Indirect interaction of person and number in Ojibwe[*]

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Abstract: Agreement on Ojibwe embedded verbs shows a complicated interdependence of person and number features: Agreement is with the object exactly when it is both plural and a speech-act participant, and with the subject otherwise. Previous accounts of agreement (e.g. Béjar & Rezac 2009, Preminger 2011) cannot straightforwardly account for this pattern. Instead of stipulating an interaction between person and number features, we show it can be derived by an indirect interaction in which movement to the specifier of a lower probe feeds agreement with a higher one. This proposal relies on a locality condition in the spirit of Relativized Minimality allowing φ-probes themselves to intervene for higher agreement. This system extends previous analyses to account for Ojibwe, but is still relatively restrictive, ruling out unattested agreement patterns.

Keywords: syntax, morphology, agreement, Algonquian, person, number

1 Introduction

Complex agreement systems have been the topic of considerable discussion in the recent syntactic literature. We contribute to this discussion by analyzing one such agreement pattern, which is characterized by interdependence of person and number features: the competition for control of agreement is resolved not by the person or the number hierarchy, but by a combination of the two. In particular, we focus on the agreement pattern shown on verbs in embedded clauses in Ojibwe (Algonquian, North America). Here, agreement is with the object exactly when it is both a speech-act participant and plural. Neither person features nor number features alone are enough to trigger object agreement; whenever the object does not have the right feature combination, agreement simply targets the subject.

(1) a. waabm -i   -siiw -aang   b. waabm -i   -siiw -an

     see   -THEME -NEG **-1p**   see   -THEME -NEG **-2s**

     '(if) you / y'all see us.'   '(if) you see me.'

We will show that this agreement pattern can be derived in the syntax without resorting to a stipulated combined feature hierarchy. In particular, the analysis we offer is based on Béjar & Rezac (2009) and Preminger (2011). While both of these systems are designed to account for agreement patterns based on feature hierarchies, we will show that neither can directly account for the Ojibwe

pattern. We propose an extension of these systems in which movement to the specifier of a lower probe feeds agreement with the higher one. The crucial element of our analysis is a locality constraint in the spirit of Relativized Minimality (Rizzi 1990) which makes φ-probes intervene for agreement.

This paper is organized as follows: In Section 2, we will go over the data from Ojibwe embedded clauses and show that the correct generalization is: agree with the object exactly when it is local plural; otherwise agree with the subject. In Section 3 we will discuss the challenges with extending the theoretical accounts of Béjar & Rezac (2009) and Preminger (2011) to the Ojibwe embedded clause agreement data. Section 4 will present the core of our analysis: probes interact indirectly by raising arguments higher in the structure, making them available for later probing. Finally, Section 5 will conclude with the observation that our proposal is still relatively restrictive in that it rules out certain classes of agreement systems.

2   Agreement in Ojibwe embedded clauses

Ojibwe, like most Algonquian languages, shows distinct agreement paradigms in matrix and embedded clauses. [1] Much has been written about agreement in Ojibwe matrix clauses — see, e.g. Béjar & Rezac (2009). In this paper, we will concern ourselves only with agreement in embedded clauses.

2.1   Embedded clause template

The inflectional material on embedded verbs is exclusively suffixing, as shown in the example below.

(2) | Stem | **-Theme** | -Neg | **-Agree** | **-Prox** | -Mode |
     |------|-----------|------|-----------|-----------|-------|
     | waabm | **-i** | -siiw | **-ang** | **-idwaa** | -n |
     | see | 1 | NEG | 1p | 3p | PRETERIT |

'(if) they hadn't seen us'

Within this template, there are three slots that track features of the verb's arguments:

1. THEME SIGN — tracks person features of the object
2. AGREEMENT PROPER — tracks subjects or local plural objects
3. PROXIMATE-OBVIATE CLITIC — tracks the presence of 3rd person arguments

We will primarily focus on the second of these, here termed 'agreement proper'. However, in order to properly delineate the scope of this agreement, we will first briefly discuss the other two slots.

2.2   Theme signs

In the independent order, Algonquian theme signs are famously sensitive to the properties of both subject and object, and indicate 'inversion' (Valentine 2001, Rhodes 1994, Béjar & Rezac 2009).

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[1]These paradigms are traditionally termed the 'Independent' and 'Conjunct' orders, and broadly correspond to matrix and embedded clauses, with some exceptions. For consistency, we will use the terms 'matrix' and 'embedded' throughout, but see Valentine (2001) for more details on where each paradigm is used.

However, in the Ojibwe embedded clause, theme signs fairly straightforwardly track only the person features of the object.

The paradigm of embedded clause theme signs is shown in Table 1. In this table and the others to follow, the columns vary by subject / external argument; the rows vary by object / internal argument; and blank spaces are ungrammatical for binding reasons (i.e. require the reflexive verb form).

