On the 2 > 1 Prominence Hierarchy of Algonquian[*]

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1   Introduction

Prominence hierarchies involve the relative ranking of arguments based on features such as person and animacy, and can be reflected in the grammar of a language in various ways (case marking strategy, choice of person-marker, etc.). Such hierarchies – under a variety of names – have been well-studied and widely described[1] This paper takes a look at two interrelated questions about prominence hierarchies. The first is a general question: what does it mean to talk about *the* prominence hierarchy for a language? The second is specific to Algonquian languages: is it accurate to say, as so many do, that second person outranks first in this family?

Starting with the first question, if a prominence hierarchy only manifests itself in one area of the grammar, there is no problem with a description which cites a unique hierarchy for the language in question. But it is also possible for

[1] The terms used include 'empathy hierarchy' (DeLancey 1981), 'animacy hierarchy' (Comrie 1981), 'person hierarchy' (Blain 1998), 'person/gender hierarchy' (Brittain 2001), 'lexical hierarchy' (Silverstein 1976), 'precedence rule' (Frantz 1991), and 'hierarchy of reference' (Zwicky 1977), among others.   Because of its generality, I borrow the term "prominence hierarchy" from Aissen (1999), who explains her term as follows: "Prominence is partly a function of inherent semantic features like animacy, and partly a function of discourse prominence, which involves notions like topicality" (1999:468).

prominence hierarchies to be relevant in more than one area of the grammar of a single language, and in such a case it is an empirical question whether the same hierarchy applies in all cases. I have only found one instance in the literature which describes a language in which two distinct hierarchies are active (Beck 2001),[2] but show here that this state of affairs is also found – in fact in several different instantiations – in the Algonquian languages. I draw a distinction here between what I will call a "global hierarchy," which applies wherever prominence is relevant in a given language, and a "local hierarchy," which only applies in some subset of the grammar (for example, across a specific and limited set of affixes), and is opposed to at least one other local hierarchy.[3]

Turning to the second question (which follows from the empirical issue just suggested), I examine the well-known prefix hierarchy of Algonquian, which ranks second person over first. A lesser-known fact about most (although not all) Algonquian languages, however, is that there is a suffix position in which first person outranks second, indicating that the oft-cited 2 > 1 hierarchy of Algonquian is actually only a part of a larger picture. Furthermore, in most (but again not all) Algonquian languages, the system of direction marking uses a hierarchy of the form Speech Act Participant > 3; that is, one in which there is no relative ranking between first and second persons. Of all of the Algonquian languages that I have examined, only one – Arapaho – verges on having a global 2 > 1 hierarchy, but even it shows vestiges of the SAP > 3 hierarchy. I conclude from these facts that it would be more accurate to say that generally in Algonquian, speech act participants (first and second persons; SAPs henceforth) outrank non-speech act participants (a global hierarchy), with the relative ranking of the speech act participants dependent upon one or two local hierarchies in specific grammatical contexts.[4]

The paper proceeds as follows: in §2 the Algonquian prefix facts are briefly presented, and in §3 I introduce more detailed and varied data from Menominee, Cree, Micmac, Blackfoot, and Arapaho which illustrate several distinct possible combinations of prominence hierarchies in these five Algonquian languages. §4 concludes the paper.[5]

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[2] In fact, Beck suggests that one hierarchy (1 > 2) is due to grammaticalization, and that both derive from a single hierarchy of the form 2 > 1.

[3] Marianne Milligan and I came up with these terms together extrapolating from a comment in Silverstein (1976:140); thanks again to her for graciously allowing me to make use of our joint thinking on the topic.

[4] I set aside for the purposes of this paper the subcategories of third person which are also ranked hierarchically in Algonquian languages: proximate > obviative > inanimate. Briefly (and roughly speaking), the proximate third person argument is the one which is in focus in a given clause, sentence, or stretch of discourse, while all other third person arguments are obviative. Inanimate arguments are always ranked lowest in any hierarchy found in the Algonquian languages.

[5] In the longer paper of which this is a part I discuss a range of claims about universals of prominence hierarchies, but space does not permit including this. I should also note that in this

2   The Algonquian prefixes

As mentioned above, the Algonquian languages are repeatedly cited as ranking second person over first, as – for example – in the following: "second person is ranked higher than first person, a characteristic of all Algonquian languages" (Blain 1998:44). Another typical description of the situation is this:

> There is a well-known hierarchy of grammatical persons in the [Algonquian] languages that determines the direct and inverse forms of the transitive verb. We may represent this hierarchy as follows: 2 > 1 > 3 > 3', which means that second person takes precedence over first, and these two take precedence over third proximate, which in turn takes precedence over third obviative (Dawe-Sheppard and Hewson 1990:1).

