

Linking Agreement and Movement: A Case Study of Long-Distance Agreement in Border Lakes Ojibwe

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This article argues for an extension of current models of Agree to capture relativized EPP effects, where a probe for movement targets an element with a specific set of features. We support the proposal through a case study of long-distance agreement (LDA) in the Border Lakes dialect of Ojibwe (Central Algonquian), where the patterns of LDA depend on the particular combination of person/animate features of the embedded arguments. This can be captured by the feeding and bleeding relationships between agreement and movement probes on Voice, Infl, and C.

Keywords: long-distance agreement, EPP, movement, relativized probes, Ojibwe, Algonquian

One foundational finding is that probes can be *relativized* (e.g., Rizzi 1990) to seek out only goals with a particular feature. While probes generally show agreement with the structurally closest goal, there are cases of so-called *omnivorous probing* (Nevins 2011, Preminger 2014) where a probe skips over a goal that lacks some particular feature in favor of agreement with a more distant goal that *does* bear the relevant feature. One recent formalization of these effects within the domain of agreement is the *interaction/satisfaction* model of Deal (2015, 2024), where probes are specified for two sets of conditions: (a) interaction conditions, which regulate what types of goals a probe can copy features from (and, therefore, which ones it will skip); (b) satisfaction conditions, which regulate when a probe will halt its search for a goal. In this article, we argue that this approach to probe relativization in agreement can be generalized to regulate movement, deriving a *relativized EPP* (Hammerly 2021, to appear b). Within the movement domain, interaction conditions regulate which types of goal will move to a specifier position of a probe, while satisfaction conditions regulate when a movement probe will halt its search. We provide empirical justification through a case study of long-distance agreement (LDA) in the Border Lakes dialect of Ojibwe (Central Algonquian).

LDA, which is characterized by an agreement relation between a matrix verb and an argument of its sentential complement, has raised considerable interest in recent years (see Bruening 2001 for Passamaquoddy, Polinsky and Potsdam 2001 for Tsez, Branigan and MacKenzie 2002 for Innu-aimûn, Boeckx 2004 and Bhatt 2005 for Hindi, Bobaljik and Wurmbrand 2005 for Itelmen, Etxepare 2006 for (substandard) Basque, Bliss 2008 for Blackfoot, Hamilton and Fry 2016 for Mi'gmaq and Ojibwe, Lochbihler and Mathieu 2016 for Ojibwe). LDA is particularly interesting

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from a syntactic perspective, because while core cases of agreement are taken to be local, applying between elements belonging to the same clause (Chomsky 2000, 2001), LDA instead involves a relation that appears to cross a clausal boundary.

As illustration, consider the examples in (1) from Border Lakes Ojibwe.¹ In (1a), there is no agreement between the matrix verb and the third person embedded subject—the matrix verb appears in the animate intransitive (AI) form, where the verb only agrees with the first person matrix subject. In contrast, (1b) is an example of LDA where the matrix verb, now in the transitive animate (TA) form, agrees with the third person embedded subject (LDA-related morphemes shown in boldface).

- (1) a. nin-gikendam mindido-d mooz
 1-know.AI big-3 moose
 ‘I know that the moose is big.’
 b. nin-gikenim-**aa** mindido-d mooz
 1-know.TA-**3** big-3 moose
 ‘I know that the moose is big.’
 (NJ 11.07.19)

Algonquian languages differ in which arguments within the embedded clause can be targeted for LDA in the matrix clause (e.g., Dahlstrom 1995). There are three basic patterns (Hamilton and Fry 2016). Some languages show *free LDA*, where either of the embedded arguments can be targeted. This pattern is characteristic of Algonquin (Lochbihler and Mathieu 2016), nonsubordinate clauses in Passamaquoddy (Bruening 2001, LeSourd 2010, 2019, Grishin 2022, 2024), and Innu-aimûn (Branigan and MacKenzie 2002). Other languages such as Plains Cree (Dahlstrom 1991) show *agent LDA*, where only the external argument or agent can be targeted. Finally, there are languages such as Mi'gmaq (Hamilton 2015, Hamilton and Fry 2016) that show *highest-ranked LDA*, where only the argument that is most prominent on the person-animacy hierarchy can be targeted, regardless of its argument position.

We follow existing work on Algonquian (e.g., Hamilton and Fry 2016) by arguing that LDA in the matrix clause can target whatever argument of the embedded clause has been moved to Spec,CP. Therefore, the core question becomes how to arrange the syntax of the embedded clause to move the argument targeted by the matrix clause to this position. As a result, this article focuses on agreement and movement in Border Lakes Ojibwe embedded clauses, with the patterns of LDA in the matrix clause serving as an indicator for the arrangement of the lower clause's syntax—in particular, which argument ends up in Spec,CP. Agreement in the matrix clause proceeds as usual, as if the argument targeted for LDA were a base-generated internal argument of the matrix verb. See Hammerly 2021, to appear b and Oxford 2019, 2023 for recent accounts of agreement and movement in the matrix clause in Ojibwe and Algonquian more generally, and

¹ Ojibwe has many dialects: Saulteaux, Chippewa, Oji-Cree, Odawa, Eastern Ojibwe, and so on (Valentine 2001). This article focuses on Border Lakes Ojibwe, a variant of Ojibwe spoken in northwestern Ontario and parts of northern Minnesota (the speakers consulted are from northwestern Ontario near Fort Frances).

Hammerly and Mathieu to appear for an account that specifically links matrix clause agreement to the evidential properties of LDA in Border Lakes Ojibwe.

While our account captures the full range of LDA with different combinations of arguments in the embedded clause, the key pattern is that of the *mixed* configurations, where one argument is a local person and the other a third person. Here, a crucial asymmetry arises that most strongly motivates the need for a relativized EPP. With $1/2 \rightarrow 3$, LDA appears only with the external argument, a pattern best described as agent LDA. In contrast, with $3 \rightarrow 1/2$, LDA can appear with either argument, resulting in free LDA. We capture this by proposing a relativized EPP feature on Voice that moves first and second person internal arguments (resulting in the free LDA pattern with $3 \rightarrow 1/2$), but not third person internal arguments (resulting in the agent LDA pattern with $1/2 \rightarrow 3$). The account reveals an intricate pattern of feeding/bleeding of movement to Spec,CP in Border Lakes Ojibwe via agreement and movement with the probes on Infl and Voice, while also having the potential to capture the wider typology of LDA in Algonquian.

1 Background

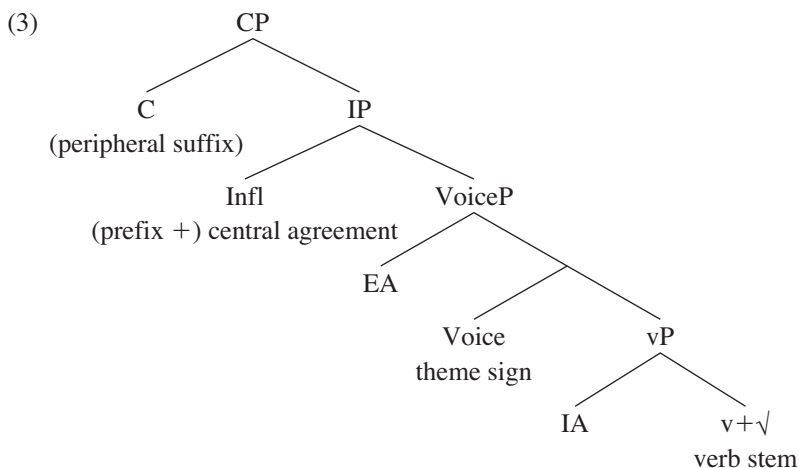
Algonquian languages—Ojibwe included—have two major types of inflectional paradigms known as the *independent* and *conjunct* orders. To a first approximation, the independent order appears in declarative matrix clauses, while the conjunct order appears with embedded clauses, questions, participles, and focus constructions (Bloomfield 1957, Brittain 2000, Cook 2008). While the paradigms share certain morphology, they also exhibit a number of key differences. Consider the two forms in (2).

- (2) a. *Independent*
o-waabam-aa-waa-n
3-see.TA-3-PL-3'
'They (PROX.PL) see them (OBV.SG).'
- b. *Conjunct*
waabam-aa-waad
see.TA-3-3PL
'... they (PROX.PL) see them (OBV.SG).'

In the independent order (2a), there are four pieces of agreement morphology known as the person prefix (*o-*), the theme sign (*-aa*), the central agreement marker (*-waa*), and the peripheral suffix (*-n*). In the conjunct order, only two markers appear: the theme sign (*-aa*) and the central agreement marker (*-waad*).

