East-West Interaction among Fifteenth-Century St. Lawrence Iroquoian and North Shore of Lake Ontario Ancestral Wendat Communities

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As early as the mid-fifteenth century, St. Lawrence Iroquoian material culture appeared in north shore of Lake Ontario ancestral Huron-Wendat communities. At the mid-fifteenth-century Parsons site, for example, situated in what is today the city of Toronto, a possible St. Lawrence Iroquoian enclave was identified on the basis of a cluster of St. Lawrence Iroquoian ceramic vessels. Along with the Mantle site iron tool, thought to have been traded upstream from the Gulf of St. Lawrence, material culture from other sites also signals interaction (such as the presence of discoidal beads made of steatite on some north shore communities, the preliminary source analysis of which suggest a Jefferson County or more broadly eastern Ontario origin for the material). Marine shell and possible ivory artifacts on mid-fifteenth-century ancestral Huron-Wendat sites in the Oshawa area also point to east—west exchange patterns along the north shore of Lake Ontario and St. Lawrence River valley/lower Ottawa River valley prior to European arrival in historic Wendake. The Oshawa cluster of sites, which seems to disappear by the late fifteenth century, may have been one of the long-hypothesised north shore communities to move to the upper Trent River valley in the early sixteenth century.

Introduction

By 1,000 years ago, Iroquoians had begun to settle into an initial form of village life in the Lake Ontario and eastern Lake Erie basins and upper St. Lawrence River valley, maize having gradually become the principal component of the Iroquoian diet since its introduction to populations inhabiting New York State approximately 1,300 years earlier (Hart et al. 2007; Thompson et al. 2004). By the sixteenth century, a series of clustered communities along the St. Lawrence River, from eastern Lake Ontario to the Quebec City area, were present, having developed out of local Middle Woodland populations (Gates St-Pierre et al. 2015). A number of these communities were documented by Jacques Cartier in the 1530s, but they had migrated elsewhere by the early 1600s, when Samuel de Champlain travelled through the area.

The early documentary record provides the locations of the various nations of the Haudenosaunee (Iroquois), Wenro, Erie, Neutral, Tionontaté (Petun), and Huron-Wendat (Figure 1). A number of populations or segments of populations originating from the north shore of Lake Ontario that had migrated to the area between Lake Simcoe and Georgian Bay, known as Wendake, by the late thirteenth century (MacDonald 2002; Sutton 1999; Williamson 2014:29-30) were the foundation communities that participated in the initial Huron-Wendat alliance building and confederacy formation between the Attignawantan (Bear) Attigneenongnahac (Cord) "more than 200 years from the 1630s (Thwaites 1896-1901:16:227-229). Moreover, Hart et al. (2016:17) have demonstrated, using social network analysis of ceramic vessel collar design on

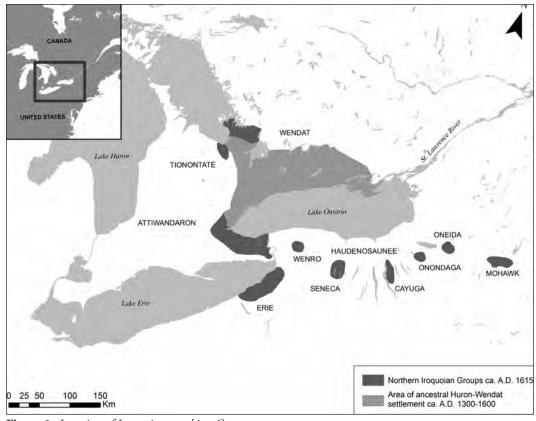


Figure 1. Location of Iroquoian-speaking Groups

Ontario Iroquoian sites, that there was likely an ongoing migration of people from north shore of Lake Ontario communities into Wendake during the fourteenth and fifteenth centuries. That this kind of fission, fusion, and migration of communities occurred is not in doubt, because it is apparent in the archaeological record and it was recorded in the historic record in 1639, when the Jesuit Le Jeune, while describing the formation of the Huron-Wendat Confederacy, noted that they "increase or diminish their numbers, however, by the adoption of other families, who join themselves now to some, now to others, and who also sometimes withdraw to form a band and a nation by themselves" (Thwaites 1896-1901:16:227).

Other ancestral Huron-Wendat populations did not leave the Trent River valley or north shore of Lake Ontario region until the late sixteenth and early seventeenth centuries, respectively. They have been identified as ancestral Huron-Wendat communities on the assumption that major population segments of these communities are known to have formed two of the nations of the historically constituted confederacy (e.g., Birch 2015:296; Ramsden 2016:223; Thwaites 1896-1901:16:227; Trigger 1976:156-157; Williamson 2014:34-35; see also Warrick 2008:28-29, 206-209).

For example, in 1615, when Champlain visited the Huron-Wendat, he eventually arrived at the village of Cahiagué, from where he left for a hunting and war excursion with the Arendaronon (Rock), travelling through the Trent River valley and eventually arriving in Haudenosaunee territory on the south side of Lake Ontario. When they were travelling through the Trent valley area, the Arendaronon informed Champlain that this region had been their former homeland and that they had abandoned it due to fear of enemies

(Biggar 1922-1936:3:59). The Arendahronon likely originated with the Trent-Foster and at least one other nearby contemporaneous community (Peter Ramsden, personal communication 2016), becoming the easternmost tribe of the confederacy around 1580.

