Ergativity and object shift across Inuit*

Michelle Yuan, UC San Diego (myuan@ucsd.edu)

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Although the Inuit languages are generally described as ergative, it has also been observed that this case patterning is more robust in certain varieties than in others (e.g. Johns, 2006, 2017; Carrier, 2017; Murasugi, 2017). This paper argues that variation in ergativity across Inuit results from variation in movement of the transitive object to a structurally high position—as evidenced by parallel points of variation seen in Scandinavian object shift (cf. Woolford, 2017). An object shift approach moreover offers new insights into the nature of the reduced ergative patterning found in certain Inuit varieties. To account for the ergativity—object shift connection in Inuit, I propose that movement of the object triggers dependent ERG case assignment to the subject (Marantz, 1991; Baker, 2015); independent restrictions imposed on object movement therefore constrain the appearance of ergativity. This, in turn, reveals that the notion of "ergativity" in the Inuit languages is fundamentally divorced from the morphosyntactic properties of transitive subjects, contrary to much theoretical literature on the phenomena. Beyond Inuit, these findings also make broader predictions for the cross-linguistic landscape of morphological and syntactic case alignment.

Keywords: Inuit, ergativity, case, agreement, object shift, clitic-doubling, variation

1 Introduction

A major typological split across the world's languages concerns the encoding of grammatical function, a concept often referred to as *morphosyntactic alignment*. Whereas many languages display a nominative-accusative ("accusative") alignment, others display an ergative-absolutive ("ergative") alignment. In languages with case morphology on nominals, ¹ this corresponds to whether it is

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¹As nominals vary in whether they are head-marking or dependent-marking, morphosyntactic alignment may also be reflected on the verb as ERG and ABS φ-agreement paradigms. This paper will focus on nominal case.

the transitive object or the transitive subject that is case-marked distinctly from the other core arguments, (1)-(2).

(1) Nominative-accusative pattern (Japanese)

- a. Taro-**ga** sin-da
 Taro-NOM died-PST
 'Taro died.'
- b. Taro-ga uta-o utat-ta
 Taro-NOM song-ACC sing-PST
 'Taro sang a song.'

(Imai, 1998)

- (2) Ergative-absolutive pattern (Kalaallisut)²
 - a. **miiqqat** piqqip-put child.PL.**ABS** healthy-3P.S 'The children are healthy.'
 - b. Juuna-p miiqqat paari-vai Juuna-ERG child.PL.ABS look.after-3s.S/3P.O 'Juuna is looking after the children.'

(Bittner and Hale, 1996a,b)

Within the generative tradition, there has been much work devoted to understanding the grammatical underpinnings of ergativity and how it differs from accusativity. While the exact implementation differs across analyses, most accounts hold that the transitive subject in ergative languages gets specially case-marked by some mechanism that is absent in accusative languages. For instance, one common approach is to derive ergativity from the case-assigning capabilities of v^0 , the syntactic head otherwise responsible for introducing external arguments such as transitive subjects (e.g. Woolford 1997, 2006; Aldridge 2008a; Legate 2008). Under a different view, languages are parametrized as to whether the higher or lower of the two arguments of a transitive verb (i.e. the transitive subject or object) is morphologically marked, with ergative languages instantiating the former option (e.g. Yip et al., 1987; Marantz, 1991; Baker, 2015).³

This paper offers a novel perspective on ergative alignment from the Inuit (Eskimo-Aleut) languages. Although Inuit is commonly described as ergative, the ergative patterning has been observed to be relatively diminished in certain varieties compared to others (Johns, 2001, 2006, 2017; Beach, 2011; Carrier, 2012, 2017; Murasugi, 2017). Through a pointwise comparison of three languages—Kalaallisut, Labrador Inuttut, and Inuktitut—I demonstrate that this phenomenon is closely tied to variation in the syntactic properties of the *transitive object*, rather than any properties of the transitive (ERG-marked) subject, which displays no such variation. Building on Woolford (2017), this variation pertains to independently observable restrictions on the types of nominals

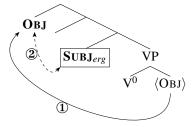
²**Abbreviations for Inuit examples:** ABS = absolutive case, ACC = accusative case, ALLAT = allative case, AP = antipassive, APPL = applicative, BECAUS = becausative mood, ERG = ergative case, GEN = genitive case, HAB = habitual aspect, IMP = imperative mood, IND = indicative mood, INT = interrogative mood, LOC = locative case, MOD = modalis case, NEG = negation, NOM = nominative case, OPT = optative mood, PART = participial mood, PERF = perfective aspect, POSS = possessive, PST = past tense, PRES = present tense, PRON = pronoun, REC.PST = recent past tense, REFL = reflexive, RPT = reportative, SG = singular, V = light verb, 1s = 1st person singular, 3P = 3rd person plural, 3s = 3rd person singular.

³And see also Deal (2010), Rezac et al. (2014), and Clem (2019) for approaches that (fully or partially) rely on T⁰ as a source of ERG case assignment.

that may undergo *object shift* to a structurally higher position. As I demonstrate, an object shift analysis of Inuit furthermore provides a number of new insights into some previously unanalyzed aspects of the diminished ergative pattern found in Labrador Inuttut and Inuktitut.

The overall picture is that, across Inuit, the relative robustness of the ergative patterning and the permissibility of object movement are thus tightly correlated, with the individual languages under discussion forming a gradient along *both* dimensions. To capture this correlation, I propose the derivation abstractly schematized in (3), which holds uniformly across Inuit. First, (certain) objects of transitive verbs raise to a structurally high position in the clausal left-periphery, such that they c-command the subject (Bittner and Hale, 1996a,b); this is the *syntactically ergative* nature of Inuit (①). However, as stated above, individual languages vary in the *types of objects* that may undergo this movement. Second, I take ERG case to be *dependent*, i.e. assigned configurationally to one of two arguments within a syntactic domain (Marantz, 1991, a.o.) (②). ERG case assignment crucially takes place only after object movement, and in situ (low) objects are invisible to the dependent case calculation, suggesting that this domain is the CP phase (Baker and Vinokurova, 2010; Baker, 2015). Thus, I take ERG case to be assigned to the *lower* of the two *v*P-external arguments, departing from most treatments of morphological ergativity within dependent case theory.

(3) Derivation of ergativity across Inuit



The variation in ergativity we see across Inuit therefore pertains exclusively to the notion of *syntactic ergativity*, i.e. movement of transitive objects to a structurally high position. Conversely, the modality of ERG case assignment is largely orthogonal to shaping this variation, as it remains uniform (i.e. dependent) across Inuit; moreover, the downwards directionality of ERG case assignment invites a reconsideration of the notion of alignment, both in Inuit and cross-linguistically. Altogether, I suggest that morphological and syntactic ergativity are *separable*, contrary to previous claims that syntactic ergativity cannot exist without morphological ergativity (Larsen and Norman, 1979; Dixon, 1994; Manning, 1996; Polinsky, 2017b). While this may initially appear counterintuitive, I contend that this arises in new falsifiable—and thus welcome—predictions regarding the kinds of alignment patterns attested (and not attested) cross-linguistically, and sketch a preliminary typology.

This paper is organized as follows. In Section 2, I provide an overview of the Inuit languages, with a focus on the case and agreement system of the languages under discussion. In Section 3, I discuss the canonically cited ergative patterning found in Kalaallisut, and contrast that with the much weaker ergative patterning seen in Labrador Inuttut. Section 4 ties variation in ergativity across Inuit to variation in object shift, developing recent work by Woolford (2017). Section 5 focuses on Inuktitut, which falls between Kalaallisut and Labrador Inuttut in both its ergative patterning and its permissibility of object shift, thus further strengthening the proposal. In Section 6, I argue that the correlation between ergativity and object shift across Inuit is best captured within a dependent case framework, and explore the broader theoretical and typological implications of

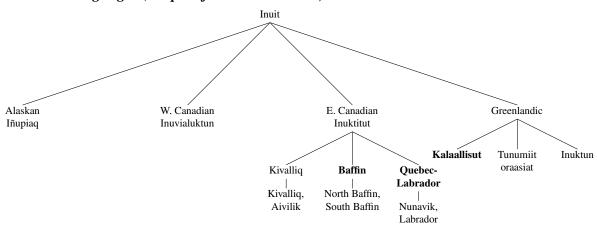
the paper's core proposals for our understanding of case alignment.

2 Overview of the Inuit languages

2.1 Language background

The Inuit languages, belonging to the Eskimo-Aleut (or Inuit-Yupik-Unangan) language family, are comprised of a continuum of generally mutually intelligible varieties spoken across the North American Arctic and Greenland (Dorais, 2010; Johns, 2010; Berge, 2016). The tree in (4) illustrates how the Inuit languages may be categorized into four major dialect groups: Iñupiaq, Inuvialuktun, Inuktitut, and Greenlandic (the bolded text reflects the languages to be investigated in this paper).

(4) The Inuit languages (adapted from Dorais 2010)



As indicated above, the paper primarily focuses on three Inuit languages: Kalaallisut (also known as West Greenlandic), the Labrador varieties of Inuktitut (henceforth called 'Labrador Inuttut'), and the Baffin varieties of Inuktitut (henceforth simply 'Inuktitut' in this paper). Unless explicitly cited, the Labrador Inuttut data were elicited by the author in the communities of Nain, Nunatsiavut and Happy Valley-Goose Bay, Labrador, in December 2019. The uncited Inuktitut data were elicited by the author between August 2016 and September 2017 in the community of Iqaluit, Nunavut, and represent the North and South Baffin varieties.

The choice to focus on Kalaallisut, Labrador Inuttut, and Inuktitut in particular comes from the fact that they display different degrees of ergativity in an especially clear-cut way, as well as due to the existence of previous research on the case patterns of these languages. The generalizations that emerge from this study thus yield testable predictions for the grammatical properties of the other Inuit (and Eskimo-Aleut) languages not surveyed here, to be verified in future research.

⁴Additional data from other languages in the Eskimo-Aleut language family, such as Yupik and Aleut, will also be provided, where relevant.

⁵The elicitation tasks primarily consisted of translations from English and grammaticality judgments for constructed Inuit examples. Prior to the elicitation tasks, speakers were often provided with contexts in the form of descriptive scenarios and pictorial illustrations.

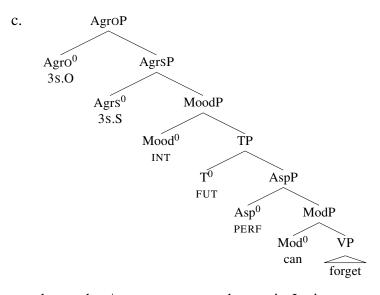
2.2 Case and agreement in Inuit

I start by providing an overview of some key morphosyntactic properties of the Inuit languages. For consistency, I illustrate these properties using data from Kalaallisut, though the generalizations shown here broadly hold for Labrador Inuttut and Inuktitut as well.

The Inuit languages are described as polysynthetic, with strict morpheme-internal order but relatively free word order (Fortescue, 1984, 2017; Dorais, 2010). Verbs generally follow the schema given in (5a), with the root at the leftmost edge of the word, followed by a series of optional derivational and inflectional suffixes, and finally followed by ϕ -morphology cross-referencing the subject and, if present, the object. As additionally shown in (5b-c), the Inuit languages are generally Mirror Principle-obeying, with left-to-right morpheme order corresponding to syntactic height. While it is therefore most intuitive to characterize the structure of the Inuit languages as *right-headed*, the structures I present in this paper are left-headed purely for illustrative clarity.

(5) Schema of Inuit verb complex

- a. $\sqrt{\text{VERB}}$ -(...)- ϕ_s/ϕ_o
- b. puiur-sinnaa-sima-ssa-vaa
 forget-can-PERF-FUT-INT.3s.S/3s.O
 'Who could ever forget it (the great plain)?' (Kalaallisut; Fortescue 1984)

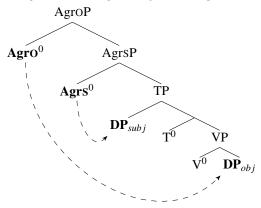


As shown above, the ϕ -agreement morphemes in Inuit are exponed in what I refer to neutrally as Agrs⁰ and Agro⁰, respectively; these heads are structurally high, located in the extended CP-domain (Johns, 2007; Compton and Pittman, 2010; Compton, 2016, 2017). Furthermore, object-referencing morphology (associated with Agro⁰) is structurally higher than subject-referencing morphology (associated Agrs⁰), as indicated by their relative morpheme orderings in certain mood and agreement paradigms (see also Bittner and Hale 1996a,b). I assume that Agrs⁰ and Agro⁰ each Agree with the highest *accessible* argument within their local c-command domain as soon as they are Merged;⁶ the dependencies between the two probes and their respective goals are thus

⁶I further assume that nominals that have already been targeted for Agree are rendered invisible—i.e. may be skipped—for further operations, in accordance with the Activity Condition (Chomsky, 2000).

nested (cf. Murasugi, 1992). Therefore, in monotransitive ergative constructions, Agrs⁰ targets the subject and Agro⁰ targets the object. A simplified structure illustrating this derivation is given in (6), though will be revised in later sections.

(6) Subject- and object-referencing in Inuit (preliminary version)



That agreement morphology in Inuit is located in the extended CP-domain not only accords with the Mirror Principle, but is evidenced by the fact that these morphemes are organized into paradigms sensitive to mood or clause type (Compton, 2016, 2017). This is exemplified throughout (7), which show 2sG subject and 2sG/3sG subject/object combinations with the declarative (indicative), interrogative, and conditional clause types in Kalaallisut.

(7) Mood-sensitive φ-morphology paradigms in Kalaallisut

	Indicative	Interrogative	Conditional
2sg.S	-vutit	-vit	-guit
2sg.S/3sg.O	-vat	-viuk	-gukku
(Fortescue, 1984	.)		

The Inuit languages generally display an ERG-ABS case patterning, with ϕ -morphology cross-referencing both the subject and object, (8a-b). Additionally, the ergative construction seen in (8b) alternates with a non-ergative transitive construction, which in the Inuit languages is an *antipassive* construction. In the antipassive, the logical transitive subject is ABS rather than ERG and the object takes MOD ('modalis') case, (8c); in the antipassive, only the subject is encoded by ϕ -morphology. In other words, only ERG and ABS nominals may be cross-referenced by ϕ -morphology.

(8) Ergative and antipassive alternation in Kalaallisut

- a. **miiqqat** piqqip-put child.PL.**ABS** healthy-3P.S 'The children are healthy.'
- b. Juuna-p miiqqat paari-vai Juuna-ERG child.PL.ABS look.after-3s.S/3P.O 'Juuna is looking after the children.'

⁷As I discuss later, the distantly related Aleut language displays an ergative/non-ergative alternation as well, but the non-ergative variant is crucially not an antipassive.

c. **Juuna** miiqqa-**nik** paari-nnip-puq
Juuna.**ABS** child-PL.**MOD** look.after-AP-3S.S

'Juuna is looking after the children.' (Bittne

(Bittner and Hale, 1996a,b)

Although the antipassive is cross-linguistically often associated with object demotion (see Spreng 2010 and Polinsky 2017a for recent overviews), we will see later that this is not evidently true for Inuit.

Another property of the Inuit languages that will be important for our purposes is the fact that they are *pro* drop, as shown in (9); the person/number specifications of the relevant arguments are recoverable via the verbal ϕ -morphology. Note that Inuit lacks overt 3rd person (non-demonstrative) pronominal forms. Although I have at various points above referred to these morphemes neutrally as 'agreement,' this will be refined later in this paper.

(9) **Pro drop in Kalaallisut**

- a. (*pro*) (*pro*) pisiar-aa 160 kuruuni-nik 3S.PRON.ERG 3S.PRON.ABS buy-3S.S/3S.O 160 kroner-PL.MOD 'He bought it for 160 kroner.'
- b. (pro) atir-tunga Antariarsi-p (pro)
 1s.PRON.ABS go.down-PART.1s.S Antariarsi-ERG (1s.PRON.ABS)
 tikip-paanga
 come.to-3s.S/1s.O
 'When I went down Antariarsi came to me.' (Fortescue, 1984)

Finally, I take both Agreeing heads, $Agrs^0$ and $Agro^0$, to be to present in *all clauses*, including the ones that only display subject ϕ -morphology, as illustrated in (10). If ϕ -Agree may fail in the absence of a viable goal (Preminger, 2011, 2014), then the absence of object ϕ -morphology in the trees below reflects the failure of $Agro^0$ to find such a goal. In (10a), this is because the sentence contains only one nominal. Why ϕ -Agree with the object in the antipassive construction fails, as represented in (10b), is slightly more complicated, and will be addressed in the next section.

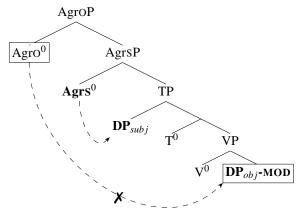
(10) Failed Agree in Inuit

a. Intransitive:

AgroP

AgrsP AgrsP DP_{subj} T^0 ...

b. Antipassive:



 $^{^{8}}$ In contrast, participant (1st/2nd person) pronouns may also be exponed overtly (e.g. uanga = 1s in Kalaallisut), but will be set aside in this paper. See Yuan (2018, to appearb) for discussion of how participant pronouns interact with object movement.

