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Communicative competence is thus acquired gradually through many trial situations. In Mohawk, a conversational exchange is sporadically dotted with confirming repetitions by the listener as in (36) at the age of 3;3:

(36) Boy: koyô'techn reduced from wakoyô'te?
I-am-working
I am working.

Mother: hv sayô'te?
yes you-are-working
Yes, you are working.

Boy: hv sayô'te
yes you-are-working
Yes, you are working.

In (36), mother confirms her boy's statement. Frequently, the propositional content of a statement made by one of the interlocutors is confirmed by both listener and speaker, as in (36). What is unusual in this conversation is the referent used by the boy while confirming. Obviously, the use of the referential system within discourse is still not mastered by the child at the age of 2;10. Within less than a year's time, at 3;8, the act of confirmation was acquired.

These few examples indicate some of the conversational constraints underlying speech as used in conversation. Learning to speak does not only imply the acquisition of linguistic material but also the way this material is being used in different situations. Language is thus more than words and sentences. A child is confronted with this fact early on in life, as he attempts to make himself understood, in order to enter verbal interaction within his speech community.

NOTES

1. An earlier version of this paper was presented at the Conference on Iroquoian Research, Rensselaer, New York, in October 1977.
2. r and 1 are free variants in St. Regis Mohawk. 1 is used in the transcription of the child version because of its frequent use.
3. RE: repetition (all other non-adult forms spontaneous).
4. The pronominal prefixes are underlined.
5. We have not yet looked at the plural pronouns, the exclusive, inclusive and dualic forms. We assume that they are of cognitive and linguistic difficulty for the child.

REFERENCES CITED


A NORTHERN IROQUOIAN DATING STRATEGY

Marianne Mithun
State University of New York - Albany

ABSTRACT

Ethnological and linguistic resources can be profitably combined to date cultural and linguistic events and to explore the nature of these events. The mutual benefits to be gained by such collaboration are illustrated by the examination of two cases. In one, the nature of the contact between the Tu-Thisora and the other Northern Iroquoians is explored by the dating of certain phonological changes and the identification of borrowed terms. In the other, the date of specific sound changes in Onondaga is pinpointed with the aid of ethnographical resources and the nature of subsequent contact between the Onondagas and the other Five Nations is investigated.

The history of Iroquoia is becoming better known as archeologists uncover new sites and reexamine old ones, ethnohistorians do the same with documents, and linguists, cognates. Each of these subdisciplines has at its disposal certain techniques for attaching dates to eras and events. Archeologists can use carbon-14 dating, ethnohistorians are often blessed with dated documents, and linguists have been known to resort to glottochronology. Unfortunately, numerous factors can affect the accuracy of these techniques. Their weaknesses can be partially overcome, however, when the results of the various approaches are compared.

Mutual confirmation by interdisciplinary comparison is, of course, possible only when periods under scrutiny overlap. While archeological dating may be applied over a wide range of time periods, ethnohistorical dating can go back only as far as written documents. At this point, glottochronology is barely even applicable, especially when heavy borrowing may have occurred, as in Iroquoia. Ethnohistorical and linguistic resources can be profitably combined, however, to develop tools useful in assigning dates to cultural and linguistic events and exploring the nature of these events.
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THE METHOD

The first step is the identification of sound changes undergone by each language under consideration by means of the comparative method and internal reconstruction. Next, written records of the languages are examined to determine what sound changes, if any, have occurred since documentation first began. Historical records are then consulted for accounts of contacts among different linguistic groups which could have prompted the changes. Once the dates of the sound changes and contacts have been established, borrowed words can be identified and the nature of the contacts explored. These dates are also useful in dating other undated documents and contacts.

In the sections which follow, this procedure will be applied to two cases: the influences between the Five Nations languages and Tuscarora, and these languages and Onondaga.

TUSCARORA

Perhaps 2,000 years ago, a group separated from the rest of the Northern Iroquoian community and moved southward. This group subsequently split into two, later known as the Nottoways and the Tuscaroras. The Nottoways were first encountered by Europeans in Virginia, the Tuscaroras in eastern Northern Carolina.

SOUND CHANGES IN TUSCARORA

Several phonological innovations occurred in Tuscarora after it separated from the other Northern Iroquoian languages. The oral vowels shifted in a "counterclockwise" direction, and the nasalized vowels emerged.