The current literature on Algonquian agreement, especially following work by Oxford (2014, 2019), has converged on an analysis of how these pieces of morphology correspond to positions within a phrase marker. These correspondences are schematized in (3), where the theme sign is recognized as the realization of Voice, the person prefix and central agreement together are recognized as the realization of Infl, and the peripheral suffix is recognized as the realization of C. Broadly, the lack of person prefix and peripheral suffix in the conjunct order is attributed to clause-typing differences. The tree also shows our assumptions regarding argument positions

within the VP: the external argument (EA) or agent is merged as specifier to VoiceP, while the internal argument (IA) or patient is merged as specifier to v. Finally, the verb stem consists of the root ($\sqrt{\text{ }}$) and the verbalizing head v; this is discussed further below.



Another key aspect of the morphosyntax of the Ojibwe verb is the system of *direct/inverse* voice. Consider the two examples in (4), which show the state of affairs in the conjunct order. The two sentences encode the same basic thematic relation between the arguments and the verb, but otherwise differ on three critical dimensions: (a) whether the agent (4a) or patient (4b) is encoded as proximate; (b) whether the theme sign appears as the so-called “direct” marker as in (4a) *-aa*; or as the “inverse” marker *-igo* as in (4b); and (c) whether the proximate agent (4a) or the proximate patient (4b) occupies the verb-initial position. As shown below, our consultants generally translate the direct voice as an active sentence in English, while the inverse voice is commonly translated as a passive.

(4) a. *Direct*

ikwe gii-miigwechiwi'-aa-d ininiw-an
 woman.PROX PAST-thank.TA-3-3 man-OBV
 ‘... the woman (PROX) thanked the man (OBV).’

b. *Inverse*

inini gii-miigwechiwi'-igo-d ikwew-an
 man.PROX PAST-thank.TA-INV-3 woman-OBV
 ‘... the man (PROX) was thanked by the woman (OBV).’

Conjunct order verbs in Border Lakes Ojibwe only show inverse morphology when obviative is acting on proximate, as in (4b). All other cases (local acting on local, local acting on proximate, proximate acting on local, and, as seen directly above, proximate acting on obviative) appear with some form of “direct” morphology. In the conjunct order, the direct forms of voice, without exception, index the person features of the internal argument, as exemplified above with the third

person form *-aa* in (4a). When the internal argument is first person, the direct marker surfaces as *-i*, and when the internal argument is second person, it surfaces as *-in*.

Finally, the paradigms of agreement and verbal morphology are commonly split four ways depending on the transitivity and the animacy of arguments (e.g., Bloomfield 1957): there are TAs (*transitive animate*; a transitive verb with an animate internal argument), TIs (*transitive inanimate*; a transitive verb with an inanimate internal argument), AIs (*animate intransitive*; an intransitive verb with an animate argument), and IIs (*inanimate intransitive*; an intransitive verb with an inanimate argument). These are characterized by differences in a morpheme known as the *verb final*, which is recognized as the realization of the verbal categorizing head *v* (Brittain 2003). The key contrast in this article will be between the TA and TI classes. The examples in (5) show the same root *waab* taking a TA final such as *-am* in (5a) or a TI final such as *-and* as in (5b). Throughout (except in (5)), we will gloss the root and final together as the verb stem.

- (5) a. TA
 ni-waab-am-aa
 1-see-TA-3
 ‘I see them (PROX.SG).’
 b. TI
 ni-waab-and-aan
 1-see-TI-0
 ‘I see it (INAN.SG).’

2 Long-Distance Agreement

2.1 Overview

Border Lakes Ojibwe shows long-distance agreement: it is possible in Ojibwe for a verb in a higher clause to agree with an argument originating in an embedded clause. This type of agreement is broadly optional, yet it is a productive feature of Ojibwe grammar. The sentence in (6a) is a non-LDA construction with the matrix verb of perception *waaband* ‘see’ in the TI form that takes a finite clausal complement (agreement is with the first person subject), while (6b) exhibits not only agreement of the first person subject, but also LDA of the embedded subject ‘Tom’ with the matrix verb *waabam* ‘see’ in the TA form.² This agreement is expressed in the theme sign, which appears in the animate third person form *-aa* (boldfaced). Note also that the agreement and word order in the embedded clause remain unchanged whether or not LDA occurs in the matrix clause. Generally speaking, LDA in Ojibwe appears to be related to evidentiality—specifically, whether the source of information is direct or indirect (Hammerly and Mathieu to appear).

² While we primarily exemplify LDA with the verb *waabam* ‘see’, we have also examined these patterns with the following matrix verbs: *noondam* ‘hear’, *gikendam* ‘know’, *andawendam* ‘want’, *minjimendam* ‘remember’, and *inendam* ‘think’. For additional details, see Hammerly and Mathieu to appear.

- (6) a. in-gii-waaband-aan [_{CP} Tom gii-pashkizw-aa-d adikw-an]
 1-PAST-see.TI-0 Tom.PROX PAST-shoot-3-3 caribou-OBV
 ‘I saw that Tom shot the caribou.’
- b. in-gii-waabam-aa [_{CP} Tom gii-pashkizw-aa-d adikw-an]
 1-PAST-see.TA-3 Tom.PROX PAST-shoot-3-3 caribou-OBV
 ‘I saw that Tom shot the caribou.’

Since the verbs that allow LDA or exceptional case-marking (ECM) are similar in type (‘I saw him leave’, ‘I heard her come in’, ‘I know him to be busy’), it is tempting to analyze LDA in Ojibwe as a case of ECM. However, there are several arguments against this (see also Branigan and MacKenzie 2002 for Innu-aimûn and Lochbihler and Mathieu 2016 for Ojibwe). First, ECM is case-related (the subject of the infinitive cannot receive nominative; it receives accusative case from the matrix verb), whereas LDA is very likely not case-related since Algonquian languages have been argued to lack case (Ritter and Rosen 2005). Second, ECM complements are tense-deficient (Johnson 1991, Bowers 1993, 2002, Kitaoka 1995) and lack referential (or relative) tense, requiring simultaneous interpretation with the tense of the matrix (Higginbotham 1983), a constraint not seen in Algonquian since each clause must have its own tense. In Ojibwe, the embedded verb is always tensed/finite (there are no infinitives), which also means that LDA in Algonquian is unlike LDA found in Itelmen (Bobaljik and Wurmbrand 2005) and Hindi (Boeckx 2004, Bhatt 2005), where the embedded clause is nonfinite; in these types of languages, it is possible to analyze LDA as agreement into the nonfinite clause under restructuring (Corbett 2006, Richards 2009). In Tsez, it is also possible to entertain an analysis by which agreement takes place across a nonphasal category, since there is no evidence of an intermediate C (Richards 2009), the embedded clause most likely being a reduced clause. Finally, Ojibwe LDA is possible with both embedded subjects and objects, whereas ECM is only possible with subjects.

We can also rule out a prolepsis-based analysis of LDA in Ojibwe, where the object of the matrix clause corefers with one of the arguments of the embedded clause (we give a flavor of the arguments here, but for full details see our parallel work Hammerly and Mathieu to appear). If the proleptic object is a null *pro* that corefers with an overt DP in the embedded clause (cf. the analysis of Passamaquoddy advanced by LeSourd (2019), which we discuss further in section 4), then such a structure would violate Principle C. In some Algonquian languages, such as Passamaquoddy, such a violation appears to be tolerated. However, Principle C is active in Ojibwe, as shown in (7), where coreference between an antecedent *pro* and an embedded DP is impossible, rendering such an account untenable.³

- (7) gii'-ikido gii'-niimi-d Ziibiins dibikong
 PAST-say.TA.3 PAST-dance.AI-3 Ziibiins last.night
 ‘She₁ said that Ziibiins_{2/*1} danced last night.’
 (NJ 08.16.23)

³ Note that (7) may be confounded with an antilogophoricity effect (e.g., Dubinsky and Hamilton 1998). Future work should seek to clarify the roles of Principle C in Ojibwe. In any case, regardless of whether Principle C is active, a prolepsis analysis is untenable due to the restricted nature of LDA in Ojibwe, as discussed further in section 4.

As shown in (10), LDA with the obviative object is judged ungrammatical regardless of word order. That is, it is not possible for the matrix verb to appear either with the obviative theme sign *-imaa* or with the obviative peripheral suffix *-n*.⁵

- (10) a. *in-gii-waabam-**imaa-n** [_{CP} John gii-paashkizw-aa-d adikw-an]
 1-PAST-see.TA-**3'-3'** John.PROX PAST-shoot.TA-3-3 caribou-OBV
 b. *ingii-waabamimaan gii-paashkizwaad inini adikwan
 c. *ingii-waabamimaan gii-paashkizwaad adikwan John
 d. *ingii-waabamimaan adikwan gii-paashkizwaad John

The inverse, where obviative is acting on proximate ($3' \rightarrow 3$), shows LDA agreement with the proximate patient (11a). Once again, this is expressed by the theme sign taking the third person form *-aa*. We also see a reversal of word order, which again is generally characteristic of embedded inverse clauses, where the proximate patient is in a preverbal position (in contrast to the agent, as seen in the direct form in (10a)). The obviative agent cannot be the target of LDA, as shown in (11b).