In summary, this section has provided an overview of the case and agreement system of the Inuit languages. We have seen that there are two ways of expressing transitive sentences: an *ergative* construction with an ERG subject and ABS object and ϕ -morphology cross-referencing both arguments, and an *antipassive* construction in which only the ABS subject is cross-referenced by verbal morphology while the MOD object is not. In what follows, variation in ergativity across Inuit will therefore refer to the *relative distributions* of the ergative and antipassive (non-ergative) transitive constructions.

3 Variation in ergativity across Inuit

This section describes the variation in ergativity across Inuit alluded to above. Whereas the ergative patterning in Kalaallisut is quite robust, with the ergative vs. antipassive alternation straightforwardly tracking the syntactic position of the grammatical object, this picture becomes complicated once we consider certain Canadian Inuit languages (e.g. Johns, 1999, 2001, 2006, 2017; Carrier, 2012, 2017; Murasugi, 2017). Ultimately, it will emerge that Kalaallisut, Inuktitut, and Labrador Inuttut occupy discrete points along a *gradient* of robustness of ergativity, summarized in (11).

(11) The ergativity gradient across Inuit (Johns, 2001)

Kalaallisut	Inuktitut	Labrador Inuttut
Robustly ergative	Less ergative	Weakly ergative

To arrive at the picture in (11), we must first establish what variation in ergativity looks like (for instance, what it means for a language to be "robustly" or "weakly" ergative). I therefore start by contrasting the syntactically ergative profile of Kalaallisut with Labrador Inuttut, in which the ergative patterning is the most reduced among the languages under discussion. The intermediate patterning seen in Inuktitut, in turn, will be discussed in Section 5 after the range of variation has been adequately shown.

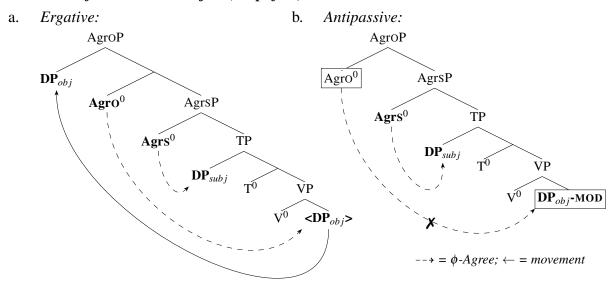
3.1 Syntactic ergativity in Kalaallisut

It is often assumed that ABS objects of ergative (transitive) constructions in Kalaallisut (and in Inuit more generally) undergo movement to a position *above* the transitive (ERG-marked) subject, as in (12a) (Bittner, 1987, 1994; Bittner and Hale, 1996a; Murasugi, 1992; Manga, 1996; Wharram, 2003, a.o.). In contrast, MOD objects in the antipassive construction remain in situ, (12b). Given the ϕ -agreement system outlined above, we may understand this contrast by imbibing the probe on Agro⁰ with a movement-triggering feature along with [u ϕ]. If so, Agree between Agro⁰ and the transitive object will result in both the appearance of ϕ -morphology and movement of the object to

⁹Conversely, Wharram (2003) and Branigan and Wharram (2019) discuss data from Labrador Inuttut and Inuktitut that do not accord with the generalizations noted by the authors cited here, nor with the generalizations presented in this paper. The data that they provide are more in line with the Kalaallisut examples discussed in the previous section, with the ergative and antipassive constructions tracking the scope of the object. As suggested by Branigan and Wharram (2019), however, this could be due to dialectal variation among speakers of Labrador Inuttut and Inuktitut. I leave a deeper investigation of this difference for future research.

Spec-AgroP, whereas the lack of successful Agree will correspond to the absence of both effects. 10

(12) Positions of the transitive object (simplified)



Building on Bittner and Hale (1996a,b), I take the ABS vs. MOD case distinction on objects in ergative and antipassive constructions to be directly correlated with their structural position, which, in turn, arises from whether the object may be targeted by Agree. ABS arguments, which are morphologically unmarked in Inuit, are essentially caseless—and are able to remain caseless because they are licensed by Agree with Agro⁰. However, the in situ object of the antipassive construction cannot be targeted by Agro⁰, as alluded to in (10b). Assuming that vP is a syntactic phase, vP-external probes such as Agro⁰ cannot access arguments internal to vP; failure to Agree is reflected as the absence of object ϕ -morphology. In the spirit of Bittner and Hale, such nominals are assigned MOD case in situ. vP-12

This means that the structure in (12a) must be slightly more complicated than presented above. In accordance with phase theory, the raising object must first stop at the vP edge before raising to its final position in Spec-AgroP, shown in (13). However, when this initial movement step does not occur, this ultimately arises in an antipassive construction.

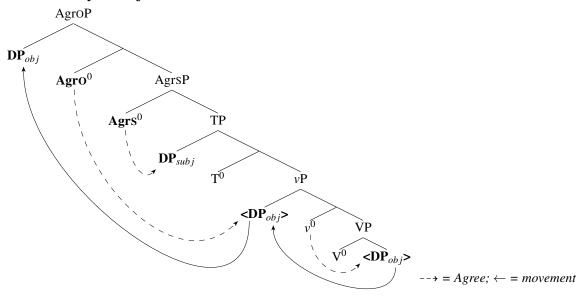
¹⁰We may further posit, for consistency, that ABS subjects similarly undergo movement, triggered by an [EPP]-bearing probe in Agrs⁰. However, I will set this aside, as it does not bear on the overall analysis.

¹¹While the present approach assumes the notion of syntactic phases (Chomsky, 2001), this is in many ways equivalent to Bittner and Hale's notion of *opaque VP* found in syntactically ergative ("raising") languages.

¹²This may be modeled as a countercyclic or postsyntactic Last Resort process, as suggested by Spreng (2012) and Levin (2015), though is also compatible with other theoretical implementations.

 $^{^{13}}$ Plausibly, this too is triggered by an Agree operation taking place between the phase head, v^0 , and the DP undergoing movement (Chomsky, 1995; McCloskey, 2002; van Urk, 2015), also shown in (13). Note that, throughout the paper, I will often opt to omit this intermediate movement step in syntactic trees, and sometimes in prose as well, for illustrative and expository convenience. However, the successive-cyclic nature of this movement will be explicitly discussed again in Section 6.3.

(13) Successive-cyclic object movement

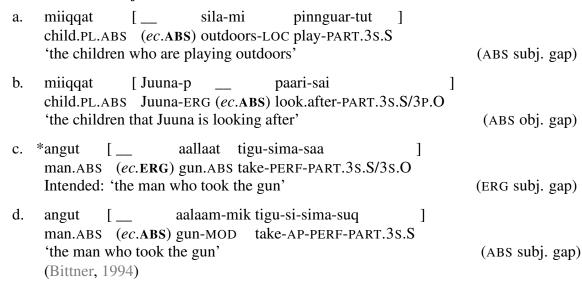


The idea that objects may eventually raise to a position higher than the subject is a hallmark of *syntactic ergativity*. The notion of syntactic ergativity pertains to the clausal organization of nominal arguments, such that ABS subjects and objects both occupy a structurally high locus to the exclusion of the ERG subject (Manning, 1996; Deal, 2016; Ershova, 2019). This is in contrast to *morphological ergativity*, which refers instead only to the ERG-ABS case morphology seen on nominals, regardless of their syntactic position. Typologically, only a subset of morphologically ergative languages are syntactically ergative (Dixon, 1979; Manning, 1996, a.o.). It has also been hypothesized that syntactic ergativity cannot exist in a given language without morphological ergativity, though I return to this point in Section 6.

I illustrate below two manifestations of syntactic ergativity in Kalaallisut. The first is an *extraction asymmetry* barring ERG subjects from undergoing Ā-movement. This is commonly attested in syntactically ergative languages (Campana, 1992; Tada, 1993; Manning, 1996) and has been analyzed as an intervention effect arising from the (ABS) object being structurally higher than the ERG subject, thereby disrupting an otherwise licit dependency between the subject and a higher head (e.g. Coon et al., 2014; Polinsky, 2016, 2017b). As shown throughout (14), only ABS subjects and ABS objects may be relativized in Kalaallisut, while ERG subjects may not. Because of this restriction, the relativization of a transitive subject requires using the non-ergative (antipassive) construction, in which the transitive subject is ABS rather than ERG.¹⁴ I therefore take the existence of this pattern as evidence for high ABS objects in Kalaallisut (and Inuit more generally). For reasons of space, however, this paper does not provide an analysis of this restriction, though see Murasugi (1992, 1997) and Deal (2016) for two possible accounts.

¹⁴Note that this restriction is only found in relativization contexts in Kalaallisut and other Inuit languages. This is in contrast to similar extraction asymmetries in other syntactically ergative languages, e.g. Mayan languages, in which ERG subjects are banned from undergoing any kind of Ā-movement.

(14) No relativization of ERG in Kalaallisut



The focus of this paper is instead on the semantic interpretation of ABS subjects and ABS objects, compared to the other nominals in the language. I will variably refer to the relevant semantic effect as pertaining to *scope* (Bittner, 1994; Wharram, 2003), *specificity* (Manga, 1996; Beach, 2011), or *topicality* (Berge, 1997, 2011; Johns and Kučerová, 2017), with the understanding that there is little consensus concerning the exact nature of the relevant effect; note, however, that all of these semantic notions are compatible with the object movement approach advocated for here.¹⁵

As shown in (15), ABS subjects and ABS objects obligatorily take wide scope relative to other elements, such as sentential negation; conversely, MOD objects of antipassive constructions receive a narrow scope interpretation. Moreover, although the data is not given, Bittner (1994, p. 138) notes that the same effect can be seen relative to modals (e.g. *-tariaqar* 'must') and high adverbs (e.g. *-juannar* 'always'), which also Merge along the clausal spine and appear as suffixes within the verb complex. A parallel pattern is given in (16): according to Bittner (1994), only the inverse scope interpretation is available in (16a) (yielding a collective reading of the object), while (16b) only permits the surface scope interpretation (yielding a distributive reading of the object). ¹⁶

(15) ABS arguments take wide scope over negation in Kalaallisut

- a. **atuagaq ataasiq** tikis-sima-**nngi**-laq book.**ABS** one.**ABS** come-PERF-**NEG**-3S.S 'There is one (particular) book that hasn't arrived.' (∃ > NEG; *NEG > ∃)
- b. 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.' (∃ > NEG; *NEG > ∃)

¹⁵This paper therefore does not seek to provide a concrete semantic analysis of the contrast between ABS and MOD arguments. Rather, it seeks to identify points of variation across Inuit concerning where (i.e. between which arguments) the contrast is present or absent.

¹⁶See Matthewson (1999) for an application of the same test in St'át'imcets.

c. 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.' (NEG > ∃; *∃ > NEG) (Bittner, 1994)

(16) ABS quantifiers outscope other quantifiers in Kalaallisut

- a. qimmit marluk **arnat pingasut** kii-vaat dog.PL.ERG two.ERG women.PL.**ABS** three.**ABS** bite-3P.S/3P.O 'Two dogs bit three women.' (3 > 2; *2 > 3)
- b. **qimmit marluk** arna-nik pingasu-nik kii-si-pput dog.PL.**ABS** two.**ABS** woman-PL.MOD three-MOD bite-AP-3P.S 'Two dogs bit three women.' (2 > 3; *3 > 2) (Bittner, 1994)

This is easily captured by the idea that Kalaallisut is syntactically ergative. Assuming that the interpretation of a given element is determined by its structural height (Diesing, 1992), movement of the object to a structurally high position in the clausal left-periphery permits it to take scope above other elements in the sentence. Note also that, although object movement is cross-linguistically often associated with the ν P-edge (see Section 4), and is a component of the present analysis, (13), this by itself is insufficient to account for the data in (15)-(16). Given the relatively high position of sentential operators such as negation, the ABS object must be interpreted in its highest position.

Turning now to the behaviour of pronouns, we see below that, although null, (3rd person) pronominal objects are necessarily interpreted as referential in the ergative construction, as in (17a), and as non-referential (indefinite) in the antipassive construction, (17b).¹⁷ This is consistent with the patterns shown in (15)-(16), and suggests that referential pronouns in Kalaallisut must undergo movement while non-referential pronouns must remain in situ.

(17) Omitted (pronominal) objects in Kalaallisut

- a. (*pro*) (*pro*) pisiar-aa 160 kuruuni-nik 3S.PRON.ERG 3S.PRON.ABS buy-3S.S/3S.O 160 kroner-PL.MOD 'He bought it for 160 kroner.'
- b. (pro) (pro) tuqut-si-vuq
 3s.PRON.ABS 3s.PRON.MOD kill-AP-3s.S
 'He killed something.' (Fortescue, 1984)

The generalizations provided above are summarized in (18):

(18) Ergative vs. antipassive objects in Kalaallisut

	Full DP	(Referential) pronoun
Movement (ABS)	✓	✓
No movement (MOD)	✓	X

Finally, it is important to establish that the structurally high position of ABS objects truly is a *derived position*, in that ABS objects are Merged VP-internally before eventually landing in Spec-

¹⁷The obligatoriness of this contrast has additionally been confirmed to me by Jerrold Sadock (p.c.).

AgroP (Murasugi, 1992; Bittner, 1994; Bittner and Hale, 1996a,b; Manga, 1996). This can be evidenced by the fact that ABS arguments may in rare instances be interpreted in a lower position, such as in NPI-licensing contexts. The examples in (19) first demonstrate that the NPI enclitic = luunniit may not be introduced in a position outside of the c-command domain of sentential negation. In (20), we further see that NPIs in all structural positions, including ABS object position, may be licensed by c-commanding negation. Following Bittner (1994), this is because ABS NPIs must reconstruct at LF, below negation, for licensing purposes.

(19) NPI requires c-commanding negation in Kalaallisut

- a. [atuagaq ataasir=luunniit tikis-sima-suq] ilumuu-nngi-laq book.ABS one.ABS=NPI come-PERF-PART.3S.S true-NEG-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=NPI 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.'

(20) Licensing of =luunniit NPIs available in all positions

- a. atuagaq ataasir=luunniit tiki-sima-nngi-laq book.ABS one.ABS=NPI come-PERF-NEG-3S.S 'No book has come (yet).'
- b. kuruuni-nik **marlu-innar-nil=luunniit** piqa-**nngi**-langa kroner-MOD.PL **two-just-MOD.PL=NPI** have-**NEG-1**S.S 'I don't have even two kroner.'
- c. **kina=luunniit** taku-**nngi**-laa **who.ABS=NPI** see-NEG-3S.S/3S.O 'He didn't see anyone.'

(Fortescue, 1984; Bittner, 1994)

(Bittner, 1994)

Overall, then, the semantic behaviour of ABS subjects and ABS objects in Kalaallisut may be readily captured by the syntactically ergative structure provided in (12a) and (13) above. Because ABS objects raise to a structurally high position in the clausal periphery, they are interpreted as specific or as wide scope relative to sentential operators such as negation and other nominal arguments.

3.2 A restricted ergative patterning in Labrador Inuttut

As mentioned, the existence of variation in ergativity across Inuit is most readily illustrated by contrasting Kalaallisut with Labrador Inuttut. In Labrador Inuttut, the usage of the ergative construction is limited to certain contexts, meaning that the ergative vs. antipassive alternation in Labrador Inuttut is highly asymmetrical. As a result, the alternation does not track the specificity or scopal property of the grammatical object. Rather, we will see that the alternation concerns whether the object is a *full DP or a pronoun*.

Unlike in Kalaallisut, the antipassive construction in Labrador Inuttut appears to be the *default* way to express transitive sentences, as observed in a series of papers by Johns (1999, 2001, 2006,

2017). This is first illustrated in (21). This example demonstrates that speakers use the antipassive to encode discourse-given information, in contrast to characterizations of MOD objects in Kalaal-lisut as non-topical by Berge (1997, 2011). In other words, comparable sentences in Kalaallisut would involve the usage of the ergative construction.

(21) Transitive sentences are by default antipassive in Labrador Inuttut

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 tautuk-tuk¹⁸
hillock-get-dear-LOC sitting-PART hillock-get-dear-LOC Nancy-MOD 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)

While Johns limits her discussion to referential DPs such as proper names, I present below novel data from quantified objects that further elucidate this characterization of antipassive objects. First, antipassive quantified objects in Labrador Inuttut may be interpreted with wide *or* narrow scope, thus further diverging from the Kalaallisut pattern presented in the previous section; rather, these nominals are semantically ambiguous. This is illustrated below relative to negation, as indicated by the contexts provided and aided by the minimizing NPI enclitic = *luunniit* in (22a) and the suffix -*tuin*(*n*)*aq* 'only' in (22b).

(22) MOD objects in Labrador Inuttut are scopally ambiguous relative to negation

a. *Context:* Johnny received several candies for Christmas and ate them all, but didn't like any of them.

