STUDIES IN ANAPHORA

Edited by

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New Directions in Referentiality

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We know that pronouns, like many other kinds of words, may follow natural paths of grammaticization, undergoing reduction over time from independent words to clitics and affixes. Such a development is well known in the history of French, for example, as well as in Bantu languages (Givón 1971, 1976), Austronesian and Australian languages (Mithun 1990), and others. It is sometimes assumed that this phonological reduction is necessarily accompanied or even preceded by a corresponding reduction in referentiality: From pronoun to mere ‘agreement’. In what follows, it will be shown that independent pronouns are not the only diachronic source of such affixes; they may come from alternative sources as well. Their development, furthermore, need not entail a loss in referentiality; it may even involve a gain. The examination of an alternative path of evolution raises a basic question about the nature of referentiality.

1. Sahaptian

Languages with pronominal affixes on their verbs often exhibit a specific gap in their paradigms. They frequently contain pronominal affixes for first and second persons but not third: Lakhota *wa*-ʔú ‘I came’ *ya*-ʔú ‘you came’, *uk*-ʔú ‘you and I came’, but *ú* ‘(s/he) came’. Third persons are identified by independent nominals, by demonstratives or emphatic pronouns, or, most often, by nothing at all so long as reference is clear. Such systems accord well with what we know about anaphoric systems in general. The same alternatives are available in many languages without pronominal affixes: First and second persons are consistently identified by independent pronouns, while
third persons are identified by independent nominals, demonstratives, emphatic pronouns, or, most often, by nothing at all.

A few languages, however, show different paradigmatic gaps. Noel Rude (1985, 1990, 1991b, 1994, and elsewhere) has presented some interesting explanations of the complex and unusual systems of marking grammatical relations in the Sahaptian languages of the Northwestern United States: Nez Perce and Sahaptin. In both languages, verbal prefixes indicate the core arguments of only those verbs involving a third person participant. The distribution of these verbal prefixes can be seen by comparing the Nez Perce verbs in (1).

(1) Nez Perce prefixes

daynapi ‘(I) arrived’
daynapi ‘(you) arrived’
hi-daynapi ‘s/he arrived’
fe-wei ‘(I) shot (you)’
fe-wei ‘(you) shot (me)’
hi-fe-wei ‘s/he shot (me)’
hi-fe-wei ‘s/he shot (you)’ (Rude 1985: 31-2)

Special prefixes appear on transitive verbs involving third person objects.

(2) Nez Perce prefixes

fe-wei ‘I shot him/her’
fe-wei ‘you shot him/her’
pee-wei ‘s/he shot him/her’ (Rude 1985: 32)

First or second person core arguments may be specified outside of the verb by enclitics. In Sahaptin, the enclitics follow the first element of the clause, whatever its lexical category.

(3) Sahaptin enclitics

adverb $aw=na$  $i-\text{n}u-\text{sa}$  $now=1.SG$  $3.NOM-$see-$\text{IMPRF}$
‘Now s/he sees me.’ (Rude 1990)

verb $i-\text{n}u-\text{sa}=a$  $3.NOM-$see-$\text{IMPRF}=1.SG$
‘S/he sees me.’ (Rude ms)
The enclitics do not distinguish case, but they do distinguish first (inclusive and exclusive) and second person, and singular and plural number.

(4) Sahaptin enclitics

$küuk=naš$ á-qínun-a
then=1.SG 3.ABS-see-PAST
‘Then I saw him/her/him.’ (Rude 1990)

$küuk=naš$ i-qínun-a
then=1.SG 3.NOM-see-PAST
‘Then s/he saw me.’ (Rude 1990)

$íci=nam$ ãw nák-tux-ta šáspš.
this=2.SG now carry-return-FUT pack
‘Now you will carry back this pack.’ (Jacobs 1929: 229)

$i-yik-ta=nam$ kwáall-nim.
3.NOM-hear-FUT=2.SG dangerous.being-ERG
‘The dangerous being will hear you.’ (Jacobs 1929: 183)

$áw=m-aš$ twána-ta
now=2.SG-1.SG follow-FUTURE
‘I shall follow you now.’ (Jacobs 1929: 221, in [Rude 1994: 103])

$xlák=nataš$ wac-á kúši.
many=1.PL.EXCL be-PAST horse
‘We had many horses.’ (Rigsby and Rude 1995)

$a=na$ tkʷatá-ta.
HORT=1.PL.INCL eat-FUT
‘Let’s eat.’ (Rigsby and Rude 1995)

$a=pam$ tkʷatá-ta.
HORT=2.PL eat-FUT
‘Eat!’ (Rigsby and Rude 1995)
The other language in the family, Nez Perce, also contains enclitics for first and second person core arguments, but they appear only with certain sentence adverbials and complementizers. As in Sahaptin, case is not marked, but first (inclusive and exclusive) and second persons are distinguished, and singular and plural number for second persons. (Shapes of morphemes alternate according to vowel harmony.)

(5) Nez Perce enclitics

\[\text{nīne}=\text{x} \quad \text{ʔaw-ʔnik-áx}\]

where-1.EXCL 1.2/3-put-COND

'Where should I put it?' (Phinney 1934: 173, in [Rude 1985: 135])

\[\text{miʔse}=\text{x} \quad \text{hi-paa-máy-n-ʔa x}\]

not=1.EXCL 3.NOM-PL-accuse-N-COND

'They cannot accuse me.'

