A Survey of the Patterning of Peripheral Agreement

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In this paper I examine the crosslinguistic behavior of the agreement marker known as the *PERIPHERAL SUFFIX* (Goddard 1979) in the Algonquian independent verb inflection.\textsuperscript{1} Peripheral agreement is used to mark the nominal categories of certain third person participants. Some grammar sources refer to peripheral agreement as a numbered position in verb templates, e.g. position 9 for Menominee (Bloomfield 1962), position 8 and 9 for Plains Cree (Wolfart 1973), position 7 for Delaware (Goddard 1979), or slot 11 for Proto-Algonquian (Pentland 1999). Peripheral suffixes express nominal features such as *number, gender, and obviation*, as shown in (1), and the same suffixes are also used in noun inflection.\textsuperscript{2}

\begin{itemize}
  \item (1) Proto-Algonquian peripheral suffixes (Pentland 1999:244)
    \begin{itemize}
      \item \texttt{*-a\textsuperscript{3}} 3s 3rd animate proximate singular
      \item \texttt{*-aki} 3p 3rd animate proximate plural
      \item \texttt{*-ali} 3’s 3rd animate obviative singular
      \item \texttt{*-ahi} 3’p 3rd animate obviative plural
      \item \texttt{*-i} 0s 3rd inanimate singular
      \item \texttt{*-ali} 0p 3rd inanimate plural
    \end{itemize}
\end{itemize}

The peripheral suffix fits into the independent verb inflection template as shown in Table 1.

< Table 1>

The Ojibwe (Southwestern dialect) examples in (2) illustrate the application of the template. There are three layers of agreement inflection on a transitive verb: the THEME SIGN (boxed), the CENTRAL AGREEMENT (underlined), and the PERIPHERAL AGREEMENT (bolded). Comparing the two forms in
(2), they share the same central agreement which consists of two separate slots, the prefix ki- and the central suffix -(naa)waaw indexing the subject, but they use different theme signs and peripheral agreement to index the verb’s object. In (2a), the theme sign -aa and peripheral agreement -ak agree with the third person animate object, and in (2b), the theme sign -aa and peripheral agreement -an agree with the third person inanimate object.

(2)  
<table>
<thead>
<tr>
<th></th>
<th>TA verb, animate object</th>
<th>TI verb, inanimate object</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>kiwaapamaawaak</td>
<td>kiwaapantaanaawaan</td>
</tr>
<tr>
<td></td>
<td>ki-waapam[aa]-waa-ak</td>
<td>ki-waapant[aa]-naawaa-an</td>
</tr>
<tr>
<td></td>
<td>2-see.TA-3.OBJ-2p-AN.PL</td>
<td>2-see.TI-0.OBJ-2p-IN.PL</td>
</tr>
<tr>
<td></td>
<td>‘You (pl) see them (an).’</td>
<td>‘You (pl) see them (IN).’</td>
</tr>
</tbody>
</table>

The existing theoretical work on theme signs (e.g. Rhodes 1990; McGinnis 1999; Brittain 2001; Bruening 2001; Oxford 2014) and/or central agreement (e.g. Béjar 2003; McGinnis 2008; Lochbihler 2012; Coon and Bale 2014; Hamilton 2015; Oxford 2019a, 2019b) outnumbers work on peripheral agreement. To my knowledge, only two theoretical papers (Halle and Marantz 1993; Branigan and MacKenzie 1999) have paid specific attention to peripheral agreement, and even then only as a side point.

Undoubtedly, theme signs and central agreement attract more attention due to their wider distribution, interesting typological status, and divergent patterning across languages. In terms of the distribution, theme signs and central agreement appear in both the independent order and the conjunct order, whereas peripheral agreement is more limited for being systematically present only in the independent and the conjunct participle and is also restricted to indexing third persons. Regarding typological characteristics, central agreement and theme signs show properties that are
less commonly found in other languages, such as the direct/inverse pattern displayed by the theme sign, the discontinuous prefix-suffix morphology of the central agreement, and the sensitivity of the central agreement to the person hierarchy $2 \succ 1 \succ X \succ 3$. The morphology of peripheral agreement seemingly is less exciting by comparison.