Dawe-Sheppard and Hewson illustrate the relative ranking of first and second persons with the following Cree examples:[6]

(1)   a.   ki-wa:pam-in
                 2-see-SUFF
                 'You see me'

         b.   ki-wa:pam-it-in
                  2-see-SUFF-SUFF
                  'I see you'
                  (Dawe-Sheppard and Hewson 1990:2)

Both examples make use of the second-person prefix <u>ki</u>-, despite the fact that the second person participant is subject in (1a) and object in (1b). This is ascribed to the hierarchy laid out in the quote above: the prefix is chosen by determining which argument is higher on the hierarchy, and is not linked to any

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version, I necessarily sidestep a number of related issues, e.g., the role of prominence hierarchies in ergativity, discourse, etc., the appropriate feature characterization of the three persons and their attested combinations, organization of person and other features into a feature geometry (see Harley and Ritter 2002, Hanson, Harley, and Ritter 2002), and the many recent attempts to capture the effects of prominence hierarchies in formal syntax (on the latter, see, for example, Halle and Marantz 1993, Déchaine 1999, Brittain 2001, and Bruening 2001). In addition, I set aside the various attempts to explain the cognitive basis for the structure of prominence hierarchies (see, e.g., Comrie 1981, DeLancey 1981, Hewson 1991).

[6] The authors do not say which dialect of Cree is represented by these examples, but the differences do not matter for my purposes here. Also note that I have retained their division into morphemes but have added glosses to their examples. "SUFF" (suffix) is used as a gloss where the specifics are not relevant to the point at hand.

specific grammatical function.[7]   These examples could be repeated by parallel forms from almost all of the Algonquian languages – the 2 > 1 ranking is virtually universal in prefix selection across the family (although see §3.3).

3   Prominence hierarchies in Algonquian languages

In this section we turn to a more detailed examination of data from a number of Algonquian languages, which show a wide range of possibilities for prominence hierarchies. The data to be examined include the following:

- a hierarchy for prefixes marking possessor on nouns;
- a hierarchy for prefixes on verbs with first person inclusive and exclusive plural arguments, and for marking SAP interactions in the transitive verb;
- a hierarchy for first and second person plural suffixes; and
- a hierarchy for the system of direct/inverse marking.

3.1   Menominee

Consider first the following Menominee examples of possessed nouns:[8]

(2)   a.   ne-sūniyan-aem-enaw
                    1-money-POSS-1PL
                    'our (excl.) money'

         b.   ke-sūniyan-aem-owāw
                    2-money-POSS-2PL
                    'your (pl.) money'

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[7] That linking is accomplished by the other suffixes, which I have left unglossed. See §3 for further discussion.

[8] Menominee examples are taken from the author's fieldwork unless otherwise noted. Abbreviations used in the examples are: CONJ – conjunct, EXCL = exclusive, INCL – inclusive, LCL = local, PL – plural, POSS – possessive, SG – singular, TH – theme sign. I use the tribal orthography, in which the macron marks a long vowel and <ae> is used for the digraph [æ].   <E> is used following Bloomfield (1962) for a morphophoneme which usually surfaces as [e].

        c.   ke-sūniyan-aem-enaw
                   2-money-POSS-1PL
                   'our (incl.) money'
                   (Bloomfield 1962:120)

In (8) we see the 2 > 1 ranking in the marking of possession: when the possessor is first person exclusive (as in (8a)), the form takes the first person prefix <u>ne</u>- and the first person plural suffix -<u>enaw</u>. When the possessor is second person plural (as in (8b)), the form takes second person <u>ke</u>- and second person plural -<u>owāw</u>. However, when the possessor is first person inclusive (as in (8c)), the second person prefix (<u>ke</u>-) is used with the first person plural suffix (-<u>enaw</u>).

This pattern is mirrored in the prefix/suffix combinations for transitive verbs, as shown in (3):

(3)   a.   nenāēwōnaw

              ne-nāēw-ā-w-enaw
              1-see-SUFF-SUFF-1PL
              'We (excl.) see him/her'

        b.   kenāēwāwāw

              ke-nāēw-ā-w-wāw
              2-see-SUFF-SUFF-2PL
              'You (pl.) see him/her'
              (Bloomfield 1962:156)

        c.   kenāēwōnaw

              ke-nāēw-ā-w-enaw
              2-see-SUFF-SUFF-1PL
              'We (incl.) see him/her'

Again, the inclusive and exclusive plurals both make use of the suffix -<u>enaw</u>, but the exclusive takes <u>ne</u>-, while the inclusive takes <u>ke</u>-. These prefix facts follow from the ranking of second person over first, since an inclusive includes a second person, while an exclusive includes first and third persons, but not second.

(4) shows the interaction of first and second persons in the transitive verb, one or both plural:

(4)   a.   kenāēwemwaw
                ke-nāēw-e-m-wāw
                2-see-SUFF-SUFF-2PL
                'You (pl.) see me'

        b.   kenāēwemenaw
                ke-nāēw-e-m-enaw
                2-see-SUFF-SUFF-1PL
                'You (sg.) see us (excl.)' *or* 'You (pl.) see us (excl.)'
                (Bloomfield 1962:156)

When the subject is second person plural and the object is first person singular (as in (4a)), the expected second person prefix and second person plural suffix (ke- and -wāw) appear. Likewise, when the subject is second person singular and the object is first person plural (as in (4b), first translation), the expected prefix and suffix (ke- and -enaw) appear. Crucially, however, when both are plural (as in (4b), second translation), only one plural suffix may appear, and the one which does appear is the first person plural -enaw. In other words, first person outranks second for purposes of selection of plural suffix.