(Phinney 1934: 173, in [Rude 1985: 136])

\[\text{táco} \quad ?\text{éetee}=\text{m} \quad \text{ʔew-íx-ye}\]

good.very surely=2.SG 1.2/3-fix-PRFV

'You surely fixed it very well.'

(Phinney 1934: 195, in [Rude 1985: 137])

\[?\text{éetee}=\text{m} \quad \text{títwéét-im} \quad \text{hi-póo-pciʔyaw-na}\]

surely=2.SG shamans-ERG 3.NOM-PL-kill-PRFV

'Surely the shamans killed you.'

(Phinney 1934: 243, in [Rude 1985: 137])

\[?\text{éete}=\text{m-} \quad \text{watiíx} \quad \text{weélu? tiwixn-u}\]

surely=2.SG-IRR tomorrow not accompany-IRR

'Surely I will accompany you tomorrow.'

(Phinney 1934: 134, in [Rude 1985: 138])

The enclitics are not obligatory in Nez Perce, as they are in Sahaptin.

(6) Nez Perce omission of enclitics

\[\text{wdaqoʔ} \quad ?\text{éetxew-c-e} \quad \text{ciklín-ʔipéeecwi-s-e}\]

now be.sad-PROG-SG go.home-want-PROG-SG

'Now [I] am sad wanting to go home.'

(Aoki 1979: 9, in [Rude 1991a: 195])
manáma yok kuśas hi-téetu
what that thus say-HAB
‘What do [you] thus keep saying?’

(Phinney 1934: 174, in [Rude 1985: 55])

In addition to the verbal prefixes and pronominal enclitics, both languages contain independent emphatic pronouns, but these forms are used only in pragmatically marked contexts to signal a focus of contrast or a shift in topic.

Since its separation from Sahaptin, Nez Perce has developed an interesting construction for further identifying the roles of first and second persons. Rude reconstructs a Proto-Sahaptian cislocative suffix *-im ‘hither’, which appears as -(i)m in Sahaptin and as -(i)m in Nez Perce. Its basic function can be seen by comparing the Sahaptin verbs in (7), and the Nez Perce verbs in (8).

(7) Sahaptin cislocative

\[
i-wínán-a \quad i-wíná-m-a
\]
3.NOM-go-PRFV \quad 3.NOM-go-CISLOCATIVE-PRFV
‘He went.’ ‘He came.’ (Rigsby and Rude 1995)

\[
i-ğínun-a \quad i-ğínun-im-a
\]
3.NOM-see-PAST \quad 3.NOM-see-CISLOCATIVE-PAST
‘He saw/looked’ ‘He looked this way’

(Jacobs 1929: 266, 1931:199, in [Rude 1991: 38])

(8) Nez Perce cislocative

\[
hi-kúuy-e \quad hi-kúu-m-e
\]
3.NOM-go-PRFV \quad 3.NOM-go-CISLOCATIVE-PRFV
‘He went.’ ‘He came.’

(Phinney 1934: 81,77, in [Rude 1985: 49])

In certain Nez Perce constructions, the cislocative suffix has moved beyond its original function. Rude reports that ‘often the existence of a first person direct object is reinforced by the cislocative’ (1985: 49).

(9) Nez Perce extension of cislocative

\[
?ipéex ?ini-im
\]
bread give-CISLOCATIVE
‘Pass me the bread!’

(Rude 1985: 42)
qéce=m wéelu? cikdaw-c-i-nm
even=younotfear-PROG-PL-CISLOCATIVE
‘You don’t even fear me!’ (Phinney 1934: 81, in [Rude 1985:49])

Has the cislocative suffix taken over the function of a referential first person object pronoun ‘me’ at this point? It would be a short semantic step to reanalyze a verb like ‘Pass it here’ as ‘Pass it to me’. The suffix in ‘You don’t even fear me’ has clearly moved beyond its original concrete spatial function.

Rude proposes that through its use in constructions like those in (9), the cislocative evolved into an inverse marker in Nez Perce. The basis for such a shift is easy to imagine. In the absence of any pronominal marking on a Nez Perce transitive verb, it can be assumed that the participants are first and second persons. Since it is more common for speakers to present events from their own point of view (‘I saw you’) than the reverse (‘you saw me’), the cislocative could be interpreted as an indicator of an unusual (inverse) direction in the flow of the action.

(10) Nez Perce exploitation of cislocative
tiwikin tiwikx-irn
follow follow-asLocArtvE
‘I have followed you’ ‘You have followed me’ (Rude 1990: 7)

Whether or not the Nez Perce use of the cislocative has in fact culminated in a referential pronoun, the modern structure does suggest how the stage could be set for the development of one.

2. Shasta

Evidence from an unrelated language indicates that the exploitation of a cislocative for disambiguating reference is not an isolated phenomenon. Shasta was spoken into the second half of the twentieth century in Northern California and Oregon. Like many North American languages, it is polysynthetic. Verbs can and often do stand alone as complete clauses in themselves, in part because of their pronominal affixes.

