -agreement vs. clitic doubling distinction.

# 3.3.1 The "canonical" Inuit pattern (Kalaallisut)

As discussed in Chapter 2, ergative and antipassive constructions in Inuit are known for displaying distinct semantics, especially with respect to the interpretation of the internal argument. The exact effect is difficult to pinpoint, given the lack of definite articles in Inuit. It has been variously characterized as pertaining to definiteness (Fortescue, 1984; Hallman, 2008), topicality (Berge, 1997, 2011; Johns and Kučerová, 2017), and specificity/scope (Bittner, 1987, 1994; Manga, 1996; Wharram, 2003).

Regardless of the exact nature of the effect, however, there is consensus among almost all researchers that the divide distinguishes ABS arguments (both subjects and objects) in ergative constructions on the one hand, and MOD objects in antipassive constructions on the other. This characterization has primarily been based on the syntactic and semantic properties of Kalaallisut (West Greenlandic) in particular, which are relatively better-studied than those of other Inuit varieties (Fortescue, 1984; Bittner, 1987, 1994; Bok-Bennema, 1991; Geenhoven, 1998; Sadock, 2003). As a result, the pattern exemplified by Kalaallisut is often cited as the canonical Inuit patterning in the broader crosslinguistic or comparative literature on ergativity (e.g. Paul and Travis, 2006; Aldridge, 2008a,b, 2012; Deal, 2010; Polinsky, 2017).

In this section, I overview two key properties of Kalaallisut, as well as a standard analysis for these facts, before showing that Inuktitut differs from Kalaallisut in all of these respects. They are as follows:

#### (22) Key properties of Kalaallisut

- (i) <u>Scope:</u> ABS subjects/objects obligatorily take wide scope; мор objects obligatorily take narrow scope
- (ii) NPI licensing: Possible in all argument positions
- (iii) <u>Bittner's (1994) analysis:</u> ABS subjects/objects raise to a structurally high position—but may reconstruct at LF in select circumstances (e.g. for NPI licensing)

Beginning with scope, in (23a) we see that ergative constructions only permit collective readings of the ABS object, while (23b) shows that antipassive objects only permit distributive readings of the MOD object. In these examples, I have bolded the wide scope-taking argument (the ABS object in (a) and the ABS subject in (b)).

<sup>&</sup>lt;sup>12</sup>Note that we may immediately rule out definiteness as the relevant factor, given numerous examples from Kalaallisut showing that definite DPs may serve as MOD objects in antipassives (Bittner, 1987). These are given below with a proper name and possessive DP respectively. I will revisit this point in Chapter 7, the conclusion of this thesis.

# (23) Kalaallisut: Scopal contrasts between ABS vs. MOD arguments

#### a. <u>ERG-ABS (ergative):</u>

qimmit marluk **arnat pingasut** kii-vaat dog.P.ERG two.ERG women.P.ABS three.ABS bite-3P.S/3P.O 'Two dogs bit three women.' *Available reading:* Inverse scope only (3 > 2; \*2 > 3)

#### b. <u>ABS-MOD (antipassive):</u>

**qimmit** marluk arna-nik pingasu-nik kii-si-pput dog.P.ABS two.ABS woman-P.MOD three-MOD bite-AP-3P.S 'Two dogs bit three women.'

Available reading: Surface scope only (2 > 3; \*3 > 2) (Bittner, 1994)

Bittner (1987, 1994) argues that this contrast can be straightforwardly understood as a matter of scope, which, in turn, is fed by syntactic structure (see also Bittner and Hale 1996a,b). In ergative constructions, the ABS object raises out of VP, the domain of existential closure, to a position higher than the ERG subject, so it takes wide scope. In contrast, in antipassive constructions, the object remains in situ within the verb phrase, where it receives MOD case. Because the object remains VP-internal, it is obligatorily narrow scope.

The same pattern can be seen with respect to operators such as negation. Whereas ABS subjects and objects scope above negation, MOD objects scope below them.<sup>13</sup>

# (24) Kalaallisut: ABS vs. MOD scopal contrasts relative to negation

#### a. ABS subject:

atuagaq ataasiq tikis-sima-nngi-laq book. Abs one. Abs come-perf-neg-3s. S 'There is one (particular) book that hasn't arrived.' Available reading:  $\exists > \text{neg}$ ; \*Neg >  $\exists$ 

# b. ABS object:

suli Juuna-p **atuagaq ataasiq** tigu-sima-nngi-laa still Juuna-erg book.Abs one.Abs get-perf-neg-3s.S/3s.O 'There is one (particular) book Juuna hasn't received yet.' *Available reading:*  $\exists$  > Neg; \*Neg >  $\exists$ 

#### (i) Kalaallisut: Antipassive objects may be definite

### a. **Jesusi-mik** taku-si-vuq Jesus-mod see-AP-3s.S 'He saw Jesus.'

# b. **anguti-mi-nik** aa-lir-puq man-REFL.POSS-MOD fetch-AP-3s.S 'He went to fetch his man (father).'

(Bittner, 1987)

<sup>&</sup>lt;sup>13</sup>Bittner also tests the behaviour of ERG subjects, and finds that they can be interpreted ambiguously, i.e. can scope above or below negation. As mentioned in Chapter 2, however, this seems to be a matter of cross-dialectal variation. In the varieties of Inuktitut examined by Wharram (2003), for example, ERG subjects obligatorily take wide scope.

#### c. <u>MOD object:</u>

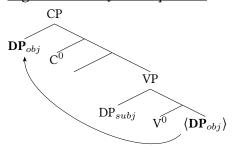
suli Juuna **atuakka-mik ataatsi-mik** tigu-si-sima-nngi-laq still Juuna.ABS book-MOD one-MOD get-AP-PERF-NEG-3s.S 'Juuna hasn't received (even) one book yet.'

Available reading: NEG > 3; \*3 > NEG (Bittner, 1994)

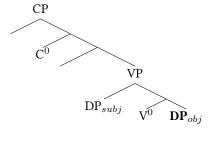
Based on these contrasts and other diagnostics, Bittner (1994) and Bittner and Hale (1996a,b) arrive at the following (simplified) structures for ergative and antipassive constructions respectively. I take the ABS argument to be in the extended CP-domain, diverging slightly from these previous authors, who take this position to be Spec-TP; this will become relevant later.

# (25) Kalaallisut: Structure of antipassive and ergative constructions

a. <u>Ergative: ABS object in Spec-CP:</u>



b. <u>Antipassive: In situ MOD object:</u>



Turning now to NPI licensing, the distribution of NPIs is a useful diagnostic for our purposes, because Inuit NPIs are sensitive to c-command. Under negation, negative minimizing indefinites (i.e. 'not even a single X') can be created by attaching the enclitic =luunniit¹⁴ to a quantifier or wh-indeterminate, as shown in the Kalaallisut examples in (26) (Fortescue, 1984; Bittner, 1994; Sadock, 2003; Hallman, 2008). Bittner (1994) demonstrates that the licensing of =luunniit requires the presence of a c-commanding negation morpheme -nngit, which is situated in the TP-domain. Though the constructions in (26) permit either matrix negation or embedded negation, only matrix negation is available if the embedded subject is an NPI.

# (26) Kalaallisut: NPI licensing requires c-commanding negation

- a. [atuagaq ataasir=luunniit tikis-sima-suq] ilumuu-<u>nngi</u>-laq book.ABS one.ABS=or come-PERF-PART.3S.S true-negation-3S.S 'It's not true that any book has come (yet).'
- b. \*miiqqa-p ataatsi-p=luunniit [Kaali Jaaku-mut child-erg one-erg=or Kaali.ABS Jaaku-ALLAT unatar-sima-nngin]-nirar-paa hit-perf-neg-say-3s.S/3s.O

  Intended: 'Any child said that Jaaku had not hit Kaali.' (Bittner, 1994)

<sup>&</sup>lt;sup>14</sup>Outside of negative contexts, the clitic *=luunniit* encodes disjunctive 'or.'

In (27), we also see that, as long as the c-command requirement is satisfied, the NPI may surface in any position, *including* ABS object position. Since ABS subjects and objects in Kalaallisut otherwise exhibit wide scope above negation, Bittner (1994) proposes that these ABS arguments undergo Ā-movement to the clausal left periphery (on par with other ABS arguments), but reconstruct at LF in order to be licensed by negation. Indeed, in the example in (27c), the ABS object NPI in Kalaallisut is indeed interpreted as a narrow scopetaking negative indefinite, in support of Bittner's proposal.

# (27) Kalaallisut: licensing of =luunniit NPIs available in all positions

a. ABS subject:

atuagaq **ataasir=luunniit** tiki-sima-<u>nngi</u>-laq book.ABS one.ABS=or come-PERF-NEG-3s.S 'No book has come (yet).' (Bittner, 1994)

b. <u>MOD object:</u>

kuruuni-nik **marlu-innar-nil=luunniit** piqa-<u>nngi</u>-langa kroner-MOD.P two-just-MOD.P=or have-NEG-1s.S 'I don't have even two kroner.' (Fortescue, 1984)

c. <u>ABS object:</u>

**kina=luunniit** taku-<u>nngi</u>-laa who.ABS=or see-NEG-3s.S/3s.O 'He didn't see anyone.'

(Fortescue, 1984)

To summarize, the pattern that is typically associated with Inuit is that ABS subjects and ABS objects take wide scope, while MOD objects take narrow scope. Concomitantly, it is assumed that ABS objects are structurally high, located in the clausal left periphery, while MOD objects remain in situ within the VP.

# 3.3.2 Microvariation across Inuit: ABS object asymmetries in Inuktitut

I now show that the pattern seen in Inuktitut diverges from that just shown for Kalaallisut. In Inuktitut, the contrast crucially distinguishes *ABS objects* on the one hand, from all other arguments (including *ABS subjects*) on the other hand. Moreover, I demonstrate that the exceptional behaviour of *ABS* objects seems to be unrelated to structural height or syntactic scope. Thus, in contrast to the set of properties listed in (22) for Kalaallisut, *ABS* objects in Inuktitut instead displays the following properties:

# (28) Key properties of Inuktitut ABs objects (and only ABs objects)

- (i) <u>Scope:</u> Obligatory apparent "wide scope" interpretation
- (ii) *NPI licensing:* Cannot form negative indefinites
- (iii) <u>D-linking:</u> When quantificational, obligatorily interpreted as strongly D-linked

To start, recall from Chapter 2 that, in Inuktitut, Mod objects may receive flexible interpretations (e.g. Johns, 1999, 2001, 2006; Carrier, 2012, 2017; Murasugi, 2017), and that this seems to be correlated with the weaker ergative patterning in Inuktitut. As a result, Inuktitut antipassive constructions do not permit the same range of interpretations as their Kalaallisut counterparts. However, what we also find is that, unlike in Kalaallisut, *ABS subjects* of intransitive verbs also receive flexible interpretations.

This is most comprehensively shown by Beach (2011), whose observations are mainly based on the Tarramiutut varieties of Inuktitut spoken in Nunavik (Arctic Quebec). Beach characterizes the relevant semantic effect in Inuktitut as pertaining to specificity, and shows that, whereas both ABS subjects and MOD objects may be interpreted as specific or non-specific, ABS objects are obligatorily specific. This is illustrated by testing the relative scope between arguments and quantificational adverbs such as *qautamaat* 'each day.' As illustrated below, non-ABS objects (e.g. ABS subjects and MOD objects) are ambiguous, (29a-b), while ABS objects may only be understood as taking scope above the adverb, yielding a specific interpretation, (29c).

#### (29) Inuktitut: An ABS object asymmetry

#### a. ABS subject:

qautamaat **ujaraq** kata-qatta-tuq each.day rock.ABS fall-HAB-3S.S 'Each day, a rock falls (i.e. not necessarily the same rock).' *Available readings:* Each > ∃; ∃ > each

#### b. MOD object:

qautamaat qimmi-**mik** taku-qatta-tunga each.day dog-mod see-hab-1s.S 'Each day, I see a dog (i.e. not necessarily the same dog).' *Available readings*: Each  $> \exists$ ;  $\exists$  > each

#### c. *ABS object:*

```
qautamaat qimmiq taku-qatta-tara
each.day dog.ABs see-HAB-1s.S/3s.O
'Each day, I see a dog (i.e. the same dog).'
Available reading: ∃ > each; *each > ∃
```

(Beach, 2011)

Again, this clearly diverges from the Kalaallisut pattern seen above. Whereas ABS subjects and ABS objects in Kalaallisut behave uniformly semantically, in Inuktitut we find a interpretive distinction between these two arguments. Furthermore, as indicated by the ambiguity of (29b), MOD objects in Inuktitut need not be narrow scope, in contrast to MOD objects in Kalaallisut. Thus, Inuktitut displays an ABS object asymmetry, a point that will be relevant to our analysis of clitic doubling: ABS objects in Inuktitut behave differently from all other arguments in the language, even ABS subjects.

I now present additional, novel data from Inuktitut that corroborate the asymmetry observed by Beach. As indicated in (28) above, the exact constellation of properties seen in

Inuktitut moreover shows that the semantic effect is distinct from syntactic scope, given some crucial contrasts with Bittner's (1994) description of Kalaallisut. This, in turn, indicates that the effect in Inuktitut cannot be derived by syntactic movement or structural height alone.

First, the Inuktitut examples in (30) are analogous to the Kalaallisut examples seen in the previous section—but display the interpretive contrast shown in Beach's (2011) data above. In (30a), we see that ABS subjects and MOD objects may *both* be interpreted as taking wide scope or narrow scope relative to each other. In contrast, (30b) demonstrates that ABS objects appear to be scope-rigid, permitting only the wide scope interpretation. Again, I have bolded the wide scope-taking arguments in these examples.

# (30) Inuktitut: ABS objects take wide scope

a. <u>ABS-MOD (antipassive):</u>

marruuk surusiit niri-qqau-jut pingasu-nit sivalaar-nit two.ABS child.P.ABS eat-REC.PST-3P.S three-P.MOD cookie-P.MOD 'Two children ate three cookies.'

Available readings: Surface scope (2 > 3) or inverse scope (3 > 2)

b. <u>ERG-ABS (ergative):</u>

marruuk surusiit niri-qqau-jangit **pingasut sivalaat** two.erg child.p.erg eat-rec.pst-3p.S/3p.O three.abs cookie.p.abs 'Two children ate three cookies.'

Available reading: Inverse scope only (3 > 2; \*2 > 3) (SB, PG)

The same divide between ABS objects and all other arguments is illustrated below with NPI-licensing, using the same NPI = luunniit seen in the previous section. First, I establish that, like in Kalaalliust, the NPI must be c-commanded by negation in Inuktitut. In (31), which are ECM constructions, the matrix NPI subject may only be licensed with matrix negation.

#### (31) Inuktitut: NPI licensing requires c-commanding negation

- a. atausi=**luunniit** inuk tabbunga-nira-i-<u>nngit</u>-tuq Jaani-mik one.Abs=or person.Abs here-say-Ap-Neg-3s.S John-Mod 'Not one person said that John is here.'
- b. \*atausi=**luunniit** inuk tabbunga-<u>nngi</u>-nira-i-juq Jaani-mik one.ABS=or person.ABS here-NEG-say-AP-3S.S Jaani-MOD *Intended:* 'Anyone said that John isn't here.' (SB, PG)

Consider now the Inuktitut data below. In Kalaallisut, we saw that, as long as the c-command requirement is satisfied, the NPI may surface in any position, *including* ABS object position. Recall moreover that, to account for this, Bittner (1994) takes ABS objects to undergo movement to the clausal left periphery but reconstruct at LF in order to be licensed by negation. In the Kalaallisut examples above, ABS object NPIs are interpreted as taking scope relative to negation, in support of Bittner's proposal.

In contrast to this, in Inuktitut we find another ABS object asymmetry: this NPI may appear in any position *except* in ABS object position.<sup>15</sup> In (32), we see that this NPI may surface in a variety of positions, including ABS subject, MOD object, and ALLAT indirect object position. Conversely, the ungrammaticality of this NPI in ABS object position is shown throughout (33); these sentences were confirmed by multiple speakers.<sup>16</sup>

# (32) Inuktitut: =luunniit NPIs available in most positions

a. ABS subject:

**kina=luunniit** saqi-lau-nngit-tuq who.abs=or show.up-pst-neg-3s.S 'Not a single person showed up.'

(NB, AB)

b. *MOD object:* 

niuvi-ruma-nngit-tunga **kisu-mi=luunniit** buy-want-neg-1s.S what-mod=or 'I don't want to buy a single thing.'

(SB, IQ)

c. <u>ALLAT indirect object:</u>

atausi-mu=luunniit inung-mut tuni-si-lau-nngit-tunga tamatuma-nik one-ALLAT=or person-ALLAT give-AP-PST-NEG-1s.S this-MOD arragu-ju-mik pikkaujjusiaqsar-mik year-PART-MOD award-MOD 'I didn't give an award to a single person this year.' (NB, AB)

# (33) Inuktitut: Unavailability of =luunniit NPIs in ABs object position

a. \*kisu=luunniit taku-qqau-<u>nngit</u>-tara

what.abs=or see-rec.pst-neg-1s.S/3s.O

Intended: 'I didn't see a single thing.'

(SB, IQ)

b. \*atausi=luunniit taku-qqau-<u>nngit</u>-tara inuk
one.ABS-or see-REC.PST-NEG-1s.S/3s.O person.ABS
Intended: 'I didn't see a single person.' (SB, PG)

c. *Context provided:* You are looking at an old group photo, and trying to figure out who everyone is.

\*ilisa-ri-<u>nngit</u>-tara **kina=luunniit** recognize-TR-NEG-1s.S/3s.O who.Abs=or *Intended:* 'I don't recognize a single person.'

(NB, PI)

Given Bittner's (1994) analysis of Kalaallisut, we might initially want to take the ill-

<sup>&</sup>lt;sup>15</sup>See also Hallman (2008) for the same observation, though he only tests the distribution of *=luunniit* NPIs only in MOD vs. ABS object position; he does not look at other arguments such as ABS subjects.

<sup>&</sup>lt;sup>16</sup>Two of the Inuktitut speakers consulted to not get the contrast reported here, but rather accept negative indefinite readings in all positions, including ABS object position. However, as pointed out in footnote 29 in §3.4.2, these are the same two speakers who permit a slightly wider range of pronominal clitic meanings. I believe these two factors are related, though leave a more detailed examination of this idea for future research.

formedness of the sentences in (33) as due to an exceptional inability for structurally high ABS objects to reconstruct. However, this is not a viable analysis. In (34), we see that NPIs trapped in wh-islands (licensed by matrix negation) may surface in MOD object position, but not ABS object position. Because these NPIs are inside islands, covert movement past matrix negation is not an analytical option.<sup>17</sup>

# (34) Inuktitut: Unavailability of ABS object NPIs not due to outscoping

#### a. <u>MOD object:</u>

Jaani iqauma-<u>nngit</u>-tuq [<sub>WH-ISLAND</sub> niri-lau-mmangaa Jaani.ABS remember-NEG-3S.S eat-PST-DUB.3S.S

# kisu-mi=luunniit ]

what-mod=or

'Jaani doesn't remember if he ate a single thing.'

#### b. ABS object:

\*Jaani iqauma-<u>nngit</u>-tuq [<sub>WH-ISLAND</sub> niri-lau-mmangaagu Jaani.ABS remember-NEG-3S.S eat-PST-DUB.3S.S/3S.O

# kisu=luunniit]

what.abs=or

Intended: 'Jaani doesn't remember if he ate a single thing.' (SB, PG)

Similarly, it can also be shown that the ill-formedness of the examples in (33) is directly related to the fact that the NPIs above are *negative indefinites*, formed by attaching *=luunniit* to a quantificational expression. In fact, *=luunniit* may also attach to non-quantificational expressions to form 'even' NPIs under negation. As shown in (35), *=luunniit* may happily cliticize to a proper name in ABS object position, with no apparent semantic distinction with its MOD object counterpart.

#### (35) Inuktitut: =luunniit available on definite ABS objects

Jaani=luunniit taku-qqau-nngit-tara

John.abs-or see-rec.pst-neg-1s.S/3s.O

'I didn't even see John.' (SB, IQ)

How do we make sense of the asymmetries shown so far? First, the fact that ABS objects behave differently from all other arguments in Inuktitut suggests that the semantic asymmetry does not correlate with morphological case (contra e.g. Wharram 2003); it is also contrary to much literature taking ABS subjects and ABS objects in Inuit to be structurally and hence semantically equivalent (Johns, 1987, 1992; Murasugi, 1992; Bittner, 1994; Bittner and Hale, 1996a,b; Manga, 1996; Spreng, 2006, 2012, a.o.).

Related to the latter point, the fact that minimizing NPIs cannot be licensed in ABS object position sheds some light on the exact nature of the semantic effect on Inuktitut ABS objects. Specifically, despite the apparent wide-scope or specific reading that ABS objects

<sup>&</sup>lt;sup>17</sup>Moreover, QR is generally clause-bound (e.g. May, 1977, 1985). Assuming that this also holds in Inuktitut, this would offer another argument against this alternative analysis.

get (shown at various points above), the distribution of minimizing NPIs in Kalaallisut vs. Inuktitut reveals that this reading is *not derivable from syntactic scope* (i.e. movement). The next section explores this conclusion in more detail and connects the effect to clitic doubling.

# 3.3.3 D-linking and pronominal clitic doubling

Following from the discussion above, I now introduce a third ABS object asymmetry in Inuktitut. This particular pattern reveals that the interpretation of the previously shown exceptional properties of ABS objects may be viewed as a D(iscourse)-linking effect, which is independently observable on wh-phrases in the language. D-linking is understood here as a semantic restriction on the domain of individuals to those that are contextually salient (e.g. Pesetsky 1987, though see also Etxeberria and Giannakidou 2010; Gillon 2013). Though I will illustrate this effect below with wh-phrases, the pattern is also replicable with non-wh quantificational expressions in Inuktitut. The existence of this D-linking effect will motivate the pronominal clitic doubling analysis pursued in this chapter, once we compare this effect with similar phenomena cross-linguistically.

Crucially, whereas wh-phrases in ABS subject and MOD object position need not be interpreted as D-linked (made clear by the contexts provided), (36a-b), ABS objects *are* interpreted as D-linked, (36c).

# (36) Inuktitut: 'kisu' (what) is D-linked in ABS object position

#### a. ABS subject:

*Context provided:* You're trying to identify something that's partly obstructed.

kisu inna

what.ABS DEM.PRON

'What's that?' (#'Which one/which of these is that?') (NB, AB)

#### b. <u>MOD object:</u>

Context provided: You and a friend are discussing what to eat for dinner, before heading to the grocery store.

kisu-mit niri-guma-vit

what-mod eat-want-int.2s.S

'What do you want to eat?' (#'Which one/which of these do you want to eat?') (IQ, SB)

#### c. ABS object:

*Context provided:* You and a friend are in an aisle at the grocery store, looking at different options to buy.

**kisu** niri-guma-viuk

what.ABS eat-want-INT.2s.S/3s.O

'Which one/which of these do you want?' (IQ, SB)

<sup>&</sup>lt;sup>18</sup>Below, I will argue more specifically that ABS objects must be understood as anaphoric definite descriptions. For now, however, I will continue to refer to this effect as D-linking.

This effect also holds for a variety of other wh-phrases, given below.

## (37) Inuktitut: 'qanuittuq' (what kind) is D-linked only in ABS object position

#### a. ABS subject:

*Context provided:* You leave your house and notice that your car has been rear-ended.

**qanuit-tu(=kiaq)** inuk nunasiuti-mik tulu-si-galua-rami how-ракт.авs=vague person.авs car-мор hit-ар-although-саus.3s.S titira-mi=luunniit tuni-si-nngi-tuq

writing-mod=or give-ap-neg-3s.S

'What kind of person would hit a car and not leave a note?' (NB, AB)

#### b. <u>MOD object:</u>

*Context provided:* You are asking your friend about a necklace she made earlier.

qanuit-tu-mik ujaming-mik sana-qqau-vit

how-part-mod necklace-mod create-rec.pst-int.2s.S

'What kind of necklace did you make?'

(K, CH)

## c. ABS object:

Context provided: You and a friend are in a bookstore, looking at different options to buy.

qanuit-tuq uqalimaagaq pi-juma-viuk

how-part.abs book.abs get-want-int.2s.S/3s.O

'What kind of book (among these) do you want?'

Consultant's comment: "If I already have the books on hand" (NB, PI)

## (38) Inuktitut: 'qatsi' (how many) is D-linked only in ABS object position

#### a. *ABS subject*:

Context provided: You want to know the population of Iqaluit.

**qassit** inuit iqalung-nir-miu-ngu-vat

how.many.abs person.p.abs Iqaluit-nmlz-habitant-be-3p.S

'How many people live in Iqaluit?' (NB, AB)

#### b. *MOD object:*

*Context provided:* You are asking your employee how many customers they served throughout the day.

ullumi niuvirving-mi **qatsi-nik** ikajuq-pit

today store-loc how.many-mod help-int.2s.S

'How many people did you help in the store today?' (NB, HB)

#### c. *ABS object:*

Context provided: You are looking at a pile of necklaces, and wondering which ones were made by your friend.

qatsi ujamik sana-vigit

how.many.ABS necklace.ABS make-INT.2s.S/3P.O

'How many (of these) necklaces did you make?'

Consultant's comment: "Out of a whole pile, which ones did you make?" (K, CH)

As a corollary, aggressively non-D-linked arguments in Inuktitut, such as those marked with the vagueness enclitic *=kiaq*, may not appear in ABS object position.<sup>19</sup>

## (39) Inuktitut: no aggressively non-D-linked wh-phrases as ABS objects

#### a. ABS subject:

Context provided: You've been getting calls from an unfamiliar number.

kina=kiar=imna uqaluq-tap-paa uvam-nut

who.abs=vague=dem.pron call-iter-int.3s.S 1s-allat

'Who on earth keeps calling me?' (K, AR)

Context provided for b. and c.: You see that I'm experiencing symptoms of a food allergy (e.g. hives).

## b. <u>MOD object:</u>

kisu-mi=kiaq niri-qqau-vit

what-mod=vague eat-rec.pst-int.2s.S

'What on earth did you eat?'

(SB, IQ)

#### c. *ABS object*:

\*kisu=kiaq niri-qqau-viuk

what.ABS=vague eat-REC.PST-INT.2s.S/3s.O

*Intended:* 'What on earth did you eat?'

(SB, IQ)

Finally, in contrast to Inuktitut, ABS object wh-phrases in Kalaallisut do not seem to necessarily be interpreted as D-linked, as indicated by the sequence in (40) (though a more detailed investigation is needed to confirm that this is the case).

#### (40) Kalaallisut: No D-linking requirement on ABS objects

A: puigi-ruma-gama imir-tar-punga forget-want-caus.1s.S drink-habit-1s.S 'I drink in order to forget.'

<sup>&</sup>lt;sup>19</sup>Previous work on these kinds of wh-phrases by Pesetsky (1987) and den Dikken and Giannakidou (2002) have shown that they exhibit a number of syntactic and semantic properties not found with regular wh-phrases. I have not tested these in Inuktitut, but this would be an interesting avenue for future work.

B: **suna** puigu-ruma-gakku what.ABs forget-want-caus.2s.S/3s.O 'In order to forget what?'

(Fortescue, 1984)

This contrast between Inuktitut and Kalaallisut is consistent with all the other contrasts shown earlier. Recall that, in addition to being understood as D-linked, ABS objects in Inuktitut are also obligatorily wide scope and cannot serve as negative indefinites. I propose that these properties can be unified under the blanket of D-linking. First, what is often described as "wide scope" has been given a number of other explanations in the literature; that is, the appearance of wide scope arises because these arguments are actually scope-rigid due to being definite or topical (e.g. Endriss, 2011)<sup>20</sup>—which are also argued to be properties of D-linked elements (e.g. López, 2000; Grewendorf, 2012). Accordingly, I suggest that the negative indefinites formed with *=luunniit* in Inuktitut are aggressively non-D-linked (in that their domains are unrestricted), capturing their inability to appear in ABS object position in Inuktitut.

On this basis, I will refer to the range of interpretive restrictions on Inuktitut ABS objects as "D-linked" for the remainder of this chapter. Taking stock of what we have seen thus far, I have shown two related points of divergence between Kalaallisut and Inuktitut, repeated below in (41):

## (41) Summary of points of divergence between Kalaallisut and Inuktitut

	Kalaallisut Inuktitut	
<b>Location of asymmetry</b>	ABS subj/obj vs. MOD obj	ABS obj vs. ABS subj/мод obj
Nature of asymmetry	Scope/structural height	D-linking

I now argue that D-linking effect comes from the fact that these ABS objects undergo pronominal clitic doubling. I will also suggest that the pronominal clitic itself—a  $D^0$  coindexed with the DP it doubles—is responsible for the semantic interpretation of the ABS object.

## 3.3.4 Parallels with other clitic-doubling languages

The argument for a clitic doubling analysis of Inuktitut comes from robust semantic parallels with other languages assumed to have object clitic doubling. As exemplified below with Romanian and Amharic, many languages *forbid clitic doubling* for negative indefinites and non-D-linked wh-phrases, and *require clitic doubling* for D-linked wh-phrases (Suñer, 1988; Dobrovie-Sorin, 1990; Gutierrez-Rexach, 2000; Kallulli, 2008; Leonetti, 2008; Kramer, 2014, a.o.).

<sup>&</sup>lt;sup>20</sup>See also Kratzer (1998) on pseudoscope.

## (42) Romanian: Obligatory clitic doubling of D-linked DPs

#### a. <u>Negative indefinite:</u>

Nu am văzut **pe nimeni** not 1s.have seen PE nobody 'I didn't see anyone.'

#### b. *Non-D-linked wh-phrase*:

**Pe cine** ai văzut PE who 2s.have seen 'Who did you see?'

## c. <u>D-linked wh-phrase:</u>

Pe care 1- ai văzut PE which cl-2s.have seen 'Which one did you see?'

(Dobrovie-Sorin, 1990)

## (43) Amharic: Obligatory clitic doubling of D-linked DPs

## a. *Negative indefinite:*

Lämma **mann-in-imm** al-ayy-ä-(\*wi)-mm Lemma.M one-ACC-FOC NEG-see.PF-3Ms.s-(\*3Ms.o)-FOC 'Lemma didn't see anybody.' (Baker and Kramer, 2016)

## b. *Non-D-linked wh-phrase*:

Girma tinant **männ-in** ayy (\*-**äw**)
Girma.m yesterday who.m-ACC see.pf(3ms.s)-(\*-3fs.o)

'Who did Girma see yesterday?'

(Kramer, 2014)

#### c. <u>D-linked wh-phrase:</u>

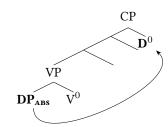
Almaz tɨnant **yätɨñnaw-ɨn** tämari ayy-ät∫t∫-**ɨw**Almaz.F yesterday which.м-acc student see.PF-3Fs.s-3Ms.o
'Which student did Almaz see yesterday?' (Kramer, 2014)

Put together with our previous discussion of object  $\phi$ -agreement as clitic doubling (cf. Woolford, 2008; Nevins, 2011), the ABS object asymmetries in Inuktitut can be straightforwardly captured. Whereas subject-referencing morphemes in Inuktitut are exponents of genuine  $\phi$ -agreement, the object-referencing morphemes are pronominal clitics—i.e. D<sup>0</sup>s—on par with their counterparts in Romanian and Amharic. As schematized in (44), clitic doubling involves a movement chain, whose head is a pronominal D<sup>0</sup> and whose head is a full DP associate.<sup>21</sup> Further evidence in favour of this idea will be provided throughout the rest of this chapter, as well as in subsequent chapters.

<sup>&</sup>lt;sup>21</sup>The specific syntactic and postsyntactic processes underlying clitic doubling will be clarified below.

## (44) Clitic doubling structure in Inuktitut

a. **kisu** niri-guma-**viuk**what.ABS eat-want-INT.2s.S/3s.O
'Which one/which of these do you want?'



In contrast, as previewed at the beginning of this chapter, Kalaallisut exhibits no ABS object asymmetries, given that its ABS subjects and objects behave uniformly. Therefore, Kalaallisut lacks object clitic doubling; its subject- and object-referencing morphemes are both exponents of  $\phi$ -agreement. The next two sections will concentrate on developing the analysis of Inuktitut clitic doubling; the structural distinction between Inuktitut and Kalaallisut will be revisited at the end of the chapter.

## 3.4 The syntax and semantics of clitic doubling

The structure given in (44), as well as the surrounding discussion, was fairly agnostic about the exact derivation of clitic doubling in Inuktitut. In this section, I address this question, and argue that the pronominal clitic—at least in Inuktitut—must be represented as a pronominal  $D^0$  in the syntax proper (and hence also at LF), contra recent proposals characterizing clitic doubling as a purely morphological phenomenon (e.g. Harizanov, 2014). From this, I adopt an analysis of clitic doubling in which the head of the chain is a  $D^0$ , while the tail of chain is a full DP, based on Baker and Kramer (2016).

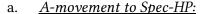
This section also addresses the semantic properties of the pronominal D<sup>0</sup> found in clitic doubling structures in Inuktitut, building on the observation that clitic doubled ABS objects are obligatorily interpreted as strongly D-linked. I present evidence demonstrating that Inuktitut pronominal clitics are obligatorily interpreted as *anaphoric definites*. Following Suñer (1988) and others, I moreover propose that the clitic induces a *matching effect* on its DP associate, due to their co-indexation. As a result, clitic doubling forces the ABS object associate to be interpreted as an anaphoric definite as well, arising in the strong D-linking effect when the associate is quantificational. Cross-linguistic support for this matching effect comes from clitic doubling in certain non-standard varieties of Bosnian/Croatian/Serbian (Runić, 2014). Pronominal clitics in these varieties display a wide range of interpretations (including non-specific and indefinite), and, concomitantly, clitic doubling does not yield any special semantic effects.

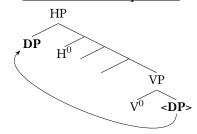
More broadly, the findings of this section suggest that, while clitic doubling frequently yields certain semantic effects (e.g. D-linking) cross-linguistically, these effects are not universal, nor are they an inherent property of clitic doubling. Rather, the occurrence of such effects ultimately hinges on the interpretations that are *independently available* on the pronominal elements found in clitic doubling structures.

## 3.4.1 Clitic doubling (in Inuktitut) is not postsyntactic

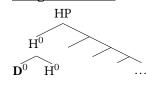
In this section, I argue that the head of a clitic doubling chain in Inuktitut is a pronominal  $D^0$  in the syntactic component—meaning that it is also interpreted as a  $D^0$  at LF. This is important to establish because it will be relevant to the argumentation of Chapters 4 and 5 of this thesis. While such a representation is in line with the majority of the previous literature on clitic doubling, it goes against a recent proposal by Harizanov (2014), in which the pronominal clitic is actually a DP in the syntactic component and at LF (see also Alexiadou and Anagnostopoulou 1997 and Anagnostopoulou 2003). Under this approach, clitic doubling is *phrasal A-movement* of a DP to a higher position, such as Spec-TP; however, the higher movement copy then undergoes a process of *postsyntactic Merger*, which yields a complex head consisting of the clitic and its host. The clitic doubling pattern is thus derived by spelling out both the higher  $D^0$  and the lower DP copy. These two steps are schematized below in (45).

## (45) Clitic doubling as A-movement and Merger





## b. Merger with $H^0$ :



As noted above, this postsyntactic approach takes pronominal clitics to be interpreted at LF as full DPs, since clitic doubling is derived by phrasal movement in the syntax. As evidence, Harizanov cites the observation that doubled pronominal clitics may act as antecedents for bound variables, even when their DP associates are structurally lower than (c-commanded by) the variables in question. In (46), we see that a variable in indirect object position may not be bound by a lower direct object DP, but *may* apparently be bound by a higher pronominal clitic doubling the direct object DP.

## (46) Bulgarian: Clitic doubling creates new antecedents for binding

- a. No clitic doubling → DO cannot bind IO:
   \*Petăr vărna [na sobstvenika i₁] [vsjaka kola]₁ včera
   Peter returned to the owner its every car yesterday
   Intended: 'Peter returned every car to its owner yesterday.'
- b. Clitic doubling  $\rightarrow$  DO can bind IO:

Petăr  $\mathbf{ja}_i$  vărna [na sobstvenika  $\mathbf{i}_i$ ] [vsjaka kola] $_i$  včera Peter 3sg.F.Do returned to the owner its every car yesterday 'Peter returned every car to its owner yesterday.' (Harizanov, 2014) As is well known, A-movement is able to create new antecedents for variable binding; this is shown in (47) below (as a caveat, however, the judgments for the Bulgarian examples in (46) have been contested by Baker and Kramer 2016, to appear). Under a postsyntactic approach to clitic doubling, then, the sentences in (46b) and (47b) have a uniform derivation in the syntax; both involve A-movement of a DP to Spec-TP. However, (46b) also involves an additional operation taking place in the postsyntactic component that generates a D<sup>0</sup> from the raised DP.

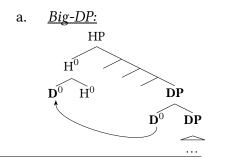
## (47) A-movement may create new antecedents for binding

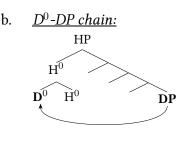
a. \*It seems to [  $\mathbf{his}_i$  mother ] that  $[\mathbf{every child}]_i$  is intelligent

b.  $[Every child]_i$  seems to  $[his_i mother]$  to be intelligent (Harizanov, 2014)

In contrast to Harizanov's (2014) proposal, however, most literature on clitic doubling represents the clitic as a bare D<sup>0</sup> in the syntax. For instance, according to the Big-DP theory of clitic doubling, a pronominal D<sup>0</sup> is base-generated in a complex DP with its associate and undergoes movement to its surface landing site, (48a) (e.g. Torrego, 1988; Uriagereka, 1995; Nevins, 2011; Arregi and Nevins, 2012). Alternatively, it has been proposed by Baker and Kramer (2016) that the clitic doubling structure involves a movement chain whose head is a bare  $D^0$  and whose tail is a DP, (48b). For Baker and Kramer (2016), the DP undergoes phrasal movement along the lines of Harizanov (2014), but a special operation, called Reduce, converts the higher DP copy into a bare D<sup>0</sup>. Crucially, unlike the movement+merger approach of Harizanov (2014), Reduce takes place in the syntax proper.<sup>22</sup> Both approaches represent the clitic as a D<sup>0</sup> in the syntactic component and at LF; the difference between these approaches is in whether the D<sup>0</sup> originates in its baseposition or in its derived position. Thus, at the head of the movement chain, these structures are identical. As far as I am aware, these approaches make very similar predictions and are difficult to tease apart empirically; see also Baker and Kramer (to appear) and Ostrove (2018) for discussion along these lines.

#### (48) **Possible clitic doubling structures**





 $<sup>^{22}</sup>$ Because Reduce is a syntactic operation, not a postsyntactic one, the DP is converted into a  $\rm D^0$  in the syntactic component, and is therefore interpreted as a pronominal element at LF. Note that this approach is found in Baker and Kramer (2016), but not its published version (Baker and Kramer, to appear). Baker and Kramer's (to appear) analysis requires that the pronominal clitic is represented as a  $\rm D^0$  in the syntactic component, but the authors are otherwise agnostic to the exact derivation of clitic doubling.

In what follows, I argue that Harizanov's (2014) postsyntactic approach to clitic doubling is a non-starter for Inuktitut, as it does not account for the semantic differences between Inuktitut and Kalaallisut. I will also later provide Inuktitut-specific evidence showing that the head of the clitic doubling chain must be interpreted as a pronominal  $D^0$  at LF—in turn, strongly suggesting that this element is a bare  $D^0$  in the syntactic component as well.

First, recall that Kalaallisut ABS subjects and ABS objects pattern together, in that both arguments receive a wide scope interpretation. And recall that the full range of Kalaallisut facts strongly favoured a *phrasal movement* analysis, wherein the ABS object DP raises to the clausal left periphery (Bittner, 1994; Bittner and Hale, 1996a,b). In order to import Harizanov's (2014) postsyntactic treatment of clitic doubling to Inuktitut, we might want to cast the difference between Kalaallisut and Inuktitut as follows: whereas ABS object DPs undergo phrasal movement to a structurally high position in both varieties, Inuktitut has an additional step of converting the higher movement copy into a clitic at PF.

The problem with this proposal is that it does not account for the observation that *ABS subjects and ABS objects in Inuktitut do not behave alike*, nor does it capture the strongly D-linked interpretation of Inuktitut ABS objects. Because Harizanov's analysis takes clitic doubling to be postsyntactic, it predicts that Kalaallisut and Inuktitut should have identical LFs—contrary to fact.<sup>23</sup> Based on this, if phrasal movement of ABS objects is the correct analysis of Kalaallisut, then it cannot also be correct for Inuktitut.

As an additional point, the binding facts shown above for Bulgarian are not replicable in either variety of Inuit, so their existence in certain clitic doubling languages is ultimately orthogonal to the  $\phi$ -agreement vs. clitic doubling distinction between Kalaallisut and Inuktitut. It is generally accepted that syntactically ergative languages (i.e. ergative languages with high ABS objects) are *argument-structurally accusative* (e.g. Guilfoyle et al., 1992; Manning, 1996). For the purposes of binding, for instance, these languages permit ERG subjects to bind into ABS objects, but not vice versa, even though ABS objects move to a structurally higher position than ERG subjects.

In Inuit, this can only be tested in a few specific configurations. For instance, the anaphor must be inside a complex DP, since an anaphor in a  $\phi$ -agreeing position is independently blocked by the Anaphor Agreement Effect (e.g. Rizzi, 1990). <sup>24</sup> First, (49a) shows that an ABS subject may bind a lower MOD-marked DP containing an anaphor (encoded by the possessive suffix -*mi*). In contrast, (49b) demonstrates that an ABS object *cannot* bind an anaphor contained in a complex ERG subject (see also Bobaljik 1993 for similar data). Bittner (1994) and Bittner and Hale (1996a,b) also note that comparable examples are ruled out in Kalaallisut, though they do not provide examples.

 $<sup>^{23}</sup>$ As I will discuss below, a slightly amended version of Harizanov's (2014) proposal *is* compatible with Inuktitut. If an extracted DP is converted into a D<sup>0</sup> in the syntax proper, as proposed by Baker and Kramer (2016, to appear), then the clitic would be expected to be interpreted as a D<sup>0</sup> at LF.

<sup>&</sup>lt;sup>24</sup>This will be further discussed in Chapter 6.

## (49) Inuktitut: Clitic doubling does not create new antecedents for binding

a. **makkuk-tuit arna-limaat** nagli-gusu-nngit-tuit youthful-part.p.abs woman-every.abs love-feel-neg-3p.S anaana-**mi**-nik mother-refl.poss-mod 'Every teenaged girl<sub>i</sub> hates her<sub>i</sub> mother.' (NB, AB)

b. \*anaana-**mi**-ta nutaraa-limaat nagli-gi-**jangit** mother-REFL.POSS-ERG child-every.ABS love-TR-3s.S/3s.O *Intended:* 'Her mother; loves every child;' (NB, AB)

According to Bittner and Hale, the inability of ABS objects to bind into ERG subjects in Kalaallisut is because ABS object movement is  $\bar{A}$ -movement, not A-movement;  $\bar{A}$ -movement does not create new antecedents for binding. This raises the question of whether this idea may be extended to Inuktitut, such that the ungrammaticality of (49b) is simply a matter of reconstruction. If so, then we could maintain a postsyntactic analysis of clitic doubling in Inuktitut after all.

However, this, too, is not a viable possibility. Recall from §3.3 that Kalaallisut and Inuktitut differ in whether minimizing NPIs may be licensed in ABS object position; the relevant contrast is repeated as (50) below. The grammaticality of the Kalaallisut example in (50a), according to Bittner (1994), is because the  $\bar{A}$ -extracted ABS object reconstructs to its base-position under negation. Given that reconstruction is a known property of  $\bar{A}$ -movement, we would expect Inuktitut to behave the same. However, (50b) shows that Inuktitut ABS objects may not serve as minimizing NPIs. This, in turn, offers another argument against a postsyntactic treatment of clitic doubling in Inuktitut.

#### (50) Kalaallisut and Inuktitut differ in NPI-licensing of ABS objects

a. *Kalaallisut*:

kina=luunniit taku-<u>nngi</u>-laa who.ABS=or see-NEG-3s.S/3s.O 'He didn't see anyone.' (Fortescue, 1984)

b. *Inuktitut*:

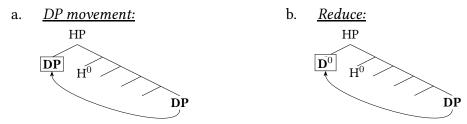
\*ilisa-ri-<u>nngit</u>-tara **kina=luunniit**recognize-Tr-NEG-1s.S/3s.O who.Abs=or *Intended:* 'I don't recognize a single person.' (NB, PI)

Based on this discussion, I conclude that doubled clitics in Inuktitut must be represented as pronominal D<sup>0</sup>s in the syntax proper, rather than full DPs, contra Harizanov (2014). It is possible that Inuktitut and Bulgarian instantiate two different types of clitic doubling cross-linguistically—or, as suggested by Baker and Kramer (2016, to appear), Harizanov's Bulgarian binding data may be reanalyzed.

For concreteness, I adopt the analysis of clitic doubling advanced by Baker and Kramer (2016). As noted earlier, this treatment takes clitic doubling to involve syntactic movement

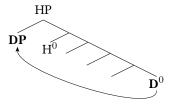
of a DP to a structurally higher position (Spec-Agr $_o$ P), followed by an operation, called Reduce, which converts the DP into a pronominal D $^0$ . Crucially, Reduce is a syntactic operation (rather than a postsyntactic one). In the postsyntactic component, D $^0$  then undergoes Merger with Agr $_o$  $^0$ , thus creating the bound clitic (cf. Harizanov, 2014). This is schematized in the structures in (51). For illustrative clarity, however, I will use the post-Reduce structure in (51b) as shorthand throughout this thesis. For the purposes of this thesis, it is only crucial that clitic doubling involves a movement chain, whose head is interpreted as a D $^0$  in the syntactic component.

## (51) Clitic doubling via Reduce (Baker and Kramer, 2016)



It is worth noting that the proposed structure in (51) is the mirror image of what has often been proposed for *wh-movement of D-linked wh-phrases* (Cinque, 1990; Boeckx, 2003; Boeckx and Grohmann, 2004, a.o.). These proposals have converged on the idea that the gap of a D-linked wh-dependency is not a trace (i.e. a bound variable), but rather a *bound pronoun*.<sup>25</sup>This is schematized in (52):

## (52) **D-linked wh-movement (DP-D**<sup>0</sup> chain)



The connection with clitic doubling is fairly intuitive. As we have seen, clitic doubling also often triggers a D-linked effect due to the presence of the pronoun (see especially Boeckx (2003), Boeckx and Grohmann (2004) for discussion). It is possible that this structure may also be derived by an equivalent Reduce operation, except taking place on the lower DP copy rather than the higher one. While I leave a deeper exploration of the

#### (i) (Colloquial) Hebrew: D-linked wh-phrase may be resumed by overt pronoun

\*mi nifgaSta ito who you-met with-him 'Who did you meet with?'

<sup>&</sup>lt;sup>25</sup>Some independent evidence for this structure comes from the fact that certain languages consistently overtly spell-out the bound pronoun when the wh-phrase is D-linked, as in Hebrew, (i). Moreover, even in languages in which the bound pronoun is not pronounced, we may detect its presence semantically. In languages like Italian, D-linked wh-phrases may escape weak islands, (ii).

parallels between clitic doubling and D-linked wh-dependencies, I take the surface similarities outlined above as motivation for the clitic doubling structure given in (51b). The rest of this section explores the properties of the pronominal  $D^0$  in greater detail and, in particular, argues that the Reduce operation (at least in Inuktitut) yields an *anaphoric definite* pronoun.

## 3.4.2 Inuktitut pronominal clitics are anaphoric definites

Having established the syntax of clitic doubling in Inuktitut, I now return to the obligatory D-linked interpretation of clitic doubled ABS objects. Starting with Suñer (1988), it has been proposed that the presence of the clitic induces a *matching effect* on its associate, in that the two must match not only in  $\phi$ -features but also in semantic features (see also Dobrovie-Sorin (1990), Leonetti (2008) for adoptions of this idea). Suñer's notion of the Matching Principle is given below:

## (53) Matching Principle on clitic doubling:

- a. Clitics must agree with the constituent with which they form a chain.
- b. A chain is well-formed only when there is no clash in features. (Suñer, 1988, p. 403)

Suñer argues that this matching effect takes place "as an automatic consequence of chain coindexing" (p. 393). This, in turn, follows from the fact that clitic doubling is ultimately driven by Agree. This derives the cross-linguistic generalization that clitic doubling is often required for D-linked elements and impossible for non-D-linked elements (e.g. negative indefinites), as seen earlier in this chapter. According to Suñer's system, the (im)possibility of clitic doubling depends on whether certain nominals are able to bear the semantic features associated with pronominal clitics. If they are unable to do so, then clitic doubling is ruled out.

b. <u>D-linked wh-phrase:</u> **eyze student** nifgaSta **ito**which student you-met with-him

'Which student did you meet with?'

(Sharvit, 1999)

#### (ii) Italian: D-linked wh-phrases can obviate weak islands

a. <u>Non-D-linked wh-phrase:</u>

??a chi ti chiedi quanti soldi hai dato to whom REFL ask.2s how.much money have.2s give 'To whom are you wondering how much money you gave?'

b. <u>D-linked wh-phrase:</u>

**a quale** dei tuoi figli ti chiedi quanti soldi hai dato to which of your sons REFL ask.2s how.much money have.2s give 'To which of your children are you wondering how much money you gave?' (Cinque, 1990)

 $^{26}$ For Suñer, clitic doubling is actually a form of φ-agreement, on par with subject-verb agreement, so the Matching Principle arises from that. However, her basic insight is equally compatible with a movement-triggered treatment of clitic doubling, if the Agree operation also underlies movement (e.g. Chomsky, 2000).

I now show that Inuktitut offers novel evidence for this matching effect, and more-over reveals that the matching effect is *unidirectional*: the DP associate must, if possible, take on the features of the pronominal clitic, not the other way around. The gist of my proposal is that the strongly D-linked interpretation that arises in quantificational contexts comes from the independently observable fact that Inuktitut pronominal clitics, by themselves, are obligatorily interpreted as *anaphoric definites*. Because pronominal clitics in Inuktitut are semantically restricted in this way, the Matching Principle dictates that their DP associates will also receive such interpretations. I will also show, later in this section, that clitic doubling languages with semantically unrestricted pronominal clitics do not impose any special interpretive requirements on their DP associates, as expected under the present analysis.

While Inuktitut lacks overt 3rd person pronouns, they may be recoverable either through verbal agreement morphology or through context. This is illustrated throughout (54) with null antipassive objects (in these examples, the null antipassive objects are represented as "pro" for clarity). These examples show that such objects support a wide range of pronominal meanings—anaphoric definite, (a);<sup>27</sup> E-type, (b); sloppy, (c); and indefinite, (d).<sup>28</sup>

## (54) Inuktitut: Antipassive null objects permit a range of interpretations

a. *Anaphoric definite*:

Jaani **titirauti-mik** tigu-si-juq titirauti-kkuving-mik amma
Jaani.ABS pencil-MOD take-AP-3s.S pencil-receptacle-MOD and
tuni-si-juq **(pro)** Miali-mut
give-AP-3s.S 3s.MOD Miali-ALLAT

'Jaani took a pencil from the pencil case and gave it to Miali.' (SB, PG)

b. <u>*E-type:*</u>

tamangmi **titirauti-mik** tigu-si-juit utiqti-si-giaqaq-tuit **(pro)** everyone.ABS pencil-MOD take-AP-3P.S return-AP-must-3P.S (3s.MOD) 'Everyone who took a pencil must return it.' (SB, PG)

## (i) Null antipassive objects as anaphoric definites

tuqu-nga-lik-suni=lu tagga takuna-liq-tugut (pro)
die-perf-prog-ctmp.3s.S=also then look.for.long.time-prog-3s.S

'And now that [the caribou] is dead, we are looking at it.' (Carrier, 2017)

About this data point, Carrier (2017, p. 680) provides the following discussion: "In fact, I have never seen, in any traditional grammar or published work on Inuktitut, examples such as the one in (i), where an omitted patient in an antipassive refers back to an argument of a previous sentence."

<sup>&</sup>lt;sup>27</sup>The fact that null antipassive objects may encode anaphoric definite readings is at odds with previous characterizations of Inuit, given that antipassivized objects are canonically described as narrow scope, non-specific, etc. (see §3.3). However, Carrier (2017) also notes the existence of such patterns in his corpus study of Inuktitut, as shown below.

<sup>&</sup>lt;sup>28</sup>As will be discussed in §3.5, the choice to illustrate with these particular four types of pronominal meanings in particular is not accidental. I will demonstrate that languages present an implicational hierarchy concerning which of these four types of pronominal interpretations they permit.

## c. Sloppy:

Jaani sikki-nga-nik kinauja-kkuving-muut-tuq, Miali Jaani.ABs cheque-poss.3s/3s-mod money-receptacle-in-3s.S, Miali.ABs nungu-ti-juq (pro) uqungmiaqang-nut finish-AP-3s.S 3s.mod candy-all 'Jaani put his cheque in the bank, while Miali spent it (= her cheque) on candy.' (SB, PG)

## d. Indefinite:

Taiviti niuvi-lauq-tuq **nutaa-mik uviniru-mik** ippaksaq amma=lu David.ABS buy-PST-3S.S new-MOD shirt-MOD yesterday and=also Carol niuvi-lau-mmi-juq (pro) Carol.ABS buy-PST-also-3S.S 3S.MOD 'David bought a new shirt yesterday, and Carol bought one too.' (NB, AB)

Now, consider the ergative variants of these antipassive constructions, given in (55). In these sentences, the pronominal objects are ABS, i.e. encoded on the verb as pronominal clitics. Crucially, three out of four of these are *excluded* in the ergative construction.<sup>29</sup> Only the anaphoric definite reading is supported by pronominal clitics, (a); in contrast, E-type, sloppy, and indefinite readings are impossible, (b-d).<sup>30</sup>

## (55) Pronominal clitics may only be interpreted as anaphoric definite

## a. Anaphoric definite:

Jaani **titirauti-mik** tigu-si-juq titirauti-kkuving-mik amma Jaani.ABS pencil-MOD take-AP-3s.S pencil-receptacle-MOD and tuni-**janga** Miali-mut give-3s.S/3s.O Miali-all 'Jaani took a pencil from the pencil case and gave it to Miali.' (SB, PG)

#### b. *No E-type reading:*

#tamangmi **titirauti-mik** tigu-si-juit utiqti-giaqaq-**tangat**everyone.ABS pencil-MOD take-AP-3P.S return-must-3P.S/3s.O

Intended: 'Everyone who took a pencil must return it.'

