# Ergativity and object movement across Inuit\*

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Although the Inuit language is generally characterized as ergative, it has been observed that the ergative case patterning is relatively weaker in certain Eastern Canadian varieties, resulting in a more accusative appearance (e.g. Johns, 2001, 2017; Carrier, 2017; Murasugi, 2017). In this paper, I present a systematic comparison of three Inuit varieties at distinct points along this ergativity cline, as a lens into the properties of case alignment and clausal structure in Inuit more broadly. Building on the previous insight that ergativity in Inuit is tied to object movement to a structurally high position (Bittner, 1994; Bittner and Hale, 1996a,b; Woolford, 2017), I demonstrate that the relative robustness of the ergative patterning across Inuit is tightly correlated with the permissibility of object movement—and not determined by the morphosyntactic properties of transitive (ERG-marked) subjects (which are uniform across Inuit). I additionally relate this correlation to another point of variation concerning the status of object agreement as affixes vs. pronominal clitics, which is shown to follow a parallel cline in the varieties surveyed. These connections offer testable predictions for the status of ergativity across the entire Inuit dialect continuum, and yield cross-linguistic implications for the typology of case alignment, especially in how it interacts with the syntactic position of nominals.

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, with many languages categorized as either accusative or ergative. In languages with case morphology on nouns, this corresponds to whether it is the transitive object or the transitive subject, respectively, that is case-marked distinctly from the other core arguments. Much research on ergative languages has focused not only on the conditions governing the distribution of ERG case morphology on subjects, but also on the respective structural positions of the ERG and ABS arguments in the clause (e.g. Dixon 1994; Manning 1996; Bittner and Hale 1996a,b; Wechsler and Arka 1998; Coon et al. 2014; Ershova 2019; see also Polinsky 2017a for a recent overview).

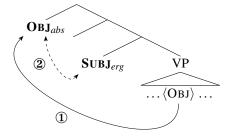
In this paper, I offer a novel perspective on the interaction between ergative alignment and clause structure from the Inuit dialect continuum. Although Inuit is typically characterized as ergative, this has been observed to be diminished in certain Eastern Canadian varieties, based on the reduced usage of the ergative construction in the encoding of transitive sentences (Johns 2001, 2006, 2017; Beach 2011; Carrier 2012, 2017, 2020; Murasugi 2017; Yuan 2018). These varieties

<sup>\*</sup>Acknowledgments to be added.

generally display a more accusative appearance (see §2), suggesting a *cline in ergativity* across the dialect continuum. Consequently, a comparative approach to Inuit offers a unique testing ground for examining the aforementioned phenomena.

This paper compares a canonically ergative variety, Kalaallisut (West Greenlandic), with two Eastern Canadian Inuit varieties, Labrador Inuttut and Inuktitut, which are shown to occupy three distinct points along this ergativity cline. The central proposal of this paper is that all members of the dialect continuum share a uniform clausal syntax, as well as a uniform mechanism of ERG case assignment to the transitive subject. However, they vary in the types of *objects* that may participate in the derivation of this structure. Following Bittner (1994) and Bittner and Hale (1996b), all Inuit varieties permit the object to move to a clause-peripheral syntactic position above the subject, which, in turn, feeds ERG case assignment to the lower subject via case competition (cf. Marantz, 1991). This is schematized in (1). However, the Eastern Canadian Inuit varieties display independent restrictions on the *types of objects* that may undergo this movement step—thus constraining the appearance of ergativity.

#### (1) Derivation of ergativity across Inuit



A closer examination additionally reveals an interaction between object movement and the verbal agreement markers cross-referencing high (ABS) objects. Building on Yuan (2018, to appear), I demonstrate that the permissibility of object movement is correlated with whether the object agreement morphology reflects genuine  $\phi$ -agreement (as in Kalaallisut) or is derived by pronominal cliticization (as in the Eastern Canadian varieties). Assuming a movement-based approach to pronominal cliticization (Déprez, 1989; Sichel, 2002), we may thus localize variation in object movement in terms of the nature of the heads and tails of such movement chains.

Altogether, this paper proposes that it is the status of the ABS object that is central to understanding the nature of ergativity across Inuit, rather than the ERG-marked subject. Moreover, the three-way correlation between ergativity, object movement, and object  $\phi$ -morphology offers testable predictions for the integration of other Inuit varieties, and thus paves the way for more fine-grained analysis in subsequent research.

This paper is organized as follows. In §2, I introduce key properties of the Inuit case and agreement system, and illustrate the variation in ergativity seen across varieties. §3 reviews Bittner's (1994) and Bittner and Hale's (1996b) movement-based account of ergativity in Inuit, and outlines the empirical predictions that emerge in light of the aforementioned ergative cline. §4 focuses on the reduced ergative patterning in Labrador Inuttut, which I show to be shaped by independent constraints on object movement. This section builds on Woolford's (2017) insight tying high objects in the larger Inuit-Yupik-Unangan family to Scandinavian object shift. In §5, I refine the analysis developed thus far by introducing the role of object agreement, whose exact nature across Inuit varieties directly determines the behaviour of the high objects. Evidence for this comes primarily

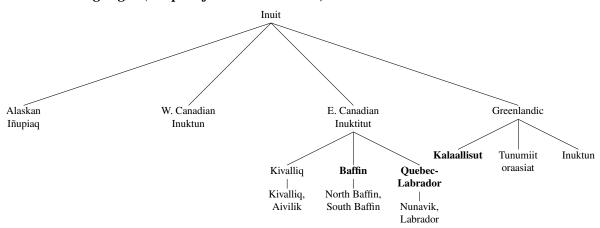
from Inuktitut, which falls between Kalaallisut and Labrador Inuttut along all empirical dimensions considered. §6 concludes by revisiting the paper's core proposal linking ergativity and object movement, and outlines some broader theoretical and typological implications.

# 2 Overview of Inuit case and agreement

## 2.1 Language background

The Inuit language, belonging to the Inuit-Yupik-Unangan (aka Eskimo-Aleut) language family, is 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 (2) provides four major dialect groups: Iñupiaq, Inuvialuktun, Inuktitut, and Greenlandic (the bolded text reflects the languages to be investigated in this paper).

#### (2) The Inuit languages (adapted from Dorais 2010)



As indicated above, the paper primarily focuses on three Inuit varieties: 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 empirical focus on Kalaallisut, Labrador Inuttut, and Inuktitut in particular is motivated by the existence of previous literature on their morphosyntactic properties, as well as the fact that their ergative patternings diverge in an especially clear-cut way. As noted above, the generalizations that emerge from this study thus provide a blueprint for the integration of other Inuit varieties (and related languages) not surveyed here.

<sup>&</sup>lt;sup>1</sup>Additional data from other representatives in the Inuit-Yupik-Unangan language family will also be provided, where relevant.

<sup>&</sup>lt;sup>2</sup>The 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.

The Inuit language is traditionally described as polysynthetic, with pragmatically unmarked SOV word order (Fortescue, 1984, 1993, 2017; Dorais, 2010). Verbs generally follow the schema given in (3a), with the root at the leftmost edge of the word, followed by a series of optional derivational and inflectional suffixes, and finally followed by  $\phi$ -agreement morphology cross-referencing the subject and, if present, the object, (3b-c). As additionally shown in the bracketed structure of the examples, (3d), the Inuit dialect group adheres to the Mirror Principle, with left-to-right morpheme order corresponding to the expected hierarchical order of syntactic heads along the clausal spine. To reflect this correspondence, the Inuit tree structures in this paper are right-headed.

## (3) Schema of Inuit verb complex

- a.  $\sqrt{\text{VERB}}$ -(...)-**AGR**
- b. titar-niqar-sima-**vuq** design-PASS-PERF-IND.3S.S 'It was designed.'

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, p. 194)

(Kalaallisut; Fortescue 1984, p. 273)

d. [[[[ Verb ] Voice ] Asp ] Tense ] Mood.Agr ]

Following Compton (2016, 2017), Inuit  $\phi$ -agreement morphology (in boldface above) is located in the extended CP-domain. This not only accords with their rightmost position in the word (given the Mirror Principle), but is evidenced by the fact that the forms are organized into paradigms sensitive to clause type, often referred to as "mood" in the literature. This is shown throughout (4), which present 2sG subject and 2sG/3sG subject/object combinations with the declarative (participial), interrogative, and dubitative moods (paradigms from Dorais (1988) from an Arctic Quebec variety of Inuktitut). As also indicated below, mood is consistently encoded at the left edge of the mood/agreement morph.

#### (4) Mood-sensitive agreement (Inuktitut)

	<b>Participial</b>	Interrogative	<b>Dubitative</b>		
2sg.S	-jutit/-tutit	-vit/-pit	-mmangarpit		
2sg.S/3sg.O	-jait/-tait	-viuk/-piuk	-mmangarpiuk		
(Dorais, 1988, pp. 70, 73, 79, 81, 92)					

While some of the above agreement forms are portmanteaux, there are a number of contexts in which the subject- and object-referencing morphemes are exponed separately, as shown in (5). I take this to indicate the underlying presence of two distinct agreeing heads that may, but need not, be realized as portmanteaux. The relative order of these morphemes additionally suggests that the head bearing object  $\phi$ -morphology is *structurally higher* than that associated with subject  $\phi$ -morphology, and that both are structurally higher than the mood-bearing head.<sup>4</sup>

<sup>&</sup>lt;sup>3</sup>As discussed by Fortescue (1993), among others, deviations from the 'neutral' SOV word order may arise from a number of pragmatic or narrative considerations, as well as from influence from rigidly SVO languages such as English.

<sup>&</sup>lt;sup>4</sup>Yuan (2018, to appear) proposes that the different combinations of portmanteaux across clause types may be captured by appealing to the notion of spans (Svenonius, 2012; Merchant, 2015), i.e. that contiguous heads along

#### (5) Separate subject- and object-agreeing morphemes in Inuktitut

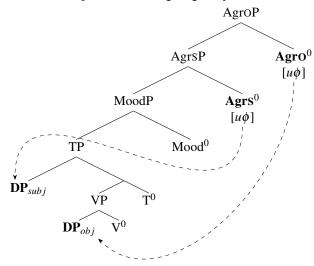
a. taku-luni taku-luni-**uk**see-CTMP.3S.S see-CTMP.3S.S-3S.O
'While (s)he/it shall see' 'While (s)he/it shall see it'

b. taku-mmat taku-mma-**uk**see-CAUS.3S.S
'Because (s)he/it sees' taku-mma-**uk**see-CAUS.3S.S-3S.O
'Because (s)he/it sees it'

c. taku-li taku-li-**uk**see-OPT.3s.S see-OPT.3s.S-3s.O
'May (s)he/it see!' 'May (s)he/it see it!'

