A Tale of Two Boroughs: Patterns of Trade in Prehistoric New England

Curtiss Hoffman
Bridgewater State College, c1hoffman@bridgew.edu

Recommended Citation

This item is available as part of Virtual Commons, the open-access institutional repository of Bridgewater State University, Bridgewater, Massachusetts.
"It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness... it was the spring of hope, it was the winter of despair."

With these words, Charles Dickens opens his exploration of social inequalities in late 19th century western Europe. The subject of social inequality and its consequences for human cultures is only now beginning to receive due attention in American archaeology.

While archaeologists would have little trouble in recognizing its traces in the material culture of 19th century France or England, or even in their North American colonies, readers might be surprised to learn that inegalitarian social structures were also present in prehistoric New World contexts. In New England, the beginnings of inequality are as old as the period local archaeologists call the Transitional Archaic, from about 4000 to 2500 years ago. Even more surprising, it looks as if the kind of dichotomous relationships Dickens portrayed disappeared after this period, to be replaced by a more simplistic social order. This development has potentially profound implications for our understanding of human behavior.

In order to approach this subject, I have adopted a theoretical perspective known as structuralism, in which social customs such as burial rituals are viewed as evidence of structural conflicts within the society. Specifically, I have explored the relationships between lowlands and uplands in southern New England in terms of a center-periphery model. In this model, some favored areas (centers) attract larger settlements and become political and economic centers of influence, while other areas (peripheries) are less favored, have smaller populations, and are susceptible to being exploited by the centers. Moreover, both center and periphery have their own local centers and peripheries. This model is a prescription for social inequality, because it sets up tensions between the advantaged centers and the disadvantaged peripheries, usually at the expense of the latter. I also argue that the solution to this social tension developed by the New England Native Americans amounted to a rejection of the political and economic importance of centers. This philosophical position persisted at least until the time of European contact, and still colors the perceptions and actions of Native peoples today.

The data I have used to test this model derives from regional archaeological studies I have directed in two towns in eastern Massachusetts, Middleborough and Westborough. Much of this work has been done by students in the Public Archaeology Concentration at Bridgewater, taking internships and directed studies over the past 10 years. As a result, few towns in the region have been as thoroughly studied at the town level, and the striking contrast between upland and lowland locations is well illustrated by the two relatively complete data sets. While the current state of analysis is descriptive rather than statistically quantitative, it still provides a reasonably clear picture. The use of statistics in archaeology, as in all the social sciences, should not be undertaken until the researcher is well acquainted with the nature of the sampling universe; that point has yet to be reached in this study.

Middleborough is located on the coastal plain, and is drained by the Taunton, Weweantic, and Sippican Rivers. The Nemasket River, which runs from the Lakeville Ponds through the center of the town, is a major tributary of the Taunton River, which forms the town's northern boundary. Most of the terrain is relatively flat, with some large basins currently occupied by swamps, punctuated by low hills. Much of the archaeological fieldwork has concentrated on Assawompsett Pond and the rivers, but our concentrated inventory of public and private artifact collections in 1991-92 identified a total of 166 sites scattered throughout the town, 22 of which have been excavated with reasonably good records. The inventory currently includes 5337 artifacts.

Westborough is located at the eastern edge of the Worcester Plateau, and contains the headwaters of the Sudbury, Assabet, and Blackstone Rivers. The land area of the modern town is marked by three large former lake basins surrounded by moderate slopes which act as watersheds between the drainage systems. Most archaeological work has concentrated on the fringes of the lake basins, resulting in a sample of 74 sites, 28 of which have been field tested, and a sample of 6002 artifacts.