Consultant's comment: "No...it does make sense but it's not the specific word to use, it's questionable." (SB, PG)

<sup>&</sup>lt;sup>29</sup>This pattern was checked with five of the many Inuktitut speakers consulted for this project, and holds for three of them. For the two Inuktitut speakers for whom this pattern does not hold (North Baffin Inuktitut speakers hailing from the communities of Arctic Bay and Hall Beach, respectively), the pronominal clitic may encode both anaphoric definite and E-type readings, but not sloppy or indefinite ones, thus patterning like French. While it is not clear to me why this contrast exists, I note here that (following from footnote 16 in §3.3.2), the two speakers who diverge in this respect also happen to be the ones who accepted negative indefinite NPIs in ABS object position. As mentioned in the earlier footnote, it is probable that these two factors are related; however, I do not have a proposal for this connection at this time.

<sup>&</sup>lt;sup>30</sup>Note that the observation that pronominal clitics in Inuktitut (and various other Eskimo-Aleut languages) support anaphoric definite readings is not novel (Bergsland, 1997; Sadock, 2000; Merchant, 2011; Johns, 2017); however, the novel observation here is that this is the *only* reading permitted.

#### *No sloppy reading:* c.

Jaani sikki-nga-nik kinauja-kkuving-muut-tuq, Miali-up Jaani.ABS cheque-Poss.3s/3s-Mod money-receptacle-in-3s.S, Miali-ERG nungu-tanga uqungmiaqang-nut

finish-3s.S/3s.O candy-ALLAT

*Intended:* 'Jaani put his cheque in the bank, while Miali spent it (= his cheque / **#her cheque**) on candy.'

Consultant's comment: "It sounds like she spent his cheque." (SB, PG)

## *No indefinite reading:*

#Taiviti niuvi-lauq-tuq nutaa-mik uviniru-mik ippaksaq amma=lu David.ABS buy-PST-3s.S new-MOD shirt-мор vesterday and=also Carol-m niuvi-lau-mmi-janga

Carol-erg buy-pst-also-3s.S/3s.O

*Intended:* 'David bought a new shirt and Carol bought on! too.'

Consultant's comment: "It sounds like they shared money to buy one shirt." (NB, AB)

In addition to the ill-formedness of (55b-d), the examples below show that other potential E-type environments such as modal subordination (Roberts, 1989; Stanton, 2017) also ban pronominal clitics.

#### (56)No pronominal clitics in other E-type environments

Context provided: Northmart is giving away free books today, and is allowing each customer to take a book with them. Many customers just randomly picked a book.

uqalimaagaq-taa-qqau-juit niuvirbing-mi, inuit amisuut person.p.ABS many.p.ABS book-get-REC.PST-3p.S store-ABL,

kisiani uqalimaa-niar-tanga(t) ilangit

some.p.ABS but read-NR.FUT-3P.S/3s.O

Intended: 'Many people got a book from the store, but only some will read

Consultant's comment: "Only if they all got the same book...but if they each got a different kind of book, it sounds weird." (SB, PG)

I am not aware of any other clitic doubling languages that make this distinction between anaphoric definite and E-type readings, a point which will be revisited in §3.5 below. Moreover, the idea that pronominal clitics in Inuktitut may permit anaphoric definite readings while excluding E-type (i.e. donkey) readings may be problematic for dynamic semantic theories of pronouns (cf. Kamp, 1981; Heim, 1982), which seek to provide a unified analysis of these pronominal readings.31

However, languages do distinguish between anaphoric and non-anaphoric definites cross-linguistically. In English, for instance, Poole (2017) and Stanton (2017) indepen-

<sup>&</sup>lt;sup>31</sup>Thank you to Judith Tonhauser (p.c.) for alerting me to this point.

dently show that such a contrast may emerge in so-called "anti-pronominal" contexts (cf. Postal, 1994). This is somewhat of a misnomer, as we will see that certain pronouns are indeed permitted in these positions. Thus, I will follow Poole in neutrally referring to these contexts as " $\Pi$ -positions."

Indeed, while  $\Pi$ -positions are traditionally characterized as disallowing pronouns and definite DPs, Poole observes that, within the class of DPs, only *anaphoric definites* are excluded. This is illustrated in the contrast between (57)-(58). Note that, in (58), the contrasts between (i)-(ii) establish that anaphoric DPs are only excluded in  $\Pi$ -positions, but may surface elsewhere.

## (57) $\Pi$ -positions permit non-anaphoric DPs and NPs

- a. <u>Change-of-colour verb:</u>
  - (i) Megan painted the house **that hideous shade of purple**. (DP)
  - (ii) Megan painted the house **magenta**. (NP)
- b. Naming verb:
  - (i) Irene called the cat **that dumb nickname**. (DP)
  - (ii) Irene called the cat **Snowflake**. (NP) (Poole, 2017)

## (58) $\Pi$ -positions ban anaphoric definite DPs

a. <u>Change-of-colour verb:</u>

Blanche picked out a shade of red for the living room...

- (i) But Dorothy thought that **the shade/colour** was too dark.
- (ii) #And Dorothy painted the room the shade/color.
- b. *Naming verb*:

My mother liked **one of the names** in the baby book...

- (i) My grandmother had wanted to give **the name** to my uncle.
- (ii) #My grandmother had wanted to call my uncle **the name**. (Poole, 2017)

Interestingly, Stanton (2017) independently shows these same contexts are not necessarily anti-pronominal, hence the usage of the term " $\Pi$ -positions" here. Rather, as shown in (59)-(60), E-type pronouns are permitted in these positions; it is only anaphoric definites that are excluded.

#### (59) English: $\Pi$ -positions permit E-type pronouns

- a. <u>Change-of-colour verb:</u> Everybody who likes [some shade of green]<sub>i</sub> also paints their porch  $[it_i]$ .
- b. <u>Naming verb:</u>
   Everyone who dislikes [their name]<sub>i</sub> wishes they were never named it<sub>i</sub>.
   (Stanton, 2017)

## (60) English: $\Pi$ -positions ban anaphoric definite pronouns

- a. <u>Change-of-colour verb:</u>
  - \*They painted their porch **green**<sub>i</sub>, but I refused to paint my porch  $[it_i]$ .
- b. *Naming verb*:
  - \*He named his daughter **Lucille**<sub>i</sub>, but I didn't name mine  $it_i$ . (Stanton, 2017)

Thus, we may generalize that English  $\Pi$ -positions permit non-anaphoric definite nominals (which may include full DPs and pronouns), but may not permit anaphoric definite nominals. This provides cross-linguistic support for the idea that a language may differentiate between anaphoric definite and non-anaphoric definite pronouns. That being said, a full analysis of why Inuktitut pronominal clitics are necessarily interpreted as anaphoric definites will be left for future research. In what follows, then, I focus on their descriptive properties.

We are now in a position to circle back to the interpretation of clitic doubling in Inuktitut. Here, I demonstrate that the above discussion of  $\Pi$ -positions provides novel support for the Matching Principle—i.e. the idea that anaphoric definite clitics in Inuktitut trigger a strong D-linked effect on their DP associates. A prediction that arises from this approach is that, if Inuktitut pronominal clitics are anaphoric definites, then clitic doubled DPs should display properties anaphoric definites as well. I show that this is prediction borne out: in particular, we will see that clitic-doubled DPs may not surface in  $\Pi$ -positions.

First, I establish that Inuktitut has  $\Pi$ -positions to begin with; some of these are shown in (61). The constructions in (61) are not particularly useful for our purposes, since they are secondary predicates. Nominal secondary predicates in Inuktitut are always moderarked, meaning that they are independently never cross-referenced by pronominal clitics.

#### (61) Some $\Pi$ -positions in Inuktitut

a. Change-of-colour verb:

iglu-ga amia-ri-juma-jara **aupak-tu-mik** house-poss.1s/3s.Abs paint-tr-want-1s.S/3s.O red-part-mod 'I want to paint my house red.' (NB, PI)

b. *Naming verb*:

pani-vut atsi-lauq-tavut **Miali-mik** daughter-poss.1p/3s.Abs name-pst-1p.S/3s.O Miali-mod 'We named our daughter Miali.' (SB, IQ)

The examples in (62) moreover show that non-anaphoric definite DPs are permitted in these contexts in Inuktitut, thus extending the parallel with the English data above.

## (62) Non-anaphoric definites are permitted in $\Pi$ -position

Context provided: I am holding up a colour swatch. amia-ruma-jara matu **uumangat kala-mik** paint-want-1s.S/3s.O door.Abs dem.pron.mod colour-mod 'I want to paint the door this colour.'

(SB, PG)

Now, consider the examples in (63)-(64). The incorporating verb *-taaq* 'get' displays a case/agreement alternation, facilitated by the transitivizing morpheme *-gi*, (63).<sup>32</sup> In the presence of this transitivizer, the incorporated object is ABS rather than MOD (as indicated by the morphological case of the stranded numeral); moreover, the D-linked interpretation of the object reveals that it is *clitic-doubled*, despite surfacing within the verb complex. A full analysis of noun incorporation will be given in Chapter 5.<sup>33</sup>

## (63) Incorporated noun may be clitic doubled

#### a. Baseline:

uqalimaagaqaving-mit **marruu-nik uqalimaagar**-taa-lauq-tunga library-abl two-mod book-get-pst-1s.S 'I got two books from the library.'

#### b. *Clitic doubled ABS object:*

uqalimaagaqaving-mit **marruuk uqalimaaga**-taa-ri-lauq-**takka** library-ABL two.ABS book-get-TR-PST-1s.S/3P.O 'I got these two books from the library.' (NB, AB)

This same verb can idiomatically mean, 'turn (in the sense of age),' whose complement is known to be a  $\Pi$ -position cross-linguistically. Crucially, the availability of the ergative construction now disappears, as shown in (64b). In other words,  $\Pi$ -positions may not host clitic-doubled DPs.

## (64) Inuktitut: $\Pi$ -position not compatible with ABS object

#### a. Baseline:

Taami **tisama-nik ukiu**-taa-lauq-tuq Tommy.ABS four-MOD winter-get-PST-3s.S 'Tommy turned four years old.'

#### b. *Clitic doubled ABS object:*

\*Taami-up **tisamat ukiu**-taa-ri-lauq-**tangit** Tommy-ERG four.ABS winter-get-TR-PST-3s.S/3P.O *Intended*: 'Tommy turned four years old.'

(NB, AB)

<sup>&</sup>lt;sup>32</sup>This morpheme is realized as *-ri* in this example due to phonological factors.

<sup>&</sup>lt;sup>33</sup>In Chapter 5, I provide evidence that the target of clitic doubling is the incorporated object, not the stranded numeral. Thus, incorporation constructions are syntactically and semantically identical to their non-incorporating counterparts; the sole difference concerns whether the object is spelled out within the verb complex.

I argue that this follows from—and, in turn, motivates—the Matching Principle on clitic doubling. While the DP *tisamat ukiut* 'four winters (years)' is *in principle* able to surface in this Π-position, given the acceptability of (64a), it is rendered incompatible by the pronominal clitic. Given that the locus of clitic doubling is high in the syntactic tree, and assuming a bottom-up approach to structure building, this means that, at the point of Merging the object, there is no way to determine that the object will end up clitic-doubled (ABS) or not. The ill-formedness of the structure therefore cannot be due to properties of the in situ object.

However, if Inuktitut pronominal clitics may only be interpreted as anaphoric definite descriptions, then the Matching Principle dictates that their nominal associates must be, as well—thus excluding them from Π-positions. The existence of this pattern, in turn, allows us to be more precise about the nature of the "D-linking" effect discussed throughout this chapter. In Inuktitut, arguments that are D-linked via clitic doubling are interpreted as anaphoric and definite. Additionally, the logic of these facts reveal the unidirectional nature of the matching effect—the presence of the pronominal clitic (which, in Inuktitut, may only be interpreted as anaphoric definite) forces the special semantic interpretation of the nominal.

As a final note, the anaphoric definite interpretation of Inuktitut pronominal clitics is not predicted if these morphemes were simply the exponents of object  $\phi$ -agreement. Under this alternative, we would presumably analyze these morphemes as cross-referencing null pronominal objects, and additionally stipulate that null pronominal objects in Inuktitut are obligatorily interpreted as anaphoric definites. However, this stipulation would then be contradicted by the fact that null pronominal objects in antipassive constructions permit additional readings, as shown in (54) above. It is thus not immediately obvious how to account for this difference between null pronominal objects in a principled manner. In contrast, taking these morphemes to be clitic in nature maintains that the exceptional anaphoric definite interpretations are a general property of the clitics themselves; again, this will be revisited shortly in §3.5.

## 3.4.3 The Matching Principle and cross-linguistic variation

Turning now to the cross-linguistic profile of clitic doubling, I now show that the special semantic effects seen in many (perhaps most) clitic doubling languages is *not universal*, but rather a tendency. Thus, although clitic doubling is often cited as correlating with interpretations such as D-linking, this is ultimately due to the fact that the *pronominal clitics* in these languages independently allow such interpretations. In languages whose pronominal clitics permit a wider range of interpretations, clitic doubling does not yield any obvious semantic effects on their DP associates. This correlation, again, follows straightforwardly from Suñer's (1988) Matching Principle, i.e. the requirement that pronominal clitics and their DP associates match in both  $\phi$ - and semantic features.

I demonstrate that this correlation is borne out in certain dialects of Bosnian/Serbian/Croatian (henceforth, BCS). Runić (2014) demonstrates that BCS displays pronominal clitics that permit sloppy and indefinite readings, (65). As indicated by the ambiguity of these sen-

tences, the expected anaphoric definite readings are also available.<sup>34</sup> Thus, unlike Inuktitut, pronominal clitics in BCS are semantically unrestricted.

#### BCS: Pronominal clitics permit sloppy and indefinite readings (65)

Sloppy:

pozvao **svoju djevojku** na slavu, a Nikola je Nikola Aux.3s invited his girlfriend on slava and invited her.CL.ACC Danilo

AUX.3s and Danilo

'Nikola invited his girlfriend to the slava, and Danilo invited her (= Nikola's girlfriend / Danilo's girlfriend) too.'

*Indefinite:* 

Nikola je vidio **film**, a vidio **ga** Danilo je Nikola Aux.3s saw film and saw it.cl.Acc Aux.3s and Danilo Nikola saw a movie and Danilo saw it / one too.' (Runić, 2014)

While BCS does not permit clitic doubling (nor do most varieties of BCS), Runić (2014) demonstrates that the closely-related Priznen-Timok Serbian does permit clitic doubling; Priznen-Timok Serbian may thus be used to bear out the Matching Principle prediction made above.35

As seen in (66), Priznen-Timok Serbian permits the clitic doubling of non-specific indefinites. Crucially, these examples show that clitic doubling in Priznen-Timok Serbian does not trigger any special semantic effects such as D-linking; the nominal associates in these particular sentences remain non-specific indefinite.

#### Prizren-Timok Serbian: Clitic doubling of indefinite/non-specific arguments (66)

- **kafu** volim da popijem s Ja (gu) komšiju I it.cl..acc coffee like.1s to drink.1s with neigbour 'I like having coffee with my neighbour.'
- b. *Context provided:* Imagine that you are at a wedding party eating roast meat. However, the waiter forgot to bring napkins. You will ask the waiter... Izvin'te. Imate (gu) salvetu

have.2s it.CL.ACC napkin sorry 'Excuse me. Do you have a napkin?

*Context provided:* There is a considerable number of old and sick people in c.

<sup>&</sup>lt;sup>34</sup>Jelena Runić (p.c.) additionally confirms that BCS pronominal clitics support E-type readings, though the relevant data point is not shown here.

<sup>&</sup>lt;sup>35</sup>According to Runić (2014), doubling of full nominals (i.e. non-pronominals) is not accepted by all speakers of Prizren-Timok Serbian, but seems to be an areal effect, allowed by speakers hailing from certain villages. Jelena Runić (p.c.) additionally confirms that Priznen-Timok pronominal clitics on their own permit the same range of interpretations as pronominal clitics in Serbian, though the data are not presented in Runić (2014). Therefore, the BCS examples shown in (65) may stand in for Priznen-Timok Serbian.

the village. However, there is no doctor in the village.

Opština (ga) novog lekara traži

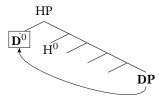
municipality him.cl.acc new doctor look.for.3s

'The municipality is looking for a new doctor.' (Runić, 2014)

This, I contend, is due to the Matching Principle, as well as the independently observable fact that pronominal clitics in BCS and related varieties permit a wide range of interpretations. Because pronominal clitics in such languages need not be interpreted as definite or referential, clitic doubling (in the varieties in which this is permitted) need not trigger D-linking. More broadly, this demonstrates that the D-linking effect that is frequently seen in clitic doubling constructions cross-linguistically is not an *inherent or universal* property of clitic doubling. The fact that clitic doubling has come to become associated with such effects is, rather, due to the fact that *pronominal clitics* tend to be definite in nature.

To summarize this section, I argued that clitic doubling in Inuktitut involves a movement chain, whose head is a pronominal D<sup>0</sup> and whose tail is a DP (cf. Baker and Kramer, 2016), as repeated in (67). Additionally, clitic doubling structures are subject to a Matching Principle (Suñer, 1988), in that the semantic features of the pronominal clitic are imposed on its DP associate.

## (67) Clitic doubling structure



As evidence for this proposal, I showed that pronominal clitics in Inuktitut are obligatorily interpreted as anaphoric definites; one consequence of this is that clitic doubled ABS objects are excluded from appearing in so-called  $\Pi$ -positions excluding anaphoric definites. On the flipside, the Matching Principle predicts that languages with less semantically restrictive pronominal clitics should also impose fewer restrictions on their associates. This was shown to be borne out in varieties of Serbian, which display clitic doubling with no obvious semantic effects at all.

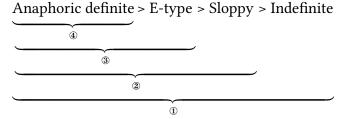
The remainder of this chapter hones in on a thus far unexplored aspect of the present proposal. Why do pronominal clitics in Inuktitut and Serbian display such different properties? While an exact answer to this question remains elusive, I show that the Inuktitut and Serbian facts may at least be situated within a broader implicational hierarchy of pronominal clitic interpretations.

# 3.5 Extension: Towards a typology of pronominal clitic meanings

The last topic of this chapter concerns the semantic properties displayed by pronominal clitics cross-linguistically. As mentioned above, this builds on the findings of the previous section, which revealed that pronominal clitics in Inuktitut only permit anaphoric definite readings, while pronominal clitics in Serbian varieties permit a range of additional readings. This section also builds on another contrast along the same lines, noted by Runić (2014) to hold between related Slavic languages.

The main observation of this section is that the range of interpretations permitted by pronominal clitics cross-linguistically fall along an *implicational hierarchy*. As indicated in (68), this predicts four types of languages.

## (68) Implicational hierarchy for pronominal clitic meanings



→ If a language's pronominal clitics permit an interpretation lower in the hierarchy, it must permit an interpretation higher in the hierarchy. However, the availability of an interpretation higher in the hierarchy does not entail the availability of an interpretation lower in the hierarchy.

I show below that all four logical types of languages are attested. I do not provide a full analysis of this hierarchy, or what differentiates one language from another. Instead, I hope to simply flag the existence of these patterns for future research.

## 3.5.1 Runić's (2014) generalization

Recall that Runić (2014) demonstrates that BCS (and Priznen-Timok Serbian) pronominal clitics permit anaphoric, sloppy, and indefinite readings.<sup>36</sup> These data are repeated in (69).

 $<sup>^{36}</sup> Recall$  moreover from footnote 34 that, according to Jelena Runić (p.c.), pronominal clitics in BCS also permit E-type readings.

## (69) BCS: Pronominal clitics permit sloppy and indefinite readings

#### a. Sloppy:

Nikola je pozvao **svoju djevojku** na slavu, a pozvao **ju** Nikola AUX.3s invited his girlfriend on slava and invited her.CL.ACC je i Danilo

Aux.3s and Danilo

'Nikola invited his girlfriend to the slava, and Danilo invited **her** (= Nikola's girlfriend / Danilo's girlfriend) too.'

## b. *Indefinite*:

Nikola je vidio **film**, a vidio **ga** je i Danilo Nikola AUX.3s saw film and saw it.CL.ACC AUX.3s and Danilo Nikola saw a movie and Danilo saw it / <u>one</u> too.' (Runić, 2014)

Interestingly, Runić observes that Macedonian, another Slavic language, displays a different pattern. As shown in (70), pronominal clitics in Macedonian do not permit sloppy or indefinite readings.<sup>37</sup>

## (70) Macedonian: No sloppy or indefinite readings with pronominal clitics

## a. No sloppy reading:

Nikola ja povika **devojka** si na slava, a Daniel Nikola her.cl.acc invited girl him.cl.dat.refl at slava and Daniel **ja** povika isto

her.cl.acc invited same

'Nikola invited his girlfriend to the slava, and Daniel invited **her** (= Nikola's girlfriend / #Daniel's girlfriend) as well.'

#### b. *No indefinite reading:*

Viktor vide (eden) **film**, a i Dimitar **go** vide Viktor saw one film and Dimitar it.CL.ACC saw 'Viktor saw a movie and Dimitar saw it / #one too.' (Runić, 2014)

Thus, while the pronominal clitics in both languages permit anaphoric and E-type readings, they diverge in whether sloppy or indefinite readings are available.

Runić (2014) connects this contrast to whether (pro)nominals in these languages are of category  $N^0$  or  $D^0$ , following Boškovič (2008, 2012). She observes that BCS lacks definite determiners, which she takes to reflect a wholesale absence of a  $D^0$ -layer on nominals; this extends to pronominal clitics, which are taken under this account to be bare  $N^0$ s rather than bare  $D^0$ s. In contrast, Macedonian does have definite determiners, indicating that Macedonian pronominal clitics are  $D^0$ s rather than  $N^0$ s.

<sup>&</sup>lt;sup>37</sup>Accordingly, Runić (2014) also shows that Macedonian clitic doubling constructions trigger a D-linked interpretation. This is, again, consistent with the Suñer's (1988) Matching Principle. Finally, while Jelena Runić (p.c.) did not test the availability of E-type readings in Macedonian, such readings are presumed to be available.

However, it is difficult to extend this analysis to languages like Inuktitut. Like BCS, Inuktitut lacks definite determiners, meaning that it patterns as an NP-language in the system proposed by Boškovič (2008, 2012). Yet, from a semantic perspective, pronominal clitics in Inuktitut are *more* definite (i.e.  $D^0$ -like) in nature than both BCS and Macedonian, given that only anaphoric definite readings are permitted. Inuktitut thus constitutes a counterexample to the idea that the absence of overt determiners indicates the absence of a  $D^0$ -layer.

In the same vein, Italian demonstrates that the presence of overt determiners in a given language does not entail that it will behave like "DP" languages. As discussed by Ippolito (2018), while Italian has definite determiners, pronominal clitics in Italian behave like BCS, in that they may be interpreted as anaphoric definite, (71a); sloppy, (71b); or indefinite, (71c). Thus, while Italian is *morphologically* similar to Macedonian, in that both languages have definite determiners, the *grammatical behaviour* of Italian's pronominal clitics might lead one to expect that Italian is an "NP" language.

## (71) Italian: Pronominal clitics can encode sloppy and indefinite readings

## a. Anaphoric definite:

Un uomo è entrato. Gianni crede che Maria lo conosca a man has entered Gianni believes that Maria him.cl knows 'A man came in. Gianni believes that Maria knows him.'

## b. Sloppy:

Leo ha venduto **la sua villa al mare**, e cos'i **l**'ho venduta Leo has sold the his villa at.the sea and so it.cl-have sold anch'io also-I

'Leo sold his villa at the sea, and so I sold mine too.'

#### c. *Indefinite*:

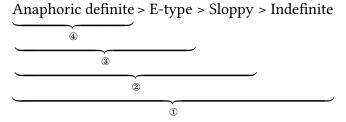
L'anno scorso i vicini hanno comprato **un cane**. Quest'anno the-year last the neighbours have.3P bought a dog this-year lo compriamo anche noi it.CL buy also we 'Last year the neighbours bought a dog. This year we'll buy one too.' (Ippolito, 2018)

Inuktitut and Italian thus demonstrate that the presence or absence of definite determiners in a given language has no bearing on the available interpretations of that language's pronominal clitics. More broadly, these languages constitute counterexamples to the idea that the presence or absence of definite determiners may be used to diagnose nominal structure, contra Boškovič (2008, 2012).

## 3.5.2 An implicational hierarchy

I now return to the implicational hierarchy of pronominal clitic meanings, repeated in (72). The relevant typology is more gradient than indicated by Runić (2014), who discusses languages that either pattern like BCS or Macedonian. The implicational hierarchy given in (72), however, predicts the existence of two additional classes of languages, to be discussed below.

## (72) Implicational hierarchy for pronominal clitic meanings



→ If a language's pronominal clitics permit an interpretation lower in the hierarchy, it must permit an interpretation higher in the hierarchy. However, the availability of an interpretation higher in the hierarchy does not entail the availability of an interpretation lower in the hierarchy.

Starting with the most permissive languages (①), languages that permit all four of the above interpretations include Italian, shown in entirety in (73) for completeness, as well as BCS, as previously discussed.<sup>38</sup>

## (73) Italian: Pronominal clitics permit all four interpretations

a. Anaphoric definite:

Un uomo è entrato. Gianni crede che Maria lo conosca a man has entered Gianni believes that Maria him.cl knows 'A man came in. Gianni believes that Maria knows him.'

b. <u>*E-type:*</u>

Ogni contadino possiede **un asino lo** picchia every farmer who owns a donkey it.cl beats 'Every farmer who owns a donkey beats it.'

c. Sloppy:

Leo ha venduto **la sua villa al mare**, e cos'i **l**'ho venduta Leo has sold the his villa at.the sea and so it.cl-have sold anch'io also-I

'Leo sold his villa at the sea, and so I sold mine too.'

<sup>&</sup>lt;sup>38</sup>Maša Močnik (p.c.) additionally confirms that Slovenian also falls within this category.

#### *Indefinite:* d.

L'anno scorso i hanno comprato un cane. Quest'anno vicini the-year last the neighbours have.3P bought a dog this-year **lo** compriamo anche noi it.cl buy also we 'Last year the neighbours bought a dog. This year we'll buy one too.' (Ippolito, 2018)

The implicational hierarchy shown above also predicts the existence of languages whose pronominal clitics permit sloppy, E-type, and anaphoric definite readings, though not indefinite readings (i.e. ② in the hierarchy above). As indicated earlier, this type of language was not discussed by Runić (2014). In (74), however, we see that Romanian instantiates this type of language. Greek is also such a language (Giannakidou and Merchant, 1997; Oikonomou, 2017).

#### (74)Romanian: Pronominal clitics can be sloppy, E-type, and anaphoric definite

#### *Anaphoric definite:* a.

Am văzut **un automobil roșu** azi în Brasov, si Adina **1**-a văzut red today in Brasov and Adina it.cl.Acc see saw a car în Bucuresti in Bucharest 'I saw a red car today in Brasov, and Adina saw it (too) in Bucharest.'

#### b. E-type:

Toti cei care au împrumutat **un album** trebuie să | îl | returneze până everyone who has borrowed an album must it.cl return vineri

Friday

'Everyone who borrowed an album must return it by Friday.'

## Sloppy:

Alexandru l-a vizitat **pe tatăl său**, si Adina **l**-a Alexandru him.cl-have visited PE father his and Adina him.cl-have vizitat, de asemena visited too

'Alexandru visited his father, and Adina visited **him** (= Alexandru's / Adina's father) too.'

## d. *No indefinite reading:*

#Am văzut **un automobil roșu** azi în Boston, și Adina Îl-a văzut I saw a car red today in Boston and Adina it.CL.ACC see în București in Bucharest *Intended:* 'I saw a red car today in Boston, and Adina saw one in Bucharest.' (Alexandru Nicolae and Adina Dragomirescu, p.c.)

The third type of language (③) permits only E-type and anaphoric definite readings, but not indefinite or sloppy readings. Such languages include French, (75) (and, by inference, Macedonian, though the relevant E-type data is not readily available).

## (75) French: Pronominal clitics can be E-type or anaphoric definite

#### a. Anaphoric definite:

Sophie a vu **une voiture rouge**, et Vincent **1**'a vue aussi Sophie has seen a car red and Vincent it.cl.has seen also 'Sophie saw a red car and Vincent saw it too.'

## b. <u>*E-type:*</u>

Chaque personne qui a emprunté **un livre** doit **le** rendre each person who has borrowed a book must it.cl return 'Everyone who borrowed a book must return it.'

## c. No sloppy reading:

Sophie a vu **sa mère**, et Vincent I'a vue aussi Sophie has seen her mother and Vincent her.cl.have seen also 'Sophie saw her mother, and Vincent saw **her** (= Sophie's / #Vincent's mother) too.'

#### d. *No indefinite reading:*

Context provided: Sophie is in Nantes and Vincent is in Montreal. #Sophie a vu une voiture rouge, et Vincent []'a vue aussi Sophie has seen a car red and Vincent it.cl.has seen also Intended: 'Sophie saw a red car and Vincent saw one too.' (Sophie Moracchini and Vincent Rouillard, p.c.)

Finally, Inuktitut exemplifies the final type of language (④) in our implicational hierarchy. Recall from (55) in the previous section that Inuktitut pronominal clitics permit anaphoric definite readings only, excluding indefinite, sloppy, and even E-type readings. These data are repeated below as (76).

## (76) Inuktitut: Pronominal clitics can only be anaphoric definite

#### a. Anaphoric definite:

Jaani **titirauti-mik** tigu-si-juq titirauti-kkuving-mik amma
Jaani.ABS pencil-MOD take-AP-3s.S pencil-receptacle-MOD and
tuni-**janga** Miali-mut
give-3s.S/3s.O Miali-all

'Jaani took a pencil from the pencil case and gave it to Miali.' (SB, PG)

## b. *No E-type reading:*

#tamangmi **titirauti-mik** tigu-si-juit utiqti-giaqaq-**tangat**everyone.ABS pencil-MOD take-AP-3P.S return-must-3P.S/3s.O

Intended: 'Everyone who took a pencil must return it.'

Consultant's comment: "No...it does make sense but it's not the specific word to use, it's questionable." (SB, PG)

## c. *No sloppy reading:*

Jaani sikki-nga-nik kinauja-kkuving-muut-tuq, Miali-up Jaani.ABs cheque-poss.3s/3s-mod money-receptacle-in-3s.S, Miali-erg nungu-tanga uqungmiaqang-nut finish-3s.S/3s.O candy-ALLAT

Intended: 'Jaani put his cheque in the bank, while Miali spent it (= his cheque / #her cheque) on candy.'

Consultant's comment: "It sounds like she spent his cheque." (SB, PG)

## d. *No indefinite reading:*

#Taiviti niuvi-lauq-tuq **nutaa-mik uviniru-mik** ippaksaq amma=lu David.ABS buy-PST-3S.S new-MOD shirt-MOD yesterday and=also Carol-m niuvi-lau-mmi-janga Carol-ERG buy-PST-also-3S.S/3S.O Intended: 'David bought a new shirt and Carol bought one too.' Consultant's comment: "It sounds like they shared money to buy one shirt." (NB, AB)

A summary of the typology of pronominal clitic meanings is repeated in (77), labelled with the relevant languages. It is at this point not immediately obvious how this fourway hierarchy should be encoded grammaticality—though as noted above, the fact that Italian (with overt determiners) and Inuktitut (with no overt determiners) fall where they do suggests that this hierarchy cannot be straightforwardly derived from the structural size of the pronominals.

## (77) Summary of typology of pronominal clitic meanings

Anaphoric definite > E-type > Sloppy > Indefinite

## Legend:

- 1: Italian, BCS
- 2: Romanian, Greek
- 3: French
- 4: Inuktitut

To conclude, I showed in this section that languages fall along a possibly universal implicational hierarchy of available pronominal clitic interpretations. In any given language, pronominal clitics that permit an interpretation found higher (rightwards) in the hierarchy must also permit an interpretation found lower (leftwards) in the hierarchy, though not vice versa. Additionally, each possible category along this four-way hierarchy is represented by an existing language—including the rare type of language whose pronominal clitics only permit anaphoric definite readings, which is represented by Inuktitut. As noted above, it is not obvious at this time why languages pattern as they do along this hierarchy, though this of course poses an interesting question for future research.

# 3.6 Chapter summary: An agreement/clitic split across Inuit

I demonstrated above that Inuktitut displays a number of ABS object asymmetries, in that special semantic and morphosyntactic restrictions are placed on the ABS objects. On this basis, I argued that, in Inuktitut, subject-referencing morphology is genuine  $\phi$ -agreement, while object-referencing morphology is actually clitic doubling—a pronominal D<sup>0</sup> in a movement chain with a full DP (cf. Baker and Kramer, 2016). The pronominal clitic was shown to be obligatorily interpreted as anaphoric definite; in clitic doubling, it forces its DP associate to be interpreted as such as well. Co-occurrence restrictions between the clitic and a bare ABS object pronoun follows from more general conditions on copy deletion and copy spell-out.

As discussed earlier in this chapter, the Inuktitut data shown here are in many ways at odds with previous characterizations of the Inuit languages—in particular, Kalaallisut (Fortescue, 1984; Bittner, 1994; Bittner and Hale, 1996a,b; Sadock, 2003). Unlike Inuktitut, Kalaallisut does not display any ABS object asymmetries; rather, ABS subjects and ABS objects pattern together. This, in turn, suggests that Kalaallisut lacks clitic doubling, meaning that both subject- and object-referencing forms in Kalaallisut are realizations of

genuine  $\phi$ -agreement.

Crucially, we arrived at this distinction without referencing *any* morphological distinctions for  $\phi$ -agreement or clitic doubling. In fact, recall that Inuktitut and Kalaallisut have identical argument-referencing forms, as repeated below with the (partial) declarative paradigms below:

## (78) Inuktitut declarative forms (79) Kalaallisut declarative forms

- a. **-jara** '1s.S/3s.O'
- b. **-jait** '2s.S/3s.O'
- c. **-jarma** '2s.S/1s.O'

- a. **-vara** 'IND.1s.S/3s.O'
- b. **-vait** 'IND.2s.S/3s.O'
- c. -varma 'IND.2s.S/1s.O'

Recall, moreover, that both Inuit varieties uniformly fail standard morphological tests for clitichood, as shown above. The object-referencing morphemes in both varieties may appear in portmanteaux, and display contextual allomorphy sensitive to mood and clause type. Therefore, examining their morphological appearance alone would have *obscured* the empirical finding that their object-referencing morphemes are underlyingly structurally different. In contrast, this structural distinction was revealed by examining *interpretive* and *distributional* interactions between these morphemes and the arguments they cross-reference.

Two lessons emerge from this discussion. First, a typological point: though it has been claimed by Woolford (2008) and Nevins (2011) that all apparent instances of object-referencing morphology are doubled clitics, suggesting that object  $\phi$ -agreement does not exist, this is too strong. Inuit shows that both are attested in natural language, and may even co-exist within a single language family. Moreover, as discussed above, a similar conclusion can be made by observing the behaviour of so-called clitics in varieties of Spanish (cf. Suñer, 1988).

Second, a methodological point: the fact that this split between Inuit varieties cannot be discerned based on morphological diagnostics suggests that these types of diagnostics are not necessarily reliable. Instead, I advocate for the usage of syntactic diagnostics that specifically reference the structural and derivational properties of  $\phi$ -agreement and clitic doubling respectively. As I demonstrated above with my comparison of Inuktitut and Kalaallisut, clitic doubling yields a number of syntactic and semantic effects that are not predicted—or necessarily attested—in languages with genuine object  $\phi$ -agreement.

In Chapters 4 and 5, I will demonstrate that, far from being an isolated phenomenon, the  $\phi$ -agreement vs. clitic doubling distinction in Kalaallisut and Inuktitut has a number of theoretical ramifications for other properties of Inuit grammar—including the status of ergativity.

## **Chapter 4**

## Modeling ergativity across Inuit: Variation in ABS object movement

In this chapter, I argue that the object  $\phi$ -agreement vs. clitic doubling distinction uncovered in Chapter 3 is directly tied to the status of the ergative patterning across Inuit, and offer a novel analysis of ergativity that accounts for this link. This departs from previous literature on this topic, which has focused on the properties of the antipassive construction. I first present independent evidence establishing that ERG case morphology is uniformly *dependent* (e.g. Marantz, 1991) across Inuit. Building on this, I show that the distribution of ERG case is ultimately constrained by the *nature of its case competitor*—i.e. whether it is a full ABS DP (in Kalaallisut) or a pronominal clitic (in Inuktitut). Variation in ergativity across Inuit is therefore entirely dependent on the properties of the *ABS object*, rather than the ERG-marked subject (whose properties remain constant in all Inuit varieties). This proposal has ramifications for the typological distinction between syntactic and morphological ergativity and, relatedly, the nature (and directionality) of dependent ERG case assignment.

## 4.1 Introduction

In Chapter 3, I proposed that Inuit displays a cross-dialectal split in the underlying status of the morphemes that cross-reference ABs objects: whereas these morphemes expone  $\phi$ -agreement in Kalaallisut, in Inuktitut they are *pronominal clitics*. We saw that this split, though seemingly minor, accounted for a number of interpretive contrasts between the two varieties—in particular, the existence of ABs object asymmetries in Inuktitut, and, correspondingly, the absence of such asymmetries in Kalaallisut.

In this chapter, I demonstrate that the  $\phi$ -agreement vs. clitic doubling distinction seen in Kalaallisut and Inuktitut is directly tied to another, seemingly independent point of micro-variation concerning the *status of ergativity* in Inuktitut and other Eastern Canadian Inuit varieties. Recall from the previous chapters that this variation has generally been discussed in the context of the semantic distribution of MOD objects in the antipassive construction (e.g. Johns, 2001, 2006; Allen and Schroeder, 2003; Allen, 2013; Carrier,

2012, 2017; Murasugi, 2014, 2017). However, I argue in this chapter that the profile of the antipassive construction is only part of the overall picture: *the ergative construction itself is subject to cross-dialectal variation*.

I demonstrate that the properties of the ergative construction in a given Inuit variety is crucially and directly tied to the object  $\phi$ -agreement vs. clitic distinction uncovered in Chapter 3. Specifically, the relative robustness of the ergative patterning is *inverse correlated* with the relative "pronominality" (i.e. clitichood) of its object-referencing morphology. As summarized in (1), this generalization will be illustrated with Kalaallisut and Inuktitut, as well as the varieties of Inuttut spoken in Labrador, Canada. The varieties presented below thus constitute individual points along a gradient system.

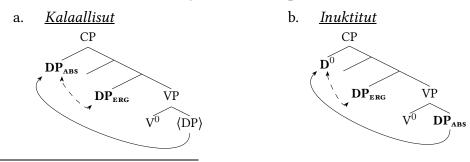
## (1) The status of ergativity is related to the "pronominality" of obj. morphology

	Kalaallisut	Inuktitut	Labrador Inuttut (§4.4.1)
Ergativity	Robustly ergative	Less ergative	Weakly ergative (pronouns only)
Obj. morphology	Agreement	Clitic doubling	Pronominal clitic only (no doubling)

To account for this correlation, I offer three interrelated claims. The first claim is that ERG case in Inuit is *dependent* (e.g. Marantz, 1991; Bittner and Hale, 1996a; Baker, 2015), assigned to a nominal element in the context of another nominal element. However, departing from canonical treatments of dependent ERG case, in which an upwards directionality of case assignment is assumed, I propose that ERG case in Inuit is assigned downwards, to the *lower* of two vP-external nominals (cf. Bittner and Hale, 1996a,b). This is a logical extension of the fact that the Inuit languages are *syntactically ergative*, with the ABS object occupying a higher position than the ERG subject. As I discuss, this point of variation across dependent ERG case systems is fully expected to exist, given the distinction between morphologically ( $\approx$  low-ABS) vs. syntactically ( $\approx$  high-ABS) ergative languages.

This leads us to our second claim: the inverse correlation in (1) reflects variation in the *nature of the case competitor* for dependent ERG case assignment. In Kalaallisut, the case competitor is a full DP that raises to the extended CP-domain; in Inuktitut (and Labrador Inuttut) the case competitor is a *pronominal clitic*. This is shown below.

#### (2) Variation in the nature of the case competitor



<sup>&</sup>lt;sup>1</sup>The Labrador Inuttut facts will be presented later in this chapter.

Finally, the resulting picture is one in which microvariation in the status of ergativity across Inuit tracks the *syntactic properties of the ABS object*, as opposed to any properties of the ERG-marked subject (which remain constant throughout). This investigation of ergativity in Inuit, in turn, uncovers an important insight into the nature of case alignment more generally. Although the majority of research on ergative systems has focused on the nature of ERG case on the subject, the present findings demonstrate the theoretical importance of the *ABS object* co-occurring with the subject.

This chapter is organized as follows. In §4.2, I briefly overview some previous analyses of ERG case assignment in Inuit, as well as their empirical issues. In §4.3, I demonstrate that ERG case in Inuktitut is dependent, based on parallels with dependent case systems cross-linguistically. §4.4 then demonstrates that, across Inuit, we find variation in the nature of the case competitor for dependent ERG case: in Kalaallisut, the case competitor is a full DP object, while in Inuktitut (and in more easterly dialects such as Labrador Inuttut), the case competitor is a pronominal D<sup>0</sup> element, resulting in the appearance of a weaker ergative patterning. Finally, §4.5 proposes that dependent ERG case is assigned downwards in syntactically ergative languages, and explores the consequences of such a proposal.

## 4.2 Previous approaches to ERG case

Much research on Inuit syntax has focused on the nature of the ergative system, with little consensus achieved. This section overviews some of this research, and outlines various empirical issues with the analyses given. Specifically, I discuss the view that ERG case is inherent, the view that ERG case is structurally assigned by T<sup>0</sup>, and the view that ERG case is equivalent to GEN case.<sup>2</sup> I will ultimately argue in 4.3 that these issues may be circumvented under a *dependent* analysis of ERG.

#### 4.2.1 ERG is inherent

A dominant approach to ERG case assignment is the proposal that ERG case is *inherent*, assigned to external arguments introduced by  $v^0$  (or Voice<sup>0</sup>) (Woolford, 1997, 2006; Anand and Nevins, 2006; Aldridge, 2008b; Legate, 2008, 2012; Mahajan, 2012).<sup>3</sup> Inherent ERG case is therefore associated with  $\theta$ -role assignment. The idea that ERG case is assigned by Voice<sup>0</sup> is meant to capture the fact that ergative languages distinguish between

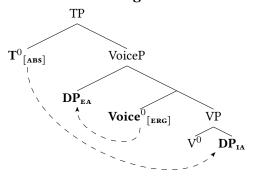
<sup>&</sup>lt;sup>2</sup>These are not the only analyses of ergativity in the literature, but are discussed here because they have been applied to Inuit. See also Imanishi (2014), for instance, for the idea that ERG may be a default case, and Deal (2010) for the idea that ERG case expones the  $\phi$ -features of the subject and object, transferred from the  $\phi$ -probe in  $v^0$  to the subject in Spec-vP. Deal's analysis will be discussed briefly in §4.3.4.

<sup>&</sup>lt;sup>3</sup>Regarding the distinction between  $v^0$  and Voice<sup>0</sup>, I follow Kratzer (1996) in taking external arguments to be introduced by Voice<sup>0</sup>. There is also various recent literature (e.g. Massam, 2009; Tollan, 2018) suggesting that transitive external arguments are introduced by Voice<sup>0</sup>, while unergative external arguments (which do not receive ERG case in the languages surveyed by these authors) are introduced lower, by  $v^0$ . I will therefore refer to the inherent ERG case assigner under these analyses as Voice<sup>0</sup> throughout this discussion.

transitive and intransitive subjects by case morphology.

For many authors working within this framework, because the external argument is assigned case in situ by Voice<sup>0</sup>, the internal argument is able to be targeted by T<sup>0</sup>, thus deriving the ERG-ABS case pattern. This is shown in (3).

## (3) Inherent case assignment



Previous researchers working on Inuit have also argued for this approach (Spreng 2006, 2012, cf. Murasugi 1992). In addition to capturing the presence of ERG case on transitive sentences, these authors argue that this also captures the absence of ERG case on transitive subjects of *antipassive* constructions, (4), assuming that antipassive constructions are derived with a different flavour of  $Voice^0/v^0$  that does not assign ERG case to its external argument.

## (4) Inuktitut: Ergative vs. antipassive alternation

#### a. *Ergative*:

Taiviti-**up** surak-tanga igalaaq David-ERG break-3s.S/3s.O window.ABS 'David broke the window.'

#### b. *Antipassive*:

**Taiviti** surak-<u>si</u>-juq igalaar-mik David.ABS break-AP-3s.S window-MOD 'David broke the window.'

(NB, AB)

However, in Chapter 6, I will argue that antipassive constructions in Inuktitut are not detransitivized (but are argument-structurally identical to their ergative counterparts). Moreover, the rest of this chapter will offer evidence revealing that ERG case cannot be inherent in Inuktitut. In particular, Inuktitut has transitive (i.e. bivalent) constructions in which Voice<sup>0</sup> is present, but ERG case is unavailable—and, on the flipside, may permit ERG case on the subject of an unaccusative verb in the absence of Voice<sup>0</sup> (e.g. in the presence of an applied argument). The latter point is illustrated in (5) for clarity, but will be discussed in greater detail below.

## (5) Inuktitut: ERG case on unaccusative subject

#### a. <u>Baseline:</u>

Jiisusi tuqu-lauq-tuq Jesus.ABS die-PST-3S.S 'Jesus died.'

## b. <u>Unaccusative applicative:</u>

Jiisusi-**up** tuqu-**jjutigi**-lauq-taatigut Jesus-ERG die-APPL-TR-PST-3s.S/1P.O 'Jesus died for us.'

(NB, AB)

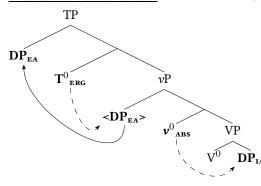
See also Baker (2014, 2015), Baker and Bobaljik (2018), Rezac et al. (2014), Deal (to appear), and others for additional empirical arguments against ERG case as inherent, along the lines given above.

#### 4.2.2 **ERG is NOM**

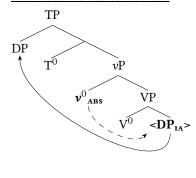
A second view of ergativity in Inuit comes from Bobaljik (1993) and Pittman (2005), who take ERG case to be akin to structural NOM Case, assigned in the TP-domain (cf. Levin and Massam, 1985); ABS case is, under this approach, analogous to structural ACC Case, assigned by  $v^0$ .<sup>4</sup> A schematization of this system is given below in (6):<sup>5</sup>

## (6) Illustration of ERG=NOM approach

#### a. Transitive construction:



#### b. *Intransitive construction:*



For this system to account for the fact that external arguments in unergative constructions receive ABS case, not ERG case, a few additional provisions must be made. Pittman (2005),

<sup>&</sup>lt;sup>4</sup>This is a slightly simplified version of Bobaljik's (1993) proposal. For Bobaljik, ergativity arises from the setting of a macroparameter, the Obligatory Case Parameter, which determines whether the case assigned by  $T^0$  (Nom/Erg) or the case assigned by  $v^0$  (ACC/ABS) is obligatorily assigned. This difference is visible only in intransitive clauses, in which there is only one argument but two possible case assigners. In accusative languages, the obligatory case is Nom in  $T^0$ , which is assigned to the subject in both transitive and intransitive clauses; in ergative languages, the obligatory case is ABS in  $v^0$ , which is assigned to the object in transitive clauses and to the subject in intransitive clauses.

 $<sup>^5</sup>$ These structures are adapted from Pittman (2005), who does not assume the presence of VoiceP in addition to  $\nu$ P.

for instance, adopts a Cyclic Agree approach (Béjar and Rezac, 2009), whereby the  $\phi$ -probe in  $v^0$  expands its search domain to include the external argument in Spec-vP, if there is no suitable goal in  $v^0$ 's c-command domain.

This approach faces a similar issue as the inherent approach to ERG case assignment. For Pittman, unaccusative subjects receive ABS case from  $v^0$  because they are base-generated as internal arguments. In order to account for the fact that unaccusative subjects do not receive ERG case (i.e. in monovalent contexts), we might have to say that, once the internal argument receives ABS case by  $v^0$ , it is not eligible to be further assigned ERG case by  $v^0$  after it raises to Spec-TP for EPP-related reasons. However, this proposal is contradicted by the fact that unaccusative subjects in Inuktitut  $v^0$  able to receive ERG case in certain contexts, as shown in (5b) above. This suggests that  $v^0$  is in principle able to assign case to unaccusative subjects that have raised to Spec-TP. In other words, it is not possible to derive both (5a) and (5b) under this system, since this leads to conflicting behaviour in the case-assigning capabilities of  $v^0$ .

Note that the evidence against this approach again comes from the same set of constructions that simultaneously offer evidence *for* a dependent treatment of ERG case.

#### **4.2.3 ERG is GEN**

Finally, Johns (1987, 1992) and Yuan (2013) argue that ERG case is actually GEN case, meaning that transitive sentences in Inuit are actually nominalized (see also Creider 1978). The primary basis of this nominalist approach comes from the fact that GEN case on DP-internal possessors is homophonous with ERG case, and the the fact that possessive morphology cross-referencing the possessor and possessee is identical to the argument-referencing morphology found on verbs. This is shown below:

## (7) Possessive morphology in Inuktitut

a. qimmi-**ra**dog-Poss.1s/3s
'my dog'

b. qimmi-**kka** dog-POSS.1S/3P 'my dogs'

## (8) S/O verbal morphology

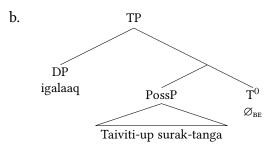
a. kapi-ja**ra** stab-1s.S/3s.O 'I stabbed it' b. kapi-ja**kka** stab-1s.S/3p.O 'I stabbed them'

According to this approach, the ERG (=GEN) argument is the possessor of a nominalized passive participle, as indicated by the structure in (9). The complex possessive structure is, in turn, interpreted as the predicate of the ABS argument, as schematized in (10). While the structure shown below is taken to be specific to Inuit, the existence of ERG-GEN syncretism is cross-linguistically quite robust (e.g. Coon, 2008; Kaufman, 2009; Rill, 2017).

## (9) Transitive sentences under nominalist analysis

a. Taiviti-up surak-tanga igalaaq
David-ERG break-3s.S/3s.O window.ABS
'David broke the window.'

Lit.: 'The window is David's broken one.'



Indeed, it has been proposed that ergative case systems often historically arise from passives, thus lending support for the analysis above (e.g. Anderson, 1976; Comrie, 1978; Dixon, 1994). Indeed, as Johns (1987, 1992) points out, passive participles may indeed serve as nominals in Inuit.<sup>6</sup>

## (10) Nominal passive participles

kapi-jaq stab-pass.part 'the stabbed one'

(Johns, 1992)

While it is possible that ergative constructions in Inuit were historically nominalized (and, concomitantly, that ERG case did develop from GEN case), it is hard to reconcile this idea with synchronic properties of the language. First, as shown above, the nominalist analysis relies on a parallel between possessive and verbal morphology. However, this parallel cannot extend beyond 3rd person object-referencing morphology, since possessees are inherently 3rd person; Inuit has a full paradigm of portmanteau morphemes inflecting for 1st/2nd person objects, as illustrated by the examples below.

## (11) Verbal morphology with 1st/2nd person objects

a. kapi-**jaanga** stab-3s.S/1s.O 'he stabbed me' c. kapi-**jagit** stab-1s.S/2s.O 'I stabbed you (sg.)'

b. kapi-**jaatit** stab-3s.S/2s.O 'he stabbed you (sg.)' d. kapi-**jarma** stab-2s.S/1s.O 'You (sg.) stabbed me'

Moreover, this parallel between possessive and verbal morphology in 3rd person contexts is only visible in the participial (≈ declarative) mood. As noted above, it is possible that the participial mood was historically genuinely nominalized—but this is harder

<sup>&</sup>lt;sup>6</sup>As I discuss in Yuan (2013), however, this construction is not permitted by all Inuktitut speakers.

to maintain for other moods in the language. Recall from Chapter 2 that the 3rd person object-referencing morpheme is in most other moods realized as *-uk* in the absence of any additional morphological rules (e.g. Dorais, 1990); this is shown below with four different mood paradigms. This morpheme is crucially not used to cross-reference the possessee in nominal contexts.

## (12) 3rd person object morpheme -uk

taku-vaa taku-va-**uk**see-int.3s.S see-int.3s.S-3s.O
'Does he/she/it see?' 'Does he/she/it see it?'

b. taku-luni taku-luni-**uk**see-CTMP.3s.S see-CTMP.3s.S-3s.O

'While he/she/it shall see' 'While he/she/it shall see it'

c. taku-mmat taku-mma-**uk**see-CAUS.3S.S see-CAUS.3S.S-3S.O
'Because he/she/it sees' 'Because he/she/it sees it'

d. taku-li taku-li-**uk**see-IMP.3s.S see-IMP.3s.S-3s.O
'May he/she/it see!' 'May he/she/it see it!'

Based on these facts, I conclude that it is difficult to maintain a *general* analysis of the ergative case system that takes ERG case to be equivalent to GEN case, despite any possible diachronic connections.