The other late arrival to the Huron-Wendat Confederacy was the Tahontaenrat (Deer), who joined around 1610. These people likely originated with the Skandatut and Wright-Van-Nostrand villages on the Humber and Holland rivers, respectively (Birch and Williamson 2013:158), after which the north shore of Lake Ontario was not occupied permanently until later The Tahontaenrat that century. Attignawantan spoke different Huron-Wendat dialects (Thwaites 1896-1901, 10:11) perhaps attesting to their geographic separation, lasting some 200 years prior to the final formation of the confederacy (Williamson 2014:35).

Prior to the migration of these groups to Wendake, the area between the ancestral Huron-Wendat region, situated south of the Canadian Shield and along the north shore of Lake Ontario, and the area used by St. Lawrence Iroquoians (SLI) living either in the lower Ottawa River valley or in Jefferson County in New York was a borderlands across which these groups would have interacted, occasionally establishing camps, as is perhaps represented by the Arbour Ridge site in Kingston, Ontario (Adams 2003). One of the Algonquian groups living in the Ottawa River valley, the Onontchataronon, who likely inhabited lands south of the Rideau-Cataragui Axis, likely also featured in the interactions between these Iroquoian-speaking peoples (Fox and Pilon 2016:210).

Dozens of sites on the major drainages on the north-central shore of Lake Ontario between the Credit River valley and the lower Trent River valley have been subject to complete or near complete excavation over the past 40 years, leading to the documentation of community sequences from approximately A.D. 1100 to the abandonment of the area in the early seventeenth century for settlement (Williamson 2014; see also Birch and Williamson 2015 concerning ongoing care of ancestral lands). In the period prior to the

migration northward, however, these communities interacted with their near and distant neighbours in all directions. This paper explores the interaction among communities on the north shore of Lake Ontario and those St. Lawrence Iroquoian populations to the east along the St. Lawrence River valley.

Archaeological Evidence of Interaction

Community structures and identities were always fluid, and they shifted frequently due to complex interactions, both within communities and between communities. While early to midfifteenth-century communities eventually coalesced and began to form the nations that eventually confederated, it is important to remember that until those processes began, communities along the north shore of Lake Ontario were not yet Huron-Wendat. Neither were communities in the upper St. Lawrence River valley part of a single ethnic group, as Engelbrecht previously noted (2004:131; see also Pendergast 1991:61). At a time before the existence of political confederacies, it is our task archaeologists to determine the relationships between these generally politically autonomous communities. They will have interacted with near and far neighbours, sometimes across borderlands or shared spaces.

One of the premises of that interaction is that people will have conveyed elements of their identities outside of their territories, including their language, ceremonies, and material culture, among other things. With respect to material culture, and to ceramics in particular, there are clear differences in the ways in which ceramic vessels were made and decorated by ancestral Huron-Wendat and SLI potters, respectively.

Ancestral Huron-Wendat ceramic vessel types were first defined by MacNeish (1952) and J.V. Wright (1966) on the basis of rim shape and neck and collar motif and technique attributes. The differences in frequencies of types between assemblages were thought to reflect the various Iroquoian nations and/or the chronological placement of a site (Wright 1966:17). Critics of this typological approach (e.g., Ramsden 1977:16-18; Smith 1983:10-14) were afraid that types

mask significant variability in single attribute frequencies. Despite this caution, researchers typically report on the frequencies of types in assemblages for comparative purposes, including accurate accounts of variability in each type (e.g., Wojtowicz 2012).

The principal ancestral Huron-Wendat ceramic types (Figure 2) include Huron Incised vessels, which have well-defined, outflaring collars with straight or convex interior collar profiles and are typically decorated with a single band of linear stamped obliques on the collar, and Sidey Notched vessels, which are decorated in a similar manner to Huron Incised vessels but also feature well-defined notches or stamps on their lips.

Sixteenth- through early seventeenth-century ancestral and historic Huron-Wendat sites also include the Seed Incised, Niagara Collared, Warminster Horizontal, and Ripley Plain types, while fourteenth- and fifteenth-century ancestral Wendat site assemblages contain significant numbers of Ontario Horizontal, Middleport Oblique, Black Necked, Pound Necked, Pound Blank, and Lalonde High Collared vessels. These latter vessels are all differentiated by design sequences involving the placement in varying locations of incised horizontals, bands of incised or stamped oblique or vertical lines—in combination or individually—on the collars and necks of vessels. (For a more detailed summary of

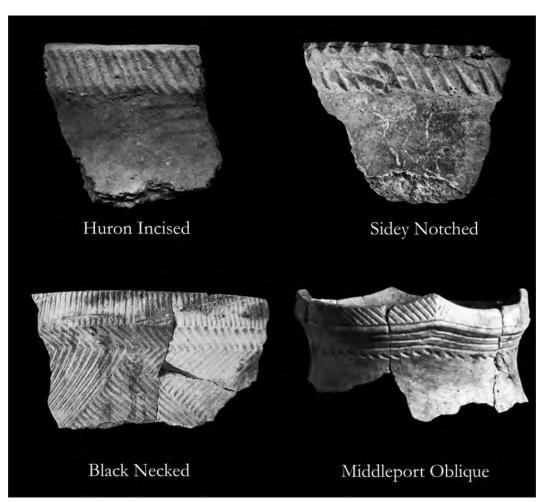


Figure 2. Huron-Wendat Vessel Types

Huron-Wendat ceramic vessel types, see Birch and Williamson 2013:128-133.)