Put together, this suggests that the structure of the Inuit clausal periphery is as in (6).<sup>5</sup>

#### (6) Structure of the clausal periphery in Inuit



# 2.2 Ergative and antipassive across Inuit

Inuit is generally said to display an ergative (ERG-ABS) case patterning, with agreement morphology cross-referencing both the subject and object. This is illustrated in (7a-b) with Kalaallisut.

an extended projection (here, the CP-domain) may be exponed by a single morph. This work also shows how this may extend to the Inuit varieties whose object agreement markers are clitic in nature (as will be developed in §5). This analysis is in contrast to reviewers' suggestions that they in fact expone a single head (e.g. C<sup>0</sup>) that has probed for multiple arguments and may thus realize a bundle of features. However, this multiple-Agree approach would not be able to support the aforementioned variation in the syntactic status of the object agreement morphemes, and is additionally empirically challenged by the ability for the subject- and object-targeting heads to be realized separately, as in (5).

<sup>&</sup>lt;sup>5</sup>The heads Agrs<sup>0</sup> and Agro<sup>0</sup> are labelled as such purely for convenience, to clarify which arguments they target. The nested nature of the  $\phi$ -agreement dependencies follows from standard locality conditions on Agree, with each head targeting the closest accessible argument (i.e. not rendered inactive by a previous instance of Agree) within their local c-command domain.

The ergative construction seen in (7b) alternates with a non-ergative transitive construction, typically referred to as the *antipassive* construction.<sup>6</sup> In the antipassive, the logical transitive subject is ABS rather than ERG and the object takes the so-called 'modalis' (MOD) case, (7c); in the antipassive, only the subject is indexed by agreement morphology. Non-ERG, non-ABS nominals such as antipassive objects may not be cross-referenced by verbal agreement.

# (7) Ergative and antipassive alternation in Kalaallisut<sup>7</sup>

a. **Jaaku** aallar-puq Jaaku.**ABS** leave-IND.3S.S 'Jaaku left.'

(Bittner 1995, p. 80)

Jaaku-p puuq aa-vaa
 Jaaku-ERG bag.ABS go.to.get-IND.3s.S/3s.O
 'Jaaku went to get bag.'

(Bittner 1987, p. 194)

c. **Jaaku** puu-**mik** aa-llir-puq Jaaku.**ABS** bag-**MOD** go.to.get-AP-IND.3S.S 'Jaaku went to get bag.'

(Bittner 1987, p. 195)

The ergative and antipassive constructions thus reflect two ways of encoding transitive sentences. Whether a given sentence is expressed with one or the other is often determined by the syntactic and semantic properties of the object, to be discussed in Section 3 and onward (Fortescue, 1984; Bittner, 1994; Manga, 1996; Berge, 1997; Sadock, 2003; Berge, 2011; Wharram, 2003; Woolford, 2017).

However, in certain Eastern Canadian Inuit varieties, the ergative vs. antipassive constructions do not necessarily alternate as seen above. A pattern that is especially distinct from that in Kalaal-lisut can be seen in Labrador Inuttut: in this variety, the antipassive construction appears to be the *primary* way to express transitive sentences, as observed in a series of papers by Johns (1999, 2001, 2006, 2017). In contrast, the ergative construction is shown to generally only surface when the object is a *referential pronoun*. This is illustrated in (8).

## (8) 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., cited in Yuan (2018, pp. 126-127))

The distribution of the ergative and antipassive constructions in Labrador Inuttut is therefore highly asymmetrical. Comparing Kalaallisut and Labrador Inuttut, we find a simultaneous reduction of the distribution of the ergative construction and a widening on the distribution of the antipassive

<sup>&</sup>lt;sup>6</sup>As I discuss later, the distantly related language Unangam Tunuu (Aleut) displays an ergative/non-ergative alternation as well, but the non-ergative construction is not an antipassive.

<sup>&</sup>lt;sup>7</sup>The sentences in (7b)-(7c) are not semantically identical, despite the English translations given.

construction. As a result of the predominant usage of the antipassive construction, Labrador Inuttut primarily displays an *accusative* case patterning, with the ABS-MOD case frame of the antipassive construction recast as a NOM-ACC one.

Finally, the contrast between the canonical ergative patterning seen in Kalaallisut and the reduced ergative patterning found in Labrador Inuttut (and other Eastern Canadian Inuit varieties) has been characterized as diachronic in nature, with the latter displaying a gradual loss of ergativity and a concomitant shift towards an accusative case system (Johns, 1999, 2001; Carrier, 2012, 2017). The investigation of the synchronic grammars of the Inuit varieties under discussion will be shown to shed light on the drivers of this proposed syntactic change.

# 3 Object movement and ergativity

As alluded to above, the ergative vs. antipassive alternation is conditioned by a number of factors, which may also differ depending on the particular Inuit variety. This section outlines the basic syntax underlying this alternation. Following Bittner (1994) and Bittner and Hale (1996a,b), it is the structural position of the transitive object that determines the case and agreement patterns seen in the entire clause. §3.1 reviews the evidence that ABS objects are structurally high and MOD objects are structurally low, and that the locus of the former is derived by movement. §3.2 then demonstrates how movement of the object may trigger (dependent) ERG case assignment to the subject. Finally, §3.3 discusses how this model of ergativity in Inuit reveals a straightforward roadmap for the rest of the paper: if the ergative case patterning arises from movement of the object, then the Eastern Canadian Inuit varieties observed to have a diminished ergative patterning should also have a diminished capacity for object movement.

# 3.1 High ABS objects

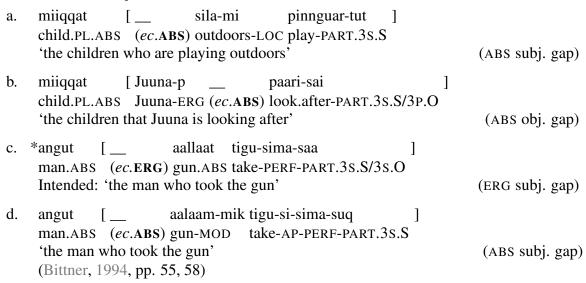
The idea that ABS objects of ergative constructions are located in a structurally high position (above the ERG subject) is not specific to Inuit, as it is a hallmark of syntactically ergative languages more generally. In such languages (considered a subtype of morphologically ergative languages), ABS subjects and ABS objects occupy a common syntactic position, distinct from that of the ERG subject, and therefore share a number of structural properties beyond morphological case (Manning, 1996; Deal, 2016; Ershova, 2019).

For Inuit, the syntactic positions of nominals cannot be easily deduced from word order, which seems to be primarily governed by pragmatic or discourse-related considerations (e.g. Fortescue, 1993). Nonetheless, evidence for a uniformly structurally high locus of ABS arguments in Inuit has come from semantic considerations, as well as comparisons with unrelated languages in which word order does correlate to structural height. In particular, we find in Inuit an extraction asymmetry commonly seen in other syntactically ergative languages, as well as an obligatorily wide scope or specific interpretation of such nominals. Moreover, that the ABS object *moves* to a high position can be deduced through reconstruction effects surfacing in select environments. I illustrate these properties with Kalaallisut below, following work by Bittner (1994) and Bittner and Hale (1996b).

<sup>&</sup>lt;sup>8</sup>Therefore, the movement-based analysis of high ABS objects in Inuit does not necessarily induce a change in word order.

The most widely studied manifestation of syntactic ergativity concerns a restriction on movement, such that only ABS arguments may undergo Ā-extraction (Campana, 1992; Tada, 1993; Coon et al., 2014; Polinsky, 2016). As shown throughout (9), both 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. 10

#### (9) No relativization of ERG in Kalaallisut



There is much cross-linguistic evidence that this restriction is correlated with syntactic height (e.g. Tada, 1993; Coon et al., 2014). For Inuit in particular, see Murasugi (1992, 1997) for an account that directly references this correlation. The fact that ABS objects pattern like ABS subjects in this respect reinforces the idea that they occupy the same structurally high position.

Converging evidence comes from the uniform semantic interpretation of ABS arguments compared to the other nominals. The relevant semantic effect has been variably characterized as pertaining to scope (Bittner, 1994; Wharram, 2003), (Manga, 1996; Beach, 2011), topicality (Berge, 1997, 2011; Johns and Kučerová, 2017), and definiteness (Fortescue, 1984; Hallman, 2008). Pinpointing the exact nature of this effect is outside of the purview of this paper; what matters here is that the *directionality* of the contrast between arguments—e.g. ABS vs. non-ABS—largely holds across analyses. ABS subjects and objects display semantic properties that are consistent with a structurally high position, while other arguments (e.g. MOD objects of antipassives) lack such properties.

Bittner (1994) uses quantificational elements to demonstrate the scope-taking properties of different nominals in Kalaallisut. She argues in particular that ABS subjects and ABS objects obli-

<sup>&</sup>lt;sup>9</sup>This is not the only diagnostic of syntactic ergativity, though it appears to be the most common. See Dixon (1979), Manning (1996), Deal (2016), and Ershova (2019) for other (less common) patterns of syntactic ergativity found cross-linguistically.

<sup>&</sup>lt;sup>10</sup>This restriction is only found in relativization contexts in Kalaallisut and other Inuit varieties, though not whmovement or focus fronting (Gillon, 1999; Sherkina-Lieber, 2004). 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.

gatorily take wide scope relative to other elements, such as sentential negation; conversely, MOD objects of antipassive constructions receive a narrow scope interpretation. Indeed, per the translations of the Kalaallisut sentences throughout (10), the numeral 'one' may only be interpreted above negation when ABS, and only below negation when MOD. Moreover, although the data are not provided, 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 appear as suffixes within the verb complex.

#### (10) 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 > ∃)
- 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, p. 2, 35)

Bittner additionally provides the examples in (11), which additionally show scopal asymmetries between two nominals through the availability of collective and distributive readings of numerals. According to Bittner, only the inverse scope interpretation is available in (11a), yielding a reading where three particular women were bitten; this would, for instance, be compatible with a scenario wherein each woman was bitten by two dogs (yielding six dogs in total, i.e. a collective reading). In contrast, (11b) only permits the surface scope interpretation, thus compatible with a reading where a total of six women were bitten. See also Matthewson (1999) for further discussion of scopal relations with numerals.

#### (11) 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; i.e. three particular women were bitten)
- 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; i.e. two particular dogs bit three women)
  (Bittner, 1994, pp. 98-99)

As subsequently developed by Bittner and Hale (1996b), these data may be captured by appealing to the idea that ABS objects move to the structurally high position that ABS subjects otherwise occupy in intransitive sentences, while MOD objects remain in situ. Assuming that the interpretation of a given element is determined by its structural height (Diesing, 1992), this movement step

permits the object to take scope above other elements in the sentence. Note also that, although object movement is cross-linguistically often associated with the vP-edge (see Section 4), this by itself is insufficient to account for the data in (10)-(11). ABS objects take wider scope above ERG subjects, and, more tellingly, take wider scope above sentential operators such as negation. Thus, ABS arguments must occupy a clause-peripheral position.

