A verb raising analysis of the Ojibwe VOS/VSO alternation: Lessons for feature copying and movement

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Abstract This paper explores patterns of agreement and word order in the Central Algonquian language Border Lakes Ojibwe. This variety of Ojibwe shows alternations between VOS and VSO word orders and complex interactions between probes on *v*, Voice, Infl, and C. I show that the behavior of lower probes feeds and bleeds the possible feature copying and movement relations on each subsequent probe. There are three major components to the analysis: (i) post-syntactic verb raising to C, deriving V1 and the complex verbal morphophonology; (ii) an extension of the *interaction/satisfaction* representation of Deal (2015, 2020) to encode a *relativized EPP* that captures variation and restrictions on movement and the possibility of movement and feature copying being independent, and (iii) a reformulation of the Activity Condition (Chomsky, 2000, 2001) to capture *reverse omnivority*, where a probe agrees with lower ranked arguments over higher ranked arguments regardless of whether it is a subject or object. The account provides a strong case for Ojibwe as a configurational language, and is shown to capture variation in agreement and word order in the Algonquian family and beyond.

1 INTRODUCTION

Minimalist syntactic theories have long posited a close link between agreement and movement (e.g. Chomsky, 1995, 2001; Carstens, 2005; Bošković, 2007; Van Urk, 2015). The general shape is for "valuation" relationships between a probe and a goal (i.e. instances of feature copying) to be followed or preceded by the application of Merge (i.e. movement). The goal of this paper is to examine the nature of the relationship between feature copying and movement through a case study of the patterns of agreement and word order in Border Lakes Ojibwe (Central Algonquian). This variety of Ojibwe shows a previously unexamined alternation between VOS and VSO word orders. I argue that V1 in Ojibwe is the result of verb raising to C, while alternations in the linear order of subjects and objects are a function of complex interactions between probes on *v*, Voice, Infl, and C. The analysis informs the general link between agreement and word order and provides strong evidence in favor of a configurational analysis of the Ojibwe clause.

The VOS/VSO alternation in Ojibwe is most readily described in relation to the alternation in DIRECT/INVERSE argument alignments. In DIRECT alignments, where the subject is a "higher ranked" PROXIMATE argument and the object is a "lower ranked" OBVIATIVE argument, VOS occurs preferentially (1a), but VSO is also possible (1b). In INVERSE alignments, where the object is PROXIMATE and the subject OBVIATIVE, only VSO occurs (1c)—VOS is ungrammatical (1d).[1]

(1) DIRECT *(VOS preferred; VSO possible);* INVERSE *(VSO only)*

a. o-gii-waab-am-aa-n ikwe-wan gwiiwizens
3-PAST-see-ANIM-DIR-3′ woman-OBV boy.PROX
'The boy (PROX) saw the woman' (OBV)' ✓$V_{DIR}O_{OBV}S_{PROX}$

b. o-gii-waab-am-aa-n gwiiwizens ikwe-wan
3-PAST-see-ANIM-DIR-3′ boy.PROX woman-OBV
'The boy (PROX) saw the woman (OBV)' ✓$V_{DIR}S_{PROX}O_{OBV}$

c. o-gii-waab-am-igoo-n gwiiwizens-an ikwe
3-PAST-see-ANIM-INV-3′ boy-OBV woman.PROX
'The boy (OBV) saw the woman' (PROX)' ✓$V_{INV}S_{OBV}O_{PROX}$

d. *o-gii-waab-am-igoo-n ikwe gwiiwizens-an
3-PAST-see-ANIM-INV-3′ woman.PROX boy-OBV
Intended: 'The boy (OBV) saw the woman (PROX)' *$V_{INV}O_{PROX}S_{OBV}$

As for agreement, *v* in transitive clauses (*-am* in the examples above) uniformly agrees with the object in animacy (Ojibwe has an animacy-based noun classification system). Voice alternates be-

[1]The following abbreviations will be used for glosses: ABS = absolutive case, ERG = ergative case, PAST = past tense, PROX = proximate, OBV = obviative, SG = singular, PL = plural, DIR = direct agreement, INV = inverse agreement, DUB = dubitative mode, PRET = preterit mode, h/ = him/her, s/he = she/he. I use the terms "subject" and "object" as synonymous with "external" and "internal" argument, respectively. The name of the language in the example will appear at the right margin of the last line of the example, unless the language is Border Lakes Ojibwe, which will be unmarked. When necessary, the source will also appear at the right margin of the final line of the example, unless unmarked, in which case it is from original fieldwork conducted by the author in Minnesota over the Summer and Fall of 2017 and the Summer of 2018.

tween a direct marker *-aa* in direct alignments (1a,b), and the inverse marker *-igoo* in inverse alignments (1c). Infl (*o-*) shows a canonical *omnivorous* agreement pattern (Nevins, 2011; Preminger, 2014) where the higher ranked proximate argument is targeted regardless of whether it is the subject (1a,b) or the object (1c). Finally, C (*-n*) shows a curious pattern that I dub *reverse omnivority*, where instead the *lower* ranked obviative argument is agreed with regardless of whether it is the subject (1c) or object (1a,b).

Ojibwe has many of the canonical properties of a nonconfigurational language as predicted by the Pronominal Argument Hypothesis (Jelinek, 1984) and the Polysynthesis Parameter (Baker, 1996), including *pro-* and argument-drop, highly rich agreement and head-marking, seemingly free word order, and discontinuous constituents. Despite this, the empirical findings, and the proposed analysis, bring Ojibwe into a growing body of work that argues Algonquian languages are in fact *configurational* (e.g. Brittain, 2001; Bruening, 2001b, 2009; LeSourd, 2006; Hamilton, 2015; Morris, 2018) in the sense that overt arguments of the verb occupy syntactic argument positions within a hierarchical phrase structure, rather than adjunct positions (Junker, 2004) or a position in a flat structure (Grafstein, 1984).

The central question of the paper is therefore *how* the syntax is configured to give rise to V1 and the VOS/VSO alternation shown above. I adopt the recent account of head movement as post-syntactic amalgamation by Harizanov and Gribanova (2018) to derive V1 in Ojibwe. The crux of the account is then to establish the representations and operations that drive the alternations between the SO and OS argument orders. I link movement of the arguments to properties of and interactions between φ-probes on *v*, Voice, and Infl, and a mixed φ/δ-probe on C. The major innovations are (i) extending the interaction/satisfaction model of Deal (2015, 2020) to include a *relativized EPP* to allow for the regulation of movement in addition to feature copying, and (ii) a formulation of the Activity Condition (Chomsky, 2000, 2001) that leads the probe on Infl to bleed the possible agreement and movement relations on the higher probe on C, capturing reverse omnivority. The proposal is assessed by exploring how indefinite arguments are interpreted with respect to negation. The analysis leads to a critical comparison with previous accounts of agreement and word order in the Algonquian family and beyond.

The roadmap for the paper is as follows. In §2, I present the basic morphosyntax of Ojibwe, and introduce the VOS/VSO alternation in more detail. In §3, I give a verb-raising analysis of V1, arguing that the verb raises to C. §4 is the heart of the analysis, where I link patterns of agreement, word order, and scope. §5 compares the analysis to previous accounts and considers some key extensions inside and outside of Algonquian. §6 concludes.

2 OJIBWE MORPHOSYNTAX

What is commonly referred to as simply “Ojibwe” is in fact a continuum of closely related dialects spoken around the Great Lakes of North America. At present, there are as many as 90,000 speakers across the dialects. While the dialects are largely mutually intelligible, there are significant phono-

logical, morphological, and syntactic differences (see Valentine (2001) and Sullivan (2016b) for reviews). Within linguistics, the eastern dialects have been the most studied. This literature includes significant descriptive work (e.g. the grammar of Valentine, 2001), as well as wide-ranging theoretical work (e.g. Béjar and Rezac, 2009; Lochbihler and Mathieu, 2013, 2016; Mathieu, 2013; Newell and Piggott, 2014; Barrie and Mathieu, 2012, 2016; Mathieu, 2014).

In the present paper, the dialect of interest is Border Lakes Ojibwe. This is generally classified as part of the Southwestern group, spoken in what is now Northern Minnesota, Southwestern Ontario, and Northern Wisconsin (Sullivan, 2016b). While estimates vary, it is likely that there are not more than 5,000 total speakers, with approximately 1,000 speakers in Minnesota, where the present fieldwork was conducted. The two speakers consulted come from the geographical area around the US-Canadian border — the Border Lakes region — approximately between International Falls, Minnesota and Thunder Bay, Ontario. This restricted focus on a single dialect may result in the failure of the empirical generalizations of this paper to be extended to other varieties and communities; however, it is necessary to ensure the constellation of facts represents a true dialect of Ojibwe. The question of variation, while not the main focus, is addressed in §5.

In the remainder of this section, I present three morphosyntactic properties of Ojibwe:[2] the obviation system, the verbal morphology, and the range of available word orders. Over the course of the discussion, the central facts relevant to the VOS/VSO alternation come into focus.

2.1 Obviation

Obviation is a discourse sensitive system that organizes third person referents (e.g. Aissen, 1997). In Ojibwe, the system is most clearly active with ANIMATE nouns—it only plays a peripheral role in nouns in the INANIMATE class. Within a given domain, one referent is designated PROXIMATE, a morphologically unmarked distinction (2a), and all others are designated OBVIATIVE, a distinction marked with the suffix *-(y/w)an* (2b). Obviation is also evident from concord with demonstratives.

(2) a. awe ikwe
DEM.PROX woman.PROX
'That woman (PROX)'

b. iniwe ikwe-wan
DEM.OBV woman-OBV
'That woman (OBV)'

How a particular referent is ultimately designated as proximate or obviative remains a largely open question. Obviation is thought to be related to topicality or prominence, but has also been understood as encoding perspective (Russell, 1996; Bliss, 2005b; Muehlbauer, 2012; Hammerly and Göbel, 2019). An approximate description is that the perspective center or most topical third person referent is designated proximate, while all other referents are obviative.

Obviative marking is required in constructions where there are multiple animate third persons—most notably possessive constructions and transitive (and ditransitive) verbs. An example of obviative marking with a transitive verb, the focus of the paper, is shown in (3a). In these contexts,

[2] I refer to Border Lakes Ojibwe simply as Ojibwe unless the discussion warrants further disambiguation.

obviative marking on one of the arguments is obligatory, as shown in (3b), and at least one of the arguments must be proximate (3c). These judgments hold regardless of agreement and word order.

(3) a. o-gii-waabam-aa-n ikwe-wan gwiiwizens
3-PAST-see-3-3′ woman-OBV boy.PROX
'The boy (PROX) saw the woman (OBV)' $3 \rightarrow 3'$

b. *o-gii-waabam-aa-n ikwe gwiiwizens
3-PAST-see-3-3′ woman.PROX boy.PROX
Intended: 'The boy (PROX) saw the woman (PROX)' $*3 \rightarrow 3$

c. *o-gii-waabam-aa-n ikwe-wan gwiiwizens-an
3-PAST-see-3-3′ woman-OBV boy-OBV
Intended: 'The boy (OBV) saw the woman (OBV)' $*3' \rightarrow 3'$

The sentence in (3a) shows a DIRECT alignment: the subject is proximate and the object is obviative. This is most readily understood in contrast to INVERSE alignments (4), where the subject is obviative and the object is proximate.[3]

(4) o-gii-waabam-igoo-n gwiiwizens-an ikwe
3-PAST-see-INV-OBV boy-OBV woman.PROX
'the boy (OBV) saw the woman (PROX)' $3' \rightarrow 3$

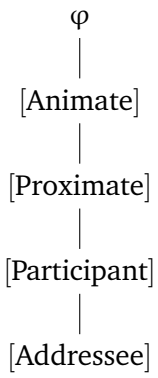
These examples show that obviation is not necessarily tied to thematic role. Reversing obviative marking does not change the core propositional meaning of the utterance: both (3a) and (4) mean 'the boy saw the woman'. Informally, the alternation is reported by speakers to be associated with a shift in perspective. Direct alignments, where the subject is proximate, take the perspective of the subject referent. Inverse alignments, where the object is proximate, take the perspective of the object referent. For this reason, speakers will often translate inverse sentences in passive voice (i.e. (4) would be translated as 'the woman was seen by the boy'). However, the inverse is syntactically and morphologically distinct from the passive: the passive decreases the valency of the verb, and is marked by passive morphology on the verb.

As evidenced by the examples above, obviation participates in nominal concord (2) and φ-agreement (3), (4). This has lead to a variety of proposals that place obviation within the wider theory of person, number, and noun classification (Bliss and Jesney, 2005; Hammerly, 2018, 2020; Oxford, 2019). I adopt the view that the relationships between φ-features, including [Proximate], can be described by appealing to a feature geometry (Harley and Ritter, 2002). To extend the geometry to Algonquian, [Proximate] is placed between [Animate] and [Participant], as shown in

[3]A note to clarify the adopted terminology: direct and inverse *alignments* refer to the syntactic arrangement of arguments. These alignments result in direct versus inverse *agreement*, which is the morphological marking on Voice. Direct and inverse *contexts* are discourses or situations that lead to the subject or object, in the case of transitive verbs with animate arguments, to be marked proximate or obviative. The primary concern of this paper is therefore direct/inverse alignments and agreement, not contexts.

(5). Note, the feature [Animate] is not present in Oxford's original proposal, but is fully consistent with the claims therein. Number is set aside.

(5) *Feature geometry for Algonquian (extended from Oxford, 2019)*



The geometry extrinsically requires more specific features such as [Addressee] to entail all less specific features (i.e. [Participant], [Proximate], and π). This leads to the representation in (6) for each of the five singular person categories.[4]

(6) *Representation of singular person/obviation/animacy categories under the feature geometry*

a. SECOND: {φ, Animate, Proximate, Participant, Addressee}
b. FIRST: {φ, Animate, Proximate, Participant}
c. PROXIMATE: {φ, Animate, Proximate}
d. OBVIATIVE: {φ, Animate}
e. INANIMATE: {φ}

This representation is constrained such that only *animate* third persons can alternate in obviation status; furthermore, all local persons are inherently proximate. This follows from the entailment relationships enforced by the geometry. For Ojibwe, this is a desirable result: neither inanimate nor local nouns (overtly) alternate in obviation.[5] Most immediately relevant to note is that the category of obviative is represented by {φ, Animate}, while proximate is represented by {φ, Animate, Proximate}. The fact that the feature sets that define these two categories are in subset-superset relationships is critical to understanding how and when these arguments are targeted by agreement

[4]As Oxford points out, one could also use [Author] to distinguish first from second. In turn, the inclusive/exclusive distinction can involve both [Addressee] and [Author]. Because this analysis focuses on the proximate/obviative distinction, these variants and decisions are immaterial.

[5]The adopted feature geometry runs into issues with other Algonquian languages. Innu (Clarke, 1982) and Blackfoot (Bliss, 2005b) show obviative markers on inanimate nouns. Blackfoot further shows a contrast between proximate and obviative local persons. This has motived alternative feature geometries (Bliss and Jesney, 2005), as well as proposals to abandon the feature geometry as a syntactic representation altogether (Hammerly, 2020). A full accounting of these issues goes beyond the scope of this paper. The upshot is that, while the geometry adopted here cannot be claimed to be universal due to underprediction of the typology of possible obviation systems, it is sufficient to capture the relationships between features in Ojibwe and can be retained for present purposes.

probes. In the next section, the verbal morphology and patterns of agreement are detailed to set the stage for this account.

2.2 Verbal morphology and agreement

The verbal morphology of Algonquian is the most intensely studied aspect of the language family (e.g. Nichols, 1980; Oxford, 2014, and references therein). For the present work, the verbal morphology is both something to be explained via agreement, but also a guide for determining the underlying structure and the landing sites for movement. This follows from the Mirror Principle of Baker (1985), where inner morphemes are taken to be heads of lower projections.

The shape of the proposed structure, shown in (7d), follows most closely the syntax proposed by Oxford (2019) for the Algonquin dialect of Ojibwe. Oxford focuses on the relationships between the verbal morphology and agreement probes: the theme sign corresponds to a probe on Voice, the central agreement and person prefix to a probe on Infl, and the peripheral agreement to a probe on C (here, corresponding more particularly to #). I propose four additions to and departures from Oxford's proposal. First, I have added the probe on *v*, which corresponds to the verb "final" in the Algonquianist tradition. Second, the location of tense, negation, and mode have been added. Third, the left periphery has been articulated. Finally, the position where the external argument is introduced is recognized as Spec,*v*P rather than Spec,VoiceP. These divergences are motivated further below. For reference, the correspondences between the terminology used within the Algonquianist tradition and heads in the phrase structure are given in (7a,b), and exemplified in (7c).