Jâni **atautsi-mi=luunniit uKumiaga-mik** piutsa-sima-**ngi**-tuk Johnny.ABS **one-MOD=NPI candy-MOD** like-PERF-NEG-3S.S 'Johnny didn't like a single candy.' (NEG $> \exists$)

b. *Context:* Johnny received several candies for Christmas and ate them all, and liked most of them.

Jâni **atautsi-tuina-mik uKumiaga-mik** piutsa-sima-**ngi**-tuk
Johnny.ABS **one-only-MOD candy-MOD** like-PERF-**NEG**-3S.S

'There was only one candy that Johnny didn't like.' (∃ > NEG)

In (23), we moreover see that antipassive constructions containing multiple quantificational arguments again permit ambiguous readings of the object, contrary to the Kalaallisut facts presented earlier in (16). Whereas (23a) displays the expected distributive reading of the MOD object, the sentence (23b) crucially shows that a collective or cumulative reading of the MOD object is also available. The linguistic consultant who produced these sentences was provided with illustrations distinctly targeting each reading and asked to describe them; it is also worth noting that she offered antipassive constructions by default for both scenarios.

¹⁸Non-transparent orthographic conventions specific to Labrador Inuttut are as follows: $\hat{a} = [a:]$, e = [i:], o = [u:], ng = [ηη], K = [χ]. Additionally, Labrador Inuttut is subject to a phonological effect known as *Schneider's Law* or *Law* of *Double Consonants*, which results in the reduction of alternating CC clusters (Schneider, 1972; Dresher and Johns, 1995; Rose et al., 2012) and whose application is reflected in the examples below.

(23) MOD quantificational objects flexible for scope

a. *Illustrated scenario*: Two men, each dancing with two women (two men and four women in total).

atautsek angutek **maggo-nik anna-nik** apigi-niat-tok, each.DU.ABS **man.**DU.ABS **two-MOD woman-PL.MOD** ask-NR.FUT-3D.S

"tânsi-guma-ven?"

"dance-want-INT.2D.S"

'Each man asked two women, "Do you want to dance?" (each > 2)

b. *Illustrated scenario*: Two men dancing with a total of three women (five people in total).

angutek maggok tânsi-KatiKa-niat-tok **pingasu-nik** man.DU.ABS two.ABS dance-COM.APPL.AP-NR.FUT-3D.**S three-MOD**

anna-nik

woman.PL-MOD

'Two men are going to dance with three women.'

(3 > 2)

Further evidence in line with these data will be provided shortly. For now, it is clear that the received analysis of Kalaallisut—that the interpretation of the object correlates with its syntactic height—cannot be straightforwardly extended to Labrador Inuttut. In fact, the Labrador Inuttut facts are more broadly problematic for any approach that derives the semantic interpretation of a nominal *solely* from its surface syntactic position, e.g. the Mapping Hypothesis of Diesing (1992, 1996) (see also López 2012). I will address this point in more detail later in this paper, but simply flag it for now as an important consideration.

Whereas the antipassive construction may be used in a wide variety of grammatical contexts, the ergative construction in Labrador Inuttut surfaces when the object is a *referential pronoun* (Johns, 2017; Johns and Kučerová, 2017). This is shown in (24). Note that the pronominal object must be encoded as ϕ -morphology on the verb.

(24) Ergative construction used with pronominal object in Labrador Inuttut

- a. John asiu-ji-laut-tuk jaika-mi-**nik**John.ABS lose-AP-PST-3S.S jacket-POSS.REFL-**MOD**'John lost his jacket...'
- b. siagolittilugu pulesi-**up** nagvâ-laut-**tanga** tunu-a-ni ilinniavi-up later police-**ERG** find-PST-**3s.S/3s.O** back-POSS-LOC school-GEN '... and later the police found **it** behind the school.' (Alana Johns, p.c.)

It is important to establish that what we have seen so far is *not* a split-ergative pattern that tracks whether the object is a pronoun (= ergative) or a full DP (= non-ergative), in contrast to surface-similar patterns discussed by Coon and Preminger (2017), among others. Although this is not explicitly addressed in previous work on Labrador Inuttut, the examples in (25) demonstrate that referential (anaphoric) pronominal objects may *also* occur in antipassive contexts, with no discernable difference in meaning from their ergative counterparts, nor any degradation in grammaticality. As mentioned in Section 2.2, since there are no *overt* independent 3rd person pronouns in

¹⁹In fact, these particular Labrador Inuttut sentences were produced by linguistic consultants as translations of the

the Eskimo-Aleut language family, the presence of a null referential pronoun is inferred based on the interpretation of the sentence.

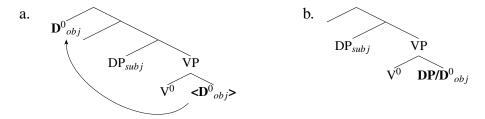
(25) Referential MOD pronominal objects in Labrador Inuttut

- a. Sâli aittosia-mik pisi-laut-tuk siagugiak Mary-mut **(pro)** âtsi-laut-tuk Sally.ABS gift-MOD buy-PST-3S.S later.on Mary-ALLAT give-PST-3S.S 'Sally bought a gift and later she gave **it** to Mary.'
- b. Jâni âpalli-mit upva-Kau-juk tâvatuak (pro) aggui-Kau-ngi-tuk Johnny.ABS apple-MOD wash-PST-3S.S but cut.up-PST-NEG-3S.S 'Johnny washed the apple but didn't cut it up.'

The emerging generalization, then, is that the ergative construction is *only* used when the object is a pronoun, whereas the occurrence of the antipassive construction is completely insensitive to the type of object.

If ergative transitive constructions in Kalaallisut involve object movement to a structurally high position, as posited in Section 3.1, a logical step is to extend this analysis to Labrador Inuttut. In Labrador Inuttut, pronouns may *optionally* undergo this movement step (reflecting the alternation given in (24)-(25)), while full DPs may *never* move. Pronoun movement in ergative transitive constructions is schematized preliminarily in (26a) for now, and will be further developed in the sections to follow. Note that I take pronouns to be bare D⁰s, following Postal (1994), Elbourne (2005), and Stanton (2016), an assumption that will prove useful later. The non-occurrence of movement in antipassive constructions in Labrador Inuttut is shown in (26b).

(26) Pronoun movement in Labrador Inuttut



Putting these facts together, we arrive at (27), an updated table from (18) above. Strikingly, we see that the object movement patterns in Kalaallisut and Labrador Inuttut are *reversed*; this reversal, I posit, is the underlying distinction in ergativity between Kalaallisut and Labrador Inuttut. In Kalaallisut, there are restrictions against leaving certain elements, e.g. referential pronouns, in situ. In contrast, *only* referential pronouns may undergo movement in Labrador Inuttut, resulting in a highly restricted usage of the ergative construction.

(27) Objects in Kalaallisut vs. Labrador Inuttut

	Kalaa	allisut	Labrado	r Inuttut
	Full DP	Pronoun	Full DP	Pronoun
Movement (ABS)	✓	✓	Х	✓
No movement (MOD)	✓	X	✓	✓

English sentences given, i.e. not constructed by the author and then judged grammatical.

More broadly, the following generalization is clear: the the robustness of ergativity within a particular Inuit language is tightly correlated with the availability of object movement.

Finally, as first pointed out by Johns (2017), I briefly note that the Labrador Inuttut pattern shown here is intriguingly reminiscent of a better-known set of facts found in the distantly-related Aleut, otherwise known as the Aleut Effect (e.g. Bergsland, 1997; Sadock, 2000; Merchant, 2011; Woolford, 2017). As illustrated in (28), the presence of a 3rd person pronominal object in Aleut triggers an ergative patterning with subject/object ϕ -morphology, while other types of objects (e.g. full DPs) surface within a non-ergative (bi-absolutive) patterning. In contrast to Labrador Inuttut, however, the occurrence of the ergative construction in pronominal object contexts appears to be *obligatory*, rather than optional.

(28) Ergative vs. non-ergative patterning in Aleut

- a. Piitra-m kidu-ku-u
 Peter-ERG help-PRES-3S.S/3S.O
 'Peter is helping him/her.'
- b. Piitra-**x** tayaĝu-**x** kidu-ku-x̂
 Peter-**ABS** man-**ABS** help-PRES-3S.S
 'Peter is helping the man.'

(Bergsland, 1997)

Due to the lack of relevant semantic data readily available, the inclusion of Aleut in this section and the next functions solely as a point of comparison with Labrador Inuttut and to strengthen the overall picture of Inuit grammar constructed in this paper. See also Sadock (2000) for some additional properties of Aleut that are potentially challenging for a unified account. Nonetheless, the existence of these surface commonalities, despite the two languages being geographically and genetically distant, reveals a systematicity in the variation in ergativity that spans across the entire Eskimo-Aleut language family.

* * *

In summary, contrary to the received characterization of ergativity in Inuit based on Kalaallisut, transitive sentences in Labrador Inuttut are generally expressed using the antipassive construction, with the ergative patterning only able to surface when the object is pronominal. Recast in terms of object movement, this means that only pronominal objects may raise to a structurally high locus in Labrador Inuttut. Zooming out, the discussion thus far raises a number of new questions, which I seek to address in the remainder of the paper. First, what is the grammatical source of the variation in ergativity between Kalaallisut and Labrador Inuttut (and, later, Inuktitut)? And, relatedly, why is the interpretation of MOD antipassive objects fixed in Kalaallisut but ambiguous in Labrador Inuttut? I argue that the answers to these questions emerge once we consider Inuit through the lens of the more general phenomenon of *object shift*.

4 Variation in object shift

This section further develops the idea that Kalaallisut and Labrador Inuttut display variation in the types of objects that may undergo movement to a structurally high position, already seen above. Building on Woolford (2017), this is supported by striking parallels with object shift in Scandinavian (see also Hale 1997). I summarize Woolford's insights below, as well as provide several new pieces of evidence for this unified approach. Against this backdrop, we will see that an object shift analysis permits us a new way of understanding the semantic flexibility of in situ (MOD) objects in Labrador Inuttut, in contrast to their Kalaallisut counterparts.

4.1 Scandinavian object shift

That objects in Inuit may undergo movement is further evidenced by Woolford (2017), who observes morphosyntactic parallels with the better-studied Scandinavian languages, in which the occurrence of object movement is well-established (Holmberg, 1986; Holmberg and Platzack, 1995; Collins and Thráinsson, 1996; Vikner, 2006; Thráinsson, 2008). Note that, although Woolford's account actually focuses on Kalaallisut and Aleut, her basic points extend to Labrador Inuttut given the similarities between Aleut and Labrador Inuttut discussed above.

As shown in the Icelandic data in (29), objects that have undergone movement are not only interpreted as *specific*, but they surface to the left of certain adverbs (e.g. *sjaldan* 'seldom'); in contrast, non-shifted objects are non-specific and are found to the right of such adverbs. See Diesing (1992, 1996), Diesing and Jelinek (1995), a.o. for further discussion.

(29) *Object shift in Icelandic*

a. Hann les <u>sjaldan</u> lengstu bókina
He reads seldom longest the.book
'He rarely reads the longest book.'
Reading: Given any group of books, he rarely reads the one that is the longest.

b. Hann les **lengstu bókina** <u>sjaldan</u>
He reads **longest the.book** seldom
'He rarely reads the longest book.'

*Reading: There is a book longer than all the others that he rarely reads. (Diesing, 1996)

The same effect is given in (30), with a quantificational object:

(30) Object shift of quantifiers in Icelandic

- a. Nemandinn las <u>ekki</u> **þrjár bækur** student-the read not **three books** 'It is not the case that the students read three books.' $(\neg > 3)$
- b. Nemandinn las þrjár bækur ekki student-the read three books not 'There are three books that the student didn't read.' (3 > ¬) (Thráinsson, 2008)

Following Chomsky (1995) and Rackowski and Richards (2005), I assume that object shift targets

the edge of the vP-phase; see also Déprez (1989) and Johnson (1991) for similar ideas. ²⁰ These Icelandic examples are thus strikingly similar to the Kalaallisut facts discussed in the previous section, although a notable syntactic difference, of course, is that in Kalaallisut the object eventually raises *above* the subject.

Additional evidence in favour of a unified analysis between Scandinavian and Inuit comes from the Mainland Scandinavian languages, in which only object shift of *pronouns* is permitted (Holmberg, 1986; Holmberg and Platzack, 1995; Vikner, 1994, a.o.). This is illustrated below with (standard) Danish.²¹

(31) Obligatory pronominal object shift in Danish

- a. *Studenten læste **bogen** <u>ikke</u> student-the read **book-the** not *Intended:* 'The student didn't read the book.'
- b. Studenten læste <u>ikke</u> **bogen** student-the read not **book-the** 'The student didn't read the book.'
- c. Studenten læste **den** <u>ikke</u> student read **it** not 'The student didn't read it.'
- d. *Studenten læste <u>ikke</u> **den** student read not **it** *Intended:* 'The student didn't read it.'

(Thráinsson, 2008)

As Woolford (2017) notes, this pattern is, of course, reminiscent of the Aleut Effect shown above, in that (certain) pronouns obligatorily seem to undergo movement.

What about Labrador Inuttut? Recall that, in contrast to both Kalaallisut and Aleut, pronominal objects in Labrador Inuttut only optionally undergo movement. However, I now contend that this too finds a parallel in typology of Scandinavian object shift. In particular, there is also variation among the Mainland Scandinavian languages in whether pronominal object shift is *obligatory* or *optional* (e.g. Josefsson, 1992, 2003; Andréasson, 2010; Vikner, 2017). Compare (31c-d) with the Swedish examples in (32):²²

²⁰I also assume with Sichel (2002) that object shift is Agree-driven, not due to Greed of the moving element.

²¹This discussion of pronominal object shift pertains specifically to *weak* (e.g. unstressed) pronouns in the sense of Cardinaletti and Starke (1999), as it is known that strong pronouns behave like full DPs with regards to object shift. The fact that only weak pronouns may undergo object shift in Mainland Scandinavian languages has resulted in parallels being drawn between object shift and *pronominal cliticization* cross-linguistically (Déprez, 1989; Josefsson, 1993; Bobaljik and Jonas, 1996), since strong pronouns similarly resist movement-derived cliticization cross-linguistically. Note moreover that the 3rd person pronouns in Inuit under discussion in this paper are also weak pronouns, since they are always null. This comparison will be revisited in Section 5.3.

²²Pronominal object shift has also been reported to be optional in Norwegian (Holmberg 1986, pp. 228-229, Anderssen et al. 2011) and in non-standard varieties of Danish (Pedersen, 1993).

(32) Optional pronominal object shift in Swedish

- a. Varför läste Peter den <u>aldrig</u>?
 why read Peter it never
 'Why did Peter never read it?'
- b. Varför läste Peter <u>aldrig</u> den?
 why read Peter never it
 'Why did Peter never read it?'

(Vikner, 2017)

Thus, we find *pointwise parallels* between the Scandinavian languages and the Inuit languages (and Aleut), concerning the types of objects that alternate syntactically, as well as the (non-)obligatoriness of such alternations. We may understand these parallels as both language groups displaying the same parameter settings. In Icelandic and Kalaallisut, full DPs may undergo object movement, while referential pronouns must do so; moreover, the occurrence of DP movement is correlated with a semantic difference pertaining to specificity or scope. In Danish and Aleut, full DP objects may not undergo movement, while pronominal objects must. Finally, in Swedish and Labrador Inuttut, while full DP object movement is also impossible, pronominal objects may undergo movement or remain in situ. This is summarized in (33).

(33) Object shift in Eskimo-Aleut and Scandinavian (adapted from Woolford 2017)

Full DPs/pronouns	Pronouns only		
Kalaallisut	Aleut	Labrador Inuttut	
Icelandic	Danish	Swedish	
	(Obligatory)	(Optional)	

Having established the occurrence of object shift in Inuit, I set aside Aleut for the remainder of this paper. The rest of this section focuses on the nature of in situ objects in Scandinavian and Inuit.

4.2 On the interpretation of low objects

I now demonstrate that the semantic flexibility of in situ (MOD) objects in Labrador Inuttut (in contrast with their counterparts in Kalaallisut) is also consistent with the cross-linguistic profile of object shift. Concretely, I suggest that this fits within the observation that the semantic correlates of object shift *disappear*, when movement is blocked for independent reasons (e.g. Adger, 1994; Vikner, 1997, 2001; Rackowski and Richards, 2005). Because full DPs may not undergo object shift to begin with in Labrador Inuttut, their interpretation is not tied to their structural height. Moreover, we correctly predict that the same effect should in principle be able to arise in Kalaallisut, in constructions in which object movement is generally impossible—a fact that has been independently discussed as well (Fortescue, 1984; Bittner, 1994).