To sum up, I have overviewed three previous approaches to ERG case assignment in Inuit (inherent/oblique, nominative, and genitive), and summarized various problems with each. I will now argue that ERG case is actually *dependent*, assigned to a subject in the context of another nominal element. As noted above, the full range of facts found in Inuktitut is particularly problematic for inherent treatments of ERG case, as Inuktitut displays a dissociation between Voice<sup>0</sup> and ERG case.

## 4.3 ERG case in Inuit is dependent

In this section, I argue that ERG case in Inuktitut (and Inuit, more generally) is *dependent*, assigned configurationally on the basis of the c-command relationship between two nominal elements (Marantz, 1991; Baker, 2015, a.o.). I present evidence for the dependent treatment of ERG case in Inuktitut based from its interaction with *lexical case*, as well as its availability on unaccusative subjects. Thus, ERG case assignment is not tied to transitivity, argument structure, or the presence of any particular functional head along the clausal spine, contrary to most previous analyses of the Inuit ergative system, as outlined above.

This proposal sets the stage for unifying the  $\phi$ -agreement vs. clitic doubling distinction uncovered in Chapter 3 with the varying nature of ergativity across Inuit, to be detailed in §4.4 and §4.5.

## 4.3.1 Dependent case and its diagnostics

According to the dependent theory of case assignment, morphological case is assigned based on a nominal's structural position relative to other nominals, not relative to a functional head (Yip et al., 1987; Marantz, 1991; Bittner and Hale, 1996a; McFadden, 2004; Baker and Vinokurova, 2010; Baker, 2014, 2015; Baker and Bobaljik, 2018, a.o.). In this system, ERG and ACC case are both dependent, but differ in the *directionality* of case assignment, which is parametrized across languages. As shown in (13a), ERG case is taken to be assigned to the higher of two nominals within a local domain of case assignment, while in (13b) ACC case is assigned to the lower of two such nominals.

## (13) **Dependent case assignment**

a. <u>ERG assigned to higher of two DPs:</u> b. <u>ACC assigned to lower of two DPs:</u>



The broader theory of case assignment that subsumes dependent case also includes *lexical case*, which, following McFadden (2004) and Preminger (2011, 2014), is the realization of a P<sup>0</sup> that directly Merges with a nominal. Once a nominal receives case, it is no longer in the purview of the dependent case calculation, i.e. it no longer counts as a 'case competitor. Thus, dependent case can only be assigned in the context of multiple *caseless* nominals.<sup>7</sup>

A logical extension of dependent case theory is that the distribution of dependent case is unrelated to the distribution of any functional heads standardly implicated in structural Case assignment, (Chomsky, 2000, 2001). Rather, dependent case is diagnosed by case alternations across constructions that occur *independent of* any differences in clause structure or argument structure. I will illustrate this point with two diagnostics, which I will then apply to ERG case in Inuktitut. Ultimately, the distribution of ERG case in Inuktitut will be shown to be incompatible with inherent treatments of ERG case, which crucially rely on the presence of Voice<sup>0</sup>. In Inuktitut, the presence of Voice<sup>0</sup> does not necessitate ERG case assignment, while the absence of Voice<sup>0</sup> does not prohibit ERG case assignment. Similarly, as discussed in §4.2.2, the distribution of ERG case in Inuktitut present a challenge for the idea that ERG has the same structural source as NOM case (i.e. T<sup>0</sup>).

The first diagnostic for dependent case can be seen in constructions containing nominals marked with lexical case. Since lexical case renders a nominal unable to participate in the dependent case calculation, the presence of lexical case may thus *bleed* dependent

<sup>&</sup>lt;sup>7</sup>Although see Levin (2018) for arguments from Korean that dependent case may sometimes be assigned to nominals already bearing case, resulting in case stacking.

case assignment to another nominal. This is illustrated below with Icelandic, in which the presence of quirky (DAT) case on a subject prevents ACC case assignment to the object. The object in these constructions must surface instead as NOM.

## (14) Icelandic: Dependent ACC case bled by DAT-marked subject

a. <u>Baseline: ACC object:</u>

dagmamman bakaði **brauðið** day.mommy.nom baked bread.Acc 'The day-mommy baked the bread.'

b. <u>Bleeding of dependent ACC:</u>

<u>barninu</u> batnaði **veikin** child.dat recovered.from disease.nom 'The child recovered from the disease.'

(Yip et al., 1987)

Both constructions in (14) are transitive, thus presenting a challenge to the standard analysis of ACC case as assigned by  $v^0$ . Rather, the availability of ACC case on the object hinges on the morphological case of the subject. This is easily captured under dependent case theory: the absence of ACC case in (14b) is due to the lack of a viable case competitor for the object.

Another diagnostic for dependent case comes from the *availability* of dependent case in the absence of vP-level functional heads. This can be seen in both accusative and ergative case systems. In Sakha (Turkic), an accusative language, embedded subjects may undergo A-movement into the matrix clause (Vinokurova, 2005; Baker and Vinokurova, 2010). As demonstrated in (15), this movement feeds ACC case assignment to the subject. Crucially, (15b-c) show that ACC case on the raised subject is available even when the matrix verb is unaccusative or passivized. Given that such verbs are standardly assumed to lack the requisite functional material for assigning ACC case, this constitutes evidence for a dependent treatment of ACC case. In (15b-c), the embedded subject is assigned dependent ACC case after raising into a position that is sufficiently local to the matrix subject, its case competitor.

## (15) Sakha: Raising-to-object feeds dependent ACC case

a. Baseline:

Min [ sarsyn ehigi kel-iex-xit dien ] ihit-ti-m I.NOM tomorrow you.NOM come-FUT-2PS that hear-PAST-1sS 'I heard that tomorrow you will come.'

b. *Unaccusative matrix verb:* 

Masha [Misha-ny [yaldj-ya dien]] tönün-ne Masha.nom Misha-ACC fall.sick-fut.3sS that return-past.3sS 'Masha returned (for fear) that Misha would fall sick.'

## c. <u>Passivized matrix verb:</u>

Sargy [kim-i daqany [tönn-üm-üö dien]]
Sargy.Nom who-ACC PRT return-NEG-FUT.3sS that
erenner-ilin-ne
promise-PASS-PAST.3sS
'Sargy was promised that nobody would return.'
(Baker and Vinokurova, 2010)

However, raising the embedded subject into the same domain as the matrix subject does not *necessarily* result in ACC case assignment to the former. As shown in Mishar Tatar (another Turkic language), which displays a similar raising-to-object pattern, dependent ACC case on the raised embedded subject surfaces only if the matrix subject, its case competitor, is NOM, (16a). Dependent ACC case assignment is not possible in the context of a DAT-marked matrix subject. (16b).

## (16) Mishar Tatar: Dependent ACC case blocked by DAT matrix subject

a. <u>NOM matrix subject:</u>

Alsu Marat(-nx) [ej teze-de dip] šatlan-a Alsu Marat(-acc) house build-pst.3s that be.happy-st.ipfv.3s 'Alsu is happy that Marat built a house.'

b. <u>DAT matrix subject:</u>

```
Alsu-ga Marat(*-nx) [ej teze-de dip ] txjxl-a
Alsu-dat Marat(*-acc) house build-pst.3s that seem-st.ipfv.3s
'It seems to Alsu that Marat built a house.' (Podobryaev, 2013)
```

The availability of dependent case in unaccusative contexts can also be seen in ergative languages. As noted above, the existence of unaccusative ERG subjects is problematic for inherent treatments of ERG case assignment, which predicts this to be only possible for external arguments introduced by  $Voice^0$ . Similarly, it is difficult to capture under analyses in which ERG is assigned by  $T^0$ , which does not predict the case alternation seen on unaccusative subjects.

However, in languages like Shipibo, unaccusative subjects may nonetheless receive ERG case in certain configurations—specifically, when they co-occur with a lower nominal. In (17), we first see that Shipibo displays an ERG-ABS case system, with intransitive (e.g. unaccusative) subjects typically surfacing as ABS.

## (17) Shipibo: Ergative case system

- a. Maria-nin-ra ochiti noko-ke Maria-erg-prt dog.Abs find-prf 'Maria found the dog.'
- b. Maria-ra ka-ke Maria-prt.abs go-prf 'Maria went.'

(Baker, 2014)

Shipibo has a productive high applicative affix which may attach to a verb regardless of its transitivity or argument structure. The examples below show applicativization of a transitive verb, an unergative verb, and an unaccusative verb, respectively. We are particularly interested in the case morphology of the subject in the unaccusative example in (20), which is ABS in the baseline construction, but ERG in the presence of a lower applied argument. Crucially, applicativization does not directly alter the argument structure of the verb itself, which remains unaccusative.

## (18) Shipibo: ERG case assignment in transitive applicative

#### a. Baseline:

Jose-**kan** ochiti rete-kas-a-ra, ka-ke Jose-erg dog.Abs kill-want-o=s-prt go-prf 'Jose wanted to kill the dog, so it left.'

## b. Applicative:

Jose-**kan**-ra Rosa atapa rete-xon-ke Jose-ERG-PRT Rosa.ABS hen.ABS kill-APPL-PRF 'Jose killed a hen for Rosa.'

(Baker, 2014)

## (19) Shipibo: ERG case assignment in unergative applicative

#### a. Baseline:

Joni-bo-ra teet-ai person-pl-prt.Abs work-impf 'The people are working.'

## b. Applicative:

Joni-**baon**-ra Rosa tee-xon-ai person-pl.erg-prt Rosa.Abs work-appl-impf 'They work for Rosa.'

(Baker, 2014)

#### (20) Shipibo: ERG case assignment in unaccusative applicative

## a. Baseline:

Kokoti-ra joshin-ke fruit-prt.Abs ripen-prf 'The fruit ripened.'

## b. Applicative:

Bimi-**n**-ra Rosa joshin-xon-ke fruit-ERG-PRT Rosa.ABS ripen-APPL-PRF 'The fruit ripened for Rosa.'

(Baker, 2014)

Again, the pattern see in (20) follows straightforwardly from a dependent treatment of case. The sole difference between (20a-b) is in the absence or presence of a case competitor for the unaccusative subject. Beyond Shipibo, see also Imanishi (2017), Yuan (2017a), and Baker and Bobaljik (2018) for further instances of dependent ERG case in unaccusative

contexts.8

Below, I demonstrate that ERG case in Inuktitut passes both of the diagnostics for dependent case above. First, I show that anaphors in Inuktitut obligatorily bear *lexical MOD case*, and that the presence of an anaphoric object thus bleeds ERG case assignment to the subject. I also demonstrate that Inuktitut permits ERG unaccusative subjects in the presence of an applied argument. These properties thus show that ERG case in Inuktitut is not inherent, nor assigned by a dedicated functional head, but rather must be assigned in the context of a case competitor.

Note that the present dependent treatment of ERG case in Inuktitut is very much in the spirit of Bittner and Hale's (1996a) analysis of the Kalaallisut ergative system. However, the empirical observations detailed here are, as far as I am aware, novel to this dissertation.

#### 4.3.2 Interactions with lexical case

We saw above that we can see dependent case interact with lexical case in languages like Icelandic. I now demonstrate that Inuktitut exhibits a similar interaction between lexical and dependent case. The evidence for this comes from the behaviour of *anaphors* (expressed in Inuktitut as *ingmi* 'self'). As I will argue in greater detail in Chapter 6 of this dissertation, anaphors in Inuktitut obligatorily bear *lexical MOD case* as an Anaphor Agreement Effect strategy.<sup>9</sup>

Assuming for now that this is the correct analysis of anaphors in Inuktitut, let us consider the following alternation. Recall that Inuktitut has a transitivizing  $v^0$  realized as -gi, which attaches to otherwise intransitive predicates (e.g. psych-verbs and noun incorporation constructions, as shown below) and introduces an internal argument, (21). Transitivized verbs additionally project VoiceP, whose head is exponed in passive contexts, (22).

## (21) -gi-transitivization

a. Baseline:

iglu-vit taqsa-nga piu-juq house-poss.2s/3s.gen colour-poss.3s/3s.abs good-3s.S 'The colour of your house is good/nice.'

<sup>&</sup>lt;sup>8</sup>Deal (to appear) also identifies the possibility of ERG case on unaccusative subjects in Nez Perce, but ultimately argues against a dependent analysis. Deal's analysis of Nez Perce (following Deal 2010) will be discussed in §4.3.4.

 $<sup>^9</sup>$ The Anaphor Agreement Effect refers to the cross-linguistic inability for anaphors to be cross-referenced by  $\phi$ -agreement morphology (Rizzi, 1990, et seq.). In Inuktitut, because MOD-marked nominals are inaccessible to  $\phi$ -Agree processes, the presence of this case layer on anaphors allows the Anaphor Agreement Effect to be bypassed.

#### b. <u>Transitivized:</u>

piu-gi-jara taqsa-nga iglu-vit

good-tr-1s.S/3s.O colour-poss.3s/3s.Abs house-poss.2s/3s.gen 'I like the colour of your house.'

Lit.: 'I have the colour of your house as good/nice.'

(NB, IG)

## (22) -gi-transitivized verbs contain Voice<sup>0</sup>

#### a. Baseline:

kina-limaat piu-<u>gi</u>-nngit-taatigut who-all.erg good-tr-Neg-3s.S/1p.O 'No one likes us.'

Lit.: 'No one has us as good.'

#### b. *Passive*:

piu-gi-ja-nngit-tugut good-tr-pass.part-neg-1p.S 'We are not liked.' *Lit.*: 'We are not had as good.'

(NB, IG)

When present, this morpheme triggers an ERG-ABS case frame in which both arguments are cross-referenced on the verb. This is illustrated in (23)-(24). Note also that an ABS-MOD case frame is ill-formed, as shown in the examples in (23b) and (24b), respectively.

## (23) Transitivized psych-verb requires ERG-ABS case frame

a. Taiviti-**up Kiuru** nagli-<u>gi</u>-janga David-erg Carol.Abs love-tr-3s.S/3s.O 'David loves Carol.'

## b. \*Taiviti nagli-gi-juq Kiuru-mik

David.ABS love-TR-3s.S Carol-MOD

Intended: 'David loves Carol.'

(NB, AB)

## (24) Transitivized NI construction requires ERG-ABS case frame

## a. Jaani-**up** uvanga-u-quuji-gi-jaatit

Jaani-ERG 1s-be-seem-TR-3s.S/2s.O

'Jaani thinks that you look like me.'

*Lit.:* 'Jaani considers you as looking like me.'

(NB, IG)

#### b. \*Jaani ilin-nik uvanga-u-quuji-gi-juq

Jaani.ABS 2s-MOD 1s-be-seem-TR-3s.S

*Intended:* 'Jaani thinks that you look like me.'

(NB, AB)

In contrast to the ungrammatical examples in (23b) and (24b), however, an ABS-MOD case frame *exceptionally surfaces* when the internal argument introduced by -gi is an anaphor. This is illustrated in (25)-(26). In other words, when the internal argument bears lexical MOD case, it is not possible for the external argument to remain ERG.

## (25) Transitivized psych-verb: Subject is ABS with anaphoric object

- a. <u>Taiviti</u> nagli-<u>gi</u>-juq ingmi-**nik** David.ABS love-тк-3s.S self-мор 'David loves himself.'
- b. \*Taiviti-**up** nagli-<u>gi</u>-juq ingmi-**nik**David-ERG love-TR-3s.S self-MOD

  Intended: 'David loves himself.' (NB, AB)

## (26) Transitivized NI construction: Subject is ABS with anaphoric object

- a. **Jaani** ingmi-**nik** uvanga-u-quuji-<u>gi</u>-juq Jaani.ABS self-MOD 1s-be-seem- $\tau$ R-3s.S 'Jaani<sub>i</sub> thinks that he<sub>i</sub> looks like me.'
- b. \*Jaani-**up** ingmi-**nik** uvanga-u-quuji-<u>gi</u>-juq

  Jaani.ABS self-MOD 1s-be-seem-TR-3s.S *Intended:* 'Jaani<sub>i</sub> thinks that he<sub>i</sub> looks like me.' (NB, AB)

The examples in (25)-(26) are otherwise syntactically identical to the non-anaphoric examples in (23) and (24), respectively. In both pairs of constructions, the verb is transitivized by the morpheme -gi in  $v^0$ . The case alternation on the subject therefore cannot reflect a difference in argument structure or transitivity, thus ruling out an inherent analysis of ERG case assignment. Similarly, these data are problematic for the view that ERG is assigned by  $T^0$ , given that the nature of the vP-internal argument introduced by -gi should have no bearing on whether  $T^0$  can assign ERG case or not.

However, the unavailability of ERG case on the subject in the presence of a MOD-marked object is exactly as expected under a dependent theory of case. Just as we saw with the Icelandic data above, lexical case prevents a given nominal from participating in the case competition and may thus bleed dependent case assignment.

## 4.3.3 Raising to ergative

Another argument for the dependent nature of ERG case in Inuktitut comes from the behaviour of unaccusative applicatives. Whereas the interaction with lexical case illustrated above showed that dependent case assignment may be bled in the absence of a viable case competitor, applicativization *introduces* a case competitor into the structure, thus facilitating the occurrence of dependent case. Again, this may occur even in the absence of certain functional heads such as Voice<sup>0</sup>, as in unaccusative applicatives. This was seen earlier in Shipibo, in which the presence of an (ABS) applied argument triggers dependent ERG case on the subject, regardless of the transitivity of the verb. As repeated below in (27), transitive, unergative, and crucially even unaccusative subjects alike surface with ERG case once a lower argument—a case competitor—is introduced into the structure.

## (27) Shipibo: ERG case on subjects of applicativized verbs

## a. <u>Transitive:</u>

Jose-**kan**-ra Rosa atapa rete-xon-ke Jose-ERG-PRT Rosa.ABS hen.ABS kill-APPL-PRF 'Jose killed a hen for Rosa.'

## b. <u>Unergative:</u>

Joni-**baon**-ra Rosa tee-xon-ai person-pl.erg-prt Rosa.abs work-appl-impf 'They work for Rosa.'

## c. <u>Unaccusative:</u>

Bimi-**n**-ra Rosa joshin-xon-ke fruit-ERG-PRT Rosa.ABS ripen-APPL-PRF 'The fruit ripened for Rosa.'

(Baker, 2014)

I now show that an identical pattern is seen in Inuktitut. Recall from Chapter 2 that Inuktitut has a high applicative morpheme -*Cuti*,<sup>10</sup> which introduces an ABS applied argument. The examples in (28a-b) show the applicativization of an antipassivized transitive verb and an unergative verb, respectively. The structure of such examples is schematized in (29).

## (28) Inuktitut: Applicatives introduce an ABS internal argument

#### a. <u>Transitive:</u>

Jaani niuvi-ruti-qqau-jara piruqsiar-nit Jaani.ABS buy-APPL-REC.PST-1s.S/3s.O flower-MOD 'I bought flowers for Jaani.'

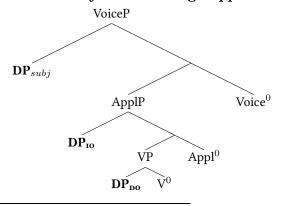
(NB, IG)

## b. <u>Unergative</u>:

Miali-up uqalimaa-**ruti**-qqau-janga **Jaani** Miali-erg read-APPL-rec.PST-3s.S/3s.O Jaani.ABs 'Miali read to Jaani.'

(NB, PI)

## (29) Structure of Inuktitut high applicative



<sup>&</sup>lt;sup>10</sup>As discussed in Chapter 2, the applicative has a number of phonologically-conditioned allomorphs, based on the final segment of the stem to which the applicative attaches.

Crucially, unaccusative verbs may also be applicativized, resulting in *ERG* case on the unaccusative subject. This is illustrated in (30)-(31) with the unaccusative verbs tuqu 'die' and tabbungaq 'go here,' and in (32)-(33) with the anticausative verbs matuiq 'open' and piruq 'grow.' Note that the applicative morpheme in these examples does not surface as -Cuti, the form seen in (28) above, but rather as -Cutigi; I will return to this point shortly.<sup>11</sup>

## (30) Applicativization of tuqu- 'die'

#### a. Baseline:

Jiisusi tuqu-lauq-tuq Jesus.ABS die-PST-3S.S 'Jesus died.'

## b. With applied argument:

Jiisusi-**up** tuqu-**jjutigi**-lauq-taatigut Jesus-erg die-APPL-have.as-PST-3s.S/1P.O 'Jesus died for us.'

(NB, AB)

## (31) Applicativization of tabbungaq- 'go here'

## a. <u>Baseline:</u>

Jaani tabbungaq-tuq Jaani.ABS go.here-3s.S 'Jaani showed up.'

## b. With applied argument:

Jaani-**up** tabbunga-**rutigi**-jaanga Jaani-ERG go.here-APPL-3s.S/1s.O 'Jaani showed up for me.'

(SB, PG)

## (32) Applicativization of matuiq- 'open'

#### a. Baseline:

niuvirvik matui-sarait-tuq store.ABS open-early-3s.S 'The store opened early.'

## b. With applied argument:

niuvirvi-**up** matui-sarai-**gutigi**-janga Miali store-ERG open-early-APPL-3s.S/3s.O Miali.ABs 'The store opened early for Miali.'

(SB, PG)

<sup>&</sup>lt;sup>11</sup>As for how we know that these verbs are unaccusative, the very fact that they require an alternative form of the applicative morpheme at all (otherwise not found in non-unaccusative contexts) is an unaccusativity diagnostic in and of itself, since it marks a morphological distinction between transitive and unergative verbs on the one hand, and unaccusative verbs on the other hand.

## (33) Applicativization of piruq- 'grow'

#### a. <u>Baseline:</u>

nunaraq piruq-tuq flower.ABS grow-3s.S 'The flower is growing.'

(NB, HB)

## b. With applied argument:

piruqsia-**p** piruq-pallia-**jjutigi**-janga angakkuq flower-ERG grow-gradually-APPL-3s.S/3s.O shaman.ABs 'The flower is growing (gradually) for the shaman.'

(NB, AB)

The fact that subjects of unaccusative and anticausative verbs may receive ERG case in the presence of a lower applied argument is, again, problematic for the inherent analysis of ERG case, as well as the view that ERG case is assigned by T<sup>0</sup>. However, it is an expected property of dependent case, in which case is assigned on the basis of the configurational relationship between two nominals, regardless of their thematic roles or grammatical functions.<sup>12</sup>

Concerning the alternative form of the applicative morpheme (-*Cutigi*) appearing in the unaccusative constructions above, I propose that this is ultimately due to contextual allomorphy. This must be clarified somewhat, however, since the additional <gi> sequence in the applicative is reminiscent of the transitivizing morpheme we saw earlier in this section, repeated in (34) for comparison. On the surface, this might suggest instead that the sequence -*Cutigi* should be decomposed into two separate morphemes: an applicative component -*Cuti* and a transitivizer -*gi*.

## (34) Morpheme -gi functions as transitivizer

Taiviti-up Kiuru nagli-**gi**-janga
David-erg Carol.Abs love-tr-3s.S/3s.O

'David loves Carol.' (NB, AB)

However, I argue that this *gi* sequence is not the transitivizing morpheme *-gi*, but is simply part of the applicative morpheme. In particular, whether the applicative is spelled out as *-Cuti* or *-Cutigi* depends on the verb stem to which it attaches. Evidence for this claim comes from the behaviour of anticausatives.

Anticausative verbs alternative with a causative (transitive) counterpart, as shown in

 $<sup>^{12}</sup>$ In addition to providing an argument for dependent ERG case, the existence of unaccusative applicatives in Inuktitut also raises a derivational question: how is the theme of an unaccusative verb (Merged as the complement of  $\rm V^0$ ) able to raise to subject position, past the applied argument? Deal (to appear) proposes that this is due to the presence of a phasal layer immediately dominaing ApplP, through which nominals raising to Spec-TP must raise. In unaccusative applicatives, the theme is able to raise to subject position, due to a *Spec-to-Spec anti-locality* condition on movement (e.g. Erlewine, 2016; Brillman and Hirsch, 2016). This anti-locality condition prevents movement of a nominal that is *too close*, i.e. between specifiers of structurally adjacent heads. This means that the applied argument in Spec-ApplP cannot raise to the intermediate phase edge without violating anti-locality. Instead, the theme may raise, before then moving to Spec-TP.

(35). The subject of the anticausative verb in (35a) is clearly interpreted as an *internal argument*, i.e. base-generated as the complement of  $V^0$ , not as an external argument (which is the interpretation found in the causative construction in (35b)). However, under the alternative transitivized analysis we are currently entertaining, we might expect the anticausative subject to be interpreted as an external argument—contrary to fact.

#### (35) Anticausative-causative alternation in Inuktitut

a. Anticausative:

**niuvirvik** matuiq-saali-**juq** store.ABS open-early-3s.S 'The store opened early.'

b. Causative (transitive):

**niuvirvik** matuiq-saali-qqau-**jara** store.ABS open-early-REC.PST-1S.S/3S.O 'I opened the store early.'

(NB, PI)

With (35a-b) as a baseline, we may now examine the interpretations of anticausative and causative subjects in applicative contexts. First, (36a) establishes that causative verbs are normally applicativized with the morpheme -*Cuti*, without the sequence <gi>. However, (36b), which is an attempt to form an anticausative applicative using -*Cuti*, shows that using the non-unaccusative sequence -*Cuti forces* a causative interpretation. However, (36b) is semantically ill-formed due to the inanimacy of the subject, as indicated by the consultant's comment provided under the sentence.

## (36) Anticausative verbs cannot be applicativized with -Cuti

- a. **Taiviti-up** matui-si-**jjuti**-qqau-janga paa-mik Kiuru Taiviti-ERG open-AP-APPL-REC.PST-3s.S/3s.O door-MOD Carol.ABS 'David opened the door for Carol.' (NB, AB)
- b. #niuvirvi-up matui-saali-jjuti-qqau-janga Piita
   store-ERG open-early-APPL-REC.PST-3s.S/3s.O Piita.ABS
   Intended: 'The store opened early for Piita.'
   Consultant's comment: "It sounds like the store opened a door or something."
   (NB, HB)

Similarly, using the non-unaccusative sequence -*Cuti* with a non-anticausative unaccusative results in ungrammaticality, as shown in (37). Presumably, this is because there is no possible parse for this sentence, given that non-anticausative unaccusatives do not have a transitive counterpart. Based on these contrasts, we can conclude that the sequence -*Cutigi* found in unaccusative contexts cannot be decomposed into an applicative morpheme, -*Cuti*, and a transitivizer, -*gi*. The unaccusative constructions discussed here are clearly not transitivized.

## (37) Unaccusative verbs cannot be applicativized with -Cuti

- a. Jiisusi-up tuqu-**jjutigi**-lauq-taatigut Jesus-ERG die-APPL-PST-3s.S/1P.O 'Jesus died for us.'
- b. \*Jiisusi-up tuqu-**jjuti**-lauq-taatigut
  Jesus-erg die-APPL-PST-3s.S/1P.O
  Intended: 'Jesus died for us.' (NB, AB)

Based on this discussion, I suggest that the contrast between -Cuti and -Cutigi is ultimately a matter of contextual allomorphy. Both variants spell out  $Appl^0$ , with the choice of allormorph depending on the type of verb to which it attaches. Following Pylkkänen (2002, 2008), I assume that high applicatives always relate an argument to an event, a verb phrase. However, whether the complement of  $Appl^0$  is vP or VP (corresponding to if the verb is transitive/unergative or unaccusative/anticausative, respectively) determines its surface realization. This is schematized below:

## (38) Contextual allomorphy rules for HAppl<sup>0</sup>

- b.  $\text{HAppl}^0 \Leftrightarrow Cutigi / V^0$

As support for this idea, this kind of contextual allomorphy is quite pervasive in the Inuktitut extended vP-domain. In examples below, we see that antipassive morphemes are also sensitive to the type of verb to which they attach (cf. Spreng, 2012). Note that the choice of verbs below was intentional, as all of them end in /q/; this shows that the allomorphs of the antipassive morpheme are not determined by phonological factors.

## (39) Antipassive morpheme displays allomorphy sensitive to verb type

a. <u>Ø on niuviq- 'buy':</u>
niuviq-Ø-tuq
buy-AP-3s.S
'She bought (something).'

(NB, PI)

(NB, HB)

b. <u>-si on taqsaq- 'colour':</u> taqsaq-**si**-juq colour-Ap-3s.S

'He coloured (something).'

c. <u>-i (+ /q/ → Ø on -niraq 'say':</u> maqu-nira-**i**-junga rain-say-AP-1s.S 'I'm saying that it's raining.' (NB, AB)

 $<sup>^{13}</sup>$ Alternatively, it has been proposed, e.g. by Legate (2003), that unaccusative verbs also project a  $\nu$ P. This is also compatible with the present account, if transitive and unergative verbs contain additional structure such as VoiceP.

To summarize, I have presented two independent arguments for the dependent nature of ERG case in Inuktitut. Moreover, the data shown here pose challenges for competing analyses of ERG case assignment, which take ERG case to be assigned by functional heads such as Voice<sup>0</sup> and T<sup>0</sup>, respectively.

Before moving on to the next section, however, I briefly consider another alternative view of analyzing ERG case, from Deal (2010).

## 4.3.4 A brief comparison with Nez Perce

As shown in (40)-(41), the morphosyntactic profile of the Sahaptian language Nez Perce is similar to that of Inuktitut. Both languages have an ergative vs. antipassive alternation, wherein the subject is ERG in the former while ABS (or NOM) in the latter. Both the subject and object are cross-referenced on the verb in the ergative construction, while only the subject is cross-referenced in the antipassive construction.<sup>14</sup>

## (40) Ergative vs. antipassive alternation in Inuktitut

a. <u>Ergative (ERG-ABS):</u>

Taiviti-up surak-tanga igalaaq Taiviti-erg break-3s.S/3s.O window.Abs 'David broke the window.'

(NB, AB)

b. <u>Antipassive (ABS-MOD):</u>

Taiviti surak-<u>si</u>-juq igalaar-**mik** Taiviti.ABS break-AP-3s.S window-MOD 'David broke the window.'

(NB, AB)

## (41) Ergative vs. antipassive alternation in Nez Perce

a. <u>Ergative (ERG-OBJ):</u>

pit'íin-**im páa**-yaҳ̂-na picpíc-**ne** girl-ERG 3/3-find-PERF cat-OBJ 'The girl found the cat.'

b. *Antipassive* (NOM-NOM):

pit'iin hi-yáax-na picpíc girl.nom 3subj-find-perf cat.nom 'The girl found her cat.'

(Deal, 2010)

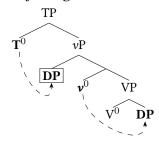
Deal (2010, to appear) proposes that so-called "ErG" case in Nez Perce is essentially the portmanteau of subject  $\phi$ -features in T<sup>0</sup> and object  $\phi$ -features on  $v^0$ , exponed on the subject in Spec-vP. The subject is able to receive these features, because it simultaneously

<sup>&</sup>lt;sup>14</sup>Unlike Inuktitut, however, Nez Perce displays a *tripartite* case system, such that the object of a transitive construction is not ABS, but what Deal (2010) refers to as 'OBJ.' Moreover, in the antipassive construction, the internal argument is MOD in Inuktitut, but caseless in Nez Perce. These differences do not bear on the overall discussion and will be set aside here.

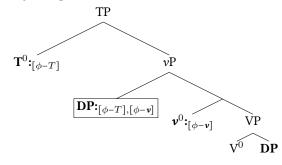
Agrees with  $T^0$  and occupies the specifier of  $v^0$ . This is summarized in (42)-(43) below. Deal's proposal is meant to the bidirectional dependency between ERG case and object-referencing morphology, in that one is not possible in Nez Perce without the other.

## (42) Derivation of Nez Perce ERG

#### a. <u>Before agreement:</u>



## b. <u>After agreement:</u>



# (43) Vocabulary Item for ERG $[\phi\text{-T}], [\phi\text{-v}], [D] \Leftrightarrow /\text{nm}/$

Deal (to appear) moreover demonstrates that Nez Perce permits ERG case on subjects of unaccusative applicatives, (44), thus furthering the parallel with Inuktitut:

## (44) Nez Perce: ERG on subjects of unaccusative applicatives

a. Baseline:

Ha-'aayat hi-pa-pay-no'-kom PL-woman.Nom 3subj-S.PL-come-fut-cis 'The women will come.'

b. With applied argument:

Ha-'aayat-**om** nuun-e hi-pa-naas-pay-**noo**-yo'-kom PL-woman-erg 1PL-obj 3subj-S.PL-O.PL-come-APPL-FUT-CIS 'The women will come to us.' (Deal, to appear)

At first blush, this pattern in Nez Perce appears straightforwardly captured under the dependent treatment of ERG case assignment discussed above. However, Deal (to appear) argues that the analysis of Deal (2010) is preferable, given an intricate set of language-internal facts found in Nez Perce.

In light of the surface similarities between Nez Perce and Inuktitut shown above, it is therefore worth considering whether the Inuktitut ergative case system could be analyzed on par with Nez Perce—which would not make explicit reference to the notion of case competition. Here, I offer two arguments against adopting such an analysis for Inuktitut. First, unlike Nez Perce, the subject- and object-referencing morphemes in Inuktitut are not in  $T^0$  and  $v^0$ ; rather, both are in the extended CP-domain, as established in the previous chapters. Given that ABS objects (or pronominal clitics associated with ABS objects) raise to Spec-CP (specifically, Spec-Agr<sub>o</sub>P), this system would lead us to expect the *object* to

receive ERG case, not the subject, given that only the object is local to the  $\phi$ -probes.

Additionally, there is empirical evidence disfavouring such an analysis. Recall that Deal's system predicts that ERG case should not be possible without both subject- and object-referencing morphology on the verb. Crucially, we do find such a dissociation in certain varieties of Inuit, such as Kalaallisut.<sup>15</sup> Under the contemporative mood, the  $\phi$ -agreement pattern in Kalaallisut shifts from cross-referencing both ERG and ABS arguments, to cross-referencing only the ABS argument (see Dorais 1988, Berge 2011 for discussion). Crucially, as shown in (45), ERG case still surfaces on the subject under such moods, even in the absence of subject  $\phi$ -agreement.

## (45) ABS-only $\phi$ -agreement in contemporative mood

arna-p atisassat irrur-lugit woman-erg clothes.Abs wash-ctmp.3p 'While woman was washing the clothes ...' (Bittner, 1994)

Together with the evidence for dependent case seen above from Inuktitut, the data in (45) demonstrate that ERG case in Inuit is conditioned on the basis of the structural relationship between two *nominal elements*. Thus, I conclude that the source of ERG case in Inuit is dependent.

The next section explores this conclusion from a microcomparative perspective. In particular, I argue that, although ERG case is uniformly dependent in nature across Inuit, we nonetheless find variation in the status of the ABS object—the case competitor for the ERG-receiving subject. This variation, in turn, is directly related to the main finding of Chapter 3, concerning the  $\phi$ -agreement vs. clitic doubling distinction across Inuit.

## 4.4 Variation in case competition: DP vs. $D^0$

Having established that ERG case is dependent, I now return to the cross-dialectal variation identified in Chapter 3 concerning the status of object-referencing morphology in Kalaallisut and Inuktitut. This section argues that this microvariation, while seemingly minor, has major consequences for the organization of Inuit grammar, as it is directly related to the status of ergativity across Inuit.

As noted in Chapter 2 and 3, Inuktitut diverges from Kalaallisut in that the ergative and antipassive constructions are not in complementary distribution. This has been taken by various authors to reflect a weaker ergative patterning (Johns, 1999, 2001, 2006, 2017; Allen and Schroeder, 2003; Allen, 2013; Carrier, 2012, 2016; Murasugi, 2014, 2017, a.o.). In this section, however, I establish that the *ergative construction itself* is subject to microvari-

<sup>&</sup>lt;sup>15</sup>While certain varieties of Inuktitut are also reported to display this pattern by Dorais (1988), my consultants did not permit such constructions. Rather, for my consultants, 3rd person ABS arguments are separately encoded with object-referencing morphology under the contemporative mood, as indicated in examples like (12) in §4.2.3.

ation, independent of any properties of the antipassive. Crucially, I demonstrate that this is directly related to—and predicted by—the  $\phi$ -agreement vs. object clitic doubling contrast between Kalaallisut and Inuktitut, which, as I will explain below, determines both the nature of the case competitor for the ERG-receiving subject and the structural position of the ABS object. The novel empirical observation of this section is the cross-dialectal pattern given below in (46). According to this table, the relative "robustness" of the ergative patterning in a given Inuit variety is inverse correlated with the *relative "pronominality"* of object-referencing morphology.

## (46) The ergativity-pronominality correlation

	Kalaallisut	Inuktitut	Labrador Inuttut/Aleut
Ergativity	Robustly ergative	Less ergative	Weakly ergative (pronouns only)
Obj. morphology	Agreement	Clitic doubling	Pronominal clitic only
			(no doubling)

The generalizations shown in the first two columns of this table have already been established. Kalaallisut displays the canonical syntactically ergative (high-ABS) patterning, with ABS and MOD objects exhibiting opposite semantic properties; Kalaallisut moreover has object  $\phi$ -agreement. In contrast, the Inuktitut ergative patterning is somewhat weaker than in Kalaallisut, given that the antipassive construction is distributionally wider, as discussed earlier. Furthermore, in Inuktitut the object-referencing morphemes are pronominal clitics doubling full ABS object DPs.

Novel evidence for this typology comes from a third Inuit variety—Labrador Inuttut (supplemented with data from distantly-related language Aleut, from the Aleut branch of the Eskimo-Aleut family). Labrador Inuttut displays an even weaker ergative patterning, with the antipassive construction being used by default in most contexts. Concomitantly, in these languages the object-referencing morphology is even more pronominal-like than in Inuktitut. As observed by Johns (2017), this morphology is also clitic in nature, but unable to double full arguments. The existence of this third pattern thus allows us to construct the cross-dialectal gradient seen in (46) above.

## 4.4.1 Pronominal object shift in Labrador Inuttut and Aleut

As discussed in detail by Johns (1999, 2001, 2017), transitive constructions in Labrador Inuttut are by default antipassive, displaying an ABS-MOD case frame with verbal agreement morphology cross-referencing only the ABS subject. <sup>16</sup> Some examples of Labrador Inuttut transitive sentences are presented in (47) for illustration. In (47b) in particular, note that

<sup>&</sup>lt;sup>16</sup>In addition to displaying the weakest degree of ergativity, Labrador Inuttut is also the most *phonologically innovative* of the varieties of Canada. Consonant clusters that exist in other Inuit varieties have been largely lost in Labrador Inuttut, due to the high degree of regressive assimilation in these varieties (Smith, 1977; Dorais, 2010).

the Mod-marked object, *Nancy*, is given, old information. The fact that this object may bear Mod case contradicts previous characterizations of Mod case as unable to encode discourse-given information (e.g. Berge, 1997, 2011).

## (47) Labrador Inuttut: Transitive sentences are by default antipassive

a. Margarita Kuinatsa-i-juk **Ritsati-mik** Margarita.Aвs tickle-Aр-3s.S Richard-мор 'Margarita is tickling Richard.'

b. Nancy angka-li-mmat akła-gulak iksiva-juk Nancy.Abs home-prog-becaus.3s.S black.bear-dear.Abs sitting-3s.S Kaksi-tâ-gula-ngmi, iksiva-ju Kaksi-tâ-gula-ngmi **Nancy-mi** hillock-get-dear-loc sitting-part hillock-get-dear-loc Nancy-mod tautuk-tuk

look.at-3s.S

"...if Nancy was coming home, the young black bear would be sitting on a little hill, sitting on the little hill, watching Nancy" (Rigolet Inuttut; Johns 2001)

Strikingly, Johns observes that the ergative patterning exceptionally surfaces only in select circumstances: Labrador Inuttut speakers switch from the antipassive construction to the ergative construction *when the object is a pronoun*. Two examples of this effect are presented in (48)-(49) below.

## (48) Labrador Inuttut: Ergative construction used with pronominal object

a. Antipassive:

John kata-i-juk Kajotta-**mik** amma-lu Kajottak siKumi-mmat, John.abs drop-ap-3s.S cup-mod also-and cup.abs break-caus.3s.S 'John dropped the cup and then when the cup broke...'

b. <u>Ergative</u>:

âkKi-sima-**janga** nipitiguti-mmut fix-perf-3s.S/3s.O glue-ALLAT '...he fixed **it** with the glue.'

(Johns, 2017)

(Johns, 2001)

#### (49) Labrador Inuttut: Ergative construction used with pronominal object

a. Antipassive:

John asiu-ji-laut-tuk jaika-mi-**nik** John.ABS lose-AP-PST-3s.S jacket-POSS.REFL-MOD 'John lost his jacket...' b. <u>Ergative:</u>

siagolittilugu pulesi-**up** nagvâ-laut-**tanga** tunu-a-ni ilinniavi-up later police-ERG find-PST-3s.S/3s.O back-POSS-MOD school-GEN '... and later the police found **it** behind the school.' (Alana Johns, p.c.)

This alternation in Labrador Inuttut is highly reminiscent of pronominal clitic systems cross-linguistically. Consider, for instance, a language like French, which displays a parallel pattern, (51); full objects in French surface as full postverbal DPs, while pronominal objects are realized as preverbal clitics.

## (50) French: Postverbal DPs and preverbal pronominal clitics

- a. Marie voit **Jean** 'Marie sees Jean.'
- b. Marie **le** voit (\*Jean) 'Marie sees him.'

(Miller and Sag, 1997)

Based on this similarity, we may conclude that object-referencing morphemes in Labrador Inuttut are pronominal clitics. This is a welcome result, given our analysis of Inuktitut from Chapter 3, which led us to the same analysis of these morphemes. However, the difference between these two varieties is that, whereas Inuktitut permits its pronominal clitics to double full objects, this pattern is generally unavailable in Labrador Inuttut (Johns, 2017). This contrast between Inuktitut and Labrador Inuttut concerning the possibility of clitic doubling echoes variation seen in other languages. In Romance, for instance, (Standard) French does not permit doubling of its pronominal clitics while Romanian does; compare (50b) to (51). We also saw similar contrasts in varieties of Bosnian/Serbian/Croatian in Chapter 3.

#### (51) Romanian: Clitic doubling

(II) văd pe Ion him.cl see.1s pe John 'I saw John.'

(Farkas, 1978)

In the rest of this section, I argue for two additional interrelated generalizations about Labrador Inuttut, which will be crucial for the rest of the chapter: (i) object pronouns in Labrador Inuttut undergo object shift (cf. Woolford, 2017), and (ii) only object pronouns in Labrador Inuttut (when they have undergone object shift) are possible case competitors for ERG case assignment. To see these properties more clearly, however, we must look further afield to the distantly-related language Aleut (also known as Unangam Tunuu), of the Aleut branch of the Eskimo-Aleut language family. As observed by Johns (2017),

 $<sup>^{17}</sup>$  Additional parallels between Inuktitut and Labrador, concerning the morphosyntactic properties of this object-referencing morphology, will be provided in Chapter 5. Crucially, we will see that Kalaallisut does not display these properties, as further support for the  $\phi$ -agreement vs. clitic doubling distinction advocated for here.

Aleut and Labrador Inuttut exhibit strikingly similar case/agreement patterns. However, examining the behaviour of Aleut as a proxy to Labrador Inuttut allows us to control for certain morphosyntactic properties of Labrador Inuttut that might otherwise obscure the above generalizations.<sup>18</sup>

For instance, non-pronominal objects always bear MOD case in Labrador Inuttut, so they are independently inaccessible for  $\phi$ -Agree processes, including the operations driving movement (see Chapter 6). As a result, it is difficult to firmly tie the facts in (48)-(49) to the idea that object shift in Labrador Inuttut is only possible for pronouns.

However, Aleut demonstrates that this generalization holds regardless of the case morphology on the object. This is because Aleut is *bi-absolutive*, in that both subjects and objects are marked ABS. As shown in (52), only the ABS subject in these examples is cross-referenced by  $\phi$ -agreement morphology.

## (52) Aleut: Bi-absolutive transitive constructions

- a. hla-**x** asxinu-x̂ kidu-ku-**x** boy-ABS girl-ABS helppres-3s.S 'The boy is helping the girl.'
- b. (pro) asxinu- $\hat{\mathbf{x}}$  kidu-ku- $\mathbf{q}$  girl-ABS help-PRES-1s.S 'I am helping the girl.'

(Bergsland, 1997)

However, consider now the data in (53). In contrast to (52), the object in these examples is a 3rd person pronoun, rather than a full argument. Here, we find that, instead of only subject  $\phi$ -agreement, both the subject and object are cross-referenced on the verb as a portmanteau morpheme. Note also that the subject also bears special REL ('relative') case morphology (e.g. Bergsland and Dirks, 1981; Bergsland, 1997; Boyle, 2000; Sadock, 2000; Merchant, 2011), to be discussed shortly. This alternation is known as the Aleut Effect.<sup>19</sup>

#### (i) Aleut: Aleut Effect only triggered with 3rd person pronominal object

- a. Piitra-**m** kidu-ku-**u**Peter-REL help-PRES-3s.S/3s.O
  'Peter is helping him/her.'
- b. Viira-**x** <u>ting</u> achixa-ku-**x**Vera-ABS 1s teach-PRES-3s.S
  'Vera is teaching me.'

(Bergsland, 1997)

In contrast to Aleut, Labrador Inuttut and Inuktitut permit the ergative patterning with pronominal objects of all persons. However, this surface difference obscures a potentially meaningful similarity. Murasugi (2014, 2017) shows experimentally that Inuktitut also possesses a contrast between 1st/2nd person and 3rd person objects. According to her results, Inuktitut speakers prefer using the antipassive construction

<sup>&</sup>lt;sup>18</sup>This unlikely morphosyntactic parallel between Labrador Inuttut and Aleut, which are very distantly related, is intriguing; as pointed out by Johns (2012), the fact that these languages *converge on the same pattern* is potentially reflective of deeper principles of language, or at least Eskimo-Aleut grammar.

<sup>&</sup>lt;sup>19</sup>Note that the Aleut Effect is only triggered in the presence of a 3rd person pronominal object. As illustrated in (i), 1st/2nd person pronominal objects display the canonical bi-absolutive pattern.

## (53) Aleut Effect triggered with 3rd person pronominal object

- a. Piitra-m kidu-ku-u
  Peter-REL help-PRES-3s.S/3s.O
  'Peter is helping him/her.'
- b. kidu-ku-**ng** help-pres-1s.S/3s.O 'I am helping her.'
- c. tayaĝu-**m** kidu-qa-**ngis** man-REL help-PST-3S.S/3P.O 'The man helped them.'

(Bergsland, 1997)

What this shows is that Labrador Inuttut and Aleut display the same contrast between pronouns and non-pronouns, regardless of the case morphology of the non-pronominal object; in both languages, 3rd person object pronouns are realized as clitics attached to the verb.<sup>20</sup> Following Woolford (2017), I propose that this pattern is simply *pronominal object shift*, akin to an identical effect seen in Mainland Scandinavian languages (e.g. Holmberg, 1986; Vikner, 1995, 2001).<sup>21</sup> As exemplified in (54)-(55) with Danish, pronominal objects undergo object shift, while full DPs remain in situ. It has been noted, for instance by Josefsson (1992, 1993) and Bobaljik and Jonas (1996), that this patterning is reminiscent of pronominal cliticization, thus furthering the parallel with Labrador Inuttut and Aleut.

## (54) Danish: Pronouns must undergo object shift

a. *Object shift:* 

Studenten læste **den** ikke student read it not 'The student didn't read it.'

b. *No object shift:* 

\*Studenten læste ikke **den** student read not it Intended: 'The student didn't read it.'

(Thráinsson, 2008)

over the ergative construction when the object is a 1st/2nd person pronoun; however, the same speakers prefer the ergative construction over the antipassive construction when the object is a 3rd person pronoun. In other words, Inuktitut appears to display as a *tendency* an alternation that has been systematic and grammaticalized in Aleut. I will leave a more in-depth investigation of this parallel for future research.

<sup>&</sup>lt;sup>20</sup>As noted, the difference between Labrador Inuttut and Aleut is that the in situ object in Labrador Inuttut is Mod, rather than Abs. In Chapter 6, I offer an analysis of the antipassive construction in Inuktitut. In the absence of the relevant data, it is unclear to me at this time whether this analysis can be straightforwardly extended to Labrador Inuttut, so I will leave this as an open question.

<sup>&</sup>lt;sup>21</sup>Note that Woolford (2017) discusses this parallel in the context of the Aleut Effect in particular, with no discussion of Labrador Inuttut.

## (55) Danish: Non-pronominal DPs may not undergo object shift

## a. Object shift:

\*Studenten læste **bogen** ikke student-the read book-the not *Intended:* 'The student didn't read the book.'

#### b. No object shift:

Studenten læste ikke **bogen** student-the read not book-the 'The student didn't read the book.'

(Thráinsson, 2008)

This parallel between Eskimo-Aleut and Scandinavian also extends to Kalaallisut. Recall that full ABS objects in Kalaallisut raise out of the  $\nu$ P-domain (Bittner, 1994; Bittner and Hale, 1996a,b). Crucially, this point of variation concerning what types of nominals may undergo object shift is also seen in Scandinavian. As pointed out by Woolford, Icelandic may be distinguished from Mainland Scandinavian in permitting both pronouns and non-pronouns to undergo object shift, (56)-(57).

## (56) Icelandic: Pronouns must undergo object shift

#### a. *Object shift:*

Nemandinn las **hana** ekki student-the read it not 'The student didn't read it.'

#### b. *No object shift:*

\*Nemandinn las ekki **hana**student-the read not it
Intended: 'The student didn't read it.'

(Thráinsson, 2008)

#### (57) Icelandic: Non-pronominal DPs may undergo object shift

#### a. *Object shift:*

Nemandinn las **bókina** ekki student-the read book-the not 'The student didn't read the book.'

## b. *No object shift:*

Nemandinn las ekki **bókina** student-the read not book-the 'The student didn't read the book.'

(Thráinsson, 2008)

Thus, just as there is variation across Scandinavian languages in the kinds of nominals that undergo shift, there is also variation of this sort across the Eskimo-Aleut languages. This is summarized below in (58):

## (58) Variation in object shift

Pronominal-only object shift	Object shift of pronouns/non-pronouns	
Labrador Inuttut/Aleut	Kalaallisut	
Mainland Scandinavian	Icelandic	

At this point, we are finally in a position to discuss ergativity in Labrador Inuttut and Aleut. As we saw above, the presence of a pronominal clitic in these languages correlates with a case alternation on the subject, repeated in (59)-(60). The "REL" case morpheme -*m* in Aleut—one of the hallmarks of the Aleut Effect—is cognate to ERG -*up* in Inuit (e.g. Fortescue et al., 1994, 2011). In the following discussion, I will thus refer to both uniformly as "ERG" for convenience (though I will continue to gloss the Aleut data with "REL").

## (59) Labrador Inuttut: Ergative construction used with pronominal object

## a. Antipassive:

John asiu-ji-laut-**tuk** jaika-mi-nik John.ABS lose-AP-PST-3s.S jacket-POSS.REFL-MOD 'John lost his jacket...'

#### b. <u>Ergative:</u>

siagolittilugu pulesi-**up** nagvâ-laut-**tanga** tunu-a-ni ilinniavi-up later police-erg find-pst-3s.S/3s.O back-poss-mod school-gen '... and later the police found **it** behind the school.' (Alana Johns, p.c.)

## (60) Aleut: Pronominal object triggers REL case on subject

#### a. *Bi-absolutive*:

hla-**x** asxinu-x kidu-ku-**x** boy-abs girl-abs help-pres-3s.S 'The boy is helping the girl.'

## b. Aleut Effect:

Piitra-m kidu-ku-u Peter-REL help-PRES-3s.S/3s.O 'Peter is helping him/her.'

(Bergsland, 1997)

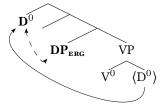
Merchant (2011) analyzes the Aleut Effect as a morphological effect, wherein ERG (REL) case on the subject is allomorphically conditioned by an object pronoun that has raised to a higher position.<sup>22</sup> In a similar vein, Woolford (2017) observes that the occurrence of ERG case in Eskimo-Aleut is correlated with the presence of a *v*P-external object. However, both authors stop short of characterizing this pattern as a *dependent case effect*.

However, we have already seen ample evidence in favour of a dependent treatment of ERG case in Inuktitut, in 4.3 above. Therefore, I propose that, in Labrador Inuttut and Aleut,

<sup>&</sup>lt;sup>22</sup>Specifically, Merchant (2011) additionally proposes that raising the pronoun, a null *pro*, allows both the subject and object to undergo Multiple Agree with a single  $\phi$ -probe, which is assumed by Merchant to occupy  $T^0$ . This derives the portmanteau subject/object form on the verb.

ERG case is also dependent. However, it is specifically conditioned by the presence of a vP-external pronoun, realized on the verb as a bound morpheme (clitic). This is illustrated in (61). In contrast to the behaviour of pronouns, full DPs remain in situ, so they are unable to trigger dependent case.

## (61) Labrador Inuttut/Aleut: Case competitor is pronominal D<sup>0</sup>



To sum up, I have shown that, in Labrador Inuttut and Aleut, only pronouns undergo object shift, while non-pronominal DPs remain in situ. In contrast, varieties such as Kalaal-lisut do not display such a contrast, as all objects may raise. Object shift, in turn, allows for the moved element to serve as a case competitor for dependent ERG case assignment. Below, I clarify and expand on these findings, and relate them to ergativity across Inuit.

## 4.4.2 Case competition across Inuit

Integrating the Labrador Inuttut and Aleut pattern discussed above with the analyses of Kalaallisut and Inuktitut from the previous chapter, we finally arrive at the typology from (46), repeated as (62). Again, this table demonstrates that the robustness of ergativity of a given Inuit variety is *inversely correlated* with the relative pronominality of the object-referencing morphology.