Shirley Silver (1966) describes portmanteau prefixes on verbs that encode combinations of subject person, number, evidentiality, mode, and tense. First, second, third, and undifferentiated persons are distinguished.
Some Shasta prefixes: *ahu-*is-i 'talk'

- *sw-áhus-i-k* ‘I\'m talking.’
- *skw-áhus-i-k* ‘You\'re talking.’
- *kw-áhus-i-k* ‘He\'s talking.’
- *tá-hus-a?* ‘I\'ll talk.’
- *stä-hus-a?* ‘You\'ll talk.’
- *lá-áhus-a?* ‘He\'s talking.’
- *čá-hus-a?* ‘We\'ll talk.’
- *stä-hus-a-ki?* ‘You (collective) will talk.’
- *lá-áhus-a-ki?* ‘They\'ll talk.’

(Silver 1966: 126-122)

The involvement of an object is indicated by one of several highly productive transitivizing suffixes. The first in each pair of verbs in (12) is intransitive; the second is transitive with a third person object. The transitive suffix in these examples is *-ay*.

Shasta transitives

- *kwís-ik* ‘He said.’
- *kwís-ay-ik* ‘He told someone.’
- *rát-aka?* ‘He\'s going along on foot.’
- *rát-ay-ka?* ‘He\'s chasing him.’
- *réhe-nuka?* ‘He\'s running along on foot.’
- *réhe-n-ay-ka?* ‘He\'s going along on horseback.’ (‘running it’)
- *kawá-s* ‘You take it off!’
- *kawásw-ay* ‘You make him take it off!’

(Silver 1966: 157-8)

The transitive suffix may indicate the involvement of a patient (‘chase him’) or goal (‘tell someone’), or it may function as a causative (‘make him take it off’).

The involvement of a beneficiary is indicated by the benefactive suffix *-yl*, usually in combination with one of the transitive markers.

Shasta benefactives

- *kwáhus-i-k* ‘He talked.’
- *kwáhus-aya-yi-k* ‘He talked to him.’
- *kwátitu-yi-k* ‘He worked for him.’
- *kwírirakmak-e-yi-nta?* ‘I did the work for her.’

(‘reached here and there for her’)

(Silver 1966: 157-60)
Neither the transitive nor the benefactive suffix actually constitutes a referential third person pronoun in itself. The involvement of a third person object is inferred from the presence of one or both suffixes, which indicate the valency of the predicate, and the absence of a marker indicating a first or second person object.

The participation of a first or second person object is indicated by an additional suffix. The origin of this suffix is of special interest. Among its many markers of direction and location, Shasta contains a set of cislocative suffixes, -ik-a, -i-ka, -ak, and -mak 'hither'. (The forms differ primarily in the morphological contexts in which they occur. The form -i-ka, for example, cooccurs only with declarative mode prefixes, and never follows the progressive suffix.) The basic function of the cislocative can be seen by comparing the first two verbs in (14), both of which contain the progressive -aka. In the second verb, the progressive is followed by a final cislocative -a[k.

(14) Shasta cislocative 'hither'

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>réhe-nayka?</td>
<td>‘He’s going along on horseback.’</td>
<td>(Silver 1966: 157)</td>
</tr>
<tr>
<td>rehê-nayk-ak</td>
<td>‘He’s coming hither on horseback.’</td>
<td>(Silver 1966: 173)</td>
</tr>
<tr>
<td>kwáskak-ak</td>
<td>‘They ran hither.’</td>
<td>(Silver 1966: 157)</td>
</tr>
<tr>
<td>nari-thih-y-ak</td>
<td>‘You come here after him!’</td>
<td>(Silver 1966: 232)</td>
</tr>
<tr>
<td>[...] iúwata-yr-ak</td>
<td>‘[How many] shall I bring?’</td>
<td>(Silver 1966: 205)</td>
</tr>
<tr>
<td>rát-ayra-k-ak=čú</td>
<td>‘They are running this way after it.’</td>
<td>(Silver 1966: 233)</td>
</tr>
<tr>
<td>ēi-m-ik-a-? [...]</td>
<td>‘Come [again]!’</td>
<td>(Silver 1966: 232)</td>
</tr>
<tr>
<td>kwáská-y-ik-a?</td>
<td>‘They came running hither.’</td>
<td>(Silver 1966: 157)</td>
</tr>
</tbody>
</table>

The cislocative suffixes have been pressed into service to signal action directed toward a first or second person, the people at the location of a speech event. Silver states that ‘the directional transitives translate as marking first singular and second person object’ (1966: 176). This use of the cislocative can be seen by comparing the two verbs in (15).

(15) Shasta cislocative as indicator of object

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>kwáhus-i-k</td>
<td>‘He talked.’</td>
<td>(Silver 1966: 127)</td>
</tr>
<tr>
<td>kwáhus-ayant-i-ka?</td>
<td>‘He talked to me/you (sg.)’</td>
<td>(Silver 1966: 59)</td>
</tr>
</tbody>
</table>

Most verbs containing a transitivizer and cislocative suffix could be interpreted with either a first person object or a second person object, like
(15). In some contexts, like those in (16) there is only one alternative. In addition to the transitivizing suffix -a'y-, a progressive aspect suffix, and a final cislocative -a'k, (16a) contains a first person subject prefix sw-. Since the subject is first person, the object is interpreted as second. The verb in (16b) contains a second person subjective prefix tw-. The object can thus only be first person.