This is our first indication, then, that it is an oversimplification to say that *the* person hierarchy for Algonquian languages is 2 >1. Algonquian languages which pattern like Menominee make use of two rankings for first and second persons: 2 > 1 for the prefixes, but 1 > 2 for the plural suffixes. There are other areas in which prominence hierarchies come into play, in fact, and we now turn to one of these, the system of direction marking on the verb.

As we have seen, the prefixes on transitive verbs in Menominee (and most other Algonquian languages) mark neither subject nor object; rather, they mark the participant in the interaction which ranks the highest on a local prominence hierarchy of the form 2 > 1 > 3.[9] A system of direction-marking suffixes (known as 'theme signs') then provides the information needed to determine whether the prefix marks subject or object. A direct theme sign indicates that the subject outranks the object on a prominence hierarchy (the details of which are to be determined), while an inverse theme sign indicates that the object outranks the subject.[10] Consider the examples in (5):

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[9] Again, I omit the subcategories of third person which are also ranked on this hierarchy.

[10] This is the traditional explanation of the function of the theme signs (as found in, for example, Bloomfield 1962). There are several current alternative analyses (e.g., Halle and Marantz 1993) which treat the theme signs as agreement markers; the merits of such proposals will not be considered here.

(5)   a.   ne-n$\overline{ae}$w-$\bar{a}$-w
               1-see-TH-3
               'I see him/her'

       b.   nen$\overline{ae}$wek
               ne-n$\overline{ae}$w-Eko-w
               1-see-TH-3
               'S/he sees me'

In both (5a) and (5b), the fact that a first person is present in the interaction is reflected by the presence of the prefix <u>ne</u>-. Both also carry the third person suffix -<u>w</u> (although it is deleted on the surface by regular rules in (5b)). (5a), however, is marked as direct by the suffix -$\underline{\bar{a}}$, meaning that the subject outranks the object – hence, that the first person participant is subject and the third person participant is object. (5b) is marked as inverse by the suffix -<u>Eko</u>, meaning that the object outranks the subject – in this case that the subject is third person and the object is first.

      Consider next examples which show an interaction between first and second persons:

(6)   a.   ke-n$\overline{ae}$w-e-m
               2-see-TH-LCL
               'You see me'

       b.   ke-n$\overline{ae}$w-en
               2-see-TH
               'I see you'

Here, the fact that both examples involve a second person is reflected by the presence in both of the prefix <u>ke</u>- (because second person outranks first in the prefixes). The forms are distinguished, though, by the theme sign: (6a) has the theme sign -<u>e</u>, indicating that the second person argument is subject and the first person argument is object, while (6b) has the theme sign -<u>en</u>, indicating the reverse interaction.[11]

      In the classic works on Algonquian languages, a distinction is made between direct and inverse theme signs – as in (5) – which mark the direction of

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[11] The suffix -<u>m</u> in (6a) is glossed as 'local' to indicate that it marks an argument which can be either first or second person. Bloomfield (1962:156) treats (6b) as exceptionally lacking this suffix; we might alternatively say that it is deleted word-finally following /n/. Also note that the theme sign in (6b) is a shortened version of what Bloomfield writes as -<u>EnEnae</u>.

interaction between SAPs and third persons as well as between different types of third persons, and a second set of theme signs – as in (6) – which mark interactions between SAPs (which I will call, following Goddard 1967:67, the "you-and-me" forms). So, for example, Bloomfield (1962:151-152) describes the Menominee theme sign -ā as direct and -Eko as inverse, but -e as marking "you-me" and -en as "I-you" interactions. Many linguists, however, have extended the 2 > 1 ranking of the prefixes to their treatment of the theme signs, claiming that they likewise involve a 2 > 1 ranking, and that as a consequence the suffix in (6a) (or its cognate) marks a direct interaction, while the one in (6b) marks an inverse interaction.[12] On a closer reading, however, it becomes apparent that this was not Bloomfield's intention. Hockett (1966) provides parallel definitions of the related forms in Potawatomi, and in his 1993 article is emphatically explicit: "forms for action by speaker on addressee, or the opposite, cannot be either direct or inverse" (1993:313). Neither Bloomfield nor Hockett gives justification for this position, however, and so we are left to deduce their reasoning and – of course – decide whether there are sound arguments for it.

The simplest argument in favor of this position is based on the fact that the you-and-me forms have their own theme signs – that is, there are four sets of theme signs, not two. If second acting on first and first acting on second were direct and inverse, respectively, one might expect that they would make use of the same theme signs used in the expression of the other direct and inverse interactions. Yet they do not, and so the null hypothesis is that the direction-marking system is not present in the you-and-me forms.