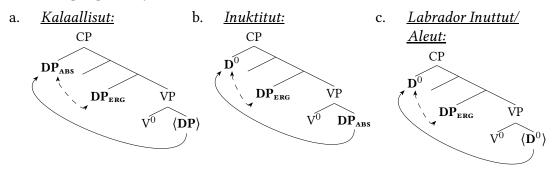
## (62) The ergativity-pronominality correlation (repeated)

	Kalaallisut	Inuktitut	Labrador Inuttut
Ergativity	Robustly ergative	Less ergative	Weakly ergative
			(pronouns only)
Obj. morphology	Agreement	Clitic doubling	Pronominal clitic only
			(no doubling)

Moreover, in (62) we see that Inuktitut occupies an intermediate position in this typology, along both dimensions. The ergative patterning in Inuktitut has a wider distribution than that in Labrador Inuttut and Aleut, given that it is available in both pronominal and non-pronominal contexts; however, Inuktitut also lacks the complementariness of the ergative and antipassive constructions seen in Kalaallisut. Similarly, Inuktitut has pronominal clitics, like in Labrador Inuttut and Aleut; however, these clitics may cross-reference overt ABS objects, like in Kalaallisut. The existence of this intermediate patterning in Inuktitut therefore provides also novel evidence for the individual analyses of the Kalaallisut and Labrador Inuttut/Aleut systems described above, as it creates a *cross-dialectal gradient* that would not have been obvious otherwise.

Putting this typology together with the fact that ERG case across Eskimo-Aleut is dependent on the presence of a *v*P-external nominal element, it is now clear that microvariation in the properties of the ergative patterning ultimately boils down to *microvariation* in the case competitor for ERG case. More concretely, the distribution of ERG case is shaped by the type of ABS object nominal that raises out of the *v*P-domain. Regarding the locus of the case competitor, recall from Chapters 2 and 3 that Inuit argument-referencing morphology is sensitive to mood or clause type, suggesting that this morphology is located in the extended CP-domain (e.g. Johns, 2007b; Compton, 2016, 2017). Recall moreover that the ABS object in Kalaallisut is also taken by Bittner and Hale (1996a,b) to raise to an Ā-position above the ERG subject. Based on these facts, I propose the following set of derivations in (63).

## (63) Deriving ergativity across Inuit

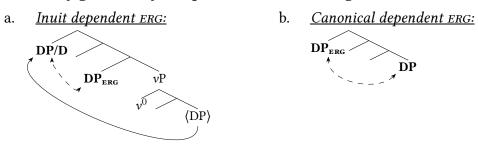


In all of the structures above, some element associated with the ABS object raises to Spec-CP and triggers dependent ERG case assignment to the subject. However, the exact nature of the raised element is subject to cross-dialectal variation. In Kalaallisut, a full DP undergoes movement to the extended CP-domain, (63a). In Inuktitut, a full object undergoes clitic doubling to the same structural position; the in situ object is realized as ABS, (63b). Finally, in Labrador Inuttut and Aleut, a pronominal object undergoes movement and ends up cliticized to the verb complex, (63c).

A crucial consequence of the present analysis is that microvariation in the status of ergativity is entirely independent of the properties of ERG case morphology on the subject. As shown above, the modality of ERG case assignment is uniformly dependent—always assigned to a vP-external nominal in the presence of a higher case competitor. To reiterate, the relevant point of variation concerns the properties of the ABS object (or the element associated with the ABS object) in the clausal left periphery. The weaker ergative pattern seen in Inuktitut and Labrador Inuttut is therefore due to increasingly greater restrictions on what counts as a case competitor for the ERG-receiving subject, i.e. increasingly greater restrictions on object shift. Concomitantly, the appearance of a nominative-accusative case alignment in these varieties (especially in Labrador Inuttut), as intuited by various previous researchers (e.g. Johns, 2001, 2006; Carrier, 2012), may reflect a loosening of the syntactic and semantic restrictions on the in situ object. This is especially evident given the profile of Labrador Inuttut (and Aleut), in which the only two possible configurations are: (i) a syntactically ergative structure, when the object is pronominal, and (ii) a nominative-accusative structure, when the object is non-pronominal.

Finally, note that the present analysis has an interesting implication for dependent case assignment, which I have for the most part left unaddressed. In this account, ERG case is assigned *downwards* to the lower of two nominals, (64a). This departs from the more canonical characterization of dependent ERG case, which assumes the opposite directionality, (64b).

## (64) Two configurations for dependent ERG case assignment



This will be the topic of §4.5 below. I will show that this distinction is independently predicted to be attested across ergative systems, given certain pre-existing parameters on case assignment within dependent case theory (cf. Baker, 2015).

## 4.5 "Downwards" dependent ERG case assignment

The final section of this chapter focuses on the claim made above that dependent ERG case assignment in Inuit is assigned downwards to the *lower* of two nominals, rather than upwards to the higher of two nominals. While this diverges from canonical treatments of dependent ERG case, I argue that this configuration arises naturally from the juncture between dependent case theory and treatments of ergativity that divide languages into morphologically ergative vs. syntactically ergative. In particular, the "canonical" dependent ERG configuration only accounts for morphologically ergative languages, in which the ABS object is structurally lower than the ERG-receiving subject. However, if a language is syntactically ergative, i.e. has structurally high ABS objects that c-command the subject, then downwards dependent ERG case assignment is logically possible.

## 4.5.1 High ABS objects as case competitors

As discussed in Chapter 2, the Inuit languages are typically considered to be syntactically ergative, rather than purely morphologically ergative, given the properties of Kalaal-lisut discussed earlier (e.g. Bittner and Hale, 1996b; Manning, 1996; Aldridge, 2008a; Deal, to appear).<sup>23</sup> In addition to the fact that ABS objects are obligatorily wide scope, (65) demonstrates that Kalaallisut displays an Ā-extraction restriction on ERG subjects. This

<sup>&</sup>lt;sup>23</sup>Recall that Inuktitut and Labrador Inuttut do not exhibit raising of ABS objects per se, since the raised element surfaces as a pronominal clitic. How Inuktitut and Labrador Inuttut fit into this discussion will be clarified shortly.

effect is only seen in relative clauses, as ERG subjects may serve as wh-words. As shown by the contrast between (65c-d), the relativization of a transitive subject in Kalaallisut requires using the antipassive construction.

## (65) Kalaallisut: Relativization restriction on ERG subjects

## a. <u>Intransitive ABS subject:</u>

miiqqat [ \_ABS sila-mi pinngar-tut ] children.ABS outdoors-loc play-part.3p.S 'the children who are playing outdoors'

## b. ABS object:

miiqqat [Juuna-p \_\_ABS paari-sai ] children.ABS Juuna-ERG look.after-PART.3s.S/3p.O 'the children that Juuna is looking after'

## c. <u>Transitive ERG subject:</u>

\*angut [ \_ERG aallaat tigu-sima-saa man.ABS gun.ABS take-PERF-PART.3s.S/3s.O Intended: 'the man who took the gun'

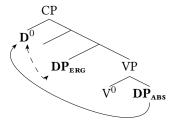
## d. Antipassive ABS subject:

angut [ \_\_ABS aallaam-mik tigu-si-sima-suq ] man.ABS gun-MOD take-AP-PERF-PART.3s.S 'the man who took the gun'

(Bittner, 1994)

The varieties of Inuit that display a 'weaker' ergative patterning nonetheless also behave as though they are syntactically ergative. First, we already saw above that the pronominal clitic in the clausal left-periphery is morphosyntactically active for the purposes of case assignment, since it is the pronominal clitic that serves as the case competitor for the ERG-receiving subject, not the in situ ABS object. This is repeated as (66).

## (66) High ABS pronominal clitic as case competitor



Moreover, (67) demonstrates that Inuktitut demonstrates the same Ā-extraction restriction as seen above in Kalaallisut, in that only ABS arguments may be relativized. Like in Kalaallisut, the relativization of a transitive subject requires the antipassive construction.

## (67) Inuktitut: Relativization restriction on ERG subjects

'the man that stabbed the polar bear'

#### *Intransitive ABS subject:* nanur-jjuaq [ \_ABS angi-juq polar.bear-big.ABS big-part.3s.S 'a big polar bear that is so big' (Compton, 2012) b. *ABS object:* nanur-mit [ Jaani-up \_\_as taku-janga ]-nit polar.bear-мор Jaani-екс see-part.3s.S/3s.O -mod 'the polar bear that Jaani saw' (Yuan, 2013) *Transitive ERG subject:* \*angut [ \_ERG nanuq kapi-jaa ] polar.bear.ABS stab-PART.3s.S/3s.O *Intended:* 'the man that stabbed the polar bear' (Johns, 2007a) Antipassive ABS subject: angut <sub>ABS</sub> nanur-mik kapi-si-juq ] polar.bear-MOD stab-AP-3s.S man.ABS

(Johns, 2007a)

A full analysis of the  $\bar{A}$ -extraction restriction in the Inuit languages is beyond the scope of this thesis, as it is not immediately obvious how exactly to unify this restriction with the microvariation in the nature of the high ABS objects identified in this chapter. I refer readers to Murasugi (1997), Deal (2016c), and Polinsky (2016) for possible approaches.

If the Inuit languages are syntactically ergative, with high ABS objects c-commanding ERG-bearing subjects, a question arises concerning dependent case assignment. It is not obvious that dependent ERG case is assigned *upwards* to the higher of two case competitors, as is commonly assumed in the dependent case literature. Given the structural properties of Inuit, this would require that dependent ERG case is assigned *prior* to movement of the object to its left-peripheral position. However, I now offer a piece of evidence from Inuktitut that casts doubt on this idea. Rather, dependent ERG case is assigned *after* the object raises—i.e. is assigned *downward*.

As I discuss in greater detail in the Appendix to Chapter 6, Inuktitut has a nominalizing morpheme -lik (roughly translating to 'one that has') which may attach to verb complexes; I take -lik to be the spell-out of a  $n^0$ . As shown in (68), the resulting constructions are high nominalizations, given that they may contain TP-level elements such as negation, tense, and participial mood morphology:

#### (68) -lik-nominalizer is structurally high

a. nagli-gi-<u>nngit-ta</u>-**lik** love-tr-NEG-PART-have.NMLZ 'one that has (the state of) not loving someone' b. nagli-gi-inna-u-<u>jarniar-ta</u>-**lik**love-tr-always-be-fut-part-have.nmlz

'one that has (the state of) always loving someone'

(NB, AB)

These examples also show that  $n^0$  Merges directly above Mood, thereby preventing higher heads such as  $\mathrm{Agr}_s{}^0$  and  $\mathrm{Agr}_o{}^0$  from also Merging into the structure, as indicated by the lack of argument-referencing morphology in such constructions. Given our analysis of Inuit clause structure, this means that nominalized clauses lack a landing site for ABS object movement, whether this is full DP movement (as in Kalaallisut) or movement of a pronominal  $\mathrm{D}^0$  (as in Inuktitut and Labrador Inuttut).

Therefore, these nominalization structures allow us to diagnose the exact timing of dependent ERG case assignment. If dependent case is assigned *upwards* to the higher of two case competitors, as is standardly assumed, then we expect dependent ERG case to still be available in these clauses. However, if dependent ERG case is assigned *downwards* after movement of the object, then it should be bled in nominalized clauses in which this movement is not possible to begin with.

As seen in (69), it is the latter pattern that surfaces. Recall from earlier in this chapter that verbs that contain a *v*P-level transitivizing morpheme -*gi* normally require an ergabs case frame. This is repeated below as (69a). Crucially, in (69b) we see that the presence of a nominalizer *bleeds* dependent erg case assignment. Note that in this example the object is marked with Mod case. In the Appendix to Chapter 6, I argue that this is due to a Last Resort argument-licensing process that takes place countercyclically, *after* the clause is built. Therefore, the loss of erg case on the subject is not due to Mod case on the object.

## (69) High nominalization bleeds dependent ERG case assignment

#### a. Baseline:

Taiviti-**up Kiuru** nagli-<u>gi</u>-janga David-ERG Carol.ABS love-TR-3s.S/3s.O 'David loves Carol.'

#### b. *Nominalized*:

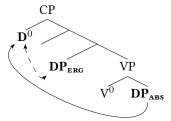
Taiviti(\*-up) nagli-gi-ja-lik Kiuru-mik
David.ABS love-TR-PART-have.NMLZ Carol-MOD
'David loves Carol.'

Lit.: 'David is one that has (the state of) loving Carol.'

(NB, AB)

Based on this contrast, I conclude that ERG case in the Inuit languages is assigned downwards to the lower of two case competitors, where the higher case competitor is the ABS object (or a pronominal element associated with the ABS object) in the clausal left-periphery. Moreover, dependent ERG case is assigned *after* syntactic movement of the object. The configuration for dependent case assignment in Inuit is repeated again in (70) with Inuktitut.

## (70) Downwards dependent ERG case assignment in Inuktitut:



In the rest of this section, I further explore the idea that dependent case assignment takes place after—and may be fed by—syntactic movement of a case competitor.

## 4.5.2 Domains of dependent case assignment

Whereas dependent case assignment is often taken to be calculated over nominals within the same (finite) clause (e.g. Marantz, 1991), Baker and Vinokurova (2010) and Baker (2015) argue that the vP-phase boundary may also mark the edge of a dependent case domain. <sup>24</sup> I propose that this is also the configuration required for dependent ERG case to be assigned in Inuit, i.e. the dependent case assignment domain in Inuit is necessarily vP-external. As a result, dependent case cannot be assigned until after the ABS object raises to its structurally high position, as shown above.

The difference between Inuit and the languages discussed by Baker and Vinokurova (2010) and Baker (2015) ultimately concerns the exact locus of the case competitor for the ERG-receiving subject. Whereas the ABS object is taken by the previous literature to occupy a position lower than the subject, I suggest that Inuit (and in other syntactically ergative languages) displays the opposite hierarchical ordering.

## Dependent Acc case

Earlier, we saw that ACC case in the Turkic language Sakha displays properties of dependent case. Recall that raising-to-object into the matrix clause feeds ACC case assignment to the embedded subject, even when the matrix verb is unaccusative. This is repeated below as (71):

## (71) Sakha: Raising-to-object feeds dependent ACC case

## a. Baseline:

Min [ sarsyn ehigi kel-iex-xit dien ] ihit-ti-m I.NOM tomorrow you.NOM come-FUT-2PS that hear-PAST-1sS 'I heard that tomorrow you will come.'

<sup>&</sup>lt;sup>24</sup>In Yuan (2017a), I additionally argue, on the basis of the Papuan language Yimas, that the clitic cluster may also constitute its domain of dependent case assignment.

## b. <u>Unaccusative matrix verb:</u>

Masha [Misha-ny] [yaldj-ya dien]] tönün-ne Masha.nom Misha-ACC fall.sick-fut.3sS that return-past.3sS 'Masha returned (for fear) that Misha would fall sick.'

#### c. Passivized matrix verb:

Sargy [kim-i daqany [tönn-üm-üö dien]]
Sargy.Nom who-ACC PRT return-NEG-FUT.3sS that
erenner-ilin-ne
promise-PASS-PAST.3sS
'Sargy was promised that nobody would return.' (Baker and Vinokurova, 2010)

Now, consider the alternation in (72). The object in (72a) is marked acc and surfaces to the left of VP-level adverbs such as *türgennik* 'quickly'; the object is moreover interpreted as specific. Conversely, the object in (72b) is morphologically unmarked, follows such adverbs, and receives a non-specific interpretation. An immediately obvious way to analyze this contrast is to say that object shift has taken place in (72a) but not in (72b).

## (72) Sakha: Dependent ACC case requires object shift

#### a. No object shift:

**Masha** türgennik **salamaat** sie-te<sup>25</sup> Masha quickly porridge eat-рsт-3sS 'Masha ate porridge quickly.'

## b. Object shift:

Masha salamaat-y türgennik sie-te Masha porridge-ACC quickly eat-PST-3sS 'Masha ate the porridge quickly.' (Baker and Vinokurova, 2010)

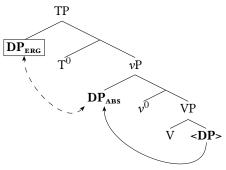
Crucially, given that we already have independent evidence for a dependent treatment of ACC case, i.e. the data in (71), a natural step is to also take (72) to involve the feeding vs. bleeding of dependent case assignment. Baker and Vinokurova (2010) and Baker (2015) propose that, if vP is a phase, then vP-internal material should not be accessible to vP-external material (and vice versa) for the purposes of case competition. Hence, the in situ object in (72a) remains morphologically unmarked. However, object shift to a vP-external position, as in (72b), places the object in the structural domain as its case competitor. In this configuration, ACC case may be assigned.

<sup>&</sup>lt;sup>25</sup>Note that ACC case is possible is this sentence, but it triggers an obligatorily contrastively focused reading.

## Dependent ERG case

As Baker (2015) notes, the above analysis of Sakha makes a typological prediction about ergative languages. Namely, it predicts that ergative languages sensitive to  $\nu$ P-phase boundaries should display a parallel effect, in that dependent ERG case assignment might require a  $\nu$ P-external case competitor. Because Baker maintains that dependent ERG case is assigned to the higher of two nominals—i.e. the "canonical" configuration in (64b) above—he limits his discussion to ergative languages in which the object raises to a phase-external position below the subject (e.g. Spec- $\nu$ P, if the complement of  $\nu$ 0 is spelled out), as in (73).

## (73) Object shift to position lower than subject



An illustration of this system comes from Eastern Ostyak (Finno-Ugric). In (74a), the indefinite object surfaces to the right of a PP-adjunct, and fails to trigger dependent ERG case on the subject, which is NOM. In contrast, (74b) shows that, when the object is pronominal, it surfaces to the left of the PP. Crucially, in this configuration, the subject is ERG rather than NOM. Baker observes that this pattern is exactly the mirror image of Sakha, the difference between the two languages being whether it is the higher or the lower argument that receives dependent case.

## (74) Eastern Ostyak: Dependent ERG case requires object shift

#### a. *No object shift:*

Mä t'əkäjəylämnä ula mənyäləm we.du.nom younger.sister.com berry pick.pst.1pS 'I went to pick berries with my younger sister.'

## b. *Object shift:*

Mə-[ŋən] ləyə əllə juy kanŋa aməyaloy we-erg them large tree beside put.pst.3pO/1pS 'We put them (pots of berries) beside a big tree.' (Gulya, 1966)

According to Baker, another language that displays this effect is Ika (Chibcan; Columbia). As with Eastern Ostyak, the definiteness of the object in Ika correlates with the morphological case of the subject, (75). Although these examples do not exhibit the word order difference seen in (74), the pattern is otherwise identical.<sup>26</sup> Thus, it is plausible to analyze Ika as another language in which dependent ERG case assignment requires two

*v*P-external arguments present.

## (75) Ika: Dependent ERG case hinges on definiteness of object

a. *Indefinite object:* 

**Gs**Ariwieri tigri a?wasa-na Gabriel jaguar chase-D.PST 'Gabriel went after a jaguar.'

b. <u>Definite object:</u>

Tigri-se? tšinu ka-ga-na Jaguar-erg pig Peri-eat-d.pst 'A jaguar ate his pig.'

(Frank 1990)

As noted, these are assumed by Baker to be examples of *morphologically ergative* languages, meaning that the subject c-commands the object. However, once we introduce syntactically ergative languages into the picture, then we arrive at an additional configuration for assigning dependent case.

## 4.5.3 A typology of dependent case assignment

I now propose that the notion of "downwards" dependent ERG case assignment in syntactically ergative languages arises from the juncture of §4.5.1 and §4.5.2. It was established in §4.5.1 that Inuit is syntactically ergative, meaning that ABS objects raise to a position where they c-command the ERG subject. I also showed that dependent case is assigned after movement of the ABS object (or an ABS object-associated element) to the clausal-left periphery. In §4.5.2, we then saw that there is cross-linguistic evidence indicating that dependent case assignment may calculated over a sub-portion of the clause. Across languages, we find that grammatical objects must undergo movement to a vP-external position in order for dependent case assignment to proceed.

Putting these facts together, I suggest that this yields the typology in (76). In this table, syntactically ergative languages contribute an additional facet to the two-dimensional grid established by Baker and Vinokurova (2010) and Baker (2015). Inuit constitutes a novel type of language, in which the domain of case assignment is parametrized to the  $\nu$ P-external phase, while the alignment of the case patterning is ergative.

#### (i) Ika: Dependent ERG case triggered in OSV sentence

Guiadžina zammi peri-se? an-a?kuss-i guak-akí nu?-na puma gen-child dog-erg ref-bite-while kill-perf aux-d.pst 'The dog had killed the puma's cub, biting it.'

(Frank 1990)

<sup>&</sup>lt;sup>26</sup>Baker (2015) additionally provides an example from Ika showing that raising the object to a pre-subject position also triggers ERG case assignment to the subject. However, it is not clear from the translation of the sentence whether this raised object is truly the case competitor for the subject or if there is a null resumptive pronoun present.

## (76) Typology of dependent case configurations

	ACC	Morphologically ERG	Syntactically ERG
Clause	Icelandic	Shipibo	*
νP-external phase	Sakha	Eastern Ostyak	Inuit

Under this view, we could view the distinction between ERG and ACC dependent case as *terminological* in nature. What we have been calling "ERG" in languages like Inuit is assigned in a similar syntactic configuration to "ACC" case, since both are assigned to the lower of two case competitors. Whether a language ends up labelled as (syntactically) ergative or accusative, then, depends on whether the object raises to a position above the subject—or, put differently, whether the case-marked nominal is understood as the subject or the object of the sentence.

Note, finally, that I have marked one cell as unattested. This would be a language that is syntactically ergative, but whose dependent case rules are calculated over the entire clause. As discussed by Bittner and Hale (1996a), syntactically ergative languages necessarily have "opaque" *v*P-domains for the purposes of case assignment, as a motivator for raising in the first place.

This type of language would be difficult to diagnose, given that subjects are typically  $\nu$ P-external to begin with, so dependent case assignment would naturally involve two  $\nu$ P-external arguments. However, I offer a pair of examples from Aleut that potentially bears on this, (77):

## (77) Aleut: Indefinite subjects cannot receive ERG/REL case

## a. <u>Definite subject:</u>

tayaĝu-**m** nag-aan hiti-ku-**u** man-rel interior-3s.Abl go.out-pres-3s.S/3s.O 'The man went out of it (e.g. the house).'

## b. <u>Indefinite subject:</u>

taya $\hat{g}u$ - $\hat{x}$  nag-aan hiti-ku-**u** man-ABS interior-3s.ABL go.out-PRES-3s.S/3s.O 'The man went out of it (e.g. the house).' (Bergsland and Dirks, 1981)

In both examples, the object is pronominal, meaning that it undergoes object shift to a structurally high position. Whereas this feeds dependent ERG case assignment in (77a), the subject remains ABS in (77b). Citing similarities with German (Diesing, 1992), Merchant (2011) suggests that the syntactic difference between these two examples is that, in the latter, the indefinite subject is in a structurally low position within the  $\nu P$ .

If remaining within vP prevents a subject from receiving dependent case, then this necessarily means that the domain of case assignment in the language in question is not the clause, but the vP-external phase. I leave as a topic for future research whether this contrast is replicated in other syntactically languages.

# 4.6 Chapter summary: From pronominal clitic doubling to ergativity

In this chapter, I demonstrated that the object  $\phi$ -agreement vs. clitic doubling distinction across Inuit has deep consequences for other aspects of the grammar. Specifically, it provided a new window into previously observed (though perhaps imprecisely-defined) differences in the distribution of the ergative patterning across Inuit. Whereas most previous literature on microvariation in the status of ergativity focused on the properties of the antipassive Mod object, in this chapter I argued for the existence of microvariation in the properties of the ergative construction, which merit investigation on their own.

In particular, we find cross-dialectal variation across Inuit with respect to the status of the ABS object that raises to the clausal left periphery. In Kalaallisut, a full ABS object DP raises to this position; however, in Inuktitut and Labrador Inuttut, the same position is occupied by a pronominal D $^0$ -element, realized as an object clitic. This point of variation is able to affect the distribution of ergativity, because ERG case across Inuit is dependent in nature, as evidenced by the application of various diagnostics for dependent case to Inuktitut. Across Inuit, the case competitor for dependent ERG case is becoming increasingly pronominal in nature, thus drawing the link with the  $\phi$ -agreement vs. clitic doubling distinction.

Zooming out slightly, the Eastern Canadian varieties of Inuit actually display *two* divergences from Kalaallisut concerning the properties of grammatical objects. While this chapter identified increasingly greater restrictions on the ABS object of the ergative construction moving from Kalaallisut to Inukttut to Labrador Inuttut, recall that the MOD object of the antipassive construction simultaneously displays *increasingly loosening* restrictions. This is summarized in (78). The fact that these two properties simultaneously hold is clearly non-coincidental; however, I leave a deeper investigation of this correlation for future research.

## (78) ABS object-MOD object correlation

Increased restrictions on ABS object ↔ loosening restrictions on MOD object

Beyond the main findings, this chapter presented a case study on how microvariation can shed light on theoretical questions. The Inuit varieties of Kalaallisut, Inuktitut, and Labrador Inuttut were represented here as individual points along a gradient system. The close examination of each individual variety allowed us to gain general insights into the nature of the Inuit ergative system overall.

## **Chapter 5**

# Morphological conditions on chain pronunciation

In this chapter, I turn to the morphosyntactic properties of clitic doubling in Inuktitut. Clitic doubling is argued to be derived via two ordered steps: (i) syntactic movement of a pronominal D<sup>0</sup>-element, which forms a movement chain with its in situ associate, and (ii) postsyntactic Merger between D<sup>0</sup> and its host, which creates a clitic (bound morpheme). I propose that the pronunciation of movement chains is regulated by the application of Merger, as Merger of an element forces that element to be spelled out (cf. the Stray Affix Filter). This interaction not only accounts for previously unnoticed restrictions on the surface distribution of ABS object pronouns—but also crucially finds an unlikely parallel in the behaviour of nominals that undergo *noun incorporation*. In particular, I demonstrate that pronominal cliticization and noun incorporation in Inuktitut obey a common set of constraints on copy spell-out and deletion. Thus, beyond clitic doubling, this proposal provides novel evidence for a purely postsyntactic analysis of noun incorporation in Inuktitut (e.g. Bok-Bennema and Groos, 1988), in which full DP objects undergo Merger with an affixal verb. This is contrary to analyses of incorporation based on head or phrasal movement, and contrary to the canonical characterization of incorporated objects as structurally reduced.

## 5.1 Introduction

In Chapter 4, the  $\phi$ -agreement vs. clitic doubling distinction across Inuit was shown to be directly tied to the ergative case system, by determining the nature of the case competitor for dependent erg case assignment. In this chapter, I investigate the theoretical implications of clitic doubling in Inuktitut for the syntax-phonology interface, as well as clarify certain aspects of the clitic doubling structure. There are two core proposals of this chapter, which are interrelated. The first is that the formation of pronominal clitics via postsyntactic Merger (i.e. the conversion of pronominal D<sup>0</sup>s into bound morphemes) is subject to several well-formedness conditions at PF—in particular, the Stray Affix Filter (Lasnik, 1981, 1995; Baker, 1988, et seq.). The second is that, because cliticization is fed by syntactic movement, the Stray Affix Filter interacts with the algorithm that determines

the spell-out and deletion of movement copies, which also takes place at PF.

Crucially, I provide novel evidence from Inuktitut that *Merger forces copy pronunciation*; in other words, the Stray Affix Filter forces an element that has undergone Merger to be spelled out. This generalization takes as a precedent the cross-linguistic observation that the necessity of adhering to the Stray Affix Filter often overrides the regular chain pronunciation rules that a language may otherwise exhibit (e.g. Lasnik, 1981; van Riemsdijk, 1989; Abels, 2001; Landau, 2006; Kandybowicz, 2008). As an illustration, consider the phenomenon of verb doubling, exemplified in (1) with Hebrew. Here, we see that, in V(P)-topicalization constructions, both the base copy and the topicalized copy of the verb are pronounced. According to Landau's (2006) analysis, the higher copy is spelled out due to intonational requirements on topics. However, the lower movement copy is *also* pronounced, to support tense morphology on T<sup>0</sup>. Therefore, although in Hebrew the lower copy of a movement chain is generally deleted, this rule may be overridden by the Stray Affix Filter.

## (1) Hebrew: VP-fronting may result in verb doubling

[VP le'hasbir et ha-kišalon], hu lo hisbir
INF.explain ACC the-failure he not PST.explain
'As for explaining the failure, he didn't explain.'

(Landau, 2006)

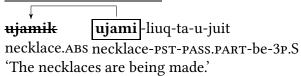
I argue that we see a parallel interaction at play in Inuktitut. Merger of a nominal element with some head H<sup>0</sup> along the clausal spine forces the pronunciation of that nominal—and, accordingly, may additionally result in the deletion of other movement copies of that nominal. As I will demonstrate, this constrains the surface distribution of clitic doubled *ABS object pronouns*. I also show that this idea extends straightforwardly to certain recalcitrant properties of *noun incorporation*—namely the fact that incorporated objects in Inuktitut may behave as though they have undergone phrasal movement (cf. Johns, 2009). I argue that these patterns share a common analysis, as schematized in (2). Because postsyntactic Merger is operative in both pronominal cliticization and noun incorporation, both phenomena interact with syntactic movement in a unified way.

## (2) Merger determines spell-out of movement copy

a. Pronominal cliticization:

Jamesie-erg 1s.Abs see-rec.pst-3s.S/1s.O 'Jamesie saw me.'

b. <u>Phrasal movement in NI:</u>



This chapter is organized as follows. In §5.2, I establish the system of syntactic movement, postsyntactic Merger, and their interaction in Inuktitut clitic doubling, and offer some cross-linguistic case studies illustrating the generality of this interaction. §5.3 identifies an asymmetry in Inuktitut concerning the surface distribution of ABS object *pronouns*, and develops an analysis of these facts using the logic presented above. Finally, in §5.4, I demonstrate that noun incorporation in Inuktitut displays parallel effects, motivating a postsyntactic treatment (cf. Bok-Bennema and Groos, 1988); along the way, I also discuss several novel properties of Inuktitut noun incorporation, not reported in the previous literature on this topic.

## 5.2 Interactions between movement and Merger

In this section, I overview the system of syntactic movement and postsyntactic Merger underlying clitic doubling in Inuktitut, as well as unrelated phenomena cross-linguistically. Because cliticization is fed by syntactic movement, the pronominal  $D^0$  that surfaces in the extended CP-domain is part of a movement chain and is thus subject to PF conditions operating on movement chains, e.g. conditions that regulate chain pronunciation. This idea is in the spirit of previous analyses of verb-doubling cross-linguistically (e.g. Landau, 2006; Kandybowicz, 2008). A similar interaction between cliticization and postsyntactic deletion has also been pursued by Bennett et al. (to appear) for Irish, in the domain of ellipsis.

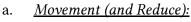
## 5.2.1 Movement, Merger, and copy spell-out in Inuktitut

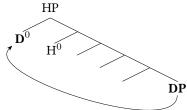
So far, we have seen that Inuktitut object-referencing morphology is pronominal in nature, and that its status as a  $D^0$  has semantic and syntactic consequences for the interpretation of ABS objects and the status of ergativity in the language. I suggested in Chapter 3.4 that clitic doubling involves a movement chain, whose head is a  $D^0$  and whose tail is a DP. In particular, I adopted the analysis of clitic doubling from Baker and Kramer (2016), which treats clitic doubling as phrasal movement of a DP, followed by a syntactic operation, Reduce, which converts the higher DP copy into a pronominal  $D^0$ .

I now address the question of how the pronominal D<sup>0</sup>-element ends up as a clitic, i.e. a bound morpheme. I propose that there are two broad steps in the formation of pronominal clitics, as illustrated below. First, as noted in Chapter 3.4, DP movement followed by Reduce yields a pronominal D<sup>0</sup>-element in the clausal left-periphery, (3a). Then, in the postsyntactic component, Merger applies between D<sup>0</sup> and its host (H<sup>0</sup> in the schematization below), generating the clitic, (3b). For extensive discussion of the idea that Merger creates bound morphemes between adjacent syntactic objects (e.g. heads), see Marantz (1984), Bobaljik (1994, 2002), Harley (2013), among others.

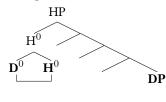
<sup>&</sup>lt;sup>1</sup>Following that, in Inuktitut these heads are then spelled out as part of a larger portmanteau morpheme that may also include subject  $\phi$ -agreement and mood, as discussed in Chapter 3.2.

## (3) Clitic doubling: Movement and Merger









Crucially, it has been observed that these steps *interact*, due to the need to satisfy conflicting PF requirements. According to the Copy Theory of Movement (e.g. Chomsky, 1995), movement generates copies, which may then be either spelled out or deleted, according to the chain pronunciation algorithm of the language in question (see also Nunes 1995, 2004; Corver and Nunes 2007, among others). In many cases, we find that deletion applies to all but one copy in a movement chain, due to Economy conditions on copy pronunciation, (4); I will refer to this idea as Economy of Pronunciation, following Landau (2006).<sup>2</sup>

(4) Economy conditions trigger deletion of all but one copy
Who did you say [ <who> Mary thinks [ <who> won the race ] ]?

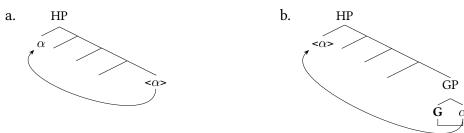
However, it has also been known since Lasnik (1981) that Merger and other word-formation processes interact with pronunciation, in that languages systematically disallow "stray affixes" (the Stray Affix Filter; see also Baker 1988, Lasnik 1995). The simplified definition of the Stray Affix Filter given below is from Markman (2008).

(5) Stray Affix Filter: Affixes must have phonologically overt hosts.

Putting these ideas together, what we find is that the pronunciation of movement chains is *regulated by the application of Merger*; Merger of an element forces it to be spelled out in accordance with the Stray Affix Filter. However, given independent pressures imposed by Economy of Pronunciations, other copies in the movement chain are deleted. As schematized in the hypothetical example in (6), the choice to delete a given copy may be directly affected by the application of Merger, as Merger may *override* a language's default copy pronunciation algorithm. Note that this type of interaction entails an *ordering of postsyntactic operations*: Merger takes place prior to the algorithm determining the spell-out and deletion of movement copies.

<sup>&</sup>lt;sup>2</sup>There are, however, many cross-linguistic instances of multiple copy spell-out (e.g. Nunes, 1995, 2004; Abels, 2001; Landau, 2006; Kandybowicz, 2008; Trinh, 2011; van Urk, to appear); some examples will also be presented throughout this chapter, both from Inuktitut and otherwise.

## (6) Merger may override chain pronunciation rules



I now illustrate how this system captures verb-doubling phenomena cross-linguistically, and also extend this to similar interactions between Merger and ellipsis.

## 5.2.2 Verb doubling

The phenomenon of verb doubling is illustrated in (7)-(8) with data from Hebrew and Nupe. In Hebrew, verb doubling arises due to the topicalization of a V(P) to the clausal left periphery, whereas in Nupe a bare V<sup>0</sup> undergoes short head movement to a clause-medial position, conveying a sense of polarity or emphasis. Kandybowicz (2008) refers to this construction in Nupe as a Bare Root Verbal Repetition Construction (BRVRC).

## (7) Hebrew: Verb doubling in VP-topicalization

[VP le'hasbir et ha-kišalon], hu lo hisbir
INF.explain ACC the-failure he not PST.explain
'As for explaining the failure, he didn't explain.'

(Landau, 2006)

## (8) Nupe: Verb doubling in BRVRCs

- a. Musa (´) pa eciMusa FT pound yam'Musa pounded a yam.'
- b. Musa **pa** eci **pa**Musa pound yam pound
  '(Yes,) Musa DID IN FACT pound a yam.'

(Kandybowicz, 2008)

Hebrew is particularly illustrative, because Hebrew has inflectional (root-template) morphology. The example in (7) shows that the higher movement copy surfaces as an infinitive, while the lower movement copy bears tense. Landau (2006) argues that verb doubling arises as the result of PF well-formedness conditions on complex words. The higher copy is obligatorily pronounced due to intonational requirements on topics; crucially, the lower copy is also obligatorily pronounced, in order to support tense morphology on T<sup>0</sup>, i.e. to avoid violating the Stray Affix Filter.

As further support for this idea, Landau offers the minimally different sentence in (9), in which the infinitival complement of the control verb 'manage' is fronted, leaving behind an unpronounced lower copy. The contrast between (9) and (7) above stems from the nature of the moving constituent. In (9), because the extracted element is infinitival

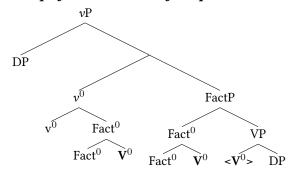
(indicating the absence of tense morphology in T<sup>0</sup>), there is nothing to force the spell-out of the base copy. This copy is thus deleted to satisfy Economy of Pronunciation.

## (9) Hebrew: Fronting infinitive does not yield doubling

[le'hasbir et ha-kišalon]<sub>i</sub>, hu lo hicliax  $t_i$  to-explain ACC the-failure he not managed 'To explain the failure, he didn't manage.'

Returning now to the Nupe verb doubling examples, Kandybowicz (2008) offers a similar analysis to that of Hebrew. To be precise, Kandybowicz analyzes Nupe verb roots as uniformly undergoing head movement to  $v^0$ . The higher copy of the verb is always spelled out, due to Kandybowicz's assumption that  $v^0$  is always affixal in nature; thus, the Stray Affix Filter operates even in a fairly isolating language like Nupe. In verb doubling constructions, a lower copy of the verb is also pronounced. As shown in (10), Kandybowicz takes the verb to pass through a low factive projection, FactP, which hosts a floating low tone.<sup>3</sup> Association of this floating tone to the verb as it moves through Fact<sup>0</sup> forces the lower copy to be pronounced as well.

## (10) Simplified structure of Nupe verb movement



In conclusion, we have seen two case studies of how morphological well-formedness conditions at PF determine the pronunciation of movement copies. In both case, Economy of Pronunciation is overridden in order to satisfy other considerations, such as the Stray Affix Filter.

## 5.2.3 Cliticization and ellipsis in Irish

The system set up thus far is not necessarily limited to Economy of Pronunciation in movement chains. Another type of deletion process that takes place at PF is ellipsis (Merchant, 2001, 2004, a.o.); thus, we might expect to see similar interactions with PF conditions on word-formation processes.

This is indeed borne out in Irish, as shown by Bennett et al. (to appear).<sup>4</sup> Irish has

<sup>&</sup>lt;sup>3</sup>The structure given here is simplified from the one presented in Kandybowicz (2008, p. 72).

<sup>&</sup>lt;sup>4</sup>For brevity, this section presents a highly simplified version of Bennett et al.'s (to appear) analysis.

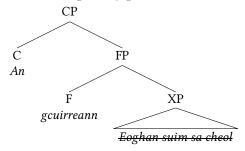
a type of ellipsis termed Responsive Ellipsis in the literature, which is illustrated in (11). Because Irish verbs independently raise to the clausal left periphery (e.g. McCloskey, 1991, 2017), verbs survive ellipsis, which applies to the post-verbal constituent; however, the subject, which follows the verb, is elided. This is further schematized in (12) for clarity.

## (11) Irish: Responsive Ellipsis of post-verbal material, including subject

- a. An gcuireann [ **Eoghan** suim sa cheol ]
  Q.PRES put Owen interest in-the music
  'Is Owen interested in music?'
- b. Creidim go gcuireann  $\Delta$  believe.pres.s1 c put.pres 'I believe he is.'

(Bennett et al., to appear)

## (12) Irish: Ellipsis of post-verbal constituent



Crucially, Bennett et al. (to appear) also demonstrate that the subject may in certain circumstances escape Responsive Ellipsis—one prerequisite being that it must undergo incorporation into (i.e. right-adjoin to) the verb. This occurs obligatorily with simple subject pronouns that are not modified by any suffixes, (13). Evidence that incorporation takes place comes from their prosodic phrasing, their ability to condition allomorphy on the verb, and their participation in verb focus stress rules (the last being especially relevant to our discussion). On this basis, Bennett et al. analyze subject incorporation as a form of postsyntactic head movement, "in effect a Merger under Adjacency in the sense of Bobaljik (2002)" (p. 19). The result is that the subject is represented as part of the verb complex.

## (13) Subject pronoun incorporation in Irish

Chonaic **mé** fear mór ar an bhealach mhór saw I man big on the way great 'I saw a large man in the roadway.'

(Bennett et al., to appear)

Based on this analysis, we may now turn to how subject incorporation (i.e. Merger) interacts with ellipsis. Irish also has what is called the Special Focus Construction, which encodes a verum focus-like effect. As shown in (14), a striking property of this construction is that the focal accent falls on the simple incorporated pronoun, even though it is the verb that is being focused.

# (14) Irish: Verb focus constructions realize focal accent on incorporated pronoun

A: An ngéillfidh siad?
Q yield.FUT they
'Will they yield (on this)?'

B: Caithfidh **SIAD** must they 'They HAVE to.'

(Bennett et al., to appear)

Put together, Bennett et al. demonstrate that, when Responsive Ellipsis applies to a Special Focus Construction, *the incorporated subject survives elision*. This is already shown in (14), but a second example—now with an expletive subject—is given in (15).

## (15) Irish: Incorporated pronoun survives ellipsis in Special Focus Construction

A: Siud é an chéad chuid den fheachtas seo — an agóidíocht seo a dem it the first piece of-the campaign dem the protest dem c tá sibh ag dul a dhéanamh. Ar oibrigh sé? be.pres you.p prog go do.non.fin Q work.pst it 'This was the first phase of this campaign — this protest that you are mounting. Did it work?'

B: D'oibrigh. D'oibrigh **sé** work.pst work.pst it 'It did. It absolutely did.'

(Bennett et al., to appear)

What this pattern reveals is an interesting interaction between competing pressures to spell-out vs. delete certain morphosyntactic objects. Thus, for our purposes, Irish thus presents another instance of how postsyntactic deletion processes may be overridden in order to satisfy other constraints that drive pronunciation. Whereas this was discussed in the previous section in the context of the pronunciation of movement copies, Irish shows that this interaction is more general, as it extends to ellipsis.

Below, I will return to movement chains created by pronominal clitic doubling, and provide evidence that the same level of interaction may be seen in Inuktitut.

## 5.3 The interaction of clitic doubling and copy spellout

In this section, I apply the logic of the previous section to a hitherto unnoticed ABS object asymmetry in Inuktitut, concerning the distribution of ABS object pronouns. Specifically, ABS object pronouns are forbidden from surfacing with object-referencing morphology. I argue that this follows from morphological conditions on clitic doubling. After establishing that bare pronouns are D<sup>0</sup>s, I propose that clitic doubling of an ABS object pronoun

creates a movement chain whose head and tail are *structurally identical*—both head and tail are bare  $D^0s$ . The lower movement copy is thus deleted. In contrast, because erg subjects and ABS subjects are cross-referenced by true  $\phi$ -agreement, they display no such restrictions. Finally, I show that, as a prediction of the present system, the doubling of clitics and ABS object pronouns is permitted under certain circumstances—in particular, when Economy conditions on copy deletion are overridden by higher ranked morphological conditions.

## 5.3.1 Pronouns are bare $D^0$ s

Following Postal (1966), Abney (1987), Wiltschko (1998), Stanton (2016), and others, I propose that independent pronouns in Inuit are bare D<sup>0</sup>s, not phrasal DPs.<sup>5</sup> This is important to establish, because it will allow us to make sense of certain restrictions on clitic doubling ABS object pronouns, to be discussed in the next section.

Cross-linguistic evidence for the idea that pronouns are D<sup>0</sup>s comes from the observation that pronouns may apparently function as determiners in so-called Adnominal Pronoun Constructions (APCs),<sup>6</sup> as illustrated in (16). In many languages, the pronouns may not co-occur with true definite articles, suggesting that they occupy the same position—D<sup>0</sup>.

## (16) **Pronouns act as determiners in APCs**<sup>7</sup>

- a. German: Wir (\*die) Studenten
- b. <u>Italian:</u> **Noi** (\*gli) studenti

Crucially, the Inuit languages also have APCs; moreover, within the Inuit languages, we find variation in exactly how APCs are instantiated. I now show that the exact nature of the APCs in Inuktitut reveals that pronouns in Inuktitut should also be analyzed as bare D<sup>0</sup>s rather than DPs. Although APCs have not been studied extensively in Inuit, Fortescue (1984) provides the example in (17a), from Kalaallisut. Note also that the pronoun in this data point surfaces to the right of the NP, which is consistent with Inuit's right-headed structure, (17b).<sup>8</sup>

## (17) APC in Kalaallisut

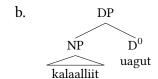
 $<sup>^5</sup>$ Note, however, that the Inuktitut data shown here are not incompatible with all phrasal approaches to pronouns. For example, Grosz and Patel-Grosz (2017) argue that pronouns are DPs, but only spell out  $D^0$ ; the NP complement of  $D^0$  is null (see also Elbourne 2005). It is only important for our purposes that the pronoun does not realize an entire span of heads.

<sup>&</sup>lt;sup>6</sup>Terminology from Höhn (2016, 2017).

<sup>&</sup>lt;sup>7</sup>In contrast to the German and Italian examples, English does permit strings such as *we the students*. However, Pesetsky (1978) argues that the construction in English involves a different structure, and possibly a different prosody as well.

<sup>&</sup>lt;sup>8</sup>Inuit APCs are only available with plural pronouns, just as in English. This is, however, not a universal pattern; see Höhn (2017, pp. 95-96) for a non-exhaustive list of languages that permit APCs to be formed with singular pronouns as well.

a. kalaalliit **uagut**Greenlanders 1P
'We Greenlanders'
(Fortescue, 1984)



In contrast to Kalaallisut, pronouns in Inuktitut APCs are encoded as  $\phi$ -bearing suffixes attached to the NPs they modify. This is illustrated in (18) with 1P and 2P APCs. Strikingly, (19) demonstrates that these suffixes are morphologically identical to the 1P and 2P object-referencing morphemes found on the verb, (19). Interestingly, a preliminary investigation suggests that this type of APC is unattested in Kalaallisut. <sup>10</sup>

## (18) APCs in Inuktitut contain pronominal suffix

a. ilisaiji-**tigut** teacher-1p 'We teachers'

(NB, AB)

b. ilinniaqtu-**hi**<sup>11</sup> student-2¤ 'you (pl.) students'

(K, AR)

## (19) Pronominal suffixes are identical to object-referencing morphemes

a. Jiisusi-up tuqu-jjutigi-lauq-taa tigut

Jesus-erg die-Appl-pst-3s.S/1p.O

'Jesus died for us.' (NB, AB)

b. taku-lauq-taa**si** ippaksaq see-PST-3s.S/2P.O yesterday 'He saw you (pl.) yesterday.' (NB, PI)

I now propose that Inuktitut APCs are syntactically identical to those in Kalaallisut, i.e. also have the structure given in (17) above. However, in Inuktitut the pronoun in  $D^0$  is realized as a *pronominal clitic*, thus accounting for their surface similarity with the verbal pronominal clitics in the language. In other words, Inuktitut displays a *generalized* morphological rule, in which pronominal  $D^0$ s undergo postsyntactic Merger with their hosts. This is given in (20). In the verb complex, this rule outputs verbal object-referencing morphology; in the nominal domain, these morphemes surface in APCs as pronominal suffixes attached to the NPs they modify.

# (20) $D^0$ -cliticization rule in Inuktitut $[[X^0]D^0] \rightarrow X^0+D^0$

<sup>&</sup>lt;sup>9</sup>Note that, due to the portmanteau nature of Inuit argument-referencing morphology, these forms are only evident when the subject is 3rd person.

<sup>&</sup>lt;sup>10</sup>I thank Yining Nie (p.c.) for consulting a Kalaallisut speaker on this point.

<sup>&</sup>lt;sup>11</sup>In certain Kivalliq varieties of Inuktitut, such as the Arviat variety represented here, the /s/ sound has been replaced with /h/.

Having argued that pronouns in Inuktitut are bare  $D^0$ s, I will now show how this sheds light on restrictions on the clitic doubling of ABS object pronouns. In particular, I will argue that this follows from general conditions on copy deletion.

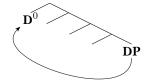
## 5.3.2 Restrictions on ABS object pronouns in Inuktitut

In Chapter 3, I proposed that Inuktitut clitic doubling consists of a movement chain whose tail is a full DP and whose head, the clitic, is a bare D<sup>0</sup>; following Baker and Kramer (2016), clitic doubling is derived by phrasal movement of a DP, followed by the syntactic operation of Reduce. The relevant (post-Reduce) structure of clitic doubling is repeated in (21a).

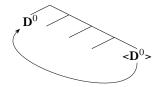
I now turn to clitic doubling chains in which the associate is a *pronoun* rather than a full ABS object. Crucially, if pronouns are bare  $D^0$ s (Postal, 1966; Abney, 1987; Stanton, 2016, 2017), then the clitic doubling structure would consist of a movement chain whose head and tail are both bare  $D^0$ s, (21b). Thus, I assume that the operation Reduce need not take place (due to its redundancy) when the nominal element is a bare  $D^0$  to begin with.

## (21) Clitic doubling structures





b. Pronominal  $D^0$  associate:



I argue that the structure in (21b) underlies another kind of ABS object asymmetry found in Inuktitut, now concerning the distribution of overt pronouns. Because the head and tail of the clitic doubling chain are structurally identical, Economy conditions on copy pronunciation force the *deletion* of the lower  $D^0$  copy (in the absence of any additional pressures for this copy to be pronounced), as indicated above. As a result, ABS object pronouns may not co-occur with object-referencing morphology. In contrast, no such co-occurrence restrictions hold between ERG and ABS subjects and subject-referencing morphology, since this morphology is  $\phi$ -agreement, not clitic doubling. Moreover, I show that this asymmetry is crucially *absent* in Kalaallisut—this follows straightforwardly from the fact that Kalaallisut lacks object clitic doubling altogether.

The Inuit languages are generally *pro* drop; the features of the unpronounced pronoun may be recovered from the argument-referencing morphology. However, consider the contrast below. Although Inuktitut allows ERG and ABS subject pronouns to optionally co-occur with subject agreement, as seen in (22a-b), ABS object pronouns are *forbidden* from co-occurring with object-referencing morphology. The example in (22c) is therefore grammatical only if the overt pronoun is suppressed.<sup>12</sup>

#### (22) Inuktitut: Co-occurrence restriction on ABS object pronoun

<sup>&</sup>lt;sup>12</sup>Though this contrast was confirmed with multiple speakers, the particular examples (as well as the accompanying comments) given in (22) come from one consultant for consistency.

#### a. <u>ERG subject:</u>

(?uvanga) Jamesie taku-qqau-jara
1s.erg Jamesie.Abs taku-rec.pst-1s.S/3s.O
'I saw Jamesie.'

Consultant's comment: "That's a little repetitive, but it still works."

#### b. *ABS subject:*

(?uvanga) Jamesie-mik taku-qqau-junga 1s.Abs Jamesie-MOD see-REC.PST-1s.S 'I saw Jamesie.' Consultant's comment: "That's still repetitive."

#### c. ABS object $\rightarrow$ co-occurrence restriction:

Jamesi-up (\*uvanga) taku-qqau-jaanga
Jamesie-erg (\*1s.abs) see-rec.pst-3s.S/1s.O

'Jamesie saw me.'

Consultant's comment: "No, that's you saying, 'me,' and then, 'he saw me."

(SB, IO)

Although there was some inter-speaker variation in the acceptability of (22a-b) (with many speakers consulted, including the one above, finding these examples to be redundant though otherwise fine), every speaker consulted on these sentences judged the construction exemplified in (22c) as completely ungrammatical. Moreover, the comment provided by the consultant in (22c) clearly suggests that the ungrammaticality of this sentence is due to the co-occurrence of the ABS object pronoun and the object-referencing morpheme. While the behaviour of ERG and ABS subject pronouns is typical of *pro*-dropped subjects, the inability of ABS object pronouns to surface at all is not expected.

We have already seen other ABS object asymmetries, stemming from the idea that subject-referencing morphology is  $\phi$ -agreement while object-referencing morphology is clitic doubling; recall from Chapter 3 that ABS objects in Inuktitut are obligatorily interpreted as anaphoric definite descriptions (approximating D-linking). Therefore, the fact that the contrast in (22) cuts at the same place strongly suggests that the  $\phi$ -agreement vs. clitic doubling distinction is also at play here.

As support for this, notice that Labrador Inuttut displays the exact same pattern, (23). Crucially, in Chapter 4, we saw that object-referencing morphology in Labrador Inuttut is also clitic in nature.

#### (23) Labrador Inuttut: Co-occurrence restriction on ABS object pronoun

#### a. <u>ERG subject:</u>

(uvanga) taku-kKau-jaga 1s.erg see-pst-1s.S/3s.O 'I saw her.'

## b. *ABS subject*:

(uvanga) taku-kKau-junga sugusi-mik 1s.ABs see-PST-1s.S child-мор 'I saw the child.'

c. <u>ABS object → co-occurrence restriction:</u> sugusi-up taku-kKau-**janga (\*uvanga)** child-ERG see-PST-3s.S/1s.O 1s.ABS 'The child saw me.'

(Ilia Nicoll, p.c.)

Finally, in contrast to Inuktitut and Labrador Inuttut, recall that Kalaallisut does not have object clitic doubling; both subject-referencing and object-referencing morphology in Kalaallisut is genuine  $\phi$ -agreement. Accordingly, ABS object pronouns in Kalaallisut should not display the restrictions shown above. Indeed, the examples in (24) demonstrate that independent pronouns in Kalaallisut may surface in all positions, including ABS object position.<sup>13</sup>

## (24) Kalaallisut: No co-occurrence restrictions on pronouns

#### a. <u>ERG subject:</u>

uanga eqqaama-vara 1s.erg remember-ind.1s.S/3s.O umiaasa-qa-raluar-poq little.flat.bottomed.rowboat-have-conseq-ind.3s.S '(In Qaqortoq) I remember it had little flat-bottomed rowboats.'

#### b. *ABS subject:*

uanga Nuum-mi inunngor-vunga 1s.ABS Nuuk-LOC be.born-1s.S 'I was born in Nuuk...'