Table 1: Embedded clause theme signs

O \ S	1s	2s	3s	Excl	Incl	2p	3p
1s		i	i			i	i
2s	i-no		i-no	igoo			i-no
3s	aa	aa	aa	aa	aa	aa	aa
Excl		i	i			i	i
Incl			i-no				i-no
2p	i-no		i-no	igoo			i-no
3p	aa	aa	aa	aa	aa	aa	aa

The distinct morphemes evident in this paradigm are:

1. **/-i/** — indicates a 1st person object
2. **/-i-no/**[2], **/-igoo/** — indicates an addressee object (2nd person or inclusive)
3. **/-aa/** — indicates a 3rd person object

The theme sign /-igoo/ is used exactly when the subject is exclusive and the object is the addressee. This is the only case in this table in which the features of the subject seem relevant to the selection of theme sign. However, this agreement is associated with with a very specific pragmatic context: /-igoo/ when the addressee is being specifically excluded from the plural subject. It seems plausible that this involves extra marking of the object in some way, making it possible to maintain the generalization that the theme sign sees only the object. We will proceed on the assumption that it is possible to understand these theme signs as encoding only the person features of the object along with some discourse-pragmatic features.

2.3 Proximate-obviate clitic

After agreement proper, Ojibwe embedded verbs have a slot dedicated to tracking the presence of 3rd person arguments (Oxford 2014a).[3]

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[2]The second part of the /-i-no/ theme sign is realized after negation, and so might be regarded as a separate morpheme. However, it always only tracks the person features of the internal argument, just like the theme sign, and so here it is lumped in.

[3]For more on the pragmatic role of proximate-obviate marking, see Valentine (2001).

Table 2: Proximate-obviate Clitic

O \ S	1s	2s	3s	Excl	Incl	2p	3p
1s			g				gwaa
2s			k				kwaa
3s	g	d	d	d	(g)	(g)	gwaa
Excl			d				dwaa
Incl			(g)				(g)waa
2p			(g)				(g)waa
3p	gwaa	dwaa	dwaa	dwaa	(g)waa	(g)waa	gwaa

That /d/, /g/, and /k/ are all allomorphs of a single morpheme can be seen from the intransitive proximate-obviate clitic paradigm:

Table 3: Intransitive proximate-obviate clitic

	V-final stem		N-final stem	
	AFFIRMATIVE	NEGATIVE	AFFIRMATIVE	NEGATIVE
3s	-d	-g	-g	-g
3p	-waad	-gwaa	-waad	-gwaa

In the intransitive, /g/ and /d/ clearly alternate based on both phonological and morphosyntactic context. As such, we will treat them both (and the devoiced form /k/) as realizations of a single morpheme in the transitive paradigm, as well.[4]

2.4 Agreement proper

We will now turn to the primary focus of this paper, agreement proper. This agreement uses the same set of morphemes as intransitive verbs, so it will be helpful to have the intransitive agreement paradigm in mind. This is given in Table 4.

Table 4: Intransitive agreement

1s	-aan	**Excl**	-aang
		Incl	-ang
2s	-an	**2p**	-eg
3s	ø	**3p**	ø

---

[4]The form of the third person plural clitic /-gwaa/ is very similar to the form of the third person plural pronoun (/-wiinwaa/ 'they'). For additional arguments in favor of treating /-gwaa/ as a clitic see Oxford (2014a:p. 103–110).

Turning back to transitives, we will show that the correct generalization for this paradigm is as follows:

(3) **Generalization for agreement proper**
   a. If the object is both local and plural, agree with it in all features.

   b. Otherwise, agree with the subject in all features.

To see that this is true, we will separate the agreement paradigm into four types of contexts: those with two singular arguments; plural subjects and singular objects; singular subjects and plural objects; and two plural arguments.[5]

2.4.1   Type 1: Singular → Singular

Looking at Table 5, consider first the $2s \to 1s$ and $1s \to 2s$ cells. Here we see that agreement is with the subject. Similarly, when the subject is $3s$ person, agreement is /ø/ exactly as it would be if agreeing with an intransitive nonlocal subject. When the object is $3s$ we see the new forms /-ag/ and /-ad/; however, these morphemes look like portmanteau of the normal $1s$ and $2s$ forms with the proximate-obviate clitic. If we separate out the two parts of this morpheme, we can still see agreement with the subject, as shown in Table 6:

Table 5: Agreement proper: singular S → singular O

O \ S	1s	2s	3s
1s		an $_s$	ø $_s$
2s	aan $_s$		ø $_s$
3s	ag $_?$	ad $_?$	ø $_s$

Table 6: Portmanteaux breakdown

O \ S	1s	2s	3s
3s	a(an) $_s$ − g	a(n) $_s$ − d	ø $_s$

Thus, once we account for portmanteaux, we see that when the object is singular agreement proper is always with the subject.