A more complicated argument in favor of this view can be seen by considering a wider range of Menominee data. The examples given to this point are in an inflectional class known as independent order. Algonquian languages have several of these classes (called "orders"), with the precise number and types varying by language. Menominee, for example, has four: independent, conjunct, negative, and imperative orders.   Here we consider only the first two: independent and conjunct. Although there are exceptions, usually the former is used for main clauses, and the latter for subordinate clauses. Examples in conjunct order are given in (7) and (8), below:

(7)   a.   nān-Ø-ak
                fetch-TH-1
                '(that) I fetch him or her'
                (Bloomfield 1962:184)

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[12] See, for example, the quote from Dawe-Sheppard and Hewson in §2 above, Wolfart (1973), Hewson (1991), and Blain (1998), Déchaine (1999), among many others.

b.   nāēw-e-t
       see-TH-3
       '(that) s/he sees me'
       (Bloomfield 1962:181)

(8)   a.   tāēpāneyan
              tāēpān-e-an
              love-TH-LOC.SG.CONJ
              '(that) you (sg.) love me'

       b.   tāēpān-en-an
              love-TH-LOC.SG.CONJ
              '(that) I love you (sg.)'

As these examples show, the most salient difference between independent and conjunct orders in Menominee is that the person-marking prefixes are not used in conjunct order. Beyond that, conjunct order suffixes tend to be less regular and show more fusion than independent order suffixes. Some of the conjunct order theme signs are the same as the independent order theme signs, but some are different, and – as we will see below – even those that are homophonous mark a different set of interactions in the two orders.

(7) and (8) are given to provide parallels to (5) and (6), above. In (7) we see direct and inverse forms, while in (8) we see you-and-me forms. It is in the theme signs for conjunct order that we see evidence that the latter set does not participate in the direct/inverse alternation. To understand this, consider the full set of interactions that the conjunct order theme signs -en and -e mark:

(9)   a.   -en   1st acting on 2nd
                      3rd acting on 2nd or 1st inclusive

       b.   -e   2nd or 3rd acting on 1st (singular or plural exclusive)

If we wanted to argue that the global prominence hierarchy for Menominee was 2 > 1 > 3, we could say that -en marks inverse interactions. That is, it marks first and third persons acting on second persons (and in the case of third person subjects, first inclusive objects as well). All of these interactions involve a participant lower on the proposed 2 > 1 > 3 hierarchy acting on a participant higher on the hierarchy, and could therefore be considered inverse. However, -e poses a problem for this approach. On the one hand, it appears to mark direct

interactions: second person acting on first. On the other hand, it also marks what would be an inverse interaction: third person acting on first.

One solution might be to claim that there are two homophonous theme signs involved, but that would miss the obvious generalization – that -e̱ marks first person objects in all cases. Consider Table 1, which lays out the theme signs and what they mark in both independent and conjunct orders:[13]

Table 1: Local theme signs for TA verbs in Menominee

Form	TA Ind	TA Conj	Generalization
-en	1 > 2	1 > 2	[2] object
		3 > 2	
		3 > 1 PL INCL	
-e	2 > 1	2 > 1	[1] object
		3 > 1	

Thus, while interactions between SAPs and third persons are best described in terms of direct and inverse interactions controlled by a prominence hierarchy, it is clear that Bloomfield and Hockett were correct in distinguishing that kind of interaction from those between two SAPs. For at least the Menominee conjunct order, the theme signs in the you-and-me forms instead mark (or agree with, depending on one's approach) the person of the object.

In this section, then, we have seen that while the Menominee person-marking prefixes show evidence of a hierarchy of the form 2 > 1, the plural suffixes show a hierarchy of the form 1 > 2. This pattern is repeated across most of the Algonquian languages, and is in fact what Goddard (1967:94) reconstructs for Proto-Algonquian. Furthermore, the Menominee theme signs follow a more general hierarchy, SAP > 3, not 2 > 1 > 3. I conclude that Menominee (and other Algonquian languages which pattern like it) is best described as having a global hierarchy of the form SAP > 3, with distinct local hierarchies (one 2 > 1 and the other 1 > 2) for two of its affix positions, and thus that the common claim that *the* hierarchy for Algonquian languages is 2 > 1 is simply not accurate.

In the following sections, I look at parallel data from other Algonquian languages which show that the Menominee pattern is not the only one found in this family.

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[13] Note that I use the right angle bracket for 'acting on' (as in 1>3; first person acting on second) in this table and a few of the following tables. The usage should be clear from context in all cases, however.

3.2   Cree dialects

Cree shows the expected 2 > 1 prefix hierarchy for possessed forms, as illustrated in (10) and (11) for Plains Cree and Swampy Cree, respectively:[14]

(10)   Plains Cree
   a. ni-tēh-enān
      1-heart-1PL.EXCL
      'our (exclusive) heart'

   b. ki-tēh-enaw
      2-heart-1PL.INCL
      'our (inclusive) heart'
      (Wolfart 1973:29)

(11)   Swampy Cree
   a. ni-cīmān-inān
      1-canoe-1PL.EXCL
      'our (exclusive) canoe'

   b. ki-cīmān-inaw
      2-canoe-1PL.INCL
      'our (inclusive) canoe'
      (Ellis 1983:194)

   In both cases, the second person prefix is used whenever a second person is present, and as we have seen before, this includes first person plural inclusive forms. As Wolfart (1973:15) puts it, "ki- takes precedence over ni-."
   When we turn to the verbal paradigms, we find an interesting split in the Cree dialects with respect to how they treat the first and second person plural suffixes. As MacKenzie (1980:153-155) shows, most of them (Plains, Atikamekw, East Cree, Betsiamites, and Moisie) show a pattern similar to that just described for Menominee; that is, a 2 > 1 hierarchy for the prefixes, but a 1 > 2 hierarchy for the plural suffixes. However, a few of the other dialects (Moose, Swampy, and Davis Inlet) have 2 > 1 in both positions.[15] The relevant data for the plural suffixes appear in Tables 2 and 3:

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[14] I use the authors' original orthography in the Cree examples in this section. Wolfart and Ellis use a macron for vowel length, MacKenzie uses a colon, and Brittain uses a circumflex accent.
[15] This was remarked upon by Hockett 1966:67, note 14, as well.