(7) *Ojibwe verbal template (for matrix verbs)*

a. **Person Prefix** + Tense + STEM + Final + *Theme Sign* + Negation + **Central** + Mode + Peripheral

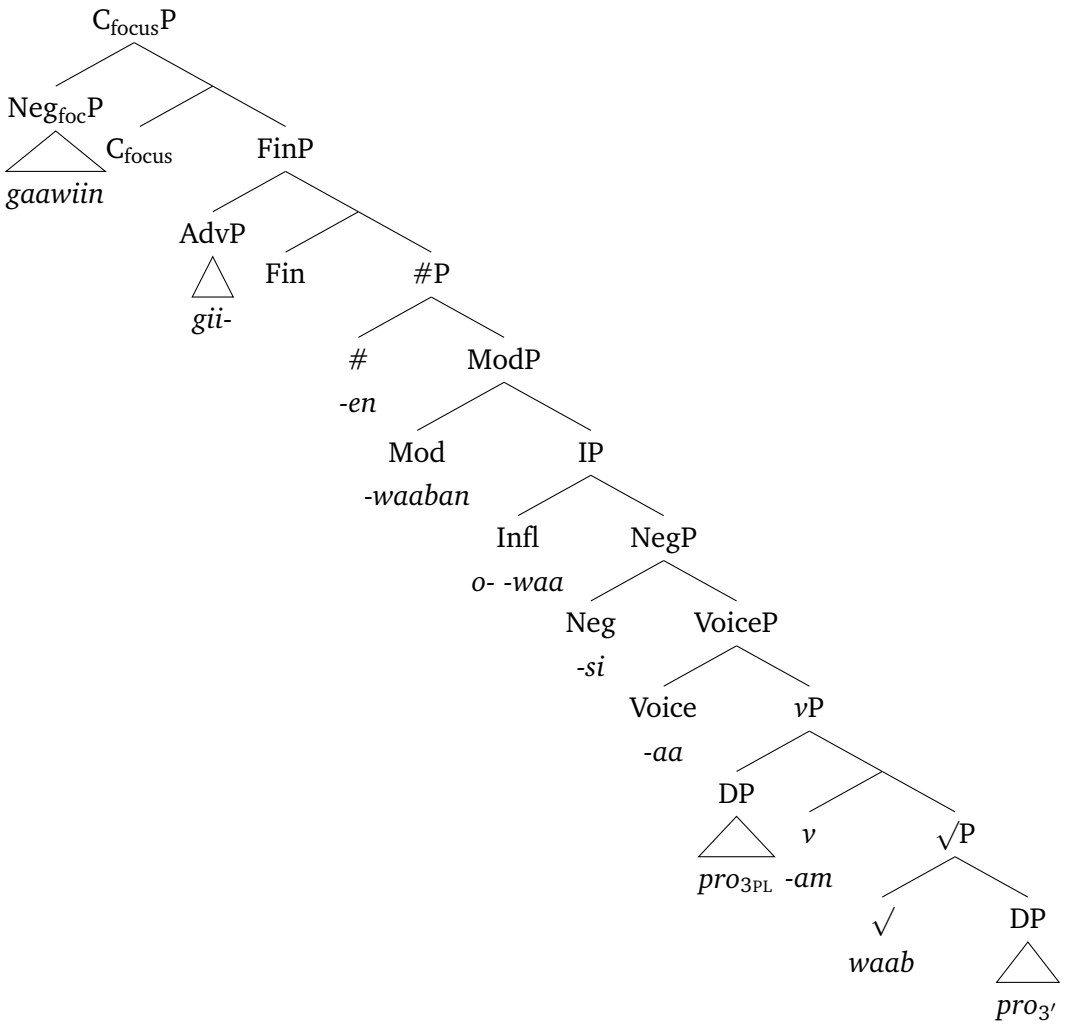
b. **Infl** + Tense (adverbial) + $\sqrt{\text{ROOT}}$ + *v* + *Voice* + Neg + **Infl** + Mod + #

c.

gaawiin	o-	gii-	waab	-am	-aa	-si	-waa	-waaban	-en
Neg	**Pre-**	Tense-	STEM	-Final	-*Theme*	-Neg	-**Cent**	-Mode	-Periph

'They (PROX) might not have seen h/ (OBV)

d.



I begin by detailing the properties of the heads along the Ojibwe verbal spine. This provides a number of landmarks to tie the complex morphological structure to familiar syntactic structures. I then detail the patterns of the agreement on *v*, Voice, Infl, and C.

2.2.1 The verbal spine

I refer to the projections contained within VoiceP as the "VP" for convenience. The internal argument, in this example *pro*, is merged as sister to the root ($\sqrt{}$). The root is verbalized via the category defining head *v*, which is identifiable as the *final* morpheme from the descriptive literature (Brittain, 2003). The external argument, also *pro* in the current example, is merged as specifier to *v*P (cf. Bruening, 2001a, 2005, 2009). I further assume that *v*P defines a phase boundary (Chomsky, 2001; Van Urk, 2015), a fact which comes into play in the analysis of C agreement. Voice is realized as the morpheme referred to as the *theme sign* in the descriptive literature. Both *v* and Voice participate in agreement, which is detailed in the next section. For now, the main takeaway is that the external and internal arguments are realized in the positions described above: they are not adjuncts associated with these positions via *pro*. The motivation for configurationality will be clear

when facts about scope and word order are explored in the following sections, with the alternative non-configurational accounts examined directly in §5.3.

The middle field is associated with negation, mode, and further agreement morphology. The first projection dominating VoiceP is Neg (Tilleson, 2019). Note that negation in Ojibwe matrix clauses is bipartite. I follow Tilleson (2019) in placing the semantic force of negation on Neg, with *gaawiin* being analyzed as a focus negator sitting in Spec,C_{focus}P. The role of negation is explored further in the discussion of scope in §4. Following Neg is Infl. I adopt an analysis where Infl does not encode tense, but rather person features (Ritter and Wiltschko, 2014; Zubizarreta and Pancheva, 2017). Again, the precise properties related to agreement are reserved for the next section. In matrix clauses, Infl is morphologically realized discontinuously as the person prefix and central agreement. Following Oxford (2019), I assume that this falls in line with wider cross-linguistic patterns of person-number discontinuities accounted for by Harbour (2008). I discuss this account further in §3.1.3.

The third morpheme in the middle field is mode. In most examples in this paper, the null *neutral mode* has been specified. However there are at least two other possible modes, described as the *preterit* and the *dubitative*, which can surface overtly. Examples are given in (8a,b), respectively. The preterit is described as signaling completed actions, and the dubitative doubt or uncertainty about whether an event has occurred (Nichols, 1980; Rice, 2020).

(8) a. o- gii- waabam -aa -ban -en
3- PAST- see -DIR -PRET -OBV
's/he (PROX) did see h/ (OBV)'

b. o- gii- waabam -aa -dogen -an
3- PAST- see -DIR -DUB -OBV
's/he (PROX) may have seen h/ (OBV)'

Finally, the left periphery is expanded in Ojibwe to include a variety of topic and focus projections (Sullivan, 2016b) following the split CP hypothesis of Rizzi (1997). I have simplified the left periphery here to include only the central projections at play. The first is #P, which shows φ-agreement and is realized as the peripheral agreement marker, but will also be claimed over the course of the paper to house a δ-probe (A′-probe) that drives movement of obviative objects. Note again that Oxford (2019) simply connects this slot to C, and I will refer to this as "C-agreement" for consistency with previous work. The next projection is FinP, which houses the adverbial tense marker (for a similar proposal for Blackfoot see Ritter and Wiltschko, 2004). The final is the focus projection C_{focus}P. As mentioned above, following Tilleson (2019), this projection houses the focus negator *gaawiin* in its specifier.

2.2.2 Patterns of agreement

To review, there are four probes scattered across the Ojibwe verbal spine: *v*, Voice, Infl, and C. In (9), I repeat the relevant portion of the morphological template for matrix clauses to aide in the parsing of the coming examples.

(9) *Inflectional template for projections relevant to agreement in matrix verbs*
Infl- $\sqrt{}$ -*v* -Voice -Infl -C

Agreement with *v* is realized as a closed-class set of morphemes—the *verb finals*. Finals alternate based on two properties: (i) noun classification, with the animacy of the internal argument being marked in transitive verbs, and the sole argument with intransitives, and (ii) argument structure, with both transitivity and other semantic information related to the thematic role of the EA being indicated. The basic form that the animacy alternations take can be observed with the examples in (10) with the causitive final, and (11) with the experiencer final.

(10) a. od- agaas -**i'** -aa -n
3- small -**CAUSE.ANIM** -3 -3′
'S/he makes h/ small'

b. od- agaas -**it** -oon
3- small -**CAUSE.INAN** -0
'S/he makes it small'

(11) a. o- waab -**am** -aa -n
3- see -**EXP.ANIM** -3 -3′
'S/he sees h/'

b. o- waab -**and** -aan
3- see -**EXP.INAN** -0
'S/he sees it'

Because this paper focuses on animate arguments, this slot is invariant in the examples discussed.

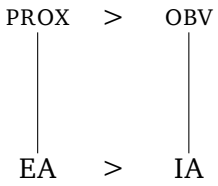
The basic alternation between the direct and inverse on Voice can be seen with the two examples in (12), with the 3SG → 3′SG alignment leading to the "direct" marker *-aa*, which is recognized here to be proximate agreement, and 3′SG → 3SG leading to the inverse marker *-igoo*.

(12) a. o- waab -am **-aa** -∅ -n
3- see -ANIM **-3** -SG -3′SG
'S/he (PROX) sees h/ (OBV)' 3SG → 3′SG

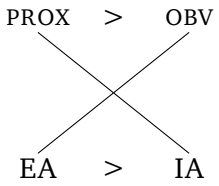
b. o- waab -am **-igoo** -∅ -n
3- see -ANIM **-INV** -SG -3′SG
'S/he (OBV) sees h/ (PROX)' 3′SG → 3SG

Direct-inverse *morphology* on Voice can be tied to differences in *alignment* of the arguments. Alignment refers to the descriptive ranking of person categories on a Person-Animacy Hierarchy (PAH) along with a scale that ranks higher syntactic positions over lower ones. In this case, the relevant scales rank 3 > 3′ and EA > IA. In direct syntactic environments, the alignment of the two scales is high-to-high, as shown in (13a). In inverse syntactic environments, alignment is high-to-low and low-to-high, as shown in (13b).

(13) a. DIRECT *(e.g. 3 → 3′)*



b. INVERSE *(e.g. 3′ → 3)*



The analysis presented in §4.2.2 accounts for direct versus inverse agreement patterns with *feature gluttony* (Coon and Keine, 2020), linking Voice in Ojibwe with other PAH-sensitive phenomena such as the person-case constraint (PCC).

I turn now to the patterns on Infl. To review, Infl is realized discontinuously as the person prefix + central agreement. In the previous examples, where both arguments were singular, only the person prefix *o-* appeared in the surface form. Changing only the proximate argument from singular to plural, shown with both direct and inverse alignments in (14), reveals that Infl is agreeing with the proximate argument in both person and number — central agreement is realized in the plural form *-waa* rather than the null singular form.

(14) a. **o-** waab -am -aa **-waa** -n
3- see -ANIM -3 -**PL** -3′SG
'They (PROX) see h/ (OBV)' 3PL → 3′SG

b. **o-** waab -am -igo **-waa** -n
3- see -ANIM -INV **-PL** -3′SG
'S/he (OBV) sees them (PROX)' 3′SG → 3PL

Considering now the patterns with a plural obviative in (15), with a return to a singular proximate argument, we see instead a change the form of peripheral agreement on C, now realized as a glottal stop *-'*. The number of the obviative argument does not affect Infl agreement in either direct or inverse alignments.

(15) a. o- waab -am -aa -∅ **-'**
3- see -ANIM -3 -SG **-3′PL**
'S/he (PROX) sees them (OBV)' 3SG → 3′PL

b. o- waab -am -igoo -∅ **-'**
3- see -ANIM -INV -SG **-3′PL**
'They (OBV) see h/ (PROX)' 3′PL → 3SG

Finally, both the proximate and obviative nouns can be plural, as shown in (16) for both direct and inverse alignments. This results in the expected forms of Infl and C, given what was observed in the examples in (14) and (15): Infl appears as *o- -waa* and C as *-'*.

(16) a. o- waab -am -aa -waa -'
3- see -ANIM -3 -PL -3′PL
'They (PROX) see them (OBV)' 3PL → 3′PL

b. o- waab -am -igo -waa -'
3- see -ANIM -INV -PL -3′PL
'They (OBV) see them (PROX)' 3′PL → 3PL

To summarize, Infl *omnivorously* agrees in person and number with the higher ranked proximate argument. That is, it agrees with the proximate argument regardless of whether it is the EA or IA. In contrast, C *omnivorously* agrees in person and number with the obviative argument.

The latter pattern on C is particularly striking, given that omnivorous patterns of agreement are generally observed to target "higher ranked" arguments with more marked feature sets such as plurals (Nevins, 2011) or participants (Preminger, 2014). Here, the previously noted set relation between proximate and obviative arguments is relevant—while it is possible to define a probe that specifically targets proximate arguments (i.e. a probe with [uProximate]), there is no feature that uniquely picks out obviative arguments to the exclusion of proximate. This is due to the feature representation advanced in §2.1, where obviative arguments are defined by a subset of those features that define proximate arguments. As a result, any probe that can target obviative arguments should be equally satisfied by a proximate argument. This raises the question: How could a probe be configured to target a less specific argument over a more specific one?

This initially puzzling pattern of *reverse omnivority* receives an explanation based in the Activity Condition (Chomsky, 2000, 2001). To preview the analysis in §4.2, Infl agrees with and deactivates the proximate argument, leaving only the obviative argument available for agreement on C. In other words, agreement on Infl *bleeds* the possible goals available to C. Since Infl always agrees with the higher ranked argument, agreement on C appears as a "reversal" of the hierarchy.

2.2.3 The direct marker -aa as proximate (subject) agreement

Before moving forward, it is necessary to address the fact that the description of Voice in the preceding section is a departure from previous claims. The received analysis of the theme sign, as the name implies, is that it alternates between inverse marking and indexing the object (the "theme"). One of the major innovations of the current study is a reanalysis of the theme sign in the $3 \rightarrow 3'$ alignments as subject agreement, rather than object agreement. This is based on analysis of the direct marker *-aa* a proximate marker, rather than a generic third person animate marker.

Analyses that treat *-aa* as a generic third person marker arising from object agreement (e.g. Oxford, 2019) cannot account for the fact that there is a specific obviative theme sign, *-imaa*, which appears in all other cases where there is an obviative object. For example, the LOCAL $\rightarrow 3'$ alignments such as in (17), where the obviative object is a complex possessive phrase.

(17) nin- gii- waab -am -imaa -n Ziibiins o-gii-n
1- PAST- see -ANIM -3′ -3′ Ziibiins.PROX 3-mother-OBV
'I saw Ziibiin's (PROX) mother (OBV)'

(18) shows that *-imaa* cannot appear with a proximate object, where instead *-aa* appears.

(18) nin- gii- waab -am -aa/*-imaa -n Ziibiins
1- PAST- see -ANIM -3/-3′ -3′ Ziibiins.PROX
'I saw Ziibiins (PROX)'

What is immediately important is that *-imaa* appears with an obviative object in all cases *except* the $3 \rightarrow 3'$ alignment, given here in (19) with the ungrammaticality of *-imaa* indicated.

(19) o- gii- waab -am -aa/*-imaa -n Ziibiins -an
3- PAST- see -ANIM -3/-3′ -3′ Ziibiins -OBV
'S/he (PROX) saw Ziibiins (OBV)'

The most natural analysis of these patterns is to treat the theme sign *-aa* as proximate *subject* agreement. If instead one adopted an object agreement analysis, it becomes necessary to explain why a "generic" third person form appears in examples like (19) instead of the obviative form, despite other cases with obviative objects giving rise to the spell-out of *-imaa*.

Given the patterns above, a description of agreement in each of the four slots is advanced in (20). While not shown here, these descriptions keep an eye towards the wider patterns that govern each slot in argument combinations that include the local persons, with a hierarchy of 1/2 (LOCAL) > 3 (PROXIMATE) > 3′ (OBVIATIVE) (e.g. Oxford, 2019; Hammerly, 2020).

(20) a. *v*: Agree with the IA in animacy.
b. Voice: If the EA is ranked lower than the IA, show INVERSE marking, otherwise show DIRECT agreement in obviation/person.
c. Infl: Agree in person and number with the highest ranked argument.
d. C: Agree in number and obviation with the lowest ranked argument.

The goal is to provide an analysis of these patterns in terms of AGREE, and link the behavior of probes to the patterns of word order, which I turn to now.

2.3 Word order alternations

There are six logically possible word orders for a transitive verb with overt arguments: two verb initial (VOS, VSO), two verb medial (SVO, OVS), and two verb final (SOV, OSV). In Ojibwe, only the verb-final word orders are considered ungrammatical in all contexts. Therefore the question arises as to how each of the four remaining word orders is licensed.

Determining the answer to this question is non-trivial—a fact that is due to both linguistic and extralinguistic factors. For example, determining whether elements have undergone movement within the discourse neutral V1 word orders cannot be tested with methods that have been useful in the Germanic literature, such as the relation of arguments to adverbs, as post-verbal adverbs are highly marked in Ojibwe, if not entirely ungrammatical. For this reason, tests of this sort do not appear. Furthermore, given that pronouns in Ojibwe only occur in non-neutral contexts in pre-verbal positions under topic and focus, the movement of all first and second person arguments, and third person pronominal arguments, is difficult to diagnose. For this reason, the paper focuses only on the behavior of overt nominals.

A second set of issues are the extralinguistic factors that influence judgments on word order (for a related discussion around Mayan, see Clemens and Coon, 2018). While there are many fluent speakers of Ojibwe, English has become the default language in many communities, and most L2 Ojibwe learners have English as their L1. The idea that word order is not contentful in Ojibwe is

pervasive among L2 learners, and English word orders are often imported to Ojibwe by default. Many first speakers are therefore accommodating of non-grammatical word orders, which can still be understood given the information encoded in obviation and direct/inverse agreement. Therefore speakers report that ungrammatical word orders 'makes sense', but upon further questioning reveal that they find the order to be unnatural. Much care was taken in the present paper to understand how my consultants distinguish between understandable sentences, and those which are grammatically licensed. These judgments were facilitated through discussions about accommodating L2 speech, and operationalizing judgments as being "first speaker speech", "learner speech", or "nonsense". Learner speech was established as a sentence that was understandable, but was in some way unnatural. Furthermore, the two speakers consulted for this study learned English as a second language in adolescence, and grew up speaking only Ojibwe at home.

