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A history of Iroquoian gender marking*

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The North Iroquoian languages have a three-way gender division in the third-person prefixes. On the basis of small differences between the meanings of these genders, a history of the gender marking is proposed, building upon earlier work by Chafe (1977). This new proposal uses fewer reconstructed stages and only assumes widely attested kinds of semantic change. However, because some aspects of this proposal do not follow genetic or areal connections between the languages, independent parallel developments are proposed to account for the convergence.

1. Introduction

One of the extraordinary features of the Iroquoian languages is their extensive person-deixis paradigm, coded as prefixes on the verb. All Iroquoian languages have person-deixis paradigms consisting of at least fifty different elements. Such a wealth of forms is a feast for historical-comparative investigations. Traditionally, the person paradigm in the Iroquoian languages is split into three parts. Transitive prefixes are distinguished from intransitive ones, and the intransitive prefixes are split in agent and patient prefixes. In this article, I consider only the tripartite gender division found in the third-person prefixes, building upon the reconstruction and history proposed by Chafe (1977). This gender division is found in the Northern Iroquoian languages, which is the main focus of this paper. The Southern Iroquoian language Cherokee is mentioned only incidentally. The genders will be investigated principally on the basis of the third-person singular intransitive prefixes. In Section 6, the third-person singular transitive prefixes are included in the historical analysis, illustrating as an aside the rather intricate dividing line between transitive and intransitive marking in Iroquoian languages.

* This paper was originally presented at the 13th International Conference on Historical Linguistics (ICHL) in Düsseldorf, Germany, in 1997. Since then, this paper has been cited as a manuscript in the Iroquoian literature (Bryant 2003; Chafe 2000, 2002). The current version includes only minor deviations from the original manuscript of 1997 and can thus be considered to be equivalent to the manuscript cited. I thank Bernard Comrie, Joshua Wilbur, and two anonymous referees for suggestions and improvements.

Methodologically, this paper lies within the historical-comparative tradition, but it stresses the importance of paradigmatic structure for historical reconstruction. The strongest arguments for historical relatedness often stem from parallel cognates in paradigms, and such paradigmatically related cognates are also attested in Iroquoian. Nichols (1996) most forcefully argued for the importance of paradigmatic structure for historical reconstruction. However, this paper takes one step further in investigating the changes in the paradigmatic structure and uses these changes as an indication of the historical reconstruction (see also Cysouw & Forker 2009 for another example of this approach).

In this approach, first basic correspondences between the morphemes in the different languages are determined. The morphemes have to correspond in their linguistic form as well as in their meaning. These correspondences are interpreted as remnants of a common ancestor. Second, differences between the corresponding forms will be interpreted as a sign of past changes. These differences in meaning will be the main subject of this paper. I assume two general constraints to decide on which reconstruction is to be preferred. First, the number of proposed changes is to be held as minimal as possible, and, second, the reconstructed changes should be as natural as possible. With the use of the word “natural,” I do not imply the existence of universal rules of change; I merely mean that changes should be proposed that are known to occur elsewhere if possible. Although these two constraints are completely uncontroversial (both being instances of Occam’s razor), they have not consistently been applied in the previous reconstructions of Iroquoian gender marking.

After establishing some basic correspondences of the person prefixes used for third-person singular intransitive in Section 2, I focus on the changes in the meaning of the three genders, leaving the changes in form not discussed in this paper (see, for instance, Mithun (1979) for an extensive account of the phonological changes in Iroquoian). I present the proposed reconstructed changes by Chafe in Section 3 and show in Section 4 that his reconstruction is neither minimal nor natural.¹ An alternative history is proposed in Section 5, which also sheds light on some oddities of Tuscarora in Section 6. In the concluding Section 7, some problems arising with this alternative proposal are discussed.

2. The North Iroquoian genders

In all North Iroquoian languages, three genders are distinguished in the third-person singular intransitive, and there are different forms for agent and patient subject for all

1. The reconstruction of the history of the gender system is only part of Chafe (1977). The other parts of his interesting article remain unchallenged here.

three.² The genders can easily be identified cross-linguistically, in form as well as in meaning. The prefixes are exemplified in Table 1, showing the full morphophonological variation found in Oneida, Seneca, and Tuscarora.³

The correspondences between the languages can clearly be identified on the morphophonological side. There are only minor phonological differences between these prefixes. The sole strange element in Table 1 is the Tuscaroran indefinite-patient prefix, which has the same form as the prefix **ka-* found with non-human agents. This is one of the oddities of Tuscarora confronted in Section 6. The reconstructed forms from Chafe (1977) are included to refer to the prefixes in the remainder of this paper.