<table>
<thead>
<tr>
<th>Proto Northern Iroquoian</th>
<th>Tuscarora</th>
</tr>
</thead>
<tbody>
<tr>
<td>*a1</td>
<td>i</td>
</tr>
<tr>
<td>*a2</td>
<td>u</td>
</tr>
<tr>
<td>*a3</td>
<td>ae</td>
</tr>
<tr>
<td>*a4</td>
<td>ñ</td>
</tr>
</tbody>
</table>

Alveolars underwent radical change.

*a > n /(_y)*
*â > ñ / elsewhere
*t > ñ / elsewhere

Proto Northern Iroquoian         Tuscarora

The earliest Tuscarora on record appears in John Lawson's A New Voyage to Carolina (1709). It is clear from his vocabulary that the vowels had already shifted in Tuscarora by this time.

<table>
<thead>
<tr>
<th>Proto Northern Iroquoian</th>
<th>Tuscarora</th>
<th>Lawson (1709)</th>
</tr>
</thead>
<tbody>
<tr>
<td>*a &gt; ae</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'bottle' *otshâ:wêh &gt; utsha:wêh h</td>
<td>utchaawu</td>
<td></td>
</tr>
<tr>
<td>'seven' *tsyé:thâk &gt; tsyê:thâk h</td>
<td>chaub-noc</td>
<td></td>
</tr>
<tr>
<td>'six' *ânyâ:k &gt; ânyâ:k h</td>
<td>houseyoc</td>
<td></td>
</tr>
<tr>
<td>'four' *âmkâ:h &gt; âmkâ:h h</td>
<td>wntoc</td>
<td></td>
</tr>
<tr>
<td>'water' *âwâ:k &gt; âwâ:k h</td>
<td>awo</td>
<td></td>
</tr>
<tr>
<td>'eight' *âksâ:k &gt; âksâ:k h</td>
<td>nec-kara</td>
<td></td>
</tr>
<tr>
<td>'fish' *kêsyô: &gt; kêsyô: h</td>
<td>cumshê</td>
<td></td>
</tr>
</tbody>
</table>

The alveolars had also shifted.

*$ > ñ / elsewhere
*t > ñ / elsewhere

'bread' *conâ:teh > utshâ:teh h | ootogarê |

To determine how early these changes could have occurred, closely related languages should be examined to see whether they share them. Nottoway, the language most closely related to Tuscarora, is now extinct, but two word lists survive from the early 19th century (Wood [1820] 1836; Trevenant [ca.1825] 1836). The lists show that the vowels had not shifted in Nottoway as they had in Tuscarora. The long, back vowels may have fluctuated slightly, but in general, they remained as in the parent language.

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Changes involving the affricate *ts' are more recent. In modern Tuscarora, there is a dialectal split within the Lewiston community. For some speakers, the reflex of *ts' is /s/, while for others, it is /t/. (The exact phonetic quality of the *ts cannot be determined.)

*θ dialect  s dialect
  *ts' > θ  *ts' > s
  *ts' > t  *ts' > t

Lawson's transcriptions contain nothing resembling the modern θ. The reflex of *ts' is sometimes θ, sometimes s.

*ts' > Lawson ts

Proto Northern Tuscarora

Iroquoian  Modern  Tuscarora (1709)

'ten' *ts'atšenə  wʌθənə / wʌθənə  wartsəu
'horse' *ts'atšenə  wʌθənə / wʌθənə  ahatsə
'heavy' *ts'atšenə  wʌθənə / wʌθənə  wacutsəne
'you' *ts'atšenə  wʌθənə / wʌθənə  ʃəstə / ʃəstə

*ts' > Lawson s

'teen' *ts'atšenə  wʌθənə / wʌθənə  sxausəu
'beans' *ts'ah'ət'əh  wʌθənə / wʌθənə  sausəu
'squirrel' *ts'atšenə  wʌθənə / wʌθənə  sausəu

This suggests that by 1709, the dialect split had already occurred. For some speakers, *ts' had already become s. For the others, *ts' had not yet changed.

In 1845, when the Reverend Gilbert Rockwood transcribed the speech of William Chew (Schoolcraft 1852:481–93), *ts' appears to have been in the process of becoming θ. Most instances of *ts' were still written ts.