(16) Shasta cislocative with first person subject
a. su-mata-há-yk-a'k  ‘I’m making you angry.’  (Silver 1966: 158)
   b. kú-ída kë- ¿in-á? twaría-čača-m-a'k  ‘Why do you look at me?’  (Silver 1966: 134)

Further examples of the use of each cislocative suffix to mark first or second person objects can be seen in (17).

(17) Shasta cislocatives
   kwáw-i-ka?  ‘They gave it to me.’  (Silver 1966: 176)
   kwt-yi-ka?  ‘He came to visit me.’  (Silver 1966: 89)
   kwírahampiýint-i-ka?  ‘He brought me (a bucket of water).’
   (Silver 1966: 160)
   [... ] kwáw-i-ka?  ‘They … gave me … [a boat].’
   (Silver 1966: 190)
   kú-pičite-k-ika?  ‘He winked at you.’  (Silver 1966: 135)
   [... ] xuwá-tir-ik-a?  ‘Would that [a snake] strike you!’
   (Silver 1966: 214)
   kúwa-ka-yt-ni-ka?  ‘He bought it for you (collective).’
   (Silver 1966: 161)
   má- ¿in-á? skutis-a-y-a'k  ‘Don’t say that to me.’  (má- ‘not’)
   (Silver 1966: 215)
   [… ] twaría-čača-m-a'k  ‘[Why] do you look at me?’
   (Silver 1966: 134)
   táhačú kim-ákwaya-y-a'k  ‘Please tell me about it!’
   (Silver 1966: 213)
   kúwa-kayí-k-a'k  ‘I bought it for you.’  (collective)
   (Silver 1966: 161)
   itpxan-ásway-a'k  ‘I’m going to wash your (sg) face.’
   (Silver 1966: 176)
Marianne Mithun

skahuht-hampa-y-ak ‘You go get doctored!’ 
(Silver 1966: 176)
rát-ayka-m-ak ‘He’s chasing me.’ (Silver 1966: 176)
ne-wá-ke-m-ak ‘You (collective) watch over us!’ 
(Silver 1966: 172)
[...] twáři-čača-m-ak ‘[Why] do you look at me?’ 
(Silver 1966: 134)
kútayay-m-ak ‘Let me alone!’ (Silver 1966: 175)

As in Nez Perce, the referential status of the cislocative suffixes in these verbs is not entirely clear. They may still simply denote motion toward the participants in the speech act, from which the involvement of a first or second person goal is inferred, or they may have come to specify these arguments directly. One construction suggests that an evolution toward direct reference might already have begun. Shasta contains a collective suffix -e-ki- on verbs. It may be used to qualify subjects, as in (18).

(18) Shasta collectives
kwic-d.? ‘I drank’
kwic.-e-ke? ‘we (collective) drank’
kwic-ik ‘you (singular) drank’
kwic.-e-ke? ‘you (collective) drank’
kwic-ik ‘he drank’
kti.-e-ke? ‘they (collective) drank’ (Silver 1966: 101-2)

The collective suffix may also qualify other features of the event. In one of the verbs cited in (17) above, repeated here as (19), the collective suffix is translated as qualifying the beneficiary.

(19) Shasta (Silver 1966: 161)
kúwa-kay-t-ak ‘I bought it for you (collective).’ 
(Silver 1966: 161)

Given the translation of this verb, it is unlikely that the collective suffix modifies the subject (‘I’), the patient (a single item), or the action (a single purchase). It seems relatively clear that it is qualifying the beneficiary ‘you’, indicated here by the final suffix -ak. This construction suggests that the second person is indeed specified grammatically within the verbal morphology, rather than only inferrable from the cislocative context.
Whether or not the Shasta cislocative has been fully grammaticized as a referential pronoun, its use in contexts with first and second person patients and beneficiaries does demonstrate a route by which pronominal affixes could come into being.

3. Iroquoian

Evidence from a third, unrelated set of languages indicates that the use of cislocatives can ultimately result in fully referential pronominal affixes. The Iroquoian languages, spoken primarily in eastern North America, all contain full sets of pronominal prefixes within their verbs referring to the core arguments of clauses. One set of pronouns is used for intransitive agents, a second for intransitive patients, and a third for transitive combinations of agent and patient. (Agent and patient case roles are grammaticized, so while they generally reflect the semantic role of participants, speakers have no choices.) First (inclusive and exclusive), second, and third persons are distinguished, and singular, dual, and plural number. The basic paradigms were already in place in the parent language, Proto-Iroquoian (Chafe 1977). Gender distinctions have since developed in third persons in languages of the Northern branch of the family.

Samples of some of the pronominal prefixes can be seen in the Mohawk verbs below. There are 50-60 pronominal prefixes in each language, so these forms represent only a sample.

(20) Mohawk pronominal prefixes (Kaia'titākhe Jacobs, p.c.)