Table 1. Intransitive third-person prefixes

Meaning	Reconstruction	Oneida	Seneca	Tuscarora
Indefinite agent	<i>*ye/*ya-</i>	(y)e/_[C, i]	ye/_[C, i]	ye/_[C, i]
		(y)ak/_[e, o]	yak/_[o, ɔ]	yak/_[e, o, v]
		(y)u/_[a]	yɔ/_[a]	yv/_[a, e, y]
		(y)ʌ/_[e]	yɛ/_[e]	
		(y)a/_[‘ihey’]	ya/_[‘iey’]	ya/_[‘ihey’]
Masculine agent	<i>*hra-</i>	(-h)(l)a/_[C]	ha/_[C]	(-h)ra/_[C]
			hæ/_[Cæ]	
		(-h)(l)ʌ/_[i]	hɛ/_[i, (y)ɔ]	(-h)rv/_[i]
		(-h)(l)/_ [a]	h/_[V]	(-h)r/_[V]
Nonhuman agent	<i>*ka-</i>	ka/_[C]	ka/_[C]	ka/_[C]
			kæ/_[Cæ]	
		kʌ/_[i]	kɛ/_[i, (y)ɔ]	kv/_[i]
		w/_[a, C]	w/_[a, e, ɛ]	w/_[V]
		[u]/_ [a]		
		(y)/_ [o]	y/_[o, ɔ]	
	/h/_ [e]	k/_ [o]		

(Continued)

2. See Mithun (1991) for an account of the agent-patient opposition in Iroquoian and other languages.

3. The Oneida data are from Lounsbury (1953), the Seneca data are from Chafe (1960, 1961), and the Tuscarora data are from Williams (1976). The italicized vowels in the contextual conditions (given in square brackets) indicate that this stem vowel merges into the given variant of the prefix. Non-italicized sounds remain overt with the prefix attached.

Table 1. Intransitive third-person prefixes (Continued)

Meaning	Reconstruction	Oneida	Seneca	Tuscarora
Indefinite patient	*(<i>ya</i>) <i>ko</i> -	(<i>y</i>) <i>ako</i> /_[C, <i>i</i> , <i>a</i>]	(<i>ya</i>) <i>ko</i> /_[C, <i>i</i> , <i>a</i>]	<i>ka</i> /_[C]
		(<i>y</i>) <i>akaw</i> /_[e]	(<i>ya</i>) <i>kaw</i> /_[e, ε]	<i>kw</i> /_[i]
		(<i>y</i>) <i>aka</i> /_[o]	(<i>ya</i>) <i>ka</i> /_[o, ɔ]	<i>w</i> /_[V]
Masculine patient	* <i>hro</i> -	(- <i>h</i>)(<i>l</i>) <i>o</i> /_[C, <i>i</i> , <i>a</i>]	<i>ho</i> /_[C, <i>i</i> , <i>a</i>]	(- <i>h</i>) <i>ro</i> /_[C, <i>i</i> , <i>a</i>]
		(- <i>h</i>)(<i>l</i>) <i>aw</i> /_[e]	<i>haw</i> /_[e, ε]	(- <i>h</i>) <i>raw</i> /_[e, o, v]
		(- <i>h</i>)(<i>l</i>) <i>a</i> /_[o]	<i>ha</i> /_[o, ɔ]	
Nonhuman patient	* <i>yo</i> -	(<i>y</i>) <i>o</i> /_[C, <i>i</i> , <i>a</i>]	/ <i>o</i> /_[C, <i>i</i> , <i>a</i>]	(<i>y</i>) <i>o</i> /_[C, <i>i</i> , <i>a</i>]
		(<i>y</i>) <i>aw</i> /_[e]	/ <i>aw</i> /_[e, ε]	(<i>y</i>) <i>aw</i> /_[e, o, v]
		(<i>y</i>) <i>a</i> /_[o]	/ <i>a</i> /_[o, ɔ]	

The semantic correspondences between these prefixes can likewise easily be established. The **ye/*ya-* and **(ya)ko-* prefixes are used in all languages for indefinite subjects ('someone'), the **hra-* and **hro-* prefixes for masculine subjects, and the **ka-* and **yo-* prefixes for non-human subjects. However, there are notable differences between the languages for the marking of feminine referents. Consequently, these prefixes are labeled in this paper by their joint meaning as identified here (i.e. "indefinite," "masculine," and "non-human"). These labels do not imply a complete characterization of their functions. For example, the "non-human" prefix is used in many languages for part of the feminine human marking, but not in all languages, and not always to the same degree. The name "non-human" only indicates that all languages agree on the fact that this prefix is used for at least non-human marking.

There are roughly three variants found to code feminine marking in North Iroquoian. Huron exemplifies the first variant, in which the non-human prefix (**ka-*, **yo-*) is used for all feminine marking. Seneca and Tuscarora exemplify the second variant, in which the indefinite prefix (**ye/*ya-*, **(ya)ko-*) is used for all feminine marking. The third variant is found in Oneida, Onondaga, and Mohawk, in which both prefixes are used for feminine marking, with language-specific differences in meaning or use between the two prefixes. Section 4 provides a discussion of the precise demarcation of the use of the two prefixes between these languages.

In conclusion, there are clear correspondences in form as well as in meaning, and there are some minor differences found with respect to feminine marking. On the basis of these facts, a history of the meaning of the genders can be reconstructed.

3. Chafe's reconstruction

Chafe (1977) argues that the Seneca and Tuscarora gender division is historically the most conservative in North Iroquoian and the Huron variant the most progressive.