As first discussed by Holmberg (1986), the occurrence of object shift in the Scandinavian languages interacts with *verb movement*—a phenomenon now known as Holmberg's Generalization. In particular, object shift is possible only if the (lexical) verb also raises, such that the verb>object word order is maintained (the Scandinavian languages are verb-second). This interaction is illustrated in the Danish examples in (34), in which the lexical verb remains in situ because it is the auxiliary verb that has undergone movement. Accordingly, the pronominal object must stay in situ

even though we had previously seen that pronominal object shift is obligatory. Crucially, notice that the pronoun is still interpreted as referential, even though it has not undergone movement.

(34) Holmberg's Generalization in Danish

- a. Hvorfor har Peter <u>aldrig</u> læst **den**? why has Peter never read **it** 'Why has Peter never read it?'
- b. *Hvorfor har Peter **den** <u>aldrig</u> læst? why has Peter **it** never read *Intended:* 'Why has Peter never read it?'

(Vikner, 2006)

But since full DPs *never* undergo object shift in Mainland Scandinavian, we expect this semantic loosening effect to be generally available for such nominals. Indeed, as shown in the examples in (35), now from Norwegian, in situ quantificational objects permit specific or wide scope readings.²³

(35) In situ DP objects in Norwegian may be interpreted as specific

- a. To barn bygde <u>faktisk</u> **tre sandslott**two children built actually **three sandcastles**'Two children actually built three sandcastles.' *Available reading:* There were three sandcastles, such that two children built them (e.g. they jointly built three).
- b. Greenberg leste <u>alltid</u> **en grammatikk** før frokost
 Greenberg read always **one grammar** before breakfast
 'Greenberg always read a grammar before breakfast.' *Available reading:* There is a particular grammar that Greenberg always read before breakfast (e.g. can be continued with, 'but I can't remember which one').

This is, of course, exactly what we have seen in Labrador Inuttut, repeated in (36). The semantic ambiguity of antipassive MOD objects—and, accordingly, their apparent defaultness—thus truly arises from restrictions on object movement.

(36) MOD objects in Labrador Inuttut are scopally ambiguous relative to negation

a. *Context:* Johnny received several candies for Christmas and ate them all, but didn't like any of them.

Jâni **atautsi-mi=luunniit uKumiaga-mik** piutsa-sima- \underline{ngi} -tuk Johnny.ABS **one-MOD=NPI candy-MOD** like-PERF-**NEG**-3S.S 'Johnny didn't like a single candy.' (NEG > \exists)

²³The expectation is that this is also the case for other Mainland Scandinavian languages.

b. *Context:* Johnny received several candies for Christmas and ate them all, and liked most of them.

```
Jâni atautsi-tuina-mik uKumiaga-mik piutsa-sima-ngi-tuk
Johnny.ABS one-just-MOD candy-MOD like-PERF-NEG-3S.S

'There was just one candy that Johnny didn't like.' (∃ > NEG)
```

This is in contrast to the obligatorily non-specific or narrow scope reading of full DP MOD objects in Kalaallisut, which persists because the option of object shift is generally available. But consider now what happens when object shift is blocked. Let us again use Scandinavian as a baseline, now focusing on Icelandic. As shown in (37), given Holmberg's Generalization, raising of the auxiliary forces both the lexical verb and the object to remain in situ. What we find is that the semantic distinction shown earlier in (29)-(30) is missing, with the in situ objects able to be interpreted as specific *or* non-specific.

(37) In situ quantificational objects in Icelandic are semantically ambiguous

Nemandinn hefur <u>ekki</u> lesið **þrjár bækur** student-the has not read **three books** 'It is not the case that the student has read three books.' $(\neg > 3)$ OR 'There are three books that the student hasn't read.' $(3 > \neg)$ (Thráinsson, 2008)

Beyond Scandinavian, this pattern has also been reported for certain full DP objects in Tagalog by Rackowski (2002) and Rackowski and Richards (2005).

A comparable environment in which object shift is blocked in Kalaallisut comes from relative clauses. Recall from (14) in Section 3.1 that Kalaallisut is syntactically ergative, with ERG arguments unable to undergo relativization; as a result, the relativization of a transitive subject requires that the relative clause be antipassive, so that an ABS subject is extracted instead. Framed differently, in such clauses, the object is *necessarily* MOD, meaning that it may not undergo object shift. Crucially, it is in these constructions that the MOD object *need not* be interpreted as non-specific or narrow scope. This has been reported by both Fortescue (1984) and Bittner (1994) (though Bittner does not provide the relevant scopal data). Indeed, Fortescue (1984, p. 54) offers the following passage, describing the example in (38):²⁵

"Due to the impossibility of using transitive participial inflected forms in relative clauses one cannot attach a transitive relative clause—with relative case subject—to a main clause NP, but it may be possible to substitute a corresponding 'half-transitive' [antipassive] form with instrumental [MOD] case object (not necessarily in the indefinite/deemphasized object sense that construction has in superordinate clauses):" (emphasis mine)

(38) Semantically ambiguous MOD object in Kalaallisut RC

piniartuq **nannu-mik** tuqut-si-suq hunter.ABS **polar.bear-MOD** kill-AP-PART.3S.S 'the hunter who killed a/the bear' (Fortescue, 1984)

²⁴Bittner (1994) also discusses double object constructions as another environment in which in situ internal arguments may be semantically flexible due to the impossibility of movement; these constructions must take an ERG-ABS-MOD case frame (with the indirect object raising and the direct object remaining in situ).

²⁵See also Bittner (1994, p. 116-118) for similar discussion.

As noted by various authors (Vikner, 1997, 2001; Thráinsson, 2008), the fact that the semantic correlates of object shift may be rendered vacuous presents a challenge for treatments that take semantic interpretation to derive *solely* from syntactic height, as pursued by Diesing (1992, 1996) and Diesing and Jelinek (1995). Nonetheless, it is possible to accommodate this set of facts by further positing that object shift may take place covertly at LF just in case syntactic object shift is blocked (Diesing, 1996). That covert movement does not over-apply in the constructions in which only a narrow scope reading is possible could, in turn, be construed as due to an economy condition, dispreferring object shift with no morphosyntactic consequences.²⁶ I take this to be the correct approach in this paper, though leave a fuller investigation of its consequences for future work.

Regardless, it is clear that, whatever the relevant explanation is, the disappearance of the semantic contrast when object shift is independently unavailable is a generalized and systematic effect that holds across genetically unrelated languages.

* * *

I have now presented a number of parallels between the Inuit ergative vs. antipassive alternation and object shift in Scandinavian, thus motivating a unified analysis. ABS objects of ergative constructions in Inuit are structurally high, while MOD objects of antipassive constructions remain in situ within the VP-domain. Moreover, we have seen that Inuit (and Aleut) and Scandinavian display identical points of variation in the types of nominals that may undergo object shift, as well as identical semantic effects in both raised and in situ environments.

Zooming out further, we can see that the ergative patterning in Inuit occurs *in tandem* with object shift. Accordingly, this means that ergativity is constrained in the Inuit varieties in which object shift is limited, e.g. in Labrador Inuttut. In the following section, I present further evidence for this correlation from Inuktitut, which displays an intermediate patterning between Kalaallisut and Labrador Inuttut along both dimensions. The exact nature of object shift in Inuktitut will moreover shed light on the proper analysis of raised pronouns across Inuit.

5 An intermediate patterning in Inuktitut: Pronominal cliticdoubling

I now turn to the ergative vs. antipassive alternation in Inuktitut, as an extension of our comparison of Kalaallisut and Labrador Inuttut. At the same time, this discussion seeks to precisify previous observations that the ergative patterning found in Inuktitut appears to be weaker than in Kalaallisut, though stronger than in Labrador Inuttut (Johns, 2006, 2017; Beach, 2011; Carrier, 2012, 2017; Murasugi, 2017).

²⁶It has been alternatively posited that object shift would be better modeled in an Optimailty Theoretic system, in which requirements on moving specific objects may be violated (e.g. Vikner, 1997, 2001). In a similar vein, Bittner (1994, p. 117) offers a solution based on pragmatic competition, suggesting that, while movement vs. non-movement are normally associated with opposing semantics, this is actually pragmatically generated rather than semantically encoded; however, this may be cancelled when the alternation is lost.

I establish that Inuktitut truly occupies an intermediate position along the ergativity gradient alluded to earlier in (11), thereby providing evidence for the gradient itself. The Inuktitut pattern may also be understood in terms of object movement: Inuktitut displays pronominal doubling of full DP objects, in that the ϕ -morphology cross-referencing ABS objects is not genuine ϕ -agreement, but is rather the product of clitic-doubling. As shown in (39), then, Inuktitut thus instantiates an intermediate patterning between Kalaallisut and Labrador Inuttut along both axes. This strengthens the core proposal of this paper that the robustness of ergativity corresponds to the robustness of object shift. Furthermore, the idea that Inuktitut displays object clitic-doubling has important ramifications for the theoretical status of pronominal object shift and whether it can be conflated with pronominal cliticization (cf. Josefsson, 1993; Bobaljik and Jonas, 1996).

(39) Variation in ergativity and object shift across Inuit

	Kalaallisut	Inuktitut	Labrador Inuttut
Ergativity	Robustly ergative	Less ergative	Weakly ergative
Object movement	Full nouns	Pronouns	Pronouns
	and pronouns	doubling full nouns	only

5.1 The ergative patterning in Inuktitut

In Section 3, we saw that, between Kalaallisut and Labrador Inuttut, there is a marked difference in the permissibility of object movement, as reflected by the distributions of the ergative and antipassive constructions; the core findings repeated in (40). In Kalaallisut, full DPs may optionally undergo object shift, corresponding to a semantic difference pertaining to specificity or scope, while pronouns obligatorily raise. In Labrador Inuttut, full DPs may not undergo object shift, while pronouns may do so; moreover, in situ DPs are semantically ambiguous.

(40) Objects in Kalaallisut vs. Labrador Inuttut

	Kalaa	allisut	Labrado	r Inuttut
	Full DP	Pronoun	Full DP	Pronoun
Movement (ABS)	✓	✓	Х	✓
No movement (MOD)	✓	X	✓	✓

I now demonstrate that Inuktitut displays similarities with *both* Inuit varieties. Like in Kalaallisut, the ergative construction in Inuktitut may be used in pronominal and non-pronominal contexts alike; furthermore, the ABS object of the ergative construction appears to be obligatorily specific or wide scope (though this will be clarified in 5.2). However, the MOD object of the antipassive construction is semantically ambiguous—on par with their counterparts in Labrador Inuttut. These generalizations are first shown below in (41), from Beach's (2011) survey of the Nunavik (Quebec) varieties of Inuktitut.²⁷

²⁷Note that Beach (2011), working within a lexicalist framework, characterizes the relevant interpretive effect in terms of specificity rather than scope.

(41) ABS vs. MOD objects in Nunavik Inuktitut relative to quantificational adverbs

- a. <u>qautamaat</u> qimmiq taku-qatta-tara every day dog.ABS see-HAB-1S.S/3S.O
 'Every day, I see a dog (i.e. the same dog).' (∃ > every day; *every day > ∃)
- b. <u>qautamaat</u> **qimmi-mik** taku-qatta-tunga every day **dog-MOD** see-HAB-1S.S 'Every day, I see a dog (i.e. not necessarily the same dog).' (every day > ∃; ∃ > every day) (Beach, 2011)

The data in (42), from the author's fieldwork on the Baffin varieties of Inuktitut, are consistent with Beach's findings. These examples again demonstrate that quantificational ABS objects of ergative constructions must apparently take scope over other quantificational elements, resulting in a collective or cumulative reading, while MOD objects of antipassive constructions are semantically ambiguous.²⁸

(42) ABS vs. MOD quantificational nominals in Inuktitut

- a. marruuk surusiit niri-qqau-jangit **pingasut sivalaat** two.ERG child.PL.ERG eat-REC.PST-3P.S/3P.O three.**ABS** cookie.PL.**ABS** 'Two children ate three cookies (in total).' (3 > 2, *2 > 3)
- b. **marruuk surusiit** niri-qqau-jut pingasu-**nit** sivalaar-**nit** two.**ABS** child.**PL.ABS** eat-REC.PST-3P.S three-PL.**MOD** cookie-PL.**MOD** 'Two children ate three cookies (i.e. in total, or each).' (3 > 2, 2 > 3)

Recall also that (3rd person) pronominal objects in antipassive constructions in Kalaallisut are necessarily interpreted as non-referential, while their counterparts in Labrador Inuttut may also be referential. The Inuktitut equivalent of such sentences is given in (43), and shows that Inuktitut again patterns like Labrador Inuttut in this respect.²⁹

(i) Construction type and patient definiteness (Carrier, 2017)

	ANT	IPASSIVE	ERG	ATIVE	
Patient definiteness	#	%	#	%	Total
Definite	239	40	365	60	604
Indefinite	200	93	15	7	215
Total	439	54	380	46	819

²⁸These findings are also supported by recent quantitative research on ergativity in Inuktitut. Consider the table below, which summarizes the results of the corpus study conducted by Carrier (2017); whereas ABS objects in ergative constructions were overwhelmingly definite, MOD objects in antipassive constructions were both definite and indefinite. Put differently, 40% of definite objects in the corpus were MOD rather than ABS. See also Murasugi (2014, 2017) for similar results based on experimental evidence.

(43) Referential pronominal objects in Inuktitut

a. Jaani titirauti-mik tigu-si-juq titirauti-kkuving-mik amma tuni-**janga** Jaani.ABS pencil-MOD take-AP-3S.S pencil-receptacle-MOD and give-3S.S/3S.O Miali-mut

Miali-ALLAT

'Jaani took a pencil from the pencil case and gave it to Miali.'

b. Jaani titirauti-mik tigu-si-juq titirauti-kkuving-mik amma tuni-si-juq Jaani.ABS pencil-MOD take-AP-3S.S pencil-receptacle-MOD and give-AP-3S.S

(pro) Miali-mut

3s.pron.mod Miali-ALLAT

'Jaani took a pencil from the pencil case and gave it to Miali.'

Naturally-occurring sentences similar to (43b) also appear in corpus data, as noticed by Carrier (2017):³⁰

(44) Definite pro-dropped antipassive objects in Inuktitut

tuqu-nga-lik-suni=lu tagga takuna-liq-tugut (*pro*) die-PERF-PROG-CTMP.3S.S=also then look.for.long.time-PROG-1P.S **3S.PRON.MOD** 'And now that [the caribou] is dead, we are looking at it.' (Carrier, 2017)

Given the profile of Inuktitut, the table in (40) above may be updated as below. Altogether, (45) makes it clear that Kalaallisut, Inuktitut, and Labrador Inuttut truly do form a gradient in the relative robustness of ergativity, as first foreshadowed at the beginning of this section. Notice moreover that the intermediate nature of Inuktitut is reflected by the apparent free variation between ergative and antipassive constructions, regardless of the type of object being used (cf. Carrier, 2017; Murasugi, 2017).

(45) ABS vs. MOD objects across Inuit

	Kalaallis	sut (robustly erg.)	Inuktitut (less erg.)		(robustly erg.) Inuktitut (less erg.) Labrador Inuttut (weakly erg		r Inuttut (weakly erg.)
	Full DP	Pronoun	Full DP	Pronoun	Full DP	Pronoun	
Mvt.	✓	✓	✓	✓	X	✓	
(ABS)							
No mvt.	✓	Х	✓	1	✓	✓	
(MOD)							

However, this apparent free variation in Inuktitut is surprising, given our analysis of the semantic ambiguity of MOD (in situ) objects in Labrador Inuttut from Section 4.3; recall that this was attributed to the impossibility of full DP object shift in Labrador Inuttut. How are MOD objects in Inuktitut also able to be interpreted ambiguously, as shown above, if full DP objects may appear as ABS in Inuktitut?

I argue that, despite surface appearances, ergative and antipassive constructions in Inuktitut are

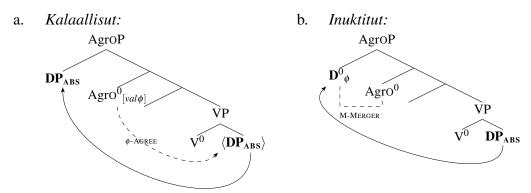
³⁰Indeed, Carrier (2017, p. 679-680) discusses the referential pronominal usage of the (null) antipassive object in (44) as a manifestation of the weaker ergative patterning in Inuktitut, in contrast to the received characterization of Inuit (as typified by Kalaallisut).

not exactly in free variation. This is because full ABS objects in the ergative construction are *clitic-doubled*, but otherwise remain in situ; the apparent wide scope or specific interpretation seen above is actually one of D-linking, which is attributed to the pronominal D⁰ in the clitic-doubling chain. Moreover, the exact analysis of pronominal clitic-doubling advocated for in this paper—based on Baker and Kramer (2016, 2018)—will allow us to make sense of subtle differences between Kalaallisut and Inuktitut ABS objects.

