Clay to Ceramics: St. Lawrence Iroquoian Sites in Alburgh, Vermont

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Paper presented at the 74th Annual Meeting of the Eastern States Archaeological Federation, Burlington, Vermont, November 8-11, 2007 (1 & 2) Lake Champlain has long been considered a boundary between Algonquin groups to the east and Iroquoian groups to the west. Linguistic data collected by Day (1971) and Lounsbury (1978) identifies long standing Abenaki and Iroquois toponyms throughout the region. Recent research has begun to identify the presence of a third group, the Saint Lawrence Iroquoians, who have long been defined as focused along the Saint Lawrence River. The interactions of these three groups over hundreds of years certainly created intersecting patterns of settlement that should be identifiable in the archeological record. Sorting out those patterns, however, requires intensive and extensive investigation.

It is unlikely that a distinct boundary has ever existed for an extended period of time. The anthropology of boundaries demonstrates the difficulties of identifying them through the archeological record. Sometimes it is at the boundaries between groups that identity is most fluid. In other times and places identity is defined by specific traits, objects or behaviors (Stark 1998). I expect that the Lake Champlain region has seen boundaries of varied clarity and location over the thousands of years of human occupation. This paper discusses several sites recently, and briefly, examined that might be considered to be located right on the boundary between Iroquoian and Algonquin groups.

Determining the identity of the occupants of archeological sites is a difficult task fraught with various hazards. The political, social and cultural context of the area was very complex (Petersen and Toney 2000; Petersen et al. 2004). The use of artifacts to interpret identity frequently focuses on those artifacts with decorative elements that can be isolated and compared between sites. For the northeast, ceramics are a primary focus of such studies. However, simply equating ceramics with identity oversimplifies a complex cultural dynamic. Brumbach has suggested that adoption of Iroquoian ceramic attributes by Algonquin (Mahican) groups may indicate the adoption of a complex of cultural traits related to the advent of maize horticulture (Brumbach 1995). Chilton has identified ceramic traits as the end product of the creative process (choice) and that the process can be more indicative of identity than the finished vessels (Chilton 1998). Petersen and Cowie state that social identity may have become increasingly important in the context of the broad transformations of horticulture, social aggregation and increased sedentism. They argue that late precontact farming transformed local pottery styles ...primarily because of sociopolitical factors related to social signaling and identity (Petersen and Cowie 2002:280).

These studies indicate the complexity of pinpointing aspects of material culture that can be used to ascribe identity to the occupants of an archeological site. Such an attribution must refer to specific traits and should use the universe of available information on any one site to provide the best basis for the attribution of identity, if one can be made.

James Pendergast identified as early as 1987 the potential of a cluster of Saint Lawrence Iroquoian occupation in the Champlain Valley based on ceramics in various collections from the area (Petersen et al. 2004:88). Since then, excavations by the University of Montréal along the Pike River, north of Missisquoi Bay, encountered Saint Lawrence Iroquoian ceramics at several sites interpreted as short term fishing camps (Blais 1993). The recent excavations of the Bohannon Site (VT-GI-26/32) provide definitive evidence the site was home to a group of Saint Lawrence Iroquoians c. AD 1500-1620 (Petersen et al. 2004).

(3) The South Alburgh Fire District #2 survey was conducted in 2004 and 2005 throughout much of the town of Alburgh. Testing was conducted along many roads that cross and outline the peninsula. During the survey six precontact sites were encountered. Three of

these sites, the Summit Site, the Ransom Bay Site and the South View Site, were identified based on decorated ceramics with attributes characteristic of Saint Lawrence Iroquoian ceramics.

The Summit Site (VT-GI-49) is located close to the highest point in the town, a northsouth trending shale ridge located over a kilometer (0.77 mi) from the lake shore (4). (5) Testing at the site encountered decorated ceramics from two vessels in two tests located 5 meters apart. (6 & 7) The first vessel from Test 11 falls into the type defined by MacNeish as Lanorie Crossed (MacNeish 1952:64) with incised designs on the collar and the thickend and flattened lip. (8) Other body sherds from the test that may be from the same vessel have check stamping that is also highly diagnostic of St. Lawrence Iroquoian ceramics. (9) The second vessel at the Summit Site is represented by sherds found in Test 31. This vessel is decorated with incised and dentate impressions on the exterior and the top of the rim. (10) Further testing encountered single undecorated sherds in two additional tests and two possible features. The highly dispersed nature of these positive tests and lack of lithic artifacts is also diagnostic of St. Lawrence Iroquoian sites.

(11) The Ransom Bay Site (VT-GI-59) is located along the east shore of Alburgh about 3.7 kilometers (2.3 mi) southwest of the Bohannon Site. It is at the mouth of Mud Creek that flows from the large wetland to the north and is located on an esker that extends north along the west side of Mud Creek. (12) Here testing encountered a concentration of ceramics and some fire cracked rock. (13) Again, the ceramics exhibit traits including check stamping, incised designs, finger nail notches and punctates below the rim. In addition, two pipe fragments are present, one an Iroquoian ringed bowl form (14). The lack of lithics and the ceramic traits provide strong indications of St. Lawrence Iroquoian presence.