The others are transitional forms between these extremes. The Tuscarora/Seneca variant, with all feminine third persons marked by use of the indefinite **ye/*ya-* and **(ya)ko-* prefixes, is hypothesized by Chafe to be close to Proto-North Iroquoian (PNI). The reasons to propose this feminine meaning for the indefinite prefix in PNI are straightforward. All North Iroquoian languages except Huron use the indefinite prefix for at least some part of the feminine marking, and Seneca and Tuscarora, which use the indefinite prefix for all feminine marking, are two indirectly related and geographically widely dispersed languages (Chafe & Foster 1981). If the feminine marking had not been part of the meaning of the indefinite prefixes in PNI, a joint innovation could thus not be explained by genetic relatedness, nor by areal diffusion. In contrast, the North Iroquoian languages that use the non-human **ka-* and **yo-* prefixes for feminine marking, whether partially or completely, are all geographically neighboring languages, suggesting that the joint use of the non-human prefix for feminine marking is an areal feature. Areal diffusion of the use of the non-human prefix for feminine marking can also explain the variant found in Huron as an extreme case of the diffusion in which all feminine marking is shifted to the non-human prefix.

On the basis of correspondences between North Iroquoian languages and Cherokee, a South Iroquoian language (which does not show a gender division in the third person), and, even more daring, with Caddoan (in which an indefinite and a specific opposition with related forms are found in the third person), Chafe proposes a Proto Iroquoian specific versus indefinite gender opposition. To link the reconstructed history of North Iroquoian with Proto-Iroquoian, Chafe introduces a Pre-PNI stage without masculine marking and proposes a human versus non-human reanalysis of the gender division here. The history, as proposed by Chafe, is shown in Figure 1.

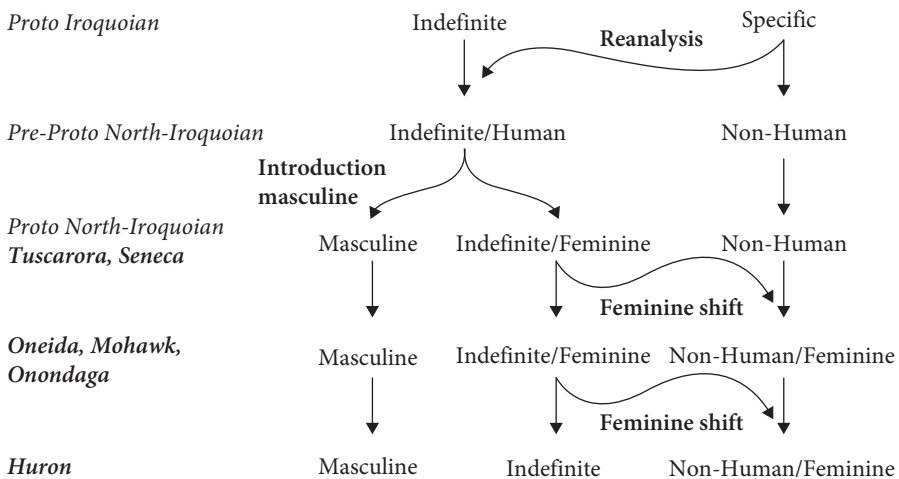


Figure 1. History of gender marking, following Chafe (1977)

4. Problems with Chafe's reconstruction

There are three problems with the history proposed by Chafe. The first concerns the direction of the gender change in North Iroquoian, and the second and third concern the Pre-PNI stage.

With regard to the direction of the gender change, Chafe proposes a shift from feminine marked with the indefinite prefix (in Tuscarora and Seneca) toward the use of the non-human prefix (in Huron). The splits in feminine marking as found in Onondaga, Oneida, and Mohawk are interpreted by Chafe as intermediate cases in the shift of feminine marking. In these languages, both the indefinite as well as the non-human prefix can be used to refer to feminines. Various grammarians writing on these languages all go into some detail in describing the differences in meaning of the indefinite and non-human prefixes when used for feminine marking. There is also a thorough study of this split in Oneida by Abbott (1984). The slightly differing descriptions found in the literature are all completely compatible with the analysis of Abbott, and I will assume that the three languages are in principle identical on the use of this split in feminine marking.⁴

The main claim made by Abbott is that although there are differences in meaning between the two prefixes when used to refer to females, using either prefix does not force a specific interpretation. Both prefixes are used regularly and in roughly equal amounts without fixed connotations. However, the prefixes are clearly not synonymous. The main reason to use one or the other prefix is established use. A speaker will always refer to a particular referent with the same prefix. Only when the other form is used is a special meaning conveyed: "If the speaker and the referent have established some choice of pronominal, whichever it may be, then it may well be rather rude not to observe it" (Abbott 1984: 135). The connotations are fairly regular when the non-established prefix is used, although different semantic aspects play a role, as shown in Table 2. In general, if the non-established form is used, then there seems to be some connotation of distance between the speaker and the referent for the non-human prefix and closeness between the speaker and the referent for the indefinite prefix. The connotations of the indefinite are more positive than the non-human connotations.