William Chew 1845

Iroquoian  Modern Tuscarora

'cow' *səmənydəhə  ῥoomənydəhə / ῥoomənydəhə  ah't'semunyan
'horse' *səmənydəhə  ῥoomənydəhə / ῥoomənydəhə  bah hahtə
'potoo' *səmənydəhə  ῥoomənydəhə / ῥoomənydəhə  boonuhsteh

A few fricatives appear, however. The number 'ten' seems to be a transitional combination of the two.

'ten' *ts'atšenə  wʌθənə / wʌθənə  wʌθənə / wʌθənə  wath'sunk

The pronoun 'you' appears once with ts and once with θ.

'you' *ts'atšenə  wʌθənə / wʌθənə  ʃəstə / ʃəstə  wath'sunk

Because Nottoway does not share the vowel shift nor the nasalization of *t with Tuscaraora, these changes must have taken place in Tuscaraora after the two languages had become distinct. The origin of the nasalization of *t is less obvious. Nottoway may have initiated the shift, which subsequently spread into Tuscaraora because it occurs in a more restricted context in Nottoway (intervocally) than in Tuscaraora (prevoically). At any rate, all of these changes were complete by 1709, when Lawson recorded his Tuscaraora word list.
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Other words show only the th.

'pigeon'  *tsahst
T. urfinem
H. oritey
W. (Potier): orite
Oo. oljite
M. orite

'oyster'
T. wetsonah
W. (Potier): kandochia
C. kaholisia
Oo. ohnousia
M. orite

By the 1880's, when J.N.B. Hewitt began transcribing Tuscarora for the Bureau of American Ethnology, (N.B. in the Antropological Archives of the Smithsonian Institution, Washington, D.C.), the change was still in progress. Hewitt used ç for [ç] and c for [tç].

ahsp'hnu' / aca*hni'k: 'night'
up'nu'rd / uncu'nr'd 'feathered headgear'

The change was complete by the turn of the century.

Sometime after Tuscarora had separated from Nottoway but before 1709, the oral vowels shifted counterclockwise, the nasalized vowels merged, *t was nasalized prevoically, and *n was demnasalized except before nasals. For some speakers, *ç had become [ç] by this time as well. For the others, /ç/ was still [tç]. The later shift of *s to ò probably began in the middle of the 19th century and was complete by the beginning of the 20th.

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north. If alveolars (n or t) in a Tuscarora word match those in an equivalent Five Nations word, this indicates that the word was borrowed.

Borrowing was extensive in Tuscarora. Words for all areas of this new northern environment were adopted: trees, plants, animals, birds, fish etc.

A northern Tuscarora fruits and vegetables in 18th century.

birch
T. unjik'nah
Oo. onjik'has
Oe. onjike
M. onike

oak
T. sity'ba
Oo. sity'ba
Oe. sity'ba
M. sity'ba

mulberry
T. tskirtew
Oo. tskirtew
Oe. tskirtew
M. tskirtew

Even the verb 'hunt' appears to have been borrowed, a surprising loan.

hunting
T. rat'ttsa
S. hatitawi
C. hatowiwa
Oo. hatowiwa
Oe. latasit
M. rat'rsi
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Words for cultural items, both abstract concepts and material objects, were adopted.