<table>
<thead>
<tr>
<th>AGENTS</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>wa?-ke-?nyá:kṣ?ne?</td>
<td>‘I escaped’</td>
</tr>
<tr>
<td>wa?-akeni-?nyá:kṣ?ne?</td>
<td>‘s/he and I (exclusive dual) escaped’</td>
</tr>
<tr>
<td>wa?-akwa-?nyá:kṣ?ne?</td>
<td>‘they and I (exclusive plural) escaped’</td>
</tr>
<tr>
<td>w-eteni-?nyá:kṣ?ne?</td>
<td>‘you and I (inclusive dual) escaped’</td>
</tr>
<tr>
<td>w-etewa-?nyá:kṣ?ne?</td>
<td>‘you all and I (inclusive plural) escaped’</td>
</tr>
<tr>
<td>wa-hse-?nyá:kṣ?ne?</td>
<td>‘you escaped’</td>
</tr>
<tr>
<td>w-eseni-?nyá:kṣ?ne?</td>
<td>‘you two escaped’</td>
</tr>
<tr>
<td>w-esewa-?nyá:kṣ?ne?</td>
<td>‘you all escaped’</td>
</tr>
<tr>
<td>wa?-ka-?nyá:kṣ?ne?</td>
<td>‘it/she escaped’</td>
</tr>
<tr>
<td>wa-ha-?nyá:kṣ?ne?</td>
<td>‘he escaped’</td>
</tr>
<tr>
<td>wa-hni-?nyá:kṣ?ne?</td>
<td>‘they two (masculine) escaped’</td>
</tr>
</tbody>
</table>
wa-hati-?nyá:kä?ne? ‘they all (masculine) escaped’
wa?-e-?nyá:kä?ne? ‘one/she escaped’
wa?-keni-?nyá:kä?ne? ‘they two (neuter/feminine) escaped’
wa?-kūt:i-?nyá:kä?ne? ‘they all (neuter/feminine) escaped’

**PATIENTS**

**wa?ke-?nikührhas** ‘I forget’
**yũkeni-?nikührhas** ‘we two forget’
**yũkwa-?nikührhas** ‘we all forget’
**sa-?nikührhas** ‘you forget’
**seni-?nikührhas** ‘you two forget’
**sewa-?nikührhas** ‘you all forget’

**TRANSITIVES: AGENT + PATIENT**

wa?-ká-?nyate? ‘I fed you’
wa?-keni-?nyate? ‘I fed you two’
wa?-kwá-?nyate? ‘I fed you all’
wa-hi-?nyate? ‘I fed him’
wa?-khé-?nyate? ‘I fed her’
wa-hšaká-?nyate? ‘he fed her’
wa-hške-?nyate? ‘you fed me’
wa-hškeni-?nyate? ‘you fed us two’
wa-hškwá-?nyate? ‘you fed us all’
wa-hšhe-?nyate? ‘you fed him’
wa-hšshe-?nyate? ‘you fed her’
wa-?huwá-?nyate? ‘she fed him’

etc.

When a verb involves a semantic agent, semantic patient, and semantic beneficiary, only the agent and beneficiary are encoded in the pronominal prefix as the core arguments. These are of course the participants most likely to be human and topicworthy.

(21) Mohawk core arguments (Skawén:nati Montour, p.c.)

**Wa-ha-hni:ny-?**
**Wa-hak-hni:ny-?s-e?**
**AORIST-M.AGT-buy-PRFV**
**AORIST-M/1-buy-BENEFACTIVE-PRFV**

‘He bought it.’

‘He bought it for me.’

There is little evidence within the Iroquoian languages for assuming that these prefixes are anything but referential pronouns in their own right. Speakers report that they know that a verb like ro?nikührhas ‘he forgets’ contains a pronoun roughly equivalent to English ‘he’, although they may not be conscious of which portion of the word corresponds to it. Because all verbs obligatorily contain pronominal prefixes referring to their core arguments, they can constitute complete, grammatical sentences in themselves. Speakers
say they do not feel that anything is missing or has been deleted from a clause like *ro?nik\vairh\vajas*, any more than English speakers feel that a subject is missing from *he forgets*. Third person pronominal prefixes may ‘agree’ with a nominal elsewhere in the discourse in the sense that they may be coreferent, but they are no more ‘agreement’ markers than the nominals. There is even less language-internal motivation for considering the first and second person pronominal prefixes simply ‘agreement’ markers. There are no independent nominals within the languages for them to agree with. As in most languages of this type, there is a set of independent contrastive pronominal particles that appear under pragmatically marked circumstances. They could be considered coreferent with the pronominal prefixes, but they do not replace them and they do not express the same range of distinctions as the prefixes. The contrastive particles distinguish only person: Tuscarora *ix* (first person) and *ixθ* (second person), Cayuga *(n)i?: ?* and *(n)i?: s*, Mohawk *(n)i?: i?* and *(n)i?: se?*. The pronominal prefixes distinguish not only person but also singular, dual, and plural number; agent and patient case; and inclusive versus exclusive first person. The prefixes are as referential as the independent pronouns of languages like English.

Like all Iroquoian verbs, imperatives and hortatives also contain pronominal prefixes.

(22) Mohawk intransitive commands (Kaia’titáhkhe Jacobs p.c.)

- *se?-nyá:kä\?n* ‘Escape!’ (SECOND SINGULAR AGENT)
- *seni?-nyá:kä\?n* ‘Escape, you two!’ (SECOND DUAL AGENT)
- *sewa?-nyá:kä\?n* ‘Escape, you all!’ (SECOND PLURAL AGENT)
- *sa-yéshy* ‘Smile!’ (SECOND SINGULAR PATIENT)
- *teni?-nyá:kä\?n* ‘Let’s escape!’ (INCLUSIVE DUAL AGENT)
- *tewa?-nyá:kä\?n* ‘Let’s escape!’ (INCLUSIVE PLURAL AGENT)
- *ra?-nyá:kä\?n* ‘Let him escape’ (MASCULINE SINGULAR AGENT)

etc.