4. For compatible descriptions of Mohawk, see Beatty (1974: 62) and Bonvillain (1973: 85–87). Chafe (p.c.) confirms the compatibility of Onondaga in this respect. For Oneida, see also Lounsbury (1953: 51–52). In all these descriptions, non-human is referred to using the labels "feminine-zoic (FZ)," indefinite as "feminine-indefinite (FI)," following Lounsbury (1953).

Table 2. Connotations of feminine marking, following Abbott (1984)

Context	NonHuman (*ka-)	Indefinite (*ye/*ya-)
Size/gracefulness	large, awkward, aggressive	small, graceful, dainty, petite
Age	older	younger
Relationship	indifferent/detached attitude toward referent	empathy towards referent
References in texts	unmarked reference to women	mother, grandmother, granddaughter, elderly
Kinship terms	kin older than ego (distancing when used to refer to younger relatives)	kin younger than ego
Citation	male citation form	female citation form

Chafe proposes a historical shift of feminine marking from the indefinite to the non-human; that is, the marking of femininity is transferred from the variant with positive connotations to that with negative connotations. However, a shift toward the variant with negative connotations is a highly marked change, while the opposite direction is much easier to explain. For example, Keller (1990: 107–109) presents an explanation for a change toward the more positive variant. He notes a comparable change in the development of German nouns used to refer to women: the words tend to become derogatory over time. This clearly happened to the word *Weib* (cognate to English *wife*), which has become strongly pejorative in German. This, Keller argues, is also happening with its successor *Frau*, which is currently being replaced by *Dame*. In compounds the use of *Frau* sounds very awkward, as in *Frauentoiletten* ‘ladies’ restroom’, *Frauenabteil* ‘ladies’ compartment’, or *Frauenwahl* ‘ladies’ choice’, for example. Normally *Dame* is used instead: *Damentoilette*, *Damenabteil*, *Damenwahl*. The reason this happens is a form of gallantry: “be sure never to use a pejorative expression in the wrong situation.”

The maxim is “better use a word a bit too ‘high’ as one a bit too ‘low’ in cases of doubt.” This leads in time to a process in which the “higher” word always becomes the un-marked form, whereas the former normal expression becomes pejorized.
(Keller 1990: 108; translation, MC)

Weib originated as a relatively unmarked reference to women; it first became restricted to women in marital status (as in the English *wife*) but subsequently became derogatory as in German. Complete recategorization, still to happen, would implicate the disappearance of the word, as there would no longer be any usage left for it. Keller’s explanation of this shift uses the notion of an “invisible hand”: the forces that lead to a change are actions by people using words with some immediate goal, leading in

the long run to a (possibly unintended) change of the meaning of those words. Being gallant causes words to become derogatory (Keller 1990: Chapter 4).⁵ To summarize, the change of feminine marking in Iroquoian, as proposed by Chafe, does not seem to be in the expected direction. Of course, such an unexpected change is perfectly possible, but a reconstruction that does not need this unexpected change should be preferred.

The second problem concerns the proposed Pre-PNI stage. A “pre” stage is always a tricky part of a reconstruction. It is not based on multiple occurrences of a phenomenon (like a proto stage) but on some internal consistencies. To reconstruct a “pre” stage on top of a “proto” stage is always strongly hypothetical. So, if it is possible to reconstruct a history without such a “pre-proto” stage that explains the same differences between attested structures, such an alternative should be favored.

To link the North Iroquoian languages (with Tuscarora and Seneca showing the most conservative gender division) with Proto-Iroquoian, Chafe first proposes a change in Pre-PNI from specific versus indefinite to non-human versus human + indefinite. In PNI, a masculine is split off from human, resulting in the Tuscarora/Seneca division among non-human, feminine + indefinite, and masculine. Finally, the proposed feminine shift leads in its extreme (in Huron) to a gender division close to the proposed Proto-Iroquoian division (cf. Figure 1). The only difference between the Proto-Iroquoian reconstruction and Huron is that in Huron a masculine is added. The other two genders remain nearly the same, only with a slight change in the meaning of the specific prefix because the masculine part of the meaning is removed by the introduction of a separate prefix. Chafe also notes this almost complete cycle in the history of the Huron gender division:

Having passed through stages in which its [i.e. “indefinite”] meaning embraced all third person, then human third person, and then feminine, but having always retained its nonspecific function as well, in Huron it was brought by the complete masculine-nonmasculine dichotomy in that language to return to its original function alone. (Chafe 1977:513)

The cyclical aspect of this history can also be seen in Figure 1, as there are first transferences away from the specific prefix and later shifts back to this prefix. It seems overly complicated to propose intricate changes using a Pre-PNI stage when there are languages attested that closely resemble the Proto-Iroquoian stage. Why not turn it around and take Huron as closely resembling the PNI stage and redefine the gender division of PNI? This approximates my proposal that will be presented in the next section.

