

Abstract: In this paper, we propose treating alignment shift as a process of functional markedness reversal in the domain of semantically transitive constructions. We illustrate how this approach allows us to capture similarities between the alignment shifts in Eskimo-Aleut and Western Austronesian languages, despite morphosyntactic differences in their voice systems. Using three diagnostics of functional markedness (semantic transitivity, topic continuity of P, and discourse frequency), we compare antipassive and ergative constructions in Eskimo-Aleut varieties and actor voice (AV) and undergoer voice (UV) constructions in Western Austronesian varieties. We argue that ergative alignment is equivalent to a functionally unmarked P-prominent construction (e.g. ergative, UV), whilst accusative alignment is equivalent to a functionally unmarked A-prominent construction (e.g. antipassive, AV). On this basis, we claim that both language groups are undergoing a parallel shift from ergative to accusative, since A-prominent constructions are functionally marked in more conservative varieties, but lose their functionally marked character and begin to function as unmarked transitive constructions in more innovative varieties.

1. Introduction

It is well-established in the literature that valency-changing alternations, such as the antipassive, can play an important role in alignment change (see e.g. Nichols 1992; Harris & Campbell 1995; Tuite 2017; Creissels 2018; Zúñiga 2018). This can be observed in Eskimo-Aleut, more specifically Inuktitut, where the shift from ergative to accusative is driven by the reanalysis of the antipassive construction, (1b), as the basic transitive construction (see e.g. Johns 1999, 2001, 2006; Spreng 2005; Carrier 2012, 2017, 2021; Yuan 2018).

- | | | |
|-----|---|--------------------|
| (1) | South Baffin (Baffin region; Hallman 2008: 4-5) | |
| a. | <i>niviaqsia-p jappa miqsuq-tanga</i> | Ergative |
| | girl-ERG parka sew-IND.3SG.SBJ.3SG.OBJ | |
| | ‘The girl sewed the parka.’ | |
| b. | <i>niviaqsiaq jappa-mit miqsuq-tuq</i> | Antipassive |
| | girl parka-INS sew- ¹ IND.3SG.SBJ | |
| | ‘The girl sewed a parka.’ | |

As proposed in Aldridge (2012a), Western Austronesian languages are undergoing a similar shift from ergative to accusative. However, this is driven via the reanalysis of the actor voice (AV) construction, shown in (2b) (see also Kikusawa 2017; Hemmings 2021a).

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|-----|---|------------------------|
| (2) | Tagalog (Aldridge 2012b: 192-193) | |
| a. | <i>B<in>ili ng=babae ang=isda</i> | Undergoer Voice |
| | <UV.PFV>buy GEN=woman NOM=fish | |
| | ‘The woman bought the fish.’ | |
| b. | <i>B<um>ili ang=babae ng=isda</i> | Actor Voice |
| | <AV.PFV>buy NOM=woman GEN=fish | |
| | ‘The woman bought a fish.’ | |

Unlike the antipassive in (1b), which is a detransitivised variant of the ergative construction in (1b), the actor voice (AV) construction is part of a system of symmetrical voice alternations, shown in (2) (cf. Himmelmann 2005; Riesberg 2014: 10; Creissels 2018: 64). These differ in the coding of arguments, such that a different argument takes *ang*-marking in (2a) and (2b), but are both syntactically transitive in the sense that they have two core arguments (cf. §3.2). As a result, it is difficult to identify whether actor voice (AV) or undergoer voice (UV) is the basic transitive construction on formal, morpho-syntactic grounds (see Riesberg 2014; Chen & McDonnell 2019 for discussion). This makes it challenging to determine alignment using the

¹ The antipassive construction is commonly derived through the antipassive voice marker *si* in South Baffin. However, some verbs including ‘sew’ occur in the antipassive without the antipassive suffix (Hallman 2008: 5).

traditional approach (§2.2) and has led to Western Austronesian languages being classed as having a different type of ‘symmetrical’ or ‘Philippine-type’ alignment (see e.g. Kroeger 1993; Himmelmann 2005; Foley 2008; Riesberg 2014; Creissels 2016; Zúñiga 2018), rather than treating variation between languages in terms of alignment change. Though this approach may capture the formal differences between the antipassive and the AV, it fails to account for the fact that the functions performed by the two constructions are strikingly similar. For example, the patient receives a definite interpretation in (1a) and (2a), but an indefinite interpretation in (1b) and (2b). More importantly, it does not account for the fact that the functions change in similar ways when we compare the constructions in (1) and (2) in more conservative and more innovative varieties of Eskimo-Aleut and Western Austronesian.

For this reason, we follow Aldridge (2012a) in claiming that Western Austronesian languages are undergoing a parallel shift from ergative to accusative alignment, but argue that the best way to capture the similarities between the Eskimo-Aleut and Western Austronesian shifts is to adopt a FUNCTIONAL MARKEDNESS approach. Specifically, we argue that ergative alignment is equivalent to a P-prominent construction (e.g. ergative, UV) that is functionally unmarked in terms of semantic transitivity, topic continuity and discourse frequency, whilst accusative alignment is equivalent to an A-prominent construction (e.g. antipassive, AV) that is functionally unmarked (cf. §2). This allows us to frame alignment shift as a process of FUNCTIONAL MARKEDNESS REVERSAL in the domain of semantically transitive constructions, and demonstrate that the key parallel between Eskimo-Aleut and Western Austronesian is that A-prominent constructions shift from being FUNCTIONALLY MARKED in more conservative varieties (cf. §3) to being less functionally marked, and in some cases, even FUNCTIONALLY UNMARKED in comparison with P-prominent constructions in more innovative varieties (cf. §4). Consequently, we claim that a functional markedness reversal is taking place and that treating alignment shift in this manner allows us to capture the parallels in the alignment shifts that are occurring in the two language families, whilst also avoiding the challenges associated with identifying alignment using the traditional approach in languages, like Western Austronesian, with multiple syntactically transitive constructions.

To illustrate, we compare A-prominent and P-prominent constructions in more conservative and more innovative language varieties of Eskimo-Aleut and Western Austronesian. We explore synchronic variation, partly because this is known to represent language change in progress (cf. Croft 2003: 232) and partly because, for the languages in question, there is limited diachronic data available.² For Eskimo-Aleut, we focus on the Inuit sub-branch of Eskimo, comparing more conservative and more innovative Eastern Canadian Inuktitut dialects. In more conservative dialects, spoken in the Kivalliq and Baffin regions, the ergative in (1a) is functionally unmarked, whilst the antipassive in (1b) is functionally marked. This is in keeping with an analysis of ergative alignment (§3.1). In contrast, in more innovative dialects, such as Nunavik and Labrador, that are shifting from ergative to accusative alignment there is a loosening of semantic and discourse restrictions on the antipassive, as well as an increase in discourse frequency (§4.1).³ Consequently, we argue that alignment shift results from the reanalysis of the antipassive as the functionally unmarked transitive construction.

² In particular, the languages of Northern Sarawak are under-documented and the earliest syntactic records date from the 1950s (see Hemmings 2020).

³ The classification of dialects as more conservative or more innovative in this paper is based on our analysis of the literature and made exclusively in relation to the functional properties of ergative and antipassive constructions (but see also Dresher & Johns 1996: 114 and Dorais 2003: 33 for a similar division of Inuktitut based on phonological features). Following Johns (2017), Yuan (2018) and Carrier (2017), we treat Quebec-Labrador dialects as the most innovative of the Inuktitut varieties. Accordingly, we class Kivalliq and Baffin varieties as more conservative. This classification is supported by the functional differences between Inuktitut varieties discussed in §3.1 and §4.1. Note, however, that Baffin dialects are in some respects more innovative than Kivalliq and other Inuit varieties, leading some to claim that they are also undergoing the same alignment shift from ergative to accusative (see e.g. Spreng 2005; 2012, Yuan 2018; and Carrier 2021 for proposals of alignment shift

For Western Austronesian, we compare Philippine-type languages with languages in Northern Sarawak. Philippine-type languages are known to be syntactically conservative within the Austronesian family (Blust 2013), while the languages in Northern Sarawak can be thought of as transitional between the characteristic Philippine-type structures and more innovative Indonesian-type structures (Clayre 2014; Hemmings 2016). They share the property of having symmetrical voice alternations, which complicates the alignment shift hypothesis as discussed above (cf. Hemmings 2021a). However, the AV construction is functionally marked in many Philippine-type languages like Tagalog, which we argue supports an analysis of alignment as ergative (§3.2). In contrast, the AV construction is subject to fewer semantic restrictions and has increased discourse frequency in the Kelabit, Lun Bawang, and Sa'ban languages of Northern Sarawak, suggesting a shift towards accusative alignment (§4.2).⁴ Consequently, we argue that alignment shift results from reanalysing the actor voice construction as functionally unmarked and that treating alignment shift in terms of a functional markedness reversal allows us to capture the similarities between the Eskimo-Aleut and Western Austronesian shifts, despite the morphosyntactic differences in their voice systems.

The paper is structured as follows: §2 defines the concept of functional markedness in relation to transitive constructions and sets out how it can be used to identify alignment and alignment shifts. §3 introduces the antipassive in more conservative Eastern Canadian Inuktitut and the AV construction in more conservative Philippine-type languages, indicating the morphosyntactic differences between the two constructions, whilst providing parallel evidence to show that both are functionally marked in support of an ergative analysis. §4 provides evidence for the functional markedness reversal in the antipassive in more innovative Eastern Canadian Inuktitut dialects and the AV construction in languages of Northern Sarawak, which, in turn, supports the idea that these varieties are shifting towards accusative alignment. §5 concludes, discussing the implications of the markedness approach to alignment change.

2. Markedness

Our account of alignment shift builds on the notion of MARKEDNESS (Greenberg 1966; Andersen 1972; Lyons 1977; Andrews 1990; Croft 1991, 2003; Givón 1991; Kroeger 2004; Bybee 2011, etc.). This involves two or more members of a particular language category (e.g. number) that stand in opposition. The most basic or prototypical member (e.g. singular) is considered UNMARKED, while all others (e.g. plural, dual) are MARKED. These terms have been used in different ways in the literature (see Haspelmath 2006 for discussion), but in this paper, we understand the unmarked member to be the most prototypical member of a set, following Croft (2003: 175). By extension, any members that deviate from the prototype will be marked.⁵

We further distinguish between formal markedness and functional markedness. In the context of transitive constructions, we consider formal markedness to be categorical (or 'binary'). That is, we assume a semantically transitive construction is either syntactically

in Baffin Inuktitut on the basis of both morphosyntactic and functional properties). This can be captured using the functional markedness approach by stating that A-prominent constructions are starting to become less marked in Baffin varieties as well. Given that the alignment shift is ongoing in Inuktitut (see e.g. Carrier 2017, 2021), variation can be expected, reflecting different stages in the shift.

