A Unified Account for Number Agreement in Algonquian Languages¹

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Abstract

The literature on Algonquian agreement displacement often discusses the person hierarchy in which second person outranks first person for all of the agreement slots. However, over the years, many Algonquian languages have been reported to establish more than one hierarchies in their agreement system. This paper concerns itself with the typological classification as well as the syntactic derivations for person hierarchy effects, with a focus on number agreement, and thereby advancing our understanding of cross-linguistic variation in agreement constructions. In particular, I propose that in order to capture the plural paradigms in both one- and two-person hierarchy languages, two distinct probes for person and number are required. Crucially, what drives one-person hierarchy languages away from twoperson hierarchy ones is the availability of the goal for subsequent matching with the number probe after their features have been checked by the person probe.

1 Introduction

In this paper, I investigate cross-linguistic variation in plurality agreement constructions that involve person hierarchy (PH) effects, proposing a unified account for the syntactic derivation of agreement in languages that have only one apparent PH effect and those that have two.

For languages with only one PH, such as Ojibwe (Valentine, 2001) and Swampy Cree (Ellis, 1983), both the prefix and the plural suffix follow the same PH in which second person outranks first person (2 > 1). In contrast, if there are two active PHs in the language, as in the case of Meskwaki (Goddard, 1994) and Menominee (Bloomfield, 1962), the agreement slots take on different rankings. In particular, while the prefix is determined by the 2 > 1 PH, the plural suffix always follows the 1 > 2 ranking. A greater scope on Algonquian one-PH and two-PH languages has been proposed in work on linguistic typology by Macaulay (2005). However, there are no existing formal analyses or syntactic mechanisms in previous literature to account for the contrast found in these two types of Algonquian languages.

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I argue that in order to license ϕ -features in the plural paradigm, both types of languages require two distinct probes, which are the person (π) and number (#) probes. The crucial factor that differentiates one-PH languages from two-PH ones is whether the goals are available for matching with the # probe after their features have been checked by the π probe. I show that variation in this factor can capture the different agreement profiles found in Algonquian languages.

The remainder of the paper is structured as follows. In Section 2, I will briefly introduce the basic agreement patterns observed in Algonquian languages. The data pertaining to the different agreement patterns expressed by the prefix and plural suffix found in one-PH and two-PH Algonquian languages will be presented in section 3 and 4, respectively. In section 5, I will show how the Cyclic Agree mechanism (Béjar & Rezac, 2009) cannot account for the data shown in the previous sections. In sections 6 and 7, I will then propose an analysis to capture these agreement facts and show how this proposed mechanism works for both one-PH and two-PH Algonquian languages. Section 8 summarizes the main points and concludes the paper.

2 Algonquian Agreement System

The agreement patterns in Algonquian languages can be characterized as having multiple arguments competing for the control of one agreement slot. The controller in the agreement system determines the ranking of the external argument (EA) and the internal argument (IA) on the basis of their person specifications. Therefore, the resulting agreement morphology is sensitive to this person hierarchy.

This also generates two classes of derivations for transitive clauses in Algonquian. Firstly, there is a class corresponding to direct (DIR) contexts. In this class, the EA controls agreement. On the other hand, there also exists another class in which agreement tracks the IA. This class corresponds to inverse (INV) contexts.

Following Béjar & Rezac (2009), this paper makes use of the notation $x \rightarrow y = x$. This denotes that in a clause where the π specifications of the EA are x, and those of the IA are y, agreement is controlled by either x or y. The agreement patterns will be illustrated below using the Ojibwe data taken from Valentine (2001).

(1)	$1 \rightarrow 3 = 1$		$3 \rightarrow 1 = 1$		
	n- wâbm -â		n- wâbm -ig		
	1 see DIR		1 see INV		
	'I see him.'		'He see me.'		

In (1), the two candidate controllers are the first person EA argument and the third person IA argument. Meanwhile, in (2), the EA is the third person argument, while the IA is the first person argument. Because in Ojibwe, the hierarchy of 1 > 3 determines

the choice of controller, a first person argument will always win over a third person argument. As a result, in both (1) and (2) the prefix argument is tracked by a first person argument, and thus the first person marking, n-, appears in this slot.

The direct-inverse alignment system is what distinguishes (1) and (2). While the EA controls agreement in (1), it is the IA that tracks agreement in (2). Therefore, the morpheme *-aa* corresponding to direct contexts appears in (1). Meanwhile, since (2) corresponds to an inverse context, it is marked with *-ig*.