(15) Finally, the South View Site (VT-GI-63) is located directly east of the bridge between Alburgh and Isle Lamotte. (16) The site was identified in four tests at 10 meter intervals oriented perpendicular to the lake shore and adjacent to a small wetland. (17) Ceramics were encountered in small fragments, but nonetheless exhibit zoned incising and a fragment of a square castellation. (18) One particularly interesting sherd is a rim fragment of a miniature vessel that exhibits oblique incising and tiny punctates below the collar. (19) An undecorated pipe stem was also present. No lithics were encountered, so, here again we have strong indication of St. Lawrence Iroquoian occupation.

Anaylsis

The limited excavation conducted on these sites prevents a strong case being made as to their function. They could be small fishing or hunting camps or larger seasonal or even yearround settlements. To better understand the occupations the ceramics were examined in more detail.

The bulk of the temper material is fine-grained quartz, feldspar and biotite. The clay in the ceramics is laminated and angular indicating it did not travel very far and is probably from marine and glacial lake deposits. All of these materials are locally available in Alburgh and the surrounding region.

Neutron Activation Analysis (NAA) of Ceramics and Clay

Matthew Boulanger of the University of Missouri volunteered to conduct a Neutron Activation Analysis (NAA) of ceramics from the survey and clay samples collected in the area. He presented his results in detail yesterday morning. Seven samples from the ceramic collection for the project and six geological clay samples were chosen for analysis. The purpose is to identify the elemental composition of the ceramics and clay and compare them to determine the likely origin of the clay used to make the ceramics.

(20) The ceramics selected for the study include fragments of Vessels 1 (1444.1.5) and 2 (1444.2.1b) from the Summit Site (VT-GI-49), a check stamped body sherd (1444.204.3) from the Ransom Bay Site (VT-GI-59), a check stamped body sherd (1444.223.2a) from the South View Site (VT-GI-63), the undecorated pipe stem (1444.224.1) from the South View Site (VT-GI-63) a late Middle Woodland or early Late Woodland cord wrapped stick impressed sherd (1444.5.1) from the Passage Site (VT-GI-50) and a non-diagnostic probably Late Woodland undecorated sherd (1444.145.1) from the West Shore Site (VT-GI-60). (21) The clay samples analyzed were from Knights Point beach (North Hero), Clay Point (Alburgh), the South View Site (Alburgh), Winooski (2 samples) and Westminster Station (southeast Vermont). The Alburgh and North Hero clay is marine clay (Doll et al. 1970), deposited by the Champlain Sea. It is thought that one of the Winooski samples is from a Champlain Sea deposit and another from a glacial Lake Vermont deposit. The Westminster sample is from a glacial Lake Hitchcock varved clay deposit.

(22) The results of the analysis indicate a high correlation between the clay samples collected in Alburgh and North Hero and the ceramics from Alburgh. The Winooski and Westminster clay samples fall well outside of the 99% confidence interval for group membership. Thus, the conclusion is that the ceramics sampled were all produced from locally available clay. It is particularly interesting that the one clay sample from an archeological site area (the South View Site) falls near the center of the ceramic samples while the other two clay samples fall at the edge of the group. This suggests that clay available at a site is most likely to have been utilized for making ceramics, if of an appropriate composition, having implications for

the choice of some site locations. The heavy clay deposits present along the west shore of Alburgh do not appear to have attracted extensive settlement, suggesting other factors such as exposure also were important in settlement location choice.

A 1990 neutron activation study by Crépeau and Kennedy (1990) examined clay and ceramic samples from the Saint Lawrence River Valley between Montréal and Québec City and found overall similarity that made associations of ceramics with clay sources impossible. They call the Saint Lawrence Valley an "unresolvable region" defined as "the geological region, both on the surface and in stratigraphy, over which no differences in composition can be distinguished with present techniques." (Crépeau and Kennedy 1990:71-72). Roland Trembley's NAA analysis of Bohannon ceramics (Trembley et al. 2006) places them in the same compositional groupings with samples from the Pike River sites and sites around Lake Saint Pierre on the Saint Lawrence River, possibly confirming homogeneity identified by Crépeau and Kennedy. However, comparison of the Alburgh and Winooski samples indicates variation in the Champlain Sea clays that can be distinguished. Boulanger states that "the similarities between the clays and ceramics are overwhelming, and suggest a clear compositional similarity. The possibility that the randomly collected clays and randomly collected ceramics would be so similar is quite small..." (Boulanger, pers. comm., October 5, 2007). Therefore, it appears that the ceramics found on the sites in Alburgh were produced locally from local clays and temper. Broadening this study to include more clay and ceramic samples from a wider region is a goal we hope to pursue to corroborate and refine these results.

Interpretations

(23) Despite the limited excavation conducted at these sites, they provide an opportunity for discussion of chronology, identity, interaction and settlement patterns.