- (11) a. in-gii-waabam-**aa** [_{CP} ikwe gii-miigwechiwi'-igo-d John-an]
 1-PAST-see.TA-**3** woman.PROX PAST-thank.TA-INV-3 John-OBV
 'I saw that the woman was thanked by John.'
 b. *in-gii-waabam-**imaa-n** [_{CP} John-an gii-miigwechiwi'-igo-d ikwe]
 1-PAST-see.TA-**3'-3'** John-OBV PAST-thank.TA-INV-3 woman.PROX
 Intended: 'I saw that the woman was thanked by John.'
 (NJ 08.20.19)

We can therefore characterize the patterns in the nonlocal-only configurations as a highest-ranked LDA, as only the higher-ranked proximate argument is available as a target for LDA regardless of whether it is the agent (as in direct voice clauses) or the patient (as with inverse voice clauses).

2.3 Local-Only Configurations

Turning now to the patterns in the local-only configurations, where both arguments are first or second person, with embedded $2 \rightarrow 1$, we see LDA with either the first person (12a) or the second person (12b). In both cases, LDA is apparent from the realization of the person prefix in the first or second person form (and, less directly, from the appearance of the inverse marker; in the independent order, $3 \rightarrow 1/2$ configurations trigger the inverse marker on Voice).

⁵ This agreement is possible more generally—for example, with a first person subject acting on a possessed object.

- (i) nin-gii-waabam-imaa-n Ziiibiins o-maamaa-yan
 1-PAST-see-3'-3' Ziiibiins.PROX 3-mother-OBV
 'I saw Ziiibiins's (PROX) mother (OBV).'
 (Hammerly 2020:441)

- (12) a. **gi-gii-waabam-ig** John [CP gii-miigwechiwi'-i-yan]
 2-PAST-see.TA-INV John.PROX PAST-thank.TA-1-2
 'John saw that you thanked me.'
- b. **in-gii-waabam-ig** John [CP gii-miigwechiwi'-i-yan]
 1-PAST-see.TA-INV John.PROX PAST-thank.TA-1-2
 'John saw that you thanked me.'
 (NJ 08.20.19)

Likewise, with embedded 1 → 2, LDA is possible with either first person (13a) or second person (13b). Once again, this is clearest from the realization of the person prefix.

- (13) a. **in-gii-waabam-ig** John [CP gii-miigwechiwi'-in-aan]
 1-PAST-see.TA-INV John.PROX PAST-thank.TA-2-1
 'John saw that I thanked you.' ('John saw me giving thanks to you.')
- b. **gi-gii-waabam-ig** John [CP gii-miigwechiwi'-in-aan]
 2-PAST-see.TA-INV John.PROX PAST-thank.TA-2-1
 'John saw that I thanked you.' ('John saw you when I thanked you.')
- (NJ 08.20.19)

The two local-only configurations therefore show free LDA, where either argument of the embedded clause can be a target for agreement on the matrix verb.

2.4 Mixed Configurations

The final dataset concerns the mixed configurations, where a local and (proximate) third person are interacting. First, with embedded 2 → 3, LDA is possible with the second person (14a), as shown by the presence of the second person theme sign *-in* and person prefix *gi-*, but it is not possible with the proximate person (14b).

- (14) a. **gi-gii-waabam-in** [CP gii-miigwechiwi'-ad John]
 2-PAST-see.TA-2 PAST-thank.TA-2>3 John.PROX
 'I saw that you thanked John.'
- b. ***in-gii-waabam-aa** [CP gii-miigwechiwi'-ad John]
 1-PAST-see.TA-3 PAST-thank.TA-2>3 John.PROX
 Intended: 'I saw that you thanked John.'
 (NJ 08.20.19)

With embedded 3 → 2, LDA is possible with either third person (15a), as shown by the presence of the third person theme sign *-aa*, or second person (15b), as shown again by the second person theme sign and person prefix.

- (15) a. **in-gii-waabam-aa** [CP ikwe gii-miiwechiwi'-ik]
 1-PAST-see.TA-3 woman.PROX PAST-thank.TA-3>2
 'I saw that the woman thanked you.'

- b. **gi-gii-waabam-in** [_{CP} gii-miiwechiwi'-ik ikwe]
 2-PAST-see.TA-2 PAST-thank.TA-3 > 2 woman.PROX
 'I saw that the woman thanked you.'
 (NJ 08.29.19)

A pattern analogous to what was observed with $2 \rightarrow 3$ occurs with $1 \rightarrow 3$. It is not possible for LDA to target the embedded proximate person, as shown in (16).

- (16) a. ***gi-gii-waabam-aa** ina [_{CP} gii-miiwechiwi'(-aa)-ag ikwe]
 2-PAST-see.TA-3 Q PAST-thank.TA(-3)-1 > 3 woman.PROX
 Intended: 'Did you see that I thanked the woman?'
 b. ***gi-gii-waabam-aa** ina [_{CP} ikwe gii-miiwechiwi'(-aa)-ag]
 2-PAST-see.TA-3 Q woman.PROX PAST-thank.TA(-3)-1 > 3
 Intended: 'Did you see that I thanked the woman?'
 (NJ 08.29.19)

Keeping with $1 \rightarrow 3$, LDA with embedded first person is grammatical, as shown in (17). Note that the first person theme sign *-i* is deleted in the surface form as the result of a general phonological process that deletes short vowels at the end of a word.

- (17) **gi-gii-waabam(-i)** ina [_{CP} gii-miiwechiwi'(-aa)-ag ikwe]
 2-PAST-see.TA(-1) Q PAST-thank.TA(-3)-1 > 3 woman.PROX
 'Did you see that I thanked the woman?'
 (NJ 08.29.19)

Rounding out the mixed configurations, with $3 \rightarrow 1$ we again find a pattern analogous to that found with $3 \rightarrow 2$, where LDA can target either the third person as in (18a) or the first person as in (18b), respectively evident from the presence of the third or first person theme sign on the matrix verb.

- (18) a. **gi-gii-waabam-aa** ina [_{CP} ikwe gii-miiwechiwi'-i-d]
 2-PAST-see.TA-3 Q woman.PROX PAST-thank.TA-1-3
 'Did you see that the woman thanked me?'
 b. **gi-gii-waabam(-i)** ina [_{CP} gii-miiwechiwi'-i-d ikwe]
 2-PAST-see.TA(-1) Q PAST-thank.TA-1-3 woman.PROX
 'Did you see that the woman thanked me?'
 (NJ 08.29.19)

Overall, the patterns of LDA in the mixed alignments do not have a single, unified characterization. The $1/2 \rightarrow 3$ pattern is a case of agent LDA, where only the first or second person argument can be targeted. In contrast, $3 \rightarrow 1/2$ is best characterized as free LDA, as either argument can be targeted. Note that the existence of the latter pattern rules out an analysis of the $1/2 \rightarrow 3$ cases as highest-ranked LDA, as the higher-ranked first and second persons are not

targeted to the exclusion of the lower-ranked proximate person when first or second is the patient. It is only the confluence of being a local person *and* an agent that can characterize the patterns in the $1/2 \rightarrow 3$ configurations.

2.5 Summary

In this section, we have shown that Border Lakes Ojibwe exhibits a mixture of free, agent, and highest-ranked LDA depending on the particular person features of the embedded arguments. We summarize the patterns in (19) before turning to a formal analysis.

(19) Summary of LDA in Border Lakes Ojibwe

- a. Nonlocal-only ($3 \leftrightarrow 3'$): Highest-ranked LDA
 - i. With $3 \rightarrow 3'$, LDA targets the proximate agent.
 - ii. With $3' \rightarrow 3$, LDA targets the proximate patient.
- b. Local-only ($1 \leftrightarrow 2$): Free LDA
 - i. With $1 \rightarrow 2$, LDA freely targets either the agent or the patient.
 - ii. With $2 \rightarrow 1$, LDA freely targets either the agent or the patient.
- c. Mixed configurations ($1/2 \leftrightarrow 3$): Variable pattern
 - i. With $1/2 \rightarrow 3$, LDA targets the first/second person agent (agent LDA).
 - ii. With $3 \rightarrow 1/2$, LDA freely targets either the agent or the patient (free LDA).