This paper breaks Algonquian agreement into three categories, which are the prefix (PFX) agreement corresponding to person features, the theme sign (TS) corresponding to the direct-inverse alignment, and the plural (PL) suffix corresponding to both person and number features. Each of these positions may only host one affix. In particular, the study mainly concerns itself with the agreement patterns observed in the two prefix and plural suffix agreement slots. Moreover, it will focus on the form of transitive animate (TA) independent order as well as the interactions between speech act participants (SAP), which are first and second persons.

3 One-PH Languages

One-PH Algonquian languages, including Ojibwe and Swampy Cree, are the ones that follow only one ranking across all of the agreement slots. Specifically, the controllers in both slots in question, the prefix and the plural suffix, are given by the 2 > 1 person hierarchy. In other words, for both of the agreement slots, the morphological π features reflect the following entailment relations among person features (Harley & Ritter, 2002):

(3) Entailment: [addressee] \subset [participant] (\subset [π])

This means that first from second persons in Swampy Cree are distinguished by classifying an addressee, instead of a speaker. Then, a bare [participant] will be interpreted as first person, and second person will be the most specified, as illustrated in the following table:

(3)	1	2
([π])	[π] [participant]	[π] [participant] [addressee]

Table 1: Person	specifications	in all of the	agreement slots	in one-PH languages
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As a result, when two SAP arguments interact with each other in a transitive clause, no matter what syntactic role it plays, the second person argument will always control agreement, as illustrated in the following Swampy Cree data (Ellis, 1983):

	EA – IA	PFX	STEM	TS	PL	EXAMPLE
a.	2sg – 1sg	ki- 2	wâpam see	-in DIR	_	'you (sg.) see me'
b.	2pl – 1sg	ki- 2	wâpam see	-in DIR	-âwâw 2pl	'you (pl.) see me'
c.	2sg – 1pl	ki- 2	wâpam see	-in DIR	-ân 1PL	'you (sg.) see us (excl.)'
d.	2pl – 1pl	ki- 2	wâpam see	-in DIR	-âwâw 2pl	'you (pl.) see us (excl.)'
e.	1sg – 2sg	ki- 2	wâpam see	-itin INV	_	'I see you (sg.)'
f.	1sg – 2pl	ki- 2	wâpam see	-itin INV	-âwâw 2pl	'I see you (pl.)'
g.	1pl – 2sg	ki- 2	wâpam see	-itin INV	-ân 1PL	'we (excl.) see you (sg.)'
h.	1 PL - 2 PL	ki- 2	wâpam see	-itin INV	-âwâw 2pl	'we (excl.) see you (pl.)'

 Table 2: TA Independent SAP interactions in Swampy Cree (Ellis, 1983)

Firstly, for all of the examples showing the interaction between a first person and a second person argument above, *ki-*, which marks the presence of a second person argument, is always the morpheme that appears in the prefix agreement slot. This means that a second person argument always outranks a first person argument in this agreement slot.

Secondly, the plural suffix includes the plural agreement with both first and second persons, whose morphemes will only appear if there is a relevant corresponding argument. As shown in (b) and (f), when one of the arguments is 2PL, and the other is 1SG,

the expected $-\hat{a}w\hat{a}w$, which marks second person plural, will appear in the plural suffix agreement slot. Likewise, in (c) and (g), when one argument is 1PL and the other is 2SG, the expected first person plural marking $-\hat{a}n$ will appear in this slot instead.

Since each agreement slot may host only one affix, and there are two candidate controllers, 1PL and 2PL, competing for the control of the plural suffix, an interesting pattern emerges. If both 1PL and 2PL arguments are present in one clause, the PH effect will come into play to determine the plural agreement morpheme that will appear in this suffix slot. As shown in the (e) and (h) cases, the plural suffix agreement is controlled by the second person plural argument, as it is the morpheme $-\hat{a}w\hat{a}w$ that appears in this slot. Then, similar to the prefix agreement slot, this plural suffix slot also follows the 2 > 1 ranking.

4 Two-PH Languages

As previously shown in section 3, the prefix and the plural suffix agreement slots in one-PH Algonquian languages like Ojibwe and Swampy Cree follow only one ranking, which is 2 > 1. In this section, we will discuss a different type of agreement pattern observed in other Algonquian languages, such as Meswaki and Menominee, investigating the data from two-PH languages, whose agreement slots obey different person hierarchies.