SLI vessels, on the other hand, are characterised typically by well-defined collars, some quite high, decorated by complex motifs of parallel incised lines and chevrons bordered by horizontal lines and often featuring ladder motifs and/or patterns made by circular reed punctates, sometimes evoking human faces (Tremblay 2006:82-88). SLI vessels are usually described as thinner and more finely decorated than Huron-Wendat pottery (or that of other Iroquoian nations).

Two distinctive SLI types that appear on some Huron-Wendat sites are Corn Ear and Durfee Underlined vessels. The Corn Ear vessels, which seem to have originated in the St. Lawrence River valley, have distinctive collar motifs that feature deep vertical grooves crossed by interrupted horizontals, along with a moulded lip which together imitate a row of corn ears, while Durfee Underlined vessels, originating in the St. Lawrence/Upper New York area (MacNeish 1952) are defined by complex patterns bordered by

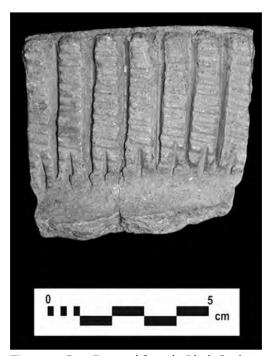


Figure 3. Corn Ear vessel from the Black Creek site

incised horizontal lines, both at the top and bottom of their collars (see Dermarkar et al., this volume), for the distribution of SLI pottery, including Corn Ear and Durfee Underlined, on SLI and Huron-Wendat sites through time).

The first clear evidence of interaction between north shore of Lake Ontario ancestral Huron-Wendat and SLI communities appears by the mid-fifteenth century in the form of concentrations of SLI material culture on sites. The best known examples of this are at the Parsons site in north Toronto (see papers in Williamson and Robertson 1998) and the Joseph Picard site, near Brooklin, Ontario, about 25 km to the east (Williamson et al. 2016). The Black Creek site, perhaps occupied immediately prior to the Parsons site (Williamson 2014:23), also yielded a few examples of Corn Ear pottery (Figure 3), as was first noted by Ramsden (1977:260). Limited excavations at the site in the 1950s by Norman Emerson revealed an unusual double palisade straddling two terraces adjacent to Black Creek (Emerson 1954:123, 142); the construction of one or more palisade walls on a terrace of Black Creek was duplicated at the Parsons site.

The Parsons site, however, yielded hundreds of SLI vessel rims recovered both through avocational and University of Toronto excavations in the 1950s and through later excavations by Archaeological Services Inc. (ASI) of a sewer line right-of-way through the site (Williamson and Robertson 1998). The findings of earlier excavations at the site, along with ASI's results, led to the conclusion that the site was a densely occupied, coalescent village of the mid-fifteenth century. Three relevant radiocarbon dates from Parsons, one on maize and two on charcoal from the more recent excavations calibrate with medians to between A.D. 1411 and 1460 at 2 sigma (Robertson et al. 1998;108-109).

Table 1 illustrates the frequency percentage of SLI vessels on sites situated along the north shore of Lake Ontario and in the Trent River valley. With the exception of Parsons, the percentage frequencies range from 1 to 5 percent, while at Parsons the frequency is almost 10 percent. This high frequency is rivalled only by sixteenth-century sites in the Trent River valley,

Table 1. St. Lawrence Iroquoian type ceramic vessels on sites in the Toronto and Trent valley areas.

Toronto Region Ceramics	Trent Valley	% of St. Lawrence
Draper (AlGt-2)		5.0
Keffer (AkGv-14)		2.0
Parsons (AkGv-8)		9.9 (ASI)
Black Creek (AkGv-11)		1.5
Jackes (AkGu-3)		5.0
McKenzie-Woodbridge (AkGv-2)		2.8
Mantle (AlGt-334)		1.3
Aurora (BaGu-2)		1.0
	Jamieson (BcGr-1)	3.4
	Hardrock (BdGr-2)	1.2
	Kirche (BcGr-4) (Ext. house cluster)	7.5
	Coulter (BdGr-6)	2.8
	Benson (BdGr-2)	9.8
	Trent-Foster (BcGr-5)	13.4
	Dawn (BdGq-1)	16.0
	Lean (BcGq-2)	20.0

(Warrick 2008:197; Williamson and Powis 1998:59)

such as Kirche, Benson, Trent-Foster, Dawn, and Lean. What is even more important is that 77 percent of the SLI vessels from the ASI assemblage were recovered from the east end of the excavated portion of the site, in particular houses 8 and 9 and their associated midden (Midden 4) and refuse features (see Williamson and Powis 1998:58-69, Figures 12, 18, 20, and 21). The proportion of SLI-style pots was not unlike that in the assemblages recovered through previous work. Considerable quantities of Durfee Underlined vessels in Norman Emerson's University of Toronto assemblage, for example, remained unidentified until recently because his original percentage frequencies included them in the category of Onondaga Triangular (Figure 4). James Pendergast believed that a near complete vessel found by ASI in Midden 4 (Williamson and Powis 1998:65), along with other vessels recovered by ASI, were made by SLI descendants in an effort to reproduce vessels typical of their ancestral

territory (Williamson and Powis 1998:59). This sizable concentration of SLI-like material culture suggests the presence of an "ethnic enclave" of people who wished to decorate their vessels in a SLI style at the Parsons site by the mid-fifteenth century. The Parsons community is thought to have been succeeded by the various upper Humber River late fifteenth- and sixteenthcentury communities that ultimately led to the late sixteenth-century Skandatut site and its associated ossuary, the Kleinburg ossuary. Skandatut was likely one of the communities that contributed to the Tahontaenrat (Deer) of the Huron-Wendat (Williamson confederacy 2014:23-25).