In contrast to full DP objects, which may surface as ABS or MOD, referential pronominal objects in Kalaallisut only surface within ergative constructions, i.e. constructions containing subject/object verbal  $\phi$ -morphology, (12a). Null pronominal objects in antipassive constructions, on the other hand, are interpreted as non-referential or indefinite, (12b). Although there are no overt independent (non-demonstrative) 3rd person pronouns in Inuit (and 1st/2nd person pronouns are typically dropped, unless emphasized), this generalization can be made from the interpretations of such null objects. Thus, we may conclude that referential pronominal objects in Kalaallisut obligatorily undergo the movement step posited here, while non-referential pronominal objects remain in situ.

#### (12) Referential and non-referential 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. niviarsia-mut (*pro*) uqar-put girl-ALLAT (3S.PRON.**MOD**) say-3P.S 'They said **something** to the girl.'

(Fortescue, 1984, p. 63, 88)

Finally, it is important to establish that the structurally high position of ABS objects is a *derived position*, in that ABS objects are generated VP-internally prior to movement (Murasugi, 1992; Bittner, 1994; Bittner and Hale, 1996b; Manga, 1996). This can be evidenced by the fact that ABS arguments may in rare instances be interpreted in their base position, such as in NPI-licensing contexts. The examples in (13) first demonstrate that the NPI enclitic = *luunniit* may not be introduced in a position outside of the c-command domain of sentential negation.

#### (13) 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.' (Bittner, 1994, p. 142)

In (14), we further see that NPIs in all structural positions, including ABS object position, may be

<sup>&</sup>lt;sup>11</sup>Although one example of an antipassivized (MOD-marked) pronominal object in Kalaallisut is presented in Bittner (1987, p. 196, ex. (5)), it has been subsequently suggested that there are some confounds that contribute to the well-formedness of the given data point; see De Hoop (1992, p. 70) and Manning (1996, pp. 94–96) for discussion.

<sup>&</sup>lt;sup>12</sup>The obligatoriness of this contrast has additionally been confirmed to me by Jerrold Sadock (p.c.).

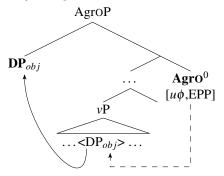
licensed by c-commanding negation. I follow Bittner (1994) in assuming that this is because ABS NPIs must reconstruct at LF to a position below negation, in order to be licensed.

#### (14) 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).' (Bittner, 1994, p. 142)
- b. kuruuni-nik **marlu-innar-nil=luunniit** piqa-**nngi**-langa kroner-MOD.PL **two-just-MOD.PL=NPI** have-NEG-1S.S 'I don't have even two kroner.' (Fortescue, 1984, p. 221)
- c. kina=luunniit taku-nngi-laa
  who.ABS=NPI see-NEG-3S.S/3S.O
  'He didn't see anyone.' (Fortescue, 1984, p. 138)

Overall, then, the uniform syntactic and semantic behaviour of ABS subjects and ABS objects in Kalaallisut may be readily captured by the idea that ABS objects raise to a structurally high position. What is this position? Given that structurally high (ABS) objects are always cross-referenced by verbal  $\phi$ -morphology, I assume, without evidence to the contrary, that the same functional head responsible for agreement also triggers syntactic movement of the targeted nominal to its specifier. We may model this by providing the agreeing head (Agro<sup>0</sup> in this paper) with an [EPP] feature (Chomsky, 1981). This assumption will moreover permit us to later unify the Kalaallisut pattern with that found in the Eastern Canadian Inuit varieties, in which the agreement/movement correlation is more apparent (§5). Thus, (15) illustrates the derivation of high ABS objects in Kalaallisut.

#### (15) Object agreement and movement in Kalaallisut



In sum, transitive objects in Inuit may undergo movement to a syntactically high position or remain in situ, with these options yielding distinct clusters of morphosyntactic and semantic properties. These are repeated below:

#### (16) Properties correlated with (non-)movement of objects

Movement?	Interpretation	Agreement	Case	Construction
Yes	Wide scope/specific	Yes	ABS	Ergative
No	Narrow scope/non-specific	No	MOD	Antipassive

Syntactic movement of the object both feeds semantic interpretation and goes hand-in-hand with

the presence of  $\phi$ -morphology. Moreover, whether movement takes place correlates with whether the object surfaces with ABS or MOD case. I assume, following Marantz (1991), that ABS is essentially an unmarked case (see also Bittner and Hale (1996a)); I do not develop an analysis of MOD case assignment since this is less crucial to the paper (although many other implementations are possible<sup>13</sup>). What is important here is simply that the ABS vs. MOD distinction can be viewed as a direct morphological reflex of the structural position of the object: the object is realized as ABS if structurally high or as MOD if in situ. <sup>14</sup>

With these ideas in place, I turn to the derivational relationship between object movement and ERG case assignment.

# 3.2 A configurational approach to ERG case assignment

We have now seen that object movement is necessary to derive an ergative construction in Inuit. This section demonstrates that these are indeed causally linked: movement of the object to a structurally high position triggers ERG case assignment to the subject. Additionally, I propose that this is most intuitively captured using a dependent case framework (Marantz 1991, Baker 2015, cf. Bittner and Hale 1996a).

According to this theory, dependent case is assigned configurationally, based on the c-command relationship between two (or more) nominals, rather than assigned by functional heads via Agree (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 shown in (17a-b) below, this framework takes ERG and ACC case to both be dependent cases, differing 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—the case competitor—remains morphologically unmarked, i.e. is ABS or NOM. <sup>15</sup>

#### (17) Syntactic configurations for dependent case assignment

a. *Ergative language:* 



b. Accusative language:



If the realization of ERG case on the subject in Inuit correlates with the presence of a high object, then that ERG case must be assigned only after object movement has occurred. Put differently, the

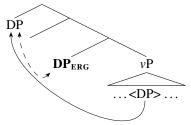
 $<sup>^{13}</sup>$ For instance, Bittner and Hale (1996a,b) take MOD case in antipassive constructions to be an oblique case (see also Levin 2015). In contrast, Bok-Bennema (1991), Spreng (2012), and Yuan (2018) analyze MOD as akin to a structural ACC case, assigned by a particular flavour of  $v^0$  associated with the antipassive.

 $<sup>^{14}</sup>$ I similarly abstract away from the notion of successive-cyclic movement, such as movement is punctuated by syntactic phase edges in the course of the derivation. Assuming that vP is a phase Chomsky (2000, 2001), we may expect that the object first lands in Spec-vP before moving to Spec-AgroP. This is compatible with the overall analysis presented here, though is omitted in (15) above for simplicity.

<sup>&</sup>lt;sup>15</sup>Marantz's (1991) 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.

Inuit-specific dependent case calculus must be localized to the vP-external phase, rather than the entire clause, with the dependent case assigned to the *lower* of two vP-external nominals (this is in many ways equivalent to Bittner and Hale's (1996a) notion of *opaque VP* found in syntactically ergative or "raising" languages). The downwards directionality of ERG case assignment advocated for here therefore resembles the standard treatment ACC case assignment in a dependent case approach. While unorthodox, this idea is consistent with the syntactically ergative nature of Inuit; see also Ershova (2019) and Yuan (2020) for applications of this idea to a number of unrelated syntactically ergative languages. Put together, the configuration required for ERG case assignment in Inuit is schematized as in (18).

#### (18) Dependent case assignment in a syntactically ergative language



The idea that ERG case assignment in Inuit is contingent on object movement does not, by itself, point unequivocally towards a dependent case system; see for instance Woolford (2015, 2017) for an alternative analysis of this interaction. However, there is independent evidence that ERG case in Inuit is indeed dependent, rather than assigned by a functional head such as (transitive)  $v^0$ , as is assumed under the inherent analysis of ERG case assignment (Woolford, 1999, 2006; Aldridge, 2008; Legate, 2008). I illustrate this point with a diagnostic from Baker and Vinokurova (2010), Baker (2014) regarding the distribution of case in unaccusative constructions. In unaccusative constructions, transitive  $v^0$ , the head typically taken to assign structural ACC or inherent ERG, is unavailable. If ERG or ACC case is nonetheless present in unaccusative constructions, then it must have a different source.

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, (19) (Baker, 2014). This is difficult to reconcile with inherent analyses of ERG, but follows straightforwardly from a dependent approach: the applied argument serves as the case competitor for the subject, thus satisfying the requisite configuration for dependent ERG case assignment (the structure in (17a) for Shipibo).<sup>17</sup>

<sup>&</sup>lt;sup>16</sup>Specifically, Woolford (2015, 2017) suggests that ERG case induced by object movement may occur as a Last Resort, since the high object may block the subject from being case-licensed by a higher functional head.

<sup>&</sup>lt;sup>17</sup>This unaccusative 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  $\phi$ -features in T<sup>0</sup> and the object's  $\phi$ -features in  $v^0$ , respectively, transferred onto the subject (which Agrees with T<sup>0</sup> 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 (Agro<sup>0</sup>) being higher; thus, Deal's 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  $\phi$ -agreement

#### (19) Dependent ERG case in Shipibo

 a. 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, pp. 345-346)

(unaccusative applicative)

The availability of ERG case in unaccusative contexts is also seen in Inuit (and related languages), thus supporting the analysis outlined 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 may receive ERG case in such contexts. This is shown in the Inuktitut examples in (20) with the reason applicative *-gutigi*. In (20b), the applied argument is generated below the transitive subject, before undergoing the object movement step discussed in §3.1; this, in turn, feeds ERG case assignment per the configuration in (18).

#### (20) ERG case on unaccusative subjects (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 because of Miali.'

Miyaoka (2012) additionally lists a number of examples of this sort for the related Central Alaskan Yup'ik; two are given in (21) (see also Woodbury 1981, pp. 332–333 for similar constructions with malefactive internal arguments, as well as Baker and Bobaljik 2017 for further contextualization within a dependent case framework).

<sup>(</sup>Dorais, 1988); an example of this is provided later in (21a) for Central Alaskan Yup'ik.

<sup>&</sup>lt;sup>18</sup>See Fortescue (1984, p. 268) for a (non-exhaustive) list of applicative morphemes found in Inuit. An aonymous reviewer asks whether the Inuit applicative morphology shown in (20b) could be analyzed as bimorphemic (a nominalizing morpheme -*Cuti* followed by a transitivizing morpheme -*gi*, both independently attested in Inuit). Under this approach, the ERG DP would be analyzed as an external argument of the transitivizer, rather than the theme of the verb (such that (20b) would be literally, 'The store has Miali as an opening-early-reason'); this would undermine the diagnostic for dependent ERG case. However, I am not aware of any language-internal synchronic evidence for this division (it is possible that the combination of the two aforementioned morphemes was at some point grammaticalized to create an applicative morpheme). Moreover, this idea does not extend to the Central Alaskan Yup'ik data in (21), in which the applicative morphology provided (-*ut*) cannot be analyzed in this way.