Table 2: Cree Pattern 1 (1 > 2) (Plains, Atikamekw,
East Cree, Betsiamites, Moisie; MacKenzie 1980:154)

Form	Subject	Object
-in	2Sg	1Sg
-ina:n	**2Sg/Pl**	**1Pl**
-ina:wa:w	2Pl	1Sg
-itin	1Sg	2Sg
-itina:n	**1Pl**	**2Sg/Pl**
-itina:wa:w	1Sg	2Pl

Table 3: Cree Pattern 2 (2 > 1) (Moose,
Swampy, Davis Inlet; MacKenzie 1980:154)

Form	Subject	Object
-in	2Sg	1Sg
-ina:n	2Sg	1Pl
-ina:wa:w	**2Pl**	**1Sg/Pl**
-itin	1Sg	2Sg
-itina:n	1Pl	2Sg
-itina:wa:w	**1Sg/Pl**	**2Pl**

In both dialect groups, the suffix complex -<u>na:n</u> marks first person plural, while the suffix complex -<u>na:wa:w</u> marks second person plural (-<u>i</u> and -<u>iti</u> are the theme signs).[16] What differs is the solution chosen when both subject and object are plural. In what I have called pattern 1, the first person plural suffix is chosen over the second person plural suffix (1 > 2). In what I have called pattern 2, the reverse holds: the second person plural suffix has priority over the first person plural suffix (2 > 1).

Brittain (2001) provides examples of Pattern 1, with data from Western Naskapi:[17]

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[16] MacKenzie does not give fully inflected verb forms, nor does she segment the suffix complexes given in the tables, but the details are not crucial at this point.
[17] The second person plural suffix in Western Naskapi is slightly truncated vis-à-vis the form given in Table 2; this does not affect the point being made.

(12) a. chi-wâpim-inân   'You (singular/plural) see us'
      b. chi-wâpim-inâw   'You (plural) see me'
      c. chi-wâpim-itinân 'We see you (singular/plural)'
      d. chi-wâpim-itinâw 'I see you (plural)'
          (Brittain 2001:51)

The examples in (12) show first that Western Naskapi uses the second person prefix <u>chi</u>- (cognate to the /kV-/ forms in other dialects) in all of the possible combinations of first and second persons, following the standard 2 > 1 hierarchy for prefixes. Second, the examples show that Western Naskapi neutralizes number for second person when the other argument is first person plural; that is, that the hierarchy for the plural marker is 1 > 2 (Pattern 1).

Contrast the examples in (12) with the following examples from Swampy Cree, which illustrate Pattern 2:

(13) a. ki-wāpam-inān   'You (singular) see us'

      b. ki-wāpam-itinān   'We see you (singular)'

      c. ki-wāpam-ināwāw   'You (plural) see me/us'

      d. ki-wāpam-itināwāw 'I/we see you (plural)'
          (Ellis 1983:282)

We again note the use of the second person prefix (<u>ki</u>- in this dialect) in all examples, illustrating the 2 > 1 hierarchy for the prefixes. These examples also show the second person plural suffix used in the cases with both first and second person plural involved. That is, number is neutralized for first person in the presence of a second person plural. Thus the same hierarchy, 2 > 1, holds for the plural suffixes as holds for the person-marking prefixes in Swampy Cree.

Given the difference in the behavior of the SAP plural suffixes between the two dialects, we might expect a parallel difference in the Cree theme signs. However, both dialect types show a Menominee-like SAP > 3 hierarchy in their direction marking. Cree conjunct order theme signs are much more fused than those of Menominee, and so there is no parallel to the data shown in Table 1. But we do find clear direct and inverse markers for interactions of SAPs with third persons, and distinct markers for interactions of SAPs with other SAPs. Consider Table 4, which provides the theme signs for the Independent Indicative Neutral paradigm in Western Naskapi:

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Table 4: Western Naskapi Theme Signs
(Independent Indicative Neutral; Brittain 2001:27)

Category	Theme Sign
Direct	-â
Inverse	-ikw
2nd on 1st	-i
1st on 2nd	-iti

Brittain treats the third and fourth categories in the table (second person acting on first, and first person acting on second) as direct and inverse, respectively. Yet there is no evidence that the SAPs are ranked relative to one another in the direction-marking system. The only explicit ranking is SAP > 3 (plus the extended ranking of various categories of third persons), marked as direct with -â and inverse with -ikw. The only reason to treat second person acting on first as direct is the assumption that the local hierarchy governing the prefixes carries over to the theme signs. But if the plural suffixes are governed by a hierarchy of the form 1 > 2 (as they are in Western Naskapi), it would be just as plausible to claim that the theme sign for first person acting on second (-iti) was direct, and that the theme sign for second person acting on first (-i) was inverse. In fact, there is no evidence for either ranking of SAPs in the theme signs.