In this paper, I show that peripheral agreement also displays extensive crosslinguistic variation. In particular, the distribution of peripheral agreement shows a crosslinguistic cline that indicates varying degrees of robustness in indexing the object, a pattern that has not been discussed in detail in previous literature. The paper is structured as follows. First, I present the crosslinguistic cline based on data from five Algonquian languages. Next, I discuss some of the idiosyncratic characteristics of peripheral agreement that are challenging from a typological and theoretical perspective. I then conclude that the questions raised by the crosslinguistic survey indicate that the complexity of peripheral agreement is yet to be fully untangled and hence warrants further research.

**THE CLINE**

This section shows that the set of objects that can be indexed by peripheral agreement varies across Algonquian languages, and that the variation has the shape of a “staircase” cline. As background, note that verbs capable of taking an object can be distinguished into four classes. Canonical morphologically transitive verbs come in pairs according to the object’s animacy: Transitive Animate (TA) verbs, which select an *animate* patient/theme argument, and Transitive Inanimate (TI) verbs, which select an *inanimate* patient/theme argument. The contrast is reflected in their stem shapes. For example, the TA stem *wa-pam*- ‘to see’ differs from the TI stem *wa-pant*- ‘to see’ in the final morpheme, which is -am in the former and -ant in the latter. The other two classes of transitive verbs, AI+O and TA+O, involve an object argument that is not explicitly indexed in the shape of the stem (Bloomfield 1946:95; Rhodes 1990; Dahlstrom 2009). AI+O verbs are
morphologically intransitive in that they lack a theme sign and show an intransitive final rather than a transitive one, e.g. *a·tawe·- ‘to sell’ in Table 2. TA+O verbs are syntactically ditransitive, taking both an indirect object (semantic role of goal/recipient) and a direct object (semantic role of patient/theme), e.g. *wa·pantamaw- ‘to look at something for/on someone’ in Table 2.

Three core grammatical functions are relevant to Algonquian verb inflection: SUBJECT, PRIMARY OBJECT, and SECONDARY OBJECT. The primary object is the only object of a canonical transitive verb (TA and TI) or the indirect object (goal/recipient) in TA+O verbs, while the secondary object is the direct object (patient/theme) of an AI+O or TA+O verb (Rhodes 1990). The question of interest in this paper is whether or not peripheral agreement indexes each type of object in a given language: the primary object of a TA/TI verb or the secondary object of an AI+O/TA+O verb, as summarized in Table 3 below.

A survey of five Algonquian languages (Delaware, Menominee, Ojibwe, Oji-Cree, and Cree) shows that the ability of peripheral agreement to index different types of objects varies, conditioned by verb classes and sometimes also by person, number, and animacy. The variation takes the shape of a cline, as shown in Table 4 and elaborated in the remainder of this section. In Table 4, a check mark indicates that peripheral agreement indexes the object of the relevant type of verb while an X mark indicates that peripheral agreement does not index the object.

The Oji-Cree data are from my fieldwork conducted with a speaker from Bearskin Lake, Ontario. Except where indicated, all examples from the other four languages are from the following sources: Delaware (both Unami and Munsee) from Goddard 1979, Menominee from Bloomfield
1962, Nishnaabemwin from Valentine 2001, and Plains Cree from Wolfart 1973. These four sources will be abbreviated as G79, B62, V01, and W73 below. These five languages were selected as an initial sample to illustrate the gradient use of peripheral agreement across languages. It is a task for future work to extend the survey to other dialects and languages, as well as to non-indicative modes such as the preterite.

Pattern 1: TA SAP Subject Forms

Peripheral agreement shows the broadest crosslinguistic distribution in TA forms in which the subject is an SAP (Speech-act participant, i.e. first or second person) and the primary object is an animate third person. For example, in the 1s→3p forms surveyed in (3), the third-person plural object is indexed by the peripheral suffix (PA *-aki) in all five languages.