This means that besides the oft-cited 2 > 1 ranking, the controllers in the two agreement slots are also governed by a 1 > 2 hierarchy. In particular, the general pattern observed in Algonquian 2-PH languages is that while the 2 > 1 PH still determines the morpheme that appears in the prefix slot, it is the 1 > 2 ranking that the plural suffix follows. In other words, for the prefix agreement slot, we still have the same entailment relations among person features noted in (3). However, for the plural suffix slot, the morphological π features reflect a different entailment, as shown below (Harley & Ritter, 2002):

(4) Entailment: [speaker] \subset [participant] (\subset [π])

The different entailment relations give rise to an interesting puzzle about person specifications. A contradiction emerges because while the prefix specifies a second person as [addressee], the plural suffix specifies a first person as [speaker]. A bare [participant] is interpreted as first person in the prefix slot, but as second person in the plural suffix slot. In other words, in the prefix slot, second person is the most specified, but in the plural suffix, it is the first person that is most specified, as illustrated below:

Table 3: Person specifications in the plural suffix slot in two-PH languages

(3)	2	1
([<i>π</i>])	[π] [participant]	[π] [participant] [speaker]

Therefore, when it comes to SAP interactions in two-PH languages, agreement tracks the second person argument in the prefix slot, but the first person plural argument in the plural suffix. This pattern is illustrated in the following Meskwaki data, adopted from Goddard (1994):

Table 4: TA Independent SAP interactions in Meskwaki (Goddard, 1994)

	EA – IA	PFX	STEM	TS	PL	EXAMPLE
a.	2sg – 1sg	ke- 2	wâpam see	-i DIR	_	'you (sg.) see me'
b.	2pl – 1sg	ke- 2	wâpam see	-i DIR	-pwa 2pl	'you (pl.) see me'
c.	2sg – 1pl	ke- 2	wâpam see	-i DIR	-pena 1PL	'you (sg.) see us (excl.)'
d.	2pl – 1pl	ke- 2	wâpam see	-i DIR	-pena 1PL	'you (pl.) see us (excl.)'
e.	1sg – 2sg	ke- 2	wâpam see	-ene INV	_	'I see you (sg.)'
f.	1sg – 2pl	ke- 2	wâpam see	-ene INV	-pwa 2pl	'I see you (pl.)'
g.	1pl – 2 sg	ke- 2	wâpam see	-ene INV	-pena 1PL	'we (excl.) see you (sg.)'
h.	1 PL - 2 PL	ke- 2	wâpam see	-ene INV	-pena 1PL	'we (excl.) see you (pl.)'

Firstly, the prefix agreement in Meswaki behaves similarly to the pattern previously observed in Swampy Cree. Like Swampy Cree's ki-, the morpheme ke- always appears in the prefix slot, marking the presence of a second person argument. In other words, a 2 > 1 ranking is established for this slot.

However, the difference between one-PH and two-PH languages emerges when it comes to the plural suffix agreement slot. In contrast to the pattern shown in Swampy Cree, when both 1PL and 2PL arguments are present in a clause, the plural suffix agreement in Meskwaki is controlled by first person plural argument. Therefore, instead of *-pwa*, which marks 2PL, the morpheme *-pena*, which marks 1PL, appears in this slot. As a result, while the prefix agreement follows the 2 > 1 ranking, the plural suffix is under the 1 > 2 PH effect.

5 Cyclic Agree

Béjar & Rezac (2009) offer a compelling analysis for the agreement systems of many languages that display agreement displacement phenomena, including Ojibwe, based on the notion of Cyclic Agree. They propose an articulated probe capable of targeting multiple points on the ϕ -geometry independently.

In particular, the data for one-PH languages appear to fit with the claim that Algonquian languages have a fully articulated probe with the structure [π [participant [addressee]]], which is notated as [u-3-1-2]. There are two cycles of Agree in this mechanism. First, the characteristic probe will seek a match in the IA. Then, if the probe still has some segments left that need to be checked, it will expand its search space on v upwards. In this second cycle, the probe will Agree with the EA to have all of its segments checked.

If the IA is a third person argument, agreement will track a first or second person EA. This is because the probe segments [u1] and [u2] are not affected by Agree with the IA in $v_{\rm I}$. These unchecked segments are then projected to $v_{\rm II}$. Likewise, if the IA is a first person argument, the unchecked segment [u2] with $v_{\rm I}$ from the first cycle will project to $v_{\rm II}$ in the sec-

In particular, the data for one-PH lan- ond cycle, as illustrated in (5):



In the syntactic structure above, first- and second-cycle Agree are represented by thin and thick arrows, respectively. In this case, their system accounts reasonably well for the prefix agreement patterns in one-PH Algonquian languages.