What of the Pattern 2 dialects of Cree? Recall from (11) above that Swampy Cree is such a dialect: one in which both the prefixes and the plural suffixes show a ranking of 2 > 1. In such a case we might expect that the theme signs would show evidence of the same ranking, but they do not. In fact, the theme signs for Swampy Cree are exactly the same as the ones shown for Western Naskapi in Table 4, leading to the same conclusion – that in Swampy Cree the theme signs are governed by a hierarchy of the form SAP > 3; that is, that first and second persons are not ranked with respect to each other for purposes of choice of theme sign.

3.3   Micmac

Micmac patterns like Menominee and Cree Pattern 1 in its verbal system; that is, the prefixes show 2 > 1 while the plural suffixes show 1 > 2, and the theme signs show SAP > 3. Goddard (1967) gives the following prefix-suffix pairs for the relevant interactions:[18]

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[18] Micmac does not use prefixes in most orders; these forms are for "the subjunctive mode together with the negative imperative" (Goddard 1967:100).

(14) a. g-___-(i)n   2SG acting on 1SG
      b. g-___-(i)neo   2PL acting on 1SG
      c. g-___-(i)nen   2SG or PL acting on 1PL
      d. g-___-olin   1SG acting on 2SG
      e. g-___-olineo   1SG acting on 2PL
      f. g-___-olinen   1PL acting on 2SG or PL
          (Goddard 1967:100)

As we see, the prefix is g- in all cases, indicating that the hierarchy for the prefixes is 2 > 1. However, the plural suffixes show a neutralization of number for second person, indicating that the hierarchy there is 1 > 2.

It is in the use of the prefixes for noun possession that Micmac differs from the languages considered so far. Fidelholtz (1968:iii) says that "In possessed nouns, the prefixes reflect an 'order of preference,' which is 2nd person, 1st person, 3rd person in the more conservative type of possession, but 1st, 2nd, 3rd in the more frequent type." Examples of each type appear in (15)-(16):[19]

(15) a. n-ignen   'our (excl.) house'
      b. g-ignu   'our (incl.) house'
      c. g-iguow   'your (pl.) house'

(16) a. n?t-awgtinu   'our (excl.) road'
      b. n?t-awgtinen 'our (incl.) road'
      c. əgt-awgtiwow 'your (pl.) road'
          (Fidelholtz 1968:323-324)

Thus Micmac has two hierarchies for possessive prefixes: 2 >1 and 1 > 2.

3.4   Blackfoot

Blackfoot shows interesting differences from Menominee, Cree, and Micmac. First, the first person plural inclusive does not make use of a person-marking prefix, as illustrated in (17):[20]

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[19] It is not clear to me what "?" is used for in these examples, but it appears to be a vowel.
[20] In the Blackfoot examples, acute accent marks a high pitch, long vowels are indicated by use of double vowels, and apostrophe marks glottal stop.

(17) a. nit-áóoyi   'I'm eating'
      b. nit-áóoyihpinnaana   'We (exclusive) are eating'
      c. áóoyo'pa   'We (inclusive) are eating'
      d. kit-áóoyi   'You (singular) are eating'
      e. kit-áóoyihpoaawa   'You (plural) are eating'
          (Frantz 1991:17)

(17c) stands in contrast to examples like (3c) for Menominee, in which the first person inclusive is marked with a second person prefix. We do, however, find evidence in Blackfoot for a local hierarchy of the form 2 > 1 in the prefixes when they are used to mark possessor on nouns and in interactions between first and second persons in transitive verbs:

(18) a. n-itáninnaana   'our (exclusive) daughter'
      b. k-itáninnoona   'our (inclusive) daughter'
          (Frantz 1991:69)

(19) a. kit-sikákomimmoki   'You (singular) love me'
      b. kit-sikákomimmo   'I love you (singular)'
          (Frantz 1991:59-60)

(18) shows that Blackfoot, like most other Algonquian languages, marks first person inclusive plural possessors with the second person prefix (in this case k-), while (19) shows that Blackfoot marks the verb with the second person prefix whether the second person involved is a subject or an object. That is, the local hierarchy for the prefixes (nominal and verbal) is 2 > 1.
      The plural suffixes for first and second person show the same pattern as those for Menominee, Micmac, and Cree Pattern 1, as shown in (20):

(20) a. kitsikákomimmohpoaawa   'I love you (plural)'
      b. kitsikákomimmokihpoaawa   'You (plural) love me'
      c. kitsikákomimmohpinnaana   'We love you (singular or plural)'
      d. kitsikákomimmokihpinnaana 'You (singular or plural) love us'
          (Frantz 1991:59-60)