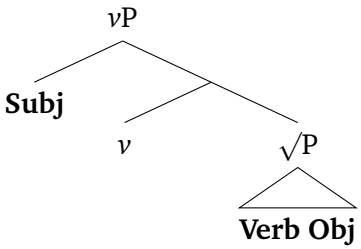
Beyond the judgments provided in the current paper, a case study on spontaneous speech and word order in Ojibwe by Sullivan (2016a) has established the conditions under which different word orders arise. Sullivan showed a single speaker of Ojibwe a series of pictures depicting transitive actions, and asked the speaker to describe what was going in each of the scenes. Sullivan found that VOS, and to a lesser extent VSO, dominates in naturally elicited speech—a finding consistent with the judgments reported here and the broader findings in the literature, which take VOS to be the 'basic' word order of many of the Ojibwe dialects (e.g. Tomlin and Rhodes, 1992; Valentine, 2001; Meyer, 2013; Dahlstrom, 2017). Furthermore, Sullivan showed that verb-medial word orders are associated with the fronting of topicalized, focused, and new subjects and objects, leading to SVO and OVS, respectively. This finding is consistent with analyses where the left periphery is associated with topic and focus positions (e.g. Rizzi, 1997).

The conditions under which VOS versus VSO arise are initially far less straightforward. Sullivan identifies a number of disparate factors that seem to condition this alternation, with the most robust being the focus of the present paper: VOS occurs preferentially in direct environments, though VSO can also occur; VSO occurs in inverse environments. The primary goal of the paper is to link the alternations between OS and SO with the patterns of agreement (this is accomplished in §4). First, I provide a general introduction to verb raising analyses and adopt the *amalgamation* account of Harizanov and Gribanova (2018) to capture V1 in Ojibwe.

3 VERB RAISING

Verb raising analyses of V1 have been advanced for a variety of languages, including the Celtic languages (e.g. McCloskey (1991, 1996) for Irish, Sproat (1985) for Welsh), a number of Austronesian languages (Otsuka, 2005a,b; Clemens, 2019), and Mayan (Clemens and Coon, 2018). A general review can be found in Clemens and Polinsky (2017). Verb raising accounts start with the assumption that specifiers are generated on the left, and complements on the right. Therefore SVO is base-generated, as schematized in (21), and both VOS and VSO must be derived.

(21) *Base-generated SVO with leftward specifiers*



To derive verb-initiality and the VSO word order, the verb undergoes cyclic head movement (e.g. Travis, 1984) to a position relatively high in the clause. To derive the VOS order, an additional step is required to move the object above the position of the subject, but lower than the verb. There are therefore two basic parameters: (i) establishing how far the verb raises; and (ii) establishing the landing site of and motivation for movement of the object. I propose that matrix verbs move to C in Ojibwe (this section), and that the object undergoes (optional) movement to the specifier of #P (§4). This movement is driven by the probe on # (again, this probe is also referred to as C for consistency with previous work; but it is distinct from the projection that the verb raises to).

3.1 Application to Ojibwe

In the literature on Ojibwe dialects, there is broad agreement that the post-verbal morphology is collected on the verb via head movement (Lochbihler, 2008; Newell and Piggott, 2014), and that this process conforms to the Mirror Principle (Baker, 1985). Combined with work establishing the functional aspects of different pieces of morphology, this has allowed the functional sequence within the verbal spine to be established, as outlined in §2.2. However, arguments for verb-raising based purely on morphology can quickly become circular in the following way: head movement is argued to correctly derive the sequence of morphology, and the sequence of morphology is deduced by assuming head movement under the Mirror Principle. Therefore a contribution of the present account is to show that the process of head movement is independently motivated by a need to bring the verb to a clause-initial position to account for the observed surface word orders.

The presentation of raising is divided into two parts. First, I establish the landing site of raising as C, and adopt the head movement as amalgamation approach of Harizanov and Gribanova (2018). Second, I address an issue that arises from this account: how to derive pre-verbal versus post-verbal morphology.

3.1.1 Raising to C as amalgamation

As has been perennially noted (e.g. in Chomsky (2000, 2001); Matushansky (2006); Roberts (2010); Harizanov and Gribanova (2018)), head movement occupies an awkward position in syntactic theory: it violates many of the conditions thought to broadly apply to all syntactic operations, including conditions on locality and the Extension Condition. This has generated much debate about the timing and nature of head movement, which has recently culminated in a pro-

posal by Harizanov and Gribanova (2018) to split the phenomenon into two separate operations (see also Matushansky, 2006): (i) genuine syntactic movement, akin to phrasal movement, and (ii) post-syntactic amalgamation via *Raising* or *Lowering*.

These two operations have complementary profiles. Syntactic head movement is simply internal Merge, and therefore obeys the same constraints, can feed LF, and does not lead to the formation of morphologically complex objects. On the other hand, amalgamation produces a head-adjunction structure that obeys the Head Movement Constraint (Travis, 1984), maps to a morphologically complex word, and does not have interpretive effects. This movement occurs in a highly-local fashion, and is driven by a PF *Raising* operation, formalized in (22), which adjoins heads that are structurally adjacent.

(22) Head *Raising* (Harizanov and Gribanova, 2018):
$[_{XP} \ldots X \ldots [_{YP} \ldots Y [_{ZP} \ldots]]] \rightarrow [_{XP} \ldots [_{X} X Y] [_{YP} \ldots [_{ZP} \ldots]]]$
(where Y and X are heads, X c-commands Y, and there is no head Z that c-commands Y and is c-commanded by X)

Unlike narrow syntactic movement, as a PF operation, *Raising* does not affect interpretation at LF. This is important for capturing the scope effects in Ojibwe, where heads such as negation are interpreted in their base-generated position despite being pronounced elsewhere.

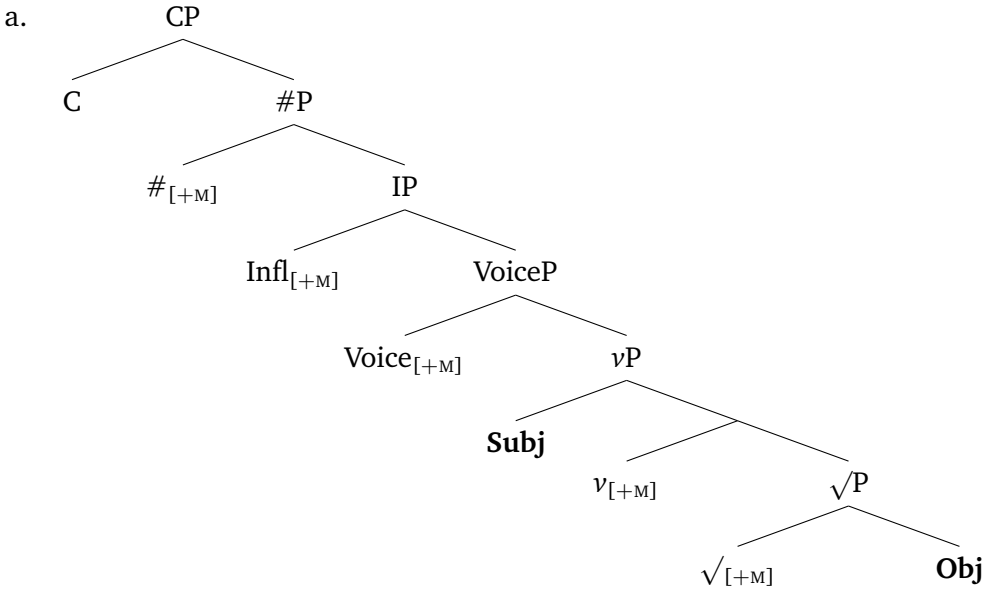
Harizanov and Gribanova implement the trigger of the amalgamation operation through a feature [M], which can take a positive (+) or negative (−) value. If a given head is specified for the positive M feature [+M], then this triggers Raising of that head to the next structurally adjacent head up.[6] These features are lexically specified on each given head, and are therefore a source of variation. When Raising is triggered, it applies from the bottom up, and the M features are deleted or deactivated.

Verb raising in Ojibwe conforms in all aspects to the expected patterns under amalgamation described by Harizanov and Gribanova: it obeys the Head Movement Constraint, it forms a morphologically complex object, and it does not have interpretive effects. Ojibwe can be captured if the root ($\sqrt{}$), *v*, Voice, Infl, and # are all specified for [+M], as shown in (23a). The tree in (23a) represents the base-generated structure, where all of the [+M] features remain unchecked. These features trigger the application of Raising, which applies cyclically upwards starting from the bottom of the structure (i.e. $\sqrt{_{[+M]}}$) and deactivates the M feature at each application. The result is the head-adjunction structure in (23b), which feeds into Vocabulary Insertion, the formation of prosodic structure (following the PF model of Embick and Noyer (2001)), and leads the verbal complex to be pronounced in an initial position (Note, I simplify the left periphery to CP for expository purposes; I assume the verb stops at FinP).

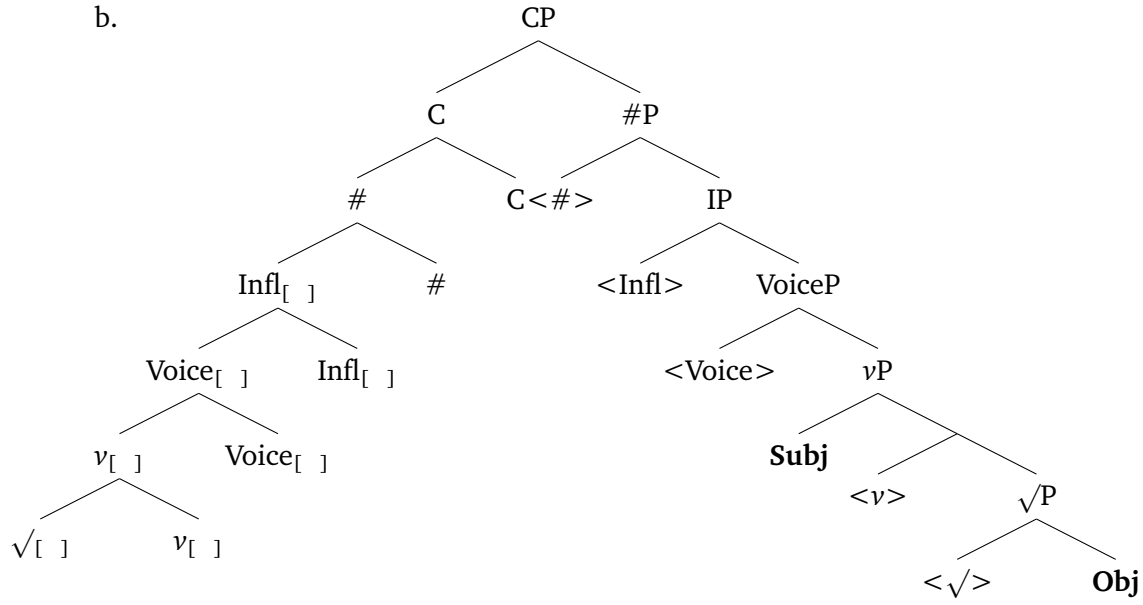
[6] Harizanov and Gribanova also propose an analogous operation *Lowering* (adapted from Embick and Noyer (2001)), which displaces a head downward into the next structurally adjacent head, and is triggered by [−M]. This operation will not be necessary in the present paper, but could be imagined to account for variation in the position of the verb across Algonquian.

(23) *Deriving V1 via Raising. See (7d) for phonological spell-out of heads. The figure in (a) shows the base-generated structure, and (b) the structure after the application of Raising from the bottom up.*

a.



b.



The proposal has a number of antecedents in the Algonquian literature: verb raising to C in matrix clauses (i.e. the *independent order*) has been previously proposed by Halle and Marantz (1993) for Potawatomi (a Central Algonquian language closely related to Ojibwe) and Richards (2004) for Wampanoag (Eastern Algonquian). To my knowledge, the present paper is among the first to extend raising to C to Ojibwe (though compare McGinnis, 1995). Most immediately relevant is Richards (2004) on Wampanoag, who argues that raising to C occurs in matrix clauses but stops at Infl in embedded clauses. In line with this analysis, Lochbihler and Mathieu (2013) have argued that verb raising stops at Infl and does not proceed to C in embedded clauses in eastern dialects of

Ojibwe. Combined with the present proposal that the verb *does* raise to C in Ojibwe matrix clauses, a pathway emerges to derive the syntactic differences between these two verbal forms in a parallel manner to that proposed by Richards (2004) for Wampanoag. The main focus of the analysis is matrix clauses, but embedded clauses are touched on in §5.1.2.[7]

There are two relevant consequences of the proposed movement to C. First, the verb is promoted to a position that is higher than the potential landing site of the object (i.e. Spec,#P), but still low enough that the topic and focus positions in the left periphery remain linearly to the left. This correctly allows for the SVO and OVS word orders discussed in §2.3 to be associated with topic/focus of the subject and object, respectively. Second, the account captures the fact that the functional projections within the verbal spine are affixed to the root—modulo the person prefix, which is linearized to the left for independent reasons examined in the next section. On the other hand, the adverbial tense marker, which as shown in (7d) is in the specifier of FinP, remains semi-independent.

3.1.2 Pre-verbal versus post-verbal morphology

The above analysis applies the Raising operation proposed by Harizanov and Gribanova to a novel case, capturing both V1 and the relationship between the root and the post-verbal morphology in Ojibwe. However, the status of the pre-verbal clitics/affixes remains undetermined by the model: Raising leads each head to be realized as suffixal morphology, and does not derive prefixes. There are two basic cases of preverbal material: (i) tense, and other adverbial preverbs, and (ii) the person prefix (i.e. as part of the discontinuous realization of Infl). There is good reason to think that the structural relation of the pre-verbal morphology to the verb is distinct from the post-verbal morphology. These arguments follow from work on the syntax-phonology interface in Ojibwe from Newell and Piggott (2014).

For one, vowel hiatus in Ojibwe is not tolerated between the root and the post-verbal morphology (24a). It is usually resolved via deletion or glide insertion (Newell and Piggott, 2014). However, hiatus *can be* tolerated between the verbal root and the preverbal morphology, as shown in (24b) with tense and (24c) with a directional marker.

(24) *Examples taken from Newell and Piggott (2014) showing hiatus tolerance/resolution*

a. [manido꞉wi] *Hiatus resolved by deletion post-verbally*
/manido꞉-iwi/
spirit-INCHOATIVE
'S/he becomes a spirit'

[7]This proposal and its antecedents do stand in contrast to Campana (1996) for Passamaquoddy-Malecite (Eastern Algonquian) and Brittain (1997) for Sheshatshit Montagnais (Central Algonquian), who propose movement to C occurs with embedded verbs but in matrix verbs the verb stops at Infl. Far from causing issues, this rightly indicates that amalgamation is the locus of variation (compare to this discussion in Harizanov and Gribanova, 2018).

b. [gi:anoki:] *Hiatus tolerated pre-verbally*
/gi:-anoki:/
PAST-work
'S/he worked'

c. [bia:gamose] *Hiatus tolerated pre-verbally*
/bi-a:gam-ose/
HERE-snowshoe-walk
'S/he walked here in snowshoes'

This suggests that the pre-verbal morphology is in a distinct phonological unit, and is not as closely related to the verbal complex as the post-verbal morphology, which is wrapped up in a head-adjunction structure. Following Newell and Piggott, I adopt an analysis where the pre-verbal adverbial morphemes including tense and directional preverbs remains separate from the head adjunction structure, and as a result forms a separate phonological unit.

What must be dealt with, however, is the status of the pre-verbal person marker. I take an example with the first person marker, which has an underlying form /ni-/, and does not tolerate hiatus in the same way as its other pre-verbal counterparts. In general, hiatus between the pre-verbal person marker and whatever element is to the right is resolved by epenthesizing /d/. Two examples of this strategy are shown below. First, between the person marker and the root (25a); Second, the person marker and a pre-verbal directional prefix (25b).

(25) *Hiatus resolved by /d/ insertion with pre-verbal person marker. Example from Newell and Piggott (2014)*

a. [nida:gamose]
/ni-a:gam-ose/
1-snowshoe-walk
'I walk in snowshoes"

b. [nidinia:gamose]
/ni-ini-a:gam-ose/
1-AWAY-snowshoe-walk
'I walk away in snowshoes"

The preverbal person marker therefore appears to be a part of the same phonological domain as the root and post-verbal morphology (25a), but can be blocked from being a part of this domain through the insertion of preverbs (25b). In both cases, vowel hiatus is not tolerated between the person prefix and whatever is to the right of it.

To account for this behavior, it is first necessary to take a brief look forward at the coming analysis of agreement. Recall that the person prefix is part of the discontinuous realization of agreement on Infl, with the other part being the central agreement marker (Oxford, 2019). While Infl *probes* based on π-features alone, the full set of φ-features of the goal are copied back to the

probe, including person and number (i.e. it shows *featural coarseness*; Preminger, 2014). The spell-out of Infl as discontinuous then follows from Harbour (2008) (a connection first made by Oxford, 2019). Harbour shows that in cases where a single head contains a complex φ-set, the linearization algorithm dictates that the exponence of person must precede the exponence of number. This rules out all linearizations where # precedes π. The exponents of person and number further require linear adjacency to the stem.[8] As a result, STEM-π-# is ruled out, as # is not adjacent to the stem with π as an intervenor. The solution is for π to be linearized to the left of the stem, resulting in π-STEM-#, the ordering observed in Ojibwe.

While the circumstances surrounding the linearization of the complex φ-structure lead to the realization of the person features of Infl as a prefix rather than a suffix, the prefix remains a part of the amalgamation structure created by Raising and is thus subject to vowel hiatus resolution in the same manner as the post-verbal morphology. This stands in contrast to the temporal and directional preverbs, which are are not within the same phonological domain as the head amalgamation structure and tolerate vowel hiatus as a result.