(3) TA forms with SAP subjects: peripheral agreement with object in all languages

a. Unami Delaware (G79:171) b. Nishnaabemwin (V01:289)

nəmi·lá·ək nwaabmaag

n-mi·l-a·-w-ak n-waabam-aa-Ø-ag

1-give.to-3.OBJ-1s-3p 1-see-3.OBJ-1s-3p

‘I give to them (AN).’ ‘I see them (AN).’

c. Oji-Cree d. Menominee (B62:152)

niwaapamaak nena-na-wak

ni-waapam-aa-Ø-ak ne-na·n-a·-w-ak

1-see-3.OBJ-1s-3p 1-fetch-3.OBJ-1s-3p

‘I see them (AN).’ ‘I fetch them (AN).’

e. Plains Cree (W73:41)

niwâpamâwak
ni-wâpam-â-w-ak

1-see-3.OBJ-1s-3p

‘I see them (AN).’

Pattern 2: TI SAP Subject Forms

The next broadest distribution of peripheral agreement is shown by TI forms with an SAP subject. As illustrated in (4), four of the languages in the survey, Delaware, Nishnaabemwin, Oji-Cree, and Menominee, use the peripheral suffix to index the inanimate object in such forms (PA *-ali 0p).

(4) TI forms with SAP subjects: peripheral agreement with object in four languages

a. Unami Delaware (G79:179)  
   n-pən-am-an-al  
   1-look.at-0.OBJ-1s-0p  
   ‘I look at them (IN).’

b. Nishnaabemwin (V01:311)  
   n-waabndaanann  
   1-see-0.OBJ-1s-0p  
   ‘I see them (IN).’

c. Oji-Cree  
   nitakihshikaataanan  
   1-kick-0.OBJ-1s-0p  
   ‘I kick them (IN).’

d. Menominee (B62:158)  
   nepo-na-nan  
   1-put.in-0.OBJ-1s-0p  
   ‘I put them (IN) in the pot.’

The only exception in the sample is Plains Cree, (5), where peripheral agreement is absent in TI forms with an SAP subject, resulting in the number of the inanimate object being neutralized.
(5) TI forms with SAP subjects: no peripheral agreement with object in Plains Cree

niwâpahtên
ni-wâpaht-ê-n
1-see-0.OBJ-1s
‘I see it/them (IN).’ (W73:43)

In addition to the basic distinction between the presence of peripheral agreement in a language like Nishnaabemwin and the absence of peripheral agreement in a language like Plains Cree, it is also possible for the number of the SAP subject to affect the distribution of peripheral agreement in certain languages, such as Menominee. The pattern shown for Menominee in (4d) above in fact holds only for forms in which the SAP subject is singular (e.g. ‘I’). If the SAP subject is plural, as in the 1p→0 form in (6), peripheral agreement is absent, resulting in the number of the inanimate object being neutralized as in Plains Cree.

(6) TI forms with plural SAP subjects: no peripheral agreement with object in Menominee

nepo-ne-menaw
ne-po-n-e-menaw
1-put.in-0.OBJ-1p
‘We put it/them (IN) in the pot.’ (B62:159)

To conclude, in TI forms with SAP subjects, some languages show a uniform pattern in which peripheral agreement is either always used (Nishnaabemwin) or never used (Plains Cree), while in other languages, such as Menominee, the use of peripheral agreement depends on the number of the SAP subject: when the SAP subject is singular, Menominee patterns like Nishnaabemwin, but when the SAP subject is plural, Menominee patterns like Plains Cree. Similar variation exists in the Delaware languages: some Unami speakers show a consistent use of
peripheral agreement like in Nishnaabemwin, but other Unami speakers and all Munsee speakers show the same pattern as Menominee in which forms with SAP subjects lack peripheral agreement (Goddard 1979:179-180). These patterns are summarized in Table 5.

Table 5

Pattern 3: TA/TI Third-Person Forms

The next pattern involves forms in which both the subject and the primary object are third persons. In TA third-person forms, such as the 3p→3′ forms in (7), peripheral agreement indexes the obviative object in Delaware, Nishnaabemwin, and Oji-Cree (PA *-ali).