#### c. *ABS object:*

1987-arsi-mi tassannga-annar-suaq pujorta-runnaa-rama **uanga** 1987-years-loc from.then.on-only-big smoke-no.more-caus.1s.S 1s.abs cigaritsi-p aju-le-**raminga** cigarette-erg be.bad-begin-3s.S/1s.O 'In 1987 from then on I stopped smoking, cigarettes didn't like me anymore.' (Berge, 1997)

It is thus clear that the unavailability of ABS object pronouns in Inuktitut and Labrador Inuttut follows from object clitic doubling. As mentioned above, I argue that this co-occurrence restriction is simply a matter of *copy deletion*, enforced by Economy conditions on chain pronunciation; this is schematized in (25). Moreover, because Merger applies to the higher movement copy (thus generating the bound clitic), it is obligatorily the lower movement copy that gets deleted. In contrast, no co-occurrence restrictions are expected

 $<sup>^{13}\</sup>mathrm{These}$  examples, from Berge (1997), are excerpted from longer pieces of discourse.

to take place with true  $\phi$ -agreement, as  $\phi$ -feature valuation does not create movement chains. This is why Inuktitut and Labrador Inuttut display an asymmetry between ABS objects vs. ERG and ABS subjects, and why Kalaallisut displays no such asymmetries at all.

#### (25)Deletion of identical pronominal copies

```
Jamesi-up uvanga taku-qqau-jaanga
Jamesie-ERG 1s.ABS see-REC.PST-3s.S/1s.O
'Jamesie saw me.'
```

In the next section, I turn to cases in which the ABS object pronoun is not deleted, and extend the present proposal to capture these cases. I will show that, in these instances, either the pronoun occurs within a larger DP constituent, or the pronoun itself undergoes Merger with an adjacent element, thereby bleeding copy deletion.

#### Overriding copy deletion 5.3.3

Earlier in this chapter, we saw instances of the phenomenon of verb doubling, which arises in VP-topicalization and predicate clefting constructions; examples from Hebrew and Nupe are repeated below in (26). The fact that the VP is spelled out both in its base position and in its landing site was taken to be due to various PF requirements overriding Economy of Pronunciation (Landau, 2006; Kandybowicz, 2008).

#### (26)Verb doubling in Hebrew and Nupe

#### *Hebrew:*

[ $_{VP}$  le'hasbir et ha-kišalon], hu lo hisbir INF.explain ACC the-failure he not PST.explain 'As for explaining the failure, he didn't explain.'

(Landau, 2006)

#### b. Nupe:

Musa **pa** eci pa Musa pound yam pound '(Yes,) Musa did in fact pound a yam.' (Kandybowicz, 2008)

In contrast, the Inuktitut data shown above do not display overt clitic doubling, since ABS

object pronouns are deleted in their base position. In other words, Economy of Pronunciation applies successfully in these constructions. In this section, I demonstrate that this need not be the case. Just as with the verb doubling examples above, Economy of Pronunciation may be overridden in order to satisfy other PF requirements operating in the language.

First, as shown in (27), contrastively focusing an ABS object pronoun obviates the cooccurrence restriction:

## (27) Inuktitut: Co-occurrence restriction obviated with focus

**uvanga** Taiviti-up taku-qqau-**jaanga**, Carol taku-nngi-&uni-uk 1s.Abs Taiviti-erg see-rec.pst-3s.S/1s.O Carol.Abs see-neg-ctmp.3s.S-3s.O 'It's me that Taiviti saw, not Carol.' (NB, AB)

I propose that this can be given the same analysis as the Hebrew verb-doubling example seen earlier. The pronominal clitic is always pronounced due to the Stray Affix Filter, as established above. However, the focus-fronted copy of the pronoun is also spelled out, presumably because of a particular intonation imposed on focused elements, or because the focus-fronting landing site itself is associated with special properties blocking deletion (cf. Landau, 2006; van Urk, to appear). However, the base copy of the pronoun is deleted, in accordance with Economy of Pronunciation.

It is also possible to force the pronunciation of an ABS object pronoun in its base-generated position if it itself undergoes Merger with an adjacent element. As seen in (28), the presence of a suffixal modifier<sup>14</sup> (-kuluk) also permits the co-occurrence of an ABS object pronoun and a pronominal clitic.

## (28) Co-occurrence restriction obviated if in situ pronoun undergoes Merger

Taiviti-up **igvi-kuluk** taku-qqau-**jaatit** Taiviti-ERG 2s.ABS-dear see-REC.PST-3s.S/2s.O 'Taiviti saw dear you.'

(NB, AB)

Finally, this discussion permits us a straightforward way of understanding the existence of clitic doubling—i.e. why DP associates do not ever get deleted under Economy of Pronunciation. As noted by Landau (2006), Economy of Pronunciation applies to *identical copies* in a movement chain. In clitic doubling structures, D<sup>0</sup> and its DP associate are structurally distinct, so both are spelled out. This also extends to the fact that pronouns that occur in complex ABs object DPs are not deleted under Economy of Pronunciation; the pronoun is *contained* within the tail of the clitic doubling movement chain, but is not itself the tail. Two instances of the latter are given below. In (29a), we see that pronouns in APCs in ABs object position may co-occur with pronominal clitics, since the entire APC is the associate of the clitic. Similarly, (29b) demonstrates that pronouns in ABs object coordinate structures may also be pronounced.

## (29) Clitic doubling of ABS object containing pronominal D<sup>0</sup>

a. *APC*:

Jaani-up piu-gi-nngit-**taatigut** ilisaiji-**tigut** Jaani-erg like-have.as-neg-3s.S/1p.O teacher-1p.Assoc.abs 'Jaani doesn't like us teachers.'

(NB, PI)

<sup>&</sup>lt;sup>14</sup>See Compton (2012) for a detailed analysis of these suffixes in Inuktitut.

<sup>&</sup>lt;sup>15</sup>Additionally, the pronoun within the DP undergoes Merger with its complement.

#### b. *Coordination:*

Taiviti-up ippaksaq **ilitsi** Kiuru=lu taku-laur-**raasi** David-erg yesterday 2s.abs Carol.abs=also see-pst-3s.S/2p.O 'David saw you and Carol yesterday.' (NB, AB)

Before concluding, I note that the Inuktitut examples shown above closely mirror the distribution of *deficient vs. strong pronouns* discovered by Cardinaletti and Starke (1999). Cardinaletti and Starke observe that deficient (i.e. structurally reduced) pronoun forms are cross-linguistically forbidden in contexts like (28) and (29), which instead require strong pronoun forms. They analyze this restriction in terms of structural economy, proposing that it is more economical, and thus preferred, to use a structurally deficient pronominal form, such as a weak pronoun or a clitic. Strong forms appear only when deficient pronouns may not surface for independent reasons.

This is illustrated below in (30) for focused, modified, and coordinated pronouns. <sup>16</sup> Unlike Inuktitut, (Standard) French does not permit clitic doubling.

## (30) French: Clitic/deficient vs. strong pronoun distinction

## a. <u>Baseline:</u>

J(e) {**l'**} ai aidé {\*elle} I her have helped her 'I helped her.'

#### b. Focus:

J(e) {\*LA} ai aidé {ELLE} I her have helped her 'I helped HER.'

## c. <u>Modification:</u>

J(e) {\*seulement **la**} ai aidé {seulement **elle**} I only her have helped only her 'I helped only her.'

## d. Coordination:

J(e) {\*la et l'autre} ai aidé {elle et l'autre}
I her and the.other have helped her and the.other
'I helped her and the other.' (Cardinaletti and Starke, 1999)

However, I do not believe that a deficient vs. strong pronoun distinction regulated by structural economy lies behind the Inuktitut contrasts discussed in the previous section. For one thing, it does not offer an explanation for why *subject pronouns* in Inuktitut never surface as deficient morphemes, but rather as full pronouns. It also does not account for the fact that Kalaallisut APCs are expressed using full (strong) pronouns, repeated below as (31a), though their counterparts in Inuktitut are expressed using pronominal clitics

<sup>&</sup>lt;sup>16</sup>Cardinaletti and Starke's (1999) sample of languages mainly includes Indo-European languages. However, see Harley and Trueman (2010) for an extension of their proposal to Hiaki (Uto-Aztecan).

(deficient forms), (31b). Finally, see also Manzini (2014) for a number of conceptual and empirical problems with Cardinaletti and Starke's approach.

#### (31) APCs across Inuit

a. Kalaallisut:

kalaalliit **uagut** Greenlanders 1P 'We Greenlanders'

(Fortescue, 1984)

b. Inuktitut:

ilisaiji**-tigut** teacher-1p

'We teachers' (NB, AB)

To sum up, I have shown that Inuktitut displays the expected interaction between syntactic movement and Merger. The application of Merger between D<sup>0</sup> and another head prevents D<sup>0</sup> from being deleted, in accordance with the Stray Affix Filter. In accordance with Economy of Pronunciation, this triggers the deletion of its associate if the two are structurally identical and if the lower copy is not subject to any of its own PF well-formedness conditions blocking deletion. Next, I demonstrate that a parallel interaction between movement, Merger, and copy spell-out is visible in the domain of noun incorporation.

## 5.4 Beyond clitics: Merger and copy spell-out in Inuktitut noun incorporation

In the last part of this chapter, I show that the conditions on chain pronunciation developed above are a *general property* of Inuktitut word formation, extending beyond the distribution of clitics and pronouns. This is achieved through an investigation of *noun incorporation* in Inuktitut, in which objects that surface as incorporated into the verb complex nonetheless behave as though they are syntactically active for the purposes of case, agreement, and A-/ $\bar{A}$ -movement processes. I will argue that this behaviour of incorporated nominals may be straightforwardly accounted for by the same interaction between Merger, movement, and copy deletion established above.

The noun incorporation pattern is illustrated in (32), in which the incorporated nominal is interpreted as though it has been passivized.

## (32) Incorporated nominals may be passivized

**ujami**-<u>liuq</u>-ta-u-jut Suusa-mut necklace-make-pass.part-be-3p.S Susan-allat 'The necklaces are being made for Susan.'

(NB, CR)

Additionally, this discussion entails that noun incorporation in Inuktitut is a postsyntactic process (Bok-Bennema and Groos, 1988), contrary to prominent movement-based analyses of noun incorporation, both in Inuktitut and cross-linguistically (e.g. Sadock, 1980; Baker, 1988; Baker et al., 2005; Johns, 2007b; Barrie and Mathieu, 2016).

This analysis of incorporation extends to polysynthetic word formation in Inuktitut more generally, and bears on the even broader question of how affixes are created: does affixation take place by successive head movement (e.g. Travis, 1984; Baker, 1988), a postsyntactic Merger process (e.g. Marantz, 1984; Bobaljik, 1994, 2002; Harley, 2013; Harizanov and Gribanova, to appear), or some combination of the two (e.g. Julien, 2002)? As mentioned, the findings concerning Inuktitut noun incorporation to be presented in this section argue against movement-based analyses of word formation. At the end of this section, I suggest that they also present a challenge to recent phonological approaches to polysynthetic word formation (Compton and Pittman, 2010; Barrie and Mathieu, 2016). Instead, Merger is argued here to be a universally-available mechanism for word formation and affixation, regardless of a language's synthetic or isolating properties. In a polysynthetic language like Inuktitut, complex words are formed by iterative instances of Merger along the clausal spine.

## 5.4.1 Overview of Inuit noun incorporation

Cross-linguistically, noun incorporation of an object tends to be optional and permitted with a variety of verbs (Sadock, 1980; Mithun, 1984; Baker, 1988, 1996; Rosen, 1989; Barrie, 2011; Barrie and Mathieu, 2016, a.o.), as exemplified with the Mohawk (Iroquian) examples in (33).

## (33) Mohawk: 'classical' noun incorporation

- a. Wa'-k-hninu-' ne **ka-nakt-a'** FACT-1sS-buy-punc ne nS-bed-nsf 'I bought the/a bed.'
- b. Wa'-ke-**nakt**-a-hninu-' FACT-1sS-bed-Ø-null-PUNC 'I bought the/a bed.'

(Baker, 1996)

In contrast, in the Inuit languages, noun incorporation is *obligatory* with a closed class of verbs and is otherwise impossible with all other verbs (Sadock, 1980; Fortescue, 1984; Bok-Bennema and Groos, 1988; Geenhoven, 1998; Johns, 2007b, 2009).<sup>17</sup> Besides its obligatoriness, the occurrence of noun incorporation may be diagnosed by certain morphological properties of the incorporated object. As is evident throughout this section, the

<sup>&</sup>lt;sup>17</sup>Although this type of noun incorporation is relatively rare cross-linguistically, it does exist beyond Inuit, e.g. in Wakashan language Nuu-chah-nulth (Stonham, 2004; Wojdak, 2005, 2008) and Chukotko-Kamchatkan language Chukchi (Kurebito, 1998, 2001). As discussed by Wojdak (2005, 2008) in particular, Nuu-chah-nulth permits incorporated objects to undergo passivization—just as in Inuktitut, the topic of §5.4.3 below.

incorporated object must be appear as morphologically bare (i.e. unable to inflect for case or number). Moreover, the final segment of the incorporated object undergoes either deletion or assimilation, in accordance with the regular morphophonological rules occurring across morpheme boundaries within complex words.

According to Johns (2007b), the verbs that require incorporation are all semantically bleached (with few s-selectional requirements) and can thus be analyzed as light verbs  $(v^0)$ . This is illustrated below by the contrast between -tuq 'consume,' which is obligatorily incorporating and takes a semantically diverse range of objects, and lexical verbs such as imiq 'drink' and niri 'eat,' which are non-incorporating and are relatively s-selectionally restrictive. Other incorporating verbs that will figure into our discussion include -u 'be,' -qaq 'have,' -liri 'do, work on' and -liuq 'make'; see Johns (2007b) for a more extensive list.

## (34) Incorporating verbs in Inuktitut are semantically bleached

a. **tii**-<u>tu</u>-ruma-junga tea-consume-want-1s.S 'I want to drink tea.'

(SB, IQ)

b. **iqalu**-tu-lauq-tunga fish-consume-PST-1s.S 'I ate the fish.'

(NB, AB)

c. qatsi-<u>tuq</u>-paa how.much-consume-INT.3s.S 'How much does it cost?'

(K, CH)

## (35) Non-incorporating verbs are selectionally restrictive

a. **tii-mik** / **#sivalaar-mik** imi-ruma-junga tea-MOD / **#biscuit-MOD** drink-want-1s.S 'I want to drink tea.' (#'I want to drink a biscuit.') (NB, AB)

b. **sivalaar-mik** / **#tii-mik** niri-lauq-tunga cookie-MOD / tea-MOD eat-PST-1s.S 'I ate a cookie.' (#'I ate tea.') (NB, AB)

Only *direct objects* are able to undergo incorporation in Inuit. This follows fairly straightforwardly from the idea that  $v^0$  takes the direct object as its complement.<sup>18</sup>

Noun incorporation across languages has often been analyzed as movement—either as N $^0$ -to-V $^0$  head movement (Baker, 1988, 2009; Baker et al., 2005) or phrasal movement of an NP to Spec-VP (e.g. Barrie and Mathieu, 2016). However, postsyntactic approaches to noun incorporation (and the similar phenomenon of pseudo noun incorporation) have

 $<sup>^{18}</sup>$  However, see Carrier (2016) for data showing that, even in double object constructions (i.e. low applicatives), it is the direct object that incorporates, not the indirect object—even though the indirect object is structurally more local to  $\nu^0$ . To account for this, Carrier (2016) suggests that the structure of Inuktitut DOCs cannot correspond to the low applicative structure proposed by Pylkkänen (2002, 2008). However, it is difficult to concretely make such a claim, without a deeper investigation of the properties of such constructions in Inuktitut. I leave this puzzle for future research.

also been pursued (e.g. Levin, 2015; Phillips, 2016). The movement vs. in situ debate also exists for Inuit noun incorporation; while Johns (2007b, 2009) derives the phenomenon as an EPP effect, an in situ (postsyntactic) approach to noun incorporation is assumed by Geenhoven (1998) and Compton and Pittman (2010), and is explicitly argued for by Bok-Bennema and Groos (1988).

## 5.4.2 Inuktitut noun incorporation is postsyntactic

I now provide several step-wise arguments that Inuktitut noun incorporation is a post-syntactic process, applying between a  $v^0$  and its object in its base position. Noun incorporation in Inuktitut thus does not involve head or phrasal movement, but is simply a product of Merger.

#### Incorporated objects may take wide scope

First, incorporated nominals in the Inuit languages are typically characterized to be obligatorily property-denoting or non-specific (Bittner, 1994; Geenhoven, 1998; Wharram, 2003). This has been taken to follow from the idea that incorporated nominals are bare Ns or NPs. As illustrated below, this is the case in Inuktitut for objects of certain incorporating verbs such as *-qaq* 'have.'

## (36) Incorporating verb -qaq 'have' requires property-denoting object

a. uqalimaagar-qaq-tunga book-have-1s.S 'I have a book/books.'

(NB, AB)

- b. naugli iglut-tta kii-nik? **kii-nik** pi-sima-vit where house-poss.3s/3p.gen key-p.mod key-p.mod have-perf-int.2s.S 'Where are the house-keys?' Do you have them?' (NB, AB)
- c. #**kii**-qaq-pit? kev-have-INT.2s.S

Intended: 'Do you have the keys?'

(NB, AB)

However, other incorporating verbs in Inuktitut do not behave this way. Inuktitut permits incorporated objects of other verbs to take wide scope over ABS subjects, (37a). This pattern is parallel to the behaviour of Mod-marked antipassive objects in Inuktitut, which are similarly not scope rigid, as repeated in (37b) for comparison. Inuktitut contrasts in this respect with Kalaallisut, in which incorporated objects are uniformly characterized as property-denoting or narrow scope (Sadock, 1980; Bittner, 1994; Geenhoven, 1998, 2002).

## (37) Incorporated objects can take wide scope

a. <u>Incorporated object:</u>

marruuk nutaraak **pingasu-nik sivalaar**-<u>tu</u>-qqau-juuk two.ABS child.D.ABS three-P.MOD cookie-consume-REC.PST-3D.S 'Two children consumed (i.e. ate) three cookies.'

Available readings: Surface scope (2 > 3) or inverse scope (3 > 2) (NB, AB)

b. *Antipassive* (MOD) object:

marruuk surusiit niri-qqau-jut **pingasu-nit sivalaar-nit** two.ABS child.P.ABS eat-REC.PST-3P.S three-P.MOD cookie-P.MOD 'Two children ate three cookies.'

Available readings: Surface scope (2 > 3) or inverse scope (3 > 2) (SB, PG)

The data in (37) thus serve to demonstrate that incorporated objects are not necessarily interpreted as bare nominals. Relatedly, as Compton (2013) shows, Inuktitut allows phrasal constituents to be incorporated. The example in (38a) demonstrates that modified nominals can be incorporated. The example in (38b) moreover illustrates the incorporation of a possessed nominal, a complex DP.<sup>19</sup> Thus, these examples reinforce the point made above that incorporated nominals are not necessarily property-denoting. They also contradict Johns's (2007b) characterization of incorporated objects as bare roots.

## (38) Incorporated nominals are phrasal

a. <u>Incorporation of modified nominal:</u> [iglu-tsiava-nngua]-qaq-tuq house-great-pretend-have-3s.S '(S)he has a great pretend house.'

(Compton, 2013)

b. <u>Incorporation of possessive DP:</u>

Kiuru [angaju-ngi]-<u>u</u>-quuji-juq Carol.ABS elder-POSS.3P-be-seem-3s.S 'Carol resembles her elder relatives.'

(NB, AB)

These data, by themselves, are still compatible with idea that incorporated objects are reduced; for instance, Compton (2013) proposes that incorporated objects may be DPs, but crucially nonetheless still lack the case-assignment properties of full (non-incorporated) arguments, which are KPs. However, I now show that incorporated objects *are* able to be assigned case and are accessible to Agree phenomena ( $\phi$ -agreement, clitic doubling).

#### Incorporated objects remain syntactically active

In all of the examples above, the incorporated object is not cross-referenced on the verb; moreover, the transitive subject is ABS rather than ERG, and modifiers of the object are MOD,

<sup>&</sup>lt;sup>19</sup>Possessive DPs are rarely able to be incorporated in Inuit. In addition to the example given here with the incorporating verb -u 'be,' they may be incorporated into locative verbs. See Sadock (1980) for discussion of the latter.

(39). Based on this pattern, it is generally assumed that noun incorporation constructions throughout Inuit are intransitive (Sadock, 1980; Geenhoven, 1998; Wharram, 2003; Johns, 2007b).

## (39) Incorporation constructions appear intransitive

Ulakujami-liu-qqau-juqpiu-ju-mikUlak.ABS necklace-make-REC.PST-3s.S beautiful-PART-MOD(K, CH)

However, a less known fact, only reported in Johns (2009), is that incorporated objects in Inuktitut are accessible to  $\phi$ -agreement (clitic doubling, under the present analysis). Building on this observation, the examples in (40) demonstrate that, in these constructions, the subject is ERG (not ABS) and modifiers of the incorporated object are ABS (not MOD). Note especially the fact that the D-linked interpretation required for non-incorporated (clitic doubled) ABS objects is retained in incorporation contexts. In other words, noun incorporation is not necessarily detransitivizing; rather, the intransitive examples shown above alternate with the transitive examples below.

## (40) Incorporation constructions are also transitive

- a. Ula-**up ujami**-<u>liu</u>-qqau-**janga** piu-juq Ulak-erg necklace-make-rec.pst-3s.S/3s.S beautiful-part.abs 'Ulak made (this) beautiful necklace.' (K, CH)
- b. Taiviti-**up sivalaar**-<u>tu</u>-ruma-**jangit**David-ERG biscuit-consume-want-3s.S/3p.P

  'David wants to eat (these) cookies.' (NB, AB)

In addition, the data above demonstrate that noun incorporation in Inuktitut does not bleed dependent ERG case—this is because, as established in Chapter 4, the relevant case competitor in Inuktitut is the pronominal object in the extended CP-domain. Regardless, clitic doubling of the incorporated object must take place to then feed ERG case assignment, thus furthering the idea that incorporated objects in Inuktitut are available for case/agreement processes.

Crucially, these data contrast with the cross-linguistically more typical pattern illustrated below with Alutor, in which dependent case is known to be *blocked* by noun incorporation. As discussed by Podobryaev (2013), dependent DAT case assignment in Alutor requires the presence of two case competitors, i.e. three arguments in total, (41a); incorporation of the direct object into the verb removes it from the case competition, thus bleeding DAT case on the causee, (41b).

## (41) Alutor: Dependent DAT case on causee unavailable with incorporated DO

a. <u>Baseline: DAT causee:</u>

gəm-nan **akka-**ŋ tə-nə-svitku-və-tk-ən utte-?ut 1s-erg son-dat 1s.a-caus-cut-suff-pres-3s.p wood-abs 'I am making the son cut wood.'

b. Incorporated object  $\rightarrow$  ABS causee:

gəm-nan **ak**ə**k** tə-n-<u>u</u>-svitku-və-tk-ən

1s-erg son.Abs 1s.A-CAUs-wood-cut-suff-pres-3s.p

'I am making the son cut wood.'

(Podobryaev, 2013)

The ability for incorporated objects in Inuktitut to (indirectly) participate in dependent case assignment demonstrates that these incorporated objects are structurally identical to their non-incorporated counterparts. This, in turn, motivates a postsyntactic analysis of noun incorporation.

## Against two alternative approaches to noun incorporation

Other languages with noun incorporation also permit incorporated objects to be cross-referenced by  $\phi$ -morphology. Various proposals have been advanced to account for this fact, two of which I review here. I will argue, however, that neither alternative can capture the full range of Inuktitut data. Crucially, both alternatives rely on the idea that the incorporated object is structurally reduced—which, as I showed above, does not seem to be the case in Inuktitut.

First, the data below demonstrate that incorporated objects in Tiwa may be cross-referenced on the verb. To account for this pattern, Baker et al. (2005) propose that incorporation takes place by head movement (in line with the proposal from Baker 1988), but in some languages the object may leave remnant  $\phi$ -features in the position of the trace. The presence of agreement in (42b) thus tracks the *remnant features*, not the incorporated object itself.

## (42) Tiwa: Agreement with incorporated objects

- a. **seuan-ide** ti-mu-ban man-s 1sS/AO-see-PST 'I saw the/a man.'
- b. **ti**-seuan-mu-ban 1sS/AO-man-see-PST 'I saw the/a man.'
- c. **wisi seuan-in bi**-mu-ban two man-P 1sS/BO-see-PST 'I saw two men.'

d. **bi**-seuan-mu-ban 1sS/BO-man-see-PST 'I saw men.'

(Baker et al. 2005)

However, this approach is somewhat difficult to maintain assuming the Copy Theory of Movement (Chomsky, 1995), according to which the base position of the object would be filled by a full copy, rather than simply  $\phi$ -features. Crucially, the derivation of object-referencing morphology in Inuktitut necessarily invokes copies, rather than traces, given that it is *clitic doubling*. Indeed, as shown in (40) above, incorporated objects co-occurring with object-referencing morphology have the D-linked interpretation typical of clitic doubled ABS objects. The presence of the object clitic is moreover able to trigger dependent ERG case assignment to the subject, in line with the analysis from Chapter 4. Based on these facts, I conclude that the analysis from Baker et al. (2005) is not viable for Inuktitut.

A second analysis of  $\phi$ -agreement with incorporated objects is presented by Rosen (1989), who argues that this pattern surfaces because the agreement is actually cross-referencing a distinct nominal argument. Evidence for this comes from the possibility of hyponymous doubling in many incorporating languages, such as Mohawk. As shown in (43a), the incorporated nominal 'fish' is less specific than the independent nominal it co-occurs with, 'bullheads.' The opposite configuration is not attested. Thus, according to Rosen, the non-specific incorporated nominal is actually a *classifier* of the true internal argument of the verb; it is this argument that triggers object agreement. A similar analysis is presented for Chamorro by Chung and Ladusaw (2004), who propose that the incorporated nominal serves to restrict (i.e. narrow the interpretive domain of) the verb, while the independent nominal saturates it; a Chamorro example is given in (43b).<sup>21</sup>

#### (43) Hyponymous doubling of incorporated objects

## a. Mohawk:

sha'teku ni-kuti **rabahbót** wa-hv-[i]tsy-a-hninu-' ki rake-'niha eight part-ZpS bullhead fact-MsS-fish-Ø-buy-punc this my-father 'My father (fish-)bought eight bullheads.' (Mithun, 1984)

#### b. Chamorro:

Gäi-**ga'** yu' **kätu** AGR.have-pet I cat 'I had a pet cat.'

(Chung and Ladusaw, 2004)

The family of analyses by Rosen (1989) and Chung and Ladusaw (2004) also falls short for

<sup>&</sup>lt;sup>20</sup>Levin (2018) presents an alternative approach to putative agreement with incorporated objects, in which the presence of agreement actually reflects a *morphological default*, rather than genuine agreement, surfacing due to failure to Agree (cf. Preminger, 2009, 2011, 2014). Levin thus argues that incorporated objects are universally *inaccessible* to Agree processes. However, as Levin acknowledges, his account cannot capture the Tiwa data shown above; they also cannot account for Inuktitut.

<sup>&</sup>lt;sup>21</sup>Unlike Rosen's (1989) classifier-based languages, however, the incorporated nominal in Chamorro need not be less specific than or subordinate to the independent nominal. For Chung and Ladusaw (2004), the only crucial point is that the incorporated nominal is obligatorily interpreted as property-denoting.

Inuktitut. We could try to account for the Inuktitut examples in (40) by positing that the true grammatical object in these examples is a 3rd person pronoun (surfacing as a pronominal clitic), co-occurring with the incorporated nominal. At first glance, a putative piece of support for this view comes from the fact that incorporated nominals may co-occur with modifiers and numerals. Modifiers and numerals have been argued by Compton (2012) to actually be nominal in nature themselves, based on their ability to stand alone. The Inuktitut examples in (44)-(45) could thus be seen as on par with the seemingly comparable Mohawk data above.

#### (44) Stranded modifiers with/without incorporation

- a. nutaar-mik uviniru-taa-ruma-junga new-MOD shirt-get-want-1s.S
   'I want to get a new shirt.'
- b. **nutaar-mik** pi-juma-junga new-mod get-want-1s.S 'I want to get a new thing.' (NB, PI)

## (45) Stranded numerals with/without incorporation

- a. **pingasut sivalaar**-<u>tu</u>-ruma-jakka three.ABS biscuit-consume-want-1s.S/3p.O 'I want to eat (these) three cookies.'
- b. **pingasut** niri-juma-jakka three.ABS eat-want-1s.S/3p.O 'I want to eat (these) three.' (NB, AB)

However, modifiers and numerals cannot easily undergo incorporation themselves; attempts to incorporate these elements are ill-formed, as illustrated in (46).<sup>22</sup> This reveals that numerals and modifiers are *not* actually nominal in nature, contra Compton (2012), and cannot directly serve as grammatical arguments. Thus, in the noun incorporation examples in (44a) and (45a), the true grammatical objects are the incorporated nominals themselves.

#### (46) Modifiers and numerals cannot be incorporated

a. \*nutaa-<u>taa</u>-ruma-junga new-get-want-1s.S Intended: 'I want to get a new thing.' (NB, PI)

<sup>&</sup>lt;sup>22</sup>In addition to the examples given, other modifiers such as *aupaktuq* 'red,' *qakuqtaq* 'white,' and *guulu* 'gold' were also checked. The former two pattern the same way as the examples in (46). The case of *guulu* 'gold' was slightly more interesting, though it otherwise converged with the other modifiers; its incorporation triggered an obligatorily nominal interpretation (i.e. 'I want to get something [made of] gold' vs. 'I want to get some gold [the mineral]'.

b. \*pingasu-tu-ruma-jakka three-consume-want-1s.S/3p.O Intended: 'I want to eat (these) three.' (NB, AB)

Furthermore, true hyponymous doubling of nominals is not permitted in Inuktitut.<sup>23</sup> The example in (47) below is meant to be a parallel to the Mohawk example in (43a). Since the standalone nominal *tuktuminiq* 'caribou meat' is more specific than the incorporated nominal *niqi* 'food,' this example is predicted to be attested under a classifier-based analysis. However, (47) is ungrammatical.

## (47) True hyponymous doubling is not permitted in Inuktitut

\*tuktu-miniq niqi-tu-ruma-jara caribou-former.ABS food-consume-want-1s.S/3s.O Intended: 'I want to (food-)eat this caribou meat.' (SB, IQ)

Altogether, these facts show that incorporated nominals in Inuktitut are able to participate in case and agreement processes the same way as independent arguments are able to. This, in turn, reveals that incorporated objects are not structurally reduced. Moreover, although noun incorporation is often characterized as an alternative means of licensing nominals that cannot receive structural Case (e.g. Baker, 1988), this cannot be true for Inuktitut. In Chapter 6, I will extensively argue that the Agree operation underlying clitic doubling is an argument licensing mechanism on par with abstract Case assignment. Therefore, the fact that incorporated objects in Inuktitut may undergo clitic doubling, i.e. be licensed the same way as non-incorporated objects, suggests that incorporation itself does not serve any licensing function in Inuktitut.

In sum, the data above revealed that the sole syntactic difference between an incorporated vs. independent nominal in Inuktitut is in the kind of verb that selects for it—i.e. whether the verb is a light verb or a lexical verb. Building on this, I motivate a postsyntactic analysis of noun incorporation, wherein incorporation is derived by a *Merger operation* between a light verb and its object (cf. Bok-Bennema and Groos, 1988). As schematized in

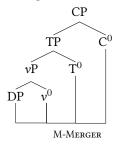
#### (i) Non-hyponymous doubling exceptionally permitted with possessed objects

- a. iqalu-up **papiru**-nga **nappa**-<u>tu</u>-qqau-jara fish-gen fish.tail-poss.3s.Abs half-consume-rec.pst-1s.S/3s.O 'I ate half of the fish's tail.' (K, CH)
- b. ujami-up ila-nga attajjuti-<u>liuq</u>-tara
  necklace-gen part-poss.3s.Abs clasp-make-1s.S/3s.O
  'I am putting a clasp on one of the necklaces.' (NB, AB)

<sup>&</sup>lt;sup>23</sup>Interestingly, non-hyponymous doubling *is* permitted in very select circumstances in Inuktitut. Speakers seem to allow doubling only when the following two conditions simultaneously hold: the incorporated object is interpreted as a possessee (though it is morphologically bare), while the independent nominal bears possessive morphology. It is unclear to me why this pattern exists or how it should be analyzed; I leave this to future research.

(48), we may generalize this Merger process to apply throughout the Inuktitut verb, with each pair of adjacent heads undergoing Merger. The end result is a complex word. Further discussion of word-formation beyond noun incorporation in Inuktitut will be provided at the end of this section.

## (48) Merger between adjacent elements



Having established that Inuktitut noun incorporation involves postsyntactic Merger, I now demonstrate that incorporated nominals are subject to the same interactions between Merger and chain pronunciation as seen above in the domain of clitic doubling.

## 5.4.3 A/Ā-movement of incorporated objects

In this section, I offer a novel observation: incorporated objects in Inuktitut may also behave as though they have undergone *phrasal movement*, despite being pronounced inside the verb complex. That is, even in the absence of overt movement, we nonetheless find independent signs that syntactic movement has taken place (Bobaljik, 2002; Reintges et al., 2006). This set of facts is conceptually challenging for approaches that take noun incorporation itself to be derived by movement, since these data would then instantiate excorporation (assumed to be impossible; see e.g. Kayne (1991) for discussion). However, I argue that this can be resolved by appealing to PF conditions on copy spell-out, on par with our previous discussion of clitic (non-)doubling.

Specifically, we will see that Merger of  $v^0$  and its complement forces that DP to be pronounced; moreover, higher movement copies are deleted in accordance with Economy of Pronunciation, unless these instances of deletion are independently blocked. This pattern can be seen with both A-movement and  $\bar{A}$ -movement.

#### A-movement

The fact that incorporated objects in Inuktitut may undergo A-movement is shown here with passives, in which a theme generated as the complement of a verb is promoted to subject position. In Inuktitut, passivization of a nominal triggers subject  $\phi$ -agreement and can bind lower anaphora, (49); the verb additionally surfaces with passive morphology.

## (49) Passives involve A-movement to subject position

angajuqa-tua-mma sua-qqau-jaanga **asi-kka** parent-only-poss.1s/3p.erg scold-rec.pst-3s.S/1s.O other-poss.1s/3p.abs suak-ta-u-qqau-nngit-**tuit** angajuqa-**mi**-nut scold-pass.part-be-rec.pst-neg-3s.S parent-poss.refl-allat 'Only my parents scolded me; the others $_i$  were not scolded by their $_i$  parents.' (NB, IG)

Crucially, as first observed by Johns (2009), *incorporated objects may also be passivized*. Building on Johns' finding, the examples below show that they behave just like non-incorporated passivized nominals with respect to agreement and binding.<sup>24</sup> Thus, although these nominals surface overtly in the verb complex, they nonetheless behave as though they have undergone A-movement.

## (50) Incorporated nominals undergo A-movement

a. Subject  $\phi$ -agreement:

 ujami
 -liuq-ta-u-juit
 Suusa-mut

 necklace-make-pass.part-be-3p.S Susan-allat
 'The necklaces are being made for Susan.'
 (NB, CR)

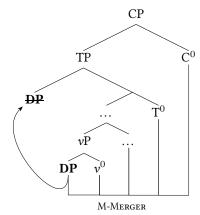
b. New antecedent for binding:

aasiva-tuq-ta-u-juqnulia-mi-nutspider-consume-pass.part-be-3s.S mate-poss.refl-allat'The spider $_i$  is being eaten by its $_i$  mate.'(NB, AB)

This pattern is straightforwardly derived from the conditions on copy spell-out discussed above. The nominal is base-generated as the object of a light verb ( $v^0$ ) and undergoes Merger with this element. As a result, it must be spelled out, in accordance with the Stray Affix Filter. However, because the higher movement copy is not subject to any PF requirements, it is deleted in order to satisfy Economy of Pronunciation. This is schematized below:

<sup>&</sup>lt;sup>24</sup>Note that the binding example was not accepted by all speakers consulted. I will leave this point of interspeaker variation for future research.

#### (51) A-movement in Inuktitut NI



More broadly, the ability for Inuktitut incorporated objects to be passivized presents novel evidence for the existence of *covert A-movement*. This conclusion is in the spirit of Bobaljik (2002), who applies this idea towards a morphophonological account of Holmberg's Generalization in Icelandic and Mainland Scandinavian object shift (cf. Holmberg, 1986, 1999). Similarly, the same idea is leveraged by Potsdam and Polinsky (2012) in their analysis of so-called 'backward raising' in the Caucasian language Adyghe.

#### **Ā-movement**

The interaction between noun incorporation and relativization (Ā-movement) provides an additional argument for the present proposal. Just as we saw above with passivization, relativized arguments may also appear in their base position inside the relative clause, if the embedded verb is obligatorily incorporating. Although relative clauses in Inuit have been characterized as internally-headed by Bittner and Hale (e.g. 1996a), the facts are actually more complicated. Thus, the present discussion also aims to elucidate the morphosyntactic properties of relative clauses in the language, though the exact details will be left for future research. In particular, the behaviour of relativized arguments in incorporation contexts provides new evidence for the *matching analysis* of relative clauses (Bhatt, 2002; Hulsey and Sauerland, 2006; Deal, 2016a, a.o.), whereby the relative clause construction contains both a head-external nominal head and an identical Ā-extracted nominal internal to the relative clause.

First, the examples in (52)-(53) show that Inuktitut allows both internally-headed and externally-headed relative clauses (IHRCs and EHRCs, respectively). In (52a), the relativized nominal appears inside the relative clause, surrounded by other RC-internal material; this is an IHRC. In (52b), however, the derivation is less clear-cut. Though the relativized nominal is displaced from its base-position, it is not obvious from the surface string whether it is actually an argument of the matrix verb, or if it is in Spec-CP of the embedded clause.

## (52) Relativized nominals can appear head-internally or at edge of RC

#### a. *IHRC*:

[Jaani taku-lauq-tanga **anguti** sivataabi-u-lauq-tu-mi] Jaani.ABS see-PST-3s.S/3s.O man.ABS week-be-PST-intr-MOD tabba-u-liq-tuq there-be-PROG-3s.S 'The man that Jaani saw last week is right there.'

#### b. String-ambiguous RC:

[anguti Jaani taku-lauq-tanga sivataabi-u-lauq-tu-mi] man.abs Jaani.abs see-pst-3s.S/3s.O week-be-pst-intr-mod tabba-u-liq-tuq there-be-prog-3s.S 'The man that Jaani saw last week is right there.' (SB, PG)

However, case connectivity effects can be used to show that Inuktitut also has true EHRCs (see also Deal (2016a) for the application of this diagnostic in Nez Perce). In (53), the relativized nominal is the antipassivized object of the matrix verb, so it surfaces with MOD case.<sup>25</sup> However, the gap internal to the relative clause is an ABS argument, indicated jointly by the fact that the clause displays an ERG/ABS case frame and by the generalization that only ABS arguments may be relativized in Inuit (Creider, 1978; Johns, 1987, 1992; Manning, 1996; Murasugi, 1997). This case mismatch shows that Inuktitut also permits relativized nominals to surface external to the relative clause.

## (53) Inuktitut also has true EHRCs

kapi-si-juq **nanur-mit** [RC (\_) Jaani-up taku-janga]-nit stab-AP-3s.S p.bear-MOD (ABS) Jaani-ERG see-3s.S/3s.O-MOD 'She stabbed the polar bear that Jaani saw.' (SB, IQ)

The contrast between (52) and (53) seems to be largely optional; again, I leave a deeper exploration of these constructions for future research.

Instead, I would like to focus on the fact that the surface position of the relativized nominal may also be determined by the *incorporating properties* of the matrix and embedded verbs, which overrides the optionality seen above. This can only be shown with nominals in direct object position, since only these nominals undergo noun incorporation. As illustrated in (54a-b), if the matrix verb is incorporating, then the object must surface within the matrix verb complex; however, if the embedded verb is incorporating, then the object is pronounced inside the embedded verb complex. Moreover, if both verbs are incorporating, then the object is spelled-out twice, appearing in *both* positions. Thus, Inuktitut  $\bar{A}$ -movement is subject to the same conditions on copy spell-out as we saw with A-movement in passives.

<sup>&</sup>lt;sup>25</sup>The relative clause itself also surfaces with MOD case, due to case concord with the relative head.

## (54) Three patterns of copy spell-out, dependent on incorporation

#### a. *RC-external*:

**tii**-tu-ruma-junga [RC ibbit niuvi-lauq-tanga]-nit tea-consume-want-1s.S 2s.ERG buy-PST-3s.S/3s.O-MOD 'I want to drink the tea that you bought.'

## b. <u>RC-internal:</u>

imi-ruma-junga [<sub>RC</sub> ibbit <u>tii</u>-<u>taa</u>-ri-lauq-tanga]-nit drink-want-1s.S 2s.erg tea-get-тr-рsт-3s.S/3s.О-мор 'I want to drink the tea that you got.'

## c. <u>Both RC-external and RC-internal:</u>

tii -tu-ruma-junga [RC ibbit tii -taa-ri-lauq-tanga]-nit tea-consume-want-1s.S 2s.ERG tea-get-TR-PST-3s.S/3s.O-MOD 'I want to drink the tea that you got.' (S

(SB, IQ)

The data below additionally demonstrate that pronouncing the relativized nominal inside the relative clause does not affect its interpretation, suggesting that its surface position is truly determined morphologically. This contrasts with much literature on IHRCs cross-linguistically, which show that IHRCs and EHRCs often have different semantics (Basilico 1996; Shimoyama 1999; Bogal-Allbritten and Moulton 2017, though see Grosu 2012). This is most clearly seen when the relativized nominal is modified by a quantifier.

This reported difference in IHRCs and EHRCs is illustrated in (55)-(56) for Japanese and Navajo. Japanese has both EHRCs and IHRCs, whereas in Navajo, the relativized nominal always appears internal to the relative clause, though the position of its associated quantifier may vary. In both languages, however, the position of the quantifier determines the interpretation of the sentence. If the quantifier is pronounced inside the relative clause, then it is necessarily interpreted internal to the relative clause as well.

## (55) Japanese: Different interpretations of EHRCs/IHRCs with 'most'

## a. *Externally-headed:*

Taro-wa [[ Yoko-ga reezooko-ni irete-oita] **kukkii-o hotondo**]
Taro-top Yoko-nom refrigerator-ni put-aux cookie-acc most
paatii-ni motte itta
party-loc brought
'Taro brought most cookies that Yoko had put in the refrigerator to the party.'

#### b. <u>Internally-headed:</u>

Taro-wa [[ Yoko-ga reezooko-ni **kukkii-o hotondo**Taro-top Yoko-nom refrigerator-ni cookie-acc most irete-oita]-no]-o paatii-ni motte itta put-aux-nm-acc party-loc brought 'Yoko put most cookies in the refrigerator and Taro brought them to the party.'

(Shimoyama, 1999)

## (56) Navajo: Different interpretations of EHRCs/IHRCs with 'half of'

## a. <u>Externally-headed:</u>

[Mary 'aghaa' yizdiz]-ę́ę 'ałníi'dóó Alice Mary wool 30BJ.3SBJ.spin.PFV-IGII half Alice yiyííłchíi' 30BJ.3SBJ.dye.red-PFV 'Alice dyed half of the wool that Mary spun.'

#### b. *Internally-headed:*

[Mary 'aghaa' 'ałníí'dóó yizdiz]-ę́ę́ Alice yiyííltchíí' Mary wool half Alice Зовј.Зѕвј.dye.red-рғv 'Mary spun half of the wool. Alice dyed it.' *Unavailable:* 'Alice dyed half of the wool that Mary spun.' (Bogal-Allbritten and Moulton, 2017)

In contrast to Japanese and Navajo, incorporated nominals in Inuktitut are interpreted as though they take relative clause-external scope. This is shown in (57) with the strong determiner 'all,' and in (58) with the weak determiner 'only one.' The contexts provided for both (57) and (58) were designed to exclude the clause-internal interpretation of the quantifier; yet, both IHRCs below are felicitous in such contexts.

## (57) Inuktitut IHRCs with 'all' take head-external scope

*Context provided:* Carol is organizing a Christmas drive and got toys from various people, including both John and Peter. The toys she got from John were new, while the ones from Peter were used.

a. [Kiuru-p tamangmik pinnguaq-taa-ri-lauq-tangit Jaani-mit] Carol-erg all.abs toy-get-tr-pst-3s.S/3p.O Jaani-abl nutaa-ngu-lauq-tuit new-be-pst-3p.S 'All the toys Carol got from John were new...'

b. ...kisiani [**tamangmik pinnguaq**-<u>taa</u>-ri-lauq-tangit Piita-mit] ...but all.ABS toy-get-TR-PST-3s.S/3P.O Peter-ABL

atuq-sima-juit use-perf-3p.S

"...but all the toys she got from Peter have been used." (NB, AB)

<sup>&</sup>lt;sup>26</sup>The choice to illustrate this pattern with both strong and weak determiners is in response to Hastings's (2004) observation that these two classes of quantifiers display different scope possibilities in Imbabura Quechua IHRCs.

- (58) Inuktitut IHRCs with numeral 'only one' take head-external scope

  Context provided: Carol made five necklaces to sell, but David bought only one of them.
  - a. Kiuru **tallima-nik ujami**-<u>liu</u>-laur-mat takkua tamarmik Carol.ABS five-P.MOD necklace-make-PST-CAUS.3S.S DEM.P.ABS all.ABS niuviaksa-ri-laur-tangit for.sale-TR-PST-3s.S/3P.O 'Having made five necklaces, Carol had them all for sale...'
  - b. ...kisiani Taiviti-up niuvi-lauq-tanga [Kiuru-up atausi-tuaq ...but David-erg buy-pst-3s.S/3s.O Carol-erg one-only.Abs ujami-liu-lauq-tanga] necklace-make-pst-3s.S/3s.O '...but David bought only one necklace that Carol made.' #'Taiviti bought a necklace that Carol made only one of.' (NB, AB)

These data suggest that Inuktitut relative clauses are uniformly head-external at LF, despite how they are ultimately pronounced. This, in turn, sheds light on how relative clauses must be analyzed in Inuktitut. For instance, it has been previously proposed that what appear to be relative clauses in Inuit do not involve Ā-movement at all, but are simply possessive nominalized structures (e.g. Creider, 1978; Johns, 1992; Compton, 2012; Yuan, 2013); see Chapter 4.2.3 for details. Under this view, the appearance of relativization is epiphenomenal, arising from a approximated paraphrase, as in (59):

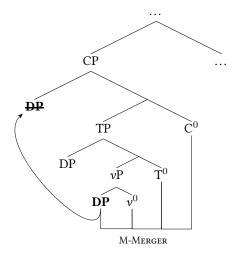
## (59) Literal meaning of RC under nominalized analysis

kapi-si-juq **nanur-mit** [RC (\_) Jaani-up taku-janga]-nit stab-AP-3s.S p.bear-MOD (ABS) Jaani-ERG see-3s.S/3s.O-MOD 'She stabbed the polar bear, Jaani's seen one.' *Understood as:* 'She stabbed the polar bear that Jaani saw.' (SB, IQ)

However, this treatment is challenged by the findings reported in this section. As I demonstrated, relativized nominals that surface as incorporated into an embedded verb complex take *matrix scope*. This is incompatible with the alternative approach given in (59), which would predict the opposite patterning. Rather, relative clauses in Inuktitut truly involve Ā-movement (Murasugi, 1997).

Within the category of analyses that assume Ā-movement in relative clauses, the behaviour of Inuktitut noun incorporation presents evidence against null operator treatments of relativization (e.g. Chomsky, 1977); rather, relativization must involve Ā-movement of a *full nominal copy*. However, we also saw that the relativized nominal may also be incorporated into the matrix verb, suggesting that another copy of this nominal is found in the matrix clause as an argument of the matrix verb. As noted above, this is suggestive of a *raising or matching analysis* of relative clauses, following Bhatt (2002), Hulsey and Sauerland (2006), Deal (2016a), and others. A partial structure is provided in (60) for illustration.

## (60) Structure of Inuktitut RC



Finally, as with the previous discussion of the passivization of incorporated objects, the fact that incorporated objects may be relativized again constitutes novel evidence for a PF-analysis of covert movement—here, covert Ā-movement. Just as wh-in situ has been analyzed as lower copy spell-out under this view (e.g. Chomsky, 1995; Boškovič, 2002; Reintges et al., 2006), Inuktitut demonstrates that this treatment may be extended to relativization.

## 5.4.4 Consequences for phase-based accounts of polysynthesis

Above, I argued that noun incorporation in Inuktitut is derived by Merger between a  $v^0$  and its DP object, not head movement or phrasal movement. A crucial component of this argument comes from the fact that Inuktitut incorporated objects do not appear to be structurally reduced. In the rest of this section, I briefly overview how this bears on previous analyses of Inuit word-formation (as well as polysynthetic word-formation more generally).

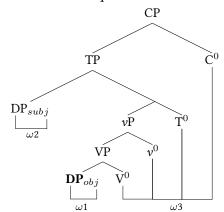
Given that the process responsible for noun incorporation (Merger between  $v^0$  and a DP) was also argued to generate pronominal clitics (Merger between  $D^0$  and  $\mathrm{Agr}_o{}^0$ ), there is no reason not to generalize this to take place throughout the Inuktitut complex word. That is, we may generate complex words in Inuktitut simply via iterative applications of Merger. This contrasts with a recent purely phonological approach to polysynthetic word formation (Compton and Pittman, 2010; Barrie and Mathieu, 2016), despite some apparent similarities. According to this view, syntactic phases (CPs, DPs) in polysynthetic languages like Inuit are mapped to single phonological words, so that sub-phasal elements are spelled out as bound morphemes. This is schematized below. In (61a), we see that the subject and object are both DPs (i.e. phasal), so they are spelled out as individual words; once the CP-phase is built, it too is spelled out as a complex word.

Under this approach, the difference between an object that is incorporated vs. an object that is not incorporated is that the former is invariably structurally reduced, hence

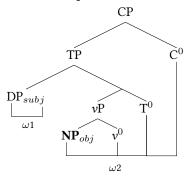
non-phasal. The idea is that, whereas lexical verbs select for DPs, incorporating verbs invariably select for NPs, as indicated in (61b).<sup>27</sup> As a result, these objects are always found within a complex word corresponding to the larger CP-phase.

## (61) Compton and Pittman's (2010) account of Inuktitut word-formation

#### a. No noun incorporation:



#### b. *Noun incorporation:*



However, this approach is not viable given the Inuktitut observations reported above. Recall that incorporated objects were shown to behave syntactically and semantically identical to their non-incorporated counterparts, thus casting doubt on the idea that they are structurally reduced. But if incorporated objects are indeed full DPs, then we would have no way of generating noun incorporation constructions under Compton and Pittman's system.

Indeed, a more general issue with their approach is that it predicts that we should *never* find elements that may both surface as standalone words and undergo incorporation. However, this prediction is not borne out. As demonstrated in (62), participial clauses—which may occur as standalone complex words (e.g. as complements of perception verbs)—may undergo incorporation to form existential constructions.

## (62) Inuktitut: Participial clauses may be standalone or incorporated

## a. Standalone:

taku-qqau-jara Taiviti **sinik-tuq** see-rec.pst-1s.S/3s.O David.abs sleep-part.abs 'I saw David sleeping.'

## b. <u>Incorporated:</u>

anguti-mik **sinik-tu**-<u>qaq</u>-tuq man-MOD sleep-PART-have-3s.S 'There is a man sleeping.'

(NB, AB)

 $<sup>^{27}</sup>$ In later work, Compton (2013) refines this idea slightly to account for the fact that DP-sized arguments such as proper names may undergo incorporation. In his amendment, independent arguments are always KPs (following Bittner and Hale 1996a,b).

To recapitulate, the behaviour of noun incorporation in Inuktitut cannot be easily captured under purely phonological accounts of polysynthetic word-formation, along the lines of Compton and Pittman (2010) (see also Barrie and Mathieu 2016). Instead, I suggest that Merger is a universally available mechanism for word-formation, with languages differing in which elements within the structure undergo Merger. Under this approach, there is nothing particularly special or different that sets a polysynthetic language like Inuktitut apart from another agglutinating language like Turkish, or even more isolating languages like English. The polysynthetic nature of Inuktitut is simply due to a requirement that *all* heads along the clausal spine undergo Merger.

# 5.5 Chapter summary: A unified analysis of cliticization and incorporation

In summary, in this chapter I argued that another outcome of the clitic doubling analysis put forth in Chapter 3 is that it reveals a systematic interaction between Merger and the postsyntactic algorithm determining the pronunciation of movement chains (cf. Landau, 2006; Kandybowicz, 2008). In particular, I showed that the Stray Affix Filter forces movement copies that undergo postsyntactic Merger to be spelled out; this may additionally override the language's regular rules for chain pronunciation.

This was shown to account for co-occurrence restrictions between pronominal clitics and ABS object pronouns. I presented evidence that overt pronouns in Inuktitut are bare  $D^0s$ , not DPs—thus, the clitic doubling of a pronoun results in a movement chain containing structurally identical  $D^0s$ , rather than a  $D^0$  head and a DP tail. The inability for ABS object pronouns to surface overtly when clitic-doubled was taken to be a simple matter of copy deletion. Support for this approach came from the *absence* of such effects with ERG subjects and ABS subjects, which are not clitic-doubled. Similarly, we saw cross-dialectal support, based on the fact that Labrador Inuttut displayed the same contrast as Inuktitut, while Kalaallisut displayed no such contrasts at all. As established in Chapters 3 and 4, Labrador Inuttut and Inuktitut both have pronominal object clitics, while Kalaallisut has object  $\phi$ -agreement.

I also demonstrated that this logic extended straightforwardly to noun incorporation. Merger between an incorporating verb and its nominal complement forces that nominal to be spelled out, even if it undergoes syntactic movement. Though the occurrence of syntactic movement in these cases was phonologically obscured by noun incorporation, I illustrated how movement could nonetheless be detected by more deeply examining the syntactic and semantic properties of the noun incorporation constructions. In the domain of A-movement, incorporated objects may trigger subject  $\phi$ -agreement and bind seemingly structurally higher anaphors; in the domain of Ā-movement, relativized incorporated objects take RC-external scope. Finally, these Inuktitut data strongly support an approach to noun incorporation based on Merger between adjacent elements, contrary to analyses noun incorporation based on movement.