The suffix for first person plural is -hpinnaana, while the suffix for second person plural is -hpoaawa. Again, the crucial cases are those in which both first and second person plurals are involved, as in (20c) and (d), where we see that Blackfoot neutralizes the number of the second person in favor of explicitly marking the number of the first; that is, the suffixes show a ranking of 1 > 2.
      Recall from the previous sections that other Algonquian languages make no hierarchical distinction between SAPs in the direction-marking system (as

reflected in the theme signs). DeLancey (1981:644) points out that Blackfoot does show possible evidence for a ranking of SAPs in its theme signs, and that that ranking is 1 > 2. Consider (21), where the theme signs are underlined:

(21) a.   nitsikákomimm<u>a</u>wa nitána   'I love my daughter'
      b.   nitsikákomimm<u>ok</u>a nitána   'My daughter loves me'
      c.   kitsikákomimm<u>oki</u>   'You (singular) love me'
      d.   kitsikákomimm<u>o</u>   'I love you (singular)'
            (Frantz 1991:55, 59-60)

In (21a) we see a direct form (first person subject and third person object), with theme sign -<u>a</u>. (21b) shows an inverse form (third person subject and first person object), with theme sign -<u>ok</u>. (21c) has a second person acting on a first, and crucially, it carries the same theme sign as (21b): the inverse marker.[21] Finally, (21d) shows that first person acting on second has its own theme, -<u>o</u>. Frantz (1991:60) says that -<u>ok</u> in (21c) is "evidently" the same as -<u>ok</u> in (21b), noting that both show the same allomorphy. The final form (in (21d)) somewhat undercuts the claim that Blackfoot direction-marking follows a 1 > 2 hierarchy because the direct theme sign -<u>a</u> is supplanted by -<u>o</u>, but the data are, nonetheless, suggestive. In fact, we can note that Frantz does consider this to be a direct theme sign: "The -<u>o</u> of the 1 → 2 forms […] must then be seen to simultaneously serve as a direct theme suffix and as indicator of 1st person involvement" (1991:60).

Thus Blackfoot shows a pattern which is distinct from either Menominee or Cree: it shows a 2 > 1 hierarchy in the prefixes, a 1 > 2 hierarchy in the plural suffixes, and it – at least arguably – also shows a 1 > 2 hierarchy in the theme signs.

3.5   Arapaho

As mentioned in the introduction, Arapaho comes the closest of all the Algonquian languages I have investigated so far to having a global hierarchy of the form 2 > 1. There are, however, indications of an SAP > 3 ranking among the theme signs. Consider first (22) and (23):[22]

(22) a.   n-éíθeʔéé   'my head'
      b.   h-éíθeʔéé   'your (singular) head'

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[21] DeLancey gives this as -<u>oki</u>; his data are drawn from Taylor (1969). This slight difference in form is not important to the discussion, however.

[22] Long vowels are represented by doubling in Arapaho; acute accent marks a high tone. Lisa Conathan (personal communication) says that Salzmann puts parentheses around vowels (as in (23a)) when some speakers delete it due to syncope.

c.   n-éíθeʔééninoo   'our (exclusive) heads'
d.   h-éíθeʔéénin   'our (inclusive) heads'
      (Salzmann 1963:61, 66)

(23)   a.   hé-íhoow(u)noohobéθ   'I don't see you (singular)'
       b.   hé-íhoownóóhow   'You (singular) don't see me'
           (Salzmann 1963:109)

(22) and (23) show what should by now be the familiar pattern, illustrating that the hierarchy for the prefixes is the expected 2 > 1.[23]

In most of the languages considered to this point, we have found the reverse ranking for the first and second person plural suffixes when both arguments were SAPs. Arapaho has a quite different system for marking such interactions, however, and in order to understand it, we begin by first considering the interactions between SAPs and third persons, as shown in Table 5 (the shaded cells are discussed below):[24]

Table 5: Arapaho Direct and Inverse Theme Signs
(Independent Indicative Affirmative; Salzman (1963, 1967))

Category	Interaction	Theme Sign
Direct	1 SG > 3	-Ø
	2 SG > 3	-ót
	SAP PL > 3	-óó
	1 PL EXCL > 3	-éé
Inverse	3 SG > 1 SG	-éi
	3 > 2SG	
	3 > SAP PL	
	3 PL > 1 SG	-í
	3 PL > 1 PL EXCL	-éiʔéé

When the forms are laid out in this way we can see at least a partial direct/inverse system following a hierarchy of the form SAP > 3.[25] While the singular subject markers are distinct for direct forms, the suffix -óó marks precisely SAP > 3: first and second person plurals acting on third persons

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[23] Arapaho does not make use of the prefixes in affirmative forms, but they do appear in the negative forms, as shown.

[24] In this table, arguments are neutral for number unless otherwise specified.

[25] The purpose here is not to advance any particular claims about the diachronic changes which Arapaho has undergone, but it is likely that this system reflects innovations with respect to the other Algonquian languages.

(singular or plural). Likewise, -éi marks inverse interactions: 3 > SAP (with a few interactions marked differently; these are discussed below).[26]

Salzmann (1963) describes these suffixes not as theme signs, but rather as agreement with subject or object within particular 'paradigms' (i.e. with corresponding paired arguments). It is not my intent to enter into a debate over the best analysis of these morphemes, but rather simply to point out that – to at least some extent – a hierarchy of the form SAP > 3 is found in what correspond to the theme signs of the other Algonquian languages.