5.2 Consequences of object clitic-doubling

The idea that Inuktitut ABS objects are clitic-doubled is laid out in greater detail in previous work (Yuan, 2018, to appearb); a subset of these arguments are presented here. I propose that, whereas the subject-referencing morphology across Inuit is uniformly genuine ϕ -agreement, exponing the ϕ -features of the targeted DP in Agrs⁰, there is variation in the status of the object-referencing morphology that appears to occupy Agro⁰, (46). In Inuktitut, the object-referencing morpheme is not ϕ -agreement with an ABS object, but is actually a *pronominal D*⁰ forming a movement chain with the ABS DP. In other words, DPs may undergo object shift in both Kalaallisut and Inuktitut, but the highest movement copy in the latter language is a D⁰ realized as a suffix (to be explicated shortly).

(46) Object φ-agreement vs. clitic-doubling across Inuit



In addition to strengthening the ergativity—object shift connection across Inuit, there is independent evidence for this treatment of Inuktitut. I demonstrate that Inuktitut possesses a number of interpretive similarities with languages in which the occurrence of object clitic-doubling is more immediately apparent.

First, the presence of the pronominal D⁰ is cross-linguistically known to be *semantically detectable* in clitic-doubling constructions (e.g. Suñer, 1988; Dobrovie-Sorin, 1990; Anagnostopoulou, 2006; Baker and Kramer, 2018). Although there is variation across languages in the exact effect that arises, it is generally the case that objects that undergo clitic-doubling are interpreted as topical or otherwise referential. In other words, clitic-doubled nominals tend to have interpretations akin to those associated with pronouns or definite determiners.³¹ Accordingly, objects that independently cannot receive such interpretations cannot undergo clitic-doubling.

³¹As additionally shown by Runić (2014), in certain Slavic languages in which pronominal clitics are semantically flexible (able to be interpreted as indefinite, for instance), clitic-doubling in such languages does not yield the aforementioned effects.

This is most easily illustrated with quantificational elements. In the Romanian data in (47), for instance, we see that non-referential, non-specific objects such as negative indefinites and simplex wh-phrases cannot be clitic-doubled, and, conversely, that D-linked wh-phrases require clitic-doubling. See also Baker and Kramer (2016, 2018) for a similar contrast in Amharic.

(47) Object clitic-doubling in Romanian

a. **pe cine** (***l-**)ai văzut
PE who him-have (you) seen
'Who did you see?'

(Non-D-linked wh-phrase; no doubling)

b. nu (*l-)am văzut **pe nimeni** not him-I.have seen PE nobody 'I didn't see anyone.'

(Negative indefinite; no doubling)

c. **pe care** *(**l-**)ai văzut
PE which him-have (you) seen
'Which one did you see?'
(Dobrovie-Sorin, 1990)

(D-linked wh-phrase; doubling obligatory)

That Inuktitut ABS objects are clitic-doubled, and that their Kalaallisut counterparts simply undergo object shift, is not immediately apparent, given the wide scope or specific interpretation of ABS objects in both varieties. However, recall that ABS subjects and objects in Kalaallisut behave uniformly, as expected if ABS objects undergo object shift to a similar position to where ABS subjects normally occupy. We therefore expect Inuktitut to display *asymmetries* between ABS subjects and ABS objects, if ABS objects are clitic-doubled. Indeed, I now show that this is borne out. A closer examination of Inuktitut reveals a number of subtle differences with Kalaallisut, suggestive of two slightly divergent grammars.

First, wh-elements in Inuktitut are naturally interpreted as D-linked in ABS object position—though this interpretation need not arise for wh-elements in other positions, including ABS subject position. This is shown in (48). Accordingly, aggressively non-D-linked wh-phrases, 32 , such as those marked with the vagueness-encoding enclitic = kiaq, are banned in ABS object position but not in ABS subject position, (49). Together, these data demonstrate that the D-linked nature of ABS objects in Inuktitut is *obligatory*.

(48) Obligatory D-linking of ABS wh-objects in Inuktitut

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

kisu inna
what.ABS DEM.PRON
'What's that?' (#'Which one is that?')

Context: You and a friend are discussing what to eat for dinner.

kisu-mit niri-guma-vit **what-MOD** eat-want-INT.2S.S 'What do you want to eat?' (#'Which one do you want to eat?')

³²See Pesetsky (1987) and den Dikken and Giannakidou (2002) for cross-linguistic discussion of these elements.

c. *Context:* You and a friend are now at the grocery store, looking at the options.

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

- (49) No aggressively non-D-linked ABS wh-objects in Inuktitut
 - a. *Context:* 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?'
 - b. *Context:* You see that I'm experiencing symptoms of a food allergy.
 - (i) **kisu-mi=kiaq** niri-qqau-vit **what-MOD=vague** eat-REC.PST-INT.2S.S 'What on earth did you eat?'
 - (ii) * kisu=kiaq niri-qqau-viuk
 what.ABS=vague eat-REC.PST-INT.2S.S/3S.O
 Intended: 'What on earth did you eat?'

Similarly, recall from (20) that, despite the high locus of ABS objects in Kalaallisut, they may reconstruct for purposes of NPI-licensing. However, the examples in (50) show that the same NPI = luunniit in Inuktitut may surface in any position except ABS object position. Importantly, in these particular sentences the NPI is contained within an embedded syntactic island, with negation in the higher clause. It therefore cannot be that the ill-formedness of (50c) is due to the ABS object outscoping (and unable to reconstruct below) the negative element. In (51), we additionally find that this NPI may attach to referential DPs in ABS object position, such as proper names. Together, these data point towards a general inability for negative indefinites to serve as ABS objects—as expected given the cross-linguistic picture of clitic-doubling.

- (50) No ABS object negative indefinites in Inuktitut
 - a. Jaani iqauma-**nngit**-tuq [**kina=luunniit** qai-lau-mmangaa Jaani.ABS remember-**NEG**-3S.S **who.ABS=NPI** come-PST-DUB.3S.S 'Jaani doesn't remember if a single person came.'
 - b. Jaani iqauma-**nngit**-tuq [niri-lau-mmangaa **kisu-mi=luunniit**] Jaani.ABS remember-**NEG**-3S.S eat-PST-DUB.3S.S **what-MOD=NPI** 'Jaani doesn't remember if he ate a single thing.'
 - c. *Jaani iqauma-**nngit**-tuq [niri-lau-mmangaagu **kisu=luunniit**]

 Jaani.ABS remember-**NEG**-3S.S eat-PST-DUB.3S.S/3S.O **what.ABS=NPI** *Intended:* 'Jaani doesn't remember if he ate a single thing.'
- (51) ABS object NPI available with referential DPs

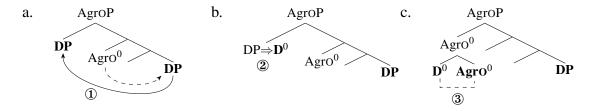
Jaani=luunniit taku-qqau-nngit-tara Jaani.ABS=NPI see-REC.PST-NEG-1S.S/3S.O 'I didn't even see Jaani.'

These data also pose a challenge for analyses of clitic-doubling that seek to conflate it with ob-

ject shift, as recently advocated for by Harizanov (2014). Harizanov proposes that clitic-doubling structures involve syntactic (phrasal) movement, followed by a process that converts the DP into a bare D⁰ at PF. Under this purely postsyntactic approach to clitic-doubling, clitic-doubling structures must be semantically equivalent to object-shifted ones, since the pronominal clitic is a full DP at LF. However, the fact that Kalaallisut (in which object shift takes place) and Inuktitut (in which object clitic-doubling takes place) do not behave alike strongly suggests that clitic-doubling structures must be syntactically distinct from pure object shift.

Following Baker and Kramer (2016, 2018), I assume instead that the series of derivational steps posited by Harizanov (2014) is essentially correct—however, both movement and the $DP \rightarrow D^0$ conversion process occur in the *syntax proper*. This is illustrated below throughout (52). First, Agro⁰ Agrees with the ABS object DP, triggering object shift to Spec-AgroP, (52a); this takes place in both Kalaallisut and Inuktitut. However, in Inuktitut the higher copy undergoes an additional syntactic operation—termed *Reduce* by Baker and Kramer—which converts it into a pronominal D^0 , (52b). A postsyntactic operation of M-Merger then rebrackets the Spec-Head configuration in (52b) into a complex head, (52c), which feeds suffixation (Matushansky, 2006; Anagnostopoulou, 2016).

(52) Derivation of clitic-doubling in Inuktitut



Finally, I believe that the present analysis of Inuktitut is compatible with the semantic interpretation of MOD (non-doubled) objects in the language. As seen in Section 5.1, these objects are semantically ambiguous, on par with their Labrador Inuttut and Mainland Scandinavian counterparts. Recall the cross-linguistic generalization that, in constructions in which object shift is independently blocked, the semantic contrast that is normally associated with object shift also disappears. This was taken in Section 4.2 as due to an availability of—albeit dispreference for—covert movement, which may occur if overt object shift is not possible.

I propose that this general idea is obeyed in Inuktitut as well. Although this paper assumes that object shift is a component of clitic-doubling, (52a), the fact that object shift is immediately followed by the clitic-generating operation in (52b) neutralizes this. Indeed, as we have seen, object clitic-doubling arises in an interpretation that is surface similar, yet subtly *distinct*, from that of canonical object shift, as reflected by the differences between Kalaallisut and Inuktitut. As such, I suggest that covert object shift is available for MOD objects in Inuktitut as well, with the assumption that clitic-doubled ABS objects and covertly raised MOD objects are not interpreted identically.

5.3 Typologies of pronominal cliticization and object shift

Before concluding this section, I briefly comment on a new analytical possibility that becomes relevant in light of the present discussion. In addition to languages differing in the degree of object

shift, many languages with pronominal clitics also display variation in whether these elements may double full DP objects. For instance, whereas Romanian was shown in (47) to permit object clitic-doubling, only pronominal cliticization is found in (Standard) French, (53).

(53) Only pronominal cliticization in French

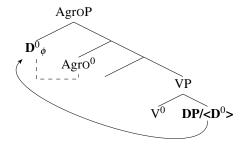
a. Marie voit **Jean**'Marie sees Jean.'

b. Marie **le** voit Marie sees him.'

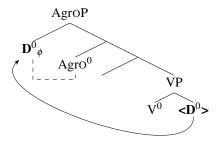
This is, of course, reminiscent of the pattern seen in Labrador Inuttut, in which (i) only pronominal objects move (albeit optionally), and (ii) when occupying their shifted position, are exponed solely as verbal object ϕ -morphology. We may typologically situate Inuktitut and Labrador Inuttut in a parallel way to the aforementioned Romance languages. Under this approach, the postsyntactic M-Merger process postulated for Inuktitut in the previous section may be extended to raised pronominal objects in Labrador Inuttut, (54). The sole crucial difference between Inuktitut and Labrador Inuttut thus concerns whether pronominal clitics may also double full DPs (Johns, 2017). I further assume that, when the raising element is a pronoun, i.e., a bare D⁰, the lower copy of movement is deleted in accordance with the Copy Theory of Movement (Chomsky, 1995). However, this deletion does not take place in clitic-doubling structures, because the members of the movement chain (D⁰ and DP, respectively) are non-identical (Landau, 2006).

(54) Pronominal clitics in Inuktitut and Labrador Inuttut

a. Inuktitut:



b. Labrador Inuttut:



Additionally, three-way contrasts between object ϕ -agreement, clitic-doubling, and pronominal cliticization—are also attested in other language groups, such as the Bantu languages (see Riedel 2009 and Baker 2018 for recent discussion; cf. also Bresnan and Mchombo 1987).³³ For instance, it has been postulated by Riedel (2009) that the verbal object markers in Sambaa behave like ϕ -agreement, while surface similar morphemes in Haya the products of clitic-doubling. Evidence for this contrast can be found by comparing the occurrence of the object markers with wh-objects and negative indefinites, (55a-b), just as we have done for Romance and Inuit above. At the same time, there are other languages such as Lubukusu that display so-called "pronoun incorporation," i.e. object markers appearing only in pronominal contexts, (55c) (Diercks and Sikuku 2013, *pace*

 $^{^{33}}$ Similar three-way contrasts can be constructed for Slavic languages, which have what appear to be pronominal object clitics on the surface. Although object clitic-doubling in Slavic is relatively rare, Runić (2014) cites multiple non-standard Serbian varieties in which this is instantiated. Finally, that at least a subset of these clitic forms are actually instances of genuine ϕ -agreement has been proposed by Rudin (1997) for Bulgarian and Franks (2009) for Macedonian.

Sikuku et al. 2018). This, in turn, lends further credence to the respective analyses of Kalaallisut, Inuktitut, and Labrador Inuttut offered in this paper.

(55) Three-way object-referencing contrast in Bantu

a. Sambaa (object ϕ -agreement):

Si-chi-on-iye kintu chochoshe NEG.1S-7O-see-PERF 7thing 7any 'I didn't see anything.'

(Riedel, 2009, p. 50)

b. *Haya* (*object clitic-doubling*):

Ti-n-a-(*ki)-bona kintu kyonakyona NEG-1SS-PST-(*70)-see 7thing 7any 'I didn't see anything.'

(Riedel, 2009, p. 186)

c. Lubukusu (pronominal cliticization):

N-a-ba-bona (*baa-somi)³⁴ 1S-PST-**2O**-see (***2-students**) 'I saw them.'

(Diercks and Sikuku, 2013, p. 9)

Finally, the idea that Labrador Inuttut not only displays pronominal object shift, but also pronominal cliticization, is, in turn, reminiscent of proposals that either seek to conflate the two phenomena (e.g. Josefsson, 1993; Bobaljik and Jonas, 1996) or at least draw parallels between them (e.g. Anagnostopoulou, 2003). On the other hand, Holmberg and Platzack (1995) points out several morphological challenges to such a unification.

I tentatively suggest that this can be resolved given the analysis of pronominal cliticization adopted in this section, and assuming some degree of cross-linguistic parametrization. As noted in Section 5.2, the derivation of clitic-doubling contains object shift as a necessary precursor (Baker and Kramer, 2016, 2018); thus, it can be plausibly concluded that all of the languages under discussion here involve object shift. In contrast, M-Merger—the postsyntactic operation that creates a clitic, i.e. a bound morpheme—takes place only in a subset of these languages, for instance not in the Scandinavian languages. This captures the similarities between pronominal cliticization and pronominal object shift, but also does not take them to be uniform phenomena. The basic idea, as well as the concomitant typology of languages that arises from it, is summarized in (56).

(56) Typology of pronominal cliticization and object shift

Object shift of pronouns	Application of M-Merger?
Labrador Inuttut	✓
French	✓
Haya	✓
Mainland Scandinavian	Х

³⁴As Diercks and Sikuku (2013) discuss, this sentence is acceptable in Lubukusu if the DP object is right-dislocated, for instance following a prosodic boundary. However, in neutral contexts, the occurrence of the object forces the absence of the object marker on the verb.

* * *

In sum, this section has argued that Inuktitut occupies an intermediate position between Kalaallisut and Labrador Inuttut along *both* axes under consideration—degree of ergativity and object shift—thus further supporting the notion that these two phenomena are closely tied. The ergative construction in Inuktitut involves object clitic-doubling; it is derived by object shift, followed by the obligatory conversion of the raised object into a pronominal D^0 (which, in turn, is realized as a ϕ -bearing suffix on the verb). The gradient that we see across Inuit is presented again below:

(57) Variation in ergativity and object shift across Inuit

	Kalaallisut	Inuktitut	Labrador Inuttut
Ergativity	Robustly ergative	Less ergative	Weakly ergative
Object shift	Full nouns	Pronouns	Pronouns
	and pronouns	doubling full nouns	only

Moreover, in this section I have posited that the clitic-based analysis of Inuktitut may be extended to pronominal object shift in Labrador Inuttut, arising in a number of typological consequences and cross-linguistic parallels. The rest of this paper focuses on the nature of ERG case morphology in Inuit and its relation to ergative alignment more broadly.

6 A dependent analysis of ergativity

We have now seen that there is variation across Inuit in *both* the robustness of ergativity and the possibility of object shift, and, more specifically, that the ergative patterning appears only in the context of object shift. In this section, I demonstrate that these factors are indeed causally linked: movement of the object to a structurally high position feeds ERG case assignment to the subject, as expected in a dependent case framework (e.g. Marantz, 1991; Baker, 2015).

However, since the Inuit languages are syntactically ergative, with the object raising *above* the subject, this yields unorthodox assumptions about how dependent ERG case is assigned. In particular, the directionality of ERG case assignment must be *downwards* (i.e. the directionality canonically associated with dependent ACC case), for which there is independent evidence in Inuit and cross-linguistically. Though seemingly counterintuitive, I show that this departure from the standard approach arises in new and welcome insights into the typology of morphological vs. syntactic case alignment.

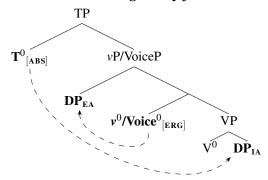
6.1 Theories of ERG case assignment

At this juncture, our desideratum is a theory of case that captures the link between ergativity and object shift—in other words, a theory that *derives* the ergative patterning from movement of the object.