One question that remains is why the person prefix becomes a part of the phonological domain of the preverb when such an element is present. For this, I adopt the idea of Newell and Piggott (2014), who propose that the preverbal person marker can undergo Phonological Merger, which integrates phonologically deficient elements into the prosodic word directly to the right of it. Once prosodically merged with one of these elements, it must resolve hiatus within that domain. This merger follows from conditions on stress assignment, which result in the pre-verbal person marker being a degenerate foot when a preverb intervenes. The details of this account can be found in Newell and Piggott (2014).

4 AGREEMENT AND WORD ORDER IN OJIBWE

The previous section provided an account of V1 in Ojibwe via the post-syntactic amalgamation operation Raising proposed by Harizanov and Gribanova (2018). The goal of this section is to understand the representations and operations that underly feature copying and movement, deriving the patterns of agreement and the VOS/VSO alternations. I begin by introducing the proposed model of feature copying and movement, then turn to the application of the system to account for agreement and word order in Ojibwe.

4.1 Theoretical preliminaries

4.1.1 Feature copying and feature gluttony

AGREE is not a single operation, but rather the sequence of operations shown in (26). There are four steps: Search, Match, Copy, and Satisfy.

[8] I assume, for the purposes of linearization, tense and other preverbs are treated as part of the stem. This is necessary to account for why the person prefix appears to the left of these elements.

(26) *Sub-components of* AGREE *(cf. Deal, 2015, 2020; Coon and Keine, 2020)*

a. *Search*: A probe with a set S of satisfaction conditions and a set I of interaction conditions searches its locality-restricted c-command domain for the (next) closest goal with a set G

b. *Match*: A probe determines Match with a goal via set intersection between I and G. Match holds if $I \cap G \neq \varnothing$

c. *Copy*: If Match holds, G is Copied to the probe

d. *Satisfy*: An unsatisfied feature σ, where $\sigma \in S$, is Satisfied iff $\sigma \in G$. The procedure is halted iff all features $\sigma \in S$ are Satisfied (i.e. if the probe is Satisfied) or all goals have been Searched

The basic outline of an AGREE relation is first that a probe with a set of *interaction/satisfaction conditions* (Deal, 2015, 2020) Searches for the (next) closest goal within its domain. Following the *obligatory operations* model of Preminger (2014), Search occurs no matter what — if there is no Matching goal, then no Copying occurs. If the probe and goal *do* Match, then the set from the goal is Copied back to the probe and the relevant features are Satisfied. The procedure repeats until either all potential goals have been checked by Match, or all unsatisfied features of the probe have been Satisfied.

I start from a model where the full set G of the goal is copied back to the probe when Match holds. In other words, agreement is *featurally coarse* (Preminger, 2014; Coon and Keine, 2020). The difference from its original formulation is that coarseness is not restricted only to situations of clitic doubling (cf. Preminger, 2014), but rather applies to all instances of φ-agreement (Coon and Keine, 2020). In terms of the currently adopted interaction/satisfaction probe representation of Deal (2015, 2020), the *interaction conditions* on the probe, which define what is Copied, are maximally liberal (i.e. the root node φ and all its dependent features will be Copied.)

Moving on from coarseness, it is now well established that probes can agree with more than one goal, Copying back multiple feature sets—this occurs when an initial Matching relationship leaves some of the features that define the satisfaction conditions of the probe unsatisfied *and* there is another goal that Matches these yet unsatisfied features. Such configurations have received recent attention under the *feature gluttony* account of Coon and Keine (2020). Gluttony is defined by a given probe having "too much agreement". This occurs as a function of the subset-superset relationships between categories, and the particular feature set that is specified on the probe.

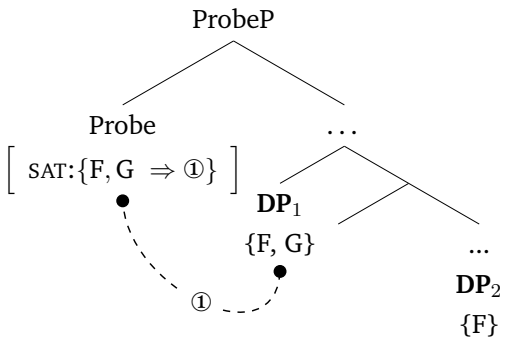
Let us see how this works. Two hypothetical direct versus inverse alignments are shown in (28) with toy features [F] and [G], where the presence of [G] geometrically entails [F]. With Deal's interaction/satisfaction representation, we can specify the probe as follows:

(27) Probe = [INT: {F}, SAT: {F, G}]

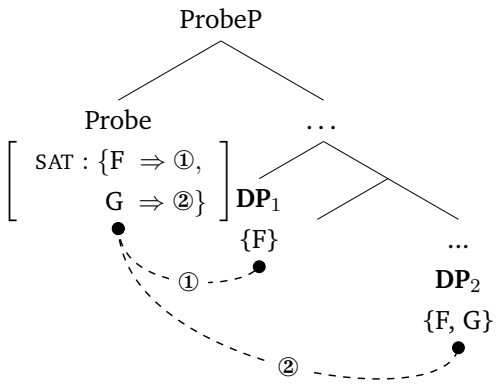
Only satisfactions conditions are immediately relevant. In the direct alignment in (28a), both features of the probe are satisfied in the first cycle of AGREE. There is thus no motivation to interact

with DP_2. This contrasts with the inverse alignment in (28b), where the same probe leads to multiple agreement relationships. In this case, DP_1 only satisfies a single feature of the probe. Subsequent agreement with DP_2 is able to satisfy the second feature.

(28) a. DIRECT *alignment*



b. INVERSE *alignment*



The result on the probe in each case are the feature sets in (29). In the direct alignment, there is a single set copied; in the inverse, two sets, one from each goal, are copied.

(29) a. DIRECT: P = {F, G}
b. INVERSE: P = {{F}, {F, G}}

There is nothing absolutely ill-formed about the multiple agreement relations that occur with inverse alignments, nor the gluttonous sets that are produced from these configurations. The issues arise elsewhere. With the PCC, the main effect of interest in Coon and Keine (2020), gluttony results in a conflict in the formation of clitics. In other cases, gluttony results in portmanteau forms or is resolved by fission. In Ojibwe, I argue that gluttony results in the spell-out of an elsewhere form on Voice, which is descriptively referred to as inverse agreement. This contrasts with the direct alignments, where Voice agrees with the external argument alone, spelling out direct agreement.

4.1.2 The relativized EPP

One of the major insights of the analysis is to tie together the patterns of agreement and movement in Ojibwe. This is accomplished by assuming a model where movement is dependent on agreement relations (e.g. Chomsky, 2000, 2001; Carstens, 2005; Bošković, 2007; Van Urk, 2015). However, feature copying in the proposed system will not *necessarily* be followed by movement. Furthermore, the formulation is neutral to the *type* of movement and agreement relationship involved. Following the featural view of movement proposed by Van Urk (2015), I assume the difference between A- and A′-movement stems from the features at play, rather than the particular position to which movement occurs. In this view, A-movement occurs following φ-agreement, while A′-movement occurs following δ-agreement.

I encode the trigger for movement through EPP *conditions* on the probe. This amounts to extending the interaction/satisfaction model of Deal (2015, 2020) to include conditions for (internal)

Merge. To recapitulate, Deal's original satisfaction conditions were used to define the stoping conditions for feature copying, while the interaction conditions defined *what* is copied back. The claim is that EPP conditions define which categories can undergo movement to the specifier of the probe and when searching for such a goal stops. Like other conditions, EPP conditions can be *relativized*, as shown with our toy features in (30a). With this probe, only a XP with a particular feature set {F, G} will fully Match and Satisfy the EPP features of the probe. Relativization of a probe's EPP conditions may be different from the conditions on feature copying, as shown in (30b), where the agreement satisfaction conditions are {F, G} and the EPP satisfaction conditions are {F}.

(30) a. Probe = [INT_{AGR}: {F}, SAT_{AGR}: {F, G}, INT_{EPP}: {F}, SAT_{EPP}: {F, G}]
b. Probe = [INT_{AGR}: {F}, SAT_{AGR}: {F, G}, INT_{EPP}: {F}, SAT_{EPP}: {F}]

Searching, Matching, and Satisfying can all be done within the previously defined sequence of AGREE by replacing Copy with Move. The AGREE procedure tuned for the EPP is given in (31). Instead of comparing the set on the goal with the set defining the agreement conditions, the EPP conditions are compared. When Search has found the (next) closet goal to the probe, if the goal Matches the conditions of the probe, then internal Merge (Move) is triggered (cf. Copy being triggered when the agreement conditions are met), bringing the goal to the specifier position of the probe. In turn, Satisfy can check the EPP conditions of the probe.

(31) *Application of* AGREE *for EPP-driven movement*

a. *Search*: A probe with a set S_{EPP} of EPP satisfaction conditions and a set I_{EPP} of EPP interaction conditions searches its locality-restricted c-command domain for the (next) closest goal with a set G
b. *Match*: A probe determines Match with a goal via set intersection between I_{EPP} and G. Match holds if $I_{EPP} \cap G \neq \varnothing$
c. *Move*: If Match holds, the goal is Merged with the probe
d. *Satisfy*: An unsatisfied feature σ, where $\sigma \in S_{EPP}$, is Satisfied iff $\sigma \in G$. The procedure is halted iff all features $\sigma \in S_{EPP}$ are Satisfied (i.e. if the probe is Satisfied) or all goals have been Searched

The proposed relativized EPP finds a number of relevant connections and comparisons with previous work. First, with the recent account of direct/inverse agreement systems by Zubizarreta and Pancheva (2017), who advance the *P(erson)-Constraint*, which states that certain projections require a D(P) with a [Participant] feature within their edge (i.e. specifier) position. The authors suggest that for Algonquian languages, this constraint may be formulated such that arguments with a [Proximate] feature (local and proximate third persons) must occupy the edge of certain phrases. Yet other languages require a first or second person—D(P)s with [Author] or [Addressee], respectively—to occupy the edge. In other words, the edge requirement can be relativized to target particular categories. For Zubizarreta and Pancheva, the requirement is formulated as an interface

condition—a filter on the derivation following the syntactic component. Setting aside the details, they argue that if a head bears an *interpretable* participant/proximate feature, then the P-Constraint requires that projection to have a participant/proximate-bearing D(P) in its edge position, or else the structure is ill-formed. The current proposal can derive the consequences of such a filter from the EPP conditions, with no need for a new type of constraint on well-formedness at the interfaces: if the EPP condition of a probe is relativized up to [Part] or [Prox] and an argument with the desired feature is within the Search domain of the probe, movement of a local or proximate argument to the edge of that probe will respectively occur.

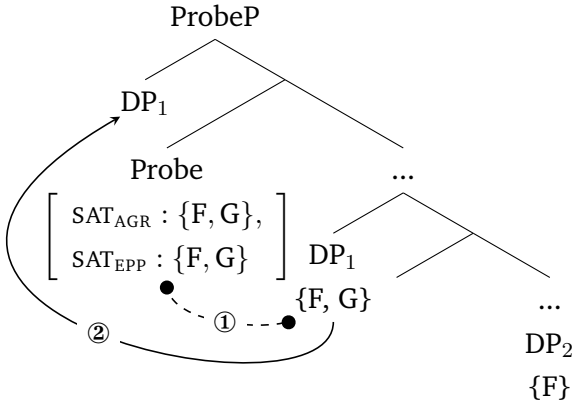
A second comparison is with Carstens' (2005) theory of the EPP as a "sub-feature" of *u*F features in Bantu languages. Translating the proposal into the current interaction/satisfaction representation, this would make the EPP parasitic on the conditions on feature copying, rather than independently specifiable conditions on movement. Deciding whether conditions on EPP satisfaction should be intrinsically linked to the satisfaction conditions on feature copying is an empirical question. Contrary to Carstens' proposal, the patterns in Ojibwe support the current model, where the conditions on the EPP can be a *subset* of those that govern feature copying. More pointedly, within Bantu, hyper-raising in Zulu (Halpert, 2019) provides a case where the EPP conditions are pickier than those that govern copying: CPs, infinitival TPs, and nominals can have their features copied, but only infinitival TPs and nominals are moved. This is explored further in §5.4.

The remainder of this section is dedicated to abstractly detailing the aspects of the relativized EPP most directly relevant to capturing agreement and movement in Ojibwe.

4.1.3 Deriving multiple specifiers

I begin by considering the behavior of a probe of the sort in (30a). In the most basic case, which corresponds to the direct alignments from the previous section, both the agreement and EPP conditions of the probe are fully satisfied by the closest DP. This is shown in (32).

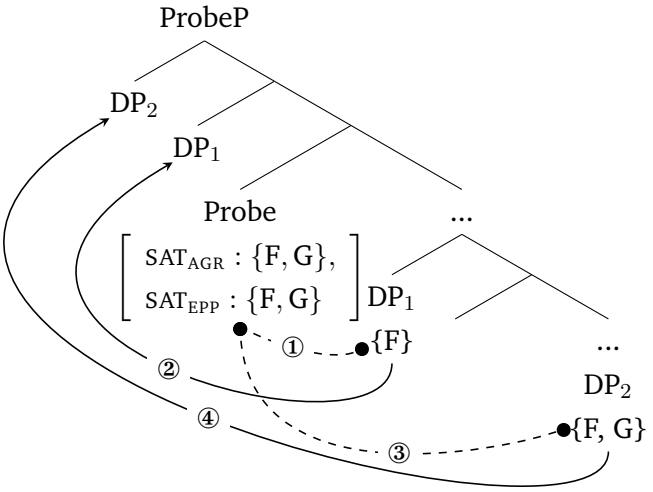
(32) *The basic case: A single goal fully satisfies the probe*



Holding the probe constant, we see that the corresponding inverse alignment adds another layer of complexity, schematized in (33). As discussed in the previous section, the initial agreement

and feature copying relation in step ① only satisfies [F] in the SAT_{AGR} and SAT_{EPP} conditions of the probe. Added here is the step in ②, where the goal is attracted to the first specifier of the probe. This leaves [G] unchecked in both the SAT_{AGR} and SAT_{EPP} conditions, resulting in a second cycle of AGREE in step ③. Given that DP_2 Matches the yet unsatisfied features of the probe, its features are copied back and it is attracted to the second specifier, shown in step ④. This results in a multiple specifier configuration (e.g. McGinnis, 1998; Hiraiwa, 2001; Rackowski and Richards, 2005).

(33) *Sequential application of* AGREE *with multiple DPs results in multiple specifiers*



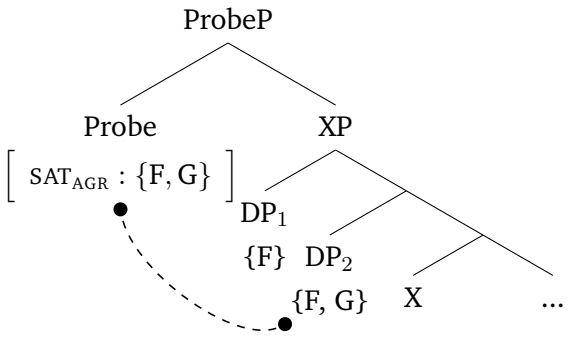
4.1.4 The Best Match principle in agreement and movement

The knock-on effects for further agreement and movement once two potential goals are in a multiple specifier configuration deserves a careful look. Following Oxford (2019), I adopt the view that multiple specifiers are *equidistant* from higher heads (see also Hornstein, 2009). This opens the question of how agreement and movement is determined in these cases, given that probes target the *closest* goal within their c-command domain. I again follow Oxford (see also Coon and Bale, 2014; Van Urk, 2015) in appealing to a Best Match principle in deciding how agreement and movement relations move forward with equidistant goals. I provide a revised formulation in (34), which extends the principle to both agreement and EPP conditions.

(34) *Best Match (cf. Coon and Bale, 2014; Van Urk, 2015; Oxford, 2019)*
When there are n goals G_1, G_2, ..., G_n that are equidistant from a probe P, P copies features from/moves the goal that matches the most SAT_{AGR}/SAT_{EPP} conditions of P.

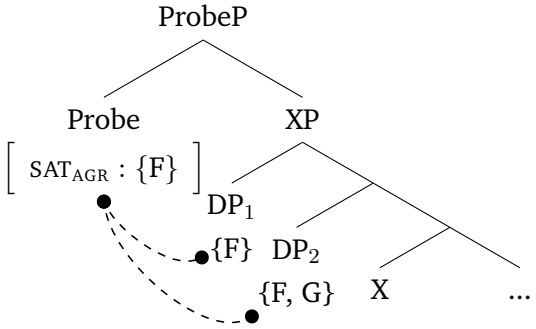
Consider first the consequences for feature copying with the SAT_{AGR}:{F, G} conditions in (35). Here, the probe Searches and finds both of DP_1 and DP_2 as equidistant goals. In this case, DP_2 provides the Best Match for the probe—DP_1 lacks the feature [G]. Therefore only the features of DP_2 are Copied back to the probe.

(35) *Best Match with agreement can decide between equidistant goals if one wins out*



A contrasting situation arises with the less articulated SAT$_{AGR}$:{F} probe in (36). Again, both DP$_1$ and DP$_2$ are found during Search to be equidistant goals. However, neither one has an edge with respect to Best Match: both are specified for [F]. This precipitates *Multiple Agree*, where the features of both DP$_1$ and DP$_2$ are Copied back to the probe (Hiraiwa, 2001; Oxford, 2019).