⁴ The Inuktitut data is summarised from the extensive literature on Eskimo-Aleut. Similarly, the Tagalog data and data from other Philippine-type languages is taken from the literature on Western Austronesian and compared with primary fieldwork data on Kelabit, Sa'ban and Lun Bawang, collected by the author over a number of years between 2013-2019. The examples are chosen to reflect the similarities between the two processes of alignment change and glosses have been unified from the varied labels used across the Eskimo-Aleut and Western Austronesian literature.

⁵ This approach to markedness draws on the proto-type theory of cognitive linguistics (Rosch 1978; Lakoff 1987), which states that a member of a set can be more or less marked depending on its degree of similarity to the prototype. See also Næss (2007) on the concept of proto-typical transitivity, though she treats markedness and prototypicality as separate constructs.

transitive (and thus formally unmarked) or intransitive (and thus formally marked). We determine formal markedness based on the morphosyntactic properties of a verb's core arguments, as discussed in §2.1.⁶ Functional markedness, on the other hand, is not categorical but gradient. In other words, a semantically transitive construction can be more or less functionally marked than another. This follows from the fact that functional markedness relates to the usage and distribution of expressions, making its effects context-dependent (cf. Givón 1991: 336) and therefore open to diachronic change (§2.2). Since functionally unmarked members tend to be used in prototypical contexts for a particular category, they also display a higher frequency of occurrence (Lehrer 1985: 399; Waugh 1982: 302). Functional markedness often correlates with formal markedness (Dixon 1994: 56). However, as we will argue for Western Austronesian, a construction can be functionally marked without being formally marked. Similarly, as we will argue for Eskimo-Aleut, a formally marked construction can be recognized as being functionally unmarked due to alignment shift.

2.1 Markedness and Transitive constructions

In this paper, we apply the notion of markedness to transitive constructions, i.e. constructions that express notionally transitive events with two individuated participants: a volitional agent who brings about a change of state or location in an affected patient (Croft 2003: 175; Næss 2007: 6; Creissels 2016 27-28; Creissels 2018: 60). Every language has an unmarked transitive construction that codes the two participants as core arguments. Besides this, languages may have alternations which allow for variation in the coding of agent and patient (cf. Zúñiga & Kittilä 2019). These alternations may be either syntactically intransitive, like the antipassive in (1b) or syntactically transitive like the AV construction in (2b).

We define formal and functional markedness in relation to transitive constructions as follows. In formal terms, an unmarked variant is syntactically transitive with two core arguments.⁷ Following Comrie (1989), we will refer to the arguments of a verb as in (3).

(3) *Core Arguments*

S = the single argument of an intransitive verb

A = the most agent-like argument of a transitive verb

P = the most patient-like argument of a transitive verb

We take core argument status to be determined by the coding and behavioural properties of arguments (cf. Andrews 2007: 153-154; Comrie et al. 2015: 11; Haspelmath & Hartmann 2015: 44). Coding includes flagging nominal arguments via case-marking or adpositions, and indexing on verbs via agreement morphology (Zúñiga 2018). Behavioural properties associated with core arguments may include relativisation, constituent order, raising, control, and reflexive binding, among others (Haspelmath & Hartmann 2015: 44; Arka 2017: 105-106). The properties associated with core arguments are necessarily language-specific (cf. Arka 2017: 106),⁸ but we assume that, in any given language, at least some morphosyntactic properties will serve to distinguish core arguments from non-core arguments (i.e. obliques). In a formally unmarked transitive construction, these will apply to both A and P. In a formally marked transitive construction, however, the coding and behavioural properties provide clear evidence for the demotion of P. This renders the construction syntactically intransitive with only one core argument. The demotion of P often corresponds to additional morphological complexity

⁶ Though see also Arka (2017) for an approach that treats the core-oblique distinction as a cline.

⁷ The distinction between core and oblique has had a variety of definitions in the theoretical and typological literature (see Arka 2017: 103 and Creissels 2016: 27-28 for discussion).

⁸ In Austronesian there is variation in terms of which syntactic properties target subjects only, and which properties distinguish all core arguments (that is subjects and objects) from obliques. For example, the ability to launch floating quantifiers is a property of subjects in Tagalog, but all core arguments in Balinese (see Arka 2017: 106).

(e.g. the presence of a voice marker on the verb). However, since this is not necessarily the case, we count syntactic transitivity as the key formal markedness parameter.⁹

Functional markedness relates to the semantic and discourse-pragmatic functions of the prototypical transitive construction, which are well established in the literature (see Hopper & Thompson 1980; Givón 2001; Lazard 2003; Næss 2007). A functionally unmarked transitive construction is characterised by a maximally high degree of semantic transitivity (Hopper & Thompson 1980: 259). Among other properties, this corresponds to a P argument that is definite and highly affected, and a verb with telic aspect (Hopper & Thompson 1980: 259).¹⁰ It is also associated with particular discourse properties. Specifically, both A and P tend to be discourse topical in functionally unmarked transitive constructions (Givón 1983, 1994, 2017; Foley & Van Valin 1984; Cooreman 1987). Following (Givón 2017), an argument is discourse topical if it has TOPIC CONTINUITY. This is determined using the quantitative metrics in (4).¹¹

(4) *Topic Continuity*

a. **Referential Distance (RD)**

The number of clauses back to the last mention of a referent

b. **Topical Persistence (TP)**

The number of clauses forward that the referent remains under discussion

Finally, the functionally unmarked construction will also be the most discourse frequent (Greenberg 1966: 31). In contrast, when the antipassive and AV construction are functionally marked, they have properties associated with low semantic and discourse transitivity, such as indefinite and unaffected Ps, atelic readings, and Ps with low topic continuity (cf. Hopper & Thompson 1980; Cooreman 1994: 52-56; Givón 1994, 2017).¹² Accordingly, they are less frequent than the functionally unmarked construction. The characteristics that determine formal and functional markedness in relation to transitive constructions are summarised in (5).

(5) *Markedness in Transitive Constructions*

a. **Formal Markedness**

- Detransivization leading to demotion of P

b. **Functional Markedness**

- Low semantic transitivity
- Low topic continuity of P
- Low discourse frequency

2.2 Functional Markedness and Alignment Shift

Following Dik (1997:44), we argue that the relative functional markedness of a construction is not fixed but can vary both synchronically and diachronically, such that a markedness reversal

⁹ Note that morphological complexity is often considered an important element of formal markedness (cf. Givón 1991: 335; Croft 2003: 91). However, since there is a great deal of variation in the morphological coding of the ergative-antipassive and actor voice-undergoer voice alternations, we determine formal markedness in relation to the coding of A and P rather than the verbal morphology (see also Riesberg 2014: 12).

¹⁰ It is widely discussed in the literature that the semantic transitivity prototype appears to differ from hierarchies related to case-marking, where the ‘unmarked’ P is said to be indefinite (cf. Comrie 1989; Croft 2003; Næss 2007: 28). However, formally intransitive structures are known to correlate with indefinite Ps (see Cooreman 1994) and hence we treat this as most relevant for the markedness of transitive constructions.

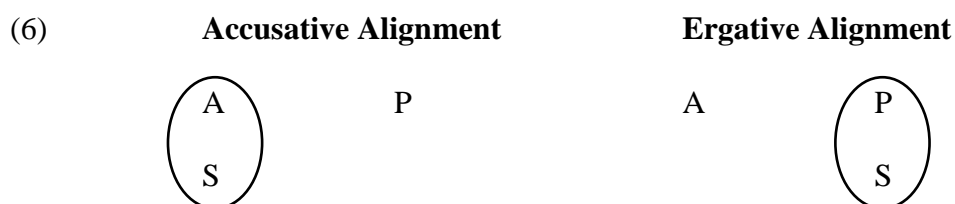
¹¹ Note that this definition of topicality is specifically linked to the notion of transitivity in the functional literature. It differs from the information structure notion (see e.g. Lambrecht 1994; Erteschik-Shir 2007; Krikfa 2008). Hence, others may use the term ‘topic continuity’ in different ways (see e.g. Carrier 2017, 2021 on Eskimo-Aleut).

¹² Semantic transitivity consists of a number of parameters discussed by Hopper & Thompson (1980: 252), including parameters that affect the action of the verb and the properties of P and A. However, the most relevant for the antipassive and the AV construction are aspect, P affectedness, and P individuation (cf. Cooreman 1994: 52-62; Vigus 2018). Consequently, we focus on these in this paper.

takes place. This happens when a marked construction loses its marked character by becoming more discourse frequent and acquiring properties associated with the unmarked prototype. Accordingly, the formerly unmarked variant becomes less frequent and begins to have a more restricted distribution (cf. Tiersma 1982; Gvozdanovic 1989: 62; Dik 1997: 44-47; Haspelmath 2006: 44; Fauconnier & Verstraete 2014: 4; Creissels 2018: 76).¹³

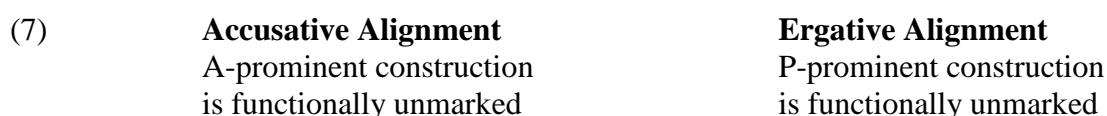
We propose that alignment shift in Eskimo-Aleut and Western Austronesian can be viewed as a process of FUNCTIONAL MARKEDNESS REVERSAL in the status of semantically transitive constructions (cf. Creissels 2018). To illustrate, we first demonstrate how alignment relates to the markedness of transitive constructions.

Alignment is typically identified in a language by comparing S with A and P. In an accusative system, A is treated in the same manner as S, whilst P is treated differently in terms of coding and behaviour properties. P is treated in the same manner in an ergative system as S, while A is treated differently. This is schematised in (6).¹⁴



Whilst this can be applied to languages with valency-decreasing voice alternations, such as passives and antipassives, it is less clear how this can be applied to symmetrical voice languages, where multiple syntactically transitive constructions co-exist (see §3.2).¹⁵ Following Comrie (1978), Payne (1982), and Kroeger (1993, 2004), we argue that alignment can only be identified in such languages by first identifying the unmarked transitive construction based on the functional parameters listed in (5b). However, we take it one step further and suggest that alignment in *any* language should be identified by comparing the functionally unmarked transitive variant with an intransitive construction. If the functionally unmarked construction treats A in the same way as S, alignment is accusative. If the functionally unmarked construction treats P in the same way as S, then alignment is ergative.