#### (21) ERG on unaccusative subjects (Central Alaskan 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, pp. 1080, 1082)

The second component to our analysis of Inuit pertains to the *domain* within which the dependent case calculation takes place. As mentioned above, dependent case assignment in Inuit seems to be demarcated by the  $\nu$ P-layer, since it occurs only if the object has raised. This, too, has a cross-linguistic precedent, as shown below with Sakha (accusative) and Eastern Ostyak (ergative). In both languages, the occurrence of object shift (as indicated by the position of the object relative to a  $\nu$ P-level adverb) results in the assignment of ACC and ERG case, respectively (Baker and Vinokurova, 2010; Baker, 2015).

## (22) Object shift and dependent case assignment in Sakha

- a. Masha [ türgennik salamaat ] sie-te Masha.NOM quickly porridge.NOM eat-PST.3SG.S 'Masha ate porridge quickly.'
- b. Masha salamaat-y [türgennik \_ ] sie-te
   Masha.NOM porridge-ACC quickly eat-PST.3SG.S
   'Masha ate the porridge quickly.' (Baker and Vinokurova, 2010, p. 602)

#### (23) Object shift and dependent case assignment in Eastern Ostyak

- a. Mä [t'əkäjəylämnä ula] mənyäləm we.DU.ABS younger.sister.COM berry pick.PST.1PS 'I went to pick berries with my younger sister.'
- b. Mə-ŋən ləyə [əllə juy kanŋa \_\_] aməyaloy we-ERG them.ABS large tree beside put.PST.3PO/1PS 'We put them (pots of berries) beside a big tree.' (Gulya 1966, cited in Baker 2015, p. 9)

A fundamental difference between these languages and Inuit, of course, concerns the final landing site of the object, a point I revisit in §6; in Inuit, the object ultimately raises above the subject, in line with its syntactically ergative nature.

Thus, the distribution of ERG case in Inuit (and related languages) can be straightforwardly captured under a dependent approach to case assignment. The specific properties shown for Inuit are moreover incompatible with competing analyses of ERG case assignment that rely on external argumenthood or transitivity (e.g. Woolford, 1999, 2006; Aldridge, 2008; Legate, 2008), and more broadly present a challenge for any account that takes ERG case to be assigned by a dedicated functional head.

## 3.3 Predictions for a continuum of ergativity

Having presented a general account of ergativity in Inuit, I now turn to Inuit varieties in which the distribution of the ergative construction differs from what we have seen in Kalaallisut. The idea that object movement may condition dependent ERG case assignment makes a straightforward prediction for all of Inuit: if there are independent restrictions on object movement in any given variety, then this should constrain the surface distribution of ERG case in that variety. Moreover, if such objects must remain in situ in a wider variety of contexts, we might expect the antipassive construction to have a wider distribution than the ergative construction. Note that this prediction hinges on the idea that ERG case is *uniformly* dependent across Inuit. Therefore, our account takes variation in ergativity across Inuit to actually be localized in the nature of the high (ABS) object—in contrast, there is no variation in the grammatical properties of the (ERG-marked) transitive subject.

The remainder of this paper argues for these exact points, on the basis of the Eastern Canadian Inuit varieties that have been previously observed to display a relatively reduced ergative patterning. Thus, while the discussion above has primarily focused on Kalaallisut, the prototypical Inuit ergative patterning, I introduce data from Labrador Inuttut and Inuktitut. As we will see, these three varieties form a continuum along multiple dimensions in a parallel way, as schematized below, with these parallels strongly suggesting that these dimensions are interrelated.

#### (24) Ergativity and object agreement/movement continuum across Inuit



In addition to the correlation between ergativity and object movement (§4), I propose that another relevant factor pertains to the pronominality (i.e. clitichood) of the agreement morphology indexing high objects (§5). We will see that this informs the exact nature of the restrictions on object movement found in Eastern Canadian Inuit.

# 4 Restricted object movement in Labrador Inuttut

In contrast to Kalaallisut, the ergative construction in Labrador Inuttut has been observed to be highly restricted, with most transitive constructions expressed using the antipassive construction (Johns, 1999, 2001, 2006, 2017). In §4.1, I provide novel data confirming this observation: Labrador Inuttut permits pronominal objects to optionally undergo movement, while (non-pronominal) full DPs must remain in situ. Thus, both predictions stated above are borne out: Labrador Inuttut indeed displays restrictions on the types of objects that may undergo movement.

In §4.2, I compare the Labrador Inuttut pattern to a remarkably similar one found in the distantly-related language Unangam Tunuu (Aleut), as first noted by Johns (2017). Unlike in Labrador Inuttut, however, pronominal object movement in Unangam Tunuu is obligatory, rather than optional; moreover, the language is generally not described as ergative. Given this latter point, the strength of the parallel between Labrador Inuttut and Unangam Tunuu offers support for the idea that the antipassive construction in Inuit is not syntactically intransitive or detransitivized, contra e.g. Fortescue (1984) or Baker (1988).

Finally, as independent evidence that variation in ergativity does indeed arise from variation in object movement, §4.3 expands on Woolford's (2017) observation that the object movement patterns seen in the Inuit-Yupik-Unangan language family precisely mirror variation in Scandinavian regarding object shift. Although Woolford focuses on Kalaallisut and Unangam Tunuu, I show that Labrador Inuttut may be straightforwardly integrated into this account as well.

## 4.1 Reduced ergativity in Labrador Inuttut

In Labrador Inuttut, the usage of the ergative construction is limited to certain contexts. As a result, the alternation between ergative and antipassive constructions does not track the specificity or scopal property of the grammatical object, diverging from what we have seen for Kalaallisut (§3.1).

In fact, 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 (25). This example demonstrates that speakers use the antipassive to encode discourse-given information, in contrast to characterizations of MOD objects in Kalaallisut as necessarily non-topical by Berge (1997, 2011). In other words, comparable sentences in Kalaallisut would involve the usage of the ergative construction.

## (25) 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-tuk<sup>19</sup>
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, p. 134)

While Johns limits her discussion to definite DPs such as proper names, I present below novel data from quantificational (scope-taking) objects, in order to provide a more systematic comparison with Bittner's (1994) Kalaallisut data from §3.1. The examples to follow show that antipassive constructions in Labrador Inuttut are scopally ambiguous.

First, the pair of antipassive constructions in (26) show that quantificational MOD objects in Labrador Inuttut are not obligatorily interpreted as narrow scope relative to operators such as negation. While (26a) shows the expected narrow scope interpretation of the MOD object under negation, (26b) additionally demonstrates that the MOD object may also take scope over negation. This is made clear by the fact that the sentence in (26b) was produced given the particular context provided (which specifically targets the inverse scope reading).<sup>20</sup>

<sup>&</sup>lt;sup>19</sup>Non-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.

 $<sup>^{20}</sup>$ The Labrador Inuttut speaker from whom this pair of examples was elicited preferred disambiguating the two sentences, in light of the contexts provided, using the minimizing NPI enclitic = luunniit and the suffix -tuin(n)aq, respectively. While these sentences are not perfect minimal pairs, the fact that (26b) occurs in the antipassive is meant to contrast with the generalizations previously made for Kalaallisut.

#### (26) 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 (27), we moreover see that antipassive constructions containing multiple quantificational arguments again permit ambiguous readings of the MOD object, contrary to the Kalaallisut facts presented earlier. The linguistic consultant who produced these sentences was provided with illustrations distinctly targeting each reading and asked to describe them; crucially, she offered antipassive constructions to depict both scenarios. The example in (27a) displays the expected narrow scope reading of the MOD object, with *maggonik annanik* 'two women' interpreted distributively (i.e. understood as four women in total). However, (27b) demonstrates that the antipassive construction in Labrador Inuttut also permits a wide scope reading of the MOD object, resulting in a collective reading. Crucially, the Kalaallisut equivalent of (27b) would be expected to be ergative rather than antipassive, given (11) in §3.1.<sup>21</sup>

#### (27) 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)

Assuming the analysis from §3 that MOD objects are in situ, the fact that movement is not required

<sup>&</sup>lt;sup>21</sup>I note here that the point made by (27b) would be strengthened by the inclusion of a third scenario, wherein the ABS *subject* is interpreted distributively due to the wide scope reading of the object. This was not elicited for Labrador Inuttut nor for Inuktitut (see (47) in §5.1 for discussion). The availability of such a reading, however, is predicted to exist, and may be verified in future work.

to yield a wide scope or specific interpretation of the object in Labrador Inuttut 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). We will see in §4.3 that this effect even arises in certain contexts in Kalaallisut.

As discussed by Johns (2017) and Johns and Kučerová (2017), the ergative construction in Labrador Inuttut surfaces when the object is a *referential pronoun*. This is illustrated with the contrast in (28). Note that, as there are no overt 3rd person pronominal forms in the Inuit-Yupik-Unangan language family, the pronominal object is encoded as object  $\phi$ -morphology on the verb; this point will be important later.

#### (28) 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., cited in Yuan (2018, pp. 126-127))

Here, I emphasize 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/antipassive), in contrast to surface-similar patterns discussed by Coon and Preminger (2017), among others. This is because, although not addressed in any previous research on Labrador Inuttut, referential pronominal objects may *also* occur in antipassive contexts, with no discernable difference in meaning from their ergative counterparts, nor any degradation in grammaticality. Two different examples showing this pattern are provided in (29).<sup>22</sup> Due to the absence of independent 3rd person pronouns in the language family, the presence of the null pronoun is inferred based on the interpretations of the sentences.

#### (29) 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.'

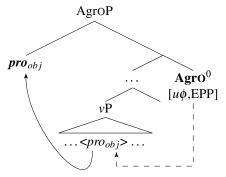
Thus, the ergative construction is used *only* when the object is pronominal, while the antipassive construction may be used with pronominal and non-pronominal objects alike.