2.4.2   Type 2: Plural → Singular

In the part of the paradigm with plural subjects and singular objects, agreement proper also tracks the features of the subject:

There is one irregularity in this part of the paradigm: When the subject is exclusive and the object is 2nd singular, the agreement form is /-an/, which looks like the intransitive agreement form

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[5]Throughout this paper, the notation $X \to Y (= Z)$ indicates a context in which the subject has features X, the object has features Y, and the verb expresses the features Z.

Table 7: Agreement proper: plural S → singular O

O \ S	Excl	Incl	2p	3p
1s			eg $_s$	ø $_s$
2s	an $_?$			ø $_s$
3s	aang $_s$	ang $_s$	eg $_s$	ø $_s$

for the object. This is the only cell in the paradigm which behaves this way, and we will treat it as exceptional.

2.4.3 Type 3: Singular → Plural

When the object is plural, a more complicated pattern emerges: agreement tracks the object if it is local, but the subject otherwise.

Table 8: Agreement proper: singular S → plural O

O \ S	1s	2s	3s
Excl		aang $_o$	aang $_o$
Incl			ang $_o$
2p	agog $_?$		eg $_o$
3p	a $_s$	a $_s$	ø $_s$

Here, when the object is 3rd, agreement tracks the features of the subject just as in the earlier parts. But when the object is 1st or 2nd, we see agreement proper filled with the 1st or 2nd intransitive agreement morphemes — that is, agreement proper switches to tracking the object in this part of the paradigm exactly when it is local.

There is one morpheme, /-agog/, which appears only once in the inflectional material of the language, so we cannot tell what this agreement is with. Oxford (2014b) notes that this form is similarly opaque in Proto-Algonquian. He treats it as portmanteaux, but without it appearing anywhere else in the paradigm it is impossible to say exactly what features it expresses. We will simply treat it as exceptional.

2.4.4 Type 4: Plural → Plural

Finally, in the part of the paradigm where both subject and object are plural, we again see a split pattern: agreement is with the object unless the object is 3rd person.

Thus, the generalization given above in (3) given above holds across the entire agreement paradigm: **If the object is both local and plural, agree with it; otherwise, agree with the subject.**

3 Background

There are several prior accounts of the kind of agreement systems where the internal argument and the external argument compete for a single agreement slot. We will be concerning ourselves with

Table 9: Agreement proper: plural S → plural O

O \ S	Excl	Incl	2p	3p
Excl			$aang_o$	$aang_o$
Incl				ang_o
2p	eg_o			eg_o
3p	$aang_s$	ang_s	eg_s	$ø_s$

two that specifically handle the selection of the goal in the narrow syntax, namely Béjar & Rezac (2009) and Preminger (2011).

3.1 Béjar & Rezac (2009)

The Béjar & Rezac (2009) account aims to capture agreement patterns that show preference for agreement with objects and agreement displacement to subjects in certain argument combinations and where the controller is chosen based on feature hierarchies. Cross-linguistically, a solid generalization is that local (1st or 2nd person arguments) and plural arguments are higher than 3rd person and singular arguments on person and number hierarchies respectively.

An arbitrary language with agreement displacement can be illustrated schematically in the following way in (4). This is an example of a language where 1st person arguments are higher on the person hierarchy than the 2nd person arguments. In (4) the object being higher on the person hierarchy controls the agreement slot. In (5) the subject is more highly specified and the agreement is displaced to the subject.

(4) a. $3 \rightarrow 1 = 1$

    b. $2 \rightarrow 1 = 1$

(5) a. $1 \rightarrow 3 = 1$

    b. $1 \rightarrow 2 = 1$

In order to capture such patterns, Béjar & Rezac introduce the notion of articulated probes. A possible structure of an articulated probe is demonstrated in (6).

(6) **An articulated probe for the hierarchy:** $1 > 2 > 3$
$[u - 3 - 2 - 1] = [\pi \text{ [local [author]]]}$

The idea is that each feature of the probe probes individually and can match a feature on a DP independently. An unvalued feature [uF] becomes valued when it matches with a feature of the goal [F] and this feature is copied to the probe. The agreement process of an articulated probe is demonstrated in (7).

(7) **The structure of articulated probes**
(from Béjar & Rezac 2009)

Probe		DP
[u3]	—	[3]
[u2]	—	[2]
[u1]	—	[1]

Other crucial ingredients of their system are ideas of cyclicity and locality. The articulated probe is positioned between the subject and the object. In the first cycle of agreement each feature of the probe seeks for matching features in its c-command domain. If the object does not match in all features with the probe (if the object is less specified than the probe), then the remaining unvalued feature stays active. There is cyclic expansion of the search space and the probe goes for a second cycle of agreement with the subject in its specifier. This is configuration is shown below.

(8) **Articulated probes:**
(from Béjar & Rezac 2009)

Subj	Probe		Obj
[3]	[u3]	—	[3]
[2]	[u2]	—	[2]
[1]	—	[u1]	

Since in the given example the object is less specified than the subject, the last segment of the probe [u1] can search upwards and agree with the argument in its specifier. With those elements this system successfully derives the agreement patterns where the internal argument controls the agreement slot unless the external argument is more highly specified.