3 A Formal Account

3.1 Background

Let us start with the assumption that the argument that is targeted by LDA with the matrix clause is in Spec,CP within the embedded clause (Hamilton and Fry 2016). This generally follows from the idea that C defines a phase, thereby rendering anything within its complement inaccessible to further operations, while anything within its specifier remains available for LDA or further syntactic operations into the higher clause. The question, then, is this: What is the specification of the probe on C that can allow the LDA patterns of Ojibwe to be accounted for? Furthermore, how do lower agreement relations on Infl and Voice feed/bleed the possible agreement relations of C?

We can gain initial traction on these questions by following Hamilton and Fry (2016), who provide a syntactic characterization of free, agent, and highest-ranked LDA, summarized in (20).

- (20) a. *Free LDA*: A δ -probe on C moves either the EA or the IA, regardless of syntactic position, depending only on whether the EA or the IA has the relevant δ -feature (e.g., a feature related to evidentiality, as proposed by Hammerly and Mathieu (to appear)).
- b. *Agent LDA*: A ϕ -probe on C moves the closest argument. There is no A-movement to Spec,IP of the IA over the EA (no “syntactic inverse”), so the EA is always closest.

- c. *Highest-ranked LDA*: A ϕ -probe on C moves the closest argument. Languages with this pattern have a “syntactic inverse,” where the highest-ranked argument undergoes A-movement to Spec,IP, making the higher-ranked argument closer to the probe on C.

In short, languages differ in whether C hosts a probe that is sensitive to ϕ -features (person, number, gender, obviation, etc.) or δ -features (features related to topic, focus, evidentiality, or other \bar{A} properties), with the latter resulting in free LDA languages. Then, among those with a ϕ -based probe, languages differ in whether the inverse is syntactic (resulting in highest-ranked LDA) or morphological (resulting in agent LDA). Border Lakes Ojibwe differs from the types of languages discussed by Hamilton and Fry in that it shows all three patterns. Therefore, none of these current analyses will work if just taken off the shelf. This frames our basic analytical problem: how can we capture a language that shows a mixture of these patterns under different conditions?

Our account finds its foundation in the operation Agree first proposed in Chomsky 2000, 2001, where an “unvalued” probe searches its locally restricted c-command domain for a goal with matching “valued” features. The features of the goal are then copied back to the probe. To start, let us make explicit the basic properties that follow from current models of Agree, including our extension to movement.

1. *Relativized probes*: Both feature copying (“agreement”) and displacement (“movement”) can be relativized to be sensitive to particular ϕ - and/or δ -features of the goal (e.g., Rizzi 1990, Preminger 2014, Hammerly 2021, to appear b).
2. *Interaction vs. satisfaction*: Probes for agreement (and movement) must dictate conditions on interaction and satisfaction (Deal 2015, 2024). Interaction describes what types of elements can be targeted for movement/agreement, while satisfaction describes when a probe halts its search for something to move or agree with.
3. *Independence of movement and agreement*: A head may have only conditions for movement, only conditions for agreement, conditions for both movement and agreement, or no conditions whatsoever (e.g., Chomsky 2000, where movement does not necessarily follow agreement).
4. *Equidistance and Best Match*: When two goals are equidistant (i.e., are dominated by the same number of maximal projections; Hornstein 2009), Best Match (see below for a definition) determines which goal is targeted (Coon and Bale 2014, Van Urk 2015, Oxford 2019, Hammerly 2021).
5. *Multiple Agree*: Multiple Agree is possible. A probe can copy the features of more than one goal in a single derivational step if both are equidistant and an equal match for the probe (Hiraiwa 2001, Oxford 2019).
6. *Ban on Multiple Move*: Multiple Move is impossible under all circumstances. It is not possible to move more than one element in a single derivational step, as applying Merge to three items simultaneously violates the standard assumption that the operation is binary (Coon and Keine 2021, Hammerly 2021, to appear b).

In particular, these properties follow from an extended version of Deal's (2015, 2024) model of probes proposed by Hammerly (2021).⁶ Hammerly applies the idea of interaction and satisfaction conditions to movement. Deal's original proposal is restricted to agreement qua feature copying, with interaction features (INT_{AGR}) defining what types of elements a probe will target for agreement, and satisfaction conditions (SAT_{AGR}) defining when a probe can stop its search for new goals to copy features from. Hammerly's proposal adds analogous conditions for movement, with interaction conditions (INT_{EPP}) defining what elements can be targeted for movement by a probe, and satisfaction conditions (SAT_{EPP}) defining when a probe can stop its search for elements to move. The proposal allows both agreement and movement to be relativized (i.e., to be sensitive to *particular* features) within a unified framework; moreover, it can replace interface conditions such as the P-Constraint (Zubizarreta and Pancheva 2017, Pancheva and Zubizarreta 2018) that have been used to derive systems where certain projections appear to require or prefer elements with a particular feature such as [PARTICIPANT] in their specifier.

Also important to highlight is our adopted formulation of Best Match, which we take from Hammerly 2021 but which has antecedents in Coon and Bale 2014, Van Urk 2015, and Oxford 2019.

(21) *Best Match*

When there are n goals G_1, G_2, \dots, 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 .

Particularly relevant to the present account is what occurs with a probe that has *disjunctive* interaction or satisfaction conditions (Roversi 2020). The example that comes up in Ojibwe is a case where either ϕ - or δ -features can fully satisfy the probe. In these cases, a goal that has both ϕ - and δ -features would provide a better match than a goal with one or the other, since a goal that matches both features matches more features than a goal that only matches one or the other (see also Hammerly to appear a on defining Best Match under disjunction and conjunction).

Finally, it is necessary to outline our assumptions regarding the feature specification of various arguments, shown in (22). For present purposes, we assume that the representation of categories related to person, obviation, and animacy are restricted by a feature geometry (Bliss and Jesney 2005, Hammerly 2018, Oxford 2019). The key consequence is that the feature sets that define the categories stand in particular subset-superset relations: all categories share ϕ , only the inanimate category lacks [ANIMATE], both inanimate and obviative lack [PROXIMATE], and so on.

⁶ Work developed by Hammerly (to appear a) while this article was under review has shown that distinguishing between interaction and satisfaction conditions is redundant and that a single set of conditions can be used to govern the behavior of a probe. The current analysis could be readily reformulated without a distinction between interaction and satisfaction, as shown in Hammerly to appear b. That said, the key takeaway that probes should be separately specified for conditions on movement and agreement holds regardless of whether interaction and satisfaction are distinguished within the representation of a probe.

(22) *Representation of singular person/obviation/animate categories*

- a. SECOND: $\{\phi, \text{ANIM}, \text{PROX}, \text{PART}, \text{ADDR}\}$
- b. FIRST: $\{\phi, \text{ANIM}, \text{PROX}, \text{PART}\}$
- c. PROXIMATE: $\{\phi, \text{ANIM}, \text{PROX}\}$
- d. OBVIATIVE: $\{\phi, \text{ANIM}\}$
- e. INANIMATE: $\{\phi\}$

These relations are critical to deriving the behavior of relativized probes (Béjar 2003). For example, a probe that is satisfied by finding a goal that bears [PARTICIPANT] will only stop probing when it encounters a first or second person; or a probe with interaction conditions that restrict it to moving or copying features from elements with [ANIMATE] will never agree with or move an inanimate goal, since it lacks this feature, but will move any argument that bears the animate feature including obviate, proximate, first person, and second person.

3.2 *Three Probes*

As outlined earlier in the article, there are three probes within the Ojibwe clausal spine: Voice, Infl, and C. In this section, we advance a proposal for the interaction and satisfaction conditions for agreement and/or movement that govern each of these three probes in embedded clauses (i.e., the conjunct order).

Following Oxford (2023), we adopt the proposal that there are two varieties of Voice in Ojibwe, which we refer to as plain Voice, shown in (23a), and ergative Voice, also known as “inverse” voice, shown in (23b).

- (23) a. Voice = $[\text{INT}_{\text{AGR}}: \{\phi\}, \text{SAT}_{\text{AGR}}: \{\phi\},$
 $\text{INT}_{\text{EPP}}: \{\text{PART}\}, \text{SAT}_{\text{EPP}}: \{\text{PART}\}]$
- b. Voice_{ERG} = $[\text{INT}_{\text{EPP}}: \{\phi\}, \text{SAT}_{\text{EPP}}: \{\phi\}]$

Plain Voice (23a) has conditions for both agreement and movement.⁷ Plain Voice has a flat agreement probe, so it will copy features and be satisfied by the first DP that it encounters within its c-command domain. However, it will only move to its specifier (and be satisfied by) a DP that has a participant feature. This relativized EPP plays a key role in capturing the asymmetry in the mixed configurations. In contrast, ergative Voice (23b) only has a probe for movement. Within the current model, this can be framed as a probe that only has EPP conditions. We assume a flat probe that will move whatever ϕ -bearing DP it encounters, which more explicitly formalizes the proposed mechanics in Oxford’s original analysis. Ergative Voice also has the property of assigning inherent case to the external argument. Again following Oxford, these two varieties of Voice have a different distribution, which is independently explained by the Person Licensing

⁷ Note that this differs from Oxford’s (2023) proposal. Oxford does not propose an EPP feature on the plain Voice head for reasons of parsimony: he lacks evidence that plain Voice ever drives movement. Such movement will be deemed necessary in the present account. The addition of conditions governing movement does not affect the core insights of Oxford’s original analysis.