Within the standard Minimalist conception of case (Vergnaud, 1977; Chomsky, 2000), case assignment takes place via Agree between a nominal and a functional head and serves a licensing function. For ergative languages, a dominant view is that ERG case is *inherent*, assigned to external

arguments by v^0 or Voice⁰ (e.g. Woolford, 1997, 2006; Anand and Nevins, 2006; Aldridge, 2008b; Legate, 2008, 2012; Coon, 2017).³⁵ A transitive construction would therefore look as in (58) (it is additionally assumed in many of these approaches that ABS case is essentially NOM, hence assigned by T^0 , illustrated here as well).

(58) ERG and ABS assigned by functional heads



Inherent ERG case thus goes together with θ -role assignment, as both are assigned by v^0 /Voice⁰ to its specifier. The contrast between intransitive and transitive subjects in Inuit, as in (59), is at first glance amenable to such an analysis (see, for instance, Spreng 2006, 2012 for an explicit proposal along those lines).

(59) Ergative-absolutive pattern in Kalaallisut

- a. **miiqqat** piqqip-put child.PL.**ABS** healthy-3P.S 'The children are healthy.'
- b. Juuna-p miiqqat paari-vai Juuna-ERG child.PL.ABS look.after-3s.S/3P.O 'Juuna is looking after the children.' (

(Bittner and Hale, 1996a,b)

However, I contend that the inherent approach to ERG case assignment is actually untenable for Inuit, as it is not clear how to capture the correlation between the occurrence of ERG case morphology and the structural height of the object, as the latter is not obviously associated with a change in transitivity or agentivity.³⁶

In contrast, that the presence of case morphology on one nominal may be determined by the structural properties of another nominal is highly suggestive of a *dependent* theory of case. According to this theory, case is assigned configurationally, based on the c-command relationship between two (or more) nominals—i.e. not mediated by functional heads (Yip et al., 1987; Marantz, 1991; McFadden, 2004; Baker and Vinokurova, 2010; Baker, 2014, 2015). A version of this theory has also been previously advanced with explicit reference to Inuit by Bittner and Hale (1996a,b). As

 $^{^{35}}$ On the distinction between v^0 and Voice 0 , Kratzer (1996) posits that external are introduced by Voice 0 rather than v^0 . It has also been proposed that transitive external arguments are introduced by Voice 0 , but unergative external arguments are introduced by v^0 . This paper does not meaningfully adjudicate between these different approaches, though the many of the structures in this section illustrate external arguments in Inuit as being introduced by Voice 0 .

³⁶Although antipassives are cross-linguistically often associated with object demotion or detransitivization (e.g. Baker, 1988), this is difficult to maintain given Inuit varieties such as Labrador Inuttut, in which *most* transitive constructions are expressed using the antipassive construction.

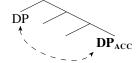
shown in (60), ERG and ACC case are both dependent within this framework, but differ in the *directionality* of assignment (parametrizable across languages). Dependent ERG case is typically taken to be assigned upwards to the higher of two nominals, while ACC case is assigned to the lower of two such nominals. The other nominal that does not receive dependent case remains morphologically unmarked, i.e. is ABS or NOM. Following the previous literature, I will refer to this other nominal as the *case competitor* for dependent case assignment.³⁷

(60) **Dependent case assignment**

a. Ergative language:



b. Accusative language:



Thus, the distribution of dependent case morphology is predicted to be unrelated to the presence of functional heads typically implicated in structural case assignment. I illustrate this point with a diagnostic from unaccusatives, which will be shown in 6.2 to apply to Inuit (and related Eskimo-Aleut languages) as well. This diagnostic capitalizes on the availability of ACC or ERG case even in the absence of ν P-level functional heads, as shown below. This is problematic for Agree-based theories of case assignment that tie both ACC and ERG case to ν 0/Voice⁰ and argument structure.

In Sakha (Turkic), embedded subjects may undergo A-movement into the matrix clause and be marked with ACC case—even when the matrix verb is unaccusative or passivized, as in (61) (Vinokurova, 2005; Baker and Vinokurova, 2010). While there is no matrix v^0 /Voice⁰ in these constructions, the presence of ACC case may be readily analyzed as due to the proximity of the embedded subject to the matrix subject—its case competitor—after raising (why movement may feed dependent case will be discussed shortly).³⁸

(61) Dependent ACC case in Sakha

a. Min [sarsyn **ehigi** kel-iex-xit dien] <u>ihit</u>-ti-m

I.NOM tomorrow **you.NOM** come-FUT-2PS that hear-PAST-1SS

'I heard that tomorrow you will come.' (baseline)

(i) Mishar Tatar: Dependent ACC case blocked by DAT matrix subject

Alsu-**ga** Marat(*-**n**x) [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)

³⁷The broader theory of case subsuming dependent case references the notion of case competition along a hierarchy of case assignment mechanisms (lexical>dependent>unmarked), with nominals no longer counting as a case competitor once they have received case. Dependent case may therefore only be assigned in the context of multiple *caseless* nominals. See also Kornfilt and Preminger (2015) for arguments that "unmarked" (ABS/nom) case is actually simply caselessness.

³⁸A second diagnostic may be seen in constructions containing lexical case-marked nominals. Since lexical case renders a nominal unable to participate in the dependent case calculation, the presence of lexical case may block dependent case assignment to another nominal. This is shown below with Mishar Tatar, related to Sakha, in which the presence of quirky (DAT) case on the matrix subject blocks ACC case assignment to the raised embedded embedded subject. In Yuan (2018), I show that a similar bleeding effect is found in particular contexts in Inuit.

- b. 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.' (unaccusative matrix verb)
- c. 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.' (passivized matrix verb)
 (Baker and Vinokurova, 2010)

A similar pattern can be seen in unaccusative constructions in Shipibo (Panoan), an ergative language: unaccusative subjects are normally ABS, as expected—but they may bear ERG case when they co-occur with a lower nominal, such as an applicative, (62) (Baker, 2014). Again, this is difficult to reconcile with inherent analyses of ERG, but follow straightforwardly from a dependent approach.³⁹

(62) Dependent ERG case in Shipibo

dependent case assignment.

 Kokoti-ra joshin-ke fruit-PRT.ABS ripen-PRF 'The fruit ripened.'

(baseline)

b. Bimi-**n**-ra Rosa joshin-xon-ke fruit-**ERG**-PRT Rosa.ABS ripen-APPL-PRF 'The fruit ripened for Rosa.'
(Baker, 2014)

(unaccusative applicative)

The Sakha data in (61) also reveal that dependent case assignment may be relativized to particular *syntactic domains*, since only raised subjects may be assigned dependent ACC case, while in situ embedded subjects are invariably NOM. The existence of domains of dependent case assignment is further illustrated in the Eastern Ostyak examples in (63). In Eastern Ostyak, object shift feeds ERG case assignment to the subject, suggesting that the v*P-phase boundary* may demarcate domains of

³⁹This diagnostic does not only point to a dependent case treatment of ERG case, as pointed out by Deal (2019). Deal demonstrates that Nez Perce displays a similar case pattern in unaccusative applicative constructions, but argues on the basis of other language-internal evidence that ERG case is not dependent. Rather, ERG "case" in Nez Perce is essentially the portmanteau of the subject's φ-features in T^0 and the object's φ-features in v^0 , respectively, transferred onto the subject (which Agrees with T^0 and is generated in Spec-vP). See also Clem (2019) for a similar analysis of the Panoan language Amahuaca. While this type of approach appears on the surface to be a viable alternative to the dependent case approach pursued here for Inuit, it is untenable. First, both of the relevant Agreeing heads in Inuit are in the extended CP-domain, as established above, with the head targeting the object (Agro⁰) being higher; thus, this system would erroneously arise in the *object* receiving ERG case. Second, we can see in certain impoverished moods/clause types that ERG case morphology may appear even in the absence of subject φ-agreement (Dorais, 1988); an example of this is given in (66a) for Yupik.

(63) Dependent ERG case requires object shift in Eastern Ostyak

- a. Mä t'əkäjəylämnä ula mənyäləm
 we.DU.NOM younger.sister.COM berry pick.PST.1PS
 'I went to pick berries with my younger sister.' (no object shift)
- b. Ma-ŋan laya əllə juy kanna amayaloy
 we-ERG them large tree beside put.PST.3PO/1PS
 'We put them (pots of berries) beside a big tree.'
 (Gulya 1966, cited in Baker 2015)

 (object shift)

Below, I show that these properties are also found in Inuit. This not only reveals that ERG case is dependent, but that it is assigned after object shift out of the *v*P-phase. This explains the correlation between ergativity and object shift discussed above. However, I also point out a crucial difference between Inuit and a language like Eastern Ostyak; ERG case is not immediately assigned to the subject when the object raises to Spec-*v*P, but rather only after it lands in Spec-AgroP.

6.2 Downwards dependent ERG case in Inuit

That ERG case in Inuit is not tied to transitivity or external argumenthood (i.e. is not associated with v^0/Voice^0) is evidenced by its ability to surface on various unaccusative subjects, just as we have seen in Sakha and Shipibo above. Inuit has several productive applicative morphemes, which promote an otherwise oblique applied argument to core argument status; this may result in an ERG-ABS case frame. Crucially, unaccusative (e.g. anticausative) subjects and passivized subjects may receive ERG case in such contexts. This is shown in the Inuktitut examples in (64)-(65) with reason and comitative applicatives.

(64) ERG case on anticausative subject (Inuktitut)

- a. **niuvirvik** matui-sarait-tuq store.**ABS** open-early-3s.S 'The store opened early.'
- b. Context: Miali won a raffle and got to go to Northmart before normally opened to have her pick of items.
 niuvirvi-up matui-sarai-gutigi-janga Miali store-ERG open-early-REAS.APPL-3S.S/3S.O Miali.ABS 'The store opened early for/because of Miali.'

(65) ERG case on passivized subject (Inuktitut)

- a. **ujamik** niuviq-ta-u-juq necklace.**ABS** buy-PASS.PART-be-3S.S 'The necklace was purchased.'
- b. ujami-**up** niuviq-ta-u-qatigi-jangit **siutirutiik** necklace-**ERG** buy-PASS.PART-be-COM.APPL-3S.S/3P.O earring.DU.**ABS** 'The necklace was purchased with the earrings (i.e. they were purchased at the same time).'

The existence of this patterning is not limited to Inuit. Miyaoka (2012) lists a number of exam-

ples of this sort for the related language Central Alaskan Yup'ik; two are given in (66) (see also Baker and Bobaljik 2017, citing Woodbury 1981 for similar constructions with malefactive internal arguments).

(66) ERG on unaccusative subjects in Central Alaska Yup'ik

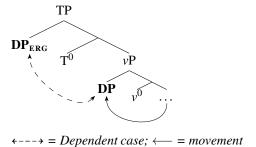
- a. **angun**=llu kis'-ul-luku kica-**m** man.**ABS**=and sink-APPL-CTMP.3s.S anchor-**ERG** 'The anchor sank along with the man (entangled).'
- b. ella-m (*pro*) assi-ut-aanga weather-ERG (1S.PRON.ABS) good-APPL-3S.S/1S.O 'The weather is good for me.' (Miyaoka, 2012, p. 1080, 1082)

Overall, then, it is clear that ERG case in Inuit (and other Eskimo-Aleut languages) is not inherent. However, the dependent approach to ERG case assignment may readily capture this set of data; under this view, ERG case simply occurs due to the presence of another (syntactically local) argument, its case competitor—the ABS internal argument.

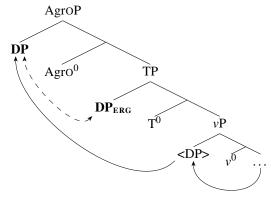
At this point, a question that arises is *when* dependent ERG case is assigned in the derivation, relative to object shift. We have seen in the previous section that dependent case may be relativized to a particular syntactic domain, such as the CP (*v*P-external) phase; this seems to be correct for Inuit as well, since *v*P-internal nominals do not trigger ERG case on the subject. However, as we have seen in (13) in Section 3.1, the object in ergative constructions first moves from its base-generated position to the edge of the *v*P-phase, and before ultimately raising to Spec-AgroP, resulting in a syntactically ergative configuration. Therefore, there are two distinct possibilities for the timing of ERG case assignment, based on the surface position of the object. These options are presented in the (abridged) structures in (67). The configuration in (67a) is essentially Baker's (2015) analysis of Eastern Ostyak, as discussed above, with the dependent case calculation applying among the *v*P-external nominals once the TP-layer is built. However, in (67b), ERG case is assigned after the *entire clause* is constructed.

(67) Timing of dependent ERG case assignment

a. *Possibility #1: Object at Spec-vP:*



b. *Possibility #2: Object at Spec-AgrOP:*



I contend that it is the configuration in (67b) that is correct, meaning that ERG case is assigned to the *lower* of two vP-external arguments. Thus, on the surface, the configuration for dependent ERG case assignment is similar to the assumed downwards directionality of dependent ACC case

assignment. While seemingly unorthodox, this idea explicitly references the *syntactically ergative* nature of Inuit, whereas the alternative configuration in (67a) does not.

Moreover, there is language-internal evidence for this idea. As shown below, the Inuit languages have a productive nominalizing suffix *-lik* (n^0), which may appear at the right edge of the verb complex. ⁴⁰ In (68), we see that n^0 Merges at the clausal periphery above Neg⁰ and Mood⁰, but crucially blocking the Merging of subsequently higher heads such as Agrs⁰ and Agro⁰. We may thus use this construction to evaluate the possibilities in (67), because vP is still present while AgroP is not. What we find in (68) is that the absence of AgroP—the final landing site of object movement—entails the loss of the ERG-ABS case patterning. ⁴¹

(68) No ERG-ABS pattern in high nominalizations

- a. **Taiviti** nagli-gi-nngit-ta-lik Kiuru-mik
 David.ABS love-TR-NEG-PART-NMLZ Carol-MOD
 'David doesn't love Carol.'
- b. *Taiviti-up nagli-gi-nngit-ta-lik Kiuru

 David-ERG love-TR-NEG-PART-NMLZ Carol.ABS

 Intended: 'David doesn't love Carol.'

Finally, see Yuan (2018, to appeara) and Ershova (2019) for arguments that the configuration in (67b) is also needed for other ergative languages with high ABS objects, such as Yimas (Papuan) and West Circassian (Caucasian). This, in turn, reveals that the dependent case algorithm is sensitive to the difference between *morphological and syntactic alignment*, a topic which I explore further in Section 6.3 below.

This difference between morphological ergativity (case) and syntactic ergativity (structural position of arguments) is highly relevant to the overall picture of Inuit that emerges from the present discussion. The (simplified) structures in (69) illustrate that ergativity in Inuit is derived by object movement to Spec-AgroP, which, in turn, triggers dependent ERG case on the subject. Thus, variation in ergativity effectively boils down to variation in the *case competitor* for dependent ERG case assignment—which, in turn, arises from restrictions on the types of object that may move to Spec-AgroP (in Kalaallisut and Labrador Inuttut), as well as how the higher copy of movement in that position is realized (e.g. as a pronominal clitic in Inuktitut).

(i) Transitivized constructions are normally obligatorily ERG-ABS

- Taiviti-up nagli-gi-nngit-tanga Kiuru
 David-ERG love-TR-NEG-3S.S/3S.O Carol.ABS
 'David doesn't love Carol.'
- b. *Taiviti nagli-gi-nngit-tuq Kiuru-mik
 David.ABS love-TR-NEG-3S.S Carol-MOD
 Intended: 'David doesn't love Carol.'

⁴⁰This morpheme may also attach to nominal stems and take on the meaning of roughly "one that has X" or "one that is provided with X." See Fortescue (1984, pp. 51-52, pp. 216-217) for discussion.

 $^{^{41}}$ Additionally, the examples below demonstrate that the non-nominalized counterparts of (68) normally obligatorily surface with an ERG-ABS case frame. As I discuss in Yuan (2018), this is due to the presence of the transitivizing morpheme -gi, which cannot be antipassivized. Thus, the loss of the expected case patterning in (68) is truly due to the presence of the nominalizer bleeding the Merging of a landing site for object movement in the clausal periphery.

(69) Deriving ergativity across Inuit

a. Kalaallisut:

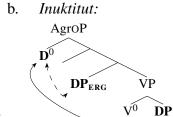
AgroP

DP

DP

DP

VP





Crucially, the derivations above demonstrate that variation in ergativity across Inuit pertains solely to *syntactic ergativity*—and is orthogonal to any properties of morphological ergativity. It is clear from (69) that the modality of ERG case assignment is invariant across Inuit, uniformly assigned in a dependent case algorithm to a *v*P-external nominal in the presence of a higher case competitor. More broadly, then, while much previous theoretical literature on ergativity has focused on the properties of the ERG-marked nominal, the pattern seen across Inuit shows that an equally important factor concerns the morphosyntactic properties of the *object* that co-occurs with the ERG subject.⁴²

6.3 Broader discussion: Morphological vs. syntactic alignment

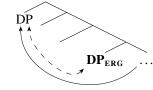
In the remainder of this paper, I briefly explore the nature of ERG case assignment in Inuit, as well as its broader typological implications for case alignment. Recall the point made earlier that the configuration required for ERG case assignment in Inuit resembles the standard treatment of ACC case assignment in a dependent case approach—namely, downwards. The relevant structures are repeated below as (70).