The derivations for the Algonquian singular agreement paradigm are summarized in Table 5 below. Dashes to the right of the probe represent the first cycle of Agree. Meanwhile, ones to the right of the probe represent instances of Agree in the second cycle. The shaded cells are those having only one Agree step with the IA. In these cells, the probe has no segments left that can Agree with the EA. Meanwhile, the unshaded cells are those where the characteristic [*u*-3-1-2] probe for Algonquian languages has an active residue after the first cycle of Agree with IA, and this residue will then Agree with the EA on its second cycle.

$EA \rightarrow IA$	2			1			3		
			EA	Agr	IA	EA	Agr	IA	
2	-		[3] [1] [2] –	[<i>u</i> 3] [<i>u</i> 1] [<i>u</i> 2]	- [3] - [1]	[3] [1] – [2] –	[u3] [u1] [u2]	- [3]	
	EA Age	R IA				EA	Agr	IA	
1	[3] [<i>u</i> 3] [1] [<i>u</i> 1] [<i>u</i> 2]	- [3] - [1] - [2]		_		[3] [1] –	[<i>u</i> 3] [<i>u</i> 1] [<i>u</i>2]	- [3]	
	EA Age	R IA	EA	Agr	IA	EA	Agr	IA	
3	[3] [<i>u</i> 3] [<i>u</i> 1] [<i>u</i> 2]	- [3] - [1] - [2]	[3] [1]	[<i>u</i> 3] [<i>u</i> 1] [<i>u</i>2]	- [3] - [1]	[3]	[<i>u</i> 3] [<i>u</i>1] [<i>u</i>2]	-[3]	

Table 5: Cyclic Agree for the singular paradigm inAlgonquian one-PH languages (Béjar & Rezac, 2009)

Instructions to PF for spelling out the prefix can originate either on $v_{\rm I}$ or on $v_{\rm II}$. This factor depends on whether it was on the first or second cycle that the probe was deactivated. Consequently, the prefix agreement morpheme's spell-out for Meskwaki is *ne*- for [3-1], *ke*- for [3-1-2], and null for [3].

While this Cyclic Agree mechanism accounts for the prefix agreement reasonably well, it cannot be extended to the analysis of plurality agreement. Firstly, the probe that Béjar & Rezac (2009) propose only has segments for person features. Since there

are no segments for number features encoded in the probe, this mechanism will not work for any plural agreement paradigm.

Secondly, plurality agreement in Algonquian languages does display a complicated dependence on the ϕ -features of both the IA and the EA. While in one-PH languages, the plural suffix slot preferentially agrees with the second person argument, it is the first person argument that the plurality agreement in two-PH languages tracks. Therefore, while Béjar & Rezac (2009) assume that there is one characteristic probe for the whole agreement system of a language, the data for two-PH languages show otherwise. In particular, in two-PH languages, the probe for the plural suffix slot, which follows the 1 > 2 ranking, is articulated differently from the prefix agreement slot, which has the 2 > 1 hierarchy.

6 Proposal

In order to propose an analysis to account for both types of Algonquian languages, there are three main components needed. We first need two licensing conditions, which require interpretable person and number features to enter into an Agree relation. Then, we need two probes to check two different sets of features. The final ingredient is the structural positions that the probes take in relation to the goals.

Firstly, the only arguments that are relevant to both the prefix and SAP plural suffix slots are first and second persons. Third person arguments only control the prefix agreement when there is neither a first nor a second person argument present in the transitive clause. Moreover, the general picture in Algonquian languages is that whenever the prefix agreement ends up tracking a third person argument, a null morpheme will appear in this slot. Unlike second person argument *ke*-, and first person argument *ne*-, third person argument has no specific agreement morphemes to mark its presence.

Furthermore, there are two different plural suffix slots for SAP and non-SAP arguments in Algonquian languages. Since third person is a non-SAP argument. its plural marking appears in a different slot than those of the SAP arguments. In other words, while 3PL has its own slot, 1PL and 2PL arguments have to compete for the control of one SAP plural slot.