3.2 Preminger (2011)

Preminger's (2011) account aims to capture patterns of *omnivorous agreement*: agreement that seeks out only DPs with particular features, regardless of structural position of the items that carry those features. In his system probes are relativized to particular features. Relativized probes are already standardly utilized in other domains — for example, the interrogative C probe only finds *wh*-features — and Preminger extends this idea to agreement probes.

Agreement probes are relativized to features on the φ feature geometry (9).

(9) **A simplified feature geometry**
(based on Harley & Ritter 2002 via Preminger 2011)

```
            [φ]
           /  \
   [PERSON]   [NUMBER]
       |          |
    [local]    [plural]
       |
   [author]
```
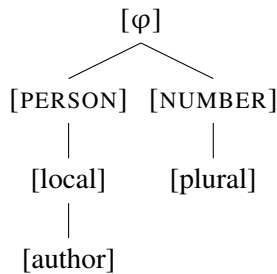
Given such a hierarchy, a probe can be relativized to [local], in which case it can only see DPs bearing the feature [local]. Such a probe skips not only non-DPs but also DPs that are not 1st or 2nd person. This system is tailored to capture the patterns of agreement in which the highest local argument controls the agreement in person. In this system, person and number probes are independently relativized. This allows to derive the agreement paradigms where person and number morphology on a verb can express features of two different arguments.

3.3 On the need to extend the existing accounts

The systems outlined above cannot account for the pattern of agreement shown by Ojibwe verbs in embedded clauses without some extension. In both systems the person and number probes are completely independent, each probe is specified either for person or number, but not both. In particular, separate articulated or relativized probes might target different goals and express e.g. plural features from one argument but local features from the other. Crucially, this is not observed in Ojibwe because the agreement happens either with local plural objects or failing that with the subject irrespective of its feature composition.

Moreover, even if we drop the assumption that the two probes are completely independent and introduce a single probe targeting a feature combination — [[LOCAL] [PLURAL]] — the Ojibwe agreement pattern will not follow straightforwardly. If no argument exists with this combination, these systems predict either failed agreement in case of a relativized probe or partial agreement with some features of the object on the first cycle and partial agreement with the subject on the second cycle in case of an articulated probe. For example, one might expect that in a sentence with 3rd person plural object and 1st person singular subject, the attested agreement will be with 1st person plural features. However, this prediction is not born out: we do not see failed or partial agreement in Ojibwe when the object does not bear the right combination of features ([[LOCAL] [PLURAL]]). Rather in this case the agreement is with the person and number features of the subject. Thus, some extension or modification is necessary to account for the Ojibwe agreement facts.

4 Proposal: indirect interaction of person and number probes

We propose that the Ojibwe pattern can be accounted for through the indirect interaction of three relativized probes placed in a feeding relationship: Each probe will raise the argument it agreed with into its specifier, making it available to be targeted by the next probe.

This proposal relies on a strict locality condition in the spirit of Relativized Minimality (Rizzi 1990):

(10) **Relativized Minimality** (paraphrased)
Let P be a φ probe and G a goal. AGREE(P,G) only if there is no φ probe P′ such that P c-commands P′ and P′ commands G.

In other words, agreement probes may not 'see past' other agreement probes. Potential goals of a low probe are invisible to a higher probe unless they have been moved up.[6]

For Ojibwe, we will assume the following structure (11), which has three probes. All of these probes are relativized as in Preminger (2011). These probes are:

(a) A low person probe relativized to [local], spelled out as the THEME SIGN
(b) A number probe relativized to [plural]
(c) A high person probe relativized to [local], jointly spelled out with the number probe as AGREEMENT PROPER

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[6]We use Relativized Minimality, rather than phases or some other locality condition, because of the proximate clitic: The probe for this must be positioned higher in the structure, but must be able to see both arguments. We propose that it is not a φ probe and so the other φ probes are not barriers for it.

(11)

```
          S
            π[local]
               #[plural]
                   π[local]        O
```
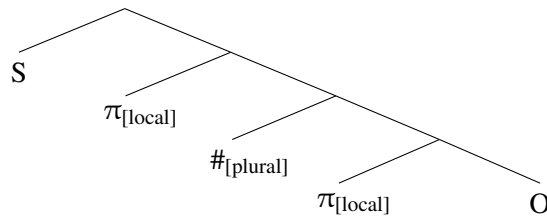
The derivation proceeds as follows:

1. The low person probe searches the object for [local] features and raises it if found, copying PERSON features in the process.

2. The number probe searches its c-command domain, which includes the object *if and only if the low person probe raised it*, and raises the object if it is plural, copying NUMBER features in the process.

3. The high person probe looks in its c-command domain, which includes the object *if and only if the number probe raised it*, and agrees with it in all φ-features.