If ergative constructions in Kalaallisut are derived by raising the object to a structurally high position, followed by dependent case assignment to the lower subject, then a logical step is to extend this account to Labrador Inuttut. Thus, pronominal objects in Labrador Inuttut *optionally* undergo this movement step (reflecting the alternation given in (28)-(29)), while full DPs must

<sup>&</sup>lt;sup>22</sup>These particular Labrador Inuttut sentences were produced by two different linguistic consultants as translations of the English sentences given, i.e. not constructed by the author and then judged grammatical by the speakers.

remain in situ. When the pronominal object does move, this triggers ERG case assignment to the subject, resulting in an ergative construction. Pronominal object movement is schematized preliminarily in (30):

#### (30) Pronoun movement in Labrador Inuttut (preliminary version)



In (30), a syntactic dependency between  $Agro^0$  and the (null) pronominal object triggers both the appearance of object  $\phi$ -morphology in  $Agro^0$  and movement of the pronoun to Spec-AgroP. This derivation will be refined in §5.2, once additional facts about the Eastern Canadian varieties of Inuit are introduced. Synthesizing the analyses of Labrador Inuttut and Kalaallisut thus far, we arrive at the table in (31), which summarizes the differences in permissibility of object movement:

#### (31) ABS vs. MOD objects in Kalaallisut and Labrador Inuttut

	Kalaallisut		Labrador Inuttut	
	Full DP	Pronoun	Full DP	Pronoun
Mvt.	✓	✓	X	✓
(ABS)				
No mvt.	✓	Х	✓	✓
(MOD)				

In the rest of this section, I provide cross-linguistic evidence for this movement-based analysis from both the wider Inuit-Yupik-Unangan language family and from unrelated languages.

# 4.2 The Aleut Effect and implications for the Labrador Inuttut antipassive

As discussed by Johns (2017), the Labrador Inuttut pattern shown above is strikingly similar to a set of constructions found in the distantly-related Unangam Tunuu (Aleut). Transitive constructions in Unangam Tunuu are generally bi-absolutive, with only the ABS subject indexed by  $\phi$ -morphology on the verb, as illustrated throughout (32). However, as the examples in (33) demonstrate, the case and agreement pattern changes when the object is understood as a 3rd person pronoun. In such a context, the subject bears the "relative" case marker -m, cognate to ERG -up in Inuit (Fortescue et al., 1994, 2011), while the pronominal object is encoded by  $\phi$ -morphology on the verb (as with Inuit, Unangam Tunuu lacks overt 3rd person pronominal forms).<sup>23</sup> This pattern

<sup>&</sup>lt;sup>23</sup>Note that there are additional properties of Unangam Tunuu φ-morphology that are set aside here, such as their interaction with raised possessors. See Sadock (2000) and Woolford (2017) for discussion.

is known as the Aleut Effect (e.g. Bergsland, 1997; Hale, 1997; Sadock, 2000; Merchant, 2011; Woolford, 2017).

#### (32) Bi-absolutive constructions in Unangam Tunuu

- a. Piitra-**x** tayagu-x kidu-ku-**x**Peter-ABS man-ABS help-PRES-3S.S
  'Peter is helping the man.'
- b. Viira-**x** ting achixa-ku-**x**Vera-ABS 1S.ABS teach-PRES-3S.S

  'Vera is teaching me.'
- c. *(pro)* asxinu- $\hat{x}$  kidu-ku-q girl-ABS help-PRES-1S.S 'I am helping the girl.'

(Bergsland, 1997, pp. 126, 139)

#### (33) The Aleut Effect in Unangam Tunuu

- a. Piitra-**m** kidu-ku-**u**Peter-ERG help-PRES-3S.S/3S.O
  'Peter is helping him/her.'
- b. tayagu-m kidu-qa-ngis man-ERG help-PST-3S.S/3P.O 'The man helped them.'

(Bergsland, 1997, pp. 126, 140)

As alluded to above, this alternation strongly resembles the distribution of the ergative and antipassive constructions in Labrador Inuttut. In both Labrador Inuttut and Unangam Tunuu, it is the non-ergative (antipassive in Labrador Inuttut; bi-absolutive in Unangam Tunuu) construction that surfaces in most transitive contexts; however, the presence of some pronominal object, encoded as verbal  $\phi$ -morphology, co-occurs with ERG (or "relative") case on the subject.<sup>24</sup> Moreover, one analysis of the Unangam Tunuu facts, put forth by Merchant (2011), is similar to the approach to Inuit advocated for in this paper: Merchant (2011) proposes that the movement of a pronominal object to a structurally high position (Spec-TP under his assumptions) feeds contextually-sensitive spell-out rules for the morphological case of the subject.<sup>25</sup>

# (34) Morphological case rules for singular NPs in Unangam Tunuu (Merchant, 2011, p. 393)

- a.  $/-m/ \leftrightarrow [Case] / \__pro$
- b.  $/-\hat{x}/\leftrightarrow$  [Case] / elsewhere

Based on this, I suggest that Merchant's approach to Unangam Tunuu may be straightforwardly unified with the present analysis of Inuit, if we simply recast the contextual allomorphy rules to (34) may be translated as rules of dependent case assignment: in proximity to a pronoun (due to movement), the subject assigned relative (i.e. ergative) case.

<sup>&</sup>lt;sup>24</sup>As will be discussed below, Unangam Tunuu and Labrador Inuttut differ in exactly which pronominal objects trigger the ergative patterning.

<sup>&</sup>lt;sup>25</sup>See also Woolford (2017) for an alternative analysis of Unangam Tunuu that also ties pronominal object movement to ergativity.

However, the distributions of the "ergative" and "non-ergative" constructions in Labrador Inuttut and Unangam Tunuu are not precisely identical. First, there is no evidence that movement of the pronominal object is optional in Unangam Tunuu, like it is in Labrador Inuttut, a difference that we will return to shortly. Second, as shown in (32b) above, only *3rd person* pronominal objects may trigger the Aleut Effect in Unangam Tunuu, whereas 1st/2nd person pronominal objects surface in the default bi-absolutive construction; in contrast, 1st/2nd person pronominal objects are permitted in ergative constructions in Labrador Inuttut. The Labrador Inuttut is illustrated in (35) with 1st person.<sup>26</sup>

#### (35) Labrador Inuttut participant pronominal objects

- a. Jâni napvâ-**vânga**Johnny.ABS find-3s.S/1s.O
  'Johnny found me.'
- b. Jâni **uvan-nik** napvâ-juk Johnny.ABS 1S.PRON-MOD find-3S.S 'Johnny found me.'

The comparison between Unangam Tunuu and Labrador Inuttut is nonetheless useful, in that they shed light on the nature of the antipassive construction in Labrador Inuttut. Just as it would be conceptually odd to treat the bi-absolutive transitive construction in Unangam Tunuu as detransitivized, the default nature of the Labrador Inuttut antipassive is similarly difficult to capture under a detransitivization-based approach, contrary to what is often assumed for antipassives cross-linguistically (see e.g. (Polinsky, 2017a) and references therein). Rather, following Johns (2001), the antipassive construction in Labrador Inuttut is essentially a NOM-ACC construction.

# 4.3 Cross-linguistic parallels: Scandinavian object shift

This paper has now presented three patterns of object movement, instantiated by Kalaallisut, Labrador Inuttut, and Unangam Tunuu, respectively. In Kalaallisut, full DP objects may undergo movement, resulting in a correlation between case and semantic interpretation, while referential pronominal objects must undergo movement. In Labrador Inuttut and Unangam Tunuu, on the other hand, movement is permitted for referential pronominal objects but not full DPs, with further variation between the two in whether pronominal object movement is optional (Labrador Inuttut) or obligatory (Unangam Tunuu).

This variation in object movement is precisely paralleled by *variation in object shift* seen cross-linguistically. As observed by Woolford (2017), the contrast in object movement possibilities in the Inuit-Yupik-Unangan language family is mirrored by object shift in the Scandinavian languages. Although Woolford focuses on Kalaallisut and Unangam Tunuu, I demonstrate that the Labrador Inuttut pattern fits straightforwardly into this picture, thus further strengthening the comparison.

<sup>&</sup>lt;sup>26</sup>Note that the occurrence of 1st/2nd pronominal objects in Labrador Inuttut has certain morphological repercussions, as it necessitates a shift in clause type morphology on the verb from the default participial mood to the otherwise contextually-marked indicative mood, as shown in (35a). See Johns (1995), Johns and Kučerová (2017), and Compton (2019) for further discussion.

Additionally, I draw a novel connection between these language groups concerning the interpretive properties of objects that *cannot* undergo movement.

Starting with the Kalaallisut-type pattern, Woolford (2017) points out that a similar set of facts has been shown for Icelandic (Holmberg, 1986; Diesing, 1992; Collins and Thráinsson, 1996; Thráinsson, 2008). In Icelandic, objects that have undergone movement are interpreted as (what has been characterized as) *specific*, while non-shifted objects are non-specific. This contrast is exemplified in (36), with the occurrence of object shift diagnosable by the position of the object relative to the adverb.

#### (36) *Object shift in Icelandic*

a. Hann les lengstu bókina sjaldan
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.

b. 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.

(Diesing, 1996, p. 79)

In addition, whereas full DPs in Icelandic may undergo object shift, referential pronouns must do so:

#### (37) **Pronominal object shift in Icelandic**

- Jón las hana <u>ekki</u>
   John read it not
   'John did not read it.'
- b. \*Jón las <u>ekki</u> hana
  John read not **it**Intended: 'John did not read it.' (Thráinsson, 2008, p. 164)

Following Chomsky (1995) and Rackowski and Richards (2005), we may assume that object shift targets the *v*P-edge; see also Déprez (1989) and Johnson (1991) for similar ideas. A notable syntactic difference between Icelandic and Kalaallisut, then, is that in Kalaallisut the object raises *above* the subject (a point to be revisited in §6).

Woolford additionally observes that the Aleut Effect seen in Unangam Tunuu is reminiscent of object shift in certain Mainland Scandinavian languages (Holmberg, 1986; Holmberg and Platzack, 1995; Vikner, 1994, a.o.). In Danish, for instance, DPs do not undergo object shift, but pronouns obligatorily do, (38).<sup>27</sup>

<sup>&</sup>lt;sup>27</sup>This discussion of pronominal object shift pertains specifically to *weak* (e.g. unstressed) pronouns, 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 analytical 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 in the sense of (Cardinaletti and Starke, 1999). This comparison will be revisited in §5, once we have introduced additional data

#### (38) 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, p. 150)

Thus, Woolford identifies two language groups with parallel movement patterns: in Icelandic and Kalaallisut, full DPs may undergo object shift, while pronouns must; in Danish and Unangam Tunuu, full DPs may not undergo object shift, while pronouns must.

I propose that the parallel observed by Woolford (2017) may be made even stronger once we incorporate the pattern seen in Labrador Inuttut into the overall picture. Indeed, there are Mainland Scandinavian languages that, like Labrador Inuttut, permit pronominal objects to optionally undergo object shift and ban full DPs from doing so (e.g. Josefsson, 1992, 2003; Andréasson, 2010; Vikner, 2017). Compare (38c-d) from Danish with the Swedish examples in (39):<sup>28</sup>

## (39) 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, 2006, p. 394)

Thus, we find *three* pointwise parallels between Inuit and Unangam Tunuu on the one hand, and the Scandinavian languages on the other. This is summarized in (40). ① In Kalaallisut and Icelandic, full DPs may undergo object movement, while pronouns must; moreover, the occurrence of DP movement is correlated with a semantic difference pertaining to specificity or scope. ② In contrast, Unangam Tunuu and Danish do not permit full DPs to undergo object movement, though this is still required for pronouns. ③ Finally, Labrador Inuttut and Swedish are like ② in banning full DP object movement; however, pronouns may optionally move or remain in situ.

from Eastern Canadian Inuit.