Condition (Béjar and Rezac 2003). The $3' \rightarrow 3$ configurations only converge when ergative Voice is part of the derivation, and this is the only configuration among those considered here where that variant of Voice can appear (Oxford also argues that it can appear in $3' \rightarrow 3'$ configurations, which are not considered here). This gives rise to what Oxford calls the “deep inverse,” where the patient is prompted to the structural subject position of Spec,IP. All other configurations have only a convergent derivation in the presence of plain Voice, as ergative Voice is unable to fully license the local arguments, violating the Person Licensing Constraint. Plain Voice is associated with the “shallow inverse,” where inverse morphology appears, but not inverse syntax. Our account can be seen as providing converging evidence for this proposal.

We next consider the probe on Infl in the conjunct order, shown in (24).

$$(24) \text{Infl} = [\text{INT}_{\text{AGR}}: \{\phi\}, \text{SAT}_{\text{AGR}}: \{\text{PROX}\}, \\ \text{INTEPP}: \{\text{PROX}\}, \text{SATEPP}: \{\text{PROX}\}]$$

This probe has conditions that govern both agreement and movement. For agreement, all ϕ -bearing DPs will be potential targets, while the probe will only be fully satisfied by finding a DP with a proximate feature. This also adjudicates what provides the “best match” for the probe, agreement with proximate-bearing DPs being preferred. The EPP conditions dictate that only a DP with a proximate feature will be moved (i.e., first, second, and proximate third persons), and only such a DP can satisfy the probe and halt its search.

Finally, we consider the probe on embedded C, which is a mixed ϕ/δ -probe.

$$(25) \text{C} = [\text{INTEPP}: \{\phi \vee \delta\}, \text{SATEPP}: \{\phi \vee \delta\}]$$

There is no evidence of any feature copying in the conjunct order (i.e., the peripheral agreement slot never appears); therefore, we assume no feature copying is taking place, so C hosts only an EPP probe to regulate movement. This probe has disjunctive interaction/satisfaction conditions (Roversi 2020) and will interact with any ϕ - or δ -bearing DP and will be satisfied and halt probing upon encountering a DP with either ϕ - or δ -features. To review, when it comes to Best Match, a goal that bears both ϕ - and δ -features will be a better match than a probe that only bears one or the other type of feature. For present purposes, we assume a generic δ -feature, but it is likely that a more specific feature related to evidentiality is what regulates movement in these cases (see Hammerly and Mathieu to appear).

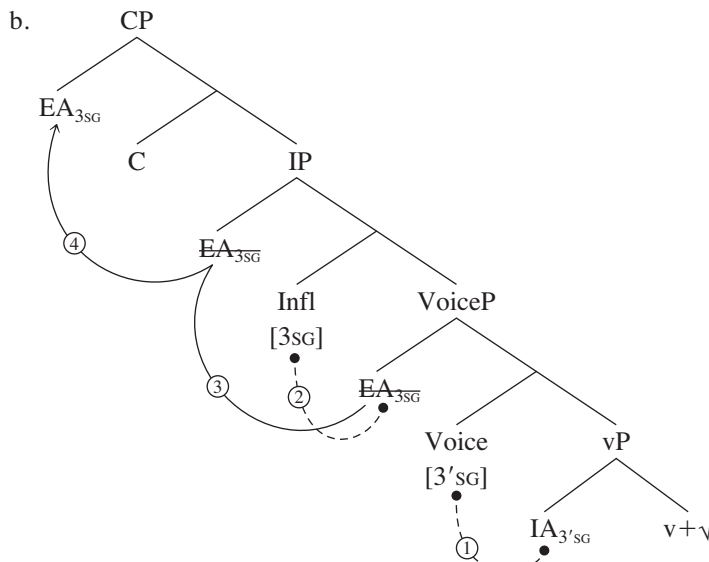
3.3 Nonlocal-Only Configurations

Following Oxford’s (2023) proposal, only plain Voice is compatible with a well-formed derivation in $3 \rightarrow 3'$ configurations, while only ergative Voice is compatible with the $3' \rightarrow 3$ configurations. (See Oxford’s article for detailed motivations for this split, which allows the “deep inverse” that characterizes these configurations to be captured.) Consequently, the derivation in each case will always result in the proximate argument being moved to Spec,IP, whether it originates as the EA or as the IA; therefore, the probe on C will always find and move the proximate argument, resulting in highest-ranked LDA. We consider each configuration in turn.

In (26a), we repeat an embedded clause where proximate is acting on obviative. Notice that the agreement on the theme sign takes the third person object form *-aa*, while the central agreement takes the proximate singular form *-d*. The derivation of this clause is schematized in (26b). First, Voice agrees with the obviative IA (step ①), deriving the realization of third person object agreement with the theme sign. However, it does not move the IA to its specifier since it does not meet the conditions of the EPP probe on Voice, which only moves local persons (i.e., those bearing [PARTICIPANT]). Therefore, when Infl probes, it will only find the proximate EA. Infl agrees with the EA (step ②), deriving proximate agreement with the central agreement marker, and moves the EA to Spec,IP (step ③). This makes the proximate EA the single closest goal to the EPP probe on C, resulting in movement to Spec,CP (step ④). Therefore, the proximate EA can be targeted by LDA in the matrix clause.

(26) *Derivation of the 3 → 3' configuration*

- a. . . . John gii-paashkizw-aa-d adikw-an
 John.PROX PAST-shoot.TA-3-3SG caribou-OBV
 ‘ . . . that John (PROX.SG) shot the caribou (OBV.SG).’



Turning to the inverse cases, where obviative is acting on proximate, recall the form of the embedded clause, repeated in (27a). Here the inverse theme sign (*-igo*) appears, while central agreement, being realized as *-d*, again indexes the proximate argument. Following Oxford (2019), we assume that the inverse theme sign is an elsewhere form, appearing only when Voice is unspecified for features. Consider now the derivation in (27b), where ergative Voice has replaced plain Voice in order to derive the deep inverse (Oxford 2023). Ergative Voice does not copy any features, since it is not specified for an agreement probe. This lack of features results in the realization of the inverse *qua* elsewhere form. The obviative EA is assigned inherent case by

3.4 Local-Only Configurations

We exemplify the local-only cases with the configuration where first person is acting on second and LDA occurs with the first person EA, repeated in part in (28a). Here, the theme sign appears in its second person object form (*-in*), while central agreement appears in its first person form (*-aan*). Turning now to the derivation in (28b), plain Voice first probes down to agree with the second person IA (step ①), resulting in realization of the second person form of the theme sign. Because the IA is second person and therefore bears [PARTICIPANT], the EPP conditions on the probe are met, and the IA is moved to Spec,VoiceP (step ②). This results in a double specifier configuration, making the EA and IA equidistant from the probe on Infl. Infl therefore copies the features of both the EA and the IA (Multiple Agree; step ③), but cannot move either due to the impossibility of Multiple Merge.⁸ Because neither the EA nor the IA has moved from Spec,VoiceP, they are equidistant from C. Since they match in ϕ -features, it will instead be the presence of a δ -feature on one or the other that leads one to be a better match for the EPP probe. In the example derivation of 1 \rightarrow 2 in (28b), the first person EA has been specified for the δ -feature and is moved to Spec,CP (step ④). We therefore obtain the free LDA pattern characteristic of these configurations: either the IA or the EA will be moved to Spec,CP and be an available target for LDA, depending on which one is specified for the relevant δ -feature (e.g., a feature related to evidentiality as proposed in Hammerly and Mathieu to appear).

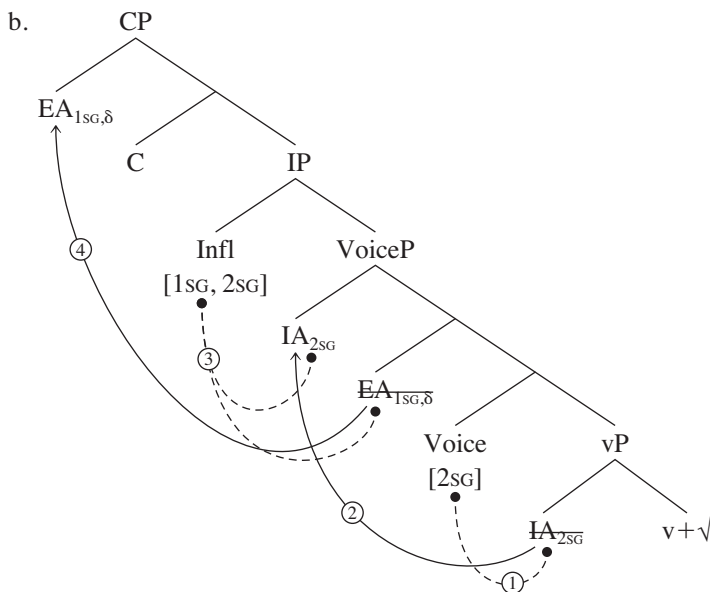
(28) Example derivation with the 1 \rightarrow 2 configuration

a. . . . gii-miigwechiwi'-in-aan

PAST-thank.TA-2-1.