4. If the high person probe finds nothing in its c-command domain, it goes for a second cycle (Béjar & Rezac 2009) and searches its specifier.

We will step through several illustrative derivations below. For each one, we will first show the configuration of arguments and probes. We will then step through the derivation probe-by-probe.

4.1 Local Plural → Local Plural

For the argument combination where both the subject and object bear the features local and plural the expected agreement is with the object. We illustrate how such a pattern can be accounted for under our proposal with a 2$^\text{nd}$ plural subject and a 1$^\text{st}$ plural object.

(12) **2p → 1p = 1p**
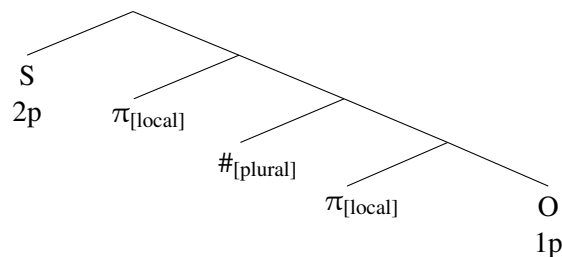
```
          S
          2p    π[local]
                   #[plural]
                       π[local]        O
                                       1p
```

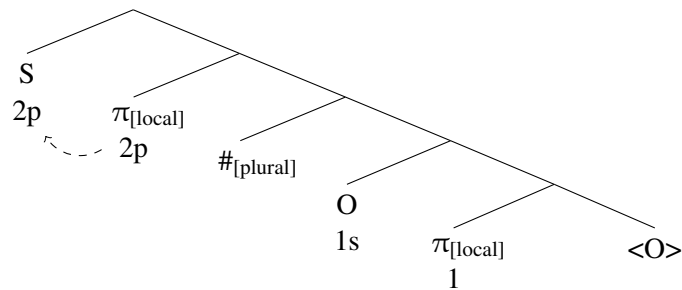Step 1: The low person probe searches its c-command domain, agrees with the object, and raises it:

S
2p $\pi_{[local]}$

$\#_{[plural]}$

$\pi_{[local]}$ O
1   1p

Step 2: The number probe searches its c-command domain, agrees with the object, and raises it:

S
2p $\pi_{[local]}$
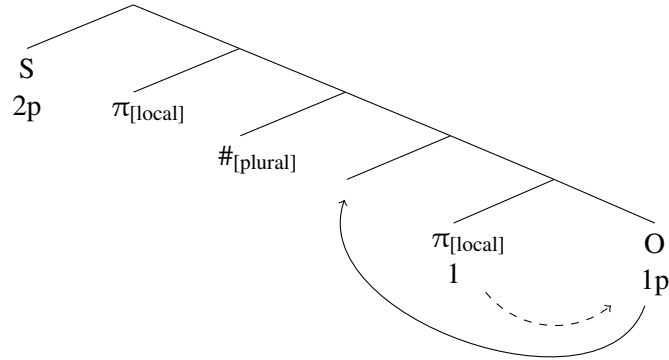
$\#_{[plural]}$
pl
    O
1p $\pi_{[local]}$ \<O\>
    1
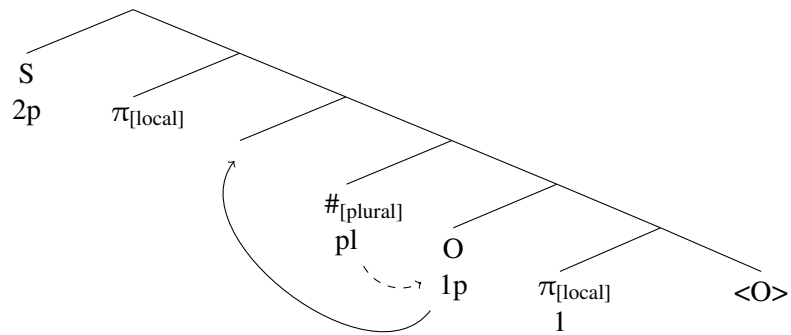
Step 3: The high person probe searches its c-command domain and agrees with the object:

S
2p $\pi_{[local]}$
1p
    O
1p $\#_{[plural]}$
pl   \<O\>
    $\pi_{[local]}$ \<O\>
    1
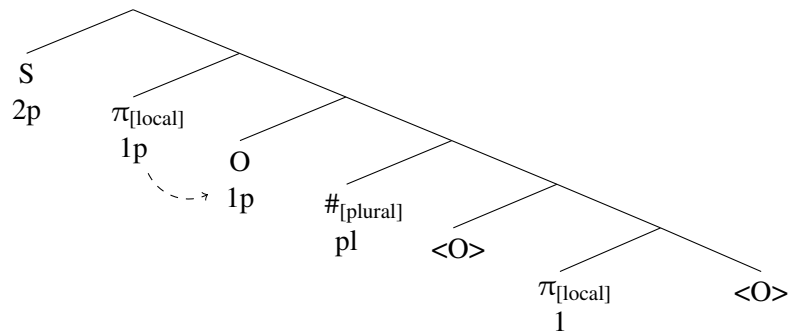
Step 4: **Spellout: 1p**

4.2 Local Plural → Local Singular

For the argument combination where the subject is local plural and the object is local singular, the expected agreement is with the local plural subject. Here the derivation would proceed as below.