(7) TA 3→3′ forms: peripheral agreement with object in Delaware, Nishnaabemwin, Oji-Cree

a. Unami Delaware (G79:171)
   mwi·la·wwá·ɔ
   w-mi·l-a·-wa·w-al
   3-give.to-3.OBJ-3p-OBV
   ‘They give to him/them’ (OBV).’

b. Nishnaabemwin (V01:287)
   wwaabmaawaan
   w-waabam-aa-waa-an
   3-see-3.OBJ-3p-OBV
   ‘They see him/them (OBV).’

c. Oji-Cree
   onihsaawaan
   o-nihs-aa-waa-an
   3-kill-3.OBJ-3p-OBV
   ‘They kill him/them (OBV).’

In Menominee and Plains Cree, however, the obviative object is not indexed by peripheral agreement, as seen in (8). Peripheral agreement does appear on the verb in these forms, but it
indexes the proximate 3p subject (PA *-aki) rather than the obviative object, which is unindexed and thus number-neutral.

(8) TA 3→3’ forms: no peripheral agreement with object in Menominee and Plains Cree

a. Menominee (B62:152)  b. Cree (W73:41)
na·nɛ·wak  wâpamêwak
na·nɛ·-w·ak  wâpam-ê-w·ak
fetch-3.OBJ-3-3p  see-3.OBJ-3-3p

‘They fetch him/them (OBV).’  ‘They see him/them (OBV).’

TI third-person forms share the same pattern as TA third-person forms in all of the languages.

In Delaware (older records), Nishnaabemwin, and Oji-Cree, peripheral agreement indexes the object (PA *-ali 0p), as shown in (9).

(9) TI 3→0 forms: peripheral agreement with object in Delaware, Nishnaabemwin, Oji-Cree

a. Unami Delaware (older records)\(^5\) (G79:179)
   pwənaməne·yį·i
   w-pən-am-əne-wa·w-i·l
   3-look.at-0.OBJ-3p-0p
   ‘They look at them (IN).’

b. Nishnaabemwin (V01:312)
   wwaabndaanaawaan
   w-waaband-aa-naawaa-an
   3-see-0.OBJ-3p-0p
   ‘They see them (IN).’

c. Oji-Cree
owaapahtaanan

o-waapaht-aa-n-an

3-see-0.OBJ-3s-0p

‘S/he sees them (IN).’

In Menominee and Cree, the peripheral suffix again indexes the subject rather than the object, as shown in (10) (PA *-aki ‘3p’). Consequently, the inanimate object ends up with its number distinction neutralized.

(10) TI 3→0 forms: no peripheral agreement with object in Menominee and Cree

a. Menominee (B62:159)
   
   po·namok
   
   po·n-am-w-ak
   
   put.in-0.OBJ-3 -3p
   
   ‘They put it/them (IN) in the pot.’

b. Cree (W73:43)
   
   wâpahtamwak
   
   wâpaht-am-w-ak
   
   see-0.OBJ-3-3p
   
   ‘They see it/them (IN).’

Pattern 4: AI+O Forms

For AI+O verbs, the use of peripheral agreement to index the object becomes even less frequent.

As shown in (11), the object of an AI+O verb is indexed by the peripheral suffix in Delaware and Nishnaabemwin (PA *-aki 3p, *-a 0s).