There is also evidence of a SLI presence at the Joseph Picard site, situated on Lynde Creek among a small cluster of late fourteenth- to mid-fifteenth-century villages (Figure 5). Excavated by ASI, Joseph Picard was an unpalisaded, 1.5 ha precoalescent village that featured 10 widely spaced

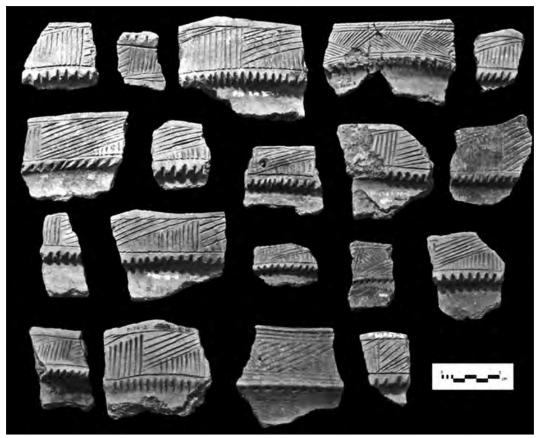


Figure 4. Durfee Underlined vessels from the Parsons site (University of Toronto Collections)

longhouses, including 2 pairs and a cluster of 5 structures, one of which was overlapped by another (Figure 6). Three of four AMS radiocarbon dates taken on maize samples from separate features are identical, at 450±30 B.P., which calibrates to A.D. 1420–1465 (at 2 sigma). The fourth date is 410±30 B.P., which calibrates to A.D. 1435-1510 and to A.D. 1600-1615 (at 2 sigma), because the radiocarbon date coincides with wiggles in the calibration curve. The latter intercept date is considered highly unlikely given that there is not a shred of evidence of a visit to the site in the historic period. While these dates place the site at about the same time as Parsons, the fact that it is a much smaller, pre-coalescent village suggests it might have been occupied just prior to Parsons.

While small quantities of SLI ceramics were recovered from the Joseph Picard site, in the form

of Roebuck Low Collared (Figure 7) and Durfee Underlined vessels, and complex necked vessels with filled triangular zones bordered by small, annular punctates, a SLI trait that is absent on other north shore sites, ASI also found a SLI-style pipe of the type noted by Tremblay (2006:71) although the effigy applied to the pipe is usually facing the smoker on SLI pipes, whereas in this case, it is facing away from the smoker. This type is absent from other ancestral Huron-Wendat north shore sites (Figure 8). All of these ceramic items were recovered from a refuse area to the north of houses 9 and 10. Other SLI-style material culture distributed across the site included considerable numbers of modified deer phalanges with ground flat and perforated posterior/flexor surfaces. While phalanges with distal and/or proximal perforations are often found on fourteenth- and fifteenth-century north shore