' . . . that I thanked you.'

⁸ Another possibility, raised by two reviewers, is that the failure of Multiple Move would lead to *optionality*, such that only one of the two equally matched goals is moved, rather than neither. We take this as a live possibility, and highlight that it would still allow us to capture the free LDA pattern in the relevant cases, exemplified in (28) and (30), where the double specifier configurations arise. The logic is as follows: In any given derivation, *either* the EA or the IA would be moved to Spec,IP. Whichever one is moved would then be the single closest goal to the probe on C and would thus be moved to Spec,CP and made available for LDA in the higher clause.



One question that arises from this derivation is why Infl is realized as the first person singular central agreement marker when the features of both the first and the second persons are copied back to the probe. We assume, following Oxford (2021:420), that there is a morphological impoverishment operation that deletes the features of singular first or second persons from Infl just in case the same first or second person features are expressed on Voice. In this case, Voice is expressed as the second person theme sign, so the second person features are deleted (postsyntactically) from Infl, leading central agreement to be realized in the first person singular form.

3.5 Mixed Configurations

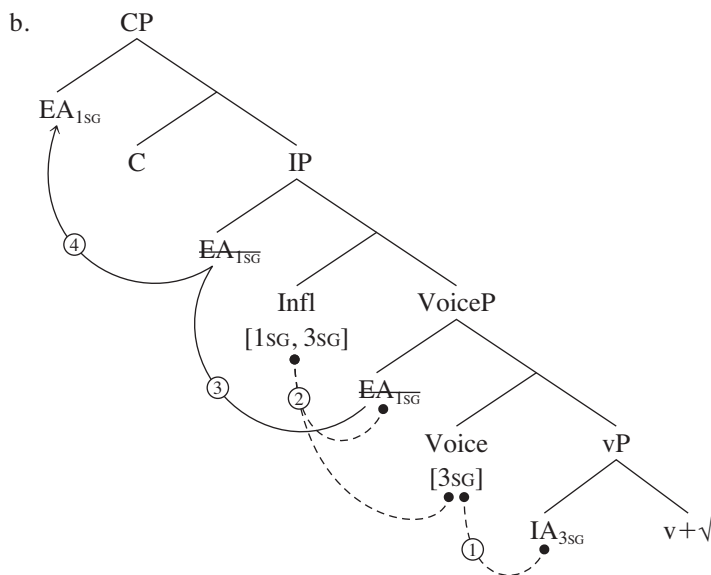
Mixed patterns provide the strongest evidence for our proposal of a relativized EPP on Voice, where local IAs are promoted to Spec, VoiceP, resulting in free LDA, while third person IAs are not, resulting in agent LDA. In this section, we show how the derivation proceeds in each case.

3.5.1 1/2 → 3 We exemplify the first type of mixed pattern with the first-person-acting-on-proximate configurations, repeated in part in (29a). Here, the theme sign appears in its third person object form *-aa*, while central agreement appears as a portmanteau form, *-ag*, which indexes both first and third person. In these cases, we again have plain Voice, which agrees with the proximate IA (step ①), deriving the expression of the third person theme sign. However, Voice does not move the proximate IA, since it does not meet the condition of being specified for [PARTICIPANT] stemming from the relativized EPP. The agreement probe on Infl engages in Multiple Agree with both the local person EA and Voice (step ②), which has inherited features from its previous agreement relation with the proximate IA (this exactly follows Oxford’s (2023) proposal). This results in both the first and the third person features being copied to the probe, which is expressed

as a portmanteau form of central agreement. For the EPP probe on Infl, we further assume that only nominal elements can be moved. Therefore, the local person EA is moved to its specifier position (step ③). As a result, the local EA is the closest DP to the probe on C and is thus the only argument that can be moved to Spec,CP (step ④) and targeted by LDA. This captures the appearance of agent LDA within these configurations.

(29) *Example derivation with the 1 → 3 configuration*

- a. . . . gii-miiwechiwi'(-aa)-ag ikwe
 PAST-thank.TA(-3)-1>3 woman.PROX
 ' . . . that I thanked the woman.'



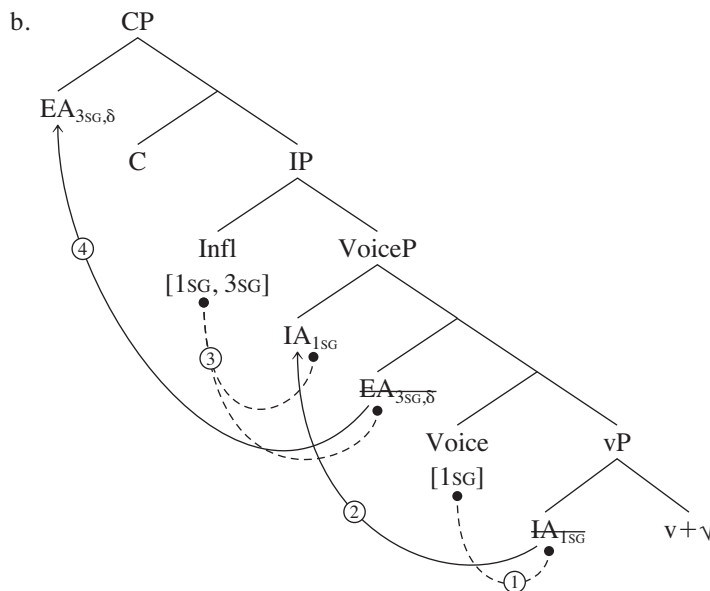
We can contrast the appearance of a portmanteau form of the central agreement marker with the nonlocal-only case in (28). The impoverishment rule proposed by Oxford (2021) specifically deletes the features of first or second person on Infl, not third person, when Voice and Infl overlap. In the case in (29), it is instead third person features that are shared by Voice and Infl, so no impoverishment occurs and a portmanteau form is realized.

3.5.2 *3 → 1/2* We exemplify the second type of mixed configuration with the proximate-acting-on-first-person configuration, repeated in part in (30a). Here, the theme sign appears in the first person object form *-i*, while central agreement appears in the third person singular form *-d*. In the derivation in (30b), as in the other mixed configuration, plain Voice agrees with the first person IA (step ①). This results in the realization of the first person form of the theme sign. Unlike in the other mixed configuration, the first person IA also meets the EPP-based interaction conditions of the probe (i.e., it is specified for [PARTICIPANT]), triggering movement to Spec, VoiceP (step ②). As we showed for the local-only configurations, this results in a double specifier configuration, making the EA and the IA equidistant from the probe on Infl. Infl ends up copying the

features of both the EA and the IA (Multiple Agree; step ③), but cannot move either due to the impossibility of Multiple Merge. As a result, the IA and the EA are equidistant from the probe on C as well. Since they match in ϕ -features, it will again be the presence of a δ -feature on one or the other that leads one to be a better match for the EPP probe and to be moved to Spec,CP. In the example in (30), the proximate EA has been specified for the δ -feature and moves to Spec,CP (step ④) to be available for LDA.

(30) *Example derivation with the 3 → 1 configurations*

- a. ... ikwe gii-miiwechiwi' -i-d
 woman.PROX PAST-thank.TA-1-3
 '... that the woman thanked me.'



Here again, the impoverishment operation on Infl is at work. While Infl copies the features of both the third person EA and the first person IA, we see neither a portmanteau form nor the expression of the more marked first person feature set: we see third person singular agreement instead. This follows again from the idea that local person features on Infl are impoverished just in case Voice expresses the features of that local person. In this case, Voice appears in its first person form, so the first person features are deleted from Infl and it is realized as the third person singular central agreement.

4 Toward a Typology of Algonquian LDA

Hamilton and Fry (2016) have identified three types of LDA within the Algonquian family: free, agent, and highest-ranked LDA. Hamilton and Fry show that parametric variation on two dimensions can capture these three types of languages: (a) whether the probe governing movement

on embedded C is sensitive to ϕ -features or δ -features, and (b) whether a language does or does not have the syntactic inverse. The relationship between these parameters and the three types of LDA couched within the adopted representation of probes is shown in (31).