(11) AI+O forms: peripheral agreement with object in Delaware and Nishnaabemwin
Peripheral agreement does not index the object of an AI+O verbs in the other three languages in the survey. When peripheral agreement does appear on an AI+O verb in Oji-Cree, Menominee, and Plains Cree, it indexes a third-person subject rather than the object, as in (12) (peripheral suffix -Ø ‘3s’ from PA *-a). Note that the object is not morphologically expressed anywhere on the verb in these forms.\(^6\)

(12)  AI+O forms: no peripheral agreement with object in Oji-Cree, Menominee, Plains Cree

a.  Oji-Cree

ataawew waapikoniin

ataawe-w-Ø waapikony-an

buy-3-3s flower-0p

‘She buys flowers (IN)’

b.  Menominee (B62:47)

napa-ke-hnaksewan awe-h-tepa·ha-ke·w
napa·kɛ·hnakɛsew-an awe·h-tepa·ha·kɛ·-w-Ø
flat.timbers-OBV go.off-sell-3-3s

‘He is going off to sell flat timbers (OBV).’

c. Plains Cree (Wolfart 1996:403)
tâpwê mêkiw pêyak mistatimwa
tâpwê mêki-w-Ø pêyak mistatimw-a
truly give.out-3-3s one horse-OBV

‘Truly he gave out one horse (OBV).’

Pattern 5: TA+O Forms
Lastly, in TA+O verbs, peripheral agreement appears in all languages, but it differs in which of
the two objects it indexes: the primary object or the secondary object. As shown in (13), Delaware
is the only language in the sample in which the secondary object (i.e. the patient/theme) can be
indexed by peripheral agreement (-a(ll) ‘0p’).

(13) TA+O forms: peripheral agreement with secondary object only in Delaware

\begin{align*}
nəmí:lâ-na \\
nə-mi-l-a--n-al \\
1\text{-give-3.OBJ-1s-}0p
\end{align*}

‘I gave them (IN) to him.’ (Unami; Goddard 2020:104)

In the other four languages, TA+O verbs pattern the same as ordinary TA verbs, showing
peripheral agreement with the primary object (i.e. the goal/recipient), as exemplified in (14).

(14) TA+O forms: no peripheral agreement with secondary object in other four languages

a. Nishnaabemwin (V01:658)

Ngii-noojmotmawaa wniijaansan.
n-gii-noojimotamaw-aa-Ø-Ø w-niijaans-an

1-PAST-cure.for-3.OBJ-1s-3s 3- child-OBV

‘I cured his child for him.’

b. Oji-Cree

Menii omiinaa Cawnan masinahikanan

Menii  o-miin-aa-Ø-an Cawn-an masinahikan-an

Mary  3-give-3.OBJ-3s-OBV John-OBV book-0p

‘Mary gives John (OBV) books.’

c. Menominee (Bloomfield 1946:92)

newe-htamowa-w

ne-we·htamow-a·w-Ø

1-tell-3.OBJ-1s-3s

‘I tell it to him.’

d. Cree (Bloomfield 1946:92)

niwîhtamawâw

ni-wîhtamaw-â-w-Ø

1-tell-3.OBJ-1s-3s

‘I tell it to him.’

**Summary of Patterns**

Combining the patterns presented from (3) to (14), the distribution of peripheral agreement with the object in the five languages in the survey can be summarized in a “staircase” cline as shown in Table 6. The overall tendency is clear: peripheral agreement with the object is most widespread in TA forms with SAP subjects and becomes progressively less widespread for the object of a TI
SAP form, the object of a TA/TI third-person form, the object of an AI+O verb, and the secondary object of a TA+O verb.

<Table 6>

If we examine this cline closer, the type of object involved in the variations is not random. Instead, they are the lower-ranked categories in the person hierarchy as well as in morphosyntactic alignment. Regarding the person hierarchy, inanmites and obviatives are located at the least prominent end of the hierarchy (i.e. $2 > 1 > X > 3 > 3^* > 0$), and this low prominence is apparently reflected by the dropping of peripheral agreement with inanimate and obviative objects in some languages (TI forms and TA third-person forms). As for morphosyntactic alignment, the object of an AI+O verb and the theme of a TA+O verb are both secondary rather than primary objects, and the crosslinguistic data suggests that peripheral agreement with such arguments is more fragile. In contrast, TA mixed forms robustly show peripheral agreement with the object across all surveyed languages, likely reflecting that proximate animate primary objects are more prominent than other kinds of third persons on the person hierarchy.