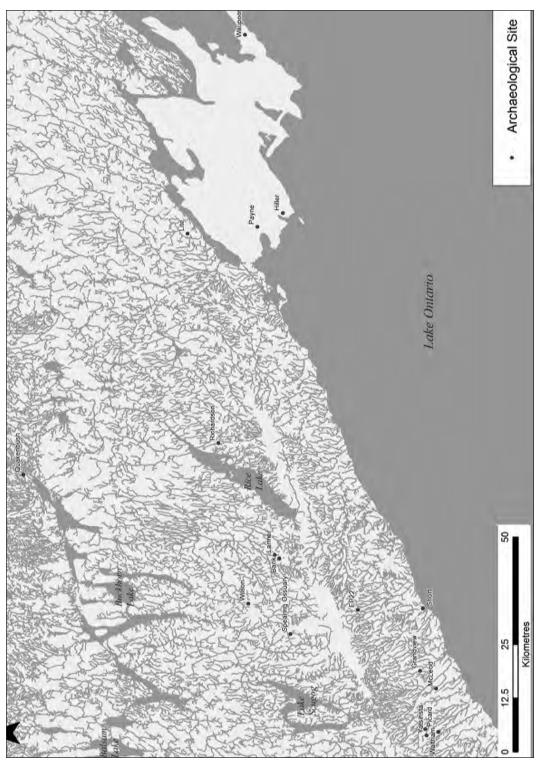


Figure 5. Location of Lynde Creek Site Cluster

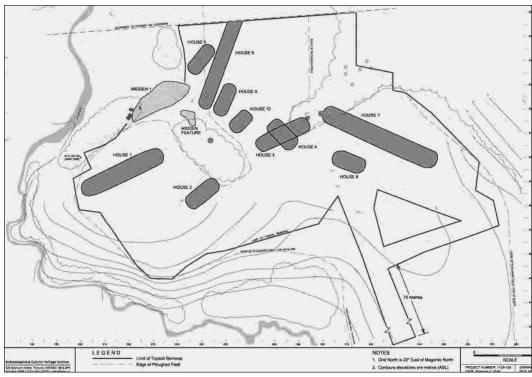


Figure 6. Joseph Picard Site Plan



Figure 7. SLI vessels from the Joseph Picard site



Figure 8. SLI style pipe from the Joseph Picard site

ancestral Huron-Wendat sites, few are ground flat posteriorly. However, many of the worked deer phalanges from the mid-fifteenth-century Joseph Picard site (Needs-Howarth 2016), the late fifteenth-century Draper site (McCullough 1978), and the sixteenth-century Mantle site (Needs-Howarth 2012) were ground in this manner. Wintemberg (1972:70-72) documented 250 deer phalanges with this modification on the SLI Roebuck site in the lower Ottawa River valley. The Joseph Picard site also yielded 22 perforated gastropods (most are the freshwater species Pleurocera acuta, sharp horn snail) and 15 altered freshwater bivalve fragments (Figure 9). The perforated gastropods are very similar to those recovered from St. Lawrence Iroquoian sites, such as McIvor (see Tremblay 2006:93); these also are exceedingly rare on north shore sites until the approach of the sixteenth century.

Joseph Picard also yielded at least one marine shell bead as well as two possible ivory artifacts (Figure 10), one of which is a pendant with two drilled holes; isotopic evidence confirms the piece is neither shell nor bone (Williamson et al. 2016). As for marine shell artifacts on pre-sixteenth-century north shore of Lake Ontario sites, marine shell is present in only small quantities, although local freshwater varieties were used to manufacture both beads and pendants, sometimes in large numbers. Of the sites that were completely or nearly completely excavated along the north shore of Lake Ontario, 8 of 24 dating to between A.D. 1300 and A.D. 1500 yielded marine shell. These finds consist of four discoidal, three *Marginella* (a

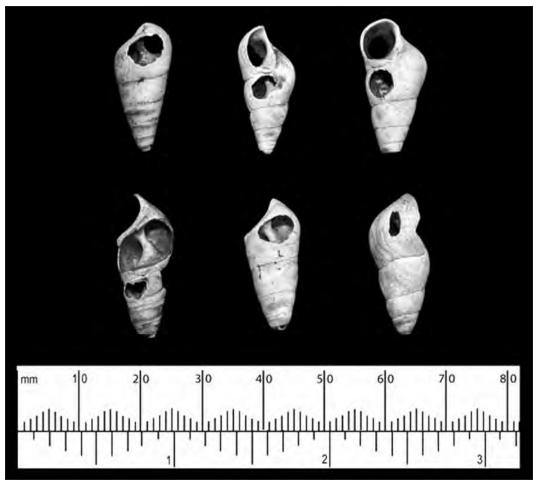


Figure 9. Perforated gastropods from the Joseph Picard site

genus of small sea snail), and three *Busycon* (a genus of very large sea snail) tubular beads in the fourteenth century; one pendant, one *Busycon* tubular bead, and one Olividae family (a sea snail commonly known as olive snail) shell bead in the fifteenth century; and one discoidal bead in the early sixteenth century (see Williamson et al. 2016 for detailed discussion of marine shell on Ontario Iroquoian sites). More generally, after the Draper site, the Joseph Picard site has the richest worked bone industry characteristic of St. Lawrence Iroquoian sites, including bone projectile points. The ratio of worked bone to non-worked bone artifacts for all the midden squares combined at the late fifteenth-century Damiani village site, for

example, is 0.83, while at Joseph Picard it is 2.3, a considerable difference.

While only a limited number of ivory objects have been found on SLI sites, including an awl from the Dawson site (Pendergast 1972:133) and a possible ivory pendant from the mid- to late fifteenth-century Droulers site, situated southwest of Montreal (Christian Gates St-Pierre, personal communication 2014), they have yielded substantial quantities of marine shell artifacts. Wintemberg reported objects made of the bones of sea mammals, specifically Cetacea (a family that includes whale, dolphin, and porpoise), as well as a seal phalanx, from the early sixteenth-century **SLI** Roebuck site, in eastern Ontario (Wintemberg 1972:14, 28-29, 97). James Bradley has also noted that walrus ivory is recovered, although infrequently, from sixteenth-century Haudenosaunee sites, as evidenced by the incised

ivory awls from the Atwell (Onondaga), Richmond Mills (Seneca), and Cayadutta (Mohawk) sites (Bradley 1987:67, 69, personal communication 2013).

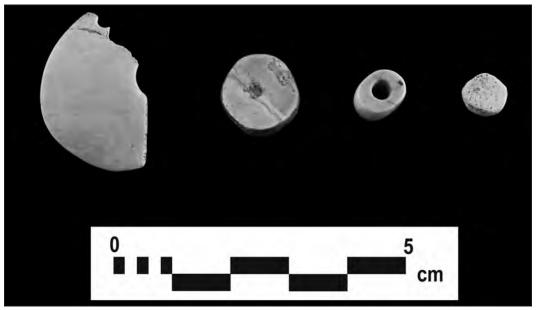


Figure 10. Marine shell and possible ivory pendant from the Joseph Picard site. From left to right: possible ivory pendant, fresh water shell bead blank, marine shell bead and fresh water disc.