(13) **2p → 1s = 2p**
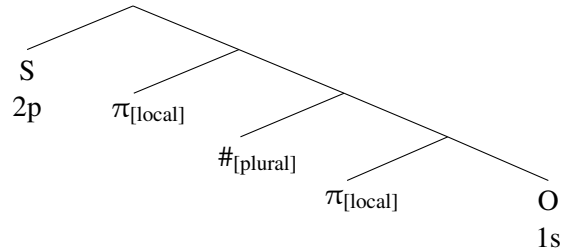
$$\begin{array}{l} \text{S} \\ \text{2p} \quad \pi_{[local]} \\ \qquad\quad \#_{[plural]} \\ \qquad\qquad\quad \pi_{[local]} \qquad \text{O} \\ \qquad\qquad\qquad\qquad\qquad \text{1s} \end{array}$$

Step 1: The low person probe searches its c-command domain, agrees with the object, and raises it:

$$\begin{array}{l} \text{S} \\ \text{2p} \quad \pi_{[local]} \\ \qquad\quad \#_{[plural]} \\ \qquad\qquad\quad \pi_{[local]} \qquad \text{O} \\ \qquad\qquad\quad 1 \qquad\qquad\quad \text{1s} \end{array}$$
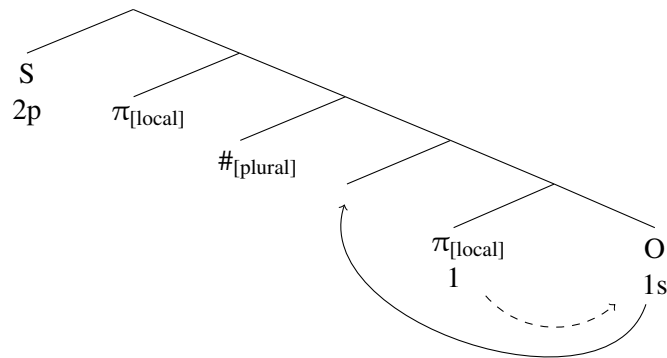
Step 2: The number probe searches its c-command domain, but finds nothing — the object is singular and thus not visible to it.

$$\begin{array}{l} \text{S} \\ \text{2p} \quad \pi_{[local]} \\ \qquad\quad \#_{[plural]} \\ \qquad\qquad\quad ✗ \text{ 1s} \quad \text{O} \\ \qquad\qquad\qquad\qquad \pi_{[local]} \qquad <\text{O}> \\ \qquad\qquad\qquad\qquad\quad 1 \end{array}$$
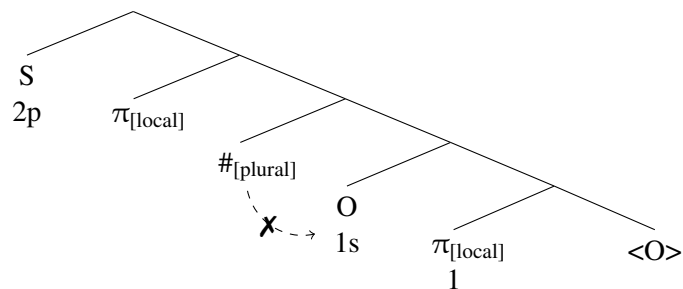
Step 3: The high person probe searches its c-command domain, but is unable to agree with object —
the number probe intervenes.

S
2p $\pi_{[local]}$
$\#_{[plural]}$
✗
O
1s $\pi_{[local]}$ <O>
1
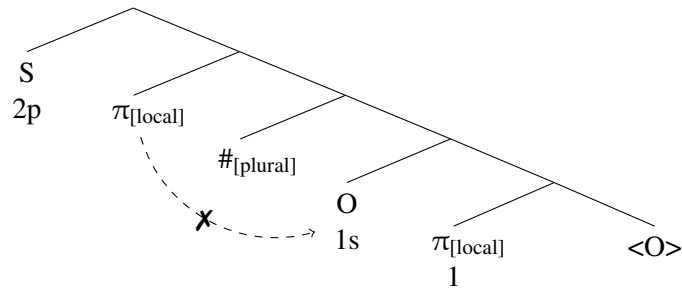
Step 4: The high person probe goes for a second cycle and probes into its specifier, finding and
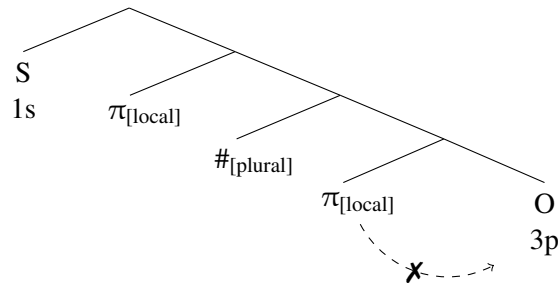agreeing with the subject, copying all of its features (including number):