Chronology

The chronological sequence of the sites identified during the project begins with the Passage Site (VT-GI-50) with Late Archaic and Middle to Late Woodland components. The Embankment Site (VT-GI-51) appears to date to the Late Archaic. The Summit Site (VT-GI-49), the Ransom Bay Site (VT-GI-59) and the South View Site (VT-GI-63) clearly date to the Late Woodland. Jim Petersen suggested a date of AD1400 for the Summit Site ceramics (pers. comm., November 7, 2004). The West Shore Site (VT-GI-60) is of ambiguous date with non-diagnostic ceramic fragments, probably dating to the Late Woodland period.

Identity

At the Summit Site (VT-GI-49) ceramic attributes associated with the Saint Lawrence Iroquoians such as a thickened collar, check stamping, dentate impressions and incised designs on the collar and lip (Petersen et al. 2004:111) are present. In addition, the testing did not encounter any lithics and the artifactual distribution appears to be focused in dispersed areas. This complex of traits helps to support the identification of the site as Saint Lawrence Iroquoian. Also, the site location on a high ridge away from typical routes of travel fits with a group on the defensive from surrounding populations. The Saint Lawrence Iroquoians are thought to have been dispersed in part due to intensive warfare with neighboring groups and defensive locations characterize many sites (Pendergast 1990).

At the Ransom Bay Site the notched, incised and punctate sherds and the check stamped sherds are typical of Saint Lawrence Iroquoian vessels. At the South View Site, a very flat rim sherd that may fall into the Salem Mixed type designation is probably part of a castellation that formed a square opening to a vessel, another diagnostic trait of Saint Lawrence Iroquoian ceramics. The fragmentary nature of the ceramics from these sites does not allow for a definitive chronological or typological placement, but they clearly fit into a sequence of Saint Lawrence Iroquoian occupation of the area. The lack of lithic artifacts also contributes to this identification.

The presence of ceramic vessels and pipes provides some indication that women and men were present at the Ransom Bay and South View sites. This interpretation, along with the local manufacture of both vessels and pipes points to an occupation of the area with some permanence. *Interaction*

Interaction within a broader region outside of the north end of Lake Champlain can begin to be interpreted from the data. The ceramics from Test 11 at the Summit Site (VT-GI-49) fit into a type defined by MacNeish as Lanorie Crossed based on ceramics excavated at the site of Lanoraie in the 1930s (MacNeish 1952:64). (24) Excavations at Lanoraie in the 1970s by the University of Montréal provide more information on the site and two reconstructed vessels are analogous to the Summit Site sherds (Clermont et al. 1983:105-106). Lanoraie is thought to date to the 14th century (Clermont et al. 1983:156), placing it approximately contemporary with the Summit Site.

(25) The identification of analogous ceramic traits between Lanoraie and the Summit Site and other Vermont materials makes sense since Lanoraie is located close to the outlet of the Richelieu River making a relatively easily traveled corridor between the two areas. This corridor would aid in maintenance of social ties and affiliation between communities in the area. The NAA study of Trembley using Bohannon ceramics suggests interaction between the Lake Champlain area, Bohannon especially, and the Lake Saint Pierre area that includes Lanoraie, Mandeville and sites to the east (Trembley et al. 2006).

Settlement Patterns

(26) The site locations in the Alburgh vicinity are typically along the boundaries of the peninsula located adjacent to the lake and some other feature such as a brook, on a point of land, a narrows in the lake or wetlands that provided protection and/or resources. The Summit Site is an exception to this pattern (on a high point away from the lake). The West Shore Site is also unusual being located on the exposed west side of the peninsula, though perhaps associated with a very small point of land.

Fourteen other sites in the area are of unknown date or known to predate the Saint Lawrence Iroquoians. It is interesting to note that of the six sites of unknown date or affiliation that are reported on points of land, most were reported by William Ross, a long time collector in the area. An interview with him in 1977 indicated "in all of Ross's travels throughout the Champlain Islands, he found no evidence of chipping." (Koier and Pease 1977). This apparent lack of lithic debitage on the sites he identified may have implications for the identity of the site occupants.

Summary

The precontact sites encountered during the fire district survey provide important new information on the Native American occupation of the area. The time span from Late Archaic at the Passage Site to the Late Woodland at the Summit, Ransom Bay and South View sites indicates a potentially long term and intensive use of the area that has been suspected but only now is beginning to be fleshed out. In particular, the evidence for Saint Lawrence Iroquoian occupation requires follow up to determine the nature of that occupation and the complexity of interaction with the contemporary Abenaki population. The two groups were probably utilizing much of the same landscape with varying degrees of cooperation and conflict over time.

Conclusion

Although the title of this paper, Clay to Ceramics, refers to the neutron activation analysis, the title is also a metaphor for the increasing amount of hard evidence documenting the precontact occupation in Alburgh. The need for detailed controlled excavation at numerous sites is highlighted by the few tantalizing clues obtained from each site examined in the fire district survey.

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