To keep track of the data, we will refer to any construction in which A is treated in the same way as S as A-prominent. This includes antipassive, actor voice, and active transitive clauses. Similarly, we will refer to any construction in which P is treated in the same way as S as P-prominent. This includes passives, undergoer voice constructions, and ergative transitive clauses.¹⁶ Our approach to alignment can, therefore, be summarised in (7).



As we will show in §3, this approach has the advantage of allowing us to capture similarities between symmetrical voice languages and other languages cross-linguistically. More importantly, for our purposes, it also allows us to identify and compare alignment shifts independently of the morphosyntactic properties of voice alternations, as shown in §4. Given that a functional markedness reversal can happen without constructions becoming more

¹³ This is also in line with the frequency inferential principle proposed by Johns (1999: 79) which states that if a language relaxes restrictions on construction X it simultaneously constrains them on construction Y. Consequently, the frequency of X increases and the frequency of Y decreases.

¹⁴ Other alignment systems are also attested cross-linguistically, including neutral, tripartite double-oblique and semantic (see Nichols 1992 for discussion).

¹⁵ Riesberg (2014) and Chen & McDonnell (2019) summarise the alignment debate in Western Austronesian.

¹⁶ These terms can be understood as comparable to the terms ‘A-unmarked’ and ‘P-unmarked’ in Creissels (2018: 16). We adopt A-prominent and P-prominent so as not to confuse the terms with our definition of markedness.

formally marked (see §4.2), we suggest that functional properties may in fact drive the alignment shift, in line with similar claims about the role of frequency and functional pressures in the typological literature (cf. DuBois 1985: 363; Johns 1999: 79; Croft 2003: 117; Hawkins 2004; Haspelmath 2020a, 2020b).

3. Marked A-Prominent Constructions

3.1 The Antipassive in Eskimo-Aleut

The Eskimo-Aleut family is spoken over a vast area stretching from the easternmost parts of Greenland in the east to eastern Siberia in the west, as illustrated in Figure 1.¹⁷



Figure 1: Eskimo-Aleut languages (Nagai 2006: 4)

The family encompasses two main branches, Eskimo and Aleut, the latter consisting of a single language spoken in the Aleutian Islands. The Eskimo branch is further subdivided into two branches Yupik (spoken in Chukotka and the southwestern and western points of Alaska) and Inuit (spoken in northern Alaska, Canada, and Greenland). The Inuit language is subdivided into four main dialect groups (cf. Dorais 2003). These are further divided into dialect subgroups, building a dialect continuum, as shown in Figure 2.

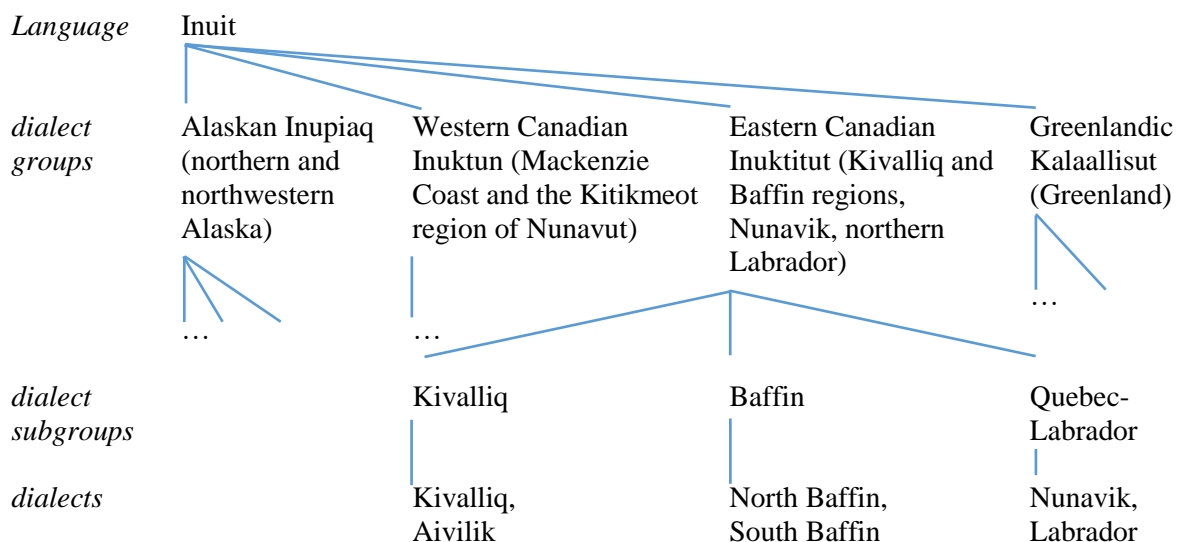


Figure 2: Dialects of the Inuit language (Dorais 2003: 15, adopted from Hayashi 2011: 7)

¹⁷ Abbreviations used in the map: WCI (Western Canadian Inuktun), ECI (Eastern Canadian Inuktitut), NAI (North Alaskan Inupiaq), SPI (Seward Peninsula Inupiaq), CSY (Central Siberian Yupik), CAY (Central Alaskan Yup'ik), AAY (Alutiiq Alaskan Yupik), CSY (Central Siberian Yupik), NSY (Naukanski Siberian Yupik), Sir (Sireniki), and GRI (for Greenlandic Inuit: Greenlandic).

Within Inuktitut, the dialect sub-groups of Kivalliq and Baffin appear more conservative, whilst Nunavik and Labrador appear more innovative, based on the functional properties associated with ergative and antipassive constructions (see also Dresher & Johns 1996: 114 and Dorais 2003: 33 for discussion of phonological features distinguishing conservative and innovative dialects, and Carrier 2017 and Yuan 2018 on differences in alignment). The antipassive alternation is illustrated in (8) from Kivalliq. The ergative construction codes the A argument with ERG case and the P argument with ABS case. Additionally, both A and P are indexed in the verbal agreement. In contrast, the antipassive only agrees with A, which is coded with ABS case. P loses the status of a core argument. It is not indexed on the verb and is either omitted or coded with oblique INS case. This is just like monovalent intransitive clauses, where S is coded with ABS case and agreement is only with S. Note that the ergative construction is P-prominent since P is coded in the same way as S (with ABS case), compare (8a) and (8c). Conversely, the antipassive is A-prominent since A is coded in the same way as S, compare (8b) and (8c).¹⁸

- (8) Kivalliq (Kivalliq region; Johns 1987: 34, 2006: 294)
- | | | | | |
|----|-------------------------------------|-------------------|--------------------------|---------------------|
| a. | <i>anguti-up</i> | <i>arnaq</i> | <i>kunik-paa</i> | Ergative |
| | man-ERG | woman.ABS | kiss-IND.3SG.SBJ.3SG.OBJ | |
| | ‘The man (A) kissed the woman (P).’ | | | |
| b. | <i>anguit</i> | <i>arna-mik</i> | <i>kunik-si-vuq</i> | Antipassive |
| | man.ABS | woman-INS | kiss-ANTIP-IND.3SG.SBJ | |
| | ‘The man (A) kissed a woman (P).’ | | | |
| c. | <i>angut</i> | <i>pisuk-tuq</i> | | Intransitive |
| | man.ABS | walk-PTCP.3SG.SBJ | | |
| | ‘The man (S) is walking.’ | | | |

Argument status in Inuktitut in general, and Kivalliq in particular, is clear from the coding properties of arguments. The ergative construction treats both A and P as core arguments since they are coded with core cases, namely ergative and absolutive, and indexed in the verbal agreement. Hence, it is syntactically transitive and thus formally unmarked. In contrast, the antipassive shows clear evidence for the demotion of P. P is no longer indexed on the verb and has a different case.¹⁹ Hence, the antipassive is a formally marked transitive construction.

In keeping with the fact that it is formally marked, the antipassive is also functionally marked in more conservative Inuktitut. This can be seen from the fact that the antipassive P has properties of low semantic transitivity. While an ergative construction is said to have a highly individuated P argument, the antipassive P is said to be non-referential, indefinite, or

¹⁸ Note that there is variation in the coding of antipassives across Eskimo-Aleut languages. While some verbs involve an explicit antipassive marker, others do not, as shown, for instance, in (1a) and (8b) respectively (see e.g. Spreng 2010: §2.2 for explanation). There is also variation in the number of antipassive markers in Eskimo-Aleut dialects (see Johns 1999: 83 for a succinct summary; Spreng 2006: footnote 6, etc.).

¹⁹ There is terminological variation in the Inuit literature when referring to the *mik*-case marking of P in antipassives. Some refer to it as an oblique case-marker (i.e. MOD ‘modalis case’ in Kleinschmidt (1852), Nagai (1998, 2006), Johns & Kučerová (2017), and Carrier (2021), and INS ‘instrumental case’ in Fortescue (1984) and Bittner (1987)). Others refer to it as an accusative marker (i.e. ACC ‘accusative case’ in Creider (1978), Bittner (1988, 1994: ch.2), Bok-Bennema (1991: 284), and Spreng (2006)). And some use more neutral terminology (i.e. MIK ‘-mik case’ in Spreng (2012), SEC ‘secondary case’ in Beach (2011)). This reflects different analyses of the antipassive P in different theoretical frameworks. The important point is that it differs from the case-marking of P in the ergative construction. As discussed in Beach (2011: 114), the case-marking used for antipassive P is different from absolutive and ergative in the sense that it never appears on arguments indexed on the verb, and triggers a separate case-suffix following possessive suffixes. In addition to marking antipassive P, *mik* case is also used for benefactives in benefactive applicative constructions, for themes and/or recipients in ditransitive predicates meaning ‘give’ and for certain adverbs of time and manner (see Beach 2011: 139).

generic (see e.g. Kleinschmidt 1851: 85; Fortescue 1984: 248).²⁰ This contrast is illustrated in (9) by Qairnirmiut, a sub-dialect of Kivalliq.²¹

- (9) Qairnirmiut (Kivalliq region; Johns 2001: 207-208)
- | | | | | |
|----|------------------------------|------------------|--------------------------|--------------------|
| a. | <i>anguti-up</i> | <i>arnaq</i> | <i>taku-jaa</i> | Ergative |
| | man-ERG | woman.ABS | see-PTCP.3SG.SBJ.3SG.OBJ | |
| | ‘The man sees the woman.’ | | | |
| b. | <i>Angut</i> | <i>nanur-mik</i> | <i>taku-juq</i> | Antipassive |
| | man.ABS | polar.bear-INS | see-PTCP.3SG.SBJ | |
| | ‘The man sees a polar bear.’ | | | |

Consequently, the antipassive is functionally marked in contrast to the ergative since the P argument has properties associated with low semantic transitivity, namely low individuation.