This fits with Harley & Ritter (2002)'s claim that third person is unmarked, while first and second persons are specified as discourse participants. As a result, a bare π is generally interpreted as third person. Meanwhile, the marked first and second persons are grouped into a natural class to the exclusion of third person.

Therefore, following Béjar & Rezac (2003), this paper will make use of the following Person Licensing Condition:

(6) Person Licensing Condition

An interpretable first or second person feature must be licensed by entering into an Agree relation with a functional category.

Besides that, in order to take into account the plural paradigm in Algonquian languages, the Number Licensing Condition will also be introduced as follows:

(7) Number Licensing Condition

An interpretable plural feature must be licensed by entering into an Agree relation with a functional category.

Secondly, I propose that for both one-PH and two-PH languages, there are two distinct probes corresponding to two different features in the two agreement slots in question. The first probe, which is similar to Béjar & Rezac (2009)'s probe, is the π probe. Person features encoded in the goals, which are the IA and the EA, will check against the segments [1] and [2] in this probe. With these instances of Agree, the person features in the goals are licensed, for they have been matched with the probe.

Then, in order to take into account the number features encoded in the EA and the IA, a second probe, namely #, which checks for number features, will be introduced. Since one DP can agree multiple times with different arguments to have its features checked, the EA and IA will enter into an Agree relation with the # probe after having their person features checked with the π probe. After this instance of Agree, the DPs will have both their person and number features checked.

Thirdly, the π probe will be active at an earlier stage than the # probe. In fact, the licensing of plural features will occur in the last step of the derivation. As a result, the # probe should be in the highest position in the structure, as illustrated below:

(8) The syntactic structure of probes and goals in Algonquian



As shown above, the # probe has a [PL] segment that will agree with unchecked plural features in the EA and the IA. Furthermore, I propose one π probe that has [1] and [2] segments for both one-PH and two-PH languages. Since for both types of languages, the second person argument will always outcompete the first person argument for the control of the prefix agreement, the π probe will have [2] more specified than [1]. Rather than having a completely different π probe with distinct rankings, I make

use of only one probe in order to propose a unified analysis that can account for the two types of languages. Finally, as shown above, both DP goals always encode both person and number features in their structures.

7 Analysis

Now that all key components have been introduced, this section will demonstrate how the proposed mechanism can apply to both one-PH and two-PH languages. The most interesting puzzle in the Algonquian SAP interactions occurs when both 1PL and 2PL arguments are present in a transitive clause. Therefore, we will examine how our system works with this perplexing interaction in both one-PH languages like Swampy Cree, as shown in (9), and two-PH languages like Meswaki, as in (10):

- (9) ki- wâpam -in -âwâw
 2 see DIR 2PL
 'You (pl.) see us (excl.)' (Swampy Cree)
- (10) ke- wâpam -i -pena
 2 see DIR 1PL
 'You (pl.) see us (excl.)' (Meskwaki)

Firstly, in both (9) and (10) above, we have a 2PL EA argument and a 1PL IA argument. This means at the beginning of the derivation, we will have the following syntactic structure:

(11) The beginning of the derivations for both one-PH and two-PH languages



Then, the Person Licensing Condition will pick out first and second person arguments. This subset of DPs now must not only enter into an Agree relation, but must also have their person features checked by a π probe. Third person DPs, on the other hand, can be licensed by entering into any Agree relation at all. As illustrated below, both the IA and the EA have their person features checked against the π probe. As this point, there is no difference in the derivation between one-PH and two-PH languages. Since the EA is a second person argument, it satisfies the π probe more fully than the IA, which is a first person argument. Consequently, both types of languages ultimately choose the morpheme that marks the presence of a second person to appear in the prefix slot.

(12) Licensing person features for both one-PH and two-PH languages



As a result, after this first cycle of Agree with the π probe, the EA gets marked. In the structure above, instances of Agree in this first cycle are represented by thin arrows. Meanwhile, a checkmark (\checkmark) represents features that have been checked by entering an Agree relation, and a star (\bigstar) marks the goal that satisfies the π probe more fully.

Then, after all the person features have been checked, the Plural Licensing Condition requires all interpretable plural features to be licensed. The DP arguments then enter the second cycle of Agree with the # probe. This probe will first search for any DP argument that has not yet been deactivated from the first cycle, and subsequently agrees with that DP. If there is no such DP, it will check the argument that has already been marked.