Transitive commands contain transitive pronominal prefixes.

(23) Mohawk transitive commands (Kaia’titáhkhe Jacobs p.c.)

- *i-tshe-nút* ‘Feed him!’
- *shé:-nút* ‘Feed her/them!’
- *etshisení:-nút* ‘Feed him, you two!’
Of special interest is the transitive prefix ‘you/me’. The Proto-Iroquoian form, reconstructed as *-hsk(w)-, has been retained in all of the daughter languages. This prefix still shows its original components: second person agent *(h)s- and first person patient *(k)(w)-. (The h appears word-medially and the w appears before certain vowels.) The Southern Iroquoian reflex can be seen in the Cherokee verbs in (24). (The initial h of the Cherokee stem -hno:his/-hno:hi- ‘tell’ has metathesized over the vowel of the pronominal prefix.)

(24) Cherokee (Janine Scancarelli p.c. from Virginia Carey)

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ṣkhi-no:his-é:h-a yi-ṣkhi-no:hi-isí-s</td>
<td>2/1-tell-DATIVE-PRESENT.INDIC COUNTERFACTUAL-2/1-tell-DATIVE-Q</td>
</tr>
<tr>
<td>You’re telling me.</td>
<td>‘Will you tell me?’</td>
</tr>
</tbody>
</table>

All of the Northern languages show the same basic form, with the addition of epenthetic e or h in certain contexts. The Northern forms are illustrated here with examples from Tuscarora, Cayuga, and Mohawk, to insure the broadest coverage of the Northern branch of the family. (Northern Iroquoian first separated into a Tuscarora-Nottoway subbranch and a Huron-Iroquois subbranch. After the separation of Huron, the Iroquois group ultimately separated into several subgroups, among them the westernmost languages Cayuga and Seneca, and the easternmost languages Oneida and Mohawk.)

(25) Tuscarora (Elton Greene p.c.)

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ḳ-i-hsk-ka-h wá-hsk-ka-?</td>
<td>(epen)-2/1-see-HABITUAL AORIST-2/1-see-PRFV</td>
</tr>
<tr>
<td>‘You see me.’</td>
<td>‘You see/saw me.’</td>
</tr>
</tbody>
</table>

(26) Cayuga (Jim Skye p.c.)

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>sk-é:ka-h a-hsk-é:ka-?</td>
<td>2/1-see-HABITUAL AORIST-2/1-see-PRFV</td>
</tr>
<tr>
<td>‘You see me.’</td>
<td>‘You see/saw me.’</td>
</tr>
</tbody>
</table>

(27) Mohawk (Skawén:nati Montour p.c.)

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>wá-hsk-ka-?</td>
<td>AORIST-2/1-see-PRFV</td>
</tr>
<tr>
<td>‘You see/saw me.’</td>
<td></td>
</tr>
</tbody>
</table>
In Southern Iroquoian, the pronominal prefixes on imperatives (both basic and future) are the same as those on indicatives.

(28) Cherokee imperatives (Janine Scancarelli, p.c. from Virginia Carey)

- skhi-nohisi ‘Tell me!’
- skhi-no:hisé:lv ‘Tell me later!’

In the Northern branch of the family, however, there has been an innovation: in imperatives, the prefix *-hsk(w)- ‘you/me’ has been replaced with a prefix *tak(w)-. The innovative prefix has retained its shape in Cayuga.

(29) Cayuga imperatives (Lizzie Skye, p.c.)

- tak-yênawa’s ‘(You) help me!’
- tak-hnq:t ‘(You) feed me!’

The same shape appears in Mohawk, except that before y, Kahnawà:ke and Kanehsatà:ke *k > t.

(30) Mohawk (Katsi’tsénhawe Beauvais, p.c.)

- tat-yé:nawa’s ‘(You) help me!’
- ták-enq:t ‘(You) feed me!’

Proto-Northern-Iroquoian *t systematically appears in Tuscarora as ?n before vowels, with loss of the ? word-initially.

(31) Tuscarora imperatives (Elton Greene, p.c.)

- nak-tirá:nhaeh ‘(You) help me!’
- ná:k-nq:t ‘(You) feed me!’

Like the original *-hsk(w)-, the form tak(w)- is used in both verbs with semantic patients, as in (29) - (31) above, and verbs with semantic goals or beneficiaries.

(32) Cayuga benefactive imperatives (Reginald Henry, p.c.)

- tak-čnjádhòch ‘(You) lend it to me!’
- tak-átkghthoh ‘(You) look at me!’
- tak-hròghwa’s ‘(You) wait for me!’
- tak-hwánkahshèh ‘(You) untie it for me!’
- tak-e?howé:klshèh ‘(You) uncover it for me!’
- tak-átrènò:thas ‘(You) sing for me!’
(33) Mohawk (Kahentoréhtha Cross p.c.)
  takw-átnýéhtá 「(You) send it to me!」
  tak-ena?tíílnha? 「(You) show it to me!」
  tak-há:wa? 「(You) carry it for me!」
  tak-enyhsa:na? 「(You) watch the house for me!」
  tak-tuhé:wa? 「(You) sweep for me!」
  tak-hahserótha? 「(You) turn on the light for me!」

(34) Tuscarora benefactive imperatives (Elton Greene p.c.)
  nak-tsihkwd:nfhah 「(You) lend me your hammer!」
  nak-rihwiitsaʔ 「(You) promise me (this)!」
  nak-ihréhysyq 「(You) untie it for me!」
  nak-ta?naratyáʔthahθ 「(You) buy me some bread!」
  nak-rá:kwahθ 「(You) choose one for me!」
  nak-nóht:aʔθ 「(You) carry it for me!」

We need not look far to find the source of the form tak(w)-. Proto-Iroquoian contained a cislocative prefix *ta- 'hither', which remains productive in all of the modern languages. It occurs immediately before the pronominal prefixes.