<table>
<thead>
<tr>
<th>drum</th>
<th>pot</th>
</tr>
</thead>
<tbody>
<tr>
<td>T. uhnîhwa[k]a</td>
<td>T. kanâ[ts]ya'</td>
</tr>
<tr>
<td>H. anderogua</td>
<td>H. natkatson</td>
</tr>
<tr>
<td>S. ka'nîhwa'</td>
<td>S. (Pôfier) kanatsa</td>
</tr>
<tr>
<td>C. k'ânîhwa'</td>
<td>C. kâ'ne:ot</td>
</tr>
<tr>
<td>Oo. ka'nîhwa'</td>
<td>Oo. kâ'nîhwa'</td>
</tr>
<tr>
<td>M. ka'nîhîkû</td>
<td>M. kanâ[ts]ya'</td>
</tr>
<tr>
<td>rattlet</td>
<td>money</td>
</tr>
<tr>
<td>T. ustâwâ[ts]rah</td>
<td>T. òwâhsûmah</td>
</tr>
<tr>
<td>W. ostaâ[p]era</td>
<td>S. oâfsata</td>
</tr>
<tr>
<td>S. kastâ[p]sap?</td>
<td>C. oâfsata</td>
</tr>
<tr>
<td>S. ostaâ[p]tra</td>
<td>Oo. oâfsata</td>
</tr>
<tr>
<td>Oo. kâstâ[p]sama'</td>
<td>Oo. oâfsata</td>
</tr>
<tr>
<td>M. ostaâ[p]sara</td>
<td>M. oâfsata</td>
</tr>
<tr>
<td>corn soup</td>
<td>God 'His word is good'</td>
</tr>
<tr>
<td>T. urâhômah</td>
<td>T. raâmâniyoyu</td>
</tr>
<tr>
<td>Oe. olâinsa'</td>
<td>R. hove'piyo</td>
</tr>
<tr>
<td>snipe clan</td>
<td>S. hweñiyo</td>
</tr>
<tr>
<td>T. twâstâvis</td>
<td>Oo. hweñiyo</td>
</tr>
<tr>
<td>S. twâstâvi</td>
<td>Oe. lâwañiyo</td>
</tr>
<tr>
<td>C. twâstâvi</td>
<td>M. raâmâniyo</td>
</tr>
<tr>
<td>Oo. twâstâvis</td>
<td></td>
</tr>
<tr>
<td>Oe. twâstâwe</td>
<td></td>
</tr>
<tr>
<td>M. twâstâvis</td>
<td></td>
</tr>
</tbody>
</table>

The other major Tuscarora innovation, the late shift of *ï to ã, could conceivably be used to identify Tuscarora loans into the Five Nations languages which occurred between 1713 and 1900. If, for example, Onondaga showed /ta/ where Tuscarora had /â/, and the other languages /a/, the Onondaga word could be considered a borrowing from Tuscarora. Such cases are probably quite rare, if any exist at all, due to the relative prestige of the two languages and the infrequency of ã in Tuscarora.

ONONDAGA

Probably the most radical phonological changes distinguishing the western Iroquoian languages, Onondaga, Cayuga, and Seneca, from the others, involve the loss of *r. In all three western languages, *r conditioned certain sound changes, then disappeared. The dating of this change in Onondaga provides a good example of the mutual advantages to be gained from the combination of ethnohistory and linguistics.

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LINGUISTIC DOCUMENTS

At first glance, it might appear that since all three western languages share the loss of *r and various accompanying phonological changes, the changes occurred before the languages had diverged. This would situate the change well before contact. Our earliest source of Seneca and Cayuga, Benjamin Smith Barton (1797) shows that the changes had already taken place in those languages by 1797, when the volume was published. Barton personally received the Seneca from his friend Major Adam Hoopes, and the Cayuga from Judge Dean of Westmoreland, New York.

#karâhwa' ([gâ'ñéhwa?]) 'sun'
Seneca (Barton 1797) gâ'ñéhwa Modern Seneca ke:kâhwa?
Cayuga (Barton 1797) gâ'ñéhwa Modern Cayuga kâ:kâhwa

Two facts indicate that *r could not have been lost before the western languages separated. The first is that the Onondaga in Barton still contained *r.

Onondaga (Barton 1797) gâ'ñéhwa Modern Onondaga kâ:kâhwa

The second is that the precise effect of the *r loss is not the same in all languages. Modern Seneca and Onondaga contain /â/ at all. In Cayuga, however, the loss occurred only in certain environments.

(_h_) *r / C. a | V(V) / V

*ona'tara' *ona'ta' 'bread'
*sa'thrâ#:i? *athâ#:i? 'he broke it'

In general, languages are more likely to borrow restricted rules and apply them globally than the reverse. This suggests that the loss of *r probably originated in Cayuga, where it is restricted, then was borrowed into Seneca, where it was applied everywhere, sometime before 1797.

Barton received his Seneca and Cayuga directly from the transcribers but he notes that his Onondaga is drawn from a dictionary compiled by David Zeisberger. In fact, several Onondaga sources predate Barton. Interestingly, they show none of the innovations which characterize modern Onondaga.