S
2p $\pi_{[local]}$
2p
$\#_{[plural]}$
O
1s $\pi_{[local]}$ <O>
1

Step 5: **Spellout: 2p**

4.3 Local Singular → Nonlocal Plural

Turning next to the argument combination of a local singular subject and a non-local plural object, the expected agreement form would index the features of the subject. The derivation of this agreement form is illustrated with a 1st singular subject and a 3rd plural object below.
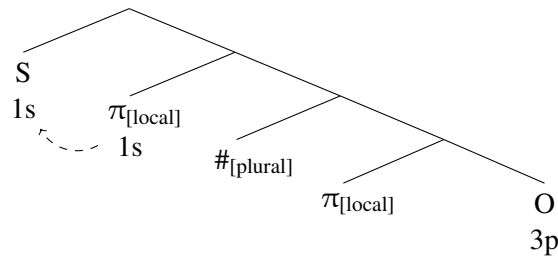
(14) **1s → 3p = 1s**

S
1s $\pi_{[local]}$
$\#_{[plural]}$
$\pi_{[local]}$ O
3p
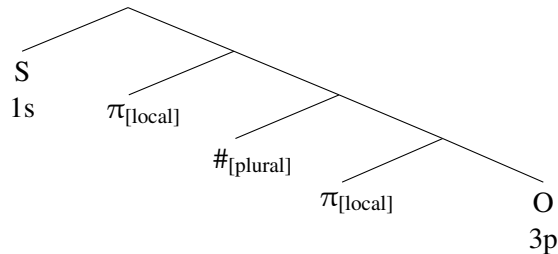
Step 1: The low person probe searches its c-command domain, but finds nothing — the object is not local and so is not visible:

$$
\begin{array}{l}
\text{S} \\
\text{1s} \quad \pi_{[\text{local}]} \\
\qquad\qquad \#_{[\text{plural}]} \\
\qquad\qquad\qquad \pi_{[\text{local}]} \qquad\qquad \text{O} \\
\qquad\qquad\qquad\qquad\qquad\qquad\qquad\quad \text{3p}
\end{array}
$$

Step 2: The number probe searches its c-command domain, but finds nothing — the low person probe intervenes between it and the object:

$$
\begin{array}{l}
\text{S} \\
\text{1s} \quad \pi_{[\text{local}]} \\
\qquad\qquad \#_{[\text{plural}]} \\
\qquad\qquad\qquad\qquad \pi_{[\text{local}]} \qquad\qquad \text{O} \\
\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad \text{3p}
\end{array}
$$
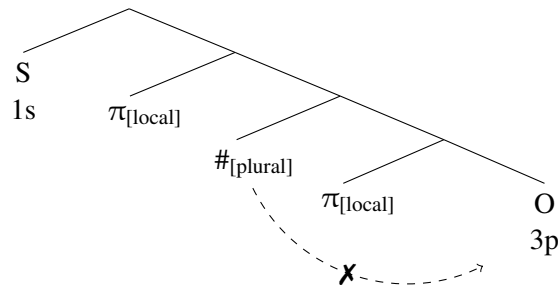
Step 3: The high person probe searches its c-command domain, finds nothing, and goes for a second cycle, agreeing with the subject:

$$
\begin{array}{l}
\text{S} \\
\text{1s} \quad \pi_{[\text{local}]} \\
\qquad\qquad \text{1s} \\
\qquad\qquad\quad \#_{[\text{plural}]} \\
\qquad\qquad\qquad\qquad \pi_{[\text{local}]} \qquad\qquad \text{O} \\
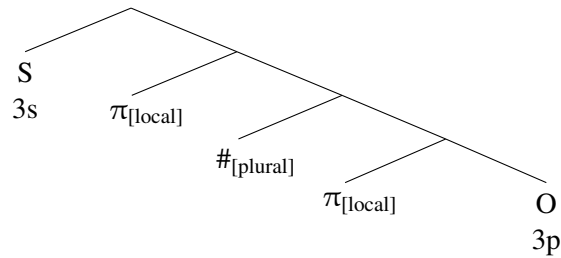\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad \text{3p}
\end{array}
$$