At this point we turn to the interactions between SAPs. Here the data are similar to those shown for Menominee in Table 1; that is, the theme signs appear to function as agreement, although in a pattern unlike that found with the Menominee conjunct order theme signs. Consider Table 6:

Table 6: Arapaho SAP Interactions (Independent
Indicative Affirmative; Salzman (1963, 1967))

Form	Interactions	Generalization
-éθe	1 SG > 2	[1 SG] subject
-éé	1 PL > 2 1 PL EXCL > 3	[1 PL] subject
-í	2 > 1SG 3PL > 1SG	[1 SG] object
-éiʔéé	2 > 1 PL 3 PL > 1 PL EXCL	[1 PL] object

There are several points to note here. First, it is clear that these suffixes mark first person agreement, specified according to number and case (subject vs. object). Second, notice that the shaded cells in Table 5 are now explained as extensions of the generalizations about the relevant suffixes. So, for example, the interaction of a third person plural on a first person singular is taken out of the realm of the inverse, and is instead marked by the form which indicates agreement with a first person singular object.

Finally, unlike the languages considered above, Arapaho does not have competing first and second person plural suffixes. Instead, each of the SAPs has its 'slot' after the verb, in the order first person – second person, and plural can be marked separately for each one. Consider the following examples:

(24)   a.   tóóʔob-éθe-n   'I hit you (singular)'
        b.   tóóʔób-eθé-n-ee   'I hit you (plural)'

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[26] I have omitted the forms for interactions of third proximate and third obviative because it is not clear to me from Salzmann exactly how those work.

(25) a.   tooʔób-ee-n   'We hit you (singular)'

       b.   tooʔób-ee-n-ee   'We hit you (plural)'

(26) a.   tóóʔow-ú-n   'You (singular) hit me'

       b.   tóóʔob-éiʔéé-n   'You (singular) hit us'

(27) a.   tóóʔow-ú-n-ee   'You (plural) hit me'

       b.   tóóʔob-éiʔee-n-ee 'You (plural) hit us'

          (Salzmann 1963:96)

In an Arapaho transitive verb with SAP subject and SAP object, the suffix immediately after the verb stem marks the first person participant with one of the four suffixes shown in Table 6, specifying number and case simultaneously. Second person is marked after that, and here there is first a suffix -n which signals only that there is a second person involved (case is not distinguished for second person except by contrast to the function of the first person), and then if that second person is plural, the suffix -ee may be added following -n. Although there is no hierarchy involved, it is interesting to note that the first person is much more highly specified in this system than second person is, with information about the second person argument derived from the more explicit information about the first person argument.

Thus Arapaho shows yet another pattern of prominence hierarchies: 2 > 1 in the prefixes, no hierarchy in the suffixes, and at least traces of SAP > 3 in the theme signs.

4   Conclusion

We have considered data from a number of Algonquian languages in the light of claims about universals of prominence hierarchies, as well as in the light of claims that the Algonquian languages rank second person over first.[27]   Table 7 summarizes the data presented:

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[27] I hasten to point out that I have not looked at all of the Algonquian languages, and so do not know what patterns the others might show. A quick look at Kickapoo (Voorhis 1967), Nishnaabemwin (Ojibwe; Valentine 2000) and Delaware (Goddard 1979) shows that they all have 2 > 1 in the prefixes and 1 > 2 in the plural suffixes. Furthermore, the data presented in Goddard 1967 (Appendix 1) indicate that these same two local hierarchies coexist in Abnaki, Cheyenne, Fox, Illinois, Malecite, Natick, Penobscot, Potawatomi, and Shawnee.

Table 7: Prominence Hierarchies in Algonquian Languages

Language	Possessive Prefixes	Verbal Prefixes	Plural Suffixes	Theme Signs
Menominee	2 > 1	2 > 1	1 > 2	SAP > 3
Cree (Pattern 1)	2 > 1	2 > 1	1 > 2	SAP > 3
Cree (Pattern 2)	2 > 1	2 > 1	2 > 1	SAP > 3
Micmac	2 > 1 & 1 > 2	2 > 1	1 > 2	SAP > 3
Blackfoot	2 > 1	2 > 1	1 > 2	(1 > 2)
Arapaho	2 > 1	2 > 1	no ranking	(SAP > 3)

The six languages/dialects considered provide us with five different distributions of the prominence hierarchies 1 > 2, 2 > 1, and SAP > 3 across four areas of grammar in which hierarchies are relevant. These findings lead me to disagree with the frequently-made statements about Algonquian languages such as the following: "There is ample evidence from Cree, Blackfoot, Micmac, Ojibway, Fox, Menominee, etc., that in [Algonquian] languages it is what we (from our own ethnocentric viewpoint) would call the second person that is the cognitive basis of the system of person in these languages" (Hewson 1991:866). Perhaps the frequency and general salience of the prefixes in data from Algonquian languages have led to the persistence of this belief, but as I have illustrated, it is simply not accurate.

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