- (31) a. *Free LDA*: $C = [\text{INT}_{\text{EPP}}: \{\delta\}, \text{SAT}_{\text{EPP}}: \{\delta\}]$ (+ syntactic inverse)
 b. *Agent LDA*: $C = [\text{INT}_{\text{EPP}}: \{\phi\}, \text{SAT}_{\text{EPP}}: \{\phi\}]$
 c. *Highest-ranked LDA*: $C = [\text{INT}_{\text{EPP}}: \{\phi\}, \text{SAT}_{\text{EPP}}: \{\phi\}]$ + syntactic inverse

Languages with a pure δ -probe on C will show free LDA whether the language has a syntactic inverse or not—the probe will find whichever argument in the clause is specified for the δ -feature, skipping those that lack that feature. In contrast, languages with a ϕ -probe will always end up moving whichever argument is syntactically closest to C. If arguments remain in their base-generated positions, the result is agent LDA, since agents (EAs) are merged higher than patients and will always be the closest matching goal. Languages with a syntactic inverse, where more prominent DPs undergo A-movement to a syntactic position above the less prominent DP in the clause, will show highest-ranked LDA, since the highest-ranked argument will always end up closer to the probe on C regardless of whether it is the agent or patient.

The proposal advanced here argues that an additional logically possible probe is indeed attested in the Algonquian languages: one where the satisfaction conditions on the probe on C are a *disjunction* of ϕ - and δ -features, as shown in (32).

- (32) *Mixed LDA*: $C = [\text{INT}_{\text{EPP}}: \{\phi \vee \delta\}, \text{SAT}_{\text{EPP}}: \{\phi \vee \delta\}]$

That is, the probe will move the first argument that it finds that is specified for either ϕ - or δ -features. When this mixed probe is combined with the particular syntax generated on the lower probes on Voice in Infl, which includes a syntactic inverse within the nonlocal-only configurations, we are able to derive the appropriate mixture of free, agent, and highest-ranked LDA characteristic of Border Lakes Ojibwe, while also filling out an additional typological possibility in terms of the structure of the probe on C.

At present, we do not wish to take a strong stance on whether our analysis can extend to all Algonquian languages that show LDA—a much more extensive typological survey going beyond the scope of this article would be necessary. However, we think the account shows promise in that direction and fares better in its coverage than other recent theories of LDA in Algonquian. For example, LeSourd (2019) argues explicitly against a raising-based account of LDA in the Eastern Algonquian language Passamaquoddy, favoring instead a “purely local” principle of argument selection, where a null proleptic argument is generated in the matrix clause and corefers with a nonlocal argument, leading to the appearance of LDA. As briefly mentioned in footnote 4, the key fact for LeSourd (2019) is that LDA in Passamaquoddy appears to be free in a rather radical sense: it is able to target not only arguments in the immediately embedded clause, but also those in more deeply embedded clauses and in nonargument possessor positions.

However, there are issues with LeSourd’s proposal both in its description of LDA in Passamaquoddy and in its extension to restricted LDA systems like the one we describe for Ojibwe. On the empirical side, recent work on LDA in Passamaquoddy by Grishin (2022, 2024) reveals that

subordinative clauses in Passamaquoddy show a restricted LDA pattern, calling into question the idea that LDA in Passamaquoddy is in fact entirely free (note that Ojibwe does not have subordinative clauses in the relevant sense). Grishin shows that local-only and mixed configurations result in agent LDA, while nonlocal-only configurations show highest-ranked LDA. Grishin gives evidence that subordinative clauses are reduced, lacking a CP layer, and therefore also lack the \bar{A} -movement otherwise associated with CP that would result in a free LDA pattern. As a result, the movement patterns to IP (the highest projection in the clause) end up governing what is accessible for LDA in the matrix clause. As with what we have shown for Ojibwe here, in mixed/local configurations, there is no syntactic inverse, so the agent is always highest, deriving agent LDA. In contrast, the presence of a syntactic inverse in nonlocal-only clauses leads to the highest-ranked LDA pattern. This is fully consistent with the analysis we present, where movement in the lower clause is the key to regulating patterns of LDA in the higher clause.

More generally, an account like LeSourd's where the agreeing NP in the matrix clause is a base-generated (null pronominal) object of the higher verb would need to explain why there are restrictions on what types of arguments can fill this position depending on the particular configuration of arguments in the immediately embedded clause. For example, turning back to Ojibwe, with a mixed local/nonlocal configuration in the embedded clause, LDA with the third person proximate argument is possible when that argument is the EA of the embedded clause (see our example (15a)), but not when it is the IA (see our (16b)). What's more, this is not a general restriction on targeting third person proximate internal arguments, as they can be targeted for LDA with nonlocal-only configurations in the embedded clause (see our (11a)). It is not clear how LeSourd's "purely local" principle on argument selection in the matrix clause could capture this asymmetry, allowing proximate arguments to be generated in the matrix clause only in particular cases that depend on the features and position of arguments in the embedded clause. However, our analysis naturally accounts for this asymmetrical restriction, since agreement and movement in the embedded clause are directly feeding/bleeding possible targets for agreement in the matrix clause. Furthermore, as discussed around example (7), the fact that Principle C appears to be active in Border Lakes Ojibwe makes an extension of LeSourd's account to Ojibwe untenable, as the prolepsis analysis relies on a violation of Principle C being tolerated such that a null pronoun binds or corefers with an embedded overt DP.

5 Conclusion

In this article, we presented and provided an analysis for a novel pattern of long-distance agreement in Algonquian from Border Lakes Ojibwe. In previous work across the family, LDA has been categorized into three basic types: free LDA, agent LDA, and highest-ranked LDA (Hamilton and Fry 2016). We showed that Border Lakes Ojibwe exhibits a mixture of all three types depending on the particular configuration of arguments within the embedded clause. We argued that an extended version of Deal's (2015, 2024) interaction/satisfaction model of probing proposed by Hammerly (2021) can capture these effects. We took as our particular starting point Oxford's (2023) account of agreement on Voice in Infl across Algonquian languages. This account has two key facets. First is the idea that the relativized EPP on (plain) Voice moves first/second

person internal arguments to Spec,VoiceP, but not third person internal arguments. This leads to the asymmetrical pattern in the mixed configurations where $1/2 \rightarrow 3$ gives rise to agent LDA, and $3 \rightarrow 1/2$ gives rise to free LDA. Second is the idea that C hosts a mixed disjunctive ϕ/δ -probe, which attracts arguments to Spec,CP, allowing them to be accessible for LDA in the matrix clause. Overall, we have shown how probes regulating agreement and movement on Voice, Infl, and C feed and bleed one another, resulting in complex and fine-grained interactions that vary crosslinguistically.

References

- Béjar, Susana. 2003. Phi-syntax: A theory of agreement. Doctoral dissertation, University of Toronto.
- Béjar, Susana, and Milan Rezac. 2003. Person licensing and the derivation of PCC effects. In *Romance linguistics: Theory and acquisition*, ed. by Ana Teresa Pérez-Leroux and Yves Roberge, 49–62. Amsterdam: John Benjamins.
- Bhatt, Rajesh. 2005. Long distance agreement in Hindi-Urdu. *Natural Language and Linguistic Theory* 23: 757–807.
- Bliss, Heather. 2008. Structuring information in Blackfoot: Against the A'-agreement analysis of cross-clausal agreement. In *Actes du congrès annuel de l'Association Canadienne de Linguistique 2008/Proceedings of the 2008 annual conference of the Canadian Linguistic Association*, ed. by Susie Jones, 1–10. Canadian Linguistics Association/Association Canadienne de Linguistique. <https://cla-acl.ca/actes/actes-2008-proceedings.html>.
- Bliss, Heather, and Karen Jesney. 2005. Resolving hierarchy conflict: Local obviation in Blackfoot. *Calgary Papers in Linguistics* 26:92–116.
- Bloomfield, Leonard. 1957. *Eastern Ojibwa: Grammatical sketch, texts, and word list*. Ann Arbor: University of Michigan Press.
- Bobaljik, Jonathan David, and Susi Wurmbrand. 2005. The domain of agreement. *Natural Language and Linguistic Theory* 23:809–865.
- Boeckx, Cedric. 2004. Long-distance agreement in Hindi: Some theoretical implications. *Studia Linguistica* 58:23–36.
- Bowers, John. 1993. The syntax of predication. *Linguistic Inquiry* 24:591–656.
- Bowers, John. 2002. Transitivity. *Linguistic Inquiry* 33:183–224.
- Branigan, Phil, and Marguerite MacKenzie. 2002. Altruism, \bar{A} -movement, and object agreement in Innu-aimûn. *Linguistic Inquiry* 33:385–407.
- Brittain, Julie. 2000. *The morphosyntax of the Algonquian conjunct verb: A Minimalist approach*. Oxford: Routledge.
- Brittain, Julie. 2003. A Distributed Morphology account of the syntax of the Algonquian verb. In *Actes du congrès annuel de l'Association Canadienne de Linguistique 2003/Proceedings of the 2003 annual conference of the Canadian Linguistic Association*, ed. by Sophie Burelle and Stanca Somesfalean, 26–41. Canadian Linguistics Association/Association Canadienne de Linguistique.
- Bruening, Benjamin. 2001. Syntax at the edge: Cross-clausal phenomena and the syntax of Passamaquoddy. Doctoral dissertation, MIT.
- Chomsky, Noam. 2000. Minimalist inquiries: The framework. In *Step by step: Essays on Minimalist syntax in honor of Howard Lasnik*, ed. by Roger Martin, David Michaels, and Juan Uriagereka, 89–155. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In *Ken Hale: A life in language*, ed. by Michael Kenstowicz, 1–52. Cambridge, MA: MIT Press.
- Cook, Claire. 2008. The syntax and semantics of clause-typing in Plains Cree. Doctoral dissertation, University of British Columbia.