(35) Cherokee cislocative (Pulte 1975: 251)
  aʔi 「He’s walking」
  ta-yaʔi 「He’s walking this way」

(36) Cayuga cislocative (Reginald Henry, p.c.)
  aheʔ 「He’s going」
  tgaʔheʔ 「He’s coming」

(37) Mohawk cislocative (Skawén:nati Montour, p.c.)
  wá:reʔ 「He’s going」
  tà:-reʔ 「He’s coming」

(38) Tuscarora cislocative (Elton Greene, p.c.)
  wáhræʔ 「He’s going」
  ná:hræʔ 「He’s coming」

The cislocative prefix *ta- has replaced the second person agent prefix *hs- in requests for action toward the speaker. It is easy to imagine how such a replacement might have come about. It is in requests that speakers are often most anxious to be polite, not to infringe on the autonomy of others. One way
to avoid infringement is to refrain from direct reference to the addressee. Instead of ‘You feed me!’, speakers might come to prefer an alternative along the lines of ‘May there be feeding toward me’. The cislocative provides a good alternative, directing actions toward the speaker without explicit designation of the addressee.

Has the form become referential? Several kinds of evidence suggest that it has. First, speakers report that they have no feeling of indirectness with commands containing *takw-*: they feel that the addressee is mentioned as overtly as in other commands. They are in fact quite surprised to discover that the form is any different.

Second, number marking indicates that the second person agent is overtly specified within the paradigm. Within the indicative 2/1 pronominal prefixes, number is marked after person in all of the languages. If either the agent or patient is plural, the plural marker -wa- appears. If neither agent nor patient is plural, but one or both is dual, the dual marker -ni- appears. (The additional e and h in the Cayuga forms are epenthetic.)

(39) Cayuga number marking (Jim Sky, p.c.)

\[
\begin{align*}
\text{sk} & \text{-} \text{é}:\text{k} \text{c} & & \text{‘You see me.’} \\
\text{skhn} & \text{í}-\text{k} \text{c} & & \text{‘You two see me.’} \\
\text{skwá}-\text{k} \text{c} & & \text{‘You see us two.’} \\
\text{sk} & \text{wá}-\text{k} \text{c} & & \text{‘You all see me.’} \\
\text{skhn} & \text{í}-\text{n} \text{g} & & \text{‘You see us all.’} \\
\text{sk} & \text{wá}-\text{n} \text{g} & & \text{‘You all see us all.’}
\end{align*}
\]

Commands with *tak(w)*- show the same pattern of number marking in all of the languages. If the agent, the patient, or both are plural, the plural element -wa- follows the person complex: *takwa-*. If neither is plural, but one or both are dual, the dual element -ni- appears: *takni-.*

(40) Cayuga number marking in commands (Reginald Henry, p.c.)

\[
\begin{align*}
tak-hnö & \text{h} \text{k} & & \text{‘Cut my hair!’} \\
takhnö & \text{i}-\text{n} \text{h} & & \text{‘You two, cut my hair!’} \\
takwö & \text{h} \text{k} & & \text{‘You two, cut our hair, both of us!’} \\
takwö & \text{h} \text{i}-\text{n} & & \text{‘You all, cut my hair!’} \\
takwö & \text{i}-\text{n} & & \text{‘You all, cut our hair!’}
\end{align*}
\]
It thus appears that the second person addressee is indeed a grammatical argument of the transitive imperative, rather than only implied by a jussive like ‘may there be hair cutting towards me’.

Final evidence of the referentiality of *tak(w)- comes from its extension to other contexts. Proto-Northern *tak(w)- was apparently used in the same contexts as in modern Cayuga (and other Iroquois languages not cited here). In these languages, the prefix appears only in commands and only when it is word-initial. If a command contains any pre-pronominal prefix, the original -hsk(w)- remains. The second command in (43) contains a cislocative prefix in its original directional function. The speaker, Mr. Henry, notes that this cislocative command would not be used if the haircutter were already with the person uttering the command. The third command contains a repetitive prefix (‘again’) and the fourth a dualic prefix (‘in two’). Although all the forms in (43) are commands, only the first contains the innovative tak(w)-, where it is word-initial.

(43) Cayuga imperatives with pre-pronominal prefixes (Reginald Henry, p.c.)

\[
\text{tak-hn̓qha:} \\
2/1\text{-hair.cut}
\]

‘Cut my hair!’
Interestingly, a remodeling has occurred within Cayuga that has resulted in doublets. In addition to the basic imperatives with a cislocative ta- standing in for the second person agent, a more polite imperative form has developed in which the original second person agent s- has been restored, although the cislocative is still present.