This is the crucial step that differs one-PH and two-PH languages, leading to the contrasting profiles we see in the person hierarchy in the plural agreement slot. For one-PH languages, the DP that has already been marked (with \bigstar), which is the EA in this example, is still as available as the DP that has not yet been marked, which is the IA in this particular case, for further feature matching. In other words, even though the EA satisfies the π probe more fully compared to the IA, the EA still maintains its active status in the second cycle. In fact, the # probe in one-PH languages is more attracted to the DP that has left the first cycle more marked. As a result, the # probe checks the plural feature against the EA before it does so with the IA. Since the EA is a second person argument, the 2PL morpheme is ultimately selected over the 1PL one to appear in the plural suffix agreement slot. At this point, the EA has all of its features checked,

and thus it is no longer an active goal in the search space of the probes. Therefore, the whole DP argument is marked with a checkmark (\checkmark), as illustrated below. Instances of Agree with the # probe in the second cycle are represented by thick arrows:

(13) The first step of licensing number features for one-PH languages



guages, the DP that has not fully satisfied the π probe in the first cycle will be given priority in the second cycle. In contrast to the patterns observed in one-PH languages, the DP that is more marked from the first cycle will become less active in the second cycle. In other words, after Agreeing with the π probe for all of its person features, the EA is temporarily deactivated from further feature matching. Consequently, when the # probe searches for a PL argument to agree with, the EA is not available in the search space. Therefore, the # probe will pick the IA argument to license its number feature. Because the IA is a first person argument, the 1PL outcompetes the 2PL morpheme for control of the plural agreement suffix slot. As a result, the IA ends up having both of its

On the other hand, for two-PH lanperson and number features checked beages, the DP that has not fully satisfied fore the EA does. In this case, the IA is the π probe in the first cycle will be given DP marked with a checkmark:

> (14) The first step of licensing number features for one-PH languages



After the PL segment of the # probe has Agreed with the preferred DP argument, which is the EA for one-PH languages and the IA for two-PH languages, it will expand its search space and look for more plural features to license. At this point in the derivation, the # probe will check for the plural feature of the other DP argument. In other words, the # probe of one-PH languages will license number features for the IA, while that of two-PH languages will Agree with the EA. Even though the # probe for one-PH languages, the mechanism responsible for selecting the DP argument to Agree with the # probe functions in the same way across both types of Algonquian languages.

Consequently, the remaining DP argument in both one-PH and two-PH languages will finally have its number features licensed, and thus it becomes fully checked, as illustrated in (15) below:

(15) The end of the derivations for both one-PH and two-PH languages



As a result, after this second cycle, both DP arguments are no longer active for further agreement, reaching the end of the derivation.

8 Conclusion

This study examines the variation in plurality agreement across one-PH and two-PH Algonquian languages. In one-PH languages, like Swampy Cree, both the prefix and the plural suffix agreement slots follow the 2 > 1 hierarchy. On the other hand, in two-PH languages, like Meskwaki, the prefix has a 2 > 1 PH effect, while the plural suffix takes on the 1 > 2 ranking.

Macaulay (2005) has previously worked on this phenomenon with a broader set of Algonquian languages. However, there has been no account proposed for the complex agreement mechanism observed. While the Cyclic Agree approach introduced by Béjar & Rezac (2009) explains the syntactic derivations of the prefix and theme sign agreement for the singular paradigm in Ojibwe, a one-PH Algonquian language, reasonably well, it fails to extend to both the analysis of the Algonquian plural paradigm as well as the different PH effects observed in the agreement system of two-PH languages.

This paper proposes a unified account for the contrasting profiles in number agreement in Algonquian languages. Instead of following the system in which only one probe is capable of targeting multiple arguments, I argue that there should always be two probes responsible for licensing ϕ features in the agreement systems of both one-PH and two-PH languages. The first probe, π , will match with person features, while the second probe, #, will correspond to the number features in the DP arguments.

Furthermore, the analysis makes use of the Person Licensing Condition (Béjar & Rezac, 2003), which requires first and second person features to be licensed by the π probe. Besides that, I also introduce the Plural Licensing Condition, which requires all the interpretable plural features to be checked by entering into an Agree relation with the corresponding # probe.

The analysis shows that the mechanisms responsible for feature matching and goal selecting are the same for both one-PH and two-PH languages. However, the languages vary in their preferences for goals in the second cycle. While the # probe for one-PH languages selects the goal that is more marked after the first cycle, that of two-PH languages preferably Agrees with the less marked DP. Crucially, this factor is what leads to the contrasting profiles in the number agreement observed across the two types of Algonquian languages.

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