Another property of low semantic transitivity associated with antipassives cross-linguistically is atelic/imperfective aspect (see Janic & Witzlack-Makarevich 2021 for an overview of antipassives). Although there is some disagreement as to whether this applies to the Inuktitut antipassive (cf. Clarke 2009; Carrier 2017; Compton 2017: 20-21), Spreng (2006: 11, 2010: 563, 2012)²² argues that there is an aspectual difference between the ergative and antipassive with respect to their neutral (or ‘out-of-context’) interpretation. For example, in Mittimatalik, a dialect spoken in the Northern region of Baffin Island, the ergative pattern yields a perfective interpretation, as in (10a). In contrast, the antipassive tends to have imperfective aspect when marked by the antipassive marker, as in (10b).

- (10) Mittimatalik (Baffin region; Spreng 2010: 563)
- | | | | | |
|----|--------------------------------|--------------------------|----------------------------|--------------------|
| a. | <i>Peta-up</i> | <i>anautaq</i> | <i>surak-taa</i> | Ergative |
| | Peter-ERG | stick.ABS | break-PTCP.3SG.SBJ.3SG.OBJ | |
| | ‘Peter broke the stick.’ | | | |
| b. | <i>Peter</i> | <i>surak-si-juq</i> | <i>anautar-mik</i> | Antipassive |
| | Peter.ABS | break-ANTIP-PTCP.3SG.SBJ | stick-INS | |
| | ‘Peter is breaking the stick.’ | | | |

Given that the atelic aspect is a property of low semantic transitivity, this is another way that the antipassive construction is functionally marked in more conservative Inuktitut dialects.

In terms of discourse properties, Kalmár (1979) argues that the antipassive is typically used when P is new and has not been mentioned in the discourse, while the ergative construction is used when P is given in discourse and therefore has topic continuity in the sense of Givón (1994, 2017).²³ For example, Kalmár (1979: 123-124) shows that the antipassive P may be definite/specific but must be new to both the speaker and the listener in the North Baffin dialect spoken in Igloolik. In contrast, if P is given, then the preference is for an ergative construction (Kalmár 1979: 123-124). Example (11) illustrates this point.

- (11) Igloolik (Baffin region; Kalmár 1979: 123)
- | | | | | |
|----|--------------------------------|------------------------|---------------------------------|--------------------|
| a. | <i>suna-up</i> | <i>ukumaq</i> | <i>suak-p-a-a</i> | Ergative |
| | Sunak-ERG | Ukumaq.ABS | spank-IND-POLYP-3SG.SBJ.3SG.OBJ | |
| | ‘Sunak spanked Ukumaq (given)’ | | | |
| b. | <i>Piita</i> | <i>sua-qqai-y-uq-Ø</i> | <i>maari-mik</i> | Antipassive |

²⁰ Note that there is disagreement as to whether the antipassive really yields a definiteness split in Inuktitut. In contrast to the traditional approach, some linguists suggest that the interpretation of the P is driven by discourse properties (see Kalmár 1979; Hallman 2008; Carrier 2012; Johns and Kučerová 2017; and Carrier 2021: §5.1.2).

²¹ Kalmár (1979: 118, 120) reports the same pattern in North Baffin spoken in Igloolik (Baffin region).

²² See also Hayashi & Spreng (2005: 8).

²³ This is separate from definiteness, since a newly introduced referent could in theory be definite or indefinite.

Peter.ABS spank-repeatedly-IND-MONOP-²⁴3SG.SBJ Mary-INS
 ‘Peter spanked Mary (new).’

Regarding (11b), Kalmár (1979) explains that the antipassive is acceptable because the proper name ‘Mary’ does not refer to any specific person known to the speaker or the listener. As a result, it is discourse-new. In (11a), however, the referent of the name *Ukumaq* is well-known to the author and his consultant. Consequently, it can be understood as discourse-given, and the ergative construction is preferred.²⁵ Thus, the antipassive is functionally marked in comparison with the ergative construction since the referent of P cannot be given, which implies that it has low referential distance and, by extension, low topic continuity.

Accordingly, the antipassive tends to be less frequent than the ergative. For example, In the collection of North Baffin and Kivalliq texts published in Rasmussen (1930), there are 117 ergative constructions (95%) and only 6 antipassives (5%) (cf. Kalmár 1979: 121). Similarly, Carrier (2017: 675) finds that the ergative is much more discourse frequent than the antipassive in North Baffin dialect spoken in Resolute Bay.²⁶ He notes 222 (73%) occurrences of the ergative construction against 83 (27%) occurrences of the antipassive. This is typical of antipassives, which tend to manifest a more restricted distribution cross-linguistically (see Rude 1988; Lazard 1989; Givón 1991; Cooreman 1988; Heaton 2017; Polinsky 2017; Vigus 2018; Janic 2021; Janic & Witzlack-Makarevich 2021; Seržant et al. 2021) and also reported for West Greenlandic, a dialect group adjacent to Eastern Canadian Inuktitut (Berge 2011: 115). Thus, the antipassive is both formally and functionally marked in more conservative Inuktitut dialects: there is clear evidence for the P demotion on the formal side, and on the functional side, the antipassive shows low semantic transitivity and less discourse frequency than the ergative construction. Following (7) this suggests that alignment is ergative since the unmarked construction is P-prominent.

3.2 The Actor Voice Construction in Western Austronesian

Like Eskimo-Aleut, the Austronesian family is spoken over a large area, spreading down from Taiwan to New Zealand, and across from Madagascar to Easter Island, as shown in Figure 2 (Adelaar 2005; Blust 2013).

²⁴ Kalmár (1979: 119) uses the gloss MONOP to refer to antipassive verbs which agree with the subject. POLYP stands for verbs of ergative clauses which agree in person and number with both the subject and the direct object.

²⁵ Hallman (2008) presents similar evidence from South Baffin (Baffin region), demonstrating that P in the ergative construction typically refers back to an argument previously mentioned in discourse, whilst antipassive P introduces new discourse referents.

²⁶ Readers should keep in mind that the discourse frequency data reported for North Baffin was collected by Carrier (2017) in the Inuit community of Resolute Bay, where the author investigates a case of new dialect formation between two dialects (including North Baffin) after the High Arctic Relocation that occurred in the 1950s. Nevertheless, the data reflects the general tendency of more conservative dialects of Eastern Canadian Inuktitut in which ergative constructions tend to be more frequent than antipassives. Kalmár (1979: 121) also discusses the frequency of ergative and antipassive constructions in the North Baffin dialect spoken in the Inuit community of Igloolik. Contrary to Rasmussen (1930), he notes 20 antipassives and 15 ergative clauses. This discrepancy may potentially result from the fact that these were elicited via translation rather than reflecting text counts (see Johns 2001: 214 for discussion). Alternatively, they may reflect an ongoing process of alignment change in different Inuit communities of Baffin, as discussed in footnote 17 (see also Carrier 2021). In any case, the percentage of ergative clauses in Kalmár (1979: 121) is higher (43%) than those reported for Itivimiut in §4.1.



Figure 3: The Austronesian Language Family © Encyclopædia Britannica²⁷

The Formosan languages of Taiwan, and the Western Malayo-Polynesian languages of the Philippines, Borneo, Sulawesi, Malaysia, Western Indonesia, and Madagascar are sometimes grouped under the label Western Austronesian (Himmelman 2005; Riesberg 2014).²⁸ The so-called ‘Philippine-type’ languages of Taiwan, the Philippines, and Northern Borneo are generally viewed as the most conservative, preserving characteristics that are reconstructed to Proto-Austronesian (Blust 2013). In contrast, the ‘Indonesian-type’ languages of Malaysia and Western Indonesia are thought to be more innovative (Adelaar 2005), and the languages of Northern Sarawak are transitional between the two (cf. §4.2).

As introduced in §1, Western Austronesian languages are known for their symmetrical voice alternations. The most important alternations for our purposes are the actor voice (AV) and undergoer voice (UV) constructions.²⁹ In AV, A is treated in the same way as S in terms of coding and behaviour. Consequently, AV is an A-prominent construction. However, P is also a core argument, and hence the construction is syntactically transitive, unlike the antipassive in §3.1. In UV, P is treated in the same way as S. Thus, UV is a P-prominent construction. However, A remains a core argument, and hence the construction differs from a passive and indeed resembles the ergative clause described above.³⁰ This is illustrated from Tagalog in (12). In the AV clause in (12a), A takes *ang*-marking, which is the same case used for S in the intransitive clause in (12c). In the UV clause in (12b), P takes *ang*-marking. For this reason, A and P are sometimes referred to as the pivot/subject of their respective voice constructions.³¹ As for the non-pivot arguments, indefinite P in AV and A in UV are marked with *ng*.

²⁷ Austronesian languages: major divisions of Austronesian languages [IMAGE]. Encyclopædia Britannica. Retrieved 3 March 2016, from <http://media1.library.eb.co.uk/eb-media/04/2004-004-7102F813.gif>

²⁸ The Formosan languages are indicated in green and the Western-Malayo-Polynesian languages in purple in Figure 3. Note that the Formosan languages and the Western-Malayo-Polynesian languages do not form a subgroup. Nonetheless, they share typological characteristics, including symmetrical voice, and are therefore often grouped under the geographical/typological label Western Austronesian. See Blust (2013), Ross (2009) and Zeitoun & Teng (2016) for discussion of subgrouping in Austronesian.

²⁹ In addition, conservative Western Austronesian languages also have constructions that map peripheral arguments to subject/pivot, including locative voice, instrumental voice and benefactive voice. These are sometimes referred to as applicative constructions (see e.g. Aldridge 2004).

³⁰ In fact, UV is sometimes analysed as ergative and AV as an antipassive on the basis of functional similarities detailed in this section (see Starosta 1998; Aldridge 2012b, 2012a, among others). In this paper, we follow Kroeger (1993) and Foley (2008) in distinguishing AV from an antipassive on the basis that P has core argument properties. However, the functional markedness approach could be applied to Western Austronesian even if one adopts the view that Tagalog AV is actually formally marked and hence equivalent to an antipassive. As discussed by a reviewer, it is possible to provide counter arguments to the core argument tests in Tagalog discussed below, depending on the definitions of core and oblique. Nonetheless, the advantage of the functional markedness approach is that it allows for the possibility that languages may differ in the morphosyntax of their variant transitive constructions but still undergo parallel alignment shifts.

³¹ Note that the grammatical function ‘subject’ is controversial in Western Austronesian (see e.g. Schachter 1976; Foley & Van Valin 1984; Dryer 1997; Bickel 2010). The pivot/subject is syntactically privileged in the sense that

- (12) Tagalog (Western Austronesian; Foley 2008: 23)
- | | | | | | |
|----|--|------------------|--------------------|-------------------|------------------------|
| a. | <i>B<um>ili</i> | <i>ng=isda</i> | <i>sa=tindahan</i> | <i>ang=lalake</i> | Actor Voice |
| | <AV>buy | GEN=fish | OBL=store | NOM=man | |
| | 'The man bought <i>fish</i> in the store.' | | | | |
| b. | <i>bi~bilh-in</i> | <i>ng=lalake</i> | <i>sa=tindahan</i> | <i>ang=isda</i> | Undergoer Voice |
| | IRR~buy-UV | GEN=man | OBL=store | NOM=fish | |
| | 'The man will buy <i>the fish</i> in the store.' | | | | |
| c. | <i>D<um>ating</i> | <i>ang=babae</i> | (Aldridge 2004: 2) | | Intransitive |
| | <INTR>arrive | NOM=woman | | | |
| | 'The woman arrived.' | | | | |

As discussed in §2, argument status is determined by coding and behavioural properties. The status of non-pivot A and P as core arguments in Tagalog can be seen from the fact that they take a different case from the obliques, such as *sa tindahan* 'in the store', which are case-marked with *sa*.³² It is further supported by behavioural properties that distinguish non-pivot A and P from obliques. Firstly, obliques in Tagalog can be fronted, whilst AV P and UV A arguments cannot, as shown in (13).

- (13) Tagalog, *Adjunct Fronting* (Foley 2008: 34)
- | | | | | | | | |
|----|--|-----------------------|-----------|-----------------|------------|---------------|-----------|
| a. | <i>[Sa tindahan]</i> | <i>bi-bilh-in</i> | <i>ng</i> | <i>lalake</i> | <i>ang</i> | <i>isda</i> | UV |
| | OBL store | IRR-buy-UV | GEN | man | NOM | fish | |
| | 'In the store, the man will buy the fish.' | | | | | | |
| b. | <i>*[ng lalake]</i> | <i>bi-bilh-in</i> | <i>sa</i> | <i>tindahan</i> | <i>ang</i> | <i>isda</i> | UV |
| | GEN man | IRR-buy-UV | OBL store | | NOM | fish | |
| c. | <i>*[ng isda]</i> | <i>b<um>ili</i> | <i>sa</i> | <i>tindahan</i> | <i>ang</i> | <i>lalake</i> | AV |
| | GEN fish | <AV>buy | OBL store | | NOM | man | |

Obliques can be fronted to a pre-verbal position, as shown in (13a), to convey a focus reading (cf. Kroeger 1993; Kaufman 2005: 167). Neither the A in UV, *ng lalake* 'the man', nor the P in AV, *ng isda* 'a fish', can. Consequently, the behaviour of AV P is different from an oblique, which suggests that they have a different status and function as core arguments.

Similarly, the AV P can control the gap in participial *nang* clauses, while obliques cannot:

- (14) Tagalog, *Participial nang clauses* (Kroeger 1993: 58)
- | | | | | | |
|----|---|----------------------|------------------|-----------------------------------|-----------|
| a. | <i>Nanghuli</i> | <i>ng=magnanakaw</i> | <i>ang=polis</i> | <i>[nang pumapasok sa=bangko]</i> | AV |
| | AV.PFV.catch | GEN=thief | NOM=police | ADV AV.IPFV.enter OBL=bank | |
| | 'The police (A) caught a/the ³³ thief (P) when entering the bank' (A or P enters bank) | | | | |
| b. | <i>Bumista</i> | <i>si=Juan</i> | <i>sa=hari</i> | <i>[nang nagiisa]</i> | AV |
| | AV.PFV.visit | NOM=Juan | OBL=king | ADV AV.IPFV.one | |
| | 'Juan (S) visited the king (OBL) alone' (S alone, *OBL alone) | | | | |

Both A and P can control the reference of the gap in the participial clause (14a) since the sentence can be interpreted as meaning either that the police entered the bank (A is controller) or that the thief enters the bank (P is controller). In contrast, the oblique cannot control the reference of the gap, (14b). The sentence can only be interpreted as meaning that Juan is alone

it has subject properties not shared by other arguments, such as the ability to be relativized on (cf. Schachter 1976; Kroeger 1993; Foley 2008).

³² Note, however, that case-marking in Western Austronesian has also been subject to a wide variety of analyses (see Latrouite 2011 and Chen & McDonnell 2019 for discussion).

³³ Note, as shown in (14), the AV undergoer can be interpreted as definite in some contexts (see Latrouite 2011; Latrouite & Van Valin 2014). Nonetheless, as discussed below, it is preferentially interpreted as indefinite and there are contexts in which forcing a definite reading is ungrammatical (see e.g. Katagiri 2005).

(S is controller), and not the king. Thus, the ability to act as a controller in participial *nang* clauses appears to be a behavioural property that targets core arguments, since P has this property and obliques do not. This suggests that P has core argument status in AV, in contrast to antipassive P.³⁴ Hence, AV has two core arguments, making it a transitive clause just like UV. As a result, neither UV nor AV is *formally* marked in comparison with the other.³⁵

Nonetheless, there are widely-reported differences in the semantic and discourse properties of the voice constructions in Philippine-type languages that suggest that AV is *functionally* marked in contrast to UV. Firstly, much like the antipassive in more conservative Inuktitut dialects, AV tends to be associated with low semantic transitivity (Bloomfield 1917; Kroeger 1993; Aldridge 2004, 2012b; Nolasco 2005; Kaufman 2017). For example, P is typically interpreted as indefinite and non-specific in the AV construction, while it is interpreted as definite in the UV construction, as shown in (12b). Moreover, the P argument in AV is often viewed as less affected by the action than the P in UV. Example (15) illustrates this contrast.

- (15) Tagalog, *Affectedness* (Schachter & Otnes 1982: 70; cited from Nolasco 2005: 224)
- | | | | | |
|----|---|-----------------|-------------------|------------------------|
| a. | <i>S<um>alpok</i> | <i>ang=alon</i> | <i>sa=bangka</i> | Actor Voice |
| | <AV.PFV>strike | NOM=wave | OBL=boat | |
| | 'The wave struck <i>at</i> the boat.' (translation adapted) | | | |
| b. | <i>S<in>alpok</i> | <i>ng=alon</i> | <i>ang=bangka</i> | Undergoer Voice |
| | <UV.PFV>strike | GEN=wave | NOM=boat | |
| | 'The wave struck the boat.' | | | |

Nolasco (2005) argues that the waves forcefully strike the boat when the UV construction is used in Tagalog, as in (15b), whilst the boat is less affected by the action of the waves in the AV construction in (15a). Indeed, Latrouite (2011: 184) points out that AV constructions with verbs like 'to strike' are judged unacceptable or less acceptable when P is human and more likely to be directly affected by the act.

Finally, the AV construction often has an atelic activity reading, as opposed to the telic accomplishment reading of UV. Example (16) illustrates this point.

- (16) Tagalog, *Telicity* (Latrouite 2011: 190)
- | | | | | |
|----|--------------------------|------------|----------------|--------------------|
| a. | <i>K<um>ain</i> | <i>ako</i> | <i>ng=isda</i> | Actor Voice |
| | <AV.PFV>eat | 1SG.NOM | GEN=fish | |
| | 'I ate (a) fish/fishes.' | | | |

³⁴ As discussed in Latrouite (2011), morphosyntactic arguments for the oblique status of AV P in Tagalog have been proposed, including the fact that UV A can be realised pre-verbally following negation whilst AV P cannot (MacLachlan 1996: 85). However, the data used is only marginally acceptable to native speakers and doesn't negate the many differences between AV P and uncontroversial obliques. In any case, it is common for there to be differences in behaviour between AV P and UV A in Western Austronesian (see Riesberg 2014). See also Aldridge (2003) on (13) and Aldridge (2012b) on (14). She argues that fronting is restricted for non-pivot NPs, but not for PPs and that the pattern in (13) is therefore determined by category rather than core status. As for (14), she argues that the control facts are expected under the formal analysis of AV developed in the paper since P remains an internal argument or object. We argue that these objections stem largely from different theoretical assumptions about the distinction between core vs. oblique and argument vs. adjunct, and whether these are derived from structural positions or treated as grammatical functions.

³⁵ Note that there is variation in the syntax of Philippine-type languages. For example, Kapampangan has a system of cross-referencing which is similar to the indexing described for Inuktitut above. Specifically, both A and P are cross-referenced in UV constructions, whilst only A is cross-referenced in AV constructions. This has led to the claim that transitivity is fully grammaticalised in Kapampangan and alignment is canonically ergative (see Rowsell 1983; Mithun 1994; Nolasco 2005). A reviewer points out that clitic pronouns in Tagalog behave similarly, in that both A and P can be clitics in UV constructions, whilst only A can be cliticised in AV. However, clitic pronouns may be determined by information structure rather than argument status (Dalrymple & Nikolaeva 2011) and, as discussed above, there are a number of behavioural properties supporting the core status of AV P.

- b. *K<in>ain ko ang=isda* **Undergoer Voice**
 <UV.PFV>eat 1SG.GEN NOM=fish
 ‘I ate the fish/the fishes.’

The AV construction in (16a) focuses on the activity of eating, resulting in an indefinite or bare plural interpretation of P. In contrast, the UV construction in (16b) focuses on the resulting effect on P, namely the accomplishment of the speaker having eaten the fish. Consequently, in Tagalog AV is functionally marked in contrast to UV since it is associated with properties of low semantic transitivity, such as non-individuated P, less affected P, and atelic action (see Liao 2004; Nolasco 2005 for comparative discussion in other Philippine-type languages).

Accordingly, AV constructions are also functionally marked in terms of their discourse properties. Specifically, the P argument in AV tends to have low topic continuity (cf. Givón 1994, 2017). In a study of Tagalog texts, Cooreman et al. (1984) found that AV clauses had P arguments with high referential distance and low topical persistence – both indications of low topic continuity. In contrast, UV constructions had P arguments with higher topic continuity.

| | A RD | Total | P RD | Total |
|-----------|-------------|--------------|-------------|--------------|
| AV | 1.62 | 37 | 19.02 | 37 |
| UV | 2.88 | 140 | 10.01 | 166 |

Table 1: Referential Distance in Tagalog (Cooreman et al. 1984: 19)³⁶

| | A TP | Total | P TP | Total |
|-----------|-------------|--------------|-------------|--------------|
| AV | 1.68 | 37 | 0.06 | 37 |
| UV | 1.22 | 140 | 0.56 | 166 |

Table 2: Topical Persistence in Tagalog (Cooreman et al. 1984: 21)

Table 1 and Table 2 suggest that UV is used in contexts where both A and P are topical, which is the expected pattern for functionally unmarked transitive constructions (Cooreman 1987; Givón 2017). However, AV is used in contexts where P is non-topical. This is typical of Philippine-type languages (see Walters 1994 for comparable findings in Cebuano). Consequently, AV is also functionally marked in terms of its discourse-pragmatic properties.