## **Chapter 6**

# Case-discrimination, Agree, and licensing

The final topic of this dissertation concerns the nature of Mod case morphology in Inuktitut, and its broader implications for argument licensing and the nature of Agree. I make three interrelated claims. (i)  $\phi$ -Agree in Inuktitut is *case-discriminating* (Bobaljik, 2008), in that it is only able to target unmarked ( $\approx$  Abs) nominals. (ii) Encountering a case-marked (e.g. Mod) argument leads to failed Agree, in that this causes a  $\phi$ -probe to cease probing (Preminger, 2011, 2014). (iii) Finally, this may lead to ungrammaticality if nominal arguments are left unlicensed as a result, which, in turn, provides novel evidence that Inuktitut nominals are subject to the Case Filter. The empirical basis of these claims comes from two constructions that contain Mod-marked objects: anaphoric constructions and antipassive constructions.

## 6.1 Introduction

While the preceding chapters of this dissertation focused on pronominal object clitics in Inuktitut and their effects on other aspects of Inuktitut and Inuit grammar, I now turn to the morphosyntactic properties of MOD case morphology and, in particular, the interaction between morphological case and  $\phi$ -Agree. In this chapter, I make three interrelated claims.

First, I establish that  $\phi$ -Agree in Inuktitut is *case-discriminating* in the sense of Bobaljik (2008) and Preminger (2011, 2014)—thus,  $\phi$ -Agree processes are sensitive to and thus restricted by the morphological case of a nominal. In Inuktitut, only nominals that are *morphologically unmarked* (i.e. Abs) are accessible to  $\phi$ -Agree processes. Note that, while this departs slightly from the standard assumption that the Inuit languages permit  $\phi$ -Agree with both Abs and Erg nominals, recall from Chapter 4 that Erg case assignment takes place *after* the object is targeted by  $\phi$ -Agree. Thus, at the point of  $\phi$ -Agree, the subject is not Erg, but is caseless.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup>In particular, in Chapter 4 I showed that the case competitor for dependent ERG case is either a high ABS object DP (as in Kalaallisut) or a high pronominal clitic (as in Inuktitut and Labrador Inuttut). Since syntactic movement in Inuit is Agree-based, we may conclude that Agree processes precede ERG case assignment. This

Second, I propose that Inuktitut offers novel evidence for the idea that  $\phi$ -Agree may fail in the absence of a viable goal (Preminger, 2011, 2014). In particular, when a  $\phi$ -probe in Inuktitut encounters a Mod-marked nominal, probing stops. Failed Agree need not lead to ungrammaticality; in Inuktitut, it is often signaled by the loss of cross-referencing morphology on the verb, as I will show.

Finally, although the failure of Agree is often tolerated by the grammar,<sup>2</sup> I also identify configurations in Inuktitut in which it leads to ungrammaticality. I argue that  $\phi$ -Agree processes in Inuktitut serve an *argument-licensing function* (cf. the Case Filter; Vergnaud 1977; Chomsky 1981). Failure of Agree is therefore only tolerated if it does not leave nominal arguments unlicensed by the end of the derivation.

The empirical basis of this proposal comes from two constructions in Inuktitut containing Mod-marked arguments. The construction in (1a) contains an anaphoric object, so I will refer to this as an *anaphoric construction*. The construction in (1b) is an *antipassive construction*, as indicated by the presence of overt antipassive morphology on the verb. While these constructions both contain ABS-MOD case frames, I will show that they actually reflect two distinct structural sources for MOD case: lexical case in the former construction, modeled as a PP layer directly Merged over anaphoric arguments, and structural case (Case) in the latter construction, assigned by a functional head optionally Merged in the extended  $\nu$ P-domain.<sup>3</sup>

#### (1) ABS-MOD constructions in Inuktitut

# a. Anaphoric construction:

aaniaq-tuq qimmiq ingmi-**nit** kii-qqau-juq sick-intr.3s dog.abs self-mod bite-rec.pst-3s.S 'The sick dog bit itself.'

(NB, IG)

#### b. <u>Antipassive construction:</u>

qimmiq kii-si-juq Taiviti-**mik** dog.ABS bite-AP-3s.S David-MOD 'The dog bit David.'

(NB, AB)

Various aspects of the core proposal above will be informed by this contrast, as each type of MOD case interacts with Agree and argument-licensing processes in a distinct way.

This chapter is organized as follows. In §6.2, I present an overview of case-discrimination and outline the ramifications of this idea for the nature of  $\phi$ -Agree (Bobaljik, 2008; Preminger, 2011, 2014). In §6.3, I show that this idea is borne out in Inuktitut, in that Mod-marked nominals block  $\phi$ -Agree processes. This is illustrated by the behaviour of Mod case on anaphoric arguments, which I argue to be lexical in nature. The presence of lexical Mod case, in turn, allows anaphors to bypass the Anaphor Agreement Effect. In §6.4, I present

will be recapitulated later in this chapter.

<sup>&</sup>lt;sup>2</sup>Indeed, in Preminger's (2011, 2014) conception of this idea, it is used as part of a general argument against so-called "derivational time bombs" such as the Case Filter.

<sup>&</sup>lt;sup>3</sup>In the Appendix, I also discuss a third kind of MOD case, which I analyze as Last Resort case, reflecting a PP layer that is countercyclically inserted to rescue unlicensed arguments at the end of the derivation.

a novel analysis of the antipassive construction in Inuktitut. Building on Bok-Bennema (1991) and Spreng (2012), I argue that ergative and antipassive constructions in Inuktitut reflect two complementary ways of licensing an internal argument—either via  $\phi$ -Agree in the CP domain or a structural Case-licensing head in the  $\nu$ P-domain. In §6.5, I turn to an interaction predicted to arise from the independent analyses of anaphoric and antipassive constructions: namely, the antipassivization of an anaphoric object. I show that this, too, results in failed Agree, based on cross-linguistic parallels with Zulu (Halpert, 2012, 2015a). Finally, the Appendix details a pattern of *Last Resort* case licensing, which is only activated whenever both  $\phi$ -Agree and structural Case assignment are independently unavailable.

# 6.2 Case-discrimination and failed Agree

This section sets the stage for the rest of the chapter. I start by overviewing the idea of case-discrimination in  $\phi$ -Agree processes. Under this approach, individual languages are parametrized at various cut-off points along a universal case-accessibility hierarchy. Whether a nominal in a given language is accessible to  $\phi$ -agreement is thus constrained by its morphological case Bobaljik (2008). I also summarize Preminger's (2011, 2014) extension of case-discrimination to his theory of failed Agree. Finally, I briefly explore some implications for this system from Inuit—in particular, though the case-discriminating property of  $\phi$ -Agree suggests that case assignment precedes Agree, the Inuit languages show that the opposite ordering is simultaneously possible.

# 6.2.1 A Case-Accessibility hierarchy

According to the Moravcsik Hierarchy (Moravcsik, 1974),  $\phi$ -agreement systems across the world's languages display a universal implicational hierarchy, according to which  $\phi$ -agreement is cross-linguistically sensitive to the grammatical function of a nominal. Bobaljik (2008) updates this hierarchy, such that  $\phi$ -agreement systems track not grammatical function, but rather *morphological case*. This updated hierarchy, which I will refer to as the Case-Accessibility Hierarchy (CAH), is given in (2).

# (2) Case-Accessibility Hierarchy:

Unmarked case > dependent case > lexical case NOM/ABS = ERG/ACC OBL

In this way,  $\phi$ -Agree is *case-discriminating*:<sup>4</sup> the morphological case of a nominal determines its (in)accessibility to a  $\phi$ -probe. Bobaljik's reformulation builds on Marantz's (1991) disjunctive case hierarchy, which unifies accusative and ergative case systems: ACC and ERG are both dependent cases, while NOM and ABS are both unmarked cases.

<sup>&</sup>lt;sup>4</sup>Terminology from Preminger (2011).

This CAH should thus be restated as follows. There are no languages that permit  $\phi$ -Agree processes targeting dependent case-marked nominals to the exclusion of morphologically unmarked nominals, no languages that permit  $\phi$ -Agree processes targeting lexical casemarked nominals to the exclusion of both unmarked and dependent case-marked nominals, and so on. As mentioned earlier, languages are parametrized to occur at different cut-off points along the CAH.

Icelandic, for instance, is a language in which only permits  $\phi$ -agreement with Nom (morphologically unmarked) nominals. In (3a),  $\phi$ -agreement cross-references the Nom subject, not the ACC object. In contrast, (3b) contains a quirky (DAT) case-marked subject; in this sentence,  $\phi$ -agreement instead targets the NOM object. Similarly, Tsez behaves like Icelandic in that only unmarked nominals may be targeted for  $\phi$ -agreement. However, Tsez displays an ergative case alignment, so this translates to  $\phi$ -agreement cross-referencing ABS subjects and ABS objects but not ERG subjects, (4).

#### (3) Icelandic: $\phi$ -Agree targets nom arguments

a. NOM-ACC:

**Við lásum** bók hans we.nom read.1p book.acc his 'We read his book.'

b. <u>DAT-NOM:</u>

Henni **leiddust þeir** she.dat was.bored.by.3p they.nom 'She was bored with them.'

(Taraldsen, 1995)

#### (4) Tsez: $\phi$ -Agree targets ABS arguments

a. ABS subject:

ziya b-ik'i-s cow.iii.Abs iii-go-pst.evid 'The cow left.'

b. <u>ERG-ABS</u>:

eniy-ā **ziya b**-išer-si mother-ERG cow.III.ABS III-feed-PST.EVID 'The mother fed the cow.'

ne mother fed the cow.' (Polinsky and Potsdam, 2001)

In contrast, Inuit is often characterized as a language that permits  $\phi$ -Agree with both unmarked (ABS) and dependent (ERG) arguments, as illustrated in (5) (e.g. Murasugi, 1994; Bobaljik, 2008; Baker, 2015). However, as I will discuss shortly, this characterization is not exactly accurate.

# (5) Inuktitut: Apparent $\phi$ -Agree with ERG and ABS arguments

a. <u>Ergative (ERG-ABS):</u>

nutaraa-**p agualiqisaq** niri-**janga** child-erg caribou.stew.abs eat-3s.S/3s.O 'The child ate the caribou stew.'

(NB, AB)

b. Antipassive (ABS-MOD):

**nutaraaq** niri-Ø-**juq** agualiqisar-mik child.ABS eat-(AP)-3s.S caribou.stew-MOD 'The child ate the caribou stew.'

(NB, AB)

Finally, a logical extension of the CAH pursued by Bobaljik (2008) is that the  $\phi$ -Agree operation necessarily takes place *after* case assignment. This is because whether  $\phi$ -agreement with a given nominal is possible is contingent on its morphological case. Moreover, as Bobaljik takes morphological case to be assigned postsyntactically, following Marantz (1991), this entails that  $\phi$ -Agree must also take place in the postsyntactic component. However, below I will summarize arguments from Preminger (2011, 2014) against a purely postsyntactic approach.

# 6.2.2 Failed Agree and derivational timing

According to the theory of fallible Agree developed by Preminger (2011, 2014), Agree may fail if a given probe is unable to find a suitable goal, though this failure need not cause the derivation to crash. In other words, while the Agree operation must be attempted, failure to Agree is tolerated by the grammar. In this section, I survey how this approach to Agree interacts with case-discrimination.

Preminger shows that the case-discriminating property of a  $\phi$ -probe results in the failure of Agree if the probe encounters a nominal bearing a  $\phi$ -inaccessible case, which aborts the Agree operation altogether. Moreover, returning to the last point of the previous section, this system functions in the first place because dependent case assignment nor  $\phi$ -Agree is postsyntactic, contra Bobaljik (2008), but must take place in the syntax proper. Crucially, the case-discriminating property of  $\phi$ -Agree may also affect A-movement, which is a necessarily syntactic operation.

The core evidence that the case-discriminating property of a  $\phi$ -probe may lead to its failure to Agree comes from *defective intervention*, illustrated below with Icelandic. First, as already shown above, Icelandic  $\phi$ -agreement is only able to target NOM arguments. In the presence of a quirky (DAT) subject, agreement that normally cross-references the subject instead encodes the features of the object. This is repeated in (6):

#### (6) Icelandic: $\phi$ -Agree is case-discriminating

a. **Við lásum** bók hans we.nom read.1p book.acc his 'We read his book.'

b. Henni **leiddust peir** she.DAT was.bored.by.3p they.NOM 'She was bored with them.'

(Taraldsen, 1995)

While (6b) above illustrates successful Agree of a  $\phi$ -probe in T<sup>0</sup> in the presence of a higher data argument, we also find instances in which a data argument prevents T<sup>0</sup> from successfully agreeing with a lower element. This is shown below with expletive existential constructions, in which  $\phi$ -agreement is neither able to target a data argument (the associate of the existential), as in (7a), nor bypass the data argument to target an embedded nom argument, as in (7b). In these examples, verbal agreement in both examples appears as 3s regardless of the number specifications of the arguments present. Preminger proposes that 3s agreement in these contexts reflects the failure of Agree: in the absence of  $\phi$ -feature valuation, a probe is spelled out with its default form—which, in Icelandic, is 3s.

# (7) Icelandic: Failed Agree reflected as default agreement

a. *No*  $\phi$ -agreement with DAT:

Pað **finnst** / \*finnast **mörgum stúdentum** tölvan ljótar EXPL find.3s find.3P many students.DAT the.computer.NOM ugly 'Many students find the computer ugly.'

b. *No bypassing DAT nominal:* 

Pað **finnst** / \*finnast einhverjum stúdent **tölvurnar** ljótar EXPL find.3s find.3P some student.DAT the.computers.NOM ugly 'Some student finds the computers ugly.' (Holmberg and Hróarsdóttir, 2003)

The example in (8) below additionally demonstrates that this pattern is truly a defective intervention effect. Moving the DAT argument out of the way allows  $\phi$ -agreement with the lower nom argument to succeed, on par with the construction in (6b) above.<sup>5</sup>

# (8) Icelandic: $\phi$ -Agree may succeed if DAT intervener is moved

Einhverjum stúdent **finnast tölvurnar** ljótar some student.dat find.3p the.computers.nom ugly 'Some student finds the computers ugly.' (Holmberg and Hróarsdóttir, 2003)

Thus, the defective intervention effect in (7) reveals that encountering a case-inaccessible nominal prevents a  $\phi$ -probe from looking past the nominal in question. As a result, all lower nominals are also inaccessible to this probe. This case-discriminating property of Agree causes  $\phi$ -probes to *cease probing altogether*.

Crucially, Preminger also points out that the same pattern is visible in the domain of

 $<sup>^5</sup>$ The full range of facts are more complicated than presented here. For example, in contrast to the data in (7), transitive expletive constructions do not display intervention effects in monoclausal constructions (e.g. Zaenen et al., 1985; Bobaljik, 2008). Moreover, whereas monotransitive DAT-NOM constructions permit  $\phi$ -agreement with 3P NOM objects (as we saw in (6b)), the presence of a *1st/2nd person* NOM object results in default 3s agreement, reflective of *failed* agreement.

A-movement, illustrated below with French. In (9a), the embedded subject *Jean* is able to successfully undergo A-movement into the matrix subject position. However, in (9b), raising is impossible, due to the presence of an intervening PP experiencer.<sup>6</sup>

# (9) French: Raising is not possible past PP-experiencer

- a. Jean seems  $[t_i]$  avoir du talent  $[t_i]$  Jean seems have of talent 'Jean seems to have talent.'
- b. \*Jean semble à Marie [ t<sub>i</sub> avoir du talent ]

  Jean seems to Marie have of talent

  Intended: 'Jean seems to Marie to have talent.'

(McGinnis, 1998)

According to Preminger, the fact that we find parallel defective intervention effects between  $\phi$ -agreement and A-movement presents an argument against a postsyntactic approach to both morphological case assignment and  $\phi$ -agreement. Abstracting away from the details of his argumentation somewhat, the idea is that A-movement to the matrix subject position in languages like French displays the *same* case-discriminating property as  $\phi$ -agreement in the language, given that DAT nominals cannot ever raise to subject position, though this is possible in other languages (such as Icelandic). This suggests that the  $\phi$ -Agree operation underlies both agreement and A-movement. Crucially, A-movement is demonstrably a syntactic process, given that it has both phonological and semantic consequences. Therefore, if A-movement is case-discriminating, then this means that morphological case assignment must be syntactic as well, contra Marantz (1991) and Bobaljik (2008).

Having established this system of  $\phi$ -Agree, the rest of this section turns to the Inuit languages and examine how the results from Chapter 4 bear on this discussion. I will argue that the logic of dependent ERG case in Inuit (and potentially in other syntactically ergative languages as well) requires dependent case assignment to  $follow\ \phi$ -Agree processes, not precede it. This, in turn, bears on how we understand the notion of case-discrimination in Inuit.

# 6.2.3 Case assignment does not always precede Agree

In this section, I return to the proposal that Inuit  $\phi$ -probes may target both ABS and ERG arguments (e.g. Murasugi, 1994; Bobaljik, 2008; Baker, 2015). This is a natural assumption, based on the surface profile of Inuit agreement morphology. As shown again in (10), this morphology cross-references both ERG subjects and ABS objects in transitive sentences.

<sup>&</sup>lt;sup>6</sup>See also Anagnostopoulou (2003), Hartman (2012), and others, for further discussion on intervention in A-movement cross-linguistically.

<sup>&</sup>lt;sup>7</sup>Though see Preminger (2014, p. 182-186) for details.

<sup>&</sup>lt;sup>8</sup>However, see also Branan (2018) for an alternative approach to defective intervention that is based on prosodic properties of the language in question (cf. Richards, 2016, 2017).

#### (10) Inuktitut: Apparent $\phi$ -Agree with ERG and ABS arguments

#### a. <u>Ergative (ERG-ABS):</u>

nutaraa-**p agualiqisaq** niri-**janga** child-ERG caribou.stew.ABS eat-3s.S/3s.O 'The child ate the caribou stew.'

(NB, AB)

#### b. *Antipassive (ABS-MOD)*:

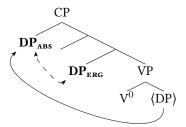
**nutaraaq** niri-Ø-**juq** agualiqisar-mik child.ABS eat-(AP)-3s.S caribou.stew-MOD 'The child ate the caribou stew.'

(NB, AB)

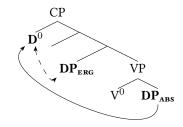
However, once we take into the consideration how the Inuit clause is derived, a slightly different picture emerges. Recall from Chapter 4 that, across Inuit, we find cross-dialectal variation in the status of ergativity, based on the properties of the ABS object element that raises. The structures of Kalaallisut and Inuktitut are provided below in (11).

#### (11) Structure of transitive clause across Inuit

a. <u>Kalaallisut:</u>



b. <u>Inuktitut:</u>



--- = dependent case assignment;  $\leftarrow$  = movement

The structures in (11) show cross-dialectal variation in the nature of the internal argument that raises to the clausal left-periphery. In Kalaallisut, this element is a full ABS DP (cross-referenced by  $\phi$ -agreement), while in Inuktitut, it is a pronominal D<sup>0</sup> (realized as a  $\phi$ -bearing clitic). Despite this variation, what these structures have in common is the fact that movement is correlated with overt object-referencing  $\phi$ -morphology.

We can moreover independently see that this movement, across all varieties, obeys standard locality conditions on Agree. In Chapter 2, I showed that it is the highest two arguments that undergo any kind of Agree-triggered movement, and that these steps create nested dependencies. We can thus conclude that  $\phi$ -Agree underlies the movement of ABS objects.

Now, let us consider how this bears on dependent ERG case assignment. We saw in Chapter 4 that, in Labrador Inuttut and distantly related language Aleut, dependent ERG case requires the presence of a pronoun that has undergone *object shift* (e.g. Boyle, 2000; Sadock, 2000; Merchant, 2011; Woolford, 2017). Non-pronominal elements remain in situ and cannot condition ERG case assignment. This is especially evident in Aleut, in which in situ nominals are ABS, yet do not count as case competitors for dependent REL (= ERG) case, (12). This fact shows that the domain of dependent case assignment in Inuit and

Aleut is localized to the  $\nu$ P-external domain.

#### (12) Aleut: In situ ABS objects do not condition dependent ERG case

a. <u>Object-shifted pronoun:</u>
Piitra-**m** kidu-ku-**u**Peter-REL help-PRES-3s.S/3s.O
'Peter is helping him.'

#### b. *In situ ABS object:*

Piitra-**x Ivaana-x** kidu-ku-x Peter-ABS John-ABS help-PRES-3S 'Peter is helping John.'

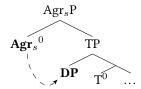
(Bergsland and Dirks, 1981)

Crucially, this set of facts provides evidence that ERG/REL case can only be assigned *after*  $\phi$ -Agree processes have taken place. The  $\phi$ -Agree operation that triggers movement to the clausal left-periphery and the appearance of object-referencing morphology is clearly case-discriminating, given that only ABs elements are eligible for movement. However, since dependent case cannot be assigned to the subject without this movement step first taking place, this entails that the subject must still be *caseless* at the point of  $\phi$ -Agree.

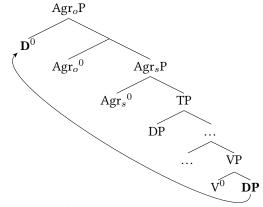
This series of derivational steps is presented below in the (slightly simplified) structures throughout (13). Recall that Inuit has two structurally-adjacent  $\phi$ -probes in the extended CP-domain,  $\mathrm{Agr}_s{}^0$  and  $\mathrm{Agr}_o{}^0$ . First,  $\mathrm{Agr}_s{}^0$  finds the highest nominal element in its c-command domain, as in (13a); this is usually the subject in Spec-TP. Then,  $\mathrm{Agr}_o{}^0$  Agrees with the next highest nominal element, the highest internal argument. In Inuktitut and in Labrador Inuttut/Aleut, this triggers clitic doubling, as illustrated in (13b). Finally, dependent ERG case is assigned to the subject in the presence of this newly present case competitor, (13c). For clarity, these structures are represented as left-branching rather than right-branching.

#### (13) Derivational steps for $\phi$ -Agree and dependent case assignment

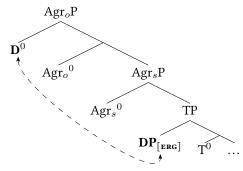
#### a. Subject $\phi$ -agreement:



#### b. Obj. clitic doubling:



#### c. <u>Dependent ERG case assignment:</u>



Thus,  $\phi$ -probes in Inuit (and Aleut) are specified to only target *morphologically unmarked* (ABS) arguments. Following Kornfilt and Preminger (2015), unmarked case could actually be understood as caselessness. As support for this idea, the default case in Inuit also happens to be "ABS", as I show in the Appendix of this chapter. It is therefore possible to characterize  $\phi$ -Agree in Inuit and Aleut as only able to target arguments that have not been assigned case.

The idea that only caseless nominals are accessible to Inuit  $\phi$ -probes has an immediate consequence for the typology of case-discrimination discussed earlier: Inuit is not a language whose case-accessibility includes both unmarked and dependent case. Rather, the case-discriminating profile Inuit is no different from that of a language like Tsez, in which only ABS arguments may be cross-referenced by  $\phi$ -agreement morphology (Forker, 2012; Gagliardi et al., 2014; Polinsky, 2015). Ergative constructions in Inuit, despite surface appearances, actually pattern like *bi-absolutive constructions* in Tsez with respect to the case-discriminating properties of  $\phi$ -agreement, (14). Both languages have two  $\phi$ -probes per clause, which may only target morphologically unmarked nominals.

# (14) Tsez: Two $\phi$ -probes targeting ABs arguments in bi-absolutives

a. *ABS subject:* 

**ziya b**-ik'i-s cow.iii.Abs iii-go-past.evid 'The cow left.'

(Polinsky and Potsdam, 2001)

b. *Ergative (ERG-ABS)*:

eniy-ā **ziya b**-išer-si mother-ERG cow.III.ABS III-feed-PAST.EVID 'The mother fed the cow.'

(Polinsky and Potsdam, 2001)

c. <u>Bi-absolutive:</u>

xex-bi sayyat b-eti-x r-ič-äsi yoł child-pl.III.ABS gift.III.ABS III-want-IPFV.CVB pl.III-stay-RES AUX.PRS 'Children want a gift.' (Polinsky, 2015)

Finally, the late timing of dependent case in Inuit and Aleut raises the possibility that there are fewer languages that fall along the "unmarked/dependent" cut-off point of the Case-Accessibility Hierarchy typology than previously assumed. I leave a deeper verification of this point for future research.

To summarize briefly, this section provided an overview of the  $\phi$ -agreement system proposed by Bobaljik (2008) and Preminger (2011, 2014). According to this system,  $\phi$ -Agree displays cross-linguistic variation along a universal implicational hierarchy with respect to its case-discriminating properties. Moreover, case-discrimination may lead to the failure of Agree. In the event that a  $\phi$ -probe encounters a case-inaccessible nominal in its search domain, probing ceases altogether; this failure is often reflected as default agreement morphology or as ungrammaticality. Finally, I argued that  $\phi$ -probes in Inuit are only able to target unmarked (ABS) arguments. The rest of the chapter focuses on the interaction between case-discrimination and failure to Agree in Inuktitut.

# 6.3 Failed Agree: Lexical MOD case on anaphors

In this section, I argue that the interaction between case-discrimination and Agree presented above is borne out in Inuktitut. I demonstrate Inuktitut displays Anaphor Agreement Effect—i.e. the cross-linguistic inability for anaphors to be cross-referenced by  $\phi$ -agreement. In Inuktitut, this is reflected by the fact that anaphors obligatorily bear *lexical MOD case*, which, in turn, renders them inaccessible to  $\phi$ -Agree processes. This results in the loss of object-referencing morphology on the verb, reflecting the failure of Agree to find a suitable goal (Preminger, 2011, 2014). I additionally show that the presence of a clause-medial MOD anaphor may trigger *defective intervention effects*, resulting in ungrammaticality, and explore the consequences of this observation for the status of argument licensing in Inuktitut.

# 6.3.1 The Anaphor Agreement Effect

The Anaphor Agreement Effect (henceforth, AAE) refers to the cross-linguistic—possibly universal—inability for anaphoric elements to be targeted by co-varying (i.e. non-default)  $\phi$ -agreement morphology (Rizzi, 1990; Woolford, 1999; Tucker, 2011; Patel-Grosz, 2014; Sundaresan, 2014, 2016, a.o.). The grammatical reality of the AAE is illustrated below. In Italian, verbal  $\phi$ -agreement most typically cross-references a nominative subject, (15a). However, if the subject bears DAT (for instance, if it is the experiencer of a psych-predicate), the same agreement morphology instead targets the *object*, which is now nominative, (15b).

#### (15) Italian: $\phi$ -agreement targets nom arguments

a. <u>NOM subject:</u>

Loro amano lei they.Nom love.3p her.Acc 'They love her.'

b. <u>NOM object:</u>

A loro **piace lei** to them please.3s her.nom 'They like her.'

(Rizzi, 1990)

Crucially, if the Nom object is an anaphor, the construction becomes ungrammatical, (16a). Rizzi (1990) points out that this contrast cannot be reduced to Binding Theory. As shown in (16b), an equivalent sentence with a Nom-ACC frame is grammatical. Similarly, the ill-formedness may be resolved if the anaphoric object is enclosed within a PP, (16c). Together, these sentences reveal that the ungrammaticality of (16a) comes from  $\phi$ -agreement with the anaphor.

#### (16) Italian: AAE with nom anaphor

a. *NOM anaphor:* 

\*A loro **piacciono se stessi** to them please.3p themselves.Nom *Intended:* 'They like themselves.'

b. <u>ACC anaphor:</u>

**Loro** amano se stessi they.Nom love.3p themselves.Acc 'They love themselves.'

c. <u>PP-internal anaphor:</u>

A loro importa solo **di se stessi** to them matter.3s only of themselves 'They only matter to themselves.'

(Rizzi, 1990)

Deal (2010) additionally demonstrates that default 3s  $\phi$ -agreement may also rescue the

errant DAT-NOM anaphoric construction. This is shown below throuhout (17).

# (17) Italian: Default $\phi$ -agreement in anaphoric object constructions

- a. \*Mi **piaccio me stesso** me.DAT please.1s myself.NOM *Intended:* 'I like myself.'
- b. ?Mi piace me stesso me.DAT please.3s myself.NOM 'I like myself.'

(Deal, 2010)

The fact that anaphors cross-linguistically repel  $\phi$ -agreement is shown even more clearly by Patel-Grosz (2014). In Kutchi Gujarati,  $\phi$ -agreement in perfective sentences targets the object rather than the subject, as shown in (18a). Strikingly, the presence of an anaphoric object triggers *agreement displacement*—such that the  $\phi$ -agreement no longer tracks not the object, but rather tracks the first conjunct of the subject (which is how we can detect the occurrence of agreement displacement). Thus, in (18b), we find 3s.F agreement morphology rather than the 3P morphology seen in (18a).

# (18) Kutchi Gujarati: Agreement displacement in anaphoric contexts

- a. φ-agreement with PL ACC object:
   Bill [John ane Mary]-ne jo-y-o
   Bill John and Mary-ACC see-PFV-PL 'Bill saw John and Mary.'
- b. φ-agreement with sG conjunct in subject:
   [Mary] ane John] pot-potha-ne jo-y-[i]
   Mary and John themselves-ACC see-PFV-F.SG
   Mary and John saw themselves.' (Patel-Grosz, 2014)

In addition, in a number of languages, anaphors are lexically specified to appear in a larger DP structure, such that the target of  $\phi$ -Agree is the DP containing the anaphor rather than the anaphor itself. This is referred to as the "protected anaphora strategy" by Tucker 2011, as the result of this is that we never find violations of the AAE. As shown in (19) in Selayarese (Woolford 1999, citing Finer 1994), the result is that  $\phi$ -agreement morphology appears invariant, regardless of the featural specifications of the anaphor (see also Iatridou (1988) and Haegeman (2004) for similar facts in Greek and West Flemish).

#### (19) Selayarese: Anaphors inside possessive DPs

<u>Invariant  $\phi$ -morphology:</u>

a. la-jañjang-i kalen-na 3.ERG-see-3.ABS self-3 'He saw himself.'

- b. ku-jañjang-**i kaleng-ku** 1s.erg-see-3.ABs self-1s 'I saw myself.'
- c. <u>Possessive morphology on DPs:</u> ando?-**na** mother-3 'his mom'

(Woolford 1999, citing Finer 1994)

Below, I will show that Inuktitut displays a similar effect, except that, in Inuktitut, anaphors are obligatorily enclosed within a PP, rather than a possessive DP. The head of this PP-layer is spelled-out as MOD case morphology. Just as a complex DP structure is able to block  $\phi$ -Agree with an anaphor, so can PP<sub>MOD</sub> in a case-discriminating language.

# 6.3.2 Anaphors bear lexical case

The idea that Inuktitut anaphors bear lexical case was first introduced in Chapter 4, as evidence for dependent ERG case. As repeated in (20) with Icelandic, lexical case on a nominal may bleed dependent case on another nominal, resulting instead in unmarked case. This is because lexical case is assigned early in the derivation, upon First Merge, while dependent case may only be calculated among caseless nominals.

# (20) Icelandic: Dependent ACC case bled by DAT-marked subject

- a. <u>dagmamman</u> bakaði **brauðið** day.mommy.Noм baked bread.Acc 'The day-mommy baked the bread.'
- b. <u>barninu</u> batnaði **veikin**child.DAT recovered.from disease.NOM
  'The child recovered from the disease.' (Yip et al., 1987)

I showed that Inuktitut displays an identical pattern. The presence of MOD case on anaphors triggers the unavailability of dependent ERG case on the subject, which surfaces instead as ABS, repeated in (21a-b). Crucially, the contrast between (21b) and (21c) shows that this MOD case morphology is *specific to anaphors*. Non-anaphoric arguments cannot bear MOD case in these constructions, which are transitivized by the  $\nu$ P-level morpheme -gi.

<sup>&</sup>lt;sup>9</sup>That a lexical case layer or a preposition may serve as an AAE strategy is, to my knowledge, unattested outside of Inuktitut. However, we might expect other languages to make use of this strategy as well. An avenue for future research would thus be to search for other instances of this cross-linguistically.

# (21) Dependent ERG case bled by MOD anaphor

- b. <u>ABS-MOD with anaphoric object:</u> **Taiviti** ingmi-**nik** nagli-gi-juq
  David.ABS self-MOD love-TR-3s.S
  'David loves himself.'
- c. \*ABS-MOD with non-anaphoric object:

  \*Taiviti Kiuru-**mik** nagli-gi-juq
  David.ABS Carol-MOD love-TR-3s.S
  Intended: 'David loves Carol.'

(NB, AB)

This section presents a deeper examination of the nature of Mod case on anaphors, and provides further evidence that this case morphology is lexical in nature. Specifically, I propose that anaphors in Inuktitut enter the derivation enclosed in a PP-layer, whose head is spelled out as Mod, as schematized in (22); I will refer to this case layer as "PP<sub>MOD</sub>" in what follows. The presence of PP<sub>MOD</sub> not only affects the case frame of the overall construction, but prevents the anaphor from participating in  $\phi$ -Agree processes (thus bypassing the Anaphor Agreement Effect).

# (22) Structure of Inuktitut anaphors



#### Preservation in complex DPs

The core argument for a lexical PP-layer on anaphors comes from the fact that MOD case is obligatorily present even when the anaphor is contained within a complex DP. I illustrate this here with "picture of" constructions. In Inuktitut, these DPs consist of a nominal ajjinnguaq 'picture,' followed by a second nominal, which modifies it. Both nominals bear the case that is assigned to the complex DP as a whole; I assume that this is the result of a morphological case concord process. This is illustrated in (23), an antipassive construction, in which both nominals within the object DP surface with MOD case.

# (23) Inuktitut: Both nominals inside complex "picture of" DP bear case

Kiuru nani-si-qqau-juq [ajjinnguar-tuqar-**mik** Taiviti-nnguar-**mik**]
Carol.ABS find-AP-REC.PST-3s.S picture-old-MOD David-fake-MOD
'Carol found an old picture of David.' (NB, AB)

Consider now what happens when the nominal modifier of *ajjinnguaq* 'picture' is an anaphor. In the constructions below, there is now an additional MOD case morpheme present, adjacent to the anaphor. The example in (24a) is the anaphoric counterpart to the baseline in (23). In (24b-c), we additionally see that the anaphor bears MOD case regardless of the case assigned to the entire DP; in (24b), the DP is a goal, so it receives ALLAT case, while in (24c), the DP is an ABS object. Note also that the examples in (24a-b) display *case-stacking* (cf. Pesetsky, 2013; Richards, 2013; Levin, 2017).

## (24) Anaphors obligatorily bear MOD case in complex DPs

# a. <u>MOD complex DP:</u>

Kiuru nani-si-qqau-juq [ajjinnguar-tuqar-**mik** Carol.ABS find-AP-REC.PST-3S.S picture-old-MOD ingmi-<u>ni</u>-nnguar-**mik**] self-MOD-old-MOD 'Carol found an old picture of herself.'

#### b. <u>ALLAT complex DP:</u>

sivuliuqti [ ajjinnguar-**mut** ingmi-**ni**-nnguar-**mut** ] premier picture-ALLAT self-MOD-fake-ALLAT qimirua-giaqtu-qqau-juq look.at-go.to-REC.PST-3s.S 'The Premier went to go look at a portrait of himself.'

#### c. *ABS complex DP:*

Kiuru-up taku-qqau-janga [ajjinnguaq ingmi-**ni**-nnguaq] Carol-erg see-rec.pst-3s.S/3s.O picture.Abs self-mod-fake.Abs 'Carol saw a picture of herself.' (NB, AB)

In contrast, (25) demonstrates that non-anaphoric arguments may not bear MOD case within complex DPs:

#### (25) No additional MOD case morphology on non-anaphors

#### a. <u>MOD complex DP:</u>

\*ajjinnguar-tuqar-**mik** Taiviti-<u>mi</u>-nnguar-**mik** picture-old-мор Taiviti-мор-fake-мор *Intended:* 'an old picture of David'

#### b. <u>ABS complex DP:</u>

\*ajjinnguaq Taiviti-**mi**-nnguaq picture.ABS David-MOD-fake.ABS *Intended:* 'a picture of David'

(NB, AB)

So far, we have seen that MOD case on anaphors is not only obligatory, but this obligatoriness is specific to anaphors; non-anaphors, for instance, may not bear MOD case in complex DPs. This, in turn, suggests that the presence of MOD case is an idiosyncratic (i.e.

lexically-specified) property of anaphors. Therefore, in what follows, I will refer to this as a *lexical case*.<sup>10</sup> The structure of anaphoric objects is repeated below as (26).

#### (26) Structure of Inuktitut anaphors



## Structural adjacency

The examples above also contain a suffixal modifier *-nnguaq* 'fake/representation of,' which is often used in "picture of" constructions in Inuktitut. The word-internal position of this suffix provides an additional piece of evidence that the presence of MOD case is a lexical property of anaphors. The suffixal modifier always *follows* the MOD case morpheme associated with the anaphor, (27a). Moreover, comparing this with (27b), we see that this morpheme order is fixed—the opposite ordering, in which the modifier intervenes between the anaphor and its lexical case, is ungrammatical.

# (27) Lexical MOD obligatorily adjacent to anaphor

- a. ingmi-ni-nnguaq self-MOD-fake '(picture of) self' (ABS object position)
- b. \*ingmi-**nnguar**-**mik**self-fake-MOD
  Intended: '(picture of) self' (NB, AB)

This is expected under the Mirror Principle. If lexical case is assigned under First Merge (i.e. under sisterhood with the anaphoric DP), then  $PP_{MOD}$  should immediately dominate the anaphor. Therefore, no other projections, including ones that host modifiers, may intervene. In contrast, (28) shows that no such requirement holds for non-anaphoric arguments assigned MOD case (e.g. antipassive objects), suggesting that this type of MOD case is not lexical. These DPs only display the opposite morpheme ordering, in which the suffixal modifier precedes the case morpheme.

# (28) No adjacency requirement on non-lexical MOD

a. Taiviti-**nnguar-mik**Таiviti-fake-мор
'(picture of) David'

 $<sup>^{10}</sup>$ My usage of the term "lexical case" differs slightly from its traditional usage, which typically refers to the case that is idiosyncratically assigned by a head  $\mathrm{H}^0$  to a nominal it selects for. Its usage in the context of Inuktitut anaphors is meant to be informal, given the lack of a more suitable term (which, in turn, stems from a paucity of similar data cross-linguistically).

b. \*Taiviti-mi-nnguaq
Taiviti-MOD-fake
Intended: '(picture of) David' (NB, AB)

It is worth clarifying at this point that the presence of suffixal modifiers is not necessary to illustrate the lexical nature of MOD case on anaphors, although these modifiers are often preferred by speakers in the contexts provided here. As seen below, case-stacking on anaphors also appears in the absence of any intervening modifiers:

(29) Case stacking on anaphors is possible without intervening modifier sivuliuqti [ajjinnguar-mut ingmi-ni-mut] qimirua-giaqtu-qqau-juq premier picture-ALLAT self-MOD-ALLAT look.at-go.to-REC.PST-3s.S 'The Premier went to go look at a portrait of himself.' (NB, AB)

To summarize, I have shown so far that anaphors obligatorily bear MOD case, and that this property is not found with non-anaphoric arguments. Before returning to the Anaphor Agreement Effect, I briefly clarify a point concerning the *absence* of lexical MOD case on anaphors in certain oblique contexts.

# 6.3.3 A note on case-stacking and haplology

Although the constructions above display case-stacking, we also find many examples in which the anaphor appears in various oblique contexts without MOD case morphology, as in (30). In fact, whereas the case-stacking data shown above are (as far as I am aware) novel to this thesis, the constructions below are frequently found in the literature.

# (30) Absence of case stacking in oblique contexts

a. ALLAT case:

inna **ingmi-nut** uqalimaa-suuq DEM.ABS self-ALLAT speak-нAB.3s.S 'That person talks to himself.'

(SB, IQ)

b. <u>SIM case:</u>

tamakkua uqausiit **ingmi-tut** uqausi-ngit-titut ajji-gi-lauq-tangit DEM.P.ABS word.P.ABS self-SIM word-3P.POSS-SIM same-TR-PST-3S.S/3P.O '...those words are the same [in the Baffin dialect] as in his own.'<sup>11</sup>

I suggest that the apparent absence of Mod case in (30) is due to a *haplology rule* that deletes the inner case morpheme, as indicated in (31) below. In other words, while  $PP_{\text{Mod}}$  is ubiquitously present in anaphoric contexts, its presence is often morphologically obscured.

<sup>11</sup> Source: https://itk.ca/wp-content/uploads/2016/10/1990-0071-InuktitutMagazine-IUCANS-IULATN-EN.pdf

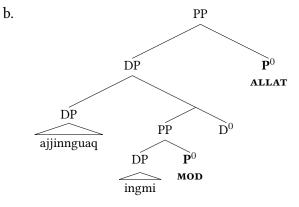
# (31) Haplology rule

 $DP\text{-}case_1\text{-}case_2 \longrightarrow DP\text{-}case_2$ ... if  $case_1$  and  $case_2$  are structurally adjacent.

According to the rule stated above, haplology applies between *structurally adjacent* case morphemes (P<sup>0</sup>s). This is meant to capture the contrast between the case-stacking constructions, repeated in (32), and the non-case-stacking constructions, repeated in (33).

## (32) Case-stacking if structurally non-adjacent

a. ajjinnguar-mut ingmi-ni-mut
 picture-ALLAT self-MOD-ALLAT
 ... at a picture of himself'



# (33) No case-stacking if structurally adjacent

a. ingmi-**nut** self-ALLAT 'to himself'

b. PP  $PP \qquad P^0$   $DP \qquad P^0$   $ingmi \qquad MOD$ 

Given the structures in (32b) and (33b), I suggest that the difference between these two constructions pertains to the *source* of the outer case morpheme. In (32), the ALLAT case on the anaphoric complex is actually assigned to the entire DP, so the MOD and ALLAT case morphemes are not *structurally adjacent*, even though they are linearly adjacent. In contrast, in (33), the ALLAT  $P^0$  *is* structurally adjacent to the lexical MOD  $P^0$ . In light of this difference, I propose that haplology applies only to structurally adjacent  $P^0$ s.

# 6.3.4 Lexical case and failed Agree

Having demonstrated above that anaphors in Inuktitut bear lexical Mod case, I now illustrate how the presence of this case morphology renders the anaphor opaque to  $\phi$ -Agree processes. As discussed in Chapters 2 and 4, Inuktitut has constructions that contain the transitivizing morpheme -gi, which appears on psych-predicates and noun incorporation constructions, (34). In these examples, we see that these constructions are normally intransitive, given that the subject is Abs, not Erg, and the internal argument (when present)

is MOD. Concomitantly, we also find only subject-referencing morphology in these constructions.

#### (34) Intransitive psych-predicates and NI constructions

#### a. <u>Psych-predicate:</u>

Taiviti nagli-gusuk-tuq Kiuru-mik David.ABS love-feel-3s.S Carol-MOD

'David loves Carol.'

Lit.: 'David feels love for/towards Carol'.

(NB, AB)

#### b. *NI construction:*

Jaani igvi-u-quuji-juq Jaani.ABS 2s-be-seem-3s.S

'Jaani looks like you.'

(NB, IG)

However, when transitivized with -gi, these constructions instead require an ERG-ABS case frame, with both arguments cross-referenced on the verb, (35). Recall that a version of these constructions with an ABS-MOD case frame is not possible, (36).

# (35) Transitivized psych-predicates and NI constructions are ERG-ABS

#### a. <u>Psych-predicate:</u>

Taiviti-up Kiuru nagli-gi-janga

David-erg Carol. Abs love-tr-3s. S/3s. O

'David loves Carol.'

(NB, AB)

#### b. *NI construction:*

Jaani-up uvanga-u-quuji-gi-jaatit

Jaani-ERG 1s-be-seem-TR-3s.S/2s.O

'Jaani thinks that you look like me.'

Lit.: 'Jaani considers you as looking like me.'

(NB, IG)

#### (36) Transitivized constructions cannot be ABS-MOD

#### a. <u>Psych-predicate:</u>

\*Taiviti Kiuru-**mik** nagli-<u>gi</u>-juq

David.ABS Carol-MOD love-TR-3s.S

Intended: 'David loves Carol.'

(NB, AB)

#### b. *NI construction:*

\*Jaani ilin-**nik** uvanga-u-quuji-<u>gi</u>-juq

Jaani.ABS 2s-MOD 1s-be-seem-TR-3s.S

*Intended:* 'Jaani thinks that you look like me.'

(NB, AB)

However, in contrast to the ungrammatical examples in (36), the presence of an anaphoric object exceptionally permits an ABS-MOD case frame to surface, (37). Crucially, in these examples, the presence of MOD case on the anaphor *blocks object-referencing morphology*.

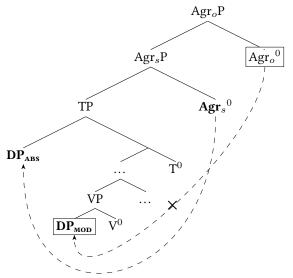
# (37) No object-referencing morphology with MOD anaphor

a. Taiviti ingmi-**nik** nagli-gi-juq David.ABS self-MOD love-TR-3s.S 'David loves himself.' (NB, AB)

b. Jaani ingmi-**nik** uvanga-u-quuji-gi-juq Jaani.ABS self-MOD 1s-be-seem-TR-3s.S 'Jaani<sub>i</sub> thinks that he<sub>i</sub> looks like me.' (NB, AB)

This follows straightforwardly from the notion of case-discrimination discussed above. In Inuktitut,  $\phi$ -probes (including those responsible for object clitic doubling) present in the clausal spine must probe for a viable goal in their c-command domain; however, MOD-marked (i.e. non-erg, non-abs) arguments are not viable targets for these  $\phi$ -probes. As a result, the Agree operation fails, instantiated in Inuktitut as the absence of object-referencing morphology altogether. This is schematized in (38):

# (38) Failed φ-Agree with MOD-marked anaphor



# 6.3.5 Defective intervention and the nature of Agree

Finally, I show that the case-discriminating nature of  $\phi$ -Agree in Inuktitut yields *defective intervention effects*, on par with earlier the discussion from Preminger (2011, 2014). This is illustrated with ditransitive (trivalent) constructions, in which the presence of a medial MOD-marked anaphor blocks  $\phi$ -Agree processes from targeting a lower element. Unlike

 $<sup>^{12}</sup>$ Note that, in Preminger (2009), whether failed Agree yields default (e.g. 3s) agreement or the loss of agreement morphology altogether corresponds to whether the relevant morpheme is true  $\phi$ -agreement or clitic doubling (see also Levin 2018). The fact that failed Agree in Inuktitut yields the absence of object-referencing morphology, rather than default agreement, provides *prima facie* support for an object clitic doubling analysis of this morphology. However, this diagnostic is only meaningful if default agreement in Inuktitut may be independently shown to be *not* zero, e.g. if it is exponed as 3s. A possible way to determine this would be to compare instances of failed Agree in Inuktitut with those in Kalaallisut, given the hypothesis in Chapter 3 that Kalaallisut has genuine object  $\phi$ -agreement.

in the previous examples, this results in ungrammaticality, rather than simply the loss of object-referencing morphology.

# Defective intervention as evidence for argument licensing

To see that Inuktitut displays defective intervention effects, recall first the Anaphor Agreement Effect data shown above. They are repeated below as (39):

# (39) Failed Agree with MOD anaphors

a. Non-anaphoric object:

Taiviti-up **Kiuru** nagli-<u>gi</u>-janga David-erg Carol.Abs love-TR-3s.S/3s.O 'David loves Carol.'

(NB, AB)

b. Anaphoric object:

Taiviti ingmi-**nik** nagli-gi-juq David.ABS self-MOD love-TR-3s.S 'David loves himself.'

(NB, AB)

Now, consider the contrast below. A Mod-marked anaphor may appear as an applied argument and be bound by a local antecedent, the external argument of the verb, as shown in (40a) (here, the direct object is incorporated). In contrast, the surface similar sentences in (40b-c) are ill-formed. Specifically, (40b) shows that, if the anaphor is structurally higher than another argument, then this lower argument may not be cross-referenced by  $\phi$ -morphology. The example in (40c) moreover demonstrates that simply *not* cross-referencing the direct object on the verb is also not a possible option.

#### (40) Mod-marked anaphor blocks $\phi$ -Agree with lower argument

a. Baseline:

ingmi-nik piruqsiaq-taa-ruti-qqau-junga self-мор flower-get-APPL-REC.PST-1s.S 'I got myself flowers.'

(NB, PI)

b. Anaphor blocks  $\phi$ -Agree with DO:

\* ukkua piruqsiat niuvi-uti-qqau-jakka ingmi-nik

DEM.PRON.P.ABS flower.P.ABS buy-APPL-REC.PST-1s.S/3P.O self-MOD

Intended: 'I bought myself these flowers.' (NB, AB)

c. No cross-referencing of DO also ungrammatical:

\*ukkua piruqsiat niuvi-uti-qqau-junga ingmi-nik

DEM.PRON.P.ABS flower.P.ABS buy-APPL-REC.PST-1s.S self-MOD

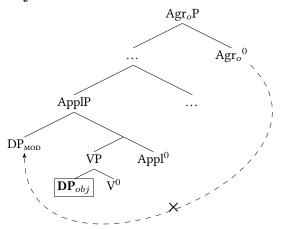
Intended: 'I bought myself these flowers.' (NB, AB)

Instead, I argue that the ill-formedness of (40b-c) is due to *defective intervention*. Because the MOD-marked anaphor, an applied argument, is structurally higher than the direct ob-

ject, the  $\phi$ -probe in the CP-domain finds the MoD-marked anaphor first; this, in turn, forces the  $\phi$ -probe to abort. As a result, the direct object is unable to be licensed by  $\phi$ -Agree, thus violating the Case Filter. In contrast, (40a) is acceptable, presumably because incorporating the direct object via Merger (see Chapter 5) allows it to be licensed (cf. Levin, 2015; Branan, 2017; van Urk, to appear).

The ungrammatical derivation of (40b-c) is schematized below (note that this structure is simplified for clarity).

#### (41) Defective intervention in Inuktitut



Why does failure to Agree with a direct object, as in (40), lead to ungrammaticality? I argue that, in these ill-formed examples, defective intervention of a Mod-marked anaphor prevents the lower argument from being *licensed by*  $\phi$ -Agree. This, in turn, entails that nominal arguments in Inuktitut require licensing, i.e. are subject to something like the Case Filter (Vergnaud, 1977; Chomsky, 1981), as sketched in (42):

# (42) Case Filter: \*DP<sub>[-case]</sub>

The traditional Case Filter prevents nominals from appearing in positions where they are unable to be licensed. Derivations that contain unlicensed nominals are thus systematically ruled out. While the notion of licensing was traditionally considered a matter of structural Case assignment, it is now generally assumed that  $\phi$ -Agree (applying in contexts beyond structural Case assignment) also functions as a licensing strategy (e.g. Chomsky, 2000). Thus, the ungrammaticality of the examples in (40) is directly due to the inability for the direct object to be targeted by—licensed by— $\phi$ -Agree.

As support for this proposal, (43) demonstrates that the ill-formedness seen above may be circumvented by *antipassivizing* the verb. As a result, the direct object receives MOD case. As I will discuss shortly, antipassivization in Inuktitut involves structural Case assignment by a functional head in the  $\nu$ P-domain (Bok-Bennema, 1991; Spreng, 2006,

2012).<sup>13</sup> Crucially, the locus of this head is *lower* than the anaphor (the argument of a high applicative), so the anaphor does not intervene between this head and the direct object it targets.

(43) Antipassivizing lowest argument obviates defective intervention effect

niuvi- - uti-qqau-junga ingmi-nik ukkuning a piruqsiar-nik

buy-(AP)-APPL-REC.PST-1s.S 1s-MOD DEM.PRON.P.MOD flower-P.MOD

'I bought myself these flowers. (NB, AB)

#### A note on the Activity Condition

Before moving on, the data shown here provide novel evidence against analyses of defective intervention effects based on the Activity Condition (McGinnis, 1998; Chomsky, 2000, 2001). As indicated back in Chapter 2, the Activity Condition states that a potential goal for Agree processes is only *active* (i.e. accessible to a given  $\phi$ -probe) if it still has unchecked uninterpretable features (for instance, [uCase]). Thus, nominals whose features have all been checked are considered inactive for the rest of the derivation.

(44) *Activity Condition:* A goal is accessible for Agree iff it has at least one unvalued uninterpretable feature. (Chomsky, 2001)

The Activity Condition is meant to capture a variety of phenomena, including the inability for English embedded subjects to undergo hyperraising out of CP, as shown in (45).<sup>14</sup>

# (45) English: No raising out of CP

- a. John, seems [ $t_i$  to be singing]
- b. \*John, seems [ that t, is singing ]

More relevantly for our purposes, the Activity Condition has also been posited as a way of accounting for defective intervention. According to this approach, PP-internal DPs are inactivated through  $\phi$ -Agree with P<sup>0</sup>. Because the DP has been inactivated, it may no longer participate in higher  $\phi$ -Agree processes. This idea is found in the following passage, from Chomsky (2008, p. 123-124):

<sup>&</sup>lt;sup>13</sup>This means that мор case morphology has multiple sources in Inuktitut. This will be explored below.

<sup>&</sup>lt;sup>14</sup>Note, however, that hyperraising is otherwise attested in many other languages. See Ura (1994), Asarina (2011), Halpert (to appear), and others for discussion.