To sum up, the languages surveyed show a cline of variation in the distribution of peripheral agreement indicating different degrees of robustness in indexing the object. The prominence of the object argument in terms of person and alignment plays a clear role in the pattern, and the subject’s person and number properties may also be relevant, as shown by the Menominee example in (6) above. However, the detailed mechanisms and principles that condition each pattern remain unanswered.

OTHER PROPERTIES OF PERIPHERAL AGREEMENT

This section overviews two other characteristics of peripheral agreement that appear to be typologically and theoretically challenging. I first present the puzzle of the differential behaviors
of peripheral agreement showing asymmetrical sensitivity to argument’s definiteness and animacy. Then I discuss the connection of peripheral agreement with a controversial set of morphemes known as FORMATIVE ELEMENTS (Goddard 2007). These elements are not adjacent to the position of the peripheral suffix but their patterning nevertheless correlates with the patterning of peripheral agreement.

Asymmetry of DOM and DSM Manifested by Peripheral Suffix

Some Eastern Algonquian languages, such as Delaware and Massachusett, have retained two parallel inflectional patterns for transitive verbs: the ABSOLUTE pattern is used when the object is indefinite and the OBJECTIVE pattern is used when the object is definite (Goddard 1979). What’s relevant here is, peripheral agreement appears in the objective forms and indexes the definite object (in boldface), as in (15a), but is missing in the counterpart absolute forms, as in (15b), where the object is indefinite. This definiteness-driven differential agreement is in line with the well-known differential object marking (DOM) phenomenon found in many unrelated languages (see Croft 1988 for Swahili, Bossong 1991 for Spanish, Massam 2000 for Niuean, Johns 2001 for Inuktitut, Aissen 2003 for Persian and Hindi, among others): a definite object receives overt morphological marking (via case or agreement) while an indefinite object is morphologically unmarked.

(15) Unami Delaware DOM, animate object (G79:158)

a.  nne·yó·k ne·k lánowak
   1-see-3.OBJ-1s-3p DEM man-3p
   ‘I saw the men.’

b.  nne·é·yə lánowak
   n-ne·w-a·-Ø lən̪əw-ak

15
1-see-3.OBJ-1s man-3p

‘I saw some men.’

In Spanish, not just definiteness but animacy can trigger DOM. As in *Veo la casa* ‘I see the house’ vs. *Veo a la mujer* ‘I see the woman’, *la casa* ‘the house’ is unmarked but *a la mujer* ‘the woman’ is marked by the preposition *a*. However, DOM in Eastern Algonquian clearly is not sensitive to animacy, since the differential use of peripheral agreement is also found when the object is inanimate. As shown in (16): a definite inanimate object triggers peripheral agreement, as in (16a), but an indefinite inanimate one does not, as in (16b).

(16) Unami Delaware DOM, inanimate object (Goddard 1974:320)

a.  nná·t·əmən ni təntay
n-na·t·-əm-ən-Ø ni təntay
1-go.after-0.OBJ-1s-Øs DEM fire

‘I am going after the fire.’

b.  nná·t·əm təntay
n-ná·t·-əm-Ø təntay
1-go.after-0.OBJ-1s fire

‘I am going after some fire.’

The prominent work of Aissen 2003 drawing upon typologically distinct languages predicted that differential object marking (DOM) and differential subject marking (DSM) should be mirror images, which is not always the case in Delaware and Massachusett. The counter example in (17) challenges the previous symmetrical definiteness-based contrast: unlike the patterning of peripheral agreement with objects, cf. (15), the contrast of definiteness is no longer distinguished
but collapsed into one form. The 3p subject is always indexed regardless of whether it is definite or indefinite.

(17) No DSM, 3rd animate subject (Unami Delaware, Goddard 1979:175)

\[\text{nəmí·lko·k}\]
\[\text{nə-mi·l-əkw-w-ak}\]
\[1\text{-give.to-INV-1s-3p}\]

‘[3pl] give to me.’ (can occur with definite or indefinite 3pl subject)

The second puzzle concerns the asymmetry of animacy in the inverse forms. Animacy thus far does not matter to DOM and definiteness does not trigger DSM. But once the third person subject is *inanimate*, DSM unexpectedly appears. For instance, in the data in (18), where a 0s subject acts on a 1p object, peripheral agreement indexes the inanimate subject when it is definite (-Ø ‘0s’), as in (18a), but disappears when it the subject is indefinite, as in (18b).