(44) Cayuga imperative doublets (Jim Sky, p.c.)

\[ \text{ta-} -k\cdot \text{gh} \quad \text{ta-} -s\cdot \text{k-}\text{gh} \]

\[ \text{CISLOCATIVE-1-give} \quad \text{CISLOCATIVE-2.AGENT-1.PATIENT-give} \]

‘Give it to me!’ ‘Please give it to me’ (more polite)

It is interesting that this development contrasts with the usual pattern of blurring reference for politeness. While the original Proto-Northern-Iroquoian innovation involved eliminating overt reference to the second person addressee by substituting the cislocative, this second innovation involves restoration of the overt pronoun.

In Tuscarora, the cognate prefix nak(w)- has been extended to all imperatives with first person patient, even when the pronoun is word-medial as in (44).

(45) Tuscarora contrastive imperative (Elton Greene, p.c.)

\[ \text{tha-} \ ? \text{nakw-ahstá:wi-} -k \]

\[ \text{CONTRASTIVE-2/1-leave-CONTINUATIVE} \]

‘Just leave me alone.’

In Mohawk, the innovative tak(w)- appears only word-initially, as in the first command in (45) (where it appears as tat- because of the phonological context). The second and third verbs retain the reflex of the earlier *-sk(w)-
(here *st-* and *sek-*) because the pronoun is word-medial. This pattern matches the original context of the innovation in Proto-Northern-Iroquoian and that of Cayuga.

(46) Mohawk commands (Kanerahtenhá:wi Gabriel, p.c.)

\[
\begin{align*}
tat-yé:nawa-?s & \quad 2/1\text{-help-BENEF\text{\text{F}}} \\
\text{‘Help me!’} & \\
ta-st-yenawa-?s-è:-ra & \quad \text{CISLOCATIVE-2/1\text{-help-BENEF\text{\text{F}}-ANDATIVE-PURPOSIVE}} \\
\text{‘Come help me!’} & \\
te-sék-hner4?k-s & \quad \text{DUALIC-2/1\text{-tie-BENEF\text{\text{F}}}} \\
\text{‘Tie it up for me!’} & \\
\end{align*}
\]

The innovative form *tak(w)-* has been extended in Mohawk, but in a different direction than in Tuscarora. It now appears in all verbs with second person agents acting on first person patients, providing it is word-initial. Indicative verbs in Mohawk (as in all Northern Iroquoian languages) appear in one of three aspects: Habitual, stative, and perfective (traditionally termed punctual). Habitual and stative verbs can occur without pre-pronominal prefixes. When they do, the form *tak(w)-* is used for ‘you/me’. Perfective verbs always contain a tense/mode prefix, aorist, future, or optative, so their pronominal prefixes are always word-medial and retain the original *-hsk(w)-*.

(47) Mohawk extension of *tak(w)-* (Skawén:nati Montour p.c.)

\[
\begin{align*}
takw-atkáhtho & \quad \text{IMPERATIVES} \\
2/1\text{-look} & \quad \text{Word-initial} \\
\text{‘Look at me!’} & \\
ta-skw-atkáhtho & \quad \text{Word-medial} \\
\text{CISLOCATIVE-2/1\text{-look}} & \\
\text{‘Look at me!’} & \\
sa-skw-atkáhtho & \quad \text{REPEITIVE-2/1\text{-look}} \\
\text{‘Look at me again!’} & \\
\end{align*}
\]
4. Conclusion

Our awareness of the fact that independent pronouns may evolve into verbal affixes has already contributed substantially to our understanding of why certain paradigms take the shapes they do. Independent pronouns are not the only source of pronominal affixes, however. Diachronic relationships between markers of unspecified reference, plurality, and neuter pronouns in Northern Iroquoian languages and related languages are discussed in Chafe (1977) and Mithun (1993). The marking of grammatical relations in Sahaptian, Shastan, and Iroquoian languages, shows us that pronominal affixes may arise from still another source: A cislocative 'hither'.

Such a development may begin at various points in the evolution of pronominal paradigms. In Nez Perce and Shasta, it began before any other object pronouns had been morphologized. In Northern Iroquoian, by contrast, it occurred long after a full paradigm, with first, second, and third persons, had been established. The end product of the evolution may vary as well. All developments have as a semantic point of departure movement toward the location of the speech act, but in Nez Perce, the cislocative came to signal a first person, in Northern Iroquoian a second person, and in Shasta, either one. In Northern Iroquoian, it now represents an agent, but in Nez Perce and Shasta it represents objects.

The development raises an interesting question concerning the precise nature of referentiality. Should identification by implication and subsequent inference be included within the notion of reference? There are of course many possible kinds of inference. It may be structural, as in the case of English verb agreement: the final -s of run-s implies that the subject of the verb is third person singular. It may be semantic or pragmatic: If I ask you to Toss it here! you may infer that I want it given to me, though I have not
explicitly mentioned myself. If we choose to recognize a difference between direct reference and identification by implication, we should ask whether the alternatives represent discrete categories or simply ends of a continuum. We have seen a diachronic shift, particularly clear in the case of Mohawk, from the implication of a second person agent to direct pronominal reference. Does such a shift represent a hop over a boundary, or a slide along a dimension? To know for certain, we must sharpen our definition of the precise nature of reference.

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REFERENCES