One dictionary, published by John Clelary Shea in 1860, is assumed to date from the close of the seventeenth century. It contains none of the sound shifts found in the modern language. *r was still present and back vowels following *r were still back. The dictionary used by Barton was compiled by a Moravian missionary, David Zeisberger, during his visits to Onondaga between 1750 and 1755, although it was not printed until 1887. This dictionary shows no loss of *r or vowel fronting either, nor a shift of *r to a back glide following back vowels, so in the modern language.
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bread
Shea: otsk'k'o
Zeisberger: jocharachequa
Modern Oo. otsk'k'o
(S. etsk'k'o)

otter
Shea: sk'k'yanen
Zeisberger: aquafo
Modern Oo. sk'k'yo

Are these dictionaries really Onondaga? The earlier one was so identified by a Père Antoine, at Shea's request, sometime around 1859, not by the original author a century and a half before. The title of another of Zeisberger's manuscripts is disturbing: "Essay of an Onondaga Grammar or Short Introduction to the Onondaga Al Naqua Tongue." The term 'Naqua' was normally used in a specific sense to refer to the Mohawks, although it was sometimes applied to all Iroquois in general. Perhaps Zeisberger did not bother to distinguish Mohawk, which retained *r, from Onondaga.

Close examination of the dictionaries reveals tight agreement among the lexical entries in Shea, Zeisberger, and modern Onondaga, even where the other Iroquoian languages differ. The words for 'axe,' 'bread,' and 'otter' are examples. The most common Onondaga term for 'axe' is not the same as those in the other languages.

axe
Shea: ask'ch'ia
Zeisberger: ashqu'ch'ea
Modern Oo. a'skw'ch'ea

M. at'k'ka
Oo. at'k'ka
C. at'k'ka
S. at'k'ka
Su. adgen/hadoogan
L. addoq'k'ehd
B. at'k'k'ehd
W. at'k'k'ehd
T. a'skw'ch'ea

A different term is used generically for 'bread' in Onondaga and (Seneca) than in the other languages.

The loss of *r had clearly not occurred by 1666, as shown in Alsp's data, nor by the end of the 17th century, as seen in Shea, nor by 1750 when Zeisberger recorded Onondaga. By 1852, however, when Abram LaFort recorded the Onondaga words published in Schoolcraft (1852), *r had disappeared. The shift of *r to the back glide /w/ had taken place and back vowels had been fronted.
Proto Northern Iroquoian: *otḥːire? 'cold'
LaFort (1852):

Proto Northern Iroquoian: *kɑʔshyʔke 'in the sky'
LaFort (1852):

Proto Northern Iroquoian: *wɑʔrhʔy 'meat'
LaFort (1852):

Shea verified the lack of /r/ in contemporary Onondaga in 1859 in his introduction to the dictionary. In 1883, Horatio Hale reiterated the fact that Onondaga, Seneca and Cayuga all lacked /r/. All of these shifts thus occurred within a hundred years or less, between Zeisberger’s visits to Onondaga in the mid-18th century and LaFort’s transcription in the mid-19th.

THE ETHNOHISTORICAL DATA

Linguistic sources alone permit us to locate these changes involving *r between approximately 1750 and 1850. The combination of ethnohistorical and linguistic data permit us to pinpoint the date of change even more precisely.

Elisabeth Tooker (personal communication) points out the following. After their villages were destroyed by the Sullivan and Clinton expedition of 1779, most Onondagas left Onondaga for protection in the Niagara Frontier area. At this time, there were also many Senecas there, since this was their territory, as well as Cayugas and some Mohawks. By the winter of 1779-80, the Onondagas were thus living among Senecas and Cayugas.

Now the results of the phonological changes involving *r are identical in the Ontario (Six Nations) and New York (Syracuse) dialects of Onondaga. Since the changes are too complex to have developed independently but identically in both two dialects, they must have occurred before the dialects diverged. Fortunately, Johnston (1964 xl) gives a date for this divergence. He notes that during the winter and spring of 1784-5, several hundred Onondagas accompanied Joseph Brant to the Grand River tract in Ontario. Over the next several decades, the Onondagas remaining in New York drifted back to Onondaga.

The implications of these events are clear. Since the shifts involving *r in Onondaga occurred after 1750, presumably under the influence of Seneca and/or Cayuga, but before 1784, when the two Onondaga dialects diverged, and, since the Onondagas lived among the Senecas and Cayugas from 1779 to the turn of the century, the shift had to have begun between 1779 and 1784. This is a dramatically short period of time for such complex shifts. Conditions for such changes were appropriate, however, since the host Senecas must have enjoyed high prestige among the refugee Onondagas. Further reinforcement of the changes after 1784 was present as well, since the Six Nations Onondagas continued to live among Senecas and Cayugas on their new reserve, and the New York Onondaga remained in the Niagara Frontier area for a number of years.