"Uninterpretable features render the goal *active*, able to implement an operation: to select a phrase for Merge (pied-piping) or to delete the probe. The operations Agree and Move require a goal that is both local and active. We therefore have the possibility of *defective intervention constraints* in a structure (46), where > is c-command,  $\beta$  and  $\gamma$  match the probe  $\alpha$ , but  $\beta$  is inactive so that the effects of matching are blocked [...] defective intervention effects are induced whether or not  $\beta$  and  $\gamma$  of (46) are identical in  $\phi$ -features."

(46) 
$$\alpha > \beta > \gamma$$

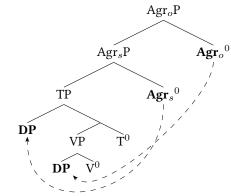
However, there are several conceptual and empirical objections to the Activity Condition as the source of these patterns (see, for instance, Nevins 2004 and Asarina 2011, ch.1). With respect to defective intervention, as pointed out by Preminger (2011, 2014), (46) ultimately offers a stipulation and a restatement of the effect (see also Richards 2008). While these previous authors have primarily focused on conceptual issues with this approach, in what follows I highlight a novel problem with the premise that P<sup>0</sup> inactivates its DP complement through Agree.

This problem comes from the Anaphor Agreement Effect, which, as discussed earlier, is the cross-linguistic inability for anaphors to be targeted by  $\phi$ -agreement. In Inuktitut, we saw earlier that anaphors are obligatorily enclosed in a PP-layer, whose head is exponed as MOD case morphology. The fact that this case morphology is obligatory only on anaphors is strongly indicative that it exists as an AAE avoidance strategy—which, in turn, entails that Inuktitut is indeed subject to the AAE. This particular AAE strategy casts doubt on the idea that the Activity Condition is the source of defective intervention. If anaphors are inherently inaccessible to  $\phi$ -agreement in Inuktitut (thus necessitating PP<sub>MOD</sub> to begin with), it becomes problematic to then propose that  $\phi$ -Agree between P<sup>0</sup> and its anaphoric complement takes place at all.

Does the Activity Condition exist at all? Although some authors have argued that this condition should be eschewed altogether (e.g. Nevins, 2004; Asarina, 2011), there is still a role for it in Inuktitut. In particular,  $\phi$ -Agree does render a nominal inactive for later syntactic operations. However, it does not create a defective intervention effect—rather, as I first suggested in Chapter 2, inactive nominals are *invisible* to the rest of the derivation. I review the logic of this idea here, illustrating with simple ergative constructions. Recall that, in Inuktitut,  $\mathrm{Agr}_o{}^0$  is structurally higher than  $\mathrm{Agr}_s{}^0$ , as evident from morpheme order under certain moods, (47a-b). Thus, the  $\phi$ -Agree paths must be *nested*, as in (47c). In order for nested dependencies to be possible (such that the higher  $\phi$ -probe is able to look past the subject), it must be the case that the subject is no longer visible once it has been targeted by Agree.

#### (47) Nested $\phi$ -Agree paths

a. **Kiuru** Taiviti-mik taku-**gami** iqi-tanga Carol.ABS David-мор see-весаus.3s.S hug-3s.S/3s.O 'When Carol saw David, she hugged him.' b. **Kiuru-up** taku-**gami**-uk Taiviti iqi-tanga Carol.erg see-Becaus.3s.S-3s.O David.abs hug-3s.S/3s.O 'When Carol saw David, she hugged him.' (NB, AB)



c.

Therefore, I conclude that defective intervention effects cannot be captured by appealing to the Activity Condition. Rather, I follow Preminger (2011, 2014) in taking defective intervention to arise from failed Agree. This, however, does not entail that the Activity Condition should be eschewed altogether, contra Nevins (2004) and Asarina (2011), among others. The Activity Condition is independently needed in order to render inactive (non-case-marked) nominals invisible.

In summary, in this section I demonstrated that Mod case on anaphors in Inuktitut is lexical, in that it is both obligatory and specific to anaphors. I analyzed this as a PP-layer directly Merged over anaphoric objects. The presence of PP<sub>Mod</sub> prevents the anaphor from being targeted by  $\phi$ -Agree operations due to Inuktitut's case-discriminating nature. This, in turn, allows Inuktitut to bypass the Anaphor Agreement Effect. I also showed that, when a  $\phi$ -probe encounters a Mod-marked argument, Agree fails (Preminger, 2011, 2014). In certain configurations, this leads to the loss of object-referencing morphology, though it is otherwise tolerated by the grammar. However, if failure of Agree prevents an argument from being licensed, as seen in defective intervention configurations, then ungrammaticality arises. Therefore, a broader finding of this section is that Inuktitut arguments are subject to licensing requirements, akin to the Case Filter.

# 6.4 The ergative-antipassive alternation: Complementary licensing strategies

In this section, I examine the nature of argument-licensing in Inuktitut in greater detail. To do this, I turn to a second configuration yielding Mod case in Inuktitut—the antipassive construction. Following Bok-Bennema (1991) and Spreng (2006, 2012), I take this type of Mod case to be a *structural Case*, assigned by a functional head in the clause; thus, Mod case morphology in Inuktitut has multiple sources. Departing from previous approaches, however, I analyze the source of Mod Case assignment as an optionally Merged functional head, ap<sup>0</sup>, available along the extended *v*P-domain. The presence or absence of ap<sup>0</sup> thus

ultimately reflects complementary licensing strategies for the internal argument. In the absence of ap<sup>0</sup>, the internal argument is licensed by  $\phi$ -Agree in the CP-domain. However, if ap<sup>0</sup> is Merged, the internal argument is licensed by structural Case assignment.

# 6.4.1 Antipassives cross-linguistically

Antipassive constructions are often characterized as containing a two-place (bivalent) predicate whose object is either suppressed or realized as an oblique (see Spreng 2010, Polinsky 2017, and references therein). In ergative languages, the demotion of the object also often results in a case alternation on the subject, which appears as ABS rather than ERG. An ergative-antipassive alternation is given in (48), from Adyghe (Northwest Caucasian). In these examples, the ERG/ABS case patterning in (a) is replaced by an ABS/OBL patterning in (b). Moreover, whereas the ergative construction contains verbal morphology cross-referencing both arguments, in the antipassive construction only the subject is encoded. The antipassive is moreover marked by a change to the verb stem.

## (48) Adyghe: Ergative vs. antipassive alternation

#### a. *Ergative*:

pŝaŝe-**m** zeč'e-**r**-jə pjəsme-(xe-)**r** Ø-ə-txə-ʁ girl-erg all-abs-add letter-p-abs 3abs-3s.erg-write-pst 'A/The girl wrote all the letters.'

#### b. *Antipassive*:

```
pŝaŝe-r zeč'e-m-jə pjəsme-(xe-)m Ø-txa-ве
girl-ABS all-OBL-ADD letter-PL-OBL 3ABS-write.AP-PST
'A/The girl wrote all the letters.' (Polinsky, 2017)
```

Though there exists many different analyses of antipassives, it is generally taken for granted that the argument structure or transitivity of an antipassive verb differs from that of a regular monotransitive verb in some respect. I review two main families of analyses here.

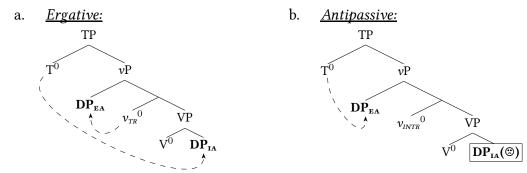
In the first type, the *theme*  $\theta$ -role of a verb is absorbed or otherwise made unavailable; I will refer to this as the " $\theta$ -absorption" analysis. In a particularly influential account, Baker (1988) takes this  $\theta$ -role to be absorbed by the verbal antipassive morpheme itself, which he analyzes as an incorporated nominal.<sup>15</sup>

In the second type of analysis, referred to here as the "intransitive  $v^0$ " analysis, antipassives do not necessarily manipulate the  $\theta$ -grid of a verb—rather, they lack a proper *licensing (e.g. Case-assigning) mechanism* for the internal argument. For both Aldridge (2004) and Coon (to appear), for instance, ergative and antipassive constructions differ in the flavour of  $v^0$  Merged into the structure, as shown in (49). The  $v^0$  found in ergative

<sup>&</sup>lt;sup>15</sup>In a similar vein, Jensen and Johns (1989) argue that the antipassive morpheme realizes a nominalizing head, whose presence along the clausal spine blocks the verb's theme  $\theta$ -role from percolating down to the internal argument.

constructions assigns inherent ERG case to the external argument, thus permitting the internal argument to be licensed by  $T^0$ . However, the  $v^0$  found in antipassive constructions lacks case-assigning capabilities. Thus, the external argument of an antipassive construction ends up licensed by  $T^0$ . Since the internal argument cannot be licensed normally, it is instead optionally realized as an oblique (Aldridge) or pseudo-incorporated into the verb (Coon). This is illustrated in (49) (the dashed lines represent licensing).

# (49) **Different flavours of** $\mathbf{v}^0$



However, this latter analysis is a non-starter for Inuktitut, given that ERG case across Inuit is dependent, not assigned by  $v^0$  (Chapter 4). Furthermore, recall that dependent ERG case assignment is available in both transitive and intransitive contexts—for instance, seen in unaccusative applicative constructions. Therefore, in what follows, I will focus on providing arguments against the  $\theta$ -absorption approach to antipassives.

I will show that ergative and antipassive constructions in Inuktitut are *argument-structurally identical* and therefore involve the same number of  $\theta$ -roles. Therefore, the  $\theta$ -absorption approach to antipassives is not viable for Inuktitut (or Inuit) either. Instead, I will propose that the fundamental difference between ergative and antipassive constructions concerns the *nature* of licensing.

Our point of departure will be the fact that antipassives in Inuit are not limited to monotransitive contexts (e.g. Allen, 1996; Nowak, 1996; Beach, 2011), but may be formed on *any* functional head introducing or otherwise associated with an internal argument. I also make a novel observation, not mentioned in the previous literature on Inuit: Inuktitut has *expletive subjects*, which may also be antipassivized under ECM. Crucially, the existence of this pattern is incompatible with the  $\theta$ -absorption analysis or, more broadly, any analysis of that assumes an argument-structural difference between ergative and antipassive constructions.

# 6.4.2 Antipassives beyond monotransitive contexts

We have already seen that monotransitive verbs alternate between an ergative and an antipassive patterning; this is illustrated again in (50)-(51). In (50a) and (51b), the subject and object are ERG and ABS respectively, with verbal morphology cross-referencing both

<sup>&</sup>lt;sup>16</sup>For expository ease, I will refer to this kind of head as "argument-associated."

arguments. In (50b) and (51b), the subject is ABS, while the object is MOD. Moreover, the verb only cross-references the subject.<sup>17</sup>

## (50) Ergative vs. antipassive alternation in Inuktitut

a. <u>Ergative (ERG-ABS):</u>

nutaraa-p **agualiqisaq** niri**-janga** child-ERG caribou.stew.ABS eat-3s.S/3s.O 'The child ate the caribou stew.'

(NB, AB)

b. Antipassive (ABS-MOD):

nutaraaq niri-<u>Ø</u>-juq agualiqisar-**mik** child.ABS eat-(AP)-3s.S caribou.stew-MOD 'The child ate the caribou stew.'

(NB, AB)

# (51) Ergative vs. antipassive alternation in Inuktitut

a. <u>Ergative (ERG-ABS):</u>

Taiviti-up surak-tanga igalaaq Taiviti-erg break-3s.S/3s.O window.Abs 'David broke the window.'

(NB, AB)

b. <u>Antipassive (ABS-MOD):</u>

Taiviti surak-<u>si</u>-juq igalaar-**mik** Taiviti.ABS break-AP-3s.S window-мор 'David broke the window.'

(NB, AB)

Crucially, this alternation extends beyond monotransitive contexts. The pairs of examples in (52)-(55) below demonstrate that ditransitive (i.e. low applicative), benefactive (i.e. high applicative), causative, and ECM<sup>18</sup> constructions also alternate between ergative (ERG-

#### (i) Verbs with null antipassive morphology

a. kisu-mit sana-Ø-qqau-vit what-mod make-(AP)-REC.PST-INT.2s.S 'What did you make?'

(SB, IQ)

b. niuvi-∅-lauq-tunga uqalimaagar-mik book-(AP)-PST-1S.S book-MOD 'I bought a book.'

(NB, AB)

<sup>&</sup>lt;sup>17</sup>As first mentioned in Chapter 2, some verbs display the relevant case/agreement alternation without overt antipassive morphology, including *niri*- 'eat' given in (50). Some additional examples are given below. It has been suggested that these verbs form a natural class based on argument structure, in that these verbs do not obligatorily require an internal argument. While most analyses assume that these constructions contain a null antipassive variant (e.g. Fortescue, 1984, 1996; Bittner, 1987, 1994), Spreng (2012) argues instead that these verbs do not contain an antipassive head at all. As I note in footnote 29, this idea runs into issues when we consider how the internal arguments of these constructions come to be assigned MOD case. Therefore, I will follow the traditional assumption that these verbs are lexically specified to occur with a null antipassive morpheme.

<sup>&</sup>lt;sup>18</sup>I refer to these verbs as "ECM" following Bittner (1994), mainly for expository reasons, to be clarified below. They are called "restructuring verbs" in Pittman (2009).

ABS) and antipassive (ABS-MOD), often with no discernable effect on the meaning of the sentence. In all of the (a) examples, the relevant internal argument is ABS, while, in all of the (b) examples, the argument is MOD and co-occurs with verbal antipassive morphology. Although the ability to antipassivize these argument-associated heads has been discussed in previous literature on Inuit (e.g. Fortescue, 1984; Bittner, 1994; Allen, 1996; Nowak, 1996; Beach, 2011), this fact has, for the most part, not figured into broader typological or theoretical discussions on antipassives.

## (52) Ergative vs. antipassive on ditransitive verb

# a. <u>Ergative (ERG-ABS):</u>

Taiviti-up tuni-qqau-**janga Kiuru** nalliutijjusiar-mik David-ERG give-REC.PST-3s.S/3s.O Carol.ABS birthday.gift-MOD 'David gave Carol a birthday gift.'

#### b. *Antipassive (ABS-MOD):*

Taiviti tuni-<u>si</u>-qqau-juq Kiuru-**mik** nalliutijjusiar-mik Taiviti.ABS give-AP-REC.PST-3S.S Carol-MOD birthday.gift-MOD 'David gave Carol a birthday gift.'

(NB, AB)

#### (53) Ergative vs. antipassive on high applicative

#### a. <u>Ergative (ERG-ABS):</u>

Jaani-up piruqsiar-taa-ruti-qqau-**janga Miali** Jaani-erg flower-get-APPL-rec.PST-3s.S/3s.O Miali.ABs 'Jaani got Miali flowers.'

#### b. <u>Antipassive (ABS-MOD):</u>

Jaani piruqsiar-taa-rujji-qqau-juq Miali-**mik** Jaani.Abs flower-get-APPL.AP-REC.PST-3s.S Miali-MOD 'Jaani got Miali flowers.'

(NB, PI)

#### (54) Ergative vs. antipassive on causative

#### a. *Ergative* (*ERG-ABS*):

Taiviti-up auk-tit-**tanga sukaq** tii-mut David-ERG melt-CAUS-3s.S/3s.O sugar.ABS tea-ALLAT 'David dissolved the sugar in the tea.'

#### b. *Antipassive (ABS-MOD):*

Taiviti auk-tit-<u>si</u>-juq sukar-**mik** tii-mut David.ABS melt-CAUS-AP-3s.S sugar-MOD tea-ALLAT 'David dissolved the sugar in the tea.'

(NB, AB)

## (55) Ergative vs. antipassive on ECM verb

#### a. <u>Ergative (ERG-ABS):</u>

**Jaani** ani-qu-**jara** Jaani.ABS leave-want-1s.S/3s.O 'I want Jaani to leave.'

#### b. Antipassive (ABS-MOD):

Jaani-**mik** ani-qu-<u>ji</u>-junga Jaani-MOD leave-want-AP-1s.S 'I want Jaani to leave.'

(NB, AB)

The fact that argument-introducing heads may be individually antipassivized predicts the possibility of *antipassive-stacking* within a single verb complex. This is borne out in the examples below. In (56a), both the causee and direct object are MOD-marked, associated with an antipassivized causative morpheme and transitive verb respectively; the same pattern holds in (56b) with an applied argument and an ECM subject.

#### (56) Antipassive-stacking in Inuktitut

a. APs on applicative and verb stem:

Taiviti sura-<u>i</u>-jjujji-qqau-juq Kiuru-**mik** igalaar-**mik**David break-AP-APPL.AP-REC.PST-3s.S Carol-MOD window-MOD
'David broke the window for Carol.' (NB, AB)

b. <u>APs on ECM verb and causative:</u>

Miali ani-tit-<u>si</u>-qu-<u>ji</u>-qqau-juq Jaani-**mik** Piita-**mik** Miali.Abs leave-CAUS-AP-want-AP-REC.PST-3s.S Jaani-MOD Peter-MOD 'Mary wanted Jaani to make Peter leave.' (NB, PI)

Note that, although antipassive-stacking has been observed in a few other languages, it is typically unproductive and limited to specific contexts. In Halkomelem Salish, for instance, antipassive-stacking is associated with a single verb (not two individual argument-associated heads), (57). As noted by Gerdts and Hukari (2000), it is therefore not clear what the outer antipassive morpheme actually contributes, given that the inner antipassive morpheme is sufficient to detransitivize the construction. In contrast, antipassive-stacking in Inuktitut is productive, with each antipassive morpheme affecting a unique argument-associated head.

#### (57) Halkomelem: Antipassive stacking is unproductive

- a. ni?  $q^w$ 'əl-əm ?ə  $t^\theta$ ə sce:ltən AUX bake-AP OBL DET salmon 'He cooked/barbecued the salmon.'
- b. ni?  $k^w$ 'ł-eʔəm-els ?ə  $k^w$ ' ti  $t^\theta$ ə John AUX pour-AP-AP OBL DET tea DET John 'John served some tea.' (Gerdts and Hukari, 2000)

The distribution of antipassives in Inuit is thus clearly much wider than that of canonical antipassives cross-linguistically. At this point, these data are still compatible with the analyses of antipassives based on  $\theta$ -absorption (e.g. Baker, 1988), although they should give us some pause, as it is slightly strange for a language to *introduce* an argument (e.g. via applicativization) only to then demote it. However, I will now present data showing

that expletive subjects (non-thematic arguments) may also be antipassivized in Inuktitut, which is strictly impossible under such accounts.

# 6.4.3 Expletive subjects under ECM

In this section, I demonstrate that antipassivization in Inuktitut is not derived from the absorption or removal of the theme  $\theta$ -role. Evidence comes from the novel observation that expletive subjects (e.g. of weather-predicates and existentials) may be antipassivized under ECM. Crucially, as expletives are *non-thematic*, their ability to be antipassivized should therefore not be possible under the  $\theta$ -role absorption analysis.

#### ECM verbs are truly ECM: Evidence from idioms

As shown earlier, Inuit has a set of affixal "ECM" verbs; throughout, I will illustrate with -qu 'want' and -niraq 'say,' underlined in the examples given.<sup>19</sup> These verbs embed a reduced clause,<sup>20</sup> such that the embedded subject is marked as though it is an object of the matrix verb. In a language like English, infinitival subjects embedded under a matrix ECM verb receive ACC case.

## (58) English ECM construction

I believed **her** to be the winner of the race.

In the Inuktitut examples below, the embedded subject is ABS and cross-referenced by an object clitic.

#### (59) ECM constructions in Inuktitut

a. <u>-qu 'want':</u>

**Jaani** ani-<u>qu</u>-**jara** Jaani.ABS leave-want-1s.S/3s.O 'I want Jaani to leave.'

(NB, AB)

b. <u>-niraq 'say':</u>

Jaani-up ani-<u>nira</u>-qqau-**janga Miali** Jaani-erg leave-say-rec.pst-3s.S/3s.O Miali.Abs 'Jaani said that Mary left.'

(SB, PG)

These are indeed ECM constructions, rather than prolepsis constructions, i.e. the ABS arguments above are not base-generated in the matrix clause. Evidence for this comes from two sentential idioms, to be shown below. First, as discussed by Davies (2005) and Salzmann (2017), proleptic objects in the matrix clause cannot form part of an idiom in the embedded clause. This is illustrated in (60)-(61) with English and Madurese:

<sup>&</sup>lt;sup>19</sup>Beach (2011, p. 110) also lists *-juri/turi* 'believe' as another verb in this class.

<sup>&</sup>lt;sup>20</sup>As noted in footnote 18, Pittman (2009) refers to these verbs as restructuring.

# (60) English: Proleptic objects cannot participate in embedded sentential idioms

- a. Ashley predicted that [**the fur** would fly at the next committee meeting].
- b. #Ashley predicted **about the fur** that [it would fly at the next committee meeting]. (Davies, 2005)

# (61) Madurese: Proleptic objects cannot participate in embedded sentential idioms

- a. Siti ngera bari' [ ja' **nase'** la daddi tajjin ]
  Siti Av.think yesterday COMP rice already become porridge
  'Siti thought yesterday that it was too late to do anything about it.'
  (Lit: 'Siti thought yesterday that the rice had become porridge.')
- b. #Siti ngera **nase'** bari' [ ja' la daddi tajjin ]
  Siti Av.think rice yesterday COMP already become porridge
  'Siti thought about the rice yesterday that it had become porridge.'
  (Davies, 2005)

In the examples above, proleptic objects appearing in the matrix clause do not permit the idiomatic reading otherwise available when the entire idiom is embedded in the complement clause.

Now, consider the Inuktitut idiomatic expressions below. The first expression, in (62a), is regional to speakers of certain South Baffin Inuktitut varieties<sup>21</sup> and expresses the subject's disbelief or shock (akin to English 'X's mind is blown'). The expression in (62b) is also idiomatic, expressing the unlikelihood of an event, similar to the English idiom, 'When Hell freezes over'~'Hell is freezing over'.<sup>22</sup>

#### (62) Idiomatic expressions in Inuktitut

a. tappa-kka nungut-tut up.there-poss.1s/3p.Abs all.gone-3p.S 'I'm totally shocked.'

Lit.: 'My up-theres are all gone.'

(SB, IQ)

#### (i) Idiomatic expression in Inuktitut

tulugait qakuq-sip-patta crows.p.abs white-incp-cond.3p.S 'When Hell freezes over.' *Lit.*: 'Only when the crows turn white.'

(SB, PG)

<sup>&</sup>lt;sup>21</sup>This idiom was known to only two consultants, both hailing from Iqaluit, Nunavut, and was otherwise unfamiliar to all other speakers consulted, including ones raised in other South and Central Baffin communities.

<sup>&</sup>lt;sup>22</sup>The example presented in (62b) is a permutation of the actual saying, which is given in (i) below. The sentence in (62b) comes from an joke between the speaker and her father, to indicate that an otherwise unlikely event is now more likely or impending. Crucially, regardless of the exact syntax of the expression, the idiomatic interpretation remains and is thus suitable for our diagnostic.

b. tulugait qakuq-si-liq-tut
crows.p.abs white-incp-prog-3p.S
'Hell is freezing over.'

Lit.: 'The crows are starting to turn white.'
(SB, PG)

Crucially, in (63), we see that these constructions still retain their idiomatic readings when embedded under an ECM verb such as *-niraq* 'say.'

## (63) Idiomatic expressions embedded under ECM

Jaani-up tappa-ngit nungu-<u>niraq</u>-tangit
Jaani-erg up.there-poss.3s/3p.Abs all.gone-say-3s.S/3p.O

'Jaani said that he was so shocked.'

Lit.: 'Jaani said that his up-theres are all gone.'

#'Jaani said about his up-theres that they're all gone.' (SB, IQ)

b. **tulugait** qakuq-si-lir-<u>niraq</u>-**tangit**crows.p.abs white-INCP-prog-say-3s.S/3p.O

'She said that Hell is freezing over.'

Lit.: 'She said that the crows are starting to turn white.'

#'She said about the crows that they're starting to turn white.' (SB, PG)

I take this pattern as evidence that these constructions truly involve ECM, against a prolepsis alternative.

#### **Expletive constructions**

Whereas the examples above are ergative, recall that matrix ECM verbs may be antipassivized, resulting in MOD case morphology on the embedded subject. This is shown in (64) below.

#### (64) ECM verbs can be antipassivized

a. <u>-qu 'want':</u>
Jaani-**mik** ani-<u>qu</u>-ji]-junga
Jaani-MOD leave-want-AP-1s.S
'I want Jaani to leave.' (NB, AB)

b. <u>-niraq 'say':</u>
Jaani ani-<u>nira-[i]</u>-qqau-juq Miali-**mik**Jaani.ABS leave-say-AP-REC.PST-3s.S Miali-MOD
'Jaani said that Mary left.' (SB, PG)

I now show that embedded expletive subjects in Inuktitut may also be antipassivized under ECM. As noted above, this constitutes an argument against the  $\theta$ -absorption analysis of antipassives, since expletive subjects are non-thematic. There are two expletive constructions that we may examine. In (65a), the expletive is the subject of a weather-predicate,

while in (65b) the expletive is the subject of an existential construction. Both constructions display (*invariant*) 3s subject  $\phi$ -agreement.

## (65) Expletive constructions in Inuktitut

#### a. *Weather-predicate*:

maquk-**tuq** rain-3s.S 'It's raining.'

# b. <u>Existential construction</u>

nutaar-mik ilisaiji-taqaq-**tuq** Nakasu-up Ilinniaving-mi new-mod teacher-exist-3s.S Nakasuk-gen School-loc 'There is a new teacher at Nakasuk School.'

(NB, IG)

Note that, at this point, there are two possible sources for this 3s subject agreement morphology. The first possibility is that this is *default agreement*, surfacing in the absence of a subject. The second possibility is that this morphology cross-references a null expletive pronoun. This latter idea, in turn, commits us to the existence of an EPP-requirement for the canonical matrix subject position, e.g. Spec-TP.<sup>23</sup>

We may differentiate between these alternatives by embedding these constructions under ECM. In such configurations, we find *3s object-referencing morphology*.<sup>24</sup>

# (66) Expletive subjects embedded under ECM verb

#### a. *Weather-predicate*:

maqu-<u>niraq</u>-**tara** rain-say-TR.1s/3s 'I'm saying that it's raining.'

#### b. <u>Existential construction:</u>

Nakasu-up Ilinniaving-mi nutaar-mik ilisaiji-taqa-qu-jara Nakasuk-gen School-loc new-mod teacher-exist-want-1s.S/3s.O 'I want there to be a new teacher at N.S.' (NB, IG)

Crucially, the object-referencing morphology surfacing in (66) cannot be analyzed as default agreement, i.e. the spell-out of a failed  $\phi$ -probe. This is because we have already seen that the inability to Agree results in the absence of object-referencing morphology altogether, not default 3s morphology; this is repeated below as (67). The presence of 3s morphology under ECM must therefore be due to successful  $\phi$ -Agree.

 $<sup>^{23}</sup>$ Or perhaps Spec- $\nu$ P; see Deal (2009) for arguments.

<sup>&</sup>lt;sup>24</sup>Interestingly, the fact that embedded expletive subjects may surface as pronominal object clitics bears on our discussion of pronominal clitics from Chapter 3. Recall that, in Inuktitut, pronominal object clitics may be interpreted as anaphoric definites, but not as E-type pronouns. The data shown here now suggest that, whatever the range of interpretations permitted, it must also include expletive pronouns. I will leave a deeper investigation of this fact for future research.

# (67) Failed $\phi$ -Agree results in absence of $\phi$ -morphology

Taiviti ingmi-nik nagli-gi-juq / [\*-janga]
David.ABS self-MOD love-TR-3S.S -3S.O

'David loves himself.' (NB, AB)

Finally, the data in (68) demonstrate that these expletive subjects may be *antipassivized*, as indicated by the presence of antipassive morphology on the ECM verb.<sup>25</sup> Although Inuktitut lacks overt 3rd person pronouns, we can still deduce that these expletives are nonetheless present. Thus, in (68) I have indicated them with '(pro).' If expletive subjects are generally required to satisfy the EPP, as is standardly assumed, there is no reason why this requirement should be lifted in antipassive constructions.

#### (68) Expletive subjects antipassivized under ECM

# a. <u>Weather-predicate:</u>

(pro) maqu-qu-ji-junga rain-want-AP-1s.S 'I want it to rain.'

#### b. Existential construction:

Jaani *(pro)* nutaar-mik ilisaiji-taqa-<u>nira</u>-i-qqau-juq
Jaani.ABS new-MOD teacher-EXIST-SAY-AP-REC.PST-3S.S
Nakasu-up Ilinniaving-mi
Nakasuk-GEN School-LOC

'Jaani said that there is a new teacher at Nakasuk School.'

(NB, IG)

Again, the fact that Inuktitut permits the antipassivization of expletive subjects is not expected under traditional analyses of antipassives. As expletives are semantically contentless and therefore strictly *non-thematic*, this provides an argument against a  $\theta$ -role absorption analysis of antipassives.<sup>26</sup>

Instead, I suggest that ergative and antipassive constructions reflect complementary *licensing strategies* for an internal argument. It is already known that subjects of structurally reduced embedded clauses often require licensing by a matrix element. We can see this in English, in which non-finite subjects embedded under ECM must raise into the matrix clause and surface with ACC Case. Moreover, it is known that expletive subjects

<sup>&</sup>lt;sup>25</sup>According to Jerry Sadock (p.c.), the ability to antipassivize expletive subjects in ECM constructions may be specific to Inuktitut, as it does not appear to be attested in Kalaallisut. I assume that this follows from the obligatorily narrow scope and non-specific semantic interpretation imposed on мор objects in Kalaallisut, as discussed in Chapters 3 and 4.

 $<sup>^{26}</sup>$  A potential caveat here is that it is not obvious whether weather-predicate subjects are truly expletives, i.e. non-thematic. There is evidence from German that the subject of weather-predicates does not behave on par with other expletive subjects and is thus "quasi-argumental" ( $\theta$ -bearing though non-referential) rather than expletive (e.g. Bennis, 1986; Grewendorf, 1989; Cardinaletti, 1990). However, it is not clear that this extends to expletives in existential constructions. Moreover, the fact that embedded idiomatic subjects in Inuktitut may also be antipassivized further supports the idea that antipassives in Inuktitut do not operate on  $\theta$ -roles.

may be licensed under ECM.

# (69) English ECM construction

- a. I believed **her** to be the winner of the race.
- b. She expects **there** to be a new teacher by tomorrow.

This pattern has been taken as evidence for the existence of the Case Filter (e.g. Vergnaud, 1977; Chomsky, 1981), or some similar licensing requirement As noted above, the traditional Case Filter prevents nominal arguments from appearing in positions where they are inaccessible to certain functional heads with argument-licensing capabilities, for instance  $T^0$  and  $v^0$  (e.g. Chomsky, 2000).

I propose that, in Inuktitut, nominal arguments similarly must be licensed by a functional head. We already saw in §6.3.5 that the inability for a  $\phi$ -probe to target a lower argument may result in ungrammaticality, if that argument ends up being left unlicensed. This was taken to signify that  $\phi$ -Agree in Agr $_o$ 0 serves a licensing function. Additionally, we saw that *antipassivizing* this argument rescues the derivation—suggesting that antipassivization allows an argument to be licensed. These data are repeated below in (70):

#### (70) Defective intervention effect obviated by antipassivization

- a. No licenser for DO:

  \*ukkua piruqsiat niuvi-uti-qqau-jakka ingmi-nik

  DEM.PRON.P.ABS flower.P.ABS buy-APPL-REC.PST-1s.S/3P.O self-MOD

  Intended: 'I bought myself these flowers.' (NB, AB)
- b. <u>Antipassivization of DO:</u>
  niuvi-Ø-uti-qqau-junga **ingmi-nik** ukkuning a piruqsiar-nik
  buy-(AP)-APPL-REC.PST-1s.S 1s-MOD DEM.PRON.P.MOD flower-P.MOD
  'I bought myself these flowers. (NB, AB)

Thus, I conclude that both  $\phi$ -Agree and antipassivization serve licensing functions in Inuktitut. So far, however, I have not specified exactly how antipassivization licenses an argument—though, given that it correlates with MOD case morphology on the internal argument, it is clearly related to case assignment. This idea is fleshed out below.

# 6.4.4 Proposal: An optionally Merging Case-assigner

We have now seen that ergative and antipassive constructions in Inuktitut appear to alternate, with no obvious interpretive differences. Any internal argument that may be ABS (and clitic doubled) may also be MOD (and associated with verbal antipassive morphology)—even non-thematic nominals such as expletives.

I now propose that this alternation may be derived from the presence vs. absence of a *freely Merging Case-assigning head* in the extended *v*P-domain, referred to here as

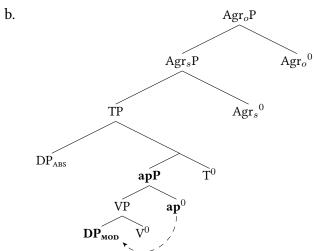
"ap<sup>0</sup>" (for "antipassive"); this head is exponed as antipassive morphology on the verb. When present, ap<sup>0</sup> is always Merged directly above an argument-associated head and assigns structural Case (realized as Mod) to the argument associated with that head. This approach builds on previous analyses by Bok-Bennema (1991) and Spreng (2006, 2012), who take Mod case to be syntactically analogous to structural ACC Case assignment by  $v^0$ . However, I will also identify some crucial differences to the present proposal later in this section.

Structural Mod Case assignment to the internal argument renders it inaccessible to  $\phi$ -Agree processes, on par with lexical Mod case on anaphors, as expected given Inuktitut's case-discriminating property. Moreover, because dependent ERG case assignment is contingent on successful  $\phi$ -Agree of Agr $_o$ 0 in the CP-domain with the internal argument (which, in Inuktitut, triggers clitic doubling), the assignment of Mod Case therefore also bleeds ERG case assignment. This is illustrated in (71).

#### (71) Derivation of antipassive construction

a. Taiviti surak-<u>si</u>-juq igalaar-**mik** Taiviti.ABS break-AP-3s.S window-мор 'David broke the window.'

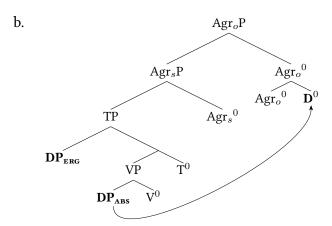
(NB, AB)



In contrast, when ap<sup>0</sup> is not Merged, the internal argument may be targeted by  $\phi$ -Agree and surfaces as ABS, (72).

#### (72) **Derivation of ergative construction**

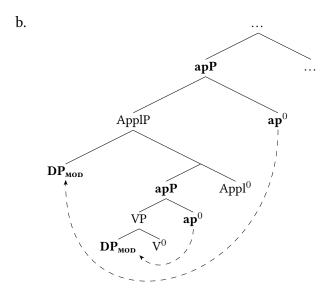
a. Taiviti-up surak-tanga igalaaq
Taiviti-erg break-3s.S/3s.O window.ABS
'David broke the window.' (NB, AB)



The idea that ergative and antipassive constructions ultimately differ in only one major respect—the absence or presence of a structural Case assigner, ap<sup>0</sup>—captures the free variation between the two constructions, as well as the fact that this alternation is not tied to any distinctions in  $\theta$ -role assignment. The freedom with which ap<sup>0</sup> may be Merged also accounts for the possibility of antipassive-stacking in Inuit. As schematized below in (73a), antipassive-stacking is derived straightforwardly by iteratively Merging ap<sup>0</sup> above each argument-associated head. However, it is also possible to only Merge ap<sup>0</sup> over one of these two heads, (73b).

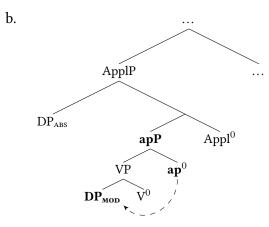
#### (73) Iteratively Merging apP

a. Taiviti surak-<u>si-jjujji</u>-qqau-juq Kiuru-**mik** igalaar-**mik**Taiviti.ABS break-AP-APPL.AP-REC.PST-3s.S Kiuru-MOD window-MOD
'David broke the window for Carol.' (NB, AB)



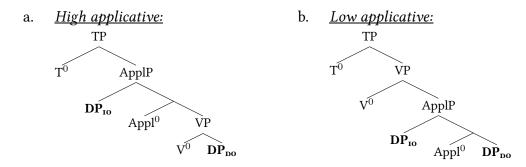
#### (74) Merging apP once

a. Taiviti-up surak-<u>si</u>-jjuti-qqau-janga Kiuru igalaar-**mik**Taiviti-erg break-AP-APPL-REC.PST-3s.S/3s.O Kiuru.ABS window-MOD
'David broke the window for Carol.' (NB, AB)



This generalization also captures a contrast between high and low applicatives. Whereas high applicative constructions relate an applied argument to an event, low applicatives encode transfer of possession from the applied argument to the direct object (Pylkkänen, 2002, 2008). The structures for high and low applicatives I am assuming are repeated in (75) (from Chapter 2):

#### (75) High and low applicative structures



This structural difference correctly predicts that antipassive-stacking in Inuktitut is possible in high applicative constructions, as seen above in (73). It also predicts that antipassive-stacking should be impossible in low applicative constructions. The impossibility of multiple antipassive morphemes in low applicative constructions comes from the fact that both internal arguments are arguments of a single head, Appl<sup>0</sup>. As a result, it is impossible to project apP separately over each internal argument.<sup>27</sup> Instead, ap<sup>0</sup> is only able to target the indirect object, the higher of the two internal arguments.<sup>28</sup> This is shown in

 $<sup>^{27}</sup>$ The only way for the lower argument to also be targeted by ap $^0$  would be if ap $^0$  could somehow Merge to V' or V $^0$  (and not project). I assume that this is ruled out by standard conditions on structure building.

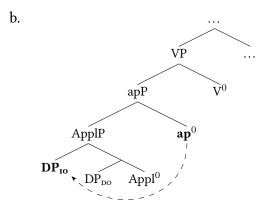
 $<sup>^{28}</sup>$  This entails that the direct object comes to bear MOD case from another source. In the Appendix, I argue that the lower internal argument is countercyclically assigned MOD case as a Last Resort, precisely because it cannot receive structural Case from ap  $^{0}$ .

(76) below.

#### (76) Low applicatives do not permit antipassive stacking

a. Taiviti tuni-<u>si</u>-qqau-juq Kiuru-**mik** nalliutijjusiar-mik Taiviti.ABS give-AP-REC.PST-3S.S Carol-MOD birthday.gift-MOD 'David gave Carol a birthday gift.'

(NB, AB)



Finally, it is worth noting that the distribution of this freely Merging ap<sup>0</sup> is constrained to a particular range of projections along the syntactic structure. More precisely, I suggest that apP may only Merge within the extended  $\nu$ P-domain. This excludes external arguments from being antipassivized, which I take to be base-generated in Spec-VoiceP (Kratzer, 1996), outside of the domain of functional heads associated with internal arguments.

On the other hand, this does not prevent antipassives from being formed over unaccusative verbs, especially in light of cross-linguistic evidence suggesting that unaccusative verbs contain  $v^0$  (e.g. Legate, 2003; Deal, 2009). Interestingly, Bittner (1988) presents an example from Kalaallisut suggesting that unaccusative verbs may in fact be antipassivized to yield "impersonal antipassives." In this construction, presented in (77), the theme does not raise to subject position, but rather remains in situ as a Mod-marked internal argument. The canonical subject position is presumably filled by a null expletive (yielding 3s agreement morphology on the verb). The impersonal antipassive alternates with the more canonical unaccusative sentence, in which the internal argument raises to subject position.

#### (77) Kalaallisut: Unaccusative verbs may be antipassivized

qilalukka-**nik** pui-<u>si</u>-vuq whale-P.MOD float-AP-IND.3s.S 'There floated whales (on the surface of the sea).' (Bittner, 1988)

This alternation is can be straightforwardly accounted for under the present analysis, as it is structurally parallel to the ergative-antipassive alternations shown above. In (77), ap<sup>0</sup> assigns MOD Case to the internal argument, thus rendering it inaccessible for further Agree-based operations such as A-movement. That being said, it is not clear how productive this construction really is. Bittner and Hale (1996b, fn. 31) claim that other Kalaallisut

consultants rejected the impersonal antipassive given above, and I was similarly unable to replicate it with my Inuktitut consultants.

I tentatively suggest that, although ap<sup>0</sup> is *in principle* able to be Merged over unaccusative verbs, this type of construction is often ruled out by speakers for independent reasons. Specifically, it is possible that most speakers simply do not permit expletive subjects in unaccusative contexts (similarly, in languages like English, only *there*-expletives are permitted in unaccusative contexts, but not *it*-expletives). According to this approach, unaccusative constructions containing an apP-layer are derivable in the syntax, but are later filtered out by the grammar as an EPP violation.

The idea that antipassive constructions in Inuktitut involve structural Case assignment has properties in common with proposals by Bok-Bennema (1991) and Spreng (2006, 2012), who take Mod Case on antipassive objects to be assigned by  $v^0$  (such that Mod Case is equivalent to ACC Case in nominative-accusative languages). If we were to equate the present approach to these previous proposals, we might simply want to take ap<sup>0</sup> to be a variant of  $v^0$ .

However, the data shown throughout this section necessitate a treatment in which ap<sup>0</sup> may be Merged *iteratively*. Recall that the antipassivization of applicatives and causatives, for instance, results in *additional antipassive morphology*, suggesting the presence of an additional head. This flexibility is not plausible with  $v^0$ , whose position in the syntactic structure is generally fixed and a matter of argument structure.<sup>29</sup> In contrast, a dedicated antipassive head that may Merged anywhere along the extended vP-domain does permit this flexibility.

### 6.4.5 Defective intervention in antipassives

In §6.3, I showed that Inuktitut displays defective intervention effects. As shown again in (78), these effects appear in ditransitive constructions, in which the medial argument (e.g. the higher of two internal arguments) is marked with MOD case morphology. Following Preminger (2011, 2014), I analyzed the ungrammaticality of (78) as due to failed  $\phi$ -Agree. According to Preminger's system, a  $\phi$ -probe aborts as soon as it encounters a nominal in its search domain bearing a morphological case that it may not access.

In the system developed here, however, a Last Resort-style analysis of this construction is difficult to implement. Assuming that each clause comes equipped with two  $\phi$ -probes, there is no way to prevent the internal argument from being targeted, such that Last Resort Mod case assignment could be activated. Therefore, I continue to assume, following the rest of the Inuit literature, that these verbs simply take a null antipassive allomorph.

<sup>&</sup>lt;sup>29</sup>Additionally, recall from footnote 17 that Spreng (2012) argues against the idea that certain verbs in Inuktitut take a null antipassive morpheme, as repeated below. Spreng proposes instead that these constructions involve a *Last Resort* licensing mechanism, akin to what I propose in the Appendix of this chapter.

#### (78) Defective intervention with MOD argument

\*ukkua piruqsiat niuvi-uti-qqau-jakka ingmi-nik

DEM.PRON.P.ABS flower.P.ABS buy-APPL-REC.PST-1S.S/3P.O self-MOD

Intended: 'I bought myself these flowers.' (NB, AB)

I now demonstrate that similar defective intervention effects are also visible in antipassive constructions. Although ap<sup>0</sup> is *freely* Merged above any given argument-associated head, certain derivations that do not contain ap<sup>0</sup> end up systematically ruled out by the Case Filter. As shown below in (79), in ditransitive (trivalent) constructions, it is impossible to antipassivize a higher head without also antipassivizing a lower head.<sup>30</sup> This has been noted in Beach (2011), who generalizes that argument-associated heads only attach to intransitive (or antipassive) verb stems.

Thus, according to the present analysis, the ungrammaticality of (79c) arises because the higher Mod-marked internal argument (the ECM subject) prevents the  $\phi$ -probe in Agr $_o{}^0$  from targeting the lower internal argument (the direct object). However, this is a non-issue for (79a-b), in which the lower internal argument is independently licensed via antipassivization.

#### (79) Defective intervention in antipassives

- a. <u>Both ECM verb and embedded verb antipassivized:</u>

  Taiviti-mik surak-si-qu-jij-junga igalaar-mik

  David-MOD break-AP-want-AP-1s.S window-MOD

  'I want David to break the window.'
- b. <u>Only embedded verb antipassivized:</u> **Taiviti** surak-**si**-qu-jara **igalaar-mik**David.ABS break-AP-want-1s.S/3s.O window-MOD

  'I want David to break the window.'
- \* Taiviti-mik sura-qu-ji-jara igalaaq
  David-MOD break-AP-want-AP-1s.S/3s.O window.ABs
  Intended: 'I want David to break the window.' (NB, AB)

The generalization noted above is actually broader than previously stated, as it extends beyond verb stems. For example, in configurations with stacked argument-associated

<sup>&</sup>lt;sup>30</sup>However, as shown by both Bittner (1994) for Kalaallisut and Pittman (2009) for North Baffin Inuktitut, ECM constructions in Inuit actually come in two case frames, differing in how the arguments in the embedded clause are case-marked. In addition to the constructions discussed here, Kalaallisut and North Baffin Inuktitut speakers additionally permit the subject of an embedded transitive verb to be case-marked with ALLAT case (-*mut*), as shown below (note, my own preliminary fieldwork on this construction suggests that this ALLAT-case pattern is not available for speakers from the South Baffin region). In these constructions, the embedded direct object may surface as ABS, in apparent violation of my assertion that the lowest argument of a ditransitive must be Mod. Pending a more in-depth investigation, I will set aside this construction here.

heads, the lower one must also be antipassivized.

#### (80) Defective intervention in antipassives: applicative under ECM

- a. <u>Both ECM verb and Appl<sup>0</sup> antipassivized:</u> niuvi-u**jji**-qu-jil-qqau-junga buy-APPL.AP-want-AP-REC.PST-1s.S/3s.O 'I want him to buy her something.'
- b. <u>Only ECM verb antipassivized:</u>

  \*niuvi-<u>uti</u>-qu-jij-qqau-jara

  buy-APPL-want-AP-REC.PST-1s.S/3s.O

  Intended: 'I want him to buy her something.' (NB, AB)

Note that it is possible for some speakers to not antipassivize either head (though for other speakers this is ungrammatical). An illustration of this is given in (81). In this example, the causee is ABS and is clitic-doubled, while the lower applied argument is marked with MOD case morphology, even though there is ostensibly no apP-layer above ApplP. This will be further discussed in the Appendix.

#### (81) MOD on applied argument without antipassive morphology

Miali **Jaani-mit** pirusia-nit niuviq-ruti-tit-tara
Miali.ABS Jaani-MOD flower-MOD buy-APPL-CAUS-TR.1S/3S
'I'm making Miali buy Jaani flowers.' (NB, IG)

Altogether, these patterns evoke the *overgeneration and filter* logic to syntactic transformations proposed by (Perlmutter, 1971; Chomsky and Lasnik, 1977). In this approach, the grammar generates more derivations than which actually surface, because a subset of those are then ruled out by various filters and constraints. In Inuktitut, whenever an argument-associated head is Merged into the structure, the next step may involve either Merging ap<sup>0</sup> or continuing to build the clausal spine. Since Merge proceeds from bottom-up, and given the high locus of  $\phi$ -Agree, it is impossible to ascertain at each step whether the choice to Merge or not Merge ap<sup>0</sup> will end up generating a grammatical structure. However, if a derivation ultimately contains an unlicensed argument, the Case Filter will rule the sentence out.

To sum up, I argued in this section that Inuktitut ergative and antipassive alternations differ structurally in one respect: namely, the absence or presence of a freely-Merging Case assigner, ap $^0$ . Whether ap $^0$  is Merged indirectly affects the case and  $\phi$ -Agree properties of the entire clause. When ap $^0$  is present, it assigns structural Mod Case to the internal argument. This blocks  $\phi$ -Agree of Agr $_0$ 0, which, in turn, bleeds dependent erg case assignment to the external argument. In contrast, when ap $^0$  is not Merged, the internal argument may be licensed by Agr $_0$ 0. Clitic doubling (in Inuktitut) is triggered, which then feeds dependent erg case assignment. Finally, I also showed in this section that Mod-marked antipassivized objects behave the same way as their Mod-marked anaphoric

counterparts, in that both cause a  $\phi$ -probe to abort. In antipassive constructions, this may also lead to defective intervention effects, when failure to Agree leaves an argument unlicensed at the end of the derivation.

# 6.5 Extension: Antipassive morphology and the Anaphor Agreement Effect

In the final section of this chapter, I turn to an interaction between antipassive morphology and the Anaphor Agreement Effect. In particular, I demonstrate that verbal antipassive morphology is blocked when the argument associated with the antipassivized head is anaphoric (i.e. marked with lexical MOD case). While this has been noticed in the previous literature, it has generally been taken to be the result of a detransitivizing reflexivization process (e.g. Marantz, 1984; Bok-Bennema, 1991; Woolford, 1999).

However, I demonstrate that, at least in Inuktitut, anaphoric constructions do not involve detransitivization. Instead, I argue that the loss of antipassive morphology in anaphoric contexts reflects another case of *failed Agree*—between the Case-assigning head ap<sup>0</sup> and the anaphoric argument. Whether antipassive morphology is spelled-out or null is a matter of contextual allomorphy, conditioned by whether Agree succeeds or fails. Support for this comes from parallels with the Bantu language Zulu, which displays the same Agree-based alternation on a similar argument-licensing head (Halpert, 2012, 2015b).

### 6.5.1 Alternations in antipassive morphology

Recall from §6.3 that the presence of lexical MOD case on anaphors prevents them from being successfully targeted by  $\phi$ -Agree. As repeated in (82), this results in failed Agree, which in Inuktitut is instantiated as the loss of object-referencing morphology altogether.

#### (82) Object-referencing morphology bled by мор anaphor

a. <u>S/O morphology with non-anaphoric object:</u>
Taiviti-up **Kiuru** nagli-gi-janga
David-ERG Carol.ABS love-TR-3S.S/3S.O
'David loves Carol.'

b. <u>Only S-morphology with anaphoric object:</u>

Taiviti ingmi-**nik** nagli-<u>gi</u>-<u>juq</u> David.ABS self-MOD love-TR-3S.S 'David loves himself.'

(NB, AB)

I now demonstrate that verbal antipassive morphology is similarly impossible in anaphoric contexts. This was not evident in §6.3, which primarily featured transitivized constructions that may not undergo antipassivization. As shown in the pairs of examples below, however, we find that this pattern restriction holds for all environments that do in princi-

ple permit an antipassive morpheme. In (83), for instance, it is not possible for the monotransitive verb *kapi*- 'stab/inject' to appear with antipassive morphology if the internal argument is an anaphor.

#### (83) Antipassive alternation on verb stem

#### a. <u>Antipassive object:</u>

luuktaaq kapi-**si**-juq kapuuti-mut **Jaani-mik** doctor.ABS stab-AP-3s.S needle-all Jaani-MOD 'The doctor injected Jaani with a needle.'

#### b. Anaphoric object:

luuktaaq kapi- | juq kapuuti-mut **ingmi-nik** doctor. ABS stab-3s. S needle-all self-MOD 'The doctor injected herself with a needle.'

(NB, AB)

The examples in (84)-(86) additionally demonstrate that the pattern above generalizes to applicative, causative, and ECM constructions. It is impossible for any of these suffixes to co-occur with verbal antipassive morphology.

#### (84) Antipassive alternation on applicative

#### a. Antipassive object:

Jaani piruqsia-taa-ru**jji**-qqau-juq **Miali-mik** Jaani.ABS flower-get-APPL.AP-REC.PST-3S.S Miali-MOD 'Jaani got Mary flowers.'

(NB, PI)

#### b. Anaphoric object:

ingmi-nik piruqsiaq-taa-ruti. Ø-qqau-junga self-mod flower-get-APPL-REC.PST-1s.S 'I got myself flowers.'

(NB, PI)

#### (85) Antipassive alternation on causative

#### a. *Antipassive object:*

ani-tit-**si**-qqau-junga **anguti-mik** leave-CAUS-AP-REC.PST-1S.S man-MOD 'I made the man leave.'

#### b. <u>Anaphoric object:</u>

Jaani **ingmi-nik** ani-tit-Ø-tuq Jaani.ABS self-MOD leave-CAUS-3S.S 'Jaani made himself leave.'

(SB, PG)

#### (86) Antipassive alternation on ECM verb

#### a. Antipassive object:

Jaani ani-nira-i-qqau-juq **Miali-mik** Jaani.Abs leave-say-AP-REC.PST-3s.S Mary-MOD 'Jaani said that Mary left.'

#### b. Anaphoric object:

Jaani ani-**nira**-Ø-qqau-juq **ingmi-nik**Jaani.ABS leave-say-REC.PST-3S.S self-MOD

'Jaani<sub>i</sub> said that he<sub>i</sub> left.' (SB, PG)

This is not a general distributional restriction preventing anaphors from surfacing with antipassive morphology wholesale. Rather, the effect hinges on the position of the anaphor relative to ap $^0$ , the head hosting antipassive morphology. In (87), we see that an anaphor inside a complex DP does not block antipassive morphology on the verb. Based on this, we may generalize that the blocking effect is triggered by an anaphor that is *maximally structurally local* to ap $^0$ , i.e. would be targeted by ap $^0$  for Agree.

#### (87) AP morpheme if anaphor is inside larger constituent

Carol nani-**si**-qqau-juq [ajjinnguar-tuqar-**mik** ingmi-ni-nnguar-**mik**]
Carol.ABS find-AP-REC.PST-3S.S picture-old-MOD self-MOD-fake-MOD
'Carol found an old picture of herself.' (NB, AB)

This is further corroborated by the contrast below. As shown by Carrier (2016), Inuktitut has both Double Object Constructions (DOCs) and Prepositional Dative Constructions (PDCs). In DOCs, the (MOD-marked) indirect object c-commands the direct object (also MOD), while in the PDC, the (MOD) direct object c-commands the (ALLAT-marked) indirect object.<sup>31</sup> In both pairs of examples in (88)-(89), the anaphor is in indirect object position. Crucially, verbal antipassive morphology is blocked only in the DOC given in (88b), but is available on the verb in the PDC, (89b).

#### (88) DOC (IO > DO): IO anaphor may not co-occur with AP morpheme

#### a. *Antipassive object:*

Jaani-mik pikkaujjusiar-mik tuni-si-qqau-junga Jaani-mod award-mod give-Ap-rec.pst-1s.S 'I gave Jaani an award.'