Archaeologists generally agree that the following criteria mark Transitional Archaic sites:
1) Radiocarbon dates in the range of 4000 - 2500

By Curtiss Hoffman
years ago;
2) Relatively large, stemmed spear points or lance points (the arrow had not yet been introduced) of various subtypes;

3) Certain ground stone tools, including clumsy plummetts, gouges, celtts, full-grooved axes, winged or whaletail shaped spearthrower weights and pestles;

4) Bowls carved out of soft stones, particularly steatite (soapstone) or chlorite;

5) The use of large slabs, either as anvils/nut-cracking stones or for the lining of pits;

6) Cremation burials with associated deposits of red ochre powder and large ceremonial blades made of stone derived from distant sources;

7) Unusual items such as “magic stones”, pendants, and petroglyphs (carved artistic representations);

8) Evidence of complex village structure;

9) Evidence of trade, both intra- and inter-regional in scope.

We have found all nine of these criteria associated with sites in Middleborough. Six of the eight radiocarbon dates from the Wapanucket site on Assawompsett Pond fall within the desired range. A total of 144 spear and lance points of Transitional Archaic types and 114 ground stone tools have been found. Stone bowls and bowl fragments are less common (19). Five slabs used as anvils are reported; slabs were found in ceremonial burials at Wapanucket only, but in great abundance. These burials are complex cremations accompanied by red ochre and grave goods, including 33 ceremonial blades, 20 of which are of exotic stone materials. Burials at other sites appear to be less complex, but 5 are associated with ceremonial blades, which also occur as isolated finds. Nineteen unusual objects found in association with burials at Wapanucket include whale tail and other pendants, petroglyphs, and magic stones. Nineteen of these have also been found at other locations, mostly along the Nemasket and Taunton Rivers. Complex village structure is well documented at Wapanucket, where three circular dwelling complexes were delineated on the basis of post mold patterns. Each circle contained a larger central structure which was the repository for burials. Finally, exotic stones from New York sources used for the manufacture of diagnostic Transitional Archaic points and ceremonial blades are 26% of the total.

Percentages for ceremonial points are much higher, 59%. Stones from Boston Basin quarries accounted for an additional 64% of the points.

Sixteen out of the 31 sites with any of these nine traits have multiple traits, though Wapanucket is the only site at which all have been found, due to the greater area exposed by excavation.

Four radiocarbon dates from Westborough fall within the stipulated range. Spear and lance points of Transitional Archaic types are less than a third as common as in Middleborough (45). Ground stone tools are also less common, 37 items in all. Twenty-one slabs used for anvils have been recovered, but none are from ceremonial contexts. Steatite bowls, red ochre burials, ceremonial blades, and most of the unusual items are altogether absent from Westborough sites of this phase. Complex village structure also appears to be absent, although a single large dwelling of the size found at Wapanucket has been recovered at the Charlestown Meadows site. Trade was mostly intra-regional; 62% of diagnostic Transitional Archaic points were made from Boston Basin lithics, while only 13% are of exotic materials. 10 of the 16 sites with any of these traits had more than one trait represented, though Charlestown Meadows was the only one to display all 6 of the traits present at Westborough sites, once again probably due to the greater exposure.

There are several ways in which the data sets from these two towns are similar. For example, Boston Basin felsites and argillites were used to make points in very similar proportions, and exotic lithics were found at a similar percentage of sites. All the subtypes of spearpoints were also found in both towns. This suggests a measure of continuity between the two areas.

However, emphasizing these similarities would obscure the significant differences between the two towns. The number of ground stone tools is higher in Middleborough, but they constitute a much smaller per-
The best-known steatite quarries in the region are located in the Blackstone drainage in northern Rhode Island and southern Massachusetts. While steatite from these sources moved down the river and across the coastal plain to Middleborough and other locations during the Transitional Archaic period, only a few scraps have ever been found in much later contexts in Westborough, probably fragments from the stone pipe industry. Steatite apparently did not cross eastwards over the watershed from neighboring Grafton into Westborough during the Transitional Archaic.