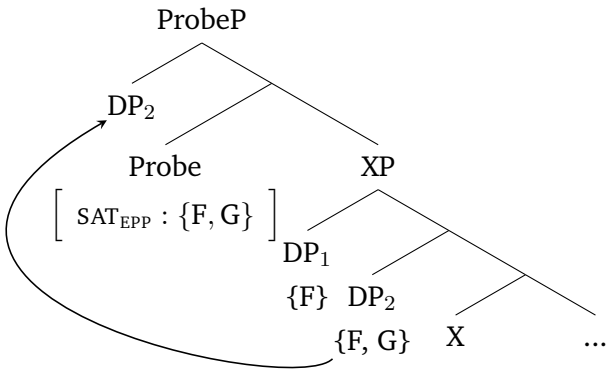
(36) *Best Match with agreement leads to Multiple Agree if equidistant goals match equally*



Put in current terms, another pathway for *gluttony* on the probe has been derived. The difference from the previous case is that gluttony has arisen from a single cycle of AGREE. This requires the operation governing feature copying to have the ability to copy back two sets of features within a single derivational step. As will be argued in a moment, feature copying contrasts with the operation of internal Merge triggered by the EPP, where the corresponding phenomena "Multiple Move" is derivationally ill-formed (cf. Hiraiwa, 2001).

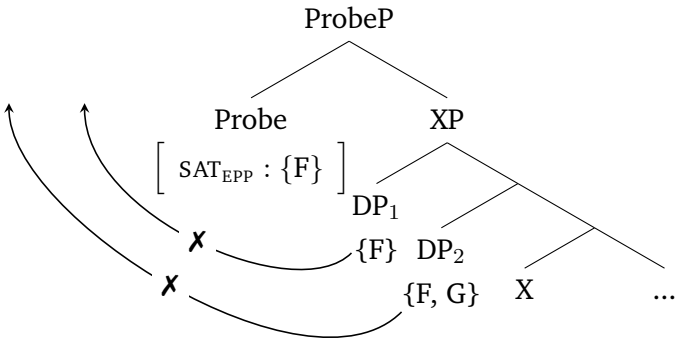
First, consider the case in (37), where the probe is specified for SAT$_{EPP}$:{F, G}. In this case, DP$_2$ provides the Best Match for the probe, precipitating Movement to Spec,ProbeP.

(37) *Best Match with EPP moves a single equidistant goal if one wins out*



The final case to consider is in (38), where both DP_1 and DP_2 are equidistant *and* equally Matched with the SAT_{EPP} conditions of the probe. As was the case with the SAT_{AGR} conditions, Best Match does not allow the probe to decide between these two arguments. In principle this should trigger Multiple Move, where both arguments are moved to the specifier of the probe *at once*. However, following the same logic that Coon and Keine (2020) use to explain the ineffability of clitic doubling in the PCC family of effects, this would require Merge to relate three elements simultaneously (DP_1, DP_2, and ProbeP). Since Merge is a binary operation that can only relate two elements at a time, this rules out the possibility of Multiple Move. As a result, *neither* of the arguments move to the specifier of the probe. This will be shown to explain restrictions on A-movement to Spec,IP in Ojibwe.

(38) *Best Match with EPP cannot move multiple equidistant goals if both match equally*



The above logic rests on the assumption that EPP conditions can be left unsatisfied (i.e. the specifier can remain unfilled) without causing a crash in the derivation. This makes them analogous to their counterparts within the satisfaction conditions, where so-called "failed agreement" configurations, which leave some or all SAT_{AGR} conditions unchecked, are not lethal to the derivation (Preminger, 2011, 2014; Deal, 2015). Alternatively, one can characterize configurations like (38) as having Satisfied the need to *find* a goal that checks the SAT_{EPP} conditions, but the derivation has conspired to make actual movement impossible. So the relevant features *have* been Satisfied, despite the failure to Move the argument(s).

In any case, the claim that a failure to check EPP conditions (or a failure to move the relevant argument to the specifier of probe) does *not* result in a derivational crash may come as a surprise, given that many languages (e.g. English) seem to require the insertion of an expletive argument to "rescue" derivations where movement of a lower argument does not occur. A solution can be found by appealing to the logic of the obligatory operations model: if you *can* Satisfy the conditions of the probe, then you *must* Satisfy them. The relevant point of variation is whether a given language makes available an expletive to be externally Merged. When a language does have an expletive available, this becomes part of the calculus: Expletives are externally Merged with Spec,ProbeP just in case the EPP conditions have not been otherwise checked. If a language does not have an expletive available, this position is left unfilled and the EPP conditions remain unsatisfied without causing a crash.

4.2 Application to Ojibwe

This section provides an account of the patterns of agreement and word order in Ojibwe using the operations developed in the previous section. To review, there are four agreement slots in Ojibwe, summarized in the table in (39).

(39) *Agreement with 3*SG/PL ↔ *3′*SG/PL *configurations*

Infl	√	*v*	Voice	Infl	C
Prefix	Stem	Final	Theme	Central	Peripheral
o-	waab	-am	-aa/-igo(o)	-∅/-waa	-n/-'
3-	see	-ANIM	-3/-INV	-SG/-PL	-3′SG/3′PL

From the inside out, *v* shows animacy agreement with the internal argument; Voice alternates between a direct marker that indexes the person/obviation of the subject, and the impoverished inverse form; Infl omnivorously agrees in person/number with the proximate argument; finally, C omnivorously agrees in person/number with the obviative argument. These patterns all find a principled explanation with the system outlined in the previous section, and motivate the adoption of a revised *Activity Condition* (cf. Chomsky, 2000, 2001).

As for word order, direct alignments show an alternation between VOS and VSO word orders, with the former being preferred. With inverse alignments, only the VSO word order is grammatical. The preferred word orders (VOS in direct and VSO in inverse) both place the obviative argument to the left of the proximate argument. This generalization, and the alternation with direct alignments, will be tied to the mixed φ/δ properties of the probe on C, which is crucially fed and bled by interactions from the earlier probes on *v*, Voice, and Infl.

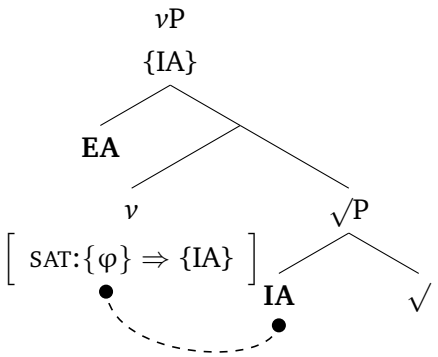
Throughout, I provide evidence for the proposal by examining how indefinite arguments take scope with respect to negation under different word orders and alignments. Given that negation is specified above Voice and below Infl and C, this provides a test for whether or not the arguments have indeed escaped the VP. The results bolster the view of the extraction of the object drives the VOS/VSO alternation in the direct alignments, supports the predicted restrictions on A-movement

due to the impossibility of Multiple Move out of double specifier constructions, and provides evidence that indefinite proximate arguments are positive polarity items (PPIs).

4.2.1 Agreement on v

The first step of the derivation is agreement with *v*, which always occurs with the IA, as shown in (40). In direct alignments, this results in agreement with the obviative argument, and in inverse alignments, agreement with the proximate argument. The probe itself can be completely flat, with invariance in which argument is targeted by the probe being due to the downward nature of AGREE.

(40) *Agreement on v with the IA*



Two aspects of the representation in (40) deserve some attention. First, I assume that the set copied to the probe is projected to the phrasal level. Given that the AGREE relation occurs prior to the projection of the head, the projected feature set will be those copied from the IA. This assumption is ultimately critical for understanding the relationship between C agreement and movement, explored in §4.2.5, where I argue that in direct alignments C φ-agrees with the IA indirectly via the features inherited by *v*P. The second is that agreement does not result in movement of the IA to the specifier of *v*P. I assume any EPP requirement of *v* that may exist (none are assumed in the figure above) is satisfied by external Merge with the EA.

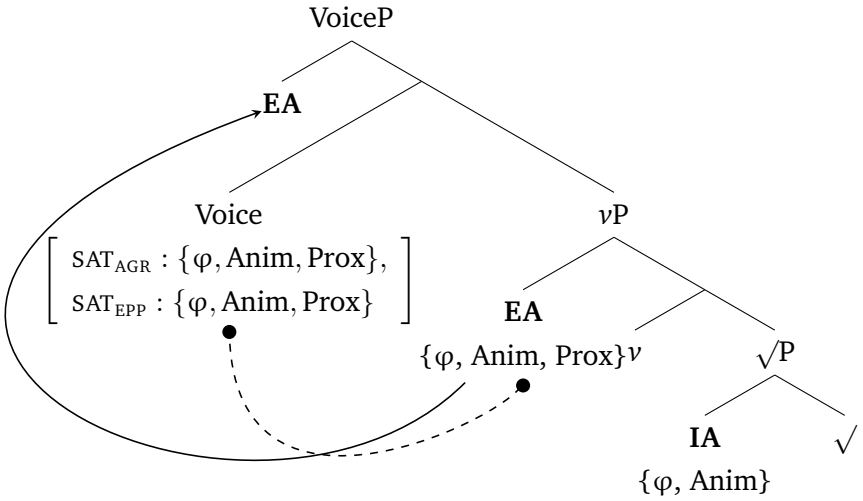
4.2.2 Agreement on Voice

The next probe is that on Voice, which shows a contrast in direct versus inverse forms, depending on the alignment of the arguments. In the wider landscape of matrix clause agreement, the SAT_{AGR} and SAT_{EPP} conditions for Voice show evidence of being specified up to [Participant]. However, since the local persons are not considered here, I simplify the probe as shown in (41). This simplification has no consequences for the analysis.

(41) Infl = [SAT_{AGR}: {φ, Anim, Prox}, SAT_{EPP}: {φ, Anim, Prox}]

With direct alignments (3 → 3′), as shown in (42), the probe hits the proximate EA first. This checks all of the probe's SAT_{AGR} conditions and the EA's set is copied to Voice. The relation also checks the SAT_{EPP} conditions and the EA undergoes A-movement to the specifier of VoiceP.

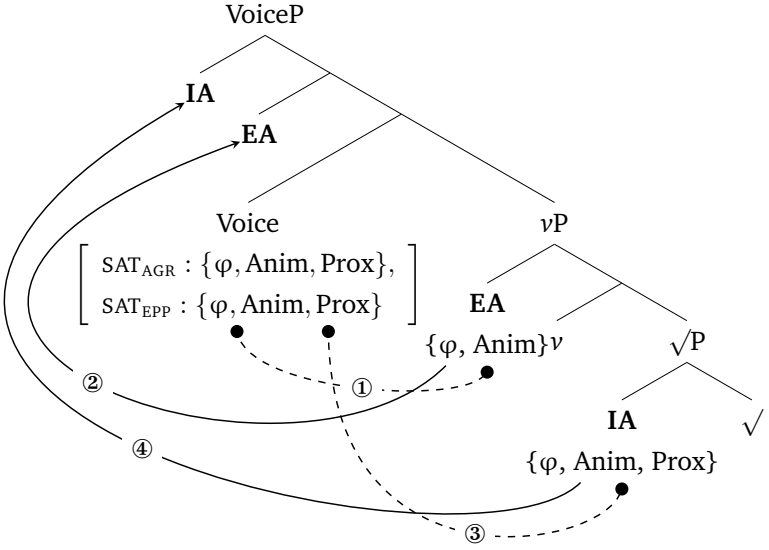
(42) *Voice agreement copies and moves the EA in direct alignments*



We can see that in the direct alignments the IA is not probed at this stage of the derivation, and therefore remains in situ. The main consequence is that the IA becomes trapped within the *v*P phase complement—a fact that becomes relevant in agreement with C.

The derivation of inverse alignments ($3' \rightarrow 3$) is shown in (43). These cases involve the same probe on Voice, but differ in that the obviative argument is the EA and the proximate the IA. As a result, the first agreement relationship between Voice and the EA checks only [φ] and [Anim], shown in step ①. The features of the goal are copied, and the EA moves to the specifier of Voice in step ②. This first cycle leaves [Prox] unchecked within both the SAT_{AGR} and SAT_{EPP} conditions. Both conditions are subsequently checked by a second cycle of agreement (step ③), leading to movement (step ④) and feature copying with the proximate IA. This results in a gluttonous set on Voice and a multiple specifier configuration.

(43) *Voice agreement results in gluttony and multiple specifiers in inverse alignments*



The respective derivations leave Voice with a single set of features in direct alignments, shown in (44a), and a gluttonous set in inverse alignments, shown in (44b).

(44) a. DIRECT: Voice = {φ, Anim, Prox}
b. INVERSE: Voice = {{φ, Anim}, {φ, Anim, Prox}}

Defining spell-out rules to capture the difference between these two is straightforward, as shown in (45). Note that these are not all of the possible forms for Voice, but rather just the ones involved in the cases in focus here.

(45) $\text{Voice}_{\{\varphi,\ \text{Anim},\ \text{Prox}\}} \Leftrightarrow$ *-aa*
$\text{Voice}_{\text{elsewhere}} \Leftrightarrow$ *-igoo*

When Voice is specified for {φ, Anim, Prox} alone, then the so-called direct marker *-aa* is exponed. With the gluttonous collection of features, the elsewhere form *-igoo* appears—there are no portmanteau morphemes available on Voice in Ojibwe, and the head does not undergo fission to be spelled-out as separate morphemes. Given that there is no vocabulary item available to match a set-of-sets, an unmarked form that does not index *any* particular set of features is exponed. This is descriptively referred to as the inverse marker.

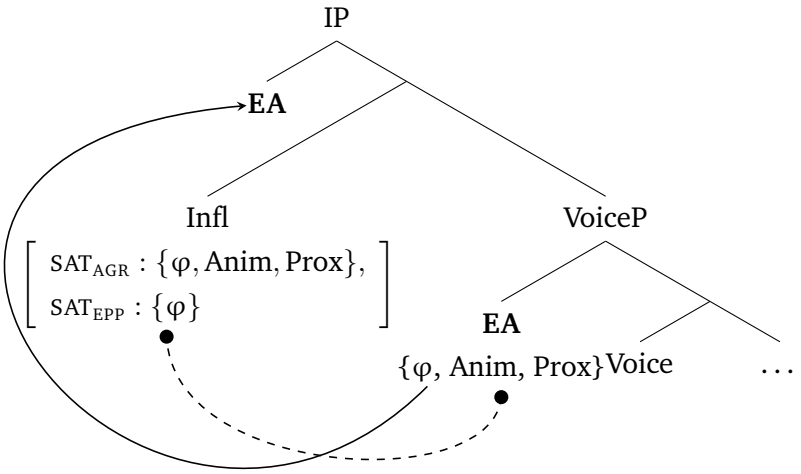
4.2.3 Agreement on Infl

The next probe is on Infl, which shows omnivorous agreement with the higher ranked proximate argument. Like the probe on Voice, the SAT_{AGR} conditions include [φ], [Anim], and [Prox]. However, the SAT_{EPP} conditions are flat, including only [φ]. This flat condition will have different effects in direct versus inverse alignments, where there are single versus multiple specifiers, respectively.

(46) Infl = [SAT_{AGR}: {φ, Anim, Prox}, SAT_{EPP}: {φ}]

The direct alignments are the simpler case by comparison. As shown in (47), the probe Searches its domain and finds the proximate EA. This leads to feature copying and movement to Spec,IP, and is sufficient to fully check both the SAT_{AGR} and SAT_{EPP} conditions.

(47) DIRECT *results in EA agreement and movement on Infl*



The proposed movement should be expected to give way to a particular scope relationship between the moved proximate subject and negation, providing a testing ground for the proposal. To reprise the discussion from §2.2, there are two elements associated with negation in matrix clauses. The first, *gaawiin*, is a focus negator following Tilleson (2019). The second element, the morpheme within the verbal complex *-sii*, encodes sentential negation. In the examples below, the negative morpheme appears above the direct/inverse agreement marker (Voice), and below obviative agreement (mode is null in these cases). Negation is therefore located immediately above VoiceP. As a result, the scope of the arguments with respect to negation provides a critical test for whether there is movement out of the VP, as proposed in (47) for proximate subjects. If the account is on the right track, then the A-moved argument should take wide scope, as schematized in (48).

(48) *Moved proximate subject (VSO shown here),* ∃ » NEG *predicted*
gaawiin ogii-waabamaasiin gwiiwizens$_{SUBJ}$ [$_{NegP}$ NEG [$_{VoiceP}$ <DP$_{SUBJ}$> ... ikwewan$_{OBJ}$]]

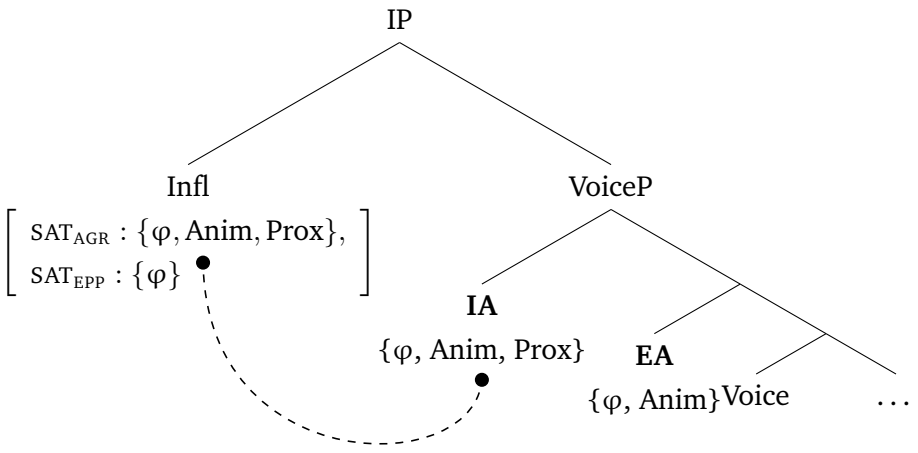
The judgments in (49) support this prediction, with indefinite subjects in both the VOS and VSO word orders taking wide scope. The unavailability of the narrow scope reading follows from the general finding that A-movement resists reconstruction.

(49) a. gaawiin o-gii-nageshkaw-aa-sii-n Ziibiins-an bezhig gwiiwizens
NEG.FOC 3-PAST-meet-DIR-NEG-OBV Ziibiins-OBV one boy.PROX
'A boy (PROX) didn't meet Ziibiins (OBV)' VOS
(i) *NEG » ∃: There is no boy x such that x met Ziibiins.
(ii) ∃ » NEG: There is a boy x such that x did not meet Ziibiins.

b. gaawiin o-gii-nageshkaw-aa-sii-n bezhig gwiiwizens Ziibiins-an
NEG.FOC 3-PAST-meet-DIR-NEG-OBV one boy.PROX Ziibiins-OBV
'A boy (PROX) didn't meet Ziibiins (OBV)' VSO
(i) *NEG » ∃: There is no boy x such that x met Ziibiins.
(ii) ∃ » NEG: There is a boy x such that x did not meet Ziibiins.

Turning now to inverse alignments, the major difference is that both the EA and IA are *equidistant* goals to the probe on Infl, as shown in (50). This leads to the application of Best Match to establish how Copying and Movement proceed. In the case of agreement, the proximate IA provides the Best Match for the SAT_{AGR} conditions of the probe. Therefore, as in the direct alignments, only the features of the proximate argument are copied to Infl. In contrast, the flat SAT_{EPP} conditions cannot allow Best Match to choose between the equidistant goals: both match equally with [φ]. Following the impossibility of Multiple Move proposed in §4.1.4, neither of these arguments can move to Spec,IP.

(50) INVERSE *results in IA feature copying via Best Match, but A-movement is blocked*



Evidence in support of a lack of movement of proximate objects to Spec,IP comes from the judgment in (51), where indefinite proximate objects (found in inverse environments) are ungrammatical under both wide and narrow scope readings.

(51) *gaawiin o-gii-nageshkaw-igoo-sii-n Ziibiins-an bezhig gwiiwizens
NEG.FOC 3-PAST-meet-INV-NEG-OBV Ziibiins-OBV one boy.PROX
Intended 'Ziibiins (OBV) didn't meet a boy (PROX)' VSO

a. *NEG » ∃: There is no boy x such that x met Ziibiins.
b. *∃ » NEG: There is a boy x such that x did not meet Ziibiins.

The fact that the wide scope reading in (51b) is unavailable directly supports the hypothesis that proximate objects remains under the scope of negation, and do not undergo A-movement to Spec,IP, despite the EPP conditions on the probes.[9] However, the unavailability of the narrow scope reading in (51a) must receive another explanation.

Recall that narrow scope readings are also impossible with indefinite proximate *subjects*. In other words, it seems there is no context in which indefinite proximate arguments can be inter-

[9]This fails to support the proposal of Oxford (2019), who argues that proximate objects are promoted to Spec,IP via successive cyclic movement through Spec,VoiceP. This would predict that proximate objects can escape the scope of negation. I discuss further differences from the present account and Oxford's in §5.2.1.

preted within the scope of negation. In essence, this makes indefinite proximate arguments positive polarity items (PPIs).[10] When the proximate argument is a subject, it escapes the scope of negation and takes wide scope by movement to Spec,IP. In contrast, proximate objects are unable to move above negation, and are therefore trapped within its scope. This results in the ungrammaticality reported in (51a). The precise semantic properties that lead to differences in how indefinite proximate and obviative arguments tolerate being within the scope of negation will not be settled here. However, it is cross-linguistically common for certain types of indefinites to behave as PPIs (e.g. Haspelmath, 1997; Szabolcsi, 2004; Fălăuș, 2018).

4.2.4 Interlude: The Activity Condition and Infl

The final piece of the picture for Infl is the idea that agreement results in the *deactivation* of the targeted goal. Much recent work on agreement, going back to the Activity Condition of Chomsky (2000, 2001), has recognized that certain probes leave arguments open to additionally satisfy a subsequent probe, while others appear to block their goal(s) from entering into further agreement relationships. An example of this is clitic doubling, where cliticization deactivates arguments for further agreement.

The literature on Infl agreement in Ojibwe, and Algonquian more generally, has oscillated over the past few decades on whether the agreement is an instance of clitic doubling or "pure" agreement (for recent takes, see Oxford, 2014, 2019; Bruening, 2019). One conspicuous piece of evidence in favor of a clitic doubling analysis is that the form of the morphology bears a resemblance to the strong pronouns—a common occurrence in languages with more clear-cut instances of cliticization (e.g. Kichean, see Preminger, 2014, p. 58). This can be shown to be the case in Ojibwe, as shown by the comparison in (52), noting that *w-* and *o-* are allomorphs.

(52) *Infl versus strong pronouns in Ojibwe*

	Infl_{IND}	Strong Pronoun
3SG	*o-*	*w-iin*
3PL	*o–waa*	*w-iina-waa*

This analogy works well in the limited case of the non-local only forms of agreement in the independent order, but becomes more difficult to maintain in the local-only and mixed alignments, where agreement often takes a portmanteau form (Oxford, 2019; Hammerly, 2020). Generally speaking it is not clear what sort of cliticization operation would allow for the formulation of portmanteau clitics, which combine the features of multiple arguments in a single form (for a related line of argumentation, see Deal, 2015). In contrast, a pure-agreement based account readily accommodates the realization of these forms by copying the sets of multiple goals to a single head.

That said, there is an additional commonality between clitic doubling and Infl agreement in Ojibwe, which could serve as the link to the deactiviation of arguments: Both show *full agreement*.

[10] Thanks to Amy Rose Deal for this insight.

That is, both Infl agreement in Ojibwe, and clitic doubling generally, express the full set of features of the goal. Note, this differs from the situation on both *v* and Voice, where respectively only noun classification and person/obviation is expressed. I therefore propose the following formulation of the Activity Condition:

(53) *The Activity Condition*
An agreement relation with a probe deactivates a goal G iff the probe expresses the full set of φ-features of G

I acknowledge that this formulation makes the *syntactic* activation of the goal dependent on its ultimate *morphophonological* form, which presents a derivational look-ahead problem. I assume that this could avoided with a more nuanced view of Copying than has been taken here, where all Copying has been assumed to be coarse (i.e. the complete set of features is Copied). If this is relaxed, then, for example, the Activity Condition could be formulated such that if and only if Copying is fully coarse, then the goal is deactivated. Anything less than the full set would not lead to deactiviation of the targeted argument. I leave the expansion of this idea to future work.

In the next section, I show that the deactivation of the proximate argument by Infl provides an explanation for the apparent hierarchy violating behavior of C agreement.

4.2.5 Agreement on C

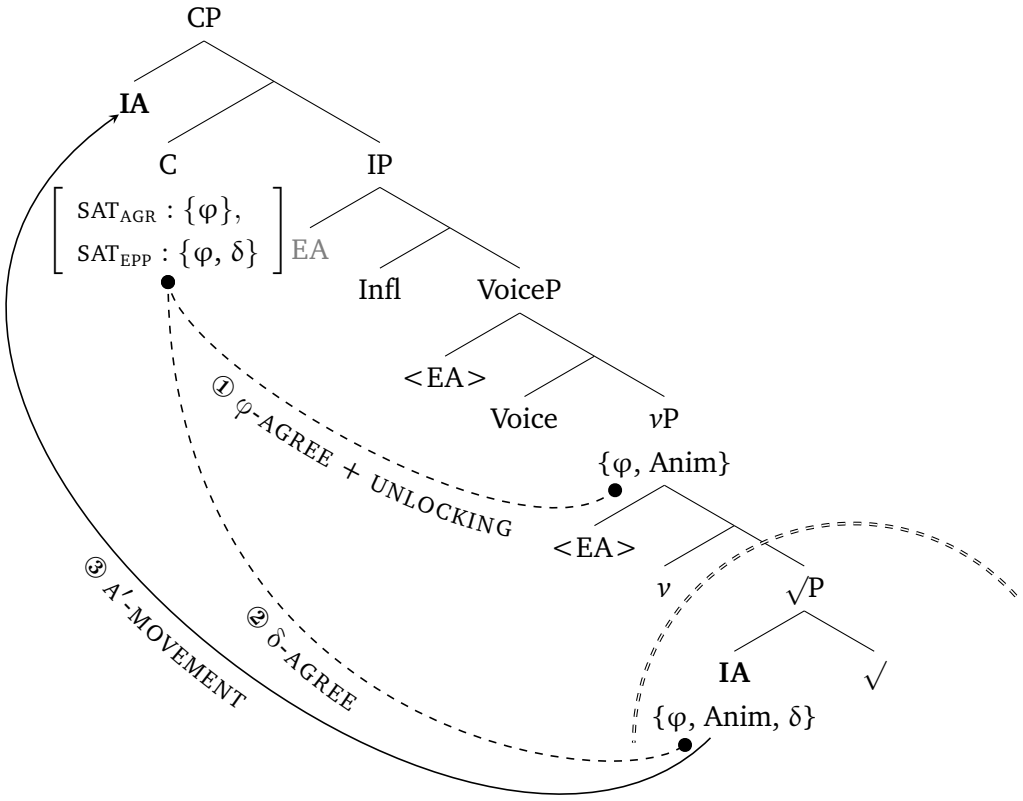
Agreement on C (peripheral agreement) shows a *reverse omnivorous* pattern, where the lower ranked obviative argument is always agreed with over the higher ranked proximate argument. The probe on C that can govern this pattern is specified in (54).

(54) $C = [SAT_{AGR}: \{\varphi\}, SAT_{EPP}: \{\varphi, \delta\}]$

The major addition to this probe is the discourse or A′-feature [δ] (see also Van Urk, 2015; Baier, 2018; Bossi and Diercks, 2019). This feature, which is optionally specified on arguments, is ultimately responsible for the optionality of VOS versus VSO word orders in Ojibwe.

I begin with a walkthrough of the direct alignments, schematized in (55). There are three basic steps: ① φ-agreement, ② δ-agreement, and ③ A′-movement.

(55) DIRECT *leads to unlocking + (optional) A′-movement of obviative IA*



The first step is φ-agreement with *v*P. Given that the EA has been deactivated by Infl, and the IA (at this point) is trapped within the complement of the phase defined by *v*, the closest active φ-bearing element is *v*P, which previously collected the φ-set of the obviative IA via agreement (see §4.2.1).[11] This step of the derivation always occurs, accounting for the invariance of the agreement morphology in these cases—there is no relationship between the word order alternations and the obviative agreement on C. This agreement alleviates the Phase Impenetrability Condition (PIC; Chomsky, 2000, 2001) on the *v*P phase via *unlocking* (Rackowski and Richards, 2005; Halpert, 2019; Branan, 2018). This allows the phase complement to be open for subsequent operations, most pertinently A′-extraction of the IA.[12]

Given that the probe on C has [φ] as an SAT$_{EPP}$ condition (which will be necessary to account for the inverse alignments, discussed below), there is a question of why the *v*P targeted by agreement does not move. I assume that the INT$_{EPP}$ conditions for this probe only drive movement of nominal XPs (i.e. XPs with the relevant nominal-defining features). This is analogous to what is assumed for Zulu by Halpert (2019), where CPs are not moved (infinitival TPs and nominals are optionally

[11] I assume that only the φ-features of the IA have been copied by agreement with *v*. This ensures the δ-features of the IA are not passed up to *v*P and are unavailable in the first round of probing.

[12] An alternative characterization that eschews an appeal to phases and the PIC would be to consider phi-bearing *v*P as an intervenor for the probe, creating an A-over-A configuration and blocking access to the IA (Chomsky, 1964; Halpert, 2012, 2015, 2019). This would additionally require that IP and VoiceP, which bear the φ-features of the proximate EA, be deactivated along with the EA itself so that they do *not* intervene.

moved) despite agreeing with a probe with an EPP feature (see §5.4 for further discussion). The *v*P, being part of the verbal spine, is not specified for such a feature, and therefore is not moved to this position. However, despite the lack of movement, the feature [φ] within the SAT_{EPP} conditions is still checked and deactivated since the goal contains that feature. As a result, further agreement relations are purely driven by the [δ] feature within the SAT_{EPP} conditions of the probe.

Moving forward, step ② is δ-agreement, which directly targets the obviative IA. This triggers A′-movement, shown in step ③. Given that δ-features are optional on DPs (Van Urk, 2015), these final two steps are, broadly speaking, optional. In derivations where the feature is present on the obviative argument, then the IA is attracted to Spec,CP and undergoes A′-movement, as shown in (55). In derivations where the IA lacks this feature, it remains in situ. Whether or not this A′-movement to Spec,CP occurs (i.e. whether the obviative IA has the relevant δ-feature) accounts for the optional VOS/VSO word order alternations in the direct alignments. Furthermore, given that the proximate argument has been deactivated by Infl, even if it had the relevant δ-feature, it could never be targeted by the δ-probe on C.

Given this analysis, different word orders should correspond to different scope relationships between an existential quantifier on the IA and negation. When the object undergoes movement, it should be able to take wide scope, as shown in (56a). In contrast, it should be interpreted with narrow scope when it remains in situ, as in (56b).

(56) *Moved object (VOS), ∃ » NEG predicted*
gaawiin ogii-waabamaasiin ikwewan$_{\text{OBJ}}$ gwiiwizens$_{\text{SUBJ}}$ [$_{\text{NegP}}$ NEG [$_{\text{VoiceP}}$ ... <DP$_{\text{OBJ}}$>]]

(57) *In situ object (VSO), NEG » ∃ predicted*
gaawiin ogii-waabamaasiin gwiiwizens$_{\text{SUBJ}}$ [$_{\text{NegP}}$ NEG [$_{\text{VoiceP}}$ ... ikwewan$_{\text{OBJ}}$]]

Both of these predictions are borne out, as shown in (58) and (59). In (58), where the indefinite object *bezhig gwiiwizensan* 'one boy (OBV)' is moved such that VOS is derived, the indefinite is necessarily interpreted outside of the scope of negation. On the other hand, in (59), when the indefinite object remains in situ, resulting in VSO word order, the indefinite is necessarily interpreted within the scope of negation.

(58) gaawiin o-gii-nageshkaw-aa-sii-n bezhig gwiiwizens-an Ziibiins
NEG.FOC 3-PAST-meet-DIR-NEG-OBV one boy-OBV Ziibiins.PROX
'Ziibiins (PROX) didn't meet one boy (OBV)'

a. *NEG » ∃: There is no boy x such that Ziibiins met x.
b. ∃ » NEG: There is a boy x such that Ziibiins did not meet x. VOS

(59) gaawiin o-gii-nageshkaw-aa-sii-n Ziibiins bezhig gwiiwizens-an
NEG.FOC 3-PAST-meet-DIR-NEG-OBV Ziibiins.PROX one boy-OBV
'Ziibiins (PROX) didn't meet one boy (OBV)'

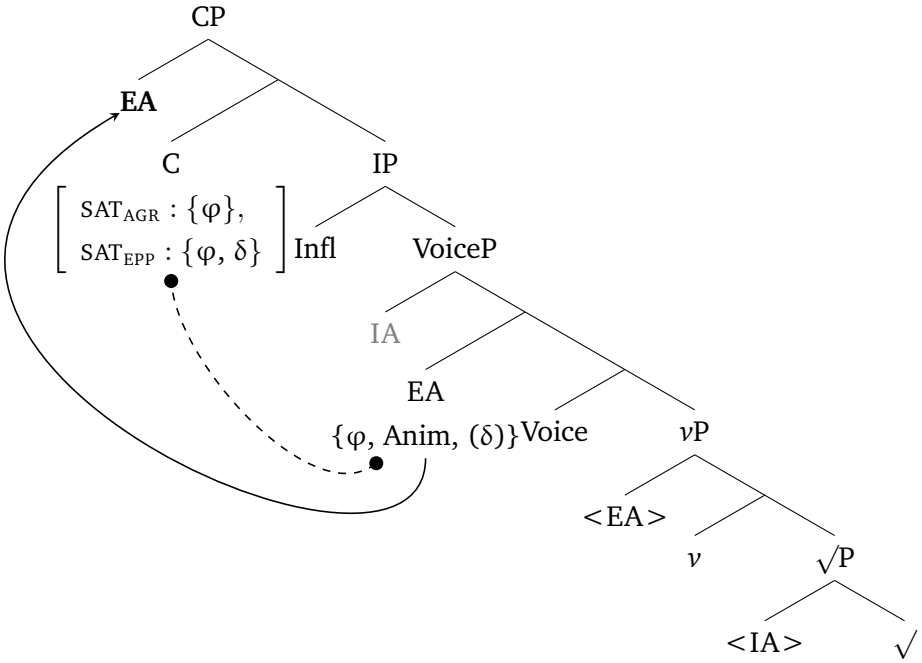
a. NEG » ∃: There is no boy x such that Ziibiins met x.
b. *∃ » NEG: There is a boy x such that Ziibiins did not meet x. VSO

Besides supporting the predictions of the analysis, these data provide evidence that the VOS/VSO alternation is not at all random or due to arbitrarily optional movement: the alternation is associated with interpretative effects that are only visible when scope is relevant. When there is no negation and two definite arguments—the cases that have been discussed in the literature—these effects are not clear, and thus the alternation appears random.

However, given that movement is ultimately the result of a δ-feature rather than a φ-feature, one may wonder why it is not possible to reconstruct and get a narrow scope reading in (59)—one of the hallmark properties of A′-movement is reconstruction. I propose that, in principle, the reconstructed interpretation is possible, but access to this interpretation is blocked by the availability of the in situ counterpart, which can *only* have the narrow scope reading. This is analogous to the situation with scalar implicatures, where, for example, the meaning of *some* in a sentence such as *some cats like boxes* results in the implicature that *not all cats like boxes*, because use of *all* provides an unambiguous way of expressing the meaning *all cats like boxes*. In the case of Ojibwe, the VSO word order unambiguously has a narrow scope interpretation, while VOS is associated with both narrow and wide scope readings. However, given that there is a more specific alternative to indicate narrow scope, the VOS order is only felicitous under the wide scope interpretation, appearing to block reconstruction.

The inverse alignment differs from the direct in that the remaining active argument is the external argument, and is therefore not trapped within the *v*P phase. As a result, the probe on C agrees with the EA directly, triggering A-movement based on the [φ] condition of the probe. This is schematized in (60).

(60) INVERSE *leads to φ-agreement and A-movement of obviative EA*



This movement is independent from the δ-feature on the probe. As a result, the EA moves in all possible derivations, with no optionality in the word order. This derives the rigid VSO word order characteristic of the inverse alignments.

Like the direct alignments, the scope facts support the analysis. As shown in (61), indefinite subjects take wide scope with respect to negation, as predicted by an analysis where they undergo A-movement to Spec,CP.

(61) gaawiin o-gii-nageshkaw-igoo-sii-n bezhig gwiiwizens-an Ziibiins
NEG.FOC 3-PAST-meet-INV-NEG-OBV one boy-OBV Ziibiins.PROX
'A boy (OBV) didn't meet Ziibiins (PROX)' VSO

a. ?NEG » ∃: There is no boy x such that x met Ziibiins.

b. ∃ » NEG: There is a boy x such that x did not meet Ziibiins.

In this case, the marginality of the narrow-scope reading again follows from the nature of A-movement, which is widely recognized to resist reconstruction.

4.2.6 Interim summary

This section linked VOS/VSO alternations in Ojibwe matrix clauses to interacting patterns of agreement and movement triggered by probes on *v*, Voice, Infl, and C. To summarize, the scope possibilities under different word orders, proximate/obviative status, and subject versus object indefinites are given in (62), with the proposed final landing site of the relevant argument indicated.

(62) *Summary of final landing site and scope judgments given alignment and word order*

Word Order	Align.	Indef. Arg.	Landing Site	NEG » ∃	∃ » NEG
VSO	DIR	Subject (PROX)	Spec,IP	✗	✓
VOS	DIR	Subject (PROX)	Spec,IP	✗	✓
VSO	INV	Object (PROX)	Spec,VoiceP	✗	✗
VSO	DIR	Object (OBV)	in situ	✓	✗
VOS	DIR	Object (OBV)	Spec,CP	✗	✓
VSO	INV	Subject (OBV)	Spec,CP	??	✓

5 EXTENSIONS AND COMPARISONS

The previous section outlined a general theory to capture the relationship between AGREE, feature copying, and movement, and applied it to a small corner of the patterns of agreement and word order in Border Lakes Ojibwe. They theory (i) extended the interaction/satisfaction model of Deal (2015, 2020) to allow for a *relativized EPP*, and (ii) pinpointed feeding/bleeding of agreement and movement with higher probes to a combination of the behavior of lower probes and the Activity Condition. In this section I explore how the system can be applied to capture patterns of agreement and word order in other corners of Border Lakes Ojibwe (§5.1), show how the analysis compares

to other accounts of agreement in related Algonquian languages and how it can capture variation within the family (§5.2), argue that previous non-configurational accounts from related Algonquian languages cannot capture the observed patterns in Border Lakes Ojibwe (§5.3), and finally form connections to Halpert's (2019) analysis of Zulu, where probing for the EPP outlives the need to probe for feature copying (§5.4)

5.1 Extensions within Border Lakes Ojibwe

5.1.1 Movement in ditransitive constructions

The current account can be shown to neatly capture the pattern of word orders observed in ditransitive constructions. Considering first ditransitive word orders in a direct agreement environment, we see that the only grammatical word orders are those in which the direct object (DO), *mishiimin-an*, which is marked obviative, is at the rightmost edge of the clause (63a-b).[13] However, like transitive verbs, ditransitives in direct environments show a word order alternation, with a preference for the indirect object (IO) to be right-adjacent to the verb (63a), but the alternation where the proximate subject is in this position is also possible (63b).[14]

(63) a. o-gii-asham-aa-n gwiiwizens-an ikwe mishiimin-an
3-PAST-feed-DIR-OBV boy-OBV woman.PROX apple-OBV
'The woman (PROX) fed the boy (OBV) an apple (OBV)' V IO S DO

b. ogii-asham-aa-n ikwe gwiiwizens-an mishiimin-an
3-PAST-feed-DIR-OBV woman.PROX boy-OBV apple-OBV
'The woman (PROX) fed the boy (OBV) an apple (OBV)' V S IO DO

c. *ogii-ashamaan mishiiminan gwiiwizensan ikwe *V DO IO S

d. *ogii-ashamaan mishiiminan ikwe gwiiwizensan *V DO S IO

e. *ogii-ashamaan gwiiwizensan mishiiminan ikwe *V DO IO S

f. *ogii-ashamaan ikwe mishiiminan gwiiwizensan *V S DO IO

The word order with ditransitives in inverse environments also reflect the same restrictions as their transitive counterparts. Only a single word order is available, where the obviative subject is right-adjacent to the verb. There are no alternations in these environments.

(64) a. o-gii-asham-igoo-n ikwe-wan gwiiwizens mishiimin-an
3-PAST-feed-INV-OBV woman-OBV boy.PROX apple-OBV
'The woman (OBV) fed the boy (PROX) an apple (OBV)' V S IO DO

b. *ogii-ashamigoon gwiiwizens ikwewan mishiiminan *V IO S DO

c. *ogii-ashamigoon mishiiminan gwiiwizens ikwewan *V DO IO S

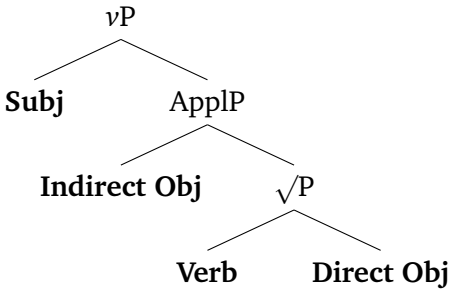
[13] In Border Lakes Ojibwe, the word for apple, *mishiimin*, is, perhaps counterintuitively, grammatically animate, and therefore participates in the obviative marking system.

[14] The word orders in (63)d and (63)f are technically grammatical, but receive the rather absurd interpretation of 'The woman fed the apple the boy'.

d. *ogii-ashamigoon mishiiminan ikwewan gwiiwizens *V DO S IO
e. *ogii-ashamigoon gwiiwizens mishiiminan ikwewan *V IO DO S
f. *ogii-ashamigoon ikwewan mishiiminan gwiiwizens *V S DO IO

I adopt the double object structure in (65) (following, e.g. Larson (1988) and Pylkkänen (2008)). For the current analysis, it is not crucial to establish whether the indirect object is high or low—what is crucial is for the indirect object to be higher than the direct object. This geometry will hold regardless of whether the ditransitives are high or low applicatives, in the sense of Pylkkänen (2008).

(65) *Distransitive structure*



In direct environments, where the subject is proximate and both the direct and indirect objects are obviative, the only licit word orders are V IO S DO and V S IO DO. This shows the same alternation to the transitive counterpart, but with potential movement of the indirect object rather than the direct. The structure with a moved IO is schematized in (66), deriving V IO S DO, and the base-generated is in (67), deriving V S IO DO.

(66) *The highest obviative argument can move:*
ogii-ashamaan gwiiwizensan$_{IO}$ ikwe$_{S}$ [$_{ApplP}$ <DP$_{IO}$> [$_{\sqrt{P}}$ mishiiminan$_{DO}$]]

(67) *Derivation with the IO and DO in situ:*
ogii-ashamaan ikwe$_{S}$ [$_{ApplP}$ gwiiwizensan$_{IO}$ [$_{\sqrt{P}}$ mishiiminan$_{DO}$]]

Why doesn't the obviative DO get targeted? An explanation can be found by appealing to Relativized Minimality (Rizzi, 1990). For the movement to target the obviative direct object, as shown in (68), it would have to skip over the obviative indirect object, violating Minimality.[15]

(68) *Minimality violation results in movement targeting the obviative DO:*
*ogii-ashamaan$_{V}$ mishiiminan$_{DO}$ ikwe$_{S}$ [$_{ApplP}$ gwiiwizensan$_{IO}$ [$_{\sqrt{P}}$ <DP$_{DO}$>]]

[15]This suggests that the δ-feature proposed in 4.2.5 that ultimately governs this optional movement cannot be specified on one obviative argument without also being specified on another. If these two arguments could be specified independently, we would expect it to be possible for the DO to be the closest matching goal for the δ-probe on C, and for the V DO S IO reading to be allowed. More work is needed to explore the nature of this assumption.

We can similarly derive the non-alternating V S IO DO word order in the inverse environments, where the subject and direct object are obviative, and the indirect object is proximate. As the subject is the highest obviative argument, it may undergo movement (however, there is no surface-level evidence for this movement, and at present the scope facts are unknown).

5.1.2 Agreement and movement in embedded clauses

With respect to agreement in the non-local only configurations, embedded clauses in Ojibwe (the "conjunct" order) is mostly similar to matrix clauses (the "independent" order): the direct/inverse alternation occurs in the same contexts, and Infl unformally indexes the person and number of the proximate argument. However, there are two major differences. First, there is a complete lack of C agreement, resulting in a lack of obviative agreement, and thus a lack of contrast (in agreement) with the singular and plural forms of the obviative. The second is Infl is realized only in the central agreement slot. The baseline form, with a singular proximate argument, is shown in (69). As expected, the direct and inverse alternation tracks with the alignment of proximate and obviative arguments, and the central agreement slot is realized as proximate agreement *-d*.

(69) a. waab -am -aa -∅ -d
see -ANIM -3 -SG -3
'...if s/he (PROX) sees him/her/them (OBV)' 3SG → 3′SG/PL

b. waab -am -igo -∅ -d
see -ANIM -INV -SG -3
'if she/he/they (OBV) see h/ (PROX)' 3′SG/PL → 3SG

Shifting the proximate argument from singular to plural results in the addition of a plural marker *-waa* to the central agreement slot in addition to the proximate marker *-d*, with all other slots being unaffected by this difference.

(70) a. waab -am -aa -waa -d
see -ANIM -3 -PL -3
'They (PROX) sees him/her/them (OBV)' 3PL → 3′SG/PL

b. waab -am -igo -waa -d
see -ANIM -INV -PL -3
'She/he/they (OBV) see them (PROX)' 3′SG/PL → 3PL

Embedded clauses differ in word order on two fronts, as seen in (71) and (72). First, the verb takes a medial position rather than an initial position. Second, only SVO is licensed in direct alignments, and only OVS is licensed in inverse alignments. In other words, word order always places the proximate argument before the obviative argument, the opposite of the preferences in matrix clauses.

(71) *Word order is proximate-before-obviative (SVO) in* DIRECT *embedded clauses*

a. in-gii-noondam ikwe gii-nagamotaw-aa-d abinoojiin-yan
1-PAST-hear woman PAST-sing-3-3 child-OBV
'I heard that the woman (PROX) sang to the child (OBV)' V [$S_{PROX}V_{DIR}O_{OBV}$]

b. *ingii-noondam abinoojiinyan gii-nagamotawaad ikwe *V [$O_{OBV}V_{DIR}S_{PROX}$]

(72) *Word order is proximate-before-obviative (OVS) in* INVERSE *embedded clauses*

a. in-gii-noondam abinoojiinh gii-nagamotaw-igo-d ikwe-wan
1-PAST-hear child PAST-sing-INV-3 woman-OBV
'I heard that the woman (OBV) sang to the child (PROX)' V [$O_{PROX}V_{INV}S_{OBV}$]

b. *ingii-noondam ikwewan gii-nagamotawigod abinoojiinh *V [$S_{OBV}V_{INV}O_{PROX}$]

These differences can be straightforwardly accounted for under the present analysis. First, as mentioned in §3.1.1, verb raising in Ojibwe embedded clauses terminates at Infl rather than C (Richards, 2004; Lochbihler and Mathieu, 2013). Second, the probe on Infl in embedded clauses can be further articulated such that SAT_{EPP} is specified up to {φ, Anim, Prox}, rather than {φ} alone (the SAT_{AGR} conditions of Infl remains identical to matrix clauses; Voice also remains the same for current purposes). This small change has the consequence of resolving the conflict for Best Match in the inverse alignments, where the EA and IA are in a multiple specifier configuration, and therefore equidistant from the probe. With these more particular SAT_{EPP} conditions, the proximate IA can outcompete the obviative EA. As a result, the proximate argument undergoes movement to Spec,IP in *both* direct and inverse alignments, rather than only in direct alignments, as was observed in matrix clauses. Given that the verb stops at Infl, the proximate argument always appears to the left of the verb. The final piece is that embedded clauses in Ojibwe lack peripheral agreement and the corresponding probe on C. Therefore obviative arguments remain within the VP, in a position to the right of the verb. This captures the patterns of agreement and word order in both direct and inverse alignments.

5.2 Cross-Algonquian extensions

5.2.1 Algonquin and Oxford (2019)

The account given in the current paper in some ways extends, and in other ways upturns, Oxford's (2019) analysis of the closely related Ojibwe dialect of Algonquin. Algonquin and Border Lakes Ojibwe show identical patterns of agreement, therefore a direct comparison between the accounts is immediately pertinent. I focus on the analysis of non-local only alignments only, as the current paper did not deal directly with the local only and mixed alignments (for an accounting of these additional alignments in Border Lakes Ojibwe, see Hammerly, 2020).

Oxford's analysis focuses solely on the behavior of Voice and Infl, with no analysis given for the probes on *v* and C. For Voice, the major difference, already discussed in some depth in §2.2.3, is that Oxford assumes the direct marker *-aa* is a general third person marker that indexes the features of the obviative object. By considering other cases with obviative objects in Ojibwe, where the more

specific obviative theme sign *-imaa* appears, I showed that such an analysis cannot be sustained: *-aa* is a proximate agreement marker, and Voice indexes the subject in direct alignments.

Recognizing *-aa* as a proximate subject marker has two main downstream effects for Oxford's analysis. First, It is not possible to maintain the assumption that EAs originate in the specifier of VoiceP while still retaining a downward-first model of AGREE. The move made here was to instead originate the EA in Spec,*v*P. Besides producing the correct geometry for the probe on Voice, this places the EA in the specifier of the head associated with the "verb final", which assigns the thematic roles of CAUSER and EXPERIENCER—the ones associated to the EA (see §2.2.2).

The second issue is with Oxford's analysis of the inverse marker *-igo(o)*. Like the current account, Oxford recognizes the inverse marker to be an elsewhere form of Voice. However, Oxford argues that inverse marking is triggered by an impoverishment operation which deletes the features of Voice just in case both Infl and Voice agree with the same argument, allowing this elsewhere form to emerge. The issue on the current analysis of *-aa* is that, in direct alignments, both Voice and Infl show agreement with the proximate argument. This erroneously predicts that impoverishment should be triggered, and the inverse form should appear. The current account, which ties the emergence of inverse marking to feature gluttony, derives the direct/inverse pattern on Voice without requiring any additional operations such as impoverishment and gets the patterns right.

The final relevant point of comparison is in the relationship of word order and agreement. The word order facts for Algonquin, to my knowledge, are unknown; but Border Lakes Ojibwe, where again the same agreement facts hold, can provide a test. Oxford's prediction that proximate arguments should precede obviative ones misses the mark for matrix clauses, where the opposite preferences hold. This is primarily due to the lack of consideration of C, which drives the (sometimes optional) movement of the obviative argument to the left of the proximate argument. Further issues stem from the fact that his account maintains that all instances of agreement are followed by movement. Given the optionality of VOS/VSO in direct alignments, and the evidence for a lack of movement of proximate objects to Spec,IP, this prediction is too strong. The proposed relativized EPP and the ban on Multiple Move provides the means for the proper parameterization of the relationship between agreement and movement.

5.2.2 Variation in peripheral agreement and the Activity Condition

Ojibwe peripheral agreement (C) showed what was termed here as *reverse omnivority*. However, as Oxford (2017) discusses, C agreement across Algonquian languages shows variation. There are three possible patterns, summarized in (73), noting that C agreement *never* appears when there are only local arguments in the clause (but does appear with mixed configurations).

(73) *Variation in C agreement with transitive clauses*

a. Ojibwe: index lowest ranked argument

b. Blackfoot: index highest ranked argument

c. Delaware: index lowest ranked argument if definite, otherwise index higher ranked argument

In the current paper, C was a bellwether for how agreement, movement, and deactivation occurs with lower probes in the clause, so this variation should be associated with wider differences in probes on Infl, Voice, and *v*. Here I give a cursory look at the behavior of C in Delaware and Blackfoot, and show that the key generalizations from the analysis hold (to the extent that there are data available to test them).

Peripheral agreement in Delaware shows sensitivity not only to the Person-Animacy Hierarchy, but also to definiteness. While an uncommon pattern within Algonquian, definiteness commonly forms part of the scale used describe other hierarchy-sensitive phenomena such as Differential Object Marking (DOM). In a recent analysis, Coon and Preminger (2017) argue that DOM is regulated by the presence/absence of *Object Shift* (Holmberg, 1986), where the IA moves from its base position to a projection immediately dominating *v*P. Only IAs that are definite, specific, or with certain person features undergo this movement, and the relevant features can differ across languages. The connection I propose is that the movement of the proximate IA to Voice in inverse alignments from §4.2.2 could be readily framed as a case of Object Shift. This raises the possibility, which is largely left to future work, that the behavior of Voice across Algonquian can be more generally tied together with what is known about DOM. In turn, these possibilities on Voice can feed and bleed what occurs with the higher probes on Infl and C.