APPLICATIONS

The dating of the Onondaga sound changes permits several kinds of inferences. For one, dates can be assigned to undated Onondaga manuscripts as pre- or post- 1785. For another, it is possible to date loans from Onondaga into the eastern languages (Oneida and Mohawk) in the same way. Since these languages contain reflexes of *r, r would show up in words borrowed before the 1780’s, but be absent from words borrowed afterwards. Cognates in Tuscarora, Wetocoay, Huron, and/or Wyandot, which retained their own reflexes of *r, indicate where *r was present in the parent language. Consider the word for 'feather headress.'

- feather headdress
  - Oo. ostó:wa'w
  - C. kastó:wa'
  - S. kastó:wa'

The *w in Onondaga and Seneca indicate that the Proto Northern Iroquoian word contained *r. The word is probably a combination of an old root for feather, *-e:to-, (nominalized to T. wáqen-tən'eh c. ostó:sera', Oo. ostó:serali, M. ostó:seri, 'feather') and the verb root -e:r- 'have in it.' The expected reflex of the word for 'headress' in Mohawk would be

- M. kastó:ra'

The actual word, however, is

- M. kastó:wa' 'feather headress.'

The *w indicates that the word was borrowed from the western languages. If it came from Onondaga, a likely source because of geographic proximity, it was borrowed after 1785.

Another type of inference concerning the contact history of Onondaga is possible from the sequencing of its sound changes. Words borrowed into Onondaga at certain times can be identified. Consider the word for 'whippleoorwill.' The word is old, since cognates can be found in Cherokee, Tuscarora, and Huron, as well as the five Nations languages.

- PMI *kwa:kɔ:ʁi:- 'whippleoorwill'
  - Ch. waku:li: s. kwă:kɔnyh?'
  - T. kwu:kɔryh? c. kwă:kɔnyh?'
  - H. whoi:roq (c. kwa:kɔ:ʁi')
  - W. meyurina k. kwă:kɔ:ʁi?

Notice that the reflex of *r before y is n in Seneca and Cayuga. This is expected, since the languages share the sound change:

- PMI *r > n / y
  - ku:yo? S. kano?: 'animal'
  - C. kano?:
The change is not shared by Onondaga, in which the word for 'wild animal' is kaio'. The Onondaga word 'whhippoorwill,' however, unexpectedly contains n.

Oo. kwa'k6nyO8 'whhippoorwill'

The n indicates that the Onondaga word was borrowed from Seneca or Cayuga sometime after their shift of *r > n / y.

CONCLUSION

Several examples have been provided of the kind of mutual advantage to be gained by ethnohistorians and linguists in combining their resources and results. Ecological and cultural loans from the Five Nations languages into Tuscarora were identified, and the phonological shifts involved in the Onondaga loss of *r were dated at 1779-1785. A great deal remains to be discovered about inter-Iroquoian contacts and influences. Linguistic and cultural changes are still in progress.

NOTES

1. A number of reflexes of *s appear as s in the transcription of William Chew's speech.

Proto Northern Iroquoian Modern Tuscarora William Chew (1845)

*tgwarainę 'wolf' ekwahrenuh
*tgakérę 'teen' skahah
*tgétę'cha 'night' ekwahreneh
	*goortedj 'feather' urah
	*goonkawainę? 'toad' roonumhskawahreuh
	*gogethe 'fish scale' oonneh

Two possible explanations for the s come to mind. Since Rockwood states that all of the words on his list are from William Chew, it seems at first that the discrepancy could not reflect the dialect split. Dialect mixture within a single individual is not so uncommon in a community such as Lewiston, however, where speakers of both dialects live side by side and intermarry. Another possibility, of course, is mistranscription of the fricative θ, which is phonetically quite similar to the s.

2. I am grateful to Mrs. Annette Jacobs, of Caughnawaga, Quebec, and to Miss Mary MacDonald, of Akwesasne, New York, for the Mohawk examples. The Onedia is from Clifford Abbott, "Onedia Dictionary" (MS.) and my notes from Mrs. Winnie Jacobs of Syracuse, New York. The Onondaga is from Mann Woodbury (personal communication) unless otherwise specified. The Cayuga is from my notes from Mr. James Skye and Mr. Reginald Henry of Six Nations, Ontario. The Seneca is from ChaF (1967). The Susquehannock (Andaste) can be found in Campanius (1969:157-160). Wyandot, unless otherwise specified, is from C. Marius Barbeau (1960).