Stone bowls do not obviously relate to elites, so we ought to ask the question, what made them useful for river-dwellers but not for the uplanders? Presumably they are somehow related to food — either for cooking or long-term storage. Quantities of charred wild seeds — of Chenopodium sp. (lambquarters) and Amaranthus sp. (pigweed) — have been recovered from Transitional Archaic sites in the Connecticut River floodplain. While we consider these plants to be weeds and pull them out of our gardens, they grow well in soft soils and produce abundant seeds which contain complete protein in late summer. They may be harvested easily and efficiently by foraging groups, but they are rather tasteless foods which are best consumed in a mush or gruel with other flavors. This gruel could also last longer than the usual suite of foraged foods if kept in large containers away from pests, and stored foods could have helped to sustain populations over the seasons when other foods were scarce, allowing for the stabilization of the food supply, which usually leads to quick population growth.

This suggests that the collection and bulk processing of seeds may have been a reason for using steatite bowls. Societies on the transition between foraging and horticulture developed seed collecting as an intermediate strategy in several well-documented cases in the Middle East and Mesoamerica. In those locations, increasing populations made a shift from day-to-day foraging to intensive collecting necessary — and population increase is one possible reason for changes in political organization from egalitarian to ingathitarian systems. The number of radiocarbon dated sites from about 4500 to 2500 years ago in southern New England increased tenfold, and the average location of sites within their drainages moved steadily upstream, suggesting a gradual filling up of the available territorial space.

However there is one problem with this argument in connection with the use of steatite bowls. In New England the places where the seed plants grow wild in abundance and the places where steatite is available are usually not the same. In order to make this seed-collecting and storage strategy work in the region, collectors in the lowlands either would have to dispatch task groups to distant steatite sources, or to develop trade connections with the uplanders. In the smaller tribal territories which seem to characterize the Transitional Archaic, the latter solution might have been the only option. The regulation of trade between groups is yet another reason to change to a political structure run by so-called "big men". The trade in exotic stones for use in lowland burial ceremonies also suggests this type of reorganization.

The next question which needs to be addressed is, what did the lowlanders have to offer the uplanders in return for steatite? Traditionally in these situations, participation in complex ceremonies and some access to high-status goods are offered. There is some evidence that such exchanges did take place in southern Worcester County, as a burial site in Millbury, just across the watershed from Westborough, contains the complete set of "special" traits, even including a copper object. The use of steatite artifacts in the uplands could have been a trade-off for high-status goods.

We should not think of Middleborough as the end-point in this process; trade probably continued up the Taunton River and across into the North River and Weymouth Fore and Back Rivers to Boston Harbor, and then up the coast. Some of this material may have then moved upstream along the Merrimack River and its tributaries, to a well-documented center at Mansion Inn in Wayland.
Westborough quartzite in sites in the Blue Hills and Blue Hills felsite in Westborough sites. Quartzite is also present in Middleborough assemblages during this earlier phase, but it was hardly used at all in the Transitional Archaic. This suggests a possible reason for the absence of “special” goods in Westborough during this phase: they lacked steatite, and the quartzite was no longer in demand.

This, then, is the argument for the center-periphery model in the Transitional Archaic. Middleborough was dearly a center area, gifted with a mild climate and abundant water resources, and river flood plains that could conceivably have been used for gathering wild seed plants. In the developing social inequality of the Transitional Archaic, some of its residents in these favored areas enjoyed the privileges associated with center centers: enhanced status, special, exotic artifacts, and special treatment after death. There are also sites in Middleborough without burial materials or special goods, but these were located at a greater distance from the rivers or ponds, and these may have been part of the center periphery: geographically and economically tied to the center but not enjoying its privileges of status.

Sites in the uplands related to the steatite extraction industry, especially those at which ceremonial burials are found, may be characterized as periphery centers. Their inhabitants supplied the wealthier lowlanders with the finished products of steatite needed for their economy, and in return may have received enough of the benefits to be able to host an occasional ceremonial.

However, Westborough, at the extreme southwestern limit of the Merrimack drainage, received little if any of this material and remained on the outskirts of the Periphery. With essentially nothing to offer the lowlands of economic importance, it became a place of cultural conservatism for the rest of prehistory. Whatever relationship the Transitional Archaic inhabitants of Westborough may have had with their immediