Application of Historical Linguistic Analysis to Iroquoian

Anth 8005 Linguistic Anthropology

William O. Beeman

Earl J. Heinrich

Fall 2015

Application of Historical Linguistic Analysis to Iroquoian

The study of the origins and development of Native American languages has similarities and differences with similar studies of languages from the Old World (primarily European ones). The historical linguistic approach has been attempted in the study of New World languages, but with limited impact.

Original Approach to Study of Native American Languages

The approach to the study of the New World languages was initially different from that used in working with the languages of Europe and the Near East. Language and cultural studies (i.e. regionalism) of Native American groups view the language and culture as co-occurring and linked, rather than as independent variables as is typically done in modern historical linguistics of the type developed by Joseph Greenberg, who has espoused a three wave theory of immigration to the Americas with divisions of native languages into corresponding groups, Amerind, Na-Dene and Eskimo-Aleut (Widmer, 2010; Greenberg & Ruhlen, 1992). One reason for this was the fact that New World languages (with a few exceptions, such as Maya and Aztec) had no written history and any earlier forms of the languages, which would aid in reconstruction of development, were basically lost. Hence efforts were concentrated on classification and codification of the existing forms with only limited efforts on reconstruction of relationships between the languages (Widmer, 2010). Language groupings such as Iroquoian, Siouan, Algonquin, etc. were developed but relationships between them and factors leading to development and change were not studied in depth. This approach was adopted even though it was known that there were Algonquin groups which had adopted the culture of the Sioux and Siouan groups which had adopted the culture of the Algonquians (Blackfeet and Winnebago, respectively) (Parker, 1916, p. 480).

One factor that proved to be a barrier to historical studies of the languages of the New World was the many impacts of contact with the Europeans. In the century between the expeditions of De Soto (d. 1542) and those of La Salle (d. 1687) major changes had been wrought on the native populations. The Mississippian culture with its large settlements, intensive agriculture and administrative systems which had been observed by De Soto dissipated due to disease, war and other factors and was replaced by the various tribal village groups found by La Salle and later explorers (Bolnick & Smith, 2003). This major change in life style and political grouping and the consequent loss of cultural awareness on the part of the descendants of these people (who were unaware that the impressive earthwork remains were the work of their ancestors) can mislead the researcher into thinking there was a whole-scale population replacement rather than reorganization (Widmer, 2010).

The Historical Linguistic Approach

Utilizing the historical linguistic approach which was used in the study of Indo-European and other Old World language groups has been used in conjunction with Native American languages, but with many of the same problems and disputes which occurred previously. As with work done "across the pond", changes in subsistence patterns and artifact assemblages have often been interpreted (rightly or wrongly) as being the result of population changes (Renfrew, 1987). "Extracting political organization from potsherds is not without its difficulties" (Engelbrecht, 1974).

The introduction of maize agriculture into the American Northeast around 1000 CE has by some been interpreted as signaling the arrival of the Iroquois peoples to the region, although in situ development of the Iroquois culture out of pre-existing Woodland cultures is generally favored (Bamann, Kuhn, Molar, & Snow, 1992; Walthall, 1977). However, they must have

migrated at some point and from somewhere and evidence of that are sought in the language, their genetics and artifacts.

Similar to the Germanic *Völkerwanderung* the Iroquois and other Native American peoples migrated to the areas where they were found by Europeans by various routes and for various reasons. Greenberg's analysis of the languages places most of the native tongues in the Amerind group, which would be the earliest arrivals, being found all the way to the tip of South America. The other two groups, Na-Dene and Eskimo-Aleut, would be seen as later arrivals confined primarily to the northern regions, although genetic analysis reveals a somewhat less clear cut distinction (Greenberg & Ruhlen, 1992; Hunley, Long, & Salzano, 2005).

Several facts about the Iroquois language and culture may provide clues to their path to the areas where they were located in historical times. Their lack of skill or interest in flint working may imply that they had not often had access to flint resources and had hence concentrated on the use of alternative stones such as chert. Their language having a word for a plant (often interpreted as a palm) with blade-like leaves which is not found in the areas they are known to have inhabited would indicate that in the past they may have been in an area with such plants. Their planting of maize indicates that they had been in contact with others who utilized this crop, perhaps the Mississippian culture before its post-contact collapse (Parker, 1916; Whyte, 2007).