- Coon, Jessica, and Alan Bale. 2014. The interaction of person and number in Mi'gmaq. *Nordlyd* 41:85–101.
- Coon, Jessica, and Stefan Keine. 2021. Feature gluttony. *Linguistic Inquiry* 52:655–710.
- Corbett, Greville. 2006. *Agreement*. Cambridge: Cambridge University Press.
- Dahlstrom, Amy. 1991. *Plains Cree morphosyntax*. New York: Garland.
- Dahlstrom, Amy. 1995. *Topic, focus and other word order problems in Algonquian*. Winnipeg, MB: Voices of Rupert's Land.
- Deal, Amy Rose. 2015. Interaction and satisfaction in ϕ -agreement. In *NELS 45*, ed. by Thuy Bui and Deniz Özyıldız, 179–192. Amherst: University of Massachusetts, Graduate Linguistics Students Association.
- Deal, Amy Rose. 2024. Interaction, satisfaction, and the PCC. *Linguistic Inquiry* 55:39–94.
- Dubinsky, Stanley, and Robert Hamilton. 1998. Epithets as antilogophoric pronouns. *Linguistic Inquiry* 29: 685–693.
- Etxepare, Ricardo. 2006. Number long distance agreement in (substandard) Basque. In *Studies in Basque and historical linguistics in memory of Robert L. Trask*, ed. by Joseba A. Lakarra and José Ignacio Hualde, 303–350. Oxford: Oxford University Press.
- Grishin, Peter. 2022. Subordinative long distance agreement in Passamaquoddy-Wolastoqey and the syntax of the inverse. Paper presented at the 54th Algonquian Conference, 21 October, University of Colorado. To appear in the proceedings.
- Grishin, Peter. 2024. CP and clause type in Passamaquoddy. <https://ling.auf.net/lingbuzz/007813>.
- Hamilton, Michael. 2015. Phrase structure in Mi'gmaq: A configurational account of a “non-configurational” language. *Lingua* 167:19–40.
- Hamilton, Michael, and Brandon Fry. 2016. Long-distance agreement in Algonquian: Accounting for syntactic variation. Paper presented at the 50th annual regional meeting of the Chicago Linguistic Society.
- Hammerly, Christopher. 2018. What ‘other people’ mean to ‘us’. In *A festschrift for Peggy Speas*, ed. by Rodica Ivan, 181–196. Amherst: University of Massachusetts, Graduate Linguistics Students Association.
- Hammerly, Christopher. 2020. Person-based prominence in Ojibwe. Doctoral dissertation, University of Massachusetts Amherst.
- Hammerly, Christopher. 2021. A verb-raising analysis of the Ojibwe VOS/VSO alternation: Lessons for feature copying and movement. Ms., University of Minnesota, Twin Cities.
- Hammerly, Christopher. To appear a. The interaction/satisfaction distinction is redundant: A reply to Deal 2024 and Oxford 2022. *Linguistic Inquiry*.
- Hammerly, Christopher. To appear b. The relativized EPP: Evidence from agreement and word order in Border Lakes Ojibwe. *Canadian Journal of Linguistics/Revue canadienne de linguistique*.
- Hammerly, Christopher, and Éric Mathieu. To appear. On the interpretation of long-distance agreement in Border Lakes Ojibwe. *Natural Language and Linguistic Theory*.
- Higginbotham, James. 1983. The logic of perceptual reports: An extensional alternative to situation semantics. *Journal of Philosophy* 80:100–127.
- Hiraiwa, Ken. 2001. Multiple Agree and the Defective Intervention Constraint in Japanese. In *Proceedings of the 1st HUMIT Student Conference in Language Research (HUMIT 2000)*, ed. by Ora Matushansky, Albert Costa, Javier Martín-González, Lance Nathan, and Adam Szczegielniak, 67–80. MIT Working Papers in Linguistics 40. Cambridge, MA: MIT, MIT Working Papers in Linguistics.
- Hornstein, Norbert. 2009. *A theory of syntax: Minimal operations and Universal Grammar*. Cambridge: Cambridge University Press.
- Johnson, Kyle. 1991. Object positions. *Natural Language and Linguistic Theory* 9:577–636.
- Kitaoka, Daiho. 1995. Phrase structure in Minimalist syntax. Doctoral dissertation, MIT.
- LeSourd, Philip. 2010. On raising to object in Maliseet-Passamaquoddy. In *Proceedings of WSCLA 14: The Workshop on Structure and Constituency in the Languages of the Americas*, ed. by Heather Bliss

- and Amelia Reis Silva, 109–141. Columbia Working Papers in Linguistics 26. Vancouver: University of British Columbia, Department of Linguistics.
- LeSourd, Philip. 2019. Raising and long-distance agreement in Passamaquoddy: A unified analysis. *Journal of Linguistics* 55:357–405.
- Lochbihler, Bethany, and Éric Mathieu. 2016. Clause typing and feature inheritance of discourse features. *Syntax* 19:354–391. <https://doi.org/10.1111/synt.12126>.
- Nevins, Andrew. 2011. Multiple Agree with clitics: Person complementarity vs. omnivorous number. *Natural Language and Linguistic Theory* 29:939–971.
- Oxford, Will. 2014. Microparameters of agreement: A diachronic perspective on Algonquian verb inflection. Doctoral dissertation, University of Toronto.
- Oxford, Will. 2019. Inverse marking and Multiple Agree in Algonquin. *Natural Language and Linguistic Theory* 37:955–996.
- Oxford, Will. 2021. An illusory subject preference in Algonquian agreement. *Canadian Journal of Linguistics/Revue canadienne de linguistique* 66:412–430.
- Oxford, Will. 2023. A tale of two inverses. *Syntax* 26:311–354.
- Pancheva, Roumyana, and Maria Luisa Zubizarreta. 2018. The Person Case Constraint. *Natural Language and Linguistic Theory* 36:1291–1337.
- Polinsky, Maria, and Eric Potsdam. 2001. Long-distance agreement and topic in Tsez. *Natural Language and Linguistic Theory* 19:583–646. <https://doi.org/10.1023/A:1010757806504>.
- Preminger, Omer. 2014. *Agreement and its failures*. Cambridge, MA: MIT Press.
- Rhodes, Richard. 1994. Agency, inversion, and thematic alignment in Ojibwe. In *BLS 20: General Session, Dedicated to the Contributions of Charles J. Fillmore*, ed. by Susanne Dolbey, Andy Gahl, and Christopher Johnson, 431–446. Berkeley: University of California, Berkeley Linguistics Society.
- Richards, Marc. 2009. Probing the past: On reconciling long-distance agreement with the PIC. Ms., University of Leipzig.
- Ritter, Elizabeth, and Sara Thomas Rosen. 2005. Agreement without A-positions: Another look at Algonquian. *Linguistic Inquiry* 36:648–660.
- Rizzi, Luigi. 1990. *Relativized Minimality*. Cambridge, MA: MIT Press.
- Roversi, Giovanni. 2020. How to satisfy probes: Person/number hierarchy effects in Äiwoo. In *NELS 50*, ed. by Mariam Asatryan, Yixiao Song, and Ayana Whitmal, 3:99–112. Amherst: University of Massachusetts, Graduate Linguistics Students Association.
- van Urk, Coppe. 2015. A uniform syntax for phrasal movement: A case study of Dinka Bor. Doctoral dissertation, MIT.
- Valentine, J. Randolph. 2001. *Nishnaabemwin reference grammar*. Toronto: University of Toronto Press.
- Zubizarreta, Maria Luisa, and Roumyana Pancheva. 2017. A formal characterization of person-based alignment. *Natural Language and Linguistic Theory* 35:1161–1204.

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