Step 4: **Spellout: 1s**

4.4 Nonlocal Singular → Nonlocal Plural

Finally, we provide the derivation for the computation of agreement for the argument combination where the subject is non-local singular and the object, non-local plural. This is the case where we have failed agreement for all agreement probes.
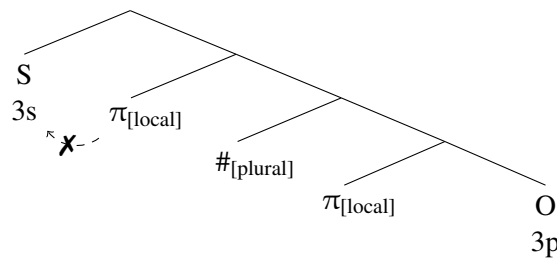
(15) **3s → 3p = Ø**

Step 1: The early part of the derivation proceeds as above — the low person probe and the number probe fail to agree:
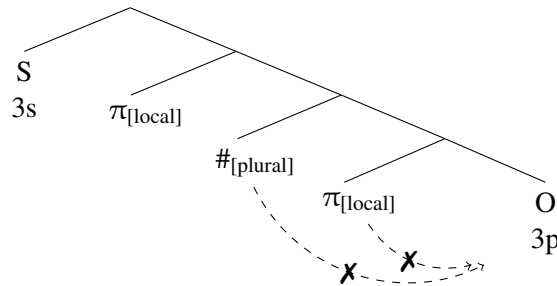
Step 2: When the high person probe goes for its second cycle, it finds nothing — the subject is nonlocal and hence invisible to it.

Step 3: **Spellout: Ø**

5 Conclusion

In this paper we have examined the agreement pattern in Ojibwe embedded clauses. We have shown that there is a preference for agreeing with objects which have both plural and local features: having only the relevant number or only the relevant person features is not enough to trigger object agreement. If the object does not have the right feature combination, it does participate in competition for the control of agreement proper.

We have suggested that this agreement pattern calls for an extension of the existing agreement models. In particular, we have argued that this pattern cannot be accounted for by allowing a single probe to be relativized to both person and number features. Rather than resorting to a stipulated hierarchy making reference to a combination of person and number features, we instead derive the pattern through the indirect interaction of probes mediated by Relativized Minimality. Our proposal is an extension of the Preminger and Béjar & Rezac systems to accommodate this agreement pattern. Potential sources of cross-linguistic variation in our system include the featural specification of the probes and their ordering with respect to subject and object.

While this model does allows us to generate additional agreement patterns beyond those predicted by Preminger (2011) and Béjar & Rezac (2009), our extended system remains relatively restrictive in that there are patterns of agreement that cannot be derived in our system. One such pattern is the reverse of the Ojibwe pattern:

(16) **Reverse Ojibwe Generalization** (predicted to be impossible)
      Agree with subject if it is both [PLURAL] and [LOCAL]; otherwise, agree with object.

In our analysis, this system would require two probes (relativized to [LOCAL] and [PLURAL], respectively) above the subject, raising it into the domain of a still-higher probe. However, that highest probe would then be too far from the object to agree with it if the intermediary probes did not find anything. Stated more generally, our proposal predicts that any time agreement selects a target based on combinations of types of features, if that combination is not found agreement cannot default to a structurally-lower argument. Further research is required to assess the truth of this prediction.

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Appendix: Ojibwe Agreement Paradigm

The following tables present the full Ojibwe agreement paradigm, including theme signs, agreement proper, and proximate / obviate clitic. Throughout the table, THEME SIGNS are indicated in small caps, **agreement proper** is bolded, and *clitics* are italicized. Subscripts on agreement proper indicate whether agreement is with subject or object.

Table 10: Ojibwe agreement, singular subjects

O \ S	1s			2s			3s		
1s				I	**an**$_s$		I	**ø**$_s$	*g*
2s	I-NO	**aan**$_s$					I-NO	**ø**$_s$	*k*
3s	AA	**a**$_s$	*g*	AA	**a**$_s$	*d*	AA	**ø**$_s$	*d*
Excl				I	**aang**$_o$		I	**aang**$_o$	*d*
Incl							I-NO	**ang**$_o$	
2p	I-NO	**agog**$_?$					I-NO	**eg**$_o$	
3p	AA	**a**$_s$	*gwaa*	AA	**a**$_s$	*dwaa*	AA	**ø**$_s$	*dwaa*

Table 11: Ojibwe agreement, plural subjects

O \ S	Excl			Incl			2p			3p		
1s							I	**eg**$_s$		I	**ø**$_s$	*gwaa*
2s	IGOO	**an**$_?$								I-NO	**ø**$_s$	*kwaa*
3s	AA	**aang**$_s$	*d*	AA$_s$	**ang**		AA$_s$	**eg**		AA	**ø**$_s$	*gwaa*
Excl							I	**aang**$_o$		I	**ang**$_o$	*dwaa*
Incl										I-NO	**ang**$_o$	*waa*
2p	IGOO	**eg**$_o$								I-NO	**eg**$_o$	*waa*
3p	AA	**aang**$_s$	*dwaa*	AA	**ang**$_s$	*waa*	AA	**eg**$_s$	*waa*	AA	**ø**$_s$	*gwaa*