(18) DSM with an inanimate subject in Delaware

a. Definite subject indexed by peripheral suffix (-Ø ‘0s’)

\[\text{mo·šəš·a kkwi·tələwə·kan ntokó·ne·n}\]
\[\text{mo·šəš·a wə-kwəhtələtwə·kan-Ø nət-əl-əkw-əne·n-Ø}\]

Moses 3-law-0s 1-say.so-INV-1p-0s

‘Moses’s law tells us.’ (Goddard 2020: 104)

b. Indefinite subject is not indexed

\[\text{wəla·te·namowə·k·an nəməšhika·kōhmənə}·\]
\[\text{wəla·te·namowə·k·an-Ø nəməšhika·-əkw-əhmənə·n}\]

gladness-0s 1-come.over-INV-1p

‘Gladness comes over us.’ (Goddard 1979: 159)
The puzzling asymmetry of animacy in differential behaviors of peripheral agreement calls for an explanation. In particular, why can definiteness alone give rise to DOM regardless of animacy while the counterpart DSM is constrained to inanimates?

**Correlations with Formatives**

**FORMATIVE ELEMENTS** (Goddard 2007) are a set of morphological elements that can be regarded as a component of the central suffixes. Pentland (1999: 239) described them as “perhaps the most important — and certainly the most disputed — set of affixes”. Goddard (1979, 2007) categorized central suffixes into three sets depending on the formative element they contain: the **M-ENDINGS** (typically used in the absolute forms, formative *-ehm* for SAP argument and *-w* for third person argument),⁸ the **W-ENDINGS** (formative *-w*), and the **N-ENDINGS** (formative *-en(e·*)). The latter two are used in objective forms. Position-wise, formative elements occur as the initial component of the central suffix, followed by the pluralizer when one is present. One might expect the formative elements to be irrelevant to peripheral agreement since their positions are not adjacent. However, as Goddard (2007: 264) shows, the selection of the formative element actually correlates with the behavior of peripheral agreement. A summary of the distribution of formatives and their correlation with peripheral agreement is given in Table 7.

<Table 7>

Taking the allomorphs of the 1p central suffix as a concrete example, *-ehmena-· is used when peripheral agreement does not appear at all, as in (19a); *-ene·na-n is used when peripheral agreement indexes an inanimate argument or a secondary object,⁹ as in (19b); and *-wena-n is used when peripheral agreement indexes a lower-ranked animate primary argument, as in (19c).

(19)  Unami formatives with 1p argument

   a. 1p *-ehmena-·
wəla-te-namowá:k·an nəməšhika:kóhməna·
wəla-te-namowá:k·an-Ø nə-məšhika'-əkw·əhm-əna-(n)
gladness-0s 1-come.over-INV-FTV-1p
‘Gladness comes over us.’ (Goddard 1979: 159)

b. 1p *-ene'na'n
mo·šáš'a kkwi·təlatəwá·kan ntəlkó·ne·n
mo·šəš'a wə-kwəhtəlatəwa·kan-Ø nət-əl-əkw·ene·n(a·n)-Ø
Moses 3-law-0s 1-say.so-INV-FTV-1p-0s
‘Moses’s law tells us.’ (Goddard 2020: 104)

c. 1p *wena'n
nəmí·la·wəná·nak
nə-mi·l-a·wəna·nak
1-give.to-3.OBJ-FTV-1p-3p
‘We give to them.’ (Goddard 1979: 171)

It is clear that the patterning of the formative depends on the patterning of peripheral agreement, but the explanation for this correlation is not yet clear. From a crosslinguistic perspective, parallels to the dependency between formatives and peripheral agreement can be identified. Bobaljik (2000) describes a similar agreement correlation in Chukchi, where certain suffixes agree with the object but show sensitivity to features of the subject. Following Bobaljik’s analysis, formatives could be regarded as involving contextual allomorphy of the central suffix conditioned by the peripheral suffix. However, a complete analysis is still lacking.