<sup>&</sup>lt;sup>28</sup>Pronominal 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).

#### (40) *Object movement patterns*

① Full DPs/pronouns	Pronouns only	
	② Obligatory	3 Optional
Kalaallisut	Aleut	Labrador Inuttut
Icelandic	Danish	Swedish

With these parallels in place, I now make the novel suggestion that the proposed connection between these language groups offers new insights into the semantic properties of antipassive constructions across Inuit (and, by assumption, bi-absolutive constructions in Unangam Tunuu). Specifically, it has been previously observed for Scandinavian languages that the semantic correlates of object shift *disappear* when movement is independently unavailable (e.g. Adger, 1994; Diesing, 1997; Vikner, 1997, 2001; Thráinsson, 2008). I propose that this extends straightforwardly not only to the interpretive flexibility of MOD objects in Labrador Inuttut antipassive constructions, but also to certain under-described corners of Kalaallisut.

In the Scandinavian languages, object shift requires lexical verb movement (Holmberg's Generalization; Holmberg 1986): if the verb remains in situ (e.g. because an auxiliary has raised instead), then object shift is no longer permitted. Against this backdrop, consider the Danish and Icelandic examples below. In (41), the in situ pronoun in Danish is still understood as referential.

#### (41) 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, p. 395)

As discussed by Thráinsson (2008, pp. 190-194), the example in (42) additionally demonstrates for Icelandic that full DP objects may be similarly interpreted as specific in situ.

#### (42) Obligatory in situ quantificational objects in Icelandic

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, p. 191)

Finally, it has already been shown in (39) that, in languages such as Swedish in which pronominal object shift is optional rather than required, the occurrence of this movement seems generally semantically vacuous.

This overall effect is akin to what we have already seen in Labrador Inuttut, with the relevant data repeated as (43). In Labrador Inuttut, recall that pronouns may remain in situ and still be understood as referential; similarly, in situ DP objects may be interpreted as specific or with wide

<sup>&</sup>lt;sup>29</sup>Moreover, that this is a general cross-linguistic phenomenon not specific to Scandinavian has been shown by Rackowski and Richards (2005) on the basis of Tagalog.

scope. Thus, in contexts in which object movement does not occur for various reasons (whether because pronominal object movement is not obligatory or because full DP object movement is not an option to begin with), the semantic contrast between raised vs. in-situ objects is lost. Accordingly, antipassive constructions in Labrador Inuttut permit readings that are otherwise associated with ergative constructions in Kalaallisut.

#### (43) Referential/wide scope in-situ 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. *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)

A comparable environment in which object movement is blocked in Kalaallisut is found in relative clauses.<sup>30</sup> Recall from §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. In such clauses, the object is *necessarily* MOD, meaning that it may not undergo movement. Crucially, it is in these constructions that the MOD object may receive a wider range of interpretations. This has been reported by both Fortescue (1984, p. 54) and Bittner (1994, p. 116-118) (though Bittner does not provide the relevant scopal data). Indeed, Fortescue (1984, p. 54) (whose discussion of ABS and MOD objects references definiteness rather than specificity or scope) offers the following passage to describe the example in (44):

"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)

## (44) 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, p. 54)

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 (Diesing, 1992, 1996; Diesing and Jelinek, 1995). Nonetheless, it is possible to accommodate this set of facts in a number of ways, though

<sup>&</sup>lt;sup>30</sup>Bittner (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).

I do not adopt a particular approach in this paper. For instance, it has been proposed 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. Alternatively, one may posit 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). Finally, 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 and may be cancelled when the alternation is lost. Regardless of the exact mechanisms behind this phenomenon, it is clear that the disappearance of the semantic contrast when object shift is independently unavailable is a generalized and systematic effect.

To sum up, the preceding sections have presented evidence for two distinct patterns of object movement across Inuit (or three patterns across the larger Inuit-Yupik-Unangan language family). Ergative constructions in Kalaallisut and Labrador Inuttut (and Unangam Tunuu) were shown to share a common syntactic derivation, i.e. movement of the object to a higher position, which feeds dependent ERG case assignment to the subject. However, the varieties in which the ergative patterning is reduced were also shown to display constraints on object movement. Variation in ergativity therefore ultimately boils down to variation in the types of objects that may undergo movement to a structurally high position.

# 5 A continuum of ergativity and object movement

Having now demonstrated that Kalaallisut and Labrador Inuttut (and Unangam Tunuu) display opposing object movement patterns, I now extend the proposal to Inuktitut, an Eastern Canadian Inuit variety spoken in Nunavut, Canada. Inuktitut offers additional evidence for the strong correlation between variation in ergativity and variation in object movement, as it occupies an intermediate position between Kalaallisut and Labrador Inuttut along both dimensions. The exact nature of Inuktitut therefore motivates the idea of a *continuum* of ergativity and object movement, along which one may find individual Inuit varieties. The Inuktitut pattern additionally reveals an additional factor relevant to object movement—and, in turn, the appearance of ergativity—across Inuit: whether the verbal  $\phi$ -morphemes cross-referencing ABS (raised) objects are instances of  $\phi$ -agreement or pronominal clitics.

As I summarize in §5.1, there has been much recent work observing that the overall appearance of ergativity in Inuktitut is less robust than in Kalaallisut (Johns 2006, Beach 2011, Carrier 2012, 2017, 2020, Murasugi 2017, Yuan 2018), based on its wider usage of the non-ergative antipassive construction. At the same time, the ergative pattern in Inuktitut is not as restricted as that in Labrador Inuttut. I show that the object movement patterns in Inuktitut are exactly as predicted, given the overall picture of Inuit thus far. §5.2 then argues that ABS objects of ergative constructions in Inuktitut are *clitic-doubled*, based on strong syntactic and semantic parallels with object clitic-doubling in other languages. In §5.3, I unify this approach with our previous findings for Kalaallisut and Labrador Inuttut, and show how this offers a key insight into the exact nature of the variation in object movement across Inuit.

## 5.1 An intermediate ergative patterning in Inuktitut

In §3, it was established that, between Kalaallisut and Labrador Inuttut, there is a marked difference in the usage of the ergative construction, which may be modeled in terms of the permissibility of object movement. In Kalaallisut, full DP objects may optionally move, while pronouns obligatorily raise; in Labrador Inuttut, full DP objects may not undergo movement, while pronouns may optionally do so. I now demonstrate that Inuktitut displays similarities with *both* Inuit varieties. The integration of Inuktitut into the overall picture thus reveals an ergativity cline across Inuit, with Inuktitut in an intermediate position—thus moving beyond the previous two-way contrast between Kalaallisut and Labrador Inuttut. This is summarized in (45) (partially repeated from (24)):

#### (45) Ergativity across Inuit



Like in Kalaallisut, the ergative construction in Inuktitut may be used in both 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). At the same time, it has been noted in much previous work (including recent experimental and corpus-based research) that the antipassive construction in Inuktitut is available in a wider range of environments than in Kalaallisut, leading to the impression that ergativity somewhat is reduced in Inuktitut (Johns 2006, Beach 2011, Carrier 2012, 2017, 2020, Murasugi 2017, Yuan 2018). As demonstrated by the data in (46), from Beach's (2011) survey of the Nunavik (Quebec) varieties of Inuktitut, objects (described by Beach as 'specific') may surface as ABS or MOD. This is made clear by Beach's annotations of the English translations provided.

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

- a. <u>qautamaat</u> (*pro*) **qimmiq** taku-qatta-tara every day (1S.PRON.ERG) **dog.ABS** see-HAB-1S.S/3S.O 'Every day, I see a dog (i.e. the same dog).' (∃ > every day; \*every day > ∃)
- b. qautamaat (*pro*) qimmi-mik taku-qatta-tunga every day (1S.PRON.ABS) 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, pp. 53-54)

The pair of sentences in (47), elicited through the author's fieldwork on the Baffin varieties of Inuktitut, match Beach's findings. These examples are intended to evaluate the scopal relations of quantificational DPs, building on the Kalaallisut and Labrador Inuttut examples from (11) and (27), respectively. In (47a), the only reading available is one in which a total of three cookies were (collectively or cumulatively) eaten by two children. In contrast, (47b) is judged as possible if a total of six cookies being eaten (the distributive reading, indicative of narrow scope), *and* also possible if just three cookies were eaten.

#### (47) 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.'
  (3 > 2, \*2 > 3; i.e. a total of three cookies were eaten)
- 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.'

  (2 > 3, 3 > 2; i.e. six cookies were eaten *or* a total of three cookies were eaten)

The fact that the MOD objects in (46b) and (47b) are not obligatorily interpreted with narrow scope is exactly as was found in Labrador Inuttut (§4.1).

Pronominal objects in Inuktitut are similarly revealing. Recall also that (3rd person) pronominal objects in antipassive constructions in Kalaallisut are necessarily interpreted as non-referential, while their counterparts in Labrador Inuttut are semantically ambiguous. The Inuktitut equivalents of such sentences are given in (48), and show that Inuktitut again patterns like Labrador Inuttut in this respect.<sup>31</sup> This observation is furthermore corroborated by naturally-occurring sentences found in in corpus data (Carrier, 2017), (48).<sup>32</sup>

#### (48) Referential ABS and MOD 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.'

#### (49) Referential MOD objects from Inuktitut corpus

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, p. 680)

To sum up, the ergative construction in Inuktitut patterns like its counterpart in Kalaallisut, in that full DP objects may surface as either ABS or MOD, while the antipassive construction in Inuktitut shares similarities with its counterpart in Labrador Inuttut. Given our movement-based analysis of ergativity, this might suggest that Inuktitut permits *both* full DP objects and pronominal objects to optionally undergo movement or remain in situ, as represented in (50), an extended version of

<sup>&</sup>lt;sup>32</sup>Indeed, Carrier (2017, p. 679-680) discusses the referential pronominal usage of the (null) antipassive object in (49) as a manifestation of the weaker ergative patterning in Inuktitut, in contrast to the received characterization of Inuit (as typified by Kalaallisut).

(31) from §4.1. This table makes clear not only that Inuktitut displays an intermediate patterning between Kalaallisut and Labrador Inuttut with respect to ergativity, but that this cline in ergativity across Inuit is truly accompanied by a parallel cline in the (non-)occurrence of object movement.