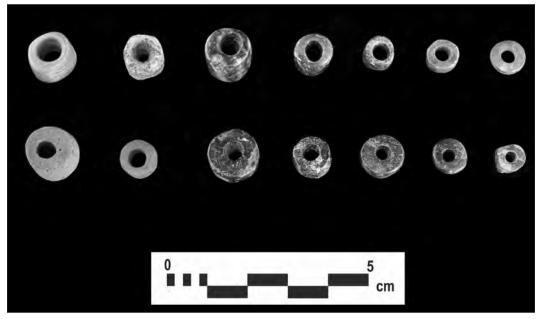


Figure 11. Steatite beads from the Joseph Picard site

Both Joseph Picard and the slightly earlier Yatsihsta' site also yielded significant quantities of steatite beads (Figure 11), some of which appear to have been made from material from the same eastern Ontario or Jefferson County source (Williamson et al. 2016). While the origin of the material used for their manufacture can provide networks evidence of exchange between communities or lineages or even individuals communities, within those their ornamentation might be signalling identities, as would have clothing, hairstyle, and tattooing, among other things (Joyce 2005:142-143).

It is unusual to recover significant numbers of steatite beads from north shore of Lake Ontario ancestral Huron-Wendat sites. In a survey of 24 fourteenth- to mid-sixteenth-century sites that have been subject to complete or near complete excavation, it was discovered that all steatite beads were found on fifteenth-century sites in the Don River drainage—until the early to mid-sixteenthcentury Mantle site, in the Duffins Creek drainage, which also yielded several examples. This underscores the differing interaction spheres for north shore communities, which has been previously noted based on ceramic assemblages (Birch and Williamson 2013:139-140; Birch et al. 2016), and it suggests that the SLI people interacting with the people at the Parsons site on the Humber River and those on Lynde Creek, likely from respectively, were different communities. While it is possible that the SLIstyle material culture recovered from the Joseph Picard site resulted from exchange only, the clustering of ceramics in one area of the site and the presence of ornamentation in the form of steatite and perforated gastropod beads in addition to an unusually rich bone industry is suggestive of an actual sustained presence of people residing at the site.

Conclusion

What these discoveries suggest is that by the midfifteenth century, segments of SLI communities, perhaps families or clan segments or their descendants if they had lived elsewhere first, moved to pre-coalescent and coalescent period ancestral Huron-Wendat communities such as the Joseph Picard and Parsons sites. The movement of community segments to join with others at this and later periods should be regarded as a standard decision by Iroquoian planners. This was evidenced at Mantle, for example, where contraction of the site in a later phase of its occupation involved the removal of seven houses and settlement reordering, with a concomitant reduction in population in the hundreds (Birch and Williamson 2013:76-78).

This movement of community segments is not a novel notion. Indeed, it was suggested some time ago that segments from SLI communities were incorporated as early as the fifteenth century into the Prince Edward County (and eventually the Trent valley) ancestral Huron-Wendat and into the eastern Haudenosaunee (Mohawk, Oneida, Onondaga) (Pendergast 1991, 1993; for recent summaries, see Abel 2015; Tremblay et al. 2015). To these movement options, we can now confidently add several north shore of Lake Ontario ancestral Huron-Wendat sites by the mid-fifteenth century.

The ultimate disposition of the Lynde Creek population is unknown, but it would not be unreasonable to suggest that they may have moved to the upper Trent River valley to help eventually form the Nation that became the Arendaronon (Rock) of the Huron-Wendat Confederacy. Links east with Trent valley populations are evident on four of the Joseph Picard trumpet pipes, which are decorated with the Benson Barred motif on their necks. That motif is very rare, indeed absent, on almost all other north shore sites, but it is a major attribute of the Benson site ceramics (Peter Ramsden, personal communication 2015).

Other SLI community segments appear to have been adopted at least into the Humber drainage system populations who eventually contributed to the formation of the Tahontaenrat (Deer) nation of the Huron-Wendat Confederacy. Thus, it is reasonable to suggest that the historic Huron-Wendat Confederacy consisted of some SLI descendants whose ancestors had previously occupied the St. Lawrence River valley or the Ottawa River valley and had moved to join with north shore of Lake Ontario and Trent valley

ancestral Huron-Wendat communities. The corollary of this is that some Huron-Wendat may have been returning to their ancestors' homeland along the St. Lawrence River at the time of the mid-seventeenth-century Ontario dispersal.

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References Cited

Abel, T.

2015 St. Lawrence Iroquoians in Northern New York: An Update of Present Research. Paper presented at the joint annual Symposium of the Ontario Archaeological Society and the Eastern States Archaeological Federation, Midland, Ontario.

Adams, N.R.

2003 The Arbor Ridge Site: A Study in Settlement Dynamics and Population Movement during the Fifteenth Century at the Eastern End of Lake Ontario. Unpublished MA thesis, School of Archaeology and Ancient History, University of Leicester.

Biggar, H.P.

1922–1936 *The Works of Samuel de Champlain in Six Volumes: 1615–1618*, edited by J.H. Cameron, W.F. Ganong, and H.H. Langton. Champlain Society, Toronto.

Birch, J.

2015 Current Research on the Historical Development of Northern Iroquoian Societies. *Journal of Archaeological Research* 23:263-323.