A different approach is proposed by Bruening and Rackowski (2001), who posit that in Wampanoag (Massachusetts), formatives are the realization of an agreement head “Def”, which
copies the specificity, animacy, and case features of third-person nominals. The vocabulary items that B&R propose for the three formatives are shown in (20).

(20) Spell-out rule of formatives in Wampanoag (ibid. p.73)

- a. -w [+Specific, +Animate, +NACC] (specific animate nominative/accusative)
- b. -unâ [+Specific] (specific inanimates and obliques)
- c. -m otherwise (no specific arguments)

This analysis works for Wampanoag and Delaware, since, in these languages, definiteness or specificity is the precise feature that distinguishes the use of objective forms (with w-endings or n-endings) and absolute forms (with m-endings). However, even in languages that no longer actively employ the absolute/objective contrast, the formatives still show the dependency described above, such that *-ehm appears only when peripheral agreement does not. It is unclear whether B&R’s analysis can extend to languages in which specificity no longer conditions the patterning of peripheral agreement.

CONCLUSION

In conclusion, the patterning of Algonquian peripheral agreement shows a complexity and variability that rivals that of theme signs and central agreement. Across the Algonquian languages, the capability of peripheral agreement to index different kinds of object arguments varies along a “staircase” cline, indicating that the robustness of peripheral agreement is related to various factors including prominence on person hierarchies, prominence of primary object vs. secondary object in alignment, and interference from a local argument. In addition, peripheral agreement presents two other challenging properties: differential argument marking and a correlation with the patterning of the “formative elements” of the central agreement suffix. By focusing on peripheral agreement, we learn more about how to situate Algonquian agreement from a typological
perspective and we come closer to a descriptively and theoretically meaningful account of the exact mechanisms behind Algonquian agreement.

REFERENCES


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2 Abbreviations used: 1, 2 = first, second person, 3 = third proximate person, 0 = inanimate, 3′ = obviative, AI = intransitive animate, AI+O = transitivized intransitive animate, AN = animate, DEM = demonstrative, FTV = formative, II = intransitive inanimate, IN = inanimate, INV = inverse theme sign, S/SG = singular, OBJ = object, OBV = obviative, P/PL = plural, TA = transitive animate, TA+O = ditransitive with animate goal, TI = verb transitive inanimate, X = unspecified actor.

3 The asterisk symbol in this paper indicates a Proto-Algonquian form.

4 Some languages, such as Plains Cree, have extended peripheral agreement from the conjunct participle to the ordinary conjunct.

5 Goddard (1979:179-80) notes that this form is only found in older records. The modern Unami speakers and the Munsee speakers do not use peripheral agreement here, e.g. Munsee pənaməné-wa ‘they look at it/them (IN.).’

6 The null peripheral suffix in the forms in (12) cannot be analyzed as indexing the object. The null peripheral suffix indexes a proximate singular nominal, but the object in (12a) is plural and would have to be indexed by -an ‘0p’; similarly, the object in (12b) is obviative and would have to be indexed by -an ‘3’.

7 The crucial diagnostic that determines whether the verb truly lacks peripheral agreement is the form of the central suffix. The 1p m-endings -əhməna-(n) in (18b) indicates that peripheral
agreement is absent whereas 1p n-ending -anə-n in (18a), indicates that peripheral agreement is present. See the complete discussion regarding the 1p allomorphs in (19).

8 The formative suffix -ẃ differs from -w as the former triggers umlaut while the latter does not. This -ẃ notation was introduced by Nilsen (2017). The umlauting -ẃ corresponds to Goddard’s (2007) [-w]m or Pentland’s (1999) -w’.

9 In AI+O and TA+O forms, peripheral agreement with the secondary object triggers the *-en(e·) formative regardless of whether the secondary object is animate or inanimate, cf. (11a) and (13).