The southern branches of the Iroquoian languages (i.e. Cherokee and Tuscarora) are separated from the northern group by hundreds of miles and numerous groups speaking a variety of other languages, Algonquin, some Siouan isolates and unclassified languages from part of the territories formerly dominated by the Mississippian culture (National Geographic Society, 2004; Whyte, 2007). This separation could have occurred during their migration to the area or be the

result of later incursions of other groups (or a combination thereof), but is primarily regarded as a divergence during migration to the area due to the greater differences between Cherokee and the northern Iroquoian languages and their exclusion from and hostility towards the later Iroquoian federation. That there were divergences between the Iroquois groups and recontacts between them over the centuries of their history in the area makes for a complex pattern of development culturally and linguistically, as does the eventual conquest or submission or membership of most of the Iroquois (aside from the Cherokee) in the Iroquois Confederacy (Chafe & Foster, 1981; Engelbrecht, 1974; Mithun, 2013).

Problems with Application

As with studies in Europe about diffusion vs. migration and the origins of the various groups in areas of Europe, similar problems have arisen in the study of Native Americans.

Changes in pottery styles or tool assemblages or the introduction of agriculture or new crops or methods of construction have been taken as evidence of new peoples arriving (likely using a new language) (Renfrew, 1987; Martin, 2008; Parker, 1916). The Iroquois appear to have deliberately avoided some innovations such as changes to axe form (preferring the celt or ungrooved axe over the grooved axe) and non-use of flint tools and weapons, making their assemblages easily distinguishable from other groups (Parker, 1916).

One of the principle problems with studying language development among the Native Americans is the fact that only the most recent (post-contact) version of the language is preserved. Earlier versions and ancestral languages are totally lost due to the lack of a written record of them. For European language studies there are earlier languages such as Latin and Ancient Greek as well as recorded earlier forms of other languages, including the development of English shown in the forms used in Beowulf, Chaucer and Shakespeare.

Contributions of DNA Studies

DNA studies have identified four principle founding mtDNA lineages that predominate among Native American populations (labeled as *A*, *B*, *C*, and *D*) (Long & Bortolini, 2011). These DNA studies have established distinct differences between the Iroquois and Algonquin groups with Algonquin having a high frequency of haplogroup *X* (a group not listed in the original founding lineages group by Long & Bertolini, 2011, but mentioned by Starikovskaya et al., 2005 and Hunley, Long, and Salzano, 2005, in some cases reaching near 50%) whereas the Iroquois groups had greater frequency of haplogroup *B* than all other groups. A perplexing anomaly is that the Cherokee sample (an Iroquoian group) were the only ones not high in haplogroup *A* (Bolnick, & Smith, 2003; Malhi, Schultz, & Smith, 2001). This helps to disprove earlier cranial studies, some of which had argued that there was a close relationship between the Algonquin and Iroquois populations (Langdon, 1995). These studies do not show a consistent correlation between genetics (i.e. a group of people or culture group) and the language groupings proposed by Greenberg, showing that they are, to some extent, independent variables and not co-occurring as has often been argued (Hunley, Long, & Salzano, 2005).

Anomalous Data

From time to time anomalous data in the form of artifacts or genetics is found which may indicate additional origins/contacts beyond the accepted migration theory via the Bering land bridge and post-Columbian (and now accepted Norse) contacts. Additional arguments for African, Polynesian and Australian contacts (see Balter, 2015) show that the Americas may not have been quite as isolated as was originally thought. If Vikings could get to the northeastern coast of North America in their longboats and, as Thor Heyerdahl demonstrated in his Ra and Kon-Tiki voyages papyrus boats and Polynesian craft could cross the Atlantic and Pacific

(Wikipedia, 2015) then other pre-Columbian contacts are a possibility. Although 'absence of evidence is not evidence of absence' theories should not be accepted without some supporting evidence rather than a lack of evidence contradicting it.

Conclusion

The historical linguistic model holds much promise for the study of Native American languages such as the various Iroquoian languages. Greenberg's classification has merit and may gain acceptance, as his African model has done, leading to breakthroughs such as that of Rilly and de Voogt (2012) with the Meroitic language of the ancient Sudan. This process leads to more meaningful results that the study of the languages in isolation from each other as is done in the cultural studies model. Also, it is important to separate the language from the culture, as they are not in all instances the same, although it is tempting (and sometimes almost impossible, especially when the same or similar terms refer to both the language and the culture) to treat them as if they were.