(70) Downwards dependent case

a. Dependent ACC case:



b. *Dependent* ERG case in Inuit:



Given that dependent case is divorced from dedicated functional heads and argument structure, we might wonder whether there is a conceptual or theoretical difference between ACC case and "downwards ERG case"—is this distinction simply terminological? Put differently, is there a sense in which Inuit may actually be described as syntactically ergative yet *morphologically accusative*?

I suggest that, indeed, it may be instructive to abstract away from morphological case labels such as "ACC" and "ERG," and instead characterize morphological case alignment more neutrally in terms of the directionality of case assignment.⁴³ Under this treatment, (70a) and (70b) display the same morphological alignment, if morphological alignment simply reflects dependent case. As

⁴²See also Tada (1993) and Coon et al. (2014) for similar conclusions based on variation in the Mayan languages.

⁴³This is somewhat in the spirit of Wunderlich (2001), for whom case is understood in terms of higher and lower roles.

a proof of concept, I show how this offers a new perspective on the typology of alignment systems, as well as some welcome predictions, to be verified for future research.

While (70a) and (70b) are both identical in terms of morphological alignment, they of course diverge in syntactic alignment, as the former is syntactically accusative (subject>object) while the latter is syntactically ergative (object>subject). This indicates that we may take morphological and syntactic alignment to instantiate *two separate parameters*, whose settings may be cross-cut. If so, then we arrive at the typological categorization of languages that is presented in (71):

(71) A typology: Morphological vs. syntactic alignment

	Syntactically accusative	Syntactically ergative
Downwards	Japanese, Sakha	Inuit, West Circassian, Yimas
Upwards	Shipibo	?

In (71), the languages given in the top row are essentially the ones representing the structures in (70a-b); both groups are parameterized as displaying a downwards directionality of case assignment, but diverge in whether the subject c-commands the object or vice versa at the point of case assignment. The left column of languages are all syntactically accusative, but, as we have seen, Shipibo is morphologically ergative, in that dependent case is assigned upwards. Most strikingly, however, there is a fourth possible combination of parameter settings, as indicated by the empty cell: languages that are syntactically ergative, with the object raising past the subject, but with dependent case crucially assigned to the *higher object*. Such a language might be labelled as "accusative," due to the case morphology normally affecting the object. This is shown more concretely in (72).

(72) Syntactically ergative language with upwards dependent case



Such a language has never been described in these exact terms. However, it is not only predicted by the present system, but is a simple extension of the patterning found in a language like Sakha, in which only objects that raise to the ν P-edge may be assigned case; the predicted language would differ in that the case assignment operation is delayed until subsequent movement of the object to the highest argument position.

I offer here two possible candidates for this language type, though leave a verification of these suggestions for future work. First, as shown in Broadwell (2006) and Tyler (2019), objects in Choctaw (Muskogean) are optionally case-marked when in situ, but obligatorily case-marked when extracted past the subject, as in (73). Assuming that optional case-marking on in situ objects is determined by a confluence of factors independent of the ones conditioning obligatory case-marking on fronted objects (see Broadwell 2006, p. 73–75 for discussion), it may be possible to analyze the latter as a syntactically ergative configuration with upwards dependent case.

(73) Obligatory case-marking on fronted objects in Choctaw

- a. Alíkichi-yat tákkon-(<u>a</u>) apa-tok doctor-NOM peach-(OBL) eat-PST 'The doctor ate the peach.'
- b. Tákkon-*(<u>a</u>) alíkichi-yat apa-tok peach-*(OBL) doctor-NOM eat-PST 'The peach, the doctor ate.'

(Tyler, 2019)

Another language that may fit this profile is Erzya Mordvin (Uralic), following the analysis of Colley (2018) (citing data from Zaicz 1988). As shown in (74), definite objects are both case-marked and are cross-referenced by ϕ -agreement (if plural), while indefinite objects co-occur with neither. Colley provides several morphosyntactic arguments that the case and agreement system of the language follows if (i) Differential Object Marking of definite objects follows from movement and (ii) the object raises to a position *above* the subject such that it is more local to the c-commanding ϕ -probe. If so, then the ACC case in (74b) is another instance of upwards dependent case to a structurally high object.

(74) Case and agreement with definite objects in Erzya Mordvin

- a. I^jišme ram-i-n^j horse buy-PST-1s.S 'I bought a horse.'
- b. t^je l^jišme-**n**^jt^j t^jet^ja-m ram-**iz**^je this horse-ACC father-1s buy-3s.S/3s.O.PST 'My father bought this horse (as for this horse, it's my father who bought it).' (Zaicz, 1988, pp. 208–209)

The idea that languages may be syntactically ergative without being morphologically ergative is in contrast to previous assumptions that former cannot exist without the latter (e.g. Larsen and Norman, 1979; Dixon, 1994; Manning, 1996; Polinsky, 2017b); syntactically ergative languages should, under such a view, be a *proper subset* of morphologically ergative ones. However, such a universal statement is testable, and the typology presented above provides an explicit way of doing so and suggests that this statement is not correct. More broadly, then, an extension of the current analysis of Inuit is that it offers novel avenues of inquiry that may potentially expand the space of cross-linguistic possibilities.

* * *

In sum, I have shown that the connection between ergativity and object shift in Inuit is best modelled within a dependent framework of case; in particular, movement of the object to a structurally higher position feeds dependent ERG case assignment on the subject (Baker and Vinokurova, 2010; Baker, 2015). Variation in the robustness of the ergative patterning across different Inuit varieties thus directly arises from this approach, as restrictions on the kinds of nominals that may undergo object shift entail restrictions on case competition for ERG case.

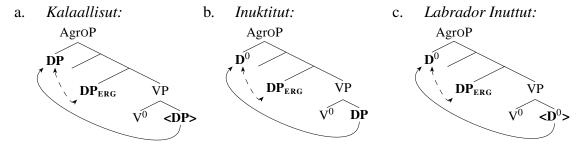
I have also argued that, contrary to standard treatments of ERG case in the dependent case framework, it is the highest movement copy in Spec-AgroP that acts as the case competitor for the ERG-receiving nominal, resulting in a dependent case configuration that looks downwards, rather than upwards as is usually assumed for morphologically ergative languages. However, far from being an idiosyncratic aspect of Inuit, I have shown that this analysis offers an alternative perspective on the relationship between morphological and syntactic alignment, and makes new predictions as to the case and movement patterns that are attested cross-linguistically.

7 Conclusion

This paper has investigated variation in ergativity across Inuit, as diagnosable by the relative distributions of the ergative and (non-ergative) antipassive constructions in individual Inuit varieties. As I have shown, the existence of this variation provides a unique empirical domain for probing the theoretical underpinnings of ergativity. The main observation of this paper has been that this variation is systematically correlated with variation in *object shift*. Evidence for this idea comes from the fact that we find a gradient in the robustness of *both* phenomena.

I have argued that this correlation follows from a syntactic derivation that holds uniformly across Inuit, with variation between individual Inuit varieties only in the permissibility of object shift. ERG case assignment is dependent in nature, and is uniformly assigned to the lower of two ν P-external nominals, after the object raises to its final landing site above the subject. As such, ERG case is a byproduct of object movement. This is schematized again in (75):

(75) Variation in ergativity across Inuit



The overall picture of Inuit that has emerged from this study shows that morphological ergativity and syntactic ergativity may be separable; not only do we find variation only in the latter, but the exact analysis of Inuit provided here questions whether the language is morphologically ergative at all. Taking this idea beyond Inuit may, in turn, offer new insights into the cross-linguistic landscape of alignment patterns.

Zooming out further, this paper has provided a case study in using linguistic variation as a tool for investigating syntactic theory, as illustrated in two concrete ways. First, our analysis of Inuit is motivated by point-by-point parallels with other, better-studied languages (e.g. Scandinavian and Romance), for instance in the treatment of objects. Second, the connection between ergativity and object shift, though not immediately apparent in any individual Inuit variety, is revealed via pointwise comparisons between otherwise extremely similar grammars.

References

- Adger, David. 1994. Functional heads and interpretation. Doctoral Dissertation, University of Edinburgh, Edinburgh.
- Aldridge, Edith. 2008a. Generative approaches to ergativity. Language and Linguistics Compass 2:966–995.
- Aldridge, Edith. 2008b. Minimalist analysis of ergativity. Sophia Linguistica 55:123–142.
- Anagnostopoulou, Elena. 2003. *The syntax of ditransitives: Evidence from clitics*. Berlin: Mouton de Gruyter.
- Anagnostopoulou, Elena. 2006. Clitic doubling. In *The Blackwell companion to syntax*, ed. Martin Everaert and Hank van Riemsdijk, volume 1, 519–581. Oxford: Wiley-Blackwell.
- Anagnostopoulou, Elena. 2016. Clitic doubling and object agreement. In *Proceedings of the VII Nereus International Workshop*, ed. Susann Fischer and Mario Navarro, 11–42. Konstanz: Fachbereich Sprachwissenschaft.
- Anand, Pranav, and Andrew Nevins. 2006. The locus of ergative case assignment: Evidence from scope. In *Ergativity: Emerging issues*, ed. Alana Johns, Diane Massam, and Juvenal Ndayiragije, 3–25. Dordrecht: Springer.
- Anderssen, Merete, Kristine Bentzen, and Yulia Rodina. 2011. Topicality and complexity in the acquisition of Norwegian object shift. *Language Acquisition* 19:39–72.
- Andréasson, Maia. 2010. Object shift or object placement in general? In *Proceedings of the LFG 08 Conference*, ed. Miriam Butt and Tracy Holloway King, 27–42. Stanford: CSLI Publications.
- Baker, Mark. 1988. *Incorporation: A theory of grammatical function changing*. Chicago: University of Chicago Press.
- Baker, Mark. 2014. On dependent ergative case (in Shipibo) and its derivation by phase. *Linguistic Inquiry* 45:341–379.
- Baker, Mark. 2015. Case: Its principles and its parameters. Cambridge: Cambridge University Press.
- Baker, Mark. 2018. On the status of object markers in Bantu languages. In *Data-rich linguistics: Papers in honor of yiwola awoyale*, ed. Oluseye Adesola, Akinbiyi Akinlabi, and Olanike Ola Orie, 2–40. Cambridge: Cambridge Scholars Publishing.
- Baker, Mark, and Jonathan Bobaljik. 2017. On inherent and dependent theories of ergative case. In *Oxford handbook of ergativity*, ed. Jessica Coon, Diane Massam, and Lisa deMena Travis, 111–134. Oxford: Oxford University Press.
- Baker, Mark, and Ruth Kramer. 2016. Clitics are pronouns: Reduce and interpret. Ms., Rutgers University and Georgetown University.
- Baker, Mark, and Ruth Kramer. 2018. Doubled clitics are pronouns: Amharic objects and beyond. *Natural Language and Linguistic Theory* 36:1035–1088.
- Baker, Mark, and Nadya Vinokurova. 2010. Two modalities of case assignment: Case in Sakha. *Natural Language and Linguistic Theory* 28:593–642.

- Beach, Matthew. 2011. Studies in Inuktitut grammar. Doctoral Dissertation, State University of New York, Buffalo, Buffalo, NY.
- Berge, Anna. 1997. Topic and discourse structure in West Greenlandic agreement constructions. Doctoral Dissertation, University of California Berkeley, Berkeley, CA.
- Berge, Anna. 2011. *Topic and discourse structure in West Greenlandic agreement constructions*. Lincoln: University of Nebraska Press.
- Berge, Anna. 2016. Eskimo-Aleut. In *Oxford research encyclopedia of linguistics*. Oxford: Oxford University Press.
- Bergsland, Knut. 1997. *Aleut grammar: Unangam Tunuganaan Achixaasi*. Fairbanks, AK: Alaska Native Language Center.
- Bittner, Maria. 1987. On the semantics of the Greenlandic antipassive and related constructions. *International Journal of American Linguistics* 53:194–231.
- Bittner, Maria. 1994. Case, scope, and binding. Dordrecht: Kluwer.
- Bittner, Maria, and Ken Hale. 1996a. Ergativity: Toward a theory of a heterogeneous class. *Linguistic Inquiry* 27:531–604.
- Bittner, Maria, and Ken Hale. 1996b. The structural determination of case and agreement. *Linguistic Inquiry* 27:1–68.
- Bobaljik, Jonathan, and Dianne Jonas. 1996. Subject positions and the role of TP. *Linguistic Inquiry* 37:195–236.
- Branigan, Phil, and Douglas Wharram. 2019. A syntax for semantic incorporation: Generating low-scope indefinite objects in Inuktitut. *Glossa* 4:1–33.
- Bresnan, Joan, and Sam Mchombo. 1987. Topic, pronoun and grammatical agreement in Chichewa. *Language* 63:741–782.
- Broadwell, George Aaron. 2006. A Choctaw reference grammar. Lincoln: University of Nebraska Press.
- Campana, Mark. 1992. A movement analysis of ergativity. Doctoral Dissertation, McGill University, Montreal, QC.
- Cardinaletti, Anna, and Michal Starke. 1999. The typology of structural deficiency: A case study of the three classes of pronouns. In *Clitics in the languages of europe*, ed. Henk van Riemsdijk, 145–233. New York: Mouton de Gruyter.
- Carrier, Julien. 2012. Analyse de la transitivité dans le dialecte Inuktitut de la Baie d'Hudson. Master's thesis, Université du Québec à Montréal, Montreal, QC.
- Carrier, Julien. 2017. The ergative-antipassive alternation in Inuktitut: Analyzed in a case of new-dialect formation. *Canadian Journal of Linguistics* 62:661–684.
- Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge, MA: MIT Press.

- Chomsky, Noam. 2000. Minimalist inquiries: The framework. In *Step by step: Essays on Minimalist syntax in honor of Howard Lasnik*, ed. Roger Martin, David Michaels, and Juan Uriagereka, 89–155. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In *Ken Hale: A life in language*, ed. Michael Kenstowicz, 1–52. Cambridge, MA: MIT Press.
- Clem, Emily. 2019. Amahuaca ergative as agreement with multiple heads. *Natural Language and Linguistic Theory* 37:785–823.
- Colley, Justin. 2018. Object movement derives object preference. In *Proceedings of NELS 48*, ed. Sherry Hucklebridge and Max Nelson, 149–162. Amherst, MA: GLSA.
- Collins, Chris, and Höskuldur Thráinsson. 1996. VP-internal structure and object shift in Icelandic. *Linguistic Inquiry* 27:391–444.
- Compton, Richard. 2016. Mutually conditioned mood and object agreement in Inuit. In *Proceedings of NELS 46*, ed. Christopher Hammerly and Brandon Prickett, 241–250. Amherst, MA: GLSA.
- Compton, Richard. 2017. Agree on C: Case and agreement at the left-periphery in Inuktitut. Poster presentation at NELS 48.
- Compton, Richard, and Christine Pittman. 2010. Word-formation by phase in Inuit. Lingua 120:2167–2192.
- Coon, Jessica. 2017. Little-v⁰ agreement and templatic morphology in Ch'ol. *Syntax* 20:101–137.
- Coon, Jessica, Pedro Mateo Pedro, and Omer Preminger. 2014. The role of case in A-bar extraction asymmetries: Evidence from Mayan. *Linguistic Variation* 14:179–242.
- Coon, Jessica, and Omer Preminger. 2017. Split ergativity is not about ergativity. In *The handbook of ergativity*, ed. Jessica Coon, Diane Massam, and Lisa Travis, 226–252. Oxford: Oxford University Press.
- Deal, Amy Rose. 2010. Ergative case and the transitive subject: A view from Nez Perce. *Natural Language and Linguistic Theory* 28:73–120.
- Deal, Amy Rose. 2016. Syntactic ergativity: Analysis and identification. *Annual Review of Linguistics* 2:165–85.
- Deal, Amy Rose. 2019. Raising to ergative: Remarks on applicatives of unergatives. *Linguistic Inquiry* 50:388–415.
- Déprez, Viviane. 1989. On the typology of syntactic positions and the nature of chains: Move A to the specifier of functional projections. Doctoral Dissertation, Massachusetts Institute of Technology, Cambridge, MA.
- Diercks, Michael, and Justine Sikuku. 2013. Object clitics in a Bantu language: Deriving pronominal incorporation in Lubukusu. Ms., Pomona College and Moi University.
- Diesing, Molly. 1992. Indefinites. Cambridge, MA: MIT Press.
- Diesing, Molly. 1996. Semantic variables and object shift. In *Studies in comparative Germanic syntax ii*, ed. Höskuldur Thráinsson, Samuel Epstein, and Steve Peter, 66–84. Dordrecht: Kluwer.