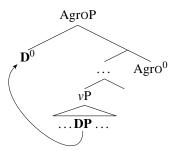
#### (50) ABS vs. MOD objects across Inuit

	Kala	allisut	Inul	ktitut	Labrado	r Inuttut
	Full DP	Pronoun	Full DP	Pronoun	Full DP	Pronoun
Mvt. (ABS)	1	1	1	1	Х	1
No mvt. (MOD)	1	X	1	1	1	<b>√</b>

## 5.2 A pronominal clitic-doubling analysis

Although it may appear from the table in (50) that ergative constructions in Kalaallisut and Inuktitut behave identically, I now introduce a number of subtle differences between the two varieties, which I argue ultimately belies a structural difference in the movement chains underlying these constructions. Whereas the ergative pattern in Kalaallisut involves simple object movement, established in §3.1, in Inuktitut the head of the object movement chain in such constructions is necessarily pronominal, though its tail may be a full DP or a pronoun, (51).

#### (51) $D^0$ -DP movement chain in Inuktitut



This treatment of Inuktitut is in many ways predictable, given Inuktitut's intermediate status within the ergativity—object movement cline across Inuit. As shown in (52), an elaboration of (50), the pronoun-only restriction imposed on the head of the object movement chain is essentially a weaker version of the generalized pronoun-only restriction on object movement in Labrador Inuttut.

#### (52) Object movement across Inuit

	Kalaallisut	Inuktitut	Labrador Inuttut
Head of mvt. chain	Full DPs/pronouns	Pronouns	Pronouns
Tail of mvt. chain	Full DPs/pronouns	Full DPs/pronouns	Pronouns

The structure in (51), consisting of a raised pronominal element co-indexed with a full in situ DP, is highly reminiscent of pronominal clitic-doubling cross-linguistically (e.g. Torrego, 1988; Uriagereka, 1995; Anagnostopoulou, 2006; Nevins, 2011; Kramer, 2014; Baker and Kramer, 2018),

and, indeed, there is much independent evidence for such an analysis of Inuktitut. Yuan (2018, to appear) has argued for a split across Inuit in whether the verbal  $\phi$ -morphology indexing ABS objects is genuine  $\phi$ -agreement (exponing valued  $\phi$ -features), as in Kalaallisut, or the product of pronominal cliticization, as in the Eastern Canadian varieties (in contrast, the  $\phi$ -morphology indexing subjects is analyzed as uniformly  $\phi$ -agreement across Inuit). Therefore, whereas the ergative construction in Kalaallisut involves  $\phi$ -agreement with a raised object (§3.1), the same object-referencing morphology in Inuktitut should be analyzed as a pronominal D<sup>0</sup> co-occurring with the ABS object.

Crucially, the presence of the pronominal  $D^0$  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); in contrast, genuine  $\phi$ -agreement is purely morphosyntactic. Thus, evidence for object clitic-doubling in Inuktitut comes from a number of interpretive properties that parallel those in other languages that have object clitic-doubling. However, these properties are absent in Kalaallisut, indicating a lack of clitic-doubling.

Although there is variation across languages in the exact semantic effect that arises, it is generally the case that objects that undergo clitic-doubling are interpreted as topical, specific, or otherwise referential. In other words, clitic-doubled nominals tend to have interpretations akin to those associated with pronouns or definite determiners.<sup>34</sup> Accordingly, objects that independently cannot receive such interpretations cannot undergo clitic-doubling.

This is most easily illustrated with quantificational elements. In the Romanian data in (53), 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 an identical pattern in Amharic.

#### (53) 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?' (D-linked wh-phrase; doubling obligatory)
(Dobrovie-Sorin, 1990, pp. 352-353, 364)

Given this diagnostic, the idea that Inuktitut ABS objects are clitic-doubled, and that their Kalaal-lisut counterparts simply undergo movement, is not immediately apparent, given the wide scope or specific interpretation of ABS objects in both varieties. However, recall that ABS subjects and

<sup>&</sup>lt;sup>33</sup>See Yuan (to appear) to appear (also fn. 3 of this paper) on morphosyntactic evidence for object clitic-doubling in Inuktitut, as well as how the pronominal  $D^0$  is to be morphologically realized as part of a portmanteau, also containing the subject  $\phi$ -agreement.

<sup>&</sup>lt;sup>34</sup>As 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.

objects in Kalaallisut behave uniformly, as expected if ABS objects undergo movement to a similar position to where ABS subjects normally occupy. In contrast, Inuktitut displays *asymmetries* between ABS subjects and ABS objects, as expected if ABS objects are clitic-doubled.

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 (54). Accordingly, aggressively non-D-linked wh-phrases,  $^{35}$ , such as those marked with the vagueness-encoding enclitic = kiaq, are banned in ABS object position but not in ABS subject position, (55). Together, these data demonstrate that the D-linked nature of ABS objects in Inuktitut is *obligatory*.

#### (54) 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?')

b. *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?')

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?'

(Yuan, to appear)

#### (55) 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?'

(Yuan, to appear)

Similarly, recall from §3.1 that, despite the high locus of ABS objects in Kalaallisut, they may reconstruct for purposes of NPI-licensing. However, in Inuktitut the same NPI = luunniit may surface in any position except ABS object position, as given in (56a-b) vs. (56c). 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 (56c) is due to the ABS

<sup>&</sup>lt;sup>35</sup>See Pesetsky (1987) and den Dikken and Giannakidou (2002) for cross-linguistic discussion of these elements.

object outscoping the negative element. These data point towards a general incompatibility between clitic-doubling and negative indefinites—again, consistent with the cross-linguistic picture of clitic-doubling.

#### (56) 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-mmangaa-**gu 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.' (Yuan, to appear)

These Inuktitut data also pose a challenge for analyses of clitic-doubling that seek to unify it with object 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 D<sup>0</sup> at PF. Under this purely postsyntactic approach to clitic-doubling, clitic-doubling structures are expected to be semantically equivalent to object-shifted ones, since the pronominal clitic is syntactic and semantically a full DP. The fact that Kalaallisut (in which object shift takes place) and Inuktitut (in which object clitic-doubling takes place) do not behave alike demonstrates that clitic-doubling structures in Inuktitut must be syntactically distinct from pure object movement.

While a number of analyses of clitic-doubling are available,  $^{36}$  I follow Baker and Kramer (2016, 2018) in assuming that the series of derivational steps posited by Harizanov's (2014) is essentially correct—however, both movement and the DP $\rightarrow$ D<sup>0</sup> conversion process occur in the *syntax proper* (Baker and Kramer term this process *Reduce*). Because there is a pronominal D<sup>0</sup> present in the clitic-doubling structure in the syntax, it is semantically interpreted. The D-linked interpretation of ABS objects thus arises from a matching requirement imposed between the D<sup>0</sup> and its DP associate, as proposed by Suñer (1988).

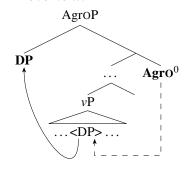
For concreteness, the derivation of clitic-doubling in Inuktitut is illustrated below throughout (57). First,  $Agro^0$  Agrees with the ABS object DP, triggering movement to Spec-AgroP, (57a); this step takes place in both Kalaallisut and Inuktitut. However, as shown in (57b), in Inuktitut the higher copy undergoes Reduce, thus converted to a pronominal  $D^0$ .<sup>37</sup>

 $<sup>^{36}</sup>$ For instance, the Inuktitut facts shown here are also generally compatible with the Big DP analysis of clitic-doubling. Under this approach, the pronominal  $D^0$  and its DP associate are generated as a complex constituent, with the  $D^0$  then undergoing long head movement to its final landing site (Torrego, 1988; Uriagereka, 1995; Nevins, 2011; Arregi and Nevins, 2012).

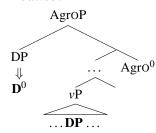
 $<sup>^{37}</sup>$ To capture how a pronominal  $D^0$  is realized as a verbal suffix, we may then introduce a postsyntactic operation of M-Merger, which rebrackets the Spec-Head configuration in (ib) into a complex head, thus feeds suffixation (Matushansky, 2006). See Yuan (to appear) for details.

#### (57) Derivation of clitic-doubling in Inuktitut

#### a. Movement:

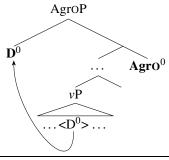


#### b. Reduce:



Analyzing the object  $\phi$ -morphology in Inuktitut as clitic-doubling allows us to recast pronominal object movement in Labrador Inuttut (and, in turn, Unangam Tunuu) in a similar light; see Johns (2017) for a precursor of this idea. In §4.1, this movement process was taken to involve a null *pro* moving to Spec-AgroP and indexed by  $\phi$ -agreement in Agro<sup>0</sup> (see (30)). On parity with Inuktitut, I propose instead that the  $\phi$ -agreement morphology in Labrador Inuttut *is* the raised pronoun—that is, the pronoun cliticizes to Agro<sup>0</sup> upon movement (cf. Déprez, 1989; Josefsson, 1993; Bobaljik and Jonas, 1996), as shown in (58). Under this treatment, the surface contrast between Inuktitut and Labrador Inuttut is simply in whether a pronominal clitic may be doubled by a full DP, akin to similar patterns in cross-linguistically more familiar languages, e.g. Romanian (clitic-doubling) vs. Standard French (no doubling) in Romance.<sup>39</sup>

#### (58) Pronominal cliticization in Labrador Inuttut



 $<sup>^{38}</sup>$ For simplicity, the pronoun in (58) is represented as a bare  $D^0$ , in the spirit of Postal (1994) and Elbourne (2005). Pronominal movement is, in turn, modeled as long head movement of  $D^0$  to specifier position (Harizanov, 2019). As indicated in fn. 36, postsyntactic M-Merger then applies.

#### (i) Three-way object-referencing contrast in Bantu

a. Object φ-agreement:
Si-chi-on-iye kintu chochoshe
NEG.1S-7O-see-PERF 7thing 7any

 $<sup>^{39}</sup>$ Beyond Inuit, three-way contrasts between object  $\phi$ -agreement, clitic-doubling, and pronominal cliticization may also be attested in other language groups, such as the Bantu languages (see Riedel 2009 and Baker 2018 for discussion; cf. also Bresnan and Mchombo 1987). For instance, it has been postulated by Riedel (2009) that the verbal object markers in Sambaa behave like  $\phi$ -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, (ia-b), just as we have done for Inuit above. At the same time, other languages such as Lubukusu have been argued to display so-called "pronoun incorporation," i.e. object markers appearing only in pronominal contexts, (ic) (Diercks and Sikuku 2013, *pace* Sikuku et al. 2018).

The idea that Labrador Inuttut displays not only pronominal object movement but also pronominal cliticization is reminiscent of early proposals that have sought to unify the two phenomena in other language groups (e.g. Déprez, 1989; Josefsson, 1993; Bobaljik and Jonas, 1996). In the Mainland Scandinavian languages, for instance, the pronouns that undergo object shift are necessarily prosodically weak (akin to clitics), while strong (e.g. stressed, focused) pronouns pattern like full DPs in remaining in situ. Although certain empirical challenges to such a unification have been raised for Scandinavian (e.g. Holmberg and Platzack, 1995), this general approach may be nonetheless plausible for Labrador Inuttut. A closer examination of the morphosyntactic and semantic properties of the object  $\phi$ -morphology in the language may help inform whether this analysis is correct.