References

- Balter, M. (2015). New mystery for Native American origins: Rival papers compete to explain surprising link to Australia and Melanesia. *Science*, *349*(6246), 354-355.
- Bamann, S., Kuhn, R., Molnar, J., & Snow, D. (1992). Iroquoian archaeology. *Annual Review of Anthropology*, 21, 435-460.
- Bolnick, D. A., & Smith, D. G. (2003). Unexpected patterns of mitochondrial DNA variation among Native Americans from the southeastern United States. *American Journal of Physical Anthropology*, 122(4), 336-354.
- Chafe, W. L., & Foster, M. K. (1981). Prehistoric divergences and recontacts between Cayuga,

 Seneca, and other Northern Iroquoian languages. *International Journal of American Linguistics*, 47(2), 121-142
- Engelbrecht, W. (1974). The Iroquois: Archaeological patterning on the tribal level. *World Archaeology*, 6(1), 52-65.
- Greenberg, J. H., & Ruhlen, M. (1992). Linguistic origins of Native Americans: Scholars have long wondered how Native Americans settled the New World: Recent research indicates that their many tongues belong to just three families, implying three waves of immigration from Asia. Scientific American, 267(5), 94-99.
- Hunley, K., Long, J. C., & Salzano, F. M. (2005). Gene flow across linguistic boundaries in Native North American populations. *Proceedings of the National Academy of Sciences of the United States of America*, 102(5), 1312-1317.
- Langdon, S. P. (1995). Biological relationships among the Iroquois. *Human Biology*, 67(3), 355.
- Long, J. C., & Bortolini, M. C. (2011). New developments in the origins and evolution of Native American populations. *American Journal of Physical Anthropology*, *146*, 491-494.

- Malhi, R. S., Schultz, B. A., & Smith, D. G. (2001). Distribution of mitochondrial DNA lineages among Native American tribes of northeastern North America. *Human Biology*, 73(1), 17-55.
- Martin, S. W. J. (2008). Languages past and present: Archaeological approaches to the appearance of Northern Iroquoian speakers in the Lower Great Lakes region of North America. *American Antiquity*, 73(3), 441-463.
- Mithun, M. (2013). Challenges and benefits of contact among relatives: Morphological copying. *Journal of Language Contact*, 6, 243-270.
- National Geographic Society. (2004). North American Indian cultures: A legacy of language and inspired ideas [Map supplement to September 2004 National Geographic Magazine].

 Washington, DC: Author.
- Parker, A. C. (1916). The origins of the Iroquois as suggested by their archaeology. *American Anthropologist*, 18, 479-507.
- Renfrew, C. (1987). Archaeology & language: The puzzle of Indo-European origins. New York, NY: Cambridge University Press.
- Rilly, C., & de Voogt, A. (2012). *The Meroitic language and writing system*. New York, NY; Cambridge University Press.
- Starikovskaya, E. B., Sukernik, R. I., Derbeneva, O. A., Volodko, N. V., Ruiz-Pesini, E., Torroni, A., Brown, M. D., Lott, M. T., Hosseini, S. H., Huoponen, K., & Wallace, D. C. (2005). Mitochondrial DNA diversity in indigenous populations of the southern extent of Siberia and the origins of Native American haplogroups. *Annals of Human Genetics*, 69, 67-89.

- Walthall, J. A. (1977). Cherokee prehistory: The Pisgah phase in the Appalachian summit region [Book review]. *American Indian Quarterly*, *3*(3) 243-245.
- Whyte, T. R. (2007). Proto-Iroquoian divergence in the late archaic-early woodland period transition of the Appalachian highlands. *Southeastern Archaeology*, 26(1), 134-144.
- Widmer, R. J. (2010). The rise, fall, and transformation of Native American cultures in the southeastern United States. *Reviews in Anthropology*, *39*(2), 108-126.
- Wikipedia. (2015). *Thor Heyerdahl*. Retrieved from https://en.wikipedia.org/wiki/Thor_Heyerdahl