- Diesing, Molly, and Eloise Jelinek. 1995. Distributing argument. Natural Language Semantics 3:123-176.
- den Dikken, Marcel, and Anastasia Giannakidou. 2002. From *hell* to polarity: "Aggressively non-D-linked" wh-phrases as polarity items. *Linguistic Inquiry* 33:31–61.
- Dixon, R.M.W. 1979. Ergativity. Language 55:59-138.
- Dixon, R.M.W. 1994. Ergativity. Cambridge: Cambridge University Press.
- Dobrovie-Sorin, Carmen. 1990. Clitic doubling, wh-movement, and quantification in Romanian. *Linguistic Inquiry* 21:351–397.
- Dorais, Louis-Jacques. 1988. *Tukilik: An Inuktitut grammar for all*. Université Laval: Association Inuksiutiit Katimajiit Inc, Groupes d'études inuit et circumpolaires.
- Dorais, Louis-Jacques. 2010. *The language of the Inuit: Syntax, semantics, and society in the Arctic.* Montreal, QC & Kingston, ON: McGill-Queen's University Press.
- Dresher, B. Elan, and Alana Johns. 1995. The law of double consonants in Inuktitut. *Linguistica Atlantica* 17:79–95.
- Elbourne, Paul. 2005. Situations and individuals. Cambridge, MA: MIT Press.
- Ershova, Ksenia. 2019. Syntactic ergativity in West Circassian. Doctoral Dissertation, University of Chicago, Chicago, IL.
- Fortescue, Michael. 1984. West Greenlandic. London: Croom Helm.
- Fortescue, Michael. 2017. Polysynthesis in the Arctic/Sub-arctic. In *The Oxford Handbook of Polysynthesis*, ed. Michael Fortescue, Marianne Mithun, and Nicholas Evans. Oxford University Press.
- Franks, Steven. 2009. Macedonian pronominal clitics as object agreement markers. In *A linguist's linguist: Studies in south slavic linguistics in honor of e. wayles browne*, ed. Steven Franks, Vrinda Chidambaram, and Brian D. Joseph, 189–221. Bloomington: Slavica.
- Gulya, János. 1966. Eastern Ostyak cherstomathy. Bloomington: University of Indiana Press.
- Hale, Kenneth. 1997. The Misumalpan causative construction. In *Essays on language function and language type*, ed. Joan Bybee, John Haiman, and Sandra Thompson, 199–216. Amsterdam: John Benjamins.
- Harizanov, Boris. 2014. Clitic doubling at the syntax-morphophonology interface: A-movement and morphological merger in Bulgarian. *Natural Language and Linguistic Theory* 32:1033–1088.
- Holmberg, Anders. 1986. Word order and syntactic features in the Scandinavian languages and English. Doctoral Dissertation, University of Stockholm, Stockholm.
- Holmberg, Anders, and Christer Platzack. 1995. *On the role of inflection in Scandinavian syntax*. Oxford: Oxford University Press.
- Imai, Shingo. 1998. Logical structure and case marking in Japanese. Master's thesis, State University of New York at Buffalo, Buffalo, NY.

- Johns, Alana. 1999. The decline of ergativity in Labrador Inuttut. *MIT Occasional Papers in Linguistics* 17:73–90.
- Johns, Alana. 2001. An inclination towards accusative. Linguistica Atlantica 23:127–144.
- Johns, Alana. 2006. Ergativity and change in Inuktitut. In *Ergativity: Emerging issues*, ed. Alana Johns, Diane Massam, and Juvenal Ndayiragije, 293–311. Springer.
- Johns, Alana. 2007. Restricting noun incorporation: root movement. *Natural Language and Linguistic Theory* 25:535–576.
- Johns, Alana. 2010. Eskimo-Aleut languages. Language and Linguistics Compass 4:1041–1055.
- Johns, Alana. 2017. Anaphoric arguments in Unangax and Eastern Canadian Inuktitut. In *Studies in Inuit linguistics*. *In honor of Michael Fortescue*, ed. Lawrence D. Kaplan and Anna Berge, 91–103. Fairbanks, AK: Alaska Native Language Center.
- Johns, Alana, and Ivona Kučerová. 2017. Towards an information structure analysis of ergative patterning in the Inuit language. In *The Oxford handbook of ergativity*, ed. Jessica Coon, Diane Massam, and Lisa Travis, 397–418. New York: Oxford University Press.
- Johnson, Kyle. 1991. Object positions. Natural Language and Linguistic Theory 9:577-636.
- Josefsson, Gunlög. 1992. Object shift and weak pronominals in Swedish. *Working Papers in Scandinavian Syntax* 49:59–94.
- Josefsson, Gunlög. 1993. Scandinavian pronouns and object shift. *Working Papers in Scandinavian Syntax* 52:1–28.
- Josefsson, Gunlög. 2003. Four myths about object shift in Swedish and the truth. In *Grammar in focus: Festschrift for christer platzack*, ed. Lars-Olof Delsing, Cecilia Falk, Gunlög Josefsson, and Halldór Ármann Sigurðsson, 199–207. Lund: University of Lund.
- Kornfilt, Jaklin, and Omer Preminger. 2015. Nominative as no case at all: An argument from raising-to-accusative in Sakha. In *Proceedings of the 9th Workshop on Altaic Formal Linguistics (WAFL 9)*. Cambridge, MA: MITWPL.
- Kratzer, Angelika. 1996. Severing the external argument from its verb. In *Phrase structure and the lexicon*, ed. Johan Rooryck and Laurie Zaring, 109–137. Dordrecht: Kluwer.
- Landau, Idan. 2006. Chain resolution in Hebrew V(P)-fronting. Syntax 9:32–66.
- Larsen, Thomas, and William Norman. 1979. Correlates of ergativity in Mayan grammar. In *Ergativity: Towards a theory of grammatical relations*, ed. Frans Plank, 347–370. New York: Academic Press.
- Legate, Julie Anne. 2008. Morphological and abstract case. Linguistic Inquiry 39:55-101.
- Legate, Julie Anne. 2012. Types of ergativity. *Lingua* 122:181–191.
- Levin, Theodore. 2015. Licensing without Case. Doctoral Dissertation, Massachusetts Institute of Technology, Cambridge, MA.

- López, Luis. 2012. *Indefinite objects: Scrambling, choice functions, and differential marking*. Cambridge, MA: MIT Press.
- Manga, Louise. 1996. An explanation for ergative versus accusative languages. Doctoral Dissertation, University of Ottawa, Ottawa, ON.
- Manning, Christopher. 1996. Ergativity: Argument structure and grammatical relations. Stanford, CA: CSLI Publications.
- Marantz, Alec. 1991. Case and licensing. In *ESCOL 91: Proceedings of the Eighth Eastern States Conference on Linguistics*, ed. German Westphal, Benjamin Ao, and Hee-Rahk Chae, 234–253. Ithaca, NY: CLC Publications.
- Matthewson, Lisa. 1999. On the interpretation of wide scope indefinite. *Natural Language Semantics* 7:79–134.
- Matushansky, Ora. 2006. Head movement in linguistic theory. *Linguistic Inquiry* 37:69–109.
- McCloskey, Jim. 2002. Resumption, successive cyclicity, and the locality of operations. In *Derivation and explanation in the Minimalist Program*, ed. Samuel Epstein and T. Daniel Seely, 184–226. Oxford: Blackwell.
- McFadden, Thomas. 2004. The position of morphological case in the derivation: A study on the syntax-morphology interface. Doctoral Dissertation, University of Pennsylvania, Philadelphia, PA.
- Merchant, Jason. 2011. Aleut case matters. In *Pragmatics and autolexical grammar: In honor of Jerry Sadock*, ed. Etsuyo Yuasa, Tista Bagchi, and Katharine Beals, 193–210. Amsterdam: John Benjamins.
- Miyaoka, Osahito. 2012. A grammar of Central Alaskan Yupik (CAY). Berlin: Mouton de Gruyter.
- Murasugi, Kumiko. 1992. Crossing and nested paths: NP movement in accusative and ergative languages. Doctoral Dissertation, Massachusetts Institute of Technology.
- Murasugi, Kumiko. 1997. Relative restrictions on relative clauses. In *Proceedings of NELS* 27, ed. Kiyomi Kusumoto, 273–286. Amherst, MA: GLSA.
- Murasugi, Kumiko. 2014. A hierarchical view of the ergative and antipassive in Inuktitut. Paper presented at the 2014 Annual Conference of the Canadian Linguistic Association.
- Murasugi, Kumiko. 2017. Linguistic fieldwork and scientific methodology. In *A Pesky Set: Papers for David Pesetsky*, ed. Claire Halpert, Hadas Kotek, and Coppe van Urk, 111–120. Cambridge, MA: MITWPL.
- Pedersen, Karen Margrethe. 1993. Letledsreglen og lighedsreglen. novation, ekspansion og resistens. In *Jyske studier tilegnede Magda Nyberg og Bent Jul Nielsen*, ed. Inge Lise Pedersen and Karen Margrethe Pedersen, 199–218. Copenhagen: Reitzels Forlag.
- Pesetsky, David. 1987. Wh-in situ: Movement and unselective binding. In *The representation of (in)definiteness*, ed. Eric Reuland and Alice G. B. ter Meulen, 98–130. Cambridge, MA: MIT Press.
- Podobryaev, Alexander. 2013. Differential case marking in Turkic as intermediate dependent case. In *Proceedings of the 8th Workshop on Altaic Formal Linguistics*, ed. Umut Özge.

- Polinsky, Maria. 2016. Deconstructing ergativity: Two types of ergative languages and their features. Oxford: Oxford University Press.
- Polinsky, Maria. 2017a. Antipassive. In *The Oxford handbook of ergativity*, ed. Jessica Coon, Diane Massam, and Lisa deMena Travis, 308–331. Oxford: Oxford University Press.
- Polinsky, Maria. 2017b. Syntactic ergativity. In *The Blackwell companion to syntax*, ed. Martin Everaert and Henk van Riemsdijk. Hoboken, NJ: Wiley-Blackwell, 2nd edition edition.
- Postal, Paul. 1994. Contrasting extraction types. *Journal of Linguistics* 30:159–186.
- Preminger, Omer. 2011. Agreement as a fallible operation. Doctoral Dissertation, Massachusetts Institute of Technology, Cambridge, MA.
- Preminger, Omer. 2014. Agreement and its failures. Cambridge, MA: MIT Press.
- Rackowski, Andrea. 2002. The structure of Tagalog: specificity, voice, and the distribution of arguments. Doctoral Dissertation, Massachusetts Institute of Technology, Cambridge, MA.
- Rackowski, Andrea, and Norvin Richards. 2005. Phase edge and extraction: A tagalog case study. *Linguistic Inquiry* 36:565–599.
- Rezac, Milan, Pablo Albizu, and Ricardo Etxepare. 2014. The structural ergative of Basque and the theory of case. *Linguistic Inquiry* 32:1273–1330.
- Riedel, Kristina. 2009. The syntax of object marking in Sambaa: A comparative Bantu perspective. Doctoral Dissertation, Leiden University, Leiden.
- Rose, Yvan, Paul Pigott, and Douglas Wharram. 2012. Schneider's Law revisited: The syllable-level remnant of an older metrical rule. In *Proceedings from phonology in the 21st century: In honour of glyne piggott*, ed. Alanah McKillen and Jenny Loughran, volume 22. Montreal: McGill Working Papers in Linguistics.
- Rudin, Catherine. 1997. Agr-O and Bulgarian pronominal clitics. In *Formal approaches to Slavic linguistics: The Indiana meeting*, ed. Martina Lindseth and Steven Franks, 224–252. Ann Arbor, MI: Michigan Slavic Publications.
- Runić, Jelena. 2014. A new look at clitics, clitic doubling, and argument ellipsis: Evidence from Slavic. Doctoral Dissertation, University of Connecticut, Storrs, CT.
- Sadock, Jerrold. 2000. Aleut number agreement. In *Proceedings of the 26th annual meeting of the Berkeley Linguistics Society*, ed. Andrew Simpson, 121–138. Berkeley, CA: Berkeley Linguistics Society.
- Schneider, Lucien. 1972. *Inuktut tuorutit: grammaire purement esquimaude*. Québec: Ministère des Richesses Naturelles.
- Sichel, Ivy. 2002. Pronoun movement as Attraction. In *Proceedings of the israeli association for theoretical linguistics*, ed. Yehuda N. Falk, volume 18.
- Sikuku, Justine, Michael Diercks, and Michael Marlo. 2018. Pragmatic effects of clitic doubling: Two kinds of object markers in Lubukusu. *Linguistic Variation* 18:359–429.

- Spreng, Bettina. 2006. Antipassive morphology and case assignment in Inuktitut. In *Ergativity: Emerging issues*, ed. Alana Johns, Diane Massam, and Juvenal Ndayiragije, 247–270. Dordrecht: Springer.
- Spreng, Bettina. 2010. On the conditions for antipassives. *Language and Linguistics Compass* 4:556–575.
- Spreng, Bettina. 2012. Viewpoint aspect in Inuktitut: The syntax and semantics of antipassives. Doctoral Dissertation, University of Toronto, Toronto, ON.
- Stanton, Juliet. 2016. Wholesale Late Merger in Ā-movement: Evidence from preposition stranding. *Linguistic Inquiry* 47:89–126.
- Suñer, Margarita. 1988. The role of agreement in clitic-doubled constructions. *Natural Language and Linguistic Theory* 6:391–434.
- Tada, Hiroaki. 1993. The a/Ā partition in derivation. Doctoral Dissertation, Massachusetts Institute of Technology, Cambridge, MA.
- Thráinsson, Hoskuldur. 2008. Object shift and scrambling. In *The Handbook of Contemporary Syntactic Theory*, ed. Mark Baltin and Chris Collins, 148–202. Oxford: Blackwell.
- Tyler, Matthew. 2019. Differential Object Marking by Ā-status. In *Proceedings of NELS 49*, ed. Maggie Baird and Jonathan Pesetsky, 231–240. Amherst, MA: GLSA.
- van Urk, Coppe. 2015. A uniform syntax for phrasal movement: A case study of Dinka Bor. Doctoral Dissertation, Massachusetts Institute of Technology, Cambridge, MA.
- Vergnaud, Jean-Roger. 1977. Personal letter to H. Lasnik and N. Chomsky.
- Vikner, Sten. 1994. Scandinavian object shift and West Germanic scrambling. In *Studies on scrambling*, ed. Norbert Corver and Henk van Riemsdijk, 487–517. Berlin: Mouton de Gruyter.
- Vikner, Sten. 1997. The interpretation of object shift, Optimality Theory, and Minimalism. *Working Papers in Scandinavian Syntax* 60:1–24.
- Vikner, Sten. 2001. The interpretation of object shift and Optimality Theory. In *Competition in syntax*, ed. Gereon Müller and Wolfgang Sternefeld, 321–340. Berlin: Mouton de Gruyter.
- Vikner, Sten. 2006. Object shift. In *The Blackwell companion to syntax*, ed. Martin Everaert and Henk van Riemsdijk, 392–436. Malden, MA: Blackwell, 1st edition edition.
- Vikner, Sten. 2017. Object shift in Scandinavian. In *The wiley-blackwell companion to syntax*, ed. Martin Everaert and Henk van Riemsdijk, 2784–2844. Hoboken, NJ: Wiley-Blackwell, 2nd edition edition.
- Vinokurova, Nadya. 2005. Lexical categories and argument structure: A study with reference to Sakha. Doctoral Dissertation, Utrecht University, Utrecht, Netherlands.
- Wharram, Douglas. 2003. On the interpretation of (un)certain indefinites in Inuktitut and related languages. Doctoral Dissertation, University of Connecticut, Storrs, CT.
- Woodbury, Anthony. 1981. Study of the Chevak dialect of Central Yupik Eskimo. Doctoral Dissertation, University of California Berkeley, Berkeley, CA.

- Woolford, Ellen. 1997. Four-way case systems: Ergative, nominative, objective and accusative. *Natural Language and Linguistic Theory* 15:181–227.
- Woolford, Ellen. 2006. Lexical case, inherent case, and argument structure. Linguistic Inquiry 37:111–130.
- Woolford, Ellen. 2017. Mainland Scandinavian object shift and the puzzling ergative pattern in Aleut. In *Order and structure in syntax*, ed. Laura Bailey and Michelle Sheehan, 117–134. Berlin: Language Science Press.
- Wunderlich, Dieter. 2001. How gaps and substitutions can become optimal: An OT account of argument linking in Yimas. *Transactions of the Philological Society* 99:315–366.
- Yip, Moira, Joan Maling, and Ray Jackendoff. 1987. Case in tiers. Language 63:217-250.
- Yuan, Michelle. 2018. Dimensions of ergativity in Inuit: Theory and microvariation. Doctoral Dissertation, Massachusetts Institute of Technology, Cambridge, MA.
- Yuan, Michelle. to appeara. Dependent case and clitic dissimilation in Yimas. *Natural Language and Linguistic Theory*.
- Yuan, Michelle. to appearb. Diagnosing object agreement vs. clitic doubling: An Inuit case study. *Linguistic Inquiry* .
- Zaicz, Gabor. 1988. Mordva. In *The uralic languages*, ed. Daniel Abondolo, 184–218. New York: Routledge.