Lastly, AV is functionally marked in terms of its discourse frequency. Cooreman et al. (1984: 17) showed that 59% of transitives in their text corpus of Tagalog (166 of 281 clauses) used UV constructions, as opposed to 24% with AV clauses.³⁷ When only basic word order clauses are considered, as the context most likely to be associated with functionally unmarked transitive constructions, the percentage of AV clauses in Tagalog text is even lower at around 18.2% (Kroeger 1993: 55).³⁸ Moreover, a preference for UV is reported in production tasks in Tagalog (Bautista 1983; Tanaka 2016). Thus, UV is more frequent across a range of genres, from narratives to elicited responses. In fact, UV constructions tend to outnumber AV constructions across Philippine-type languages (see Wouk 1984 on Toba-Batak; Huang 1994 on Atayal; Walters 1994 on Cebuano; Gault 1999 on Sama Bangingi). Taken together, the semantic and pragmatic restrictions on AV, as well as the low discourse frequency, suggest that AV is functionally marked, whilst UV is the functionally unmarked transitive construction. Since UV is a P-prominent construction, following the logic in (7), we claim that alignment is ergative.

³⁶ An arbitrary referential distance of 20 is given for newly-introduced referents.

³⁷ The remaining 17% are classed as passive in the original study but could also be treated as UV since they use UV morphology but in an *ay* inversion construction (see Cooreman et al. 1984: 17).

³⁸ Note that the frequency of voice constructions depends on text-type and construction-type (see Liao 2004). Consequently, frequency counts differ in other studies. For example, Constantino (1971: 126) found the percentage of AV clauses in Tagalog to be 41%. McFarland (1978: 236) found that 1,344 of 5,000 clauses or 26.9% were AV and 1,660 or 33.2% were UV. Wouk (1986) reports that of 222 clauses in Tagalog written and oral texts, only 60 or 27% were AV, whilst 162 or 72.9% were non-AV.

3.3 Summary

In summary, §3.1 and §3.2 showed that a functional markedness approach could be applied to both Eskimo-Aleut and Western-Austronesian languages to establish which construction is the unmarked variant for expressing semantically transitive events. Using functional properties as the main determiner of markedness allowed us to capture the similarities between more conservative Western Austronesian and Eskimo-Aleut varieties. Both language groups have functionally unmarked P-prominent constructions (ergative and UV) associated with high semantic transitivity and high discourse frequency. Similarly, both language groups have functionally marked A-prominent clauses (antipassive and AV) associated with low semantic transitivity and low discourse frequency. The key difference is that the antipassive is also formally marked since there is morphosyntactic evidence for the P demotion, while the AV construction is not since P remains a core argument in terms of its coding and behavioural properties. In the following sections, we now show that applying the same approach to more innovative varieties reveals a functional markedness reversal: the marked A-prominent constructions lose their semantic restrictions and become more discourse frequent. As a result, we argue that we can talk about alignment shift even in languages with symmetrical voice.

4. Functional Markedness Reversal

4.1 The Antipassive in Eskimo-Aleut

The functional markedness reversal can be seen in Eskimo-Aleut if we compare the properties of the antipassive in more conservative dialects with those in more innovative dialects, such as Nunavik and Labrador. What we find is that the antipassive loses its functionally marked character and begins to acquire properties of a functionally unmarked transitive construction. Firstly, it becomes increasingly acceptable for antipassive P to be definite and highly individuated when moving from west to east (Johns 1999: 80-81, 2006: 295-296).³⁹ In Rankin Inlet, a sub-dialect of Aivilik (Kivalliq region), proper names for antipassive P are reported to be odd (Johns 1999: 80, 2001: 209). In North Baffin spoken in Igloolik (Baffin region), proper names can be used under the condition that they are discourse new (Kalmár 1979: §3.1). In more innovative dialects, however, proper names can be used for antipassive P, regardless of their discourse status. This can be seen in Labrador in (17), and its sub-dialects, such as Rigolet in (18), where P is both definite and discourse-given.⁴⁰

- (17) Labrador (Northern Labrador; Johns 1999: 81)
- | | | | |
|----------------------------------|-----------------------|--------------------|--------------------|
| <i>Margarita</i> | <i>kuinatsa-i-juk</i> | <i>Ritsati-mik</i> | |
| Margarita.ABS | tickle-ANTIP-3SG | Richard-INS | |
| ‘Margarita is tickling Richard.’ | | | Antipassive |

Example (17) was elicited by Johns (1999: 81). She reports that eliciting antipassives with P as a proper name was very common and that such examples are fully acceptable in Labrador. She further explains that in the context of elicitation, the referent of P, ‘Richard’, is neither non-specific nor does it necessarily refer to someone unknown.

Furthermore, example (18) comes from an elicited narrative in Rigolet. Johns (1999) explains that Alice Adams, who is the narrator of this story, recounts that her pet bear would

³⁹ It is interesting to observe that in Alaskan Iñupiaq, an adjacent dialect group to the west of Western Canadian Inuktitut (WCI), antipassives with P expressed as proper nouns are unacceptable (Manning 1996: 95).

⁴⁰ See also Beach (2011: 158-159) for similar discussion in Tarramiut (a sub-dialect of Nunavik). He argues that it is perfectly possible for antipassive P to receive a definite interpretation when expressed as nouns, proper nouns and pronouns, and provides an example in which antipassive P can be both definite and refer back to an entity previously mentioned in the text. He nonetheless notes a tendency for the antipassive to be used when the referent of P has not been previously introduced in discourse.

look at her daughter Nancy. Since the referent of Nancy is introduced earlier in the story, and is known to both the speaker and the hearer, it can be considered both definite and discourse-given in the antipassive construction in the final clause of (18).

- (18) Rigolet (Northern Labrador, Johns 1999: 81). **Antipassive**
- | | | |
|--|---------------------------|------------------------------|
| <i>Nancy</i> | <i>angka-li-mmat</i> | |
| Nancy.ABS | home-PROG-because.3SG.SBJ | |
| <i>aklâ-gulak</i> | <i>iksiva-juk</i> | <i>haksi-tâ-gula-ngmi,</i> |
| black.bear-dear.ABS | sitting-INTR.PTCP.3SG.SBJ | hillock-get-dear-LOC.SG |
| <i>iksiva-ju</i> | <i>haksi-tâ-gula-ngmi</i> | <i>Nancy-mi⁴¹</i> |
| sitting-INTR.PTCP | hillock-get-dear-LOC.SG | Nancy-MOD.SG |
| ‘...if Nancy was coming home, the young black bear would be sitting on a little hill, sitting on the little hill, watching Nancy.’ | | |

The above examples clearly show that the semantic restrictions on the antipassive appear to be relaxed as we move in the direction of more innovative dialects of Inuktitut, since P can be expressed as a proper name and this is not restricted to contexts that are discourse new. This suggests that it can be definite as would be expected of functionally unmarked transitive clauses. We can view this as evidence of a markedness reversal, and hence alignment shift, since the A-prominent clause is becoming less functionally marked.

Similarly, Carrier (2017: 676-677) demonstrates that the use of antipassives with given P also increases in more innovative dialects. Comparing North Baffin and Nunavik, he shows that the percentage of antipassives with given P increases (22% to 39%) such that patient givenness is a significant factor in the choice of transitive variants in North Baffin but not in Nunavik. Consequently, he claims that examples like (19) are becoming increasingly frequent in more innovative Inuktitut dialects.

- (19) Nunavik (Northern Quebec; Carrier 2017: 679) **Antipassive**
- | | | |
|--|--------------------------|------------------------------|
| <i>[unaar-mik</i> | <i>tigu-si-lluni]</i> | <i>[qukiuti-qa-ngi-nami]</i> |
| harpoon-INS.SG | take-ANTIP-IPFVA.SBJ.3SG | gun-have-NEG-PFV.SBJ.3SG |
| <i>[unaar-mik</i> | <i>tigu-si-gami]</i> | |
| harpoon-INS.SG | take-ANTIP-PFV.SBJ.3SG | |
| ‘He grabbed [the harpoon] _i because he didn’t have a rifle. When he grabbed [the harpoon] _i , ...’ | | |

In (19), the antipassive P can be said to have topic continuity in the sense of Givón (2017) since ‘the harpoon’ remains under discussion in the following clause.⁴² He even provides examples of antipassives where P is omitted, not because it is unknown or unimportant but because it is recoverable from context and has a very low referential distance (see Carrier 2017: 680). Thus, the antipassive in innovative dialects of Inuktitut also allows P with topic continuity, as would be expected of a functionally unmarked transitive construction. Consequently, markedness reversal can also be seen from the fact that the A-prominent clause is becoming less functionally marked in terms of its discourse properties.

⁴¹ Johns (1999: 81) explains that the final consonant of the *-mik* case has been deleted (but see Johns 2006: 296).

⁴² Note that Carrier (2017: 671) specifically addresses topic continuity in Inuktitut dialects but using a different definition to ours, which is taken from the functional tradition of Givón (1983, 1994, 2017) and Cooreman (1987). He defines P as having topic continuity when it appears coded with ABS case in the following clause. Similarly, A would have topic continuity if it appears in the following clause coded with ABS case. Assuming this definition of topicality, Carrier (2017: 676) shows that there is an overall tendency for the antipassive to be used when A is the topic, and the ergative to be used when P is the topic. He found no differences between Nunavik and North Baffin in this regard.

Finally, while ergative constructions outnumber antipassives in more conservative dialects (§3.1), the frequency of the antipassive increases in more innovative Inuktitut dialects, as shown in Table 3.⁴³

| | | Ergative | Antipassive | Total |
|-----------|---|-----------------|--------------------|--------------|
| Tarramiut | A = 3 rd person | 20 (8%) | 234 (92%) | 254 |
| | A = 1 st /2 nd person | 732 (83%) | 148 (17%) | 880 |
| Itivimiut | | 12 (9%) | 117 (91%) | 129 |

Table 3: Discourse Frequency of the Antipassive in more innovative dialects of Eastern Canadian Inuktitut

In Tarramiut, an eastern Inuktitut sub-dialect spoken in Nunavik (Northern Quebec), the ergative construction outnumbers the antipassive when A is a first or second person argument, though the opposite is true when A is third person and acting on a P that is equal or higher on the person hierarchy (Allen 2013: 94).⁴⁴ In Itivimiut, another sub-dialect of Nunavik, the antipassive is considerably more frequent than the ergative (Carrier 2012: 76). Consequently, the antipassive is becoming functionally unmarked in terms of its discourse frequency.