Altogether, we arrive at the picture in (59). The relative restrictedness of object movement across Inuit is correlated with the relative pronominality of the object-referencing  $\phi$ -morphology on the verb.

#### (59) Object movement and pronominality of $\phi$ -morphology

	Kalaallisut	Inuktitut	Labrador Inuttut
Restrictions on movement	None	Head of chain	Head and tail of chain
Object φ-morphology	φ-agreement	Clitic-doubling	Pronominal clitic
			(no doubling)

The remainder of this section further examines this connection from a potential diachronic perspective.

# 5.3 Extension: Variation in object movement and diachrony

In §3.2, it was mentioned that the variation in ergativity found across Inuit is often assumed to be a syntactic change in progress; that is, the variation in ergative case patterning across Inuit instantiates a gradual *loss* of ergativity, i.e. a shift from ergative to accusative case alignment (Johns, 1999, 2001, 2006; Carrier, 2012, 2017). Because Labrador Inuttut has the most restricted ergative patterning, it may be understood as representing the variety furthest along in this syntactic change; Inuktitut instantiates an intermediate stage, while Kalaallisut is the most linguistically

'I didn't see anything.' (Sambaa; Riedel 2009, p. 50)

b. *Object clitic-doubling:* 

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

'I didn't see anything.' (Haya; Riedel 2009, p. 186)

c. Pronominal cliticization:

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

(Lubukusu; Diercks and Sikuku 2013, p. 9)

This cross-Bantu pattern thus mirrors what we have proposed for Inuit, the crucial difference with Inuit being that there is an effect on the surface case patterns in the language.

<sup>40</sup>That being said, it is not obvious that pronominal object movement and subsequent cliticization in Labrador Inuttut are driven by prosodic considerations, given that 3rd person pronouns are generally null. Rather, to uphold the analytical parallel with Kalaallisut, we may take object movement in Labrador Inuttut to be driven by Agree.

conservative. While there has not been concrete evidence for this diachronic approach so far, I briefly outline here how the (synchonic) analysis of Inuit put forth here offers a logical pathway for such a change, based on what is known about historical developments in other language groups.

Since ergative case alignment is argued in this paper to co-vary with the (non-)occurrence of object movement, the relevant diachronic path would have to pertain to changes affecting the *derivation of high objects*—specifically, the gradual loss of object movement and concomitant shift from object  $\phi$ -agreement to pronominal clitic. Which of these two factors is more likely to be the relevant factor driving this change? While pronouns are known to develop into agreement affixes via grammaticalization (e.g. Roberts and Roussou, 2003; van Gelderen, 2011), the opposite directionality seems less frequently attested. On the other hand, it has been recently proposed by Maddox (2019) on the basis of Old and Modern Spanish that full DP movement may develop diachronically into pronominal clitic-doubling (see also Harizanov 2014, p. 1080). It is therefore possible that this is at play in Inuit as well, with individual Inuit varieties displaying these steps in their synchronic grammars. This, in turn, could result in the subsequent reanalysis of  $\phi$ -agreement as the clitic itself in Inuktitut and Labrador Inuttut, given that (i) movement is always accompanied by  $\phi$ -morphology and (ii) the pronouns tracked by this morphology happen to generally be null.

As stated above, whether this variation is diachronic in nature is not clear, due to a present lack of relevant historical data. Nonetheless, the analysis of Inuit pursued here refines the empirical space of the conjecture, by making precise what is constant across grammars (ergative case assignment) and what truly varies (object movement).

To sum up, we have seen multiple dimensions of syntactic variation across Inuit, stemming from the core proposal that we find Inuit-internal variation in the types of objects that may move to a structurally high position. The surface ERG-ABS case patterning is derived by ERG case assignment to the subject, which takes place after this movement step, such that the overall appearance of ergativity is directly related to the (non-)occurrence of object movement. Again, this approach takes variation in ergativity to be divorced from the ERG case assignment process itself, which is proposed to be uniformly dependent in nature. Finally, I have shown that the occurrence of movement of the object (to Spec-AgroP) seems to be linked to the underlying status of object-indexing  $\phi$ -morphology (in Agro<sup>0</sup>), and offered a potential diachronic reason for this connection.

# 6 Conclusion and extensions

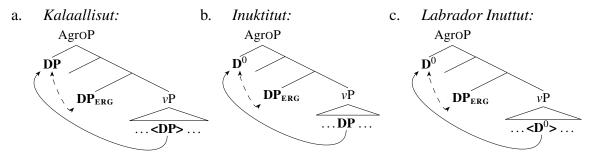
# 6.1 Summary of findings

This paper has investigated variation in ergativity across Inuit, as seen through the relative distributions of the ergative and (non-ergative) antipassive constructions in three individual Inuit varieties. As I have shown, the existence of this variation provides a unique empirical domain for probing the theoretical underpinnings of ergativity. Building on the proposal of Bittner and Hale (1996a,b) that ergativity in Inuit requires object movement, I have argued that *variation* in ergativity is similarly correlated with variation in the permissibility of object movement.

I have argued that this correlation follows from a syntactic derivation that holds uniformly across Inuit, with variation between individual Inuit varieties in (i) the types of objects that may undergo movement, and, relatedly, (ii) whether raised objects are cross-referenced by verbal  $\phi$ -

morphology, or if this  $\phi$ -morphology is pronominal in nature. ERG case assignment is uniformly dependent across Inuit, assigned to the lower of two  $\nu$ P-external nominals, after the object raises to its final landing site above the subject. Therefore, the status of ergativity in a given Inuit variety is ultimately best reflected by the properties of the object, rather than the properties of the transitive subject. This is schematized again in (60):

#### (60) Variation in ergativity across Inuit



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), for instance in the treatment of objects. Second, the deep connections between ergativity, object movement, and pronominal cliticization, though not immediately apparent from any individual Inuit variety, are revealed via pointwise comparisons between otherwise extremely similar grammars. Ultimately, the paper has offered a general syntactic profile of Inuit with constrained space for variation, and therefore makes strong predictions for the syntactic behaviour of other Inuit varieties beyond the ones studied here.

# 6.2 Typological outlook and future directions

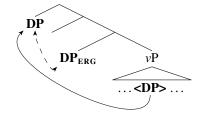
Before concluding, I address a final prediction that arises from this analysis of Inuit, now concerning the typological landscape of case and movement interactions. I have argued that dependent ERG case is assigned *downwards* to the lower of two nominals, given that the object first raises above the subject. Far from being an idiosyncratic aspect of Inuit, this may rather offer a new perspective on the relationship between case and clause structure.

Since the directionality of case assignment is parametrizable in dependent case theory, we might expect the existence of languages with the same movement-derived clause structure as Inuit, but with *upwards* dependent case assignment. Such a language might be labelled as "accusative," since the case morphology would target the raised object. This is shown more concretely in (61).<sup>41</sup>

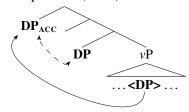
<sup>&</sup>lt;sup>41</sup>The idea that languages may allow objects to systematically raise above subjects was taken in §3.1 to contribute to the picture of Inuit as syntactically ergative. The present discussion of accusative languages with the same clause structure raises the question of whether these languages also should be understood as syntactically ergative, despite not being morphologically ergative (note that such characterizations have been explicitly argued to not exist; see Larsen and Norman e.g. 1979, Dixon e.g. 1994, Manning e.g. 1996, Polinsky e.g. 2017b).

#### (61) High objects with directionalities of dependent case

a. Downwards (ERG):



b. *Upwards* (ACC):



Such a language is not only logically predicted by the present system, but is in fact a simple extension of the patterning found in languages like Sakha and Eastern Ostyak, for which we have already seen that object shift to the  $\nu$ P edge may trigger both dependent ACC and ERG case, respectively (see (22) and (23) from §3.2). This is suggestive of two syntactic parameters (directionality of dependent case assignment and final landing site of object movement), whose settings may be cross-cut to predict four patterns. If this is on the right track, then we arrive at the typological categorization of languages given in (62):

#### (62) A typology: Dependent case assignment and object movement

	Object moves to Spec-vP (below subject)	Object moves above subject
Downwards	Sakha [ACC]	Inuit <sup>42</sup> [ERG]
Upwards	Eastern Ostyak [ERG]	(Choctaw, Erzya Mordvin [ACC])

I offer here two possible candidates for the predicted language type, though leave a deeper investigation 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 (63). 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 Choctaw as an instantiation of the language type predicted here.

#### (63) 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-\*(a) alíkichi-yat apa-tok peach-\*(OBL) doctor-NOM eat-PST 'The peach, the doctor ate.'

(Tyler, 2019, p. 232)

Another language that may fit this profile is Erzya Mordvin (Uralic), following the analysis of Colley (2018) (citing data from Zaicz 1988).<sup>43</sup> As shown in (64), definite objects are both casemarked and are cross-referenced by  $\phi$ -agreement, while indefinite objects co-occur with neither.

<sup>&</sup>lt;sup>42</sup>See Ershova (2019) and Yuan (2020) for independent arguments that the ergative case patternings in the languages West Circassian and Yimas should similarly be analyzed as dependent case assignment to the subject, after movement of the object to a c-commanding position.

<sup>&</sup>lt;sup>43</sup>I thank Justin Colley (p.c.) for bringing this to my attention.

Colley provides several morphosyntactic arguments (not given here) 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  $\phi$ -probe. If Colley's analysis is correct, then this is another instance of (upwards) dependent ACC case assignment triggered by movement of the object above the subject.

#### (64) Case and agreement with definite objects in Erzya Mordvin

- a. skal-os<sup>j</sup> **t<sup>j</sup>ikše** porn<sup>j</sup>-i cow-DEF.NOM grass.**NOM** chew-PRES.3s 'The cow eats grass.'
- b. c<sup>j</sup>ora-s<sup>j</sup> n<sup>j</sup>e-i-**n<sup>j</sup>jz<sup>j</sup>e** t<sup>j</sup>ejt<sup>j</sup>er<sup>j</sup>-t<sup>j</sup>jn<sup>j</sup>e-**n<sup>j</sup>**boy-DEF.NOM see-PST-3S/**3P** girl-DEF.PL-**ACC**'The boy saw the girls.' (Zaicz, 1988, pp. 208-209)

This paper has thus outlined a number of typological and empirical predictions stemming from a small set of interacting syntactic parameters. These predictions may inform future work on individual Inuit varieties (which are expected to broadly conform to the basic pattern proposed for Inuit) and other languages in the Inuit-Yupik-Unangan family, and may moreover offer new directions for cross-linguistic investigations of case.

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