Birch, J., and R.F. Williamson

2013 The Mantle Site: An Archaeological History of an Ancestral Wendat Community. AltaMira Press, Lanham, Maryland.

2015 Navigating Ancestral Landscapes in the Northern Iroquoian World. *Journal of Anthropological Archaeology* 39:139-150. doi: 10.1016/j.jaa.2015.03.004

Birch, J., R.B. Wojtowicz, A. Pradzynski,

and R.H. Pihl

2016 Multi-scalar Perspectives on Iroquoian Ceramics: Aggregation and Interaction in Precontact Ontario. In Process and Meaning in Spatial Archaeology: Investigations into Pre-Columbian Iroquoian Space and Place, edited by E.E. Jones and J.L. Creese, pp. 147 -190. University of Colorado Press, Boulder.

Bradley, J.W.

1987 Evolution of the Onondaga Iroquois: Accommodating Change, 1500–1655. Syracuse University Press, Syracuse.

Emerson, J.N.

1954 The Archaeology of the Ontario Iroquois.
Unpublished PhD dissertation, University of Chicago.

Engelbrecht, W.

2004 Northern New York Revisited. In A Passion for the Past: Papers in Honour of James F. Pendergast, edited by J.V. Wright and J.-L. Pilon, pp. 125-144. Mercury Series Archaeology Paper 164. Canadian Museum of Civilization, Gatineau.

Fox, W., and J.-L. Pilon

2016 Evidence for Sixteenth-Century Exchange:
The Ottawa and Upper St. Lawrence
Waterways. In Contact in the 16th Century:
Networks among Fishers, Foragers and Farmers,
edited by B. Loewen and C. Chapdelaine, pp.
199-215. Mercury Series Archaeology Paper
176. Canadian Museum of History and
University of Ottawa Press, Gatineau and
Ottawa.

Gates St-Pierre, C., R. Tremblay, and M. Plourde

2015 Middle and Late Woodland Iroquoians in the St. Lawrence River Valley: An Occupation Overview. Paper presented at the joint annual Symposium of the Ontario Archaeological Society and the Eastern States Archaeological Federation, Midland, Ontario. Hart, J.P., T. Schafie, J. Birch, S. Dermarkar, and R.F. Williamson

2016 Nation Building and Social Signaling in Southern Ontario: A.D. 1350–1650. *PLoS ONE* 11(5):e0156178. doi:10.1371/journal. pone.0156178

Hart, J.P., H.J. Brumbach, and R. Lusteck

2007 Extending the Phytolith Evidence for Early Maize (Zea mays ssp. mays) and Squash (Cucurbita sp.) in Central New York. *American Antiquity* 72:563-583.

Joyce, R.A.

2005 Archaeology of the Body. Annual Review of Anthropology 34:139-158.

MacDonald, R.I.

2002 Late Woodland Settlement Trends in South-Central Ontario: A Study of Ecological Relationships and Culture Change. Unpublished PhD dissertation, Department of Anthropology, McGill University, Montreal.

MacNeish, R.S.

1952 Iroquois Pottery Types: A Technique for the Study of Iroquois Prehistory. Bulletin 124. Anthropological Series 31. National Museum of Canada, Ottawa.

McCullough, K.M.

1978 Modified Deer Phalanges at the Draper Site. Research Report 5. Museum of Indian Archaeology, London.

Needs-Howarth, S.

2012 Zooarchaeological remains. In The archaeology of the Mantle site (AlGt-334): Report on the Stage 3-4 salvage excavation of the Mantle site (AlGt-334) part of Lot 33, Concession 9, Town of Whitchurch-Stouffville, Regional Municipality of York, Ontario, edited by Archaeological Services Inc., pp. 262-295. Report on file, Ontario Ministry of Tourism, Culture and Sport, Toronto, and at Archaeological Services Inc. http://asiheritage. ca/wp-content/uploads/2015/04/Mantle-Final-Report.pdf.

2016 Zooarchaeological Assemblage. In The Archaeology of the Joseph Picard Site (AlGs-376): A Report on the Stage 3&4 Mitigative Excavation of the Joseph Picard Site (AlGs-376), Highway 407 East, Lot 32, Concession VI, Whitby Township, Former Ontario County, Regional Municipality of Durham, Ontario, edited by Archaeological Services Inc., pp. 112-142. Toronto. Report submitted to Ministry of Tourism, Culture and Sport, Toronto.

Pendergast, J.F.

1972 An Analysis of the Dawson Site Archaeological Material. In *Cartier's Hochelaga and the Dawson Site*, edited by J.F. Pendergast and B.G. Trigger, pp. 111-162. McGill-Queen's University Press, Montreal and Kingston.

1991 The St. Lawrence Iroquoians: Their Past, Present, and Immediate Future. *The Bulletin* New York State Archaeological Association 102:47-75.

1993 More on When and Why the St. Lawrence Iroquoians Disappeared. In Essays in St. Lawrence Iroquoian Archaeology: Selected Papers in Honour of J. V. Wright, edited by J.F. Pendergast and C. Chapdelaine, pp. 9-47. Occasional Papers in Northeastern Archaeology 8. Copetown Press, Dundas, Ontario.

Ramsden, P.G

1977 A Refinement of Some Aspects of Huron Ceramic
 Analysis. Mercury Series Archaeology Paper

 63. Archaeological Survey of Canada,
 National Museum of Man, Ottawa.

2016 Sixteenth-Century Contact between the Saint Lawrence Valley and the Upper Trent Valley. In Contact in the 16th Century: Networks among Fishers, Foragers and Farmers, edited by B. Loewen and C. Chapdelaine, pp. 219-234. Mercury Series Archaeology Paper 176. Canadian Museum of History and University of Ottawa Press, Gatineau and Ottawa.