The alignment shift progresses further when the formerly unmarked construction begins to become more functionally marked in response to the relaxation of restrictions on the formerly marked construction (cf. Johns 2006: 296). In other words, A-prominent constructions becoming less functionally marked leads to P-prominent constructions becoming more marked. This can be observed in Eskimo-Aleut, in that some innovative dialects of Inuktitut begin to impose restrictions on the use of ergative constructions. For example, Itivimiut does not allow ergatives to occur with a lexically expressed A-argument. Carrier (2012: 77) shows that in the ergative constructions identified in his corpus,⁴⁵ the A argument was only ever encoded through indexation on the verb. In fact, the explicit realisation of A in an ergative construction is considered ungrammatical, as shown in (20a) and (20b). Eventually, this restriction may lead to the gradual disappearance of ergative case in Itivimiut (Creissels 2018: 11).

(20) Itivimiut (Northern Quebec; Carrier 2012: 78)

- a. **tuktuviniq* *kakkala-p* *niri-janga* **Ergative**
caribou.meat.ABS child-ERG eat-PTCP.3SG.SBJ.3SG.OBJ
‘The child ate the caribou meat.’
- b. **atiriq* *pani-up* *miquq-tanga* **Ergative**
parka.ABS girl-ERG sew-PTCP.3SG.SBJ.3SG.OBJ
‘The girl sewed the parka.’

Consequently, the ergative construction in Itivimiut is becoming functionally marked in the sense that it is subject to more restrictions.

Overall, comparing ergative and antipassive constructions in more conservative and more innovative dialects of Eastern Canadian Inuktitut provides evidence for a gradual markedness reversal since the antipassive is no longer restricted to contexts with low semantic transitivity and low topic continuity in more innovative dialects and has increased in frequency when compared with more conservative dialects. Table 4 summarises.⁴⁶

⁴³ The data in the table is taken from Carrier (2012: 76) for Itivimiut and from Allen (2013: 94) for Tarramiut. The discourse data is taken from spontaneous speech as well as elicited narrative texts based on ‘The Pear Film’ (Chafe 1975) and on the wordless picture book ‘Frog where are you’ (Mayer 1969). Carrier’s (2012) data additionally includes a personal story.

⁴⁴ This can be analysed as a split in morphological marking based on person, where ergative constructions are preferred when the agent is first and second person, and antipassives when the agent is third person. See also Spreng (2005, 2012: 172) for similar evidence in South Baffin and Carrier (2021: Chapter 5) in North Baffin.

⁴⁵ See Carrier (2012: Chapter 2) on the description of the corpus.

⁴⁶ Table 4 is summarised from the sub-dialects discussed in §3.1 and §4.1. There may be more fine-grained variation among sub-dialects. A space in Table 8 illustrates that the relevant data was not discussed in the paper.

| | Kivalliq | Baffin | Quebec-Labrador |
|---------------------------|-----------------|---------------|------------------------|
| Low Semantic Transitivity | ✓ | X/✓ | X |
| Low Topic Continuity of P | | ✓ | X |
| Low Discourse Frequency | ✓ | ✓ | X |

Table 4: Functional Properties of the Antipassive in Eastern Canadian Inuktitut

This suggests that a markedness reversal has taken place and that the A-prominent construction, which was functionally marked in more conservative dialects, is gradually becoming functionally unmarked. Building on the logic in (7), this corresponds to a shift in alignment from ergative to accusative. We will now show that the same analysis can be applied to Western Austronesian, even though voice alternations do not stand in a formal markedness opposition.

4.2 The Actor Voice Construction in Western Austronesian

We can also see evidence of a functional markedness reversal in the AV construction in Western Austronesian if we compare the properties of AV constructions in Philippine-type languages with AV constructions in Kelabit, Sa’ban, and Lun Bawang, three closely related varieties spoken in Northern Sarawak (Martin 1996). The three languages are said to differ in their typological properties (Hudson 1978; Clayre 2005, 2014), leading to the claim that they are at a point of transition between the more conservative Philippine-type and more innovative Indonesian-type languages (Hemmings 2016).⁴⁷ Much as Aldridge (2012a) argued for Malagasy, Seediq, and Standard Indonesian, we argue that the AV construction in these languages has been reanalysed as the functionally unmarked transitive construction and show that this corresponds to a relaxation of semantic restrictions and an increase in discourse frequency. The data in this section is based on primary fieldwork, and examples come from the Ba Kelalan dialect of Lun Bawang, the Bario dialect of Kelabit, and the Long Banga dialect of Sa’ban.⁴⁸

Like Philippine-type languages, the three varieties all have symmetrical voice systems with multiple transitive constructions. Hence, the AV construction is syntactically transitive (see Hemmings 2021b for core argument tests supporting this analysis). However, unlike Philippine-type languages, AV P is not necessarily indefinite, non-specific, or less affected. In

X/✓ reflects the fact that there is disagreement over whether the antipassive has properties of low semantic transitivity in Baffin varieties, as discussed above. Specifically, some scholars question the traditional claim that the ergative and antipassive construction differ in relation to the definiteness of P (see e.g. Johns 2017: 97 and Spreng 2006 on South Baffin and Carrier 2021: 205 on North Baffin). Additionally, some argue that there is no aspectual distinction between the ergative and the antipassive (see e.g. Clarke 2009 on South Baffin, and Spreng 2010: 109 and Carrier 2017 on North Baffin). Finally, there is some evidence for the ergative construction becoming more restricted in Baffin varieties (see e.g. Spreng 2005: 215 on restrictions based on person features of the A argument in South Baffin and North Baffin spoken in Igloodik, and Carrier 2021 on the dialect of North Baffin spoken in Pond Inlet). This remains in line with the idea that Inuktitut is currently undergoing a change of alignment and that different dialects may be at different stages of this change.

⁴⁷ One parameter of variation between Lun Bawang, Kelabit and Sa’ban is in case-marking. Although NPs are not case-marked in any of the varieties, Lun Bawang can be said to be the most morphologically conservative since it preserves oblique case-marking of pronouns and proper names. Kelabit is intermediate since it distinguishes NOM and GEN case in pronouns but has lost oblique marking. Finally, Sa’ban is the most morphologically innovative since there is no case-marking at all (Clayre 2014). This is interesting since, as Aldridge (2012a: 343) discusses, changes in case-marking have been linked to changes in alignment (see e.g. Garrett 1990). However, she notes that case and alignment appear to be independent in Western Austronesian since Seediq has oblique case-marking and Malagasy does not, yet Seediq is claimed to have progressed further in the shift to accusative alignment. The facts presented in this paper also support this claim since Sa’ban has lost morphological case and yet appears the most similar to Tagalog of the three languages discussed here, since UV is more discourse frequent than AV (see Table 7). See Hemmings (2019) for further discussion of case-marking in Bario Kelabit and Ba Kelalan Lun Bawang. In both languages, case appears to have developed a differential marking function.

⁴⁸ Each example is followed by a file reference to an individual recording, deposited in the ELAR archive.

fact, P can be expressed via pronouns and proper names that are high on any animacy/definiteness hierarchy (cf. Croft 2003: 130-132; Haude & Witzlack-Makarevich 2016: 433). This can be seen from the following examples, taken from oral folk stories:

- (21) Lun Bawang
Dih Bungkak nenaat ki Tuwau feh **Actor Voice**
 and crow AV.PFV.paint OBL peacock PT
 ‘And so Crow painted Peacock.’ [BAK20171101CH_03]
- (22) Kelabit
Pelaba Palug I’it malug ieh ko’ **Actor Voice**
 often PN PN AV.fool 3SG.NOM PT
 ‘Palug I’t often fools him.’ [BAR20171119CH_02]
- (23) Sa’ban
Pi ceh manaak éek **Actor Voice**
 after 2SG AV.cook 1SG
 ‘And after you have cooked me.’ [LBA20190312CH_02]

In (21), P is expressed with a proper noun, *ki Tuwau* ‘Peacock’, which is interpretable as a personal name since it takes the OBL *ki*= marker, which only occurs on proper nouns and not on common nouns. In (22), P is expressed with a pronoun, *ieh* ‘3SG.NOM’, which is inherently definite. In (23), P is a speech act participant, *éek* ‘1SG’, which is typically considered the highest possibility on the animacy hierarchy (cf. Croft 2003: 130). The examples can also be interpreted as having affected Ps, i.e. the bird that is cooked in (23), and accomplishment readings, i.e. the peacock who is fully painted (21). Consequently, AV in Lun Bawang, Kelabit, and Sa’ban does not have the same definiteness restriction found in Philippine-type languages since P can be highly individuated. This suggests that it is becoming functionally unmarked.⁴⁹

In fact, P in UV constructions can also be indefinite, unlike in more conservative Philippine-type languages. This can be seen from the following examples, where P is introduced by the indefiniteness markers *edteh* ‘one/a’ in Kelabit, and *si* ‘one/a’ in Sa’ban.

- (24) Kelabit
Senaru’ neh edteh ruing **Undergoer Voice**
 UV.PFV.make 3SG.GEN a trap
 ‘She made a trap.’ [PDA10112013CH_01]
- (25) Sa’ban
Yangang kku’ ai si’ payau **Undergoer Voice**
 UV.PFV.bark dog DEF a deer
 ‘The dog barked at a deer.’ [LBA20171204CH_01]

Indeed, the UV construction in Kelabit mainly occurs with pronominal A arguments and very rarely with lexically-expressed As, like the ergative construction in Itivimiut (§4.1). For example, in a subset of the full documentary corpus (approx. 12,000 words), 129 (or 70%) of 183 UV constructions had pronominal actors. Those that did not largely express A as a proper noun or have no A expressed at all, in which case they function more like a passive. Consequently, the UV construction is potentially in the process of becoming more functionally marked, which further supports the claim that AV is becoming the functionally unmarked construction in terms of its semantic properties.

⁴⁹ See Hemmings (2021a: 602) for discussion of the frequency of definite and indefinite P in Kelabit AV constructions in a corpus of folk stories. Roughly 40% of the 105 examples have clearly definite Ps in the sense that it is a pronoun, proper noun or modified by a definite determiner. Hence, there is no restriction against definite Ps. Note that many of these examples also have affected Ps and telic readings (see Hemmings 2021a: 604-605).