#### b. *Anaphoric object:*

**ingmi-nik** tuni-Ø-qqau-junga pikkaujjusiar-mik self-мор give-rec.psт-1s.S award-мор 'I gave myself an award.'

<sup>&</sup>lt;sup>31</sup>This is shown by Carrier (2016) using a variety of well-known tests. For instance, whereas a quantificational IO may bind a variable in DO position in DOCs, the PDC requires the opposite binding configuration (cf. Barss and Lasnik, 1986; Larson, 1990). Similarly, DOCs are subject to the Oehrle effect, while PDCs do not (Oehrle, 1976).

#### (89) PDC (DO > IO): IO anaphor may co-occur with AP morpheme

#### a. Antipassive object:

Taiviti tuni-**si**-qqau-juq **pikkaujjusiar-mik** Carol-mut Taiviti.ABS give-AP-REC.PST-3S.S award-MOD Carol-ALLAT 'Taiviti gave an award to Carol.'

#### b. Anaphoric object:

ingmi-nut=tauq **pikkaujjusiar-mik** Taiviti tuni-**si**-qqau-juq self-allat=also award-mod Taiviti.Abs give-Ap-rec.pst-3s.S 'Taiviti also gave an award to himself.' (NB, AB)

This contrast follows under standard locality conditions on Agree. If ap<sup>0</sup> targets the closest viable goal in its c-command domain, then the lack of interaction between ap<sup>0</sup> and the anaphor in (89) stems from the fact that the anaphor in indirect object position is structurally lower than the direct object, the true goal for ap<sup>0</sup>. Again, the generalization we find is that the presence of an anaphor *in a particular argument position* blocks the presence of antipassive morphology *associated with that position*.

This set of patterns has been noticed in previous literature, although it has traditionally been taken to be a matter of detransitivization (e.g. Marantz, 1984; Bok-Bennema, 1991) (see also Reinhart and Reuland 1993 and Reinhart and Siloni 2005 for a broader cross-linguistic discussion in the same vein). Under such an approach, reflexive constructions are intransitive due to the demotion or suppression of the relevant internal argument. Extending this view to our analysis of antipassives, we might want to say that ap<sup>0</sup> is simply never Merged in such constructions to begin with.

However, below, I will present some arguments against the idea that reflexivization in Inuktitut involves detransitivization,<sup>32</sup> thus casting doubt on that particular explanation for the loss of antipassive morphology in anaphoric contexts. This, in turn, will help set the stage for an alternative analysis based on failed Agree and contextual allomorphy, building on Halpert (2012, 2015b).

#### 6.5.2 Inuktitut reflexives are not detransitivized

In §6.3, I argued that lexical MOD case on Inuktitut anaphors allows the language to bypass the Anaphor Agreement Effect. In fact, the idea that Inuit is subject to the AAE is not novel to this thesis. However, the particular implementation presented here departs radically from the previous literature.

The inability for Inuit anaphors to be cross-referenced by  $\phi$ -agreement morphology—again, based on data from Kalaallisut—been generally taken as the result of a valency-reducing reflexivization process (Sadock, 1980; Fortescue, 1984; Marantz, 1984; Bok-Bennema, 1991; Nowak, 1996). As shown in (90), in Kalaallisut the anaphoric nominal is not necessary to form a reflexive construction. Reflexive predicates may be formed simply by using

<sup>&</sup>lt;sup>32</sup>As I will discuss, there seems to be cross-dialectal variation across Inuit on this topic.

an intransitive variant of the verb (Kleinschmidt, 1851; Sadock, 1980; Marantz, 1984). Note moreover that, while the verb in (90a) may be plausibly analyzed as inherently reflexive, this is difficult to extend to (90b). This detransitivized pattern has been characterized as an instance of the AAE by Woolford (1999) (see also Tucker (2011), Sundaresan (2016)).

#### (90) Kalaallisut: Reflexive predicates are intransitive

a. asap-puq wash-IND.3s.S 'He washed himself.'

(Bok-Bennema, 1991)

b. piniartuq tuqup-puq hunter.ABS kill-3s.S 'The hunter killed himself.'33

(Marantz, 1984)

In Kalaallisut, the anaphor may surface overtly, in which case it takes allat case rather than the MOD case seen in Inuktitut.

#### (91) Kalaallisut: Reflexive constructions may permit overt anaphor

angut **immi-nut** taku-vuq man.abs self-allat see-IND.3s.S 'The man sees himself.'

(Bok-Bennema, 1991)

As shown by Nagai (2006), this pattern extends to other Inuit varieties beyond Kalaallisut. In the varieties of North Alaskan Iñupiaq, reflexivization may similarly be achieved by only using an intransitive variant of the verb, (92). The fact that the anaphor is optional is additionally explicitly stated in the passage from Nagai (2006, p. 122) given below.

"The intransitive versions of patientive bases<sup>34</sup> have reflexive meanings by themselves, so oblique pronouns are not necessary for reflexive meaning with patientive bases. But oblique cases, in this case modalis or terminalis [allative], may be used to emphasize the reflexive meaning."

#### (92) Iñupiaq: Reflexive constructions do not require overt anaphor

agnaq tuqut-tuq (iŋmi-ñik / iŋmi-ñun) woman.ABS kill-3s.S self-MOD self-ALLAT 'The woman killed herself.'

(Nagai, 2006)

Taking Nagai's observation seriously, we may conclude that, in Kalaallisut and Iñupiaq, overt anaphors are *adjuncts*. However, they themselves do not play any part in reflexivizing the predicate. Following Reinhart and Siloni (2005), I suggest that reflexivization in Kalaallisut and Iñupiaq takes place via a  $\theta$ -bundling operation, as in (93). This opera-

<sup>&</sup>lt;sup>33</sup>According to Marantz (1984), this sentence can also mean, 'The hunter was killed.'

<sup>&</sup>lt;sup>34</sup>The term "patientive base" refers to verbs which take an overt antipassive morpheme, as opposed to the null variant.

tion outputs a complex external argument  $\theta$ -role, from two  $\theta$ -roles. Under this approach, reflexivized predicates are essentially unergative verbs.

# (93) Reflexivization bundling: $[\theta_i] [\theta_i] \rightarrow [\theta_i - \theta_i]$ , where $\theta_i$ is an external $\theta$ -role. (Reinhart and Siloni, 2005)

Although I leave a full study of Inuit reflexives for future work, it is, these Kalaallisut and Iñupiaq data are important for our discussion of Inuktitut, because Inuktitut crucially does not behave like these other Inuit varieties, casting doubt on the idea that Inuktitut reflexives are formed in a comparable way.

As discussed by Michael and Spreng (2014) and replicated here, Inuktitut does not permit anaphors to be suppressed in reflexive constructions. This is shown with a variety of verbs in (94)-(95). In (94), the intransitive variant of the causative/anticausative verb *anniq*- 'hurt' only permits a non-intentional reading, not a reflexive one. A similar effect is found in (95) with the intransitive form of the (normally transitive) verb *kapi*- 'stab,' for which the non-intentional reading is extremely degraded. Both verbs require an overt anaphor in order for the reflexive reading to be expressed, as indicated by the (b) examples.

#### (94) Inuktitut reflexivization requires overt anaphors

a. anniq-tunga hurt-1s.S 'I'm hurt.'

(SB, Michael and Spreng 2014)

b. **ingmi-nik** anniq-tunga self-MOD hurt-INTR.1s 'I hurt myself.'

(NB, AB)

#### (95) Inuktitut reflexivization requires overt anaphors

a. \*?kapi-junga

stab-1s.S

Possibly understood as: 'I stabbed myself accidentally.'

Authors' comment: "(95b), if at all possible, has a reading as if falling on a knife." (SB, Michael and Spreng 2014)

b. **ingmi-nik** kapi-junga kapuuti-mut self-MOD stab-INTR.1s needle-ALLAT 'I injected myself with a needle.'

(NB, AB)

A detransitivization-based account of reflexives thus cannot readily account for the obligatoriness of the anaphor in Inuktitut. A possible explanation for this cross-dialectal contrast is that Inuktitut employs a different reflexivization strategy. Instead of a bundling operation along the lines of Reinhart and Siloni (2005), perhaps Inuktitut forms reflexives via the *syntactic binding* of an anaphor in argument position.

Again, although I leave a more detailed analysis for future research, these facts estab-

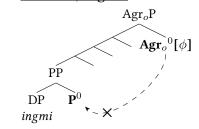
lish that the loss of antipassive morphology in anaphoric contexts in Inuktitut *cannot be reduced to detransitivization*.

#### 6.5.3 Failed Agree and contextual allomorphy

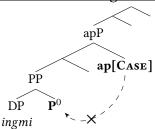
Based on the previous discussion, I argue that the loss of antipassive morphology reflects *failed Agree*, akin to our analysis of the loss of object-referencing morphology from §6.3. Because Inuktitut is case-discriminating, and because anaphors are marked with lexical MOD case, the Case-assigning probe in ap<sup>0</sup> cannot successfully target a local anaphor in its c-command domain. The parallel derivations of blocked object-referencing morphology and blocked antipassive morphology are given in (96).<sup>35</sup>

#### (96) Failed Agree in two domains

#### a. Blocked $\phi$ -Agree:



#### b. <u>Blocked Case assignment:</u>



In other words, the exponence of ap<sup>0</sup> is allomorphically conditioned by the outcome of Agree. If it succeeds in finding a suitable goal, then it is spelled out as antipassive morphology. However, if it fails to find an argument to license, such as when its closest goal already bears case, then it is spelled out as  $\emptyset$ . This is restated in the rule below:

(97) **Spell-out rule for ap**<sup>0</sup> ap<sup>0</sup> 
$$\Leftrightarrow \{-si/-ji/-ti/-i/...\}$$
 if Agree is successful. Otherwise,  $\varnothing$ .

The present analysis of Inuktitut antipassive morphology is largely inspired by a similar analysis found in Halpert (2012, 2015b), on the Zulu verbal morphology. As we will see below, Zulu displays a strikingly similar pattern to the one shown here.

# 6.5.4 A cross-linguistic parallel: The Zulu conjoint/disjoint distinction

Verbs in Zulu often alternate between what is called the *conjoint* form and the *disjoint* form, as reflected by the absence or presence of a morpheme *ya*-. These forms are given

 $<sup>^{35}</sup>$ It is worth noting that, because apP is freely-Merged according to the analysis in §6.4, the antipassiveless anaphoric constructions in Inuktitut are actually ambiguous between two possible derivations. In the other derivation, not shown here, ap $^0$  is simply not present to begin with. The probe that interacts with the anaphor in that case is the  $\phi$ -probe in Agr $^0$ .

in (98) below.

#### (98) Zulu: Conjoint/disjoint alternation

a. Conjoint:

ku-Ø-pheka uSipho 17s-cook AUG.1Sipho 'Sipho is cooking.'

b. Disjoint:

uSipho u-**ya**-pheka AUG.1Sipho 1s-YA-cook 'Sipho is cooking.'

(Halpert, 2012)

It has been noted that whether the verb surfaces with the conjoint or the disjoint form may be determined based on the presence or absence of vP-internal postverbal material (van der Spuy, 1993; Buell, 2005; Halpert, 2012, 2015b). This has already been shown above in (98), in which the presence of a postverbal subject uSipho triggers the conjoint form, while a preverbal subject yields the disjoint form. This pattern is further confirmed in the pairs of examples in (99)-(100). In (99a-b), we see that dislocating the object of a transitive verb triggers the disjoint form. However, the dislocation of an object in a ditransitive construction still requires the conjoint form, since the verb contains a second argument, (99c). Similarly, (100) demonstrates that weather-predicates, which do not contain internal arguments at all, obligatorily take the disjoint form.

#### (99) Zulu: Dislocated objects

- a. <u>Baseline transitive verb → conjoint:</u>
  uSipho u-[Ø]-pheka iqanda
  Aug.1Sipho 1s-cook Aug.5egg
  'Sipho is cooking the egg.'
- b. <u>Transitive verb  $\rightarrow$  disjoint:</u>

**iqanda** uSipho u-**ya**-li-pheka Aug.5egg Aug.1Sipho 1s-YA-5o-cook 'As for the egg, Sipho is cooking it.'

c. <u>Ditransitive verb  $\rightarrow$  conjoint:</u>

uMfundo uSipho u-∅-m-phekela iqanda Aug.1Mfundo Aug.1Sipho 1s-1o-cook.APPL Aug.5egg 'As for Mfundo, Sipho is cooking him an egg.'

(Halpert, 2012)

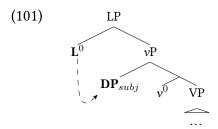
#### (100) Zulu: Weather-predicate

a. <u>Conjoint impossible:</u>

\*ku-Ø-banda 17s-be.cold Intended: 'It's cold.' b. <u>Disjoint required:</u> ku-**ya**-banda 17s-ya-be.cold 'It's cold.'

(Halpert, 2012)

To account for this alternation, Halpert (2012, 2015b) argues that the conjoint and disjoint forms reflect exponents of the same licensing head,  $L^0$ , found directly above  $\nu P$ , (101). If  $L^0$  successfully Agrees with a goal, it is spelled out as zero, understood as the conjoint form. In contrast, if  $L^0$  fails to find a suitable goal (i.e. if there are no  $\nu P$ -internal arguments), then  $L^0$  is spelled out as the disjoint form ya-.



As mentioned above, the profile of the conjoint/disjoint alternation in Zulu is strikingly similar to that of antipassive vs. anaphoric constructions in Inuktitut. Both languages have a licensing head ( $L^0$  in Zulu and ap $^0$  in Inuktitut) found in the extended vP-domain, whose exponence is determined by whether Agree takes place successfully. Note that the exponents of successful vs. failed Agree in Inuktitut and Zulu differ—in Inuktitut, failed Agree results in the loss of antipassive morphology, while in Zulu, it is *successful* Agree that is realized as zero. However, I assume that this is simply a matter of language-specific morphology.

To sum up this section briefly, I showed that, as an extension of the analyses of anaphoric and antipassive constructions found in §6.3-6.4, the presence of an anaphoric argument may block antipassive morphology on the verb. The exact distribution of the pattern revealed that this effect is due to failed Agree relation between ap<sup>0</sup> the anaphor, which bears lexical MOD case. Thus, whether ap<sup>0</sup> is spelled-out as overt antipassive morphology or as a zero variant is a matter of contextual allomorphy, in the spirit of Halpert's (2012, 2015) analysis of Zulu.

Along the way, I also demonstrated that, whereas reflexive constructions in certain Inuit varieties may plausibly be formed via detransitivization or a  $\theta$ -bundling operation (à la Reinhart and Siloni 2005), such approaches cannot capture the behaviour of comparable constructions in Inuktitut, thus revealing cross-dialectal variation across Inuit in the formation of such constructions.

 $<sup>^{36}</sup>$  Additionally, to account for the fact that object dislocation may trigger the disjoint form, as in  $\ref{map}$  above, Halpert (2012, 2015b) suggests that the Merging of  $L^0$  is countercyclic, taking place after the object has been extracted.

# 6.6 Chapter summary: Case-discrimination and argument licensing

In Chapters 3-5, I established that object-referencing morphology in Inuktitut is the product of clitic doubling, and explored various consequences of this proposal for the status of ergativity and the pronunciation of movement chains. In this chapter, I investigated the properties of the  $\phi$ -Agree relation claimed to underlie clitic doubling, by focusing on two syntactic environments that trigger the *failure* of Agree Preminger (cf. 2011, 2014). The properties of Agree in Inuktitut uncovered in this chapter are as follows:

- (i) Agree may only target caseless (≈ ABS) arguments
- (ii) Failure of Agree is in principle tolerated by the grammar, and is reflected by the absence of the relevant morphology
- (iii) Failure of Agree is *not* tolerated if it results in the failure of an argument to be licensed by Agree

The first point (i) was shown in §6.2-6.3 through an examination of the behaviour of anaphoric objects in Inuktitut. I demonstrated that anaphors in Inuktitut bear lexical MOD case, as a means of bypassing the Anaphor Agreement Effect. Because lexical MOD case is both obligatory on anaphors and specific to only anaphors, this offered a controlled environment to test the case-discriminating nature of  $\phi$ -Agree. We saw that, even in transitivized constructions that normally trigger an ERG-ABS case frame with S/O-referencing morphology, the presence of an anaphor systematically resulted in the loss of the object clitic, i.e. point (ii) above. Additionally, lexical MOD case on anaphors was used to diagnose the presence of defective intervention effects in Inuktitut. Following Preminger (2011, 2014), I took these effects to arise from failed Agree: encountering a case-inaccessible goal forces a  $\phi$ -probe to abort.

The ungrammaticality of defective intervention configurations in Inuktitut led to the third point (iii). I argued that the logic of these patterns motivated the existence of the Case Filter, such that arguments require licensing via Agree. This, in turn, was expanded upon in §6.4. I argued that the ergative vs. antipassive alternation in Inuktitut ultimately reflects two complementary ways of licensing an internal argument—either by  $\phi$ -Agree in Agr $_{o}^{0}$  (resulting in clitic doubling in the ergative construction) or by structural Case assignment via a freely-Merged functional head in the extended vP-domain (resulting in the antipassive construction; cf. Bok-Bennema 1991, Spreng 2006, 2012). As support for this proposal, I showed that antipassivized arguments need not be thematic, but may also include expletive subjects, presenting an empirical challenge for standard analyses of antipassives based on detransitivization or argument-demotion.

Finally, §6.5 extended the overall system to account for the loss of antipassive morphology in anaphoric contexts. I showed that this pattern may be captured under the same failed Agree logic from §6.3: the loss of antipassive morphology reflects the inability for ap<sup>0</sup> to assign structural Case to an already case-marked anaphor.

# Appendix A

# Last Resort case-licensing

In Chapter 6, I suggested that  $\phi$ -Agree in  $\mathrm{Agr}_o{}^0$  and Mod Case assignment by  $\mathrm{ap}^0$  are complementary  $\mathit{argument}$ -licensing  $\mathit{strategies}$ . In this Appendix, I provide further evidence for argument-licensing from a pattern of  $\mathit{Last Resort case}$ -assignment. As discussed in the chapter, the traditional Case Filter prevents nominal arguments from appearing in positions where they are unable to be licensed (Vergnaud, 1977; Chomsky, 1981). However, languages often allow such arguments to be  $\mathit{exceptionally licensed}$  in these positions nonetheless (e.g. Stowell, 1981; Harley and Noyer, 1998; Rezac, 2011; Levin, 2015; van Urk, 2015). Last Resort licensing thus rescues a derivation that would otherwise crash due to a violation of the Case Filter.

### (1) Case Filter: $^*DP_{[-case]}$

The Last Resort nature of such processes entails that they apply only when the language's "canonical' licensing strategies are unavailable.<sup>1</sup> As a result, they are often modeled as *countercyclic*,<sup>2</sup> applying only after it has been determined that there are unlicensed nominals present in the derivation.

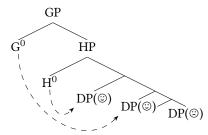
I present two configurations illustrating Last Resort licensing in Inuktitut below, and show that they follow the same logic as other instances of Last Resort licensing cross-linguistically, wherein arguments that fail to be licensed by canonical means surface with

¹This distinction echoes the *obligatory vs. secondary* licensing strategies described by Kalin (to appear). ²Whether Last Resort licensing is countercyclic (though taking place in the syntax proper) or postsyntactic cannot be easily discerned based on empirical data from Inuktitut; the data shown here are compatible with both approaches. The countercyclic view of Last Resort licensing requires a weakening of the Extension Condition, i.e. the requirement that Merge targets the root of the structure (Chomsky, 1995). While countercyclicity is therefore often taken as architecturally problematic for that reason, see Richards (1997), Halpert (2012), Pesetsky (2011), Halpert (2015b), Yuan (2017b), and others for apparent violations of the Extension Condition cross-linguistically. In contrast, a postsyntactic view of Last Resort licensing processes has been furthered by Levin (2015) and van Urk (to appear) (Levin, in particular, discusses this in the context of Inuit). However, this would require some new assumptions concerning how case morphology in Inuit is realized. In what follows, then, I will continue to characterize Last Resort licensing as countercyclic, taking place at the end of the derivation, though it should be reiterated that the Inuktitut data shown here are compatible with both approaches.

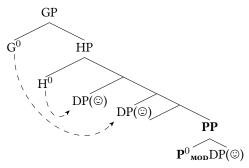
special prepositional or case morphology (e.g. Stowell, 1981; Harley and Noyer, 1998; Rezac, 2011; Levin, 2015; van Urk, 2015). I model this as a countercyclic P<sup>0</sup>-insertion process, as schematized in (2):

#### (2) Last Resort licensing

#### a. <u>Unlicensed nominal:</u>



#### b. <u>Last Resort-licensed nominal:</u>



In Inuktitut, this  $P^0$  is realized with Mod case morphology. This is therefore a third modality of Mod case assignment, distinct from lexical case on anaphors and structural Case in antipassive contexts. The countercyclic, Last Resort nature of this process is straightforward in Inuktitut: Mod case appears only in environments in which both  $\phi$ -Agree and ap<sup>0</sup> are blocked or disrupted.

# A.1 Configuration 1: Ditransitives

The first instance of Last Resort licensing comes from ditransitive constructions—specifically, double object constructions (DOCs). Recall that Inuktitut has both high and low applicatives. Whereas high applicatives permit the lower internal argument to be antipassivized (i.e. licensed by structural Case assignment), repeated in (3a), low applicatives do not have this option, since AP must either be Merged above both internal arguments or not Merged at all, (3b-c). As shown below in (3b) in particular, the direct object is MOD-marked even in the absence of antipassive morphology on the verb.

#### (3) DO is always MOD in low applicative ditransitives

a. <u>High applicative → DO antipassivized:</u>

igalaar-mit Jaani surak-si-jjuti-jara
window-MOD Jaani ARS break-AR-ARRI-1S S

window-MOD Jaani.ABS break-AP-APPL-1s.S/3s.O 'I broke the window for Jaani.'

b. <u>Low applicative (ergative):</u>

Jaani saalaksausia-nga-nit tuni-qqau-vara
Jaani.ABS award-poss.3s/3s-mod give-rec.pst-ind.1s.S/3s.O
'I gave Jaani his award.'

#### c. Low applicative (antipassive):

```
Jaani-mit saalaksausia-nga-nit tuni-si-qqau-junga
Jaani-MOD award-poss.3s/3s-MOD give-AP-REC.PST-INTR.1s

'I gave Jaani his award.'

(NB, IG)
```

I propose that the direct object of a DOC is necessarily licensed via Last Resort P<sup>0</sup>-insertion. Regardless of whether ap<sup>0</sup> is Merged into the structure, the direct object is inaccessible to a canonical licenser. In ergative constructions such as (3b), because each clause contains only two  $\phi$ -probes in total (and assuming standard locality conditions on Agree), only the highest two arguments of the clause may be targeted. The direct object of a DOC is therefore unable to be licensed by Agree. Similarly, in antipassive constructions such as (3c), ap<sup>0</sup> is Merged above both internal arguments. Once again, the indirect object is closer to the licenser, leaving the lower direct object unlicensed. After the Case Filter applies, However, P<sup>0</sup>-insertion is countercyclically activated to license the direct object, as shown in (4). This, in turn, allows the derivation to converge. This idea is reflected in the pair of configurations given earlier in (2).

Finally, note that this pattern of Last Resort licensing is visible in other ditransitive constructions, beyond double object constructions. As shown below with stacked argument-associated heads, it is usually the case that a non-antipassivized head is associated with an ABS internal argument, while antipassivizing it results in MOD case surfacing on the same argument.

#### (4) Ergative-antipassive alternation tracked by antipassive morphology

#### a. Ergative:

Jaani-up **Miali** niuvi-**ruti**-janga piruqsian-nit Jaani-ERG Miali.ABS buy-APPL-3s.S/3s.O flower-P.MOD 'Jaani bought Miali flowers.'

#### b. Antipassive:

Miali **Jaani-mit** pirusian-nit niuviq-**rujji**-tit-tara Miali.ABS Jaani-MOD flower-MOD buy-APPL.AP-CAUS-1S.S/3S.O 'I'm making Miali buy Jaani flowers.' (NB, IG)

As noted, the present analysis derives this contrast by taking the structure of (4b) to contain an  $ap^0$ , which assigns MOD Case to a locally c-commanded argument (here, the applied argument).

However, certain speakers also permit the surface-similar construction in (5). In this construction, the applicative head is *not* antipassivized—yet, the applied argument nonetheless appears with MOD morphology.

#### (5) MOD case without antipassive morphology

Miali **Jaani-mit** pirusia-nit niuviq-ruti-tit-tara Miali.ABS Jaani-MOD flower-MOD buy-APPL-CAUS-TR.1S/3S 'I'm making Miali buy Jaani flowers.'

(NB, IG)

I propose that we can analyze this on par with double object constructions—in (5), because this configuration would otherwise leave the lowest internal argument unlicensed (given that there are only two  $\phi$ -probes in the clause and three arguments), Mod case is inserted as a Last Resort.

With this system in place, I present another instance of Last Resort licensing below.

# A.2 Configuration 2: lik-nominalizations

Above, I presented a configuration in which Last Resort licensing is necessarily invoked, due to a greater number of arguments than licensers in the clause. I will now show that Last Resort licensing also is activated when a language's canonical licensing mechanisms are independently unavailable—in particular, when the structure associated with these licensing mechanisms are removed.

In English, it has been long-noted that verb-level nominalizations may apply at different structural heights, as diagnosed by different syntactic patterns that arise (e.g. Lees, 1960; Abney, 1987). In the *Acc-ing* construction, the standard analysis is that the nominalizing head  $n^0$  Merges above the locus of structural Acc Case assignment, taken here to be  $v^0$ , (6a). The relatively high locus of  $n^0$  not only captures the availability of Acc case morphology, but also the fact that the verb may be modified by an adverb (which attaches below the point of nominalization). In contrast, the *of-ing* construction is typically assumed to be a low-nominalization; as shown in (6b),  $n^0$  Merges immediately above VP. As a result, *of-ing* constructions only support adjectival modification, and the object cannot be assigned Acc case.

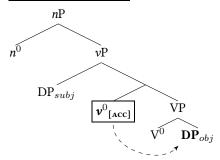
#### (6) English: 'of'-insertion in VP-nominalizations as Last Resort licensing

- a. **v***P***-nominalization:** [Sue('s) (*serendipitously*) meeting Mary] made everyone happy.
- b. **VP-nominalization:** [Sue's (serendipitous) meeting **of** Mary] made everyone happy.

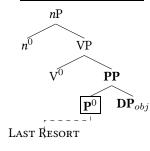
Crucially, the absence of an ACC Case-assigner corresponds to the presence of a preposition of. Harley and Noyer (1998) propose that of is countercyclically inserted as a Last Resort in order to rescue the unlicensed object (cf. Stowell, 1981). Assuming that the structure is built from bottom-up, the necessity of of may only be ascertained after vP fails to be Merged. The derivation of an of-ing nominalization under such an approach is given in (7).

#### (7) Last Resort-licensing in English nominalizations

#### a. *vP-nominalization*:



#### b. <u>VP-nominalization</u>:



I now show that Inuktitut displays a parallel pattern in nominalizations. Inuktitut has a nominal suffix, -lik 'one that has,' that may attach to simplex stems in order to create complex nominal forms (Beach, 2011; Briggs et al., 2015). Some lexicalized examples are presented below. In what follows, I assume that -lik spells out a  $n^0$ .

#### (8) -lik nominalizations in Inuktitut

a. ilu-**lik**inside-have.nmlz
'a hollow object'

b. ipua-**lik** 

short.straight.handle-have.nmlz 'frying pan' (*Utkuhiksalingmiutut*, *Briggs et al. 2015*)

This *-lik* morpheme may be productively used to express possession. In these constructions, the *-lik*-nominal surfaces as a predicate of a bare copular construction, with the subject of the copular construction interpreted as the possessor of the *-lik*-marked nominal. This is shown in (9b) and schematized in (9c).

#### (9) -lik nominalizations in copular constructions

a. <u>Copular construction (baseline):</u>

uvanga $_{subj}$  ilisaiji $_{pred}$  1s teacher

'I am a teacher.'

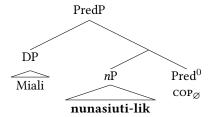
b. <u>-lik nominalization as predicate:</u>

 $Miali_{subj}$  nunasiuti- $lik_{pred}$ 

Miali.ABS car-have.NMLZ

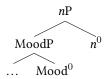
'Miali has a car.' (Lit: 'M. is one that has a car.')

#### c. -lik nominalization structure:



The morpheme *-lik* is also able to attach to complex clausal material. Crucially, this morpheme attaches immediately above participial mood morphology, thereby preventing the  $\phi$ -probes normally found above this mood morphology from Merging. As a result, the arguments normally licensed by these  $\phi$ -probes must be licensed by alternative means.

#### (10) Nominalization above mood



This is most clearly illustrated with constructions containing the transitivizing morpheme -gi. Recall from 6.3 of this chapter that the internal argument of a -gi-marked construction is normally obligatorily ABS, repeated below in (11a-b); unless the internal argument is an anaphor, it generally cannot surface with MOD case.

#### (11) No MOD internal argument in transitivized construction

- a. Taiviti-up <u>Kiuru</u> nagli-gi-janga David-ERG Carol.ABS love-TR-3s.S/3s.O 'David loves Carol.'
- b. \*Taiviti Kiuru-**mik** nagli-gi-juq
  David.ABS Carol-MOD love-TR-3s.S *Intended:* 'David loves Carol.' (NB, AB)

Thus, when a transitivized construction is nominalized with *-lik*, the internal argument cannot be licensed by  $\phi$ -Agree or by Merging ap<sup>0</sup> above the transitivizing morpheme. However, as shown in (12a), the internal argument in a *-lik*-nominalized construction *surfaces with MOD case*. I propose that this is due to Last Resort P<sup>0</sup>-insertion, on par with *of*-insertion in English nominalizations. I assume that *Taiviti*, the nominal interpreted as an external argument in these constructions, is the subject of a copular construction, on par with the examples in (9) above.

#### (12) Last Resort $P^0$ -insertion in lik-nominalization

Taiviti<sub>subj</sub> [Kiuru-mik] nagli-gi-nngit-ta-lik]<sub>pred</sub>
David.ABS Carol-MOD love-TR-NEG-PART-have.NMLZ

'David doesn't love Carol.' (\*Kiuru)

Lit.: 'David is one that has (the state of) not loving Carol.' (NB, AB)

In sum, I have presented two examples of Last Resort P<sup>0</sup>-insertion in Inuktitut. In double object constructions, the lower internal argument always surfaces with MOD case, which I argued is because this argument is never accessible to the language's canonical licensing mechanisms. Similarly, in *-lik*-nominalizations, the internal argument also surfaces as MOD, even in constructions in which MOD-marked internal arguments are otherwise unavailable.

The existence of Last Resort licensing provides additional evidence for argument-licensing in Inuktitut more generally. In particular, this process of  $P^0$ -insertion takes place only when the  $\phi$ -agreement processes in  $C^0$  and Mod Case assignment via ap $^0$  are independently unavailable. This, in turn, allows us to more concretely identify  $\phi$ -Agree and structural Case assignment as licensing mechanisms in Inuktitut.

#### A.3 MOD is not a default case

Given the data presented here, an initially plausible alternative might be to say that these instances of MOD case actually reflect *default case* (Schütze, 2001). Under this approach, we could view MOD case in Inuktitut as the default realization of nominals that are neither targeted by  $\phi$ -Agree nor licensed by Case. However, I briefly show that this alternative is not viable—the presence of MOD case in these configurations is truly due to a Last Resort process.

For Schütze (2001), default case refers to the morphological realization of a nominal that does not interact with the Case Filter at all. Unlike Last Resort licensing, default case is purely morphological, so its appearance cannot rescue an otherwise unlicensed nominal. Indeed, as shown in (13), the Case Filter exists outside of the application of default case; marking a nominal with default case does not rescue it from violating the Case Filter.

#### (13) Default case does not obviate Case Filter violations

- a. He seems to be tired.
- b. \*It seems **him** to be tired.

To differentiate between default case and Last Resort case in Inuktitut, we must examine constructions whose nominals are not subject to the Case Filter. Schütze identifies several of these environments in Germanic languages; a few of these are given below for English. These examples indicate that default case in English is ACC.

#### (14) English: Default case is ACC

- a. **Me**, I like beans.
- b. Q: Who wants to try this game? A: **Me**. (Schütze, 2001)

Turning now to Inuktitut, I show that nominals in similar constructions surface as ABS, not as MOD. In (15), I present nominals in fragment answers. In (15a), the baseline, the whword is marked with ALLAT case. As shown in (15b), a fragment answer that targets the position of the wh-word must either match in case morphology (i.e. surface with ALLAT case) or surface as ABS. Crucially, MOD case not available in this context. Similarly, (16) shows that postcopular nominals are ABS, not MOD.<sup>3</sup>

#### (15) Inuktitut fragment answers are ABS

- A: Kiuru **kina-mut** uqalla-mmat Carol.ABS who-all speak.to-caus.3s.S 'Who is Carol speaking to?'
- B: Taiviti / Taiviti-**mut** / \*Taiviti-**mik**David.ABS David-all David-MOD
  'David.' (NB, AB)

#### (16) Postcopular nominals are ABS

a. *Context provided:* You're looking at a photo and pointing different people out.

taanna **uvanga** / taanna **igvit** / taanna **uvagut**DEM.PRON.ABS 1S.ABS / DEM.PRON.ABS 2S.ABS / DEM.PRON.ABS 1P.ABS

'That's me/you/us.' (NB, IG)

Thus, nominals that are outside of the purview of the Case Filter are realized as ABS, while nominals that *are* subject to the Case Filter—but fail to be licensed during the course of the derivation—surface with MOD. This contrast between ABS and MOD shows that default case and Last Resort case are distinct phenomena and cannot be conflated.

<sup>&</sup>lt;sup>3</sup>Although Schütze (2001) presents a number of other constructions permitting default case, many of these are difficult to elicit with certainty in Inuktitut. For example, while hanging topics in Germanic surface with default case, hanging topics in Inuktitut are difficult to elicit due to the relatively free word order found in the language. I will leave a more in-depth investigation of default case environments in Inuktitut for future research.

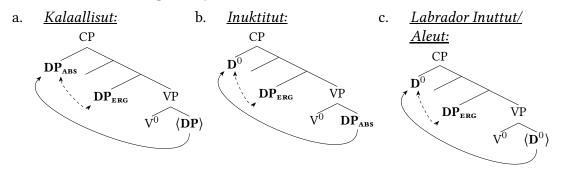
# **Chapter 7**

# Conclusion

In this thesis, I identified a systematic link between two seemingly independent points of variation in the Inuit dialect continuum: variation in the status of ergativity and variation in the status of  $\phi$ -morphology cross-referencing ABS objects. In the varieties such as Kalaallisut in which the ergative patterning is robust, I showed that the object-referencing morphology is genuine  $\phi$ -agreement. However, in the Eastern Canadian Inuit varieties such as Inuktitut and Labrador Inuttut, which display a weaker ergative patterning, I showed that the same morphology is *clitic* (i.e. pronominal) in nature.

The status of object-referencing morphology in Inuit, in turn, shapes the nominal structure of the ABS object raising to the clausal left-periphery. This constrains the distribution of dependent ERG case assignment, thus yielding microvariation in the ergative patterning across Inuit varieties. Crucially, according to this analysis, microvariation in the status of ergativity across Inuit solely tracks the properties of the ABS object—rather than any properties of the ERG-bearing subject. As summarized below, the properties of the ERG subject remain constant across all varieties surveyed.

#### (1) Microvariation in ergativity across Inuit



These findings were motivated through a close examination of the morphosyntactic and semantic properties of ABS objects within different Inuit varieties, with particular focus on Inuktitut. This thesis thus more broadly presents a case study on the utility of microcomparative research to furthering syntactic theory.

# 7.1 Summary of thesis

I began in Chapter 2 by reviewing previous literature on Inuit ergativity, which indicated that the ergative patterning seen in the Eastern Canadian Inuit varieties appear to be 'weaker' than that seen in Kalaallisut. This observation has traditionally been based on the properties of the MOD-marked object found in antipassive constructions (e.g. Johns, 2001, 2006; Carrier, 2017; Murasugi, 2017). However, this thesis aimed to show that the Inuit languages simultaneously display variation in the properties of the *ergative construction* itself.

To show this, I first identified a previously unnoticed point of variation in the status of object-referencing morphology across Inuit. This was diagnosed by the existence of *ABS object asymmetries* in Inuit varieties such as Inuktitut, such that *ABS* objects behave distinctly from all other arguments in the language, even *ABS* subjects. Specifically, I demonstrated that *ABS* objects—and only *ABS* objects—are obligatorily interpreted as strongly D-linked. I argued that these *ABS* object asymmetries in Inuktitut follow if *ABS* objects in the language are *clitic doubled*, i.e. form a movement chain with pronominal D<sup>0</sup>-elements. In contrast, the absence of such asymmetries in Inuit varieties of Kalaallisut was taken to indicate the absence of object clitic doubling.

In Chapter 4, I extended this finding to microvariation in the status of ergativity across Inuit. In particular, I proposed the generalization in (2), whereby the relative robustness of the ergative patterning in a particular Inuit variety is *inversely correlated* with the relative pronominality of that variety's object-referencing morphology. This correlation is made particularly evident given the profile of Inuit varieties such as Labrador Inuttut, in which the ergative patterning is distributionally the most restricted, surfacing only in the presence of a pronominal object (encoded on the verb as a clitic).

#### (2) The ergativity-pronominality correlation

	Kalaallisut	Inuktitut	Labrador Inuttut/Aleut
Ergativity	Robustly ergative	Less ergative	Weakly ergative (pronouns only)
Obj. morphology	Agreement	Clitic doubling	Pronominal clitic only (no doubling)

In light of independent evidence that ERG case in Inuit is *dependent* in nature (cf. Marantz, 1991; Baker, 2015), I showed that the correlation above follows from increasingly greater restrictions on the *case competitor* triggering dependent ERG case on the subject. This case competitor is in all Inuit varieties a nominal element that raises to the clausal left-periphery, where it c-commands the subject; however, we find cross-dialectal variation in whether this element is a full DP (as in Kalaallisut) or a pronominal clitic (as in Inuktitut and Labrador Inuttut).

Chapters 5 and 6 then related the theoretical underpinnings of this analysis to two other major properties of Inuktitut grammar. In Chapter 5, I returned to the clitic doubling

analysis of Inuktitut object-referencing morphology, now focusing on the morphological properties of the clitic doubling movement chain. In particular, I showed that the post-syntactic Merger operation responsible for converting the pronominal D<sup>0</sup> element into a bound clitic regulates the pronunciation of the clitic doubling chain, due to the Stray Affix Filter (Lasnik, 1981, 1995, e.g.). This captures certain hitherto unnoticed distributional restrictions on ABS object pronouns—and extends to a set of recalcitrant patterns found in *noun incorporation* constructions.

Finally, in Chapter 6 I explored the nature of  $\phi$ -Agree in Inuktitut. Following Preminger (2011, 2014), I demonstrated that a  $\phi$ -probe in Inuktitut may fail in the absence of a viable goal, for instance when it encounters a Mod-marked argument. This, in turn, shed light on the notion of argument licensing in Inuktitut, revealing the existence of a Case Filter in the language. Evidence for this idea came from the Anaphor Agreement Effect in Inuktitut, as well as from antipassive constructions. In this chapter I also argued that ergative and antipassive constructions reflect two complementary ways of formally licensing the internal argument—either via  $\phi$ -Agree (leading to an ERG-ABS pattern with clitic doubling) or via structural Case assignment (resulting in an ABS-MOD pattern).

# 7.2 Broader implications

One of the theoretical objectives of this thesis was to explore the range and limits of linguistic variation, by treating microvariation across Inuit—i.e. minimal differences across otherwise closely related languages—as a microcosm of broader cross-linguistic patterns.

### 7.2.1 On clitic doubling

On the object  $\phi$ -agreement vs. clitic doubling distinction, a close examination of Kalaal-lisut and Inuktitut revealed that both types of object-referencing morphology exist in natural language, contrary to proposals by Woolford (2008) and Nevins (2011) that *all* apparent instances of such morphology is clitic in nature. The comparison between Kalaal-lisut and Inuktitut also offered a methodological lesson in distinguishing between genuine  $\phi$ -agreement and pronominal clitics. Given that Inuit  $\phi$ -morphology is morphologically identical across dialects (and given the appearance of the object forms within portmanteaux), relying on standard morphophonological or allomorphic diagnostics would have obscured the  $\phi$ -agreement vs. clitic doubling distinction found across Inuit.

Instead, this point of microvariation across Inuit was uncovered through an examination of the syntactic and semantic properties of the nominals cross-referenced by this  $\phi$ -morphology, with an eye on the theoretical predictions that arise from a clitic doubling analysis. In particular, I argued that it is important to consider the structural and derivational relationship between the object-referencing morpheme and its DP associate. Assuming that clitic doubling involves a pronominal D<sup>0</sup> in a movement chain with a DP, we expect the pronominal status of the clitic to constrain the distribution and interpretation of the DP. This was demonstrated to be borne out in Inuktitut. Semantically, clitic

doubling triggers a strongly D-linked effect, which I showed was due to the fact that Inuktitut pronominal clitics are obligatorily interpreted as anaphoric definites. On the PF side, the clitic (bound) status of the pronominal  $D^0$  was shown to play a role in regulating the morphological spell-out of the movement chain.

Finally, this investigation into Inuktitut allowed us to identify a hitherto unnoticed point of cross-linguistic variation: I showed that languages fall into four categories along an implicational hierarchy, concerning the range of interpretations permitted by their pronominal clitics. While I left the grammatical source of this hierarchy for future research, I hope to have impressed upon readers how little we truly know about the linguistic properties of pronouns and clitics, despite a wealth of literature on the topic. Moreover, I hope to have illustrated the fruitfulness of investigating the properties of clitic doubling, not just for their own sake, but in how they interact with other (seemingly unrelated) properties of the grammar.

#### 7.2.2 On ergativity

Building on the previous section, the central findings of this thesis was that the object  $\phi$ -agreement vs. clitic doubling distinction across Inuit is directly related to microvariation in the status of ergativity. In particular, we have seen a tight connection between the semantic, morphological, and syntactic detail of the (ABS) direct object and the ERG casemarked subject. In the Inuit languages, the ABS object must raise into the same syntactic domain in order for ERG case on the subject to surface.

I showed raising of the ABS object may be constrained, both from a microvariationist perspective and within the grammar of a particular Inuit variety. Across Inuit, we find variation in whether it is a full ABS object DP or a pronominal clitic that functions as the case competitor for dependent case assignment. Crucially, the properties of subject—the argument that comes to bear ERG case—remain constant throughout all Inuit varieties considered in this thesis. The microvariation in the status of ergativity entirely concerns the properties of the direct object. Beyond the Inuit languages, the importance of the ABS object to the study of ergativity cannot be understated. For instance, it determines whether a language is classified as morphologically or syntactically ergative, with wideranging grammatical consequences.

### 7.2.3 On cross-linguistic uniformity

Finally, many of the operations and processes we have seen across Inuit are echoed in genetically unrelated languages, a welcome result if languages obey a common set of abstract principles. I highlight a few of these parallels here, beyond the ones already discussed.

Microvariation between Inuit varieties in object raising was shown to be strikingly similar to variation in object shift in the Scandinavian languages. Whereas Kalaallisut and Icelandic permit both DPs and pronominal  $D^0$ s to raise, Labrador Inuttut and Mainland

Scandinavian languages such as Danish permit only pronouns to undergo movement. As Inuktitut represents an intermediate between Kalaallisut and Labrador Inuttut, I leave as an intriguing avenue for future research whether there exists a counterpart to Inuktitut in the typology of object shift cross-linguistically.

A second point of cross-linguistic uniformity I would like to highlight concerns morphological conditions on movement chains. In Inuktitut, clitic doubling involves postsyntactic Merger of the pronominal  $D^0$  to its host. Because the pronominal clitic is part of a movement chain with its associate, the result of Merger is that it affects the pronunciation of the chain overall. We also saw a parallel effect in the domain of noun incorporation, wherein Merger of the incorporated object may obscure syntactic phrasal movement. Crucially, this type of effect is mirrored in many of the world's languages, suggesting a common constraint underlying all of these cases. The behaviour of Inuktitut thus converges with previous observations pointing towards a systematic interaction between the Stray Affix Filter, which forces elements that have undergone Merger to be spelled out, and economy principles that regulate chain pronunciation (cf. Landau, 2006).

### 7.3 Open questions and next steps

In the remainder of this thesis, I highlight two broad issues that I hope to address in future work. The first concerns microvariation across Inuit beyond the varieties surveyed here. The Western Canadian varieties of Inuit are particularly interesting, given that they are like Kalaallisut in that ABS objects and MOD objects display semantically opposite effects; yet, there are some crucial (and potentially unique) differences as well. Second, this thesis provides much discussion showing that MOD objects in Inuktitut and other Eastern Canadian varieties are semantically flexible, while their counterparts in Kalaallisut are rigidly narrow scope. However, I do not provide an analysis of this point of variation. I thus conclude the thesis with some brief thoughts on some possible directions.

#### 7.3.1 More on microvariation

This thesis focused on three Inuit varieties—Kalaallisut, Inuktitut, and Labrador Inuttut. The empirical landscape is actually much more complicated than represented here, especially with respect to the semantic properties of the grammatical object.

Recall that MOD objects of antipassive constructions in Kalaallisut are interpreted as obligatorily narrow scope. In Chapter 3.3.1, footnote 12, I presented data from Bittner (1987) showing that definite descriptions may surface in MOD object position. These examples are repeated below as (3).

#### (3) Kalaallisut: Antipassive objects may be definite

a. **Jesusi-mik** taku-si-vuq Jesus-MOD see-AP-3s.S 'He saw Jesus.' b. **anguti-mi-nik** aa-lir-puq man-refl.poss-mod fetch-AP-3s.S 'He went to fetch his man (father).' (Bittner, 1987)

Interestingly, this fact is subject to cross-dialectal variation. The Western Canadian varieties of Inuit (spoken in Alaska and in the Northwest Territories) are also considered to be robustly syntactically ergative, as diagnosed by the fact that ABS objects in ergative constructions and MOD objects in antipassive constructions display opposite semantic characteristics (Johns, 2001). However, unlike in Kalaallisut, such varieties *disallow* MOD definite descriptions, as shown below with Inuvialuktun. In this example, the MOD-marked proper name is interpreted not as a definite description, but as a property.<sup>1</sup>

#### (4) Inuvialuktun: Antipassive objects may not be definite

?Alana-**mik** Alana-мор

'someone dressed up as Alana'

(Johns, 2001)

It is not clear to me at this time how exactly to model this difference between Kalaallisut and Western Canadian Inuit varieties such as Inuvialuktun. However, future research into the exact properties of ABS objects and MOD objects in the latter will hopefully shed light on this question.

Another intriguing puzzle, perhaps less relevant to syntactic theory, concerns the geographical correlates of the status of ergativity. At least in the Canadian Inuit varieties (i.e. setting aside Kalaallisut, spoken in Greenland), it is taken for granted that the relative robustness of ergativity decreases as one moves from west to east across the Canadian Arctic (e.g. Johns, 2001; Carrier, 2017). However, my own research has found geographical exceptions to this heuristic.

For example, a speaker from the community of Rankin Inlet, spoken in the Kivalliq region of Nunavut, produced a grammatical pattern that is strikingly reminiscent of that found in Labrador Inuttut (and Aleut). As shown in (5a-b), this speaker offered an antipassive construction to express a non-pronominal DP in object position, and an ergative construction to express a pronominal object. Moreover, (5c) demonstrates that this speaker also judged ergative constructions with non-pronominal objects to be highly degraded.

#### (5) Rankin Inlet Inuktitut: Ergative construction used with pronominal object

a. <u>Non-pronominal object → antipassive:</u> qimmiq kii-si-juq Silas-**mi** dog.ABS bite-AP-3s.S Silas-MOD 'The dog bit Silas.'

<sup>&</sup>lt;sup>1</sup>See also Wharram (2003) for similar data from varieties of Inuktitut spoken in Nunavut.

- b. <u>Pronominal object → ergative:</u> qimmi-up kii-**jaa** 
  - dog-erg bite-3s.S/3s.O
  - 'The dog bit **him**.'
- c. <u>Non-pronominal object  $\rightarrow$  \*ergative:</u>

```
*qimmi-up kii-jaa Silas
dog-erg bite-3s.S/3s.O Silas.Abs
Intended: 'The dog bit Silas.'
```

(K, RI)

The similarity of this pattern to that of Labrador Inuttut is illustrated in (6):

#### (6) Labrador Inuttut: Ergative construction used with pronominal object

- a. <u>Non-pronominal object → antipassive:</u>
   John asiu-ji-laut-tuk jaika-mi-nik
   John.ABS lose-AP-PST-3S.S jacket-POSS.REFL-MOD
   'John lost his jacket...'
- b. <u>Pronominal object → ergative:</u> siagolittilugu pulesi-**up** nagvâ-laut-**tanga** tunu-a-ni ilinniavi-up later police-ERG find-PST-3s.S/3s.O back-POSS-MOD school-GEN '... and later the police found it behind the school.' (Alana Johns, p.c.)

A deeper investigation may help determine if the pattern in (5) is regional, specific to that individual speaker's grammar, or a matter of external sociolinguistic factors such as age. However, the existence of that pattern complicates the aforementioned heuristic that the Canadian Inuit varieties fall along a grammatical spectrum correlating with geographic location, and suggests that more careful sociolinguistic research is required to fully understand the Inuit empirical landscape.

### 7.3.2 The loosening semantics of the antipassive construction

Finally, one of the motivations for the central proposal of this thesis was the observation that the semantic properties of antipassive MOD objects are looser in certain Inuit varieties than in others. For instance, the fact that ABS objects and MOD objects do not display opposite semantic properties in varieties such as Inuktitut was a major clue towards the existence of object clitic doubling in the language. Moreover, these previous generalizations concerning the properties of the antipassive construction across Inuit was what led me to probe whether there exists microvariation in the ergative construction itself.

However, I did not actually provide an analysis of the semantics of the antipassive object across Inuit. As repeated below, the generalization is that, whereas MOD objects in Kalaallisut are obligatorily interpreted as narrow scope, in Inuktitut the same objects may take narrow or wide scope. Additionally, whereas grammatical objects in Kalaallisut must raise out of the  $\nu P$ -domain (i.e. the domain of existential closure) to be interpreted

as wide scope, this is not necessary in Inuktitut, given that such interpretations are also available for in situ мор objects.

#### (7) Differences in scope readings across Inuit

#### a. Kalaallisut:

qimmit marluk **arna-nik pingasu-nik** kii-si-pput dog.p.abs two.abs woman-p.mod three-mod bite-ap-3p.S 'Two dogs bit three women.'

Available reading: Surface scope only (2 > 3; \*3 > 2) (Bittner, 1994)

#### (i) *Inuktitut*:

marruuk surusiit niri-qqau-jut **pingasu-nit sivalaar-nit** two.ABS child.P.ABS eat-REC.PST-3P.S three-P.MOD cookie-P.MOD 'Two children ate three cookies.'

Available readings: Surface scope (2 > 3) or inverse scope (3 > 2) (SB, PG)

Although I leave a full analysis of this contrast for future research, I offer a few tentative suggestions here. It is well-known that many languages permit wide scope indefinites to surface in positions that rule out movement (e.g. quantifier raising) as a possible analysis (e.g. Reinhart, 1997; Winter, 1997; Kratzer, 1998). This is illustrated in the English example below, in which the indefinite is able to take scope outside of the *if*-clause.

# (8) English: Wide scope indefinites in islands If some woman comes to the party, John will be glad. (Winter, 1997)

To account for this, Kratzer (1998) proposes that quantificational expressions in English are ambiguous. Whereas some expressions are truly interpreted as generalized quantifiers (meaning that they depend on movement to take scope), other such expressions may receive specific readings in situ via *choice functions*.

As further support for this choice function analysis, Matthewson (1999) demonstrates that the Salish language St'át'imcets encodes this distinction morphologically. As shown in (9), nominals headed by the "non-polarity" determiner  $ti..a^2$  may receive wide scope interpretations in situ, while nominals headed by the "polarity" determiner ku may not. According to Matthewson, ti...a-marked nominals are interpreted via choice functions, while ku-marked nominals are generalized quantifiers.

<sup>&</sup>lt;sup>2</sup>The sequence ti...a is the form used in the present tense with a singular nominal. See Matthewson (1999, p. 87) for the full determiner paradigm.

#### (9) St'at'imcets: Determiners track interpretation

*Context:* There are a bunch of elders in this community. Mary dislikes most of these elders and doesn't want them to come. There is just one elder who she wants to come.

- a. <u>ti...a → choice function:</u>
   cuz' tsa7cw kw-s Mary lh-t'íq-as ti
   going.to happy DET-NOM Mary HYP-arrive-3conJ DET
   qelhmémen'-a
   old.person(DIMIN)-DET
   'Mary will be happy if an elder comes.'
- b. <u>ku → generalized quantifier:</u>
   #cuz' tsa7cw kw-s Mary lh-t'íq-as **ku** going.to happy det-nom Mary hyp-arrive-3conj det
   **qelhmémen'** old.person(dimin)-det
   *Intended:* 'Mary will be happy if an elder comes.' (Matthewson, 1999)

If choice functions are a viable means of interpreting wide scope indefinites, then we may potentially account for Inuktitut on par with English—MOD objects in Inuktitut are ambiguous between a choice function analysis and a generalized quantifier analysis. In contrast, I tentatively suggest that Kalaallisut indefinites may only be interpreted as generalized quantifiers, meaning that they must undergo movement in order to be interpreted as wide scope.

As mentioned, a much more detailed investigation into the semantics of Inuit nominals, and how they interact with other elements of the sentence, is needed to determine if this suggestion is on the right track. Nonetheless, I hope to have shown in this discussion another way in which microvariation within one language group may shed light on theory and linguistic typology.

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