Robertson, D.A., S.G. Monckton,

and R.F. Williamson

1998 Parsons Site Exotica and Archaeometry. Ontario Archaeology 65-66:104-110.

Smith, D.

1983 An Analytical Approach to the Seriation of Iroquoian Pottery. Research Report 12.

Museum of Indian Archaeology, London. Sutton, R.E.

1999 The Barrie Site: A Pioneering Iroquoian Village Located in Simcoe County, Ontario. *Ontario Archaeology* 67:40-87.

Thompson, R.G., J.P. Hart, H.J. Brumbach, and R. Lusteck

2004 Phytolith Evidence for Twentieth-Century B.P. Maize in Northern Iroquoia. *Northeast Anthropology* 68:25-39.

Thwaites, R.G. (editor)

1896–1901 *The Jesuit Relations and Allied Documents.*73 vols. Burrows Brothers, Cleveland.

Tremblay, R.

2006 Les Iroquoiens du Saint-Laurent, people de maïs. Pointe-à-Callière, Montreal.

Tremblay , R., M. Plourde, and C. Gates St. Pierre 2015 Old and New Hypotheses Regarding the Fate

2015 Old and New Hypotheses Regarding the Fate of the St. Lawrence Iroquoians. Paper presented at the joint annual Symposium of the Ontario Archaeological Society and the Eastern States Archaeological Federation, Midland, Ontario.

Trigger, B.G.

1976 The Children of Aataensic: A History of the Huron People to 1660, 2 vols. McGill-Queen's University Press, Montreal and Kingston.

Warrick, G.A.

2008 A Population History of the Huron-Petun, A.D. 500–1650. Cambridge University Press, Cambridge.

Williamson, R.F.

2014 The Archaeological History of the Wendat to A.D. 1651: An Overview. *Ontario Archaeology* 94:3-64.

Williamson, R.F., M. Burchell, W.A. Fox, and S. Grant

2016 Looking Eastward: Fifteenth- and Early Sixteenth-Century Exchange Systems of the North Shore Ancestral Wendat. In Contact in the 16th Century: Networks among Fishers, Foragers and Farmers, edited by B. Loewen and C. Chapdelaine, pp. 235-256. Mercury Series Archaeology Paper 176. Canadian Museum of History and University of Ottawa Press, Gatineau and Ottawa.

Williamson, R.F., and T. Powis

1998 Parsons Site Ceramic Vessels. *Ontario Archaeology* 65-66:53-71.

Williamson, R.F., and D. Robertson (editors)

1998 The Archaeology of the Parsons Site: A Fifty Year Perspective. *Ontario Archaeology* 65–66.

Wintemberg, W.J.

1972 Roebuck Prehistoric Village Site, Grenville County, Ontario. Facsimile ed. Originally published 1936, National Museums of Canada Bulletin 83. Anthropological Series 19.

Wojtowicz, R.

2012 Ceramic Vessels and Miscellaneous Ceramic Objects. In *The Archaeology of the Mantle Site* (AlGt-334): Report on the Stage 3–4 Mitigative Excavation of Part of Lot 22, Concession 9, Town of Whitchurch-Stouffville, Regional Municipality of York, Ontario, edited by Archaeological Services Inc., pp. 126-178. Report on file, Ontario Ministry of Tourism, Culture and Sport, Toronto, and at Archaeological Services Inc. http://asiheritage.ca/wp-content/uploads/2015/04/Mantle-Final-Report.pdf

Wright, J.V.

1966 The Ontario Iroquois Tradition. Bulletin 210.National Museum of Canada, Ottawa.

Dès le milieu du quinzième siècle, la culture matérielle des Iroquoiens du Saint-Laurent est apparue dans les communautés ancestrales huronnes-wendates sur la côte nord du lac Ontario. Par exemple, au site Parson, datant du milieu du quinzième siècle et situé où l'on retrouve aujourd'hui la ville de Toronto, une embouchure potentiellement iroquoienne du Saint-Laurent a été identifiée en se basant sur un amas de récipients de céramique d'Iroquoiens du Saint-Laurent. Les outils de fer du site Mantle, étant crus comme ayant été échangés en amont du golfe Saint-Laurent, ainsi que la culture matérielle d'autres sites, signalent aussi des interactions (notamment la présence de perles discoïdes fabriquées de stéatite au sein de certaines communautés sur la côte nord dont l'analyse de source préliminaire suggère une origine du Jefferson County, ou de façon plus large, de l'est de l'Ontario). Des coquillages marins et des artéfacts potentiellement fabriqués d'ivoire au sein de sites hurons-wendats ancestraux datant du milieu du quinzième siècle dans la région d'Oshawa indiquent aussi des modèles d'échanges entre l'est et l'ouest le long de la côte nord du lac Ontario et de la vallée du fleuve Saint-Laurent/de la vallée inférieure de la rivière des Outaouais avant l'arrivée des Européens à Vieux-Wendake [site historique]. Les regroupements de sites d'Oshawa, qui semblent disparaitre à la fin du quinzième siècle, ont possiblement été l'une des communautés de la côte nord longuement crues comme ayant déménagé vers la vallée inférieure de la rivière Trent au début du seizième siècle.

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