5. This gallantry is an instance of positive politeness, as described by Brown and Levinson (1987).

A third problem with Chafe's reconstruction is that the proposed human-nonhuman distinction for Pre-PNI is only found formally marked by the use of **yutat-* in Tuscarora (see Section 6). No other North Iroquoian language seems to explicitly mark the opposition human versus non-human by some formal opposition. One attested instance seems quite a narrow basis on which to propose a Pre-PNI distinction.⁶

5. An alternative proposal

The problems outlined in the previous section lead me to propose an alternative history. Because the Huron gender division resembles the reconstructed Proto-Iroquoian stage strongly, I propose a PNI reconstruction strongly resembling Huron. In PNI, a prefix marking masculinity is added to the Proto Iroquoian "specific-indefinite" division. Relative to this new category, feminine marking appears as an unmarked counterpart as part of the meaning of both of the other two prefixes.

This state of reference to women can be resolved in various ways. The most obvious choice, to mark a feminine referent, seems to be the former specific marker (the prefix used for non-human marking in all North Iroquoian languages). In this case there is no real change in the gender system because feminine was always marked with this prefix as part of the specific meaning. The feminine meaning of this prefix becomes overt only as a result of the introduction of a separate masculine. Huron exemplifies this option.

Another option is to use both original prefixes for feminine marking, with some special connotations, as is found in Oneida, Mohawk, and Onondaga. In this split of feminine marking, the former "specific" marker is still the unmarked reference to women, as can be seen from the text counts for Oneida by Abbott (1984: 131–132; see also Table 2).

6. Chafe also uses the Pre-PNI stage to account for the emergence of the **(ya)ko-* prefix (Chafe 1977: 504–506). This prefix did not exist in Proto-Iroquoian. In his proposal, first a prefix **ko-* appeared in Pre-PNI as an analog to Proto-Iroquoian **ka-* and **yo-*. In the semantic reanalysis from "specific vs. indefinite" to "non-human vs. human + indefinite," the meaning of the patient prefixes was reversed (only the patient prefixes would have undergone this reversal, not the agent prefixes). Finally the prefix **ya-* was added to **ko-*. This complicated history using three hypothesized changes in Pre-PNI becomes unnecessary if it is noted that the **ye/*ya-* prefix has an allomorph *yak-* before [o] in all languages (see Table 1). The prefix **(ya)ko-* can thus simply be explained as the combination **ye/*ya- + *yo- > *(ya)ko-*. The addition of this combination happened at the PNI stage. There is no need to hypothesize complex changes in Pre-PNI to account for the emergence of **(ya)ko-*.

A third logical possibility would be that the indefinite marker would be chosen for feminine marking, leading to the Tuscarora/Seneca gender division. This is quite a radical shift, as all feminine meaning has to be transferred from the former “specific” prefix to the indefinite prefix. Chafe uses the Pre-PNI stage as an intermediate stage to account for this radical shift. I alternatively propose a change from the split stage as found in Oneida, Mohawk, and Onondaga toward the Tuscarora/Seneca variant, transferring feminine marking increasingly to the side of the split with positive connotations, ending up with all feminine marking in the former “indefinite” prefix. Both parts of the proposed history of the North Iroquoian gender division are shown in Figure 2.