Secondly, in contrast to the Tagalog data in §3.2, in Kelabit, the P argument of AV constructions often has topic continuity, defined in the sense of Givón (2017). This can be seen if we consider RD and TP measures in five Kelabit folk stories (cf. Hemmings 2021a: 611).⁵⁰

| | | 1 (High) | 2-3 (Medium) | >3 (Low) | Total |
|----|---|-----------------|---------------------|--------------------|--------------|
| AV | A | 57 (71%) | 14 (18%) | 9 (11%) | 80 |
| | P | 32 (40%) | 19 (24%) | 29 (36%) | 80 |
| UV | A | 40 (77%) | 9 (17%) | 3 (6%) | 52 |
| | P | 25 (48%) | 10 (19%) | 17 (33%) | 52 |

Table 5: Referential Distance (RD) in Kelabit Folk Stories

| | | >2 (High) | 0-2 (Low) | Total |
|----|---|---------------------|------------------|--------------|
| AV | A | 59 (74%) | 21 (26%) | 80 |
| | P | 43 (54%) | 37 (46%) | 80 |
| UV | A | 41 (79%) | 11 (21%) | 52 |
| | P | 23 (44%) | 29 (56%) | 52 |

Table 6: Topical Persistence (TP) in Kelabit Folk Stories

Both AV and UV have similar patterns with regard to topicality: A tends to have high values for both RD and TP, and P is topical roughly 50% of the time, but less so than A. This is the expected pattern for functionally unmarked transitive constructions (Givón 2017). Consequently, neither AV nor UV appears functionally marked in the sense that P has low topic continuity. Since this contrasts with the situation in Tagalog and other more conservative Western Austronesian languages, this suggests that Kelabit speakers have reanalysed AV as a functionally unmarked construction.⁵¹

The final piece of evidence for the markedness reversal in the languages of Northern Sarawak is that AV is more discourse frequent than UV. This can be seen from the analysis of the documentary corpora collected by the author, which include different text-types:⁵²

⁵⁰ For referential distance, a mention in the immediately preceding clause is given a value of 1 and considered to represent high topicality. A mention two to three clauses back is given the value 2-3 and considered to represent mid topicality. Finally, a mention any more than three clauses back is given the value >3 and considered to represent low topicality. For topical persistence, the number of mentions in the following ten clauses are calculated. Three or more mentions is given the value >2 and considered to represent high topicality. Two or fewer mentions is given the value 0-2 and thought to represent low topicality (see Hemmings 2021a). Note that the methodology for calculating RD and TP is slightly different from the Tagalog study in (Cooreman et al. 1984) and the results are presented as percentages of examples that represent high, mid and low topicality values, rather than averages. This is because calculating the measures in this way is thought to minimise bias (Givón 1994, 2017). See Hemmings (2015: 402) for similar results in Kelabit using the older method.

⁵¹ See Hemmings (2017) for discussion of topicality metrics in Sa'ban and Lun Bawang on the basis of folk stories collected by previous researchers between the 1950s-1990s, including dialects different to those described in this paper. Note that AV P tended to have low TP values (64% low in LB and 67% low in S) but high RD values (62% in LB and 50% in S). This also differs from the Tagalog results and suggests that AV is also being reanalysed as functionally unmarked, allowing P to be discourse topical.

⁵² The Lun Bawang corpus analysed here includes three folk stories and eight descriptions of cultural practices. The Kelabit corpus includes five folk stories, six narratives elicited using the Pear Story stimulus, and three news reports broadcast via community radio. The Sa'ban corpus includes four folk stories and six descriptions of cultural practices. If only the folk stories are examined, since these are most likely to be comparable to the Tagalog frequency measures, then: LB AV = 69 (90%), UV = 8 (10%), K AV = 128 (70%), UV = 55 (30%), S, AV = 92 (38%), UV = 148 (62%). The Sa'ban folk stories included a large number of periphrastic UV constructions (71) which may be why the count is so high. The proportion of AV in everyday language is higher.

| | AV constructions | UV constructions ⁵³ | Total |
|------------|------------------|--------------------------------|-------|
| Lun Bawang | 229 (87%) | 35 (13%) | 264 |
| Kelabit | 548 (75%) | 183 (25%) | 731 |
| Sa'ban | 119 (43%) | 156 (57%) | 275 |

Table 7: Discourse Frequency in the Languages of Northern Sarawak

In Lun Bawang and Kelabit, AV constructions vastly outnumber UV constructions. In Sa'ban, UV constructions are slightly more discourse frequent than AV, but AV is still more frequent than equivalent AV constructions in Philippine-type languages (see §3.2). Consequently, all three languages provide evidence for an increase in the discourse frequency of AV, which suggests that it is becoming the functionally unmarked construction in terms of discourse frequency. In Kelabit and Lun Bawang, the low frequency of UV further supports the idea that it is becoming increasingly functionally marked.

Overall, comparing AV in Tagalog and other Philippine-type languages with AV in Lun Bawang, Kelabit, and Sa'ban provides evidence to suggest that a markedness reversal has taken place since AV is no longer associated with the properties of a functionally marked construction, such as low semantic transitivity, low topic continuity, and low discourse frequency. Table 8 summarises this observation.

| | Tagalog | Lun Bawang | Kelabit | Sa'ban |
|---------------------------|---------|------------|---------|--------|
| Low Semantic Transitivity | ✓ | × | × | × |
| Low Topic Continuity of P | ✓ | | × | |
| Low Discourse Frequency | ✓ | × | × | ×/✓ |

Table 8: Functional Properties of AV in Western Austronesian⁵⁴

4.3 Summary

§4.1 and §4.2 showed that parallel developments are happening in more innovative Eskimo-Aleut and Western Austronesian varieties. While the A-prominent constructions (antipassive and actor voice) were functionally marked in conservative varieties, as outlined in §3, A-prominent constructions in innovative varieties are becoming less functionally marked and, in some cases, functionally *unmarked* in comparison with the equivalent P-prominent constructions (ergative and undergoer voice). This can be seen from the fact that the antipassive and actor voice P need not necessarily be associated with low semantic transitivity or low topic continuity in innovative varieties. Accordingly, A-prominent constructions also tend to be more frequent than P-prominent constructions in these varieties. Taken together, these facts suggest that there has been a markedness reversal in the status of the antipassive and AV, which can be interpreted as evidence of a process of alignment shift from ergative to accusative.

5. Conclusion

This paper presented data from Eskimo-Aleut and Western Austronesian to show that a functionally marked construction in more conservative varieties has been re-analysed as the functionally unmarked transitive construction in more innovative varieties. We provided evidence based on the constructions' semantic/pragmatic properties and discourse frequency to support this analysis. Following Comrie (1978), Payne (1982), and Kroeger (1993, 2004), we argued that ergative alignment is equivalent to a functionally unmarked P-prominent construction and accusative alignment is equivalent to a functionally unmarked A-prominent

⁵³ These include periphrastic UV constructions with a UV form of the verb to do and a lexical verb in the actor voice form (see Hemmings 2016 for further description).

⁵⁴ A space in Table 8 illustrates that the relevant data was not discussed in the paper. ×/✓ indicates that AV in Sa'ban was less frequent than UV but more frequent than equivalent AV constructions in Tagalog.

construction. On this basis, we argued that both language groups are undergoing a parallel change from ergative to accusative alignment since they are shifting from unmarked P-prominent constructions (ergative, UV) to unmarked A-prominent constructions (antipassive, AV). These findings are important as they show that symmetrical voice languages can be subject to the same process of alignment shift as ergative languages, despite the morphosyntactic differences in their voice systems. This further entails that analysis of a language as having symmetrical voice is not mutually exclusive with an analysis of a given language as having ergative or accusative alignment, so long as alignment is determined by identifying the unmarked transitive construction using functional parameters. This is contra to the more established view that symmetrical voice and ergative alignment are two distinct analyses of verbal alternations in Western Austronesian (cf. Riesberg 2014; Chen & McDonnell 2019: 175). We showed that a functional markedness approach to alignment is equally revealing for languages where there is a clear asymmetry between voice alternations, like Eskimo-Aleut languages, since this allows us to track the progress of different varieties through diachronic change by examining how formally-marked constructions like the antipassive become functionally unmarked. Consequently, we propose that viewing alignment shift as a process of functional markedness reversal provides a more informative approach as it allows for comparison of morphosyntactically diverse languages, regardless of the properties of their semantically transitive variants.

There are several important questions for future research that emerge from our comparison. In particular, it is interesting to pursue the determining factors behind markedness reversal. It is often claimed that discourse frequency determines rather than correlates with other properties of functional and formal markedness (cf. Greenberg 1966: 65-69; Croft 2003; Haspelmath 2006, 2020a). This paper showed that A-prominent constructions both increased in discourse frequency and acquired properties associated with prototypical semantic and discourse transitivity in more innovative varieties. This provides further support for the idea that frequency and functional markedness are linked (see Haspelmath 2006) but opens up the question of the causal factor, i.e. whether the construction first increased in frequency or first acquired a larger scope of functional application. Furthermore, in both cases, the formally unmarked P-prominent construction became more functionally marked in response to changes to the A-prominent constructions. Therefore, one might question whether the shift starts with changes to the unmarked construction or changes to the marked construction (cf. Croft 2003: 241-242). Finally, a related question is whether systems with functionally marked A-prominent constructions are less stable and more open to diachronic change than those with functionally marked P-prominent constructions since the antipassive and AV are shown here to be re-analysable as functionally unmarked, while there are no uncontroversial cases of passives (or marked UV) being reanalysed as an unmarked ergative construction (see Creissels 2018). Certainly, Aldridge (2012a) argues that A-prominent constructions are particularly amenable to reanalysis as unmarked transitive constructions, since A has both the syntactic and semantic properties associated with canonical transitive subjects.⁵⁵ Applying the markedness approach to alignment change more widely may allow us to address these questions.

Abbreviations

1 = first person; 2 = second person; 3 = third person; ABS = absolutive; ADV = adverbial; ANTIP = antipassive; AV = actor voice; DEF = definite; ERG = ergative; GEN = genitive; IND = indicative;

⁵⁵ One could imagine that this may relate to DuBois' (1985, 1987) preferred argument structure and the idea that treating S and A alike (as in A-prominent constructions) is motivated by the link between actors and topics, whilst treating A and P alike (as in P-prominent constructions) is motivated by the fact that these are the normal roles for new participants. It may be that there is a general preference for what Croft (2003: 180) terms agent-topic type languages.

INS = instrumental; INTR = intransitive; IPFV = imperfective; IPFVA = imperfective appositional; IRR = irrealis; LOC = locative; MOD – modalis; MONOP = monopersoanl; NEG = negation; NOM = nominative; OBJ = object; OBL = oblique; PFV = perfective; PFVA = perfective appositional; PL = plural; PN = proper name, POLYP = polypersonal; PROG = progressive; PT = particle; PTCP = participle; SBJ = subject; SG = singular; UV = undergoer voice

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