Turning to the patterns, cases where the obviative argument is definite in Delaware, shown in (74), are cognates to matrix clauses in Ojibwe. When proximate is acting on obviative as in (74a), Voice appears in a direct form (*-a·*), Infl appears discontinuously and indexes the plural proximate subject (*w- -wa·w*), and C agrees with the lower ranked obviative object (*-al*). When obviative is acting on proximate as in (74b), Voice appears in the inverse form (*-əkw*), while Infl and C continue to agree omnivorously with the proximate object and obviative subject, respectively.

(74) *Delaware C agreement indexes lower ranked argument when it is definite (Goddard, 1969)*

a. w- mi·l -a· -wa·w -al
3- give -DIR -PL -3′
'They (PROX) give to DEF.OBV' 3PL → 3′.DEF

b. w- mi·l -əkw -wa·w -al
3- give -INV -PL -3′
'DEF.OBV gives to them (PROX)' 3′.DEF → 3PL

When the lower ranked obviative argument is indefinite, as in the examples in (75), the patterns change in all three slots. The direct maker in (75a) takes the form *-e·* (the inverse marker remains the same in (75b)), central agreement *-w* only indexes the person of the proximate argument and no person prefix appears, and the peripheral agreement marker *-ak* indexes the person and number of the higher ranked proximate argument.

(75) *Delaware C agreement indexes higher ranked argument elsewhere (Goddard, 1969)*

a. lo·sw -e· -w -ak
burn -DIR -3 -3PL
'They (PROX) burn INDEF.OBV' 3PL → 3′.INDEF

b. lo·sw -əkw -w -ak
burn -INV -3 -3PL
'INDEF.OBV burn them (PROX)' 3′.INDEF → 3PL

Again, a full accounting of the effects of definiteness in Delaware goes beyond the scope of this paper. However, I note that the formulation of the Activity Condition given in §4.2.4, which is the main regulator of what is available for peripheral agreement, is in line with the surface patterns. In the examples in (74), Infl showed *full agreement* with the person and number of the proximate argument, deactivating it for further agreement, leaving the subsequent probe on C to target the lower ranked obviative argument. In contrast, Infl in (75) shows only partial agreement with the proximate argument (number is lacking), leaving it active for the probe on C. I take this as a sign that the current account has a priori plausibility for Delaware.

Turning now to Blackfoot, Bliss (2005a, 2013) shows that the peripheral agreement slot shows the opposite of what is seen in Ojibwe by always agreeing with the higher ranked proximate argument (I set aside the patterns on Voice and Infl in the interest of streamlining the discussion).

(76) *Blackfoot peripheral agreement (Bliss, 2005a, p. 103–4)*

a. Ama nínaa-w íístini-m-**a** ani í'ksisako-yi
DEM.PROX man-PROX cut-DIR-**3** DEM.OBV meat-OBV
'The man cut the meat'

b. Oma aakííkoan-a ot-áákomimm-ok-**a** omi sááhkomaapi-i
DEM.PROX girl-PROX 3′-love-INV-**3** DEM.OBV boy-OBV
'The boy loves the girl' or 'the girl is loved by the boy'

Here, the available data provide an opportunity to see that this difference in agreement correlates with a difference in word order: in both the DIRECT (77) and INVERSE (78) alignments, the word order is proximate-before-obviative.

(77) *Blackfoot* DIRECT *alignment shows proximate before obviative (Bliss, 2005a, p. 103)*

a. Ama nínaa-w íístini-m-a ani í'ksisako-yi
DEM.PROX man-PROX cut-DIR-3 DEM.OBV meat-OBV
'The man cut the meat' $S_{PROX}V_{DIR}O_{OBV}$

b. *Ani í'ksisako-yi íístini-m-a ama nínaa-wa
DEM.OBV meat-OBV cut-DIR-3 DEM.PROX man-PROX
intended: 'The man cut the meat' or 'The meat was cut by the man' *$O_{OBV}V_{DIR}S_{PROX}$

(78) *Blackfoot* INVERSE *alignment shows proximate before obviative (Bliss, 2005a, p. 104)*

a. Oma aakííkoan-a ot-áákomimm-ok-a omi sááhkomaapi-i
DEM.PROX girl-PROX 3′-love-INV-3 DEM.OBV boy-OBV

'The boy loves the girl' or 'the girl is loved by the boy' $O_{PROX}V_{INV}S_{OBV}$

b. *Mi sáahkomaapi-i ot-áákomimm-ok-a Oma aakííkoan-a
DEM.OBV boy-OBV 3′-love-INV-3 DEM.PROX girl-PROX
intended: 'The boy loves the girl' or 'the girl is loved by the boy' $*S_{OBV}V_{INV}O_{PROX}$

These data dovetail with what was seen in §5.1.2 with embedded clauses in Border Lakes Ojibwe: when peripheral agreement does not agree with the lower ranked obviative argument, either by not being present (as in Ojibwe embedded clauses) or by instead agreeing with the proximate argument (as in Blackfoot) word order generalizations reverse.

While the details remain to be worked out, the account for Ojibwe advanced in this paper can be immediately brought to bear on the variation seen in peripheral agreement within Ojibwe and across Algonquian. In particular, changes in peripheral agreement lead to expected variation in word order, as seen in Ojibwe embedded clauses and Blackfoot matrix clauses, and the connection between full agreement and deactivation on Infl is extendable to other languages, namely, Delaware. Future work should aim to explore these promising extensions in more depth.

5.3 Against a non-configurational analysis

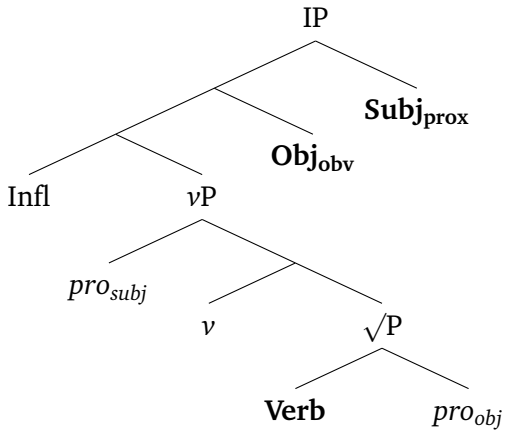
As discussed in the introduction, one of the leading analyses of word order and argument structure across Algonquian languages has been based in non-configurationality. In this section I discuss these proposals and provide evidence against them.

Ojibwe (along with nearly all Algonquian languages) descriptively displays the hallmarks of non-configurationality proposed by Hale (1983): *pro*- and argument-drop, apparently free word order, and discontinuous DPs (Grafstein, 1984). Two major accounts based in non-configurationality have been proposed as a result (terminology adopted from Hamilton, 2015): (i) Pronominal Argument Hypothesis (PAH) accounts, where A-positions are associated with φ-feature indexing affixes sitting in a flat-structure, and (ii) Hybrid accounts, where A-positions are associated with *pro* in a canonical asymmetrical configuration where the subject c-commands the object. In both cases, overt DPs are adjuncts sitting in TP/IP, which are associated with the elements occupying the A-positions via coindexation.

The most directly relevant account is Junker (2004), who gives a Hybrid account of word order in East Cree. Junker shows that East Cree has the same fundamental word order patterns as those presented here for Border Lakes Ojibwe: VOS is preferred in direct environments, while VSO is preferred in inverse. The structure for VOS direct is shown in (79), which is derived via the direct align constraint of Aissen (1997) combined with an obviation-based hierarchy and phrase structure hierarchy. These hierarchies align to ensure that proximate DPs are in a higher position in the phrase structure than obviative DPs. When both DPs are linearized to the right, VOS is derived.[16]

[16]These constraints also derive SVO, OVS, and SOV word orders. These additional word orders result in a focus interpretation of the left-most DP, given that the DP is to the left of the verb. Therefore the VOS word order is derived as neutral, as it is the only word order derived from these constraints that does not lead to a focus interpretation of one of the DPs. To derive VSO, a third constraint based in linear order that prefers higher nodes to precede lower nodes is

(79) *Derivation of VOS in direct environments based on Junker (2004)*



Immediate evidence against the analysis in (79) comes from data that has already been extensively discussed: scope of the overt arguments of the verb with respect to negation. The central thrust of the non-configurational analysis is that DPs are generated as adjuncts within IP, and do not undergo syntactic movement to arrive at their position. Instead, they are fed to linearization constraints that have no effect on the c-command/scope relations between the overt arguments of the verb and negation. This is particularly relevant in the contrast between VOS and VSO in direct environments: there is no way beyond stipulation to capture the wide versus narrow scope readings that respectively arise in these two word orders.

A further issue for non-configurational accounts arises upon consideration of the ditransitive constructions in (63) and (64). The V IO S DO direct case is repeated for reference in (80).

(80) *Only one obviative argument is "licensed" by the verbal morphology in ditransitives:*

o-gii-asham-aa-n gwiiwizens-an ikwe mishiimin-an
3-PAST-feed-DIR-OBV boy-OBV woman.PROX apple-OBV
'The woman (PROX) fed the boy (OBV) an apple (OBV)' V IO S DO

Non-configurational languages are subject to the Morphological Visibility Condition (MVC; Baker, 1996, p. 17), which requires each argument to be licensed by a pronominal element or morpheme in the verb. However, as shown in (80), only one of the obviative arguments is indexed by the verbal morphology (which is identical to the morphology seen with transitive verbs), leaving the other to violate the MVC. The fact that Ojibwe does not obey the MVC is a mark against adopting a non-configurational analysis.

While a non-configurational analysis of Ojibwe is untenable based on the reasoning presented above, I am not able to claim that all Algonquian languages are configurational. Furthermore, even Algonquian languages that are provably configurational, such as Mi'gmaq and Ojibwe, have

applied. Obeying this constraint leads to the violation of the phrase structure hierarchy. This violation is tolerated, but not preferred, deriving the preference for VOS over VSO. For the purposes of this paper I set these cases aside to retain focus on the VOS word order.

the surface appearance of non-configurationality. As Hamilton (2015) suggests, examining the role of discourse-based configurationality (Miyagawa, 2010, 2017) is an important avenue for future research; the current paper has taken an initial step in that direction for Ojibwe by examining the effects of the A′ probe on C.

5.4 Zulu hyper-raising and the relativized EPP

The final extension I consider brings us outside of Algonquian, returning to Halpert's (2019) analysis of hyper-raising in Zulu alluded to in §4.1.2. Halpert's analysis covers an array of raising patterns in Zulu and beyond. The key case for current purposes is given in (81), where raising (optionally) occurs out of embedded CPs. In the non-raising counterpart (81a), matrix T (in bold) shows class 17 agreement, which is associated with the features of the embedded CP as a whole. When the embedded subject raises (81b), matrix T agreement (again in bold) can alternate with either class 1 (agreement with the raised argument) or class 17.

(81) *Raising in Zulu is optional out of CP complements (Halpert, 2019, p. 142)*

a. **ku-**bonakala [ukuthi uZinhle u-zo-xova ujeqe] 'It seems that Zinhle will
17S-seem that AUG.1Zinhle 1S-FUT-make AUG.1bread
make steamed bread.'

b. uZinhle **u-/ku-**bonakala [ukuthi u-xova ujeqe] 'Zinhle seems to be mak-
AUG.1Zinhle **1s-/17s-**seem that 1S-make AUG.1bread
ing steamed bread now.'

The critical cases are those where raising occurs. Halpert accounts for this in two steps. First, φ-agreement between matrix T and the finite CP clause, which bears class 17 features, but is unable to move to satisfy the EPP. With the EPP left unsatisfied following this first agreement relation, the probe searches for the next closest goal, in this case the subject of the embedded verb, triggering copying of the class 1 feature and movement to the specifier of matrix TP.

Halpert notes that this analysis raises a critical question: How is it possible for the probe on matrix T, which has been (presumably) satisfied by φ-agreement with the CP, to continue probing? Halpert's solution, utilizing the original interaction/satisfaction model of Deal (2015), is to add an EPP feature into the satisfaction conditions of the probe. This is an independent feature that must be satisfied by movement of the right type of XP (in the case of Zulu, infinitival TP or a nominal, but crucially not a CP) to the specifier of the probe. So while agreement with CP checks a subset of the satisfaction conditions, it leaves the EPP unchecked. This allows the probe to continue its search, finding and moving the embedded subject, in the interest of satisfying the EPP.

The system proposed here takes things yet another step further by treating the EPP as an independent set of interaction/satisfaction conditions rather than a feature within a more general set of satisfaction conditions. The additional advantage over Halpert's formulation is that this provides a way of formalizing variation in what elements can be moved by the EPP, and further makes the interaction conditions for copying versus movement independently specifiable. For Zulu, this pro-

vides the means to encode the fact that infinitival TPs and nominals are driven to move, but CPs are not. In turn, the features of CPs can be copied back without precipitating movement to the specifier of the probe.

Putting the pieces together in the new system, we can (semi-informally) specify the probe on matrix T that regulates hyper-raising in Zulu as follows:

(82) INT_{AGR}: If the set of the goal contains φ, then the set is copied
SAT_{AGR}: Satisfied when a set containing φ has been found
INT_{EPP}: If the goal is a nominal or infinitival TP, then it is moved
SAT_{EPP}: Satisfied when a nominal or infinitival TP has been found

The SAT_{AGR} conditions on matrix T are checked by agreement with an embedded CP, which bears a class 17 feature. However, CPs do not meet the INT_{EPP} or SAT_{EPP} conditions, so do not move or satisfy those conditions. This precipitates a second round of probing based on the EPP conditions alone, where the embedded subject is found. As a nominal, it meets the INT_{EPP} conditions and is moved, while also checking the SAT_{EPP} conditions. Finally, even though the SAT_{AGR} conditions have been checked (so the probe is not being "driven by" feature copying), the INT_{AGR} conditions are still met, so copying occurs anyway. This results in optional spell-out of class 17 (agreement with CP) versus class 1 (agreement with the embedded subject) when hyper-raising occurs.

A final relevant comparison is the proposal of Carstens (2005), from which Halpert (2019) takes inspiration. To reprise the description from §4.1.2, Carstens proposes that the EPP can be a sub-feature of *u*F features (for present purposes, satisfaction conditions; i.e. $u\text{F}_{\text{EPP}}$ can be re-written as SAT_{AGR}: F_{EPP}). This makes the prediction that all probing is driven by the need to meet conditions on feature copying; so once these conditions are met (i.e. the proper feature within the satisfaction conditions is checked) this should have the downstream effect of deactivating the EPP sub-feature as well. This links feature copying and movement on a one-way street: The search for a matching XP is driven by *u*F features; if a given *u*F feature has an EPP sub-property, then the goal is moved to the specifier of the probe in addition to its features being copied. Once the *u*F features have been checked, probing stops.

There are two immediate issues with this formulation. First, in languages where *u*F features have an EPP sub-property (e.g. Bantu languages), all instances of feature copying should lead to movement. This over-generates: in Zulu, the features of CP are copied, but the CP is not moved. Second, short of additional machinery, movement is motivated by unchecked *u*F features with an EPP sub-property (or unchecked satisfaction conditions with EPP sub-properties). This time, the problem is under-generation: in Zulu, the probe continues to search for an XP to move to its specifier even after the relevant *u*F features has been checked by agreement with CP.

6 Conclusion

This paper set out to establish the basic facts of Ojibwe clausal syntax, and to provide an analysis of these facts. The VOS/VSO alternation, which was described in terms of its relation to direct and inverse argument alignments, was argued to be the function of (i) movement of the verb to C, and (ii) optional movement of obviative arguments to the Spec,#P. In direct alignments, the object can undergo movement deriving VOS word order, or stay in situ deriving VSO. This movement was shown to have semantic effects in the relationship between indefinite objects and negation, and was regulated by the presence or absence of a δ-feature on the DP. A-movement of obviative subjects in inverse alignments was shown to be invariant, leading to rigid VSO. In addition to obviative movement, the scope facts supported an analysis where proximate subjects in direct alignments move to Spec,IP, while restrictions on A-movement out of multiple specifier configurations led proximate objects in inverse alignments to remain within the VP.

There were two main theoretical innovations proposed and supported over the course of the analysis. First, the *relativized EPP*. This was formalized as a condition on probes by extending the interaction/satisfaction model of Deal (2015, 2020) to include EPP conditions. When a goal matches the INT_{EPP} conditions of the probe, this triggers movement of the goal to the specifier of the probe. Like the satisfaction conditions that govern feature copying, EPP conditions were shown to be violable and subject to different degrees of articulation, accounting for the intricate relationship between agreement and movement within and across languages.

The second major claim was a formulation of the Activity Condition to deactivate arguments only when *full agreement* is realized. This was operationalized through morphophonological expression: when the full set of φ-features of a goal is expressed by a probe, that goal becomes unavailable for further agreement relations. This was used to explain the curious pattern of *reverse omnivority* with Ojibwe C agreement, and was shown to extend to the known range of patterns of C agreement across Algonquian languages.

The proposal is a particularly marked shift away from non-configurational accounts, contributing to the growing body of work uncovering the agreement and discourse factors that lead to the appearance of non-configurationality. The surfacing of evidence that word order is derived via syntactic movement of the arguments furthers our knowledge of how the Ojibwe clause is organized. These findings have broad impacts on our understanding of agreement and movement, and find a place in the wider typology of how VOS/VSO alternations can be derived in languages of the world.

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