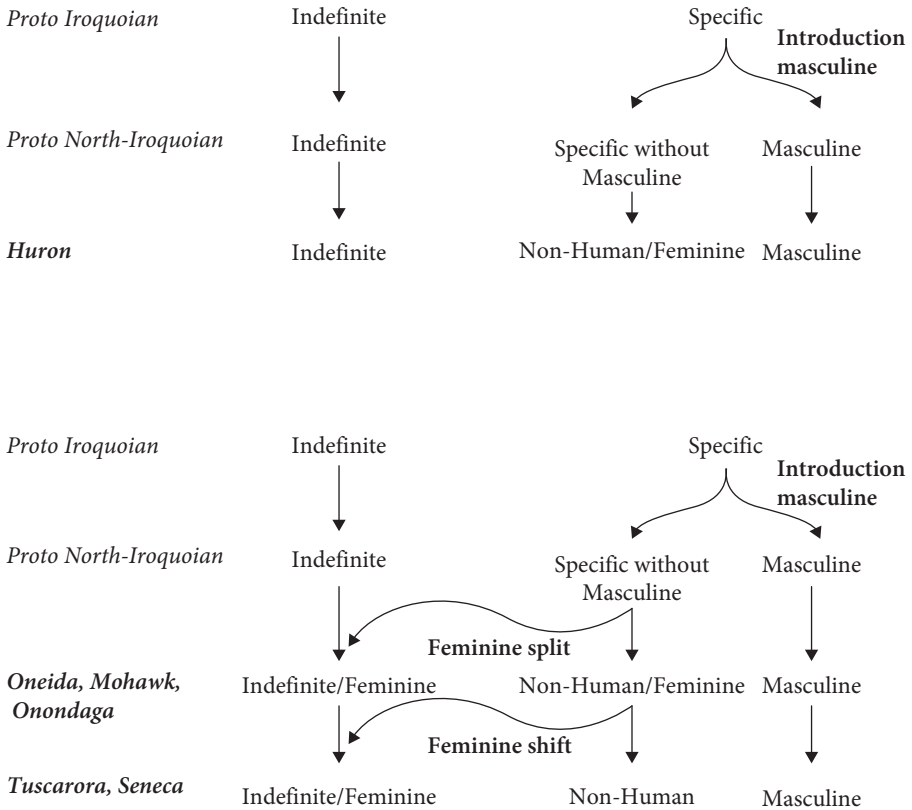


Figure 2. Alternative history of gender marking

6. Some oddities of Tuscarora

The alternative history has some interesting side effects. There are some oddities in the third-person marking in Tuscarora that are not found in any other North Iroquoian language. The hypothesis that Tuscarora underwent a radical shift in feminine marking can shed some light on these idiosyncrasies within the Iroquoian family. In Chafe’s

proposal, Tuscarora did not change its gender division relative to the PNI stage. From this perspective, some supplementary causes are needed to explain the special characteristics presented in this section. However, the feminine shift I propose to have occurred in Tuscarora already makes it reasonable (although not necessary) for some additional changes to have occurred.

First, note the strange use of **ka-* as an indefinite-feminine patient marker in Tuscarora, as already mentioned in Section 2.⁷ In this respect, Tuscarora is completely different from all other North Iroquoian languages. A specific change toward Tuscarora has to be proposed to account for this idiosyncrasy. In contrast, this change fits nicely in the proposed feminine shift. Instead of completely abandoning the feminine meaning of **ka-* in the course of the feminine shift, the prefix **ka-* was reanalyzed as a feminine patient marker instead of a feminine agent marker. Rather than shifting the reference for feminine away from **ka-*, the feminine meaning of **ka-* was reinterpreted as patient-like.⁸ Note that this reanalysis does not necessarily have to occur as a result of the feminine shift, as it is not found in Seneca where the same feminine shift occurred.

For the second insight to be gained from the proposed history of gender development, the prefixes traditionally called “transitive prefixes” have to be taken into account. The singular third-to-third person transitive prefixes are shown in Table 3.⁹ However, many transitive utterances use one of the intransitive prefixes. In other words, one could say that the difference between transitive and intransitive as measured by the morphological coding of person is not identical to what would be expected from the point of view of Western European languages. In Figure 3 the complete paradigms for third-person singular in Oneida, Seneca, and Tuscarora are shown. These paradigms are constructed by taking the morphologically corresponding intransitive prefixes as a starting point and then filling in the affixes used for the same participants in transitive constructions. Following Lounsbury (1953), I use “zero” for intransitives. An intransitive agent is looked at as a transitive construction with a zero patient and vice

7. Chafe (1977) does not mention this use of **ka-*, but Williams is quite clear about this in her grammar of Tuscarora. She even spends a long footnote lingering on an explanation (Williams 1976:305–307).

8. It may look like this change of **ka-* toward a patient meaning occurred instead of the introduction of the patient prefix **(ya)ko-* as described in note 6. But the **(ya)ko-* prefix is found in Tuscarora, although not for intransitives (see, for instance, Figure 3). Therefore the change of **ka-* has to have happened after the introduction of **(ya)ko-*, not instead of it.

9. The “reconstruction” in the first column should not be seen as genuine reconstructions of the forms of these prefixes but as a practical summary of the formal variation to make it easier to talk about the meaning of the corresponding prefixes in the different languages. In contrast to the reconstructed forms in Table 1, the reconstructions in Table 3 do not come from Chafe (1977).

versa with zero agents.¹⁰ The bold lines indicate groups of prefixes that show identical morphophonological behavior.¹¹

Table 3. Transitive third-to-third person singular

Form	Oneida	Seneca	Tuscarora
<i>*yutat-</i>	(y)utat/_[C, V]	(ʔ)ɔtat/_[V, Reson: *n]	yvʔnaʔn/_[V, y, w]
	(y)utate/_[x]	(ʔ)ɔtate/_[Obstr: *t, */n]	yvʔnaʔ/_[r, t]
		(ʔ)ɔtah, (ʔ)ɔta(C), (ʔ)ɔtan/_[n, t, /n]	yvʔnat/_[k, s, /]
<i>*huwa-</i>	(-h)(l)uwa/_[C]	hɔwɔ/_[C]	–
		hɔwæ/_[Cæ]	
	(-h)(l)uwΛ/_[i]	hɔwɛ/_[(y)ɔ, i]	
	(-h)(l)uw/_[a, e]	hɔw/_[a, e, ɛ]	
	(-h)(l)uway/_[o]	hɔwɔy/_[o, ɔ]	
<i>*kuwa-</i>	kuwa/_[C]	kɔwɔ/_[C]	–
		kɔwæ/_[Cæ]	
	kuwΛ/_[i]	kɔwɛ/_[(y)ɔ, i]	
	kuw/_[a, e]	kɔw/_[a, e, ɛ]	
	kuway/_[o]	kɔwɔy/_[o, ɔ]	

(Continued)

10. From these diagrams it seems as if the genders form some kind of hierarchy; the higher one on the hierarchy indefinite > masculine > non-human will roughly be the one to determine the choice of prefix. This resembles the direct-inverse systems of the neighbouring Algonquian languages. Although from a synchronic view the systems work rather differently, from a historical view the systems of the Algonquian and the Iroquoian languages seem to be conceptually linked. The **yo-* prefix may be compared historically to the function of the inverse markers of Algonquian, marking the fact the transitive situation is opposite in structure than expected (see also the proposed analysis of **(ya)ko-* as a combination of **ye/*ya-* and **yo-* in note 6).

11. From the description of Seneca (Chafe 1960 and 1961), it seems like some of the transitive constructions along the diagonal in the picture (i.e. the constructions with the same gender for subject as for object) allow more than one possible prefix. Lounsbury (1953) insists that for Oneida, only one option is possible on the diagonal as shown, although for plural third persons he describes a system based on topicality. When the plural agent of the transitive construction is the topic, then the zero-patient form is used, but when the plural patient is the topic, the zero-agent form is used. For Mohawk, Mithun (1991:528–536) describes in detail different factors that constrain the use of either agent or patient prefixes in intransitives. In addition to lexical semantics, factors such as aspect and contingent lexicalizations also play a role. These factors are probably the reason for some blurring of the prefixes used along the diagonal in previous descriptions.

Table 3. (Continued)

Form	Oneida	Seneca	Tuscarora
<i>*shako-</i>	^h shako/_[C, i, a]	shako/_[C, i, a]	-
	^h shakaw/_[e]	shakaw/_[e, ε]	
	^h shaka/_[o]	shaka/_[o, ɔ]	

Oneida	Indef. agent	Masc. agent	Non-hum. agent	Ø Agent
Indef. patient	<i>*yutat-</i>	<i>*shako-</i>	<i>*(ya)ko-</i>	
Masc. patient	<i>*huwa-</i>		<i>*hro-</i>	
Non-hum. patient	<i>*kuwa-</i>		<i>*yo-</i>	
Ø Patient	<i>*ye/*ya-</i>	<i>*hra-</i>	<i>*ka-</i>	

Seneca	Indef. agent	Masc. agent	Non-hum. agent	Ø Agent
Indef. patient	<i>*yutat-</i>	<i>*shako-</i>	<i>*(ya)ko-</i>	
Masc. patient	<i>*huwa-</i>		<i>*hro-</i>	
Non-hum. patient			<i>*kuwa-</i>	<i>*yo-</i>
Ø Patient	<i>*ye/*ya-</i>	<i>*hra-</i>	<i>*ka-</i>	

Tuscarora	Indef. agent	Masc. agent	Non-hum. agent	Ø Agent
Indef. patient	<i>*yutat-</i>		<i>*(ya)ko-</i>	<i>*ka-</i>
Masc. patient			<i>*hro-</i>	
Non-hum. patient			<i>*yo-</i>	
Ø Patient	<i>*ye/*ya-</i>	<i>*hra-</i>	<i>*ka-</i>	

Figure 3. Third-person singular marking in Oneida, Seneca, and Tuscarora

In Figure 3, the exceptional position of **ka-* in Tuscarora, the first peculiarity, is clearly visible. Furthermore, the usage of **yutat-* in Tuscarora is much more extended than in the other languages. Historically, this element consists of the indefinite prefix **ye/*ya-* and the reflexive/reciprocal morpheme **-atat-*. The meaning of **yutat-* is quite restricted in most languages, but in Tuscarora it is used with a wide variety of possible referents. This extension can be seen as an effect of the feminine shift. As a result of the feminine shift, the basic distinctions in the gender system changed. Feminine marking became disjointed from the non-human prefix, resulting in a situation with masculine, feminine, and indefinite (indefinites usually refer to humans) being distinct from non-human marking. In this situation, a reanalysis into a strict human versus non-human distinction seems to be an obvious possibility.

For transitive constructions, this is what seems to have happened in Tuscarora. The **yutat-* prefix came to be used for all transitive constructions involving two human participants. In the expansion of the meaning of **yutat-* in Tuscarora, the other North Iroquoian transitive prefixes disappeared as their function was overtaken by **yutat-*, as can also be seen by the impoverished set of transitive prefixes for Tuscarora in Table 3. As with the change in the use of **ka-*, it should be noted that the change in feminine marking is not enough to cause this change in Tuscarora. The same gender change seems to have happened in Seneca but did not cause the same changes in the transitive.

7. Conclusion

In this paper, I have presented some arguments for the reconstruction of the history of the gender division in the North Iroquoian languages. This reconstruction involves a revision of the proposal by Chafe (1977) regarding the variants found in Seneca and Tuscarora and with respect to the changes in the proposed Pre-PNI stage. I have argued that the gender divisions found in Seneca and Tuscarora are the most progressive variants in the family instead of the most conservative, as proposed by Chafe. With this reversal, the need for intricate changes in a Pre-PNI stage disappears. This proposal gives some interesting insights into some peculiarities of Tuscarora, but it also raises some problems. The main problem is that the same change seems to have happened in two North Iroquoian languages, Seneca and Tuscarora, which do not form a separate branch in the Iroquoian family. This excludes a genetically related change in these two languages. Areal diffusion does not seem to be possible either since Seneca and Tuscarora are widely dispersed.¹² This implies that there have been

12. Whether recontacts have occurred and caused this parallelism between the two languages is open to speculation. See Chafe and Foster (1981) for a thorough account of recontacts in North Iroquoian.

two parallel developments that converged toward the gender distinction masculine-feminine-neuter in both languages.

The explanation of the gender changes given here involved first the introduction of masculine marking, inducing the need for a choice for the feminine marking between the two original prefixes. At this point, different solutions are taken, as shown in Figure 2. Preferential use of the variant with a more positive connotation for feminine reference leads to a convergent history in Tuscarora and Seneca.

Although it is informative to speak of convergence toward the Tuscaroran/Senecan system, this development is in no sense inevitably pushing languages to an extreme. In fact, Oneida, Mohawk, and Onondaga seem quite happy residing somewhere in the middle of the process, without a unified way to overtly mark feminine. Grammarians often underestimate the advantage of such a fuzzy system. If there is a system in which the meaning of elements is strongly formalized, then the speaker has nothing left to choose from. The opportunity to play with the language is gone. As Abbott (1984) showed for Oneida, an intricate interplay between different codings can be of use for a wealth of possibilities. If the difference between two elements in a language is not completely fixed, but only presents a tendency, this difference can be used for the finesses of language: saying something without being overt. The implicit meaning conveyed will only be identified by a regular speaker of the language, as these finesses take time to master. This is one of the ways language is used to make a distinction between in- and outgroup – those who know what you mean versus those who only understand the overt meaning but not the implicit connotations. Speakers don't necessarily want a neat system; they want a bit of a mess so they can use the mess to mess around.

References

- Abbott, Clifford. 1984. Two feminine genders in Oneida. *Anthropological Linguistics* 26(2). 125–137.
- Beatty, John J. 1974. *Mohawk morphology* (Occasional Publications in Anthropology, Number 2). Greeley, CO: Museum of Anthropology, University of Northern Colorado.
- Bonvillain, Nancy. 1973. *A grammar of Akwesasne Mohawk* (Mercury Series Paper, number 8). Ottawa: National Museum of Man, National Museums of Canada.
- Brown, Penelope & Stephen C. Levinson. 1987. *Politeness: Some universals in language*. Cambridge: Cambridge University Press.
- Bryant, Doreen. 2003. *Genus-Systeme im Wandel: Spezifität, Animazität und Femininum im Mohawk* [Lincom Studies in Native American Linguistics 46]. München: Lincom.
- Chafe, Wallace L. 1960. Seneca morphology. *International Journal of American Linguistics* 26. 11–22, 123–129, 224–233, 283–289.
- Chafe, Wallace L. 1961. Seneca morphology. *International Journal of American Linguistics* 27. 42–45, 114–118, 223–225, 320–328.
- Chafe, Wallace L. 1977. The evolution of third person verb agreement in the Iroquoian languages. In Charles N. Li. (ed.), *Mechanism of syntactic change*, 493–524. Austin, TX: University of Texas Press.

- Chafe, Wallace L. 2000. Florescence as a force in grammaticalization. In Spike Gildea (ed.), *Reconstructing grammar: Comparative linguistics and grammaticalisation*, 39–64. Amsterdam: John Benjamins.
- Chafe, Wallace L. 2002. Masculine and feminine in the Northern Iroquoian languages. In Nick J. Enfield (ed.), *Ethnosyntax: Explorations in grammar and culture*, 9–109. Oxford: Oxford University Press.
- Chafe, Wallace L. & Michael K. Foster. 1981. Prehistoric divergences and recontacts between Cayuga, Seneca, and the other Northern Iroquoian languages. *International Journal of American Linguistics* 47(2). 121–142.
- Cysouw, Michael & Diana Forker. 2009. Reconstruction of morphosyntactic function: Nonspatial usage of spatial case marking in Tsezic. *Language* 85(3). 588–617.
- Keller, Rudi. 1990. *Sprachwandel: Von der unsichtbaren Hand in der Sprache*. Tübingen: Francke Verlag.
- Lounsbury, Floyd G. 1953. *Oneida verb morphology* [Yale University Publications in Anthropology 48]. New Haven CT: Yale University Press.
- Mithun, Marianne. 1979. Iroquoian. In Lyle Campbell & Marianne Mithun (eds.), *The languages of Native America: Historical and comparative assessment*, 133–212. Austin, TX: University of Texas Press.
- Mithun, Marianne. 1991. Active/agentive case marking and its motivations. *Language* 67. 510–546.
- Nichols, Johanna. 1996. The comparative method as heuristic. In Mark Durie & Malcolm Ross (eds.), *The comparative method reviewed: Regularity and irregularity in language change*, 39–71. Oxford: Oxford University Press.
- Williams, Marianne. 1976. *A grammar of Tuscarora*. New York, NY: Garland.