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Potter's Wyandot is in Fraser (1920). The Huron is taken from Sagard-Theodat (1632). The Laurentian comes from Bigger (1924). The Tuscarora is from my own notes from Mr. Elton Green of Lewiston, New York, and Mr. Robert M. Pleasants, of Sts'vis Nisio, Ontario. The Nottaway is given as transcribed by John Wood. The Cherokee is from King (1975).

3. The Wyandot entry for 'buffalo' was recorded by Hewitt at Six Nations, so it is also a borrowing. Barbeau gives the word 'tesarji'. Selzberger gives Onondaga tsciraski, so the word must have been in the language by 1790. It is strangely similar to a Mohawk word for owl, tisitseki. The verb root *wa'k- is 'cut' and the ending -u is the perfective aspect. The length and analyzability of this word suggest that it came into the language relatively recently.

4. The Cherokee verb for 'hunt' complicates the picture. The root *noit- could be a good cognate to the Tuscarora *rurst, indicating that the Tuscarorn is, in fact, original. Either this correspondence is chance, particularly since the final -t is not present in Onondote, or the Five Nations borrowed the term from Tuscarora, a quite unlikely hypothesis.

5. The lack of r in the Tuscarora word for 'rattle' which would correspond to the r in the nominalizers in this word in Cayuga and Mohawk, suggest that this word came into Tuscarora from Seneca or Onondaga, which lack r here.

6. Jack Campisi first pointed out these facts to me. Tooker cites the following published sources for these data: Graymont (1972: 196, 222, 229, 233-5), and Blau, Campisi, and Tooker (1978:491-9).

REFERENCES CITED


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NOTES ON AUTHORS

Nancy Bonvillain (Ph.D. Columbia University, 1972) is an associate professor in the Dept. of Anthropology at the State University of New York at Stony Brook. Her major research interests are in Mohawk linguistics and language education, and Iroquoian ethnohistory.

James W. Bradley (Ph.D. candidate, Syracuse University). His major research interest is in Iroquoian archaeology, specifically the Onondaga in the proto-historic and early historic periods.

Jack Campisi (Ph.D. SUNY - Albany, 1974) is an assistant professor in the Dept. of Anthropology and of Secondary Education at SUNY College in New Paltz. He has done research in Oneida linguistics and ethno-history and has participated in educational programs with the Oneida.

Mary Druke (Ph.D. candidate, University of Chicago) is presently Associate Director of the Project for the Documentary History of the Iroquis at the Newberry Library, Chicago. It is a three-year project to compile and publish documents pertaining to Iroquis treaties.

Nanny Feurer (Ph.D. McGill University 1977) teaches at the Université du Québec à Montréal in the Department of Linguistics. Her major research interests include discourse in Iroquoian language, acquisition of Mohawk as a first language, second-language acquisition.

George Hamel is a Curator in Anthropology at the Rochester Museum and Science Center, Rochester, New York. His major research interests include historical archeology and the archeology of northeastern North America.

Robert Hayden (J.D. SUNY - Buffalo Law School 1978 and Ph.D. candidate Department of Anthropology). In addition to his interest in Iroquoian research, he is also interested in ethnographic work in South India. He is currently engaged in fieldwork in South India.

Laurence Hauptman (Ph.D. New York University, 1971) is an associate professor in the Department of History at SUNY College - New Paltz. His research has included many topics in the history of the Iroquis and the history of Indian-white relations.

Hope L. Isaac (Ph.D. SUNY - Buffalo, 1973) is an assistant professor in the Department of Family Medicine at the SUNY - Buffalo School of Medicine and an associate professor in the School of Nursing. Her major research interest is the study of medical practices of the Iroquis.

Barbara Lee (Ph.D. Syracuse University, 1969) is presently an Associate in Psychiatry (Anthropology) at the Alcohol and Drug Abuse Research Center, McLean Hospital, Harvard Medical School. She has done fieldwork among the Onondaga. Her primary research interest has focused on methods of altering consciousness in rituals.

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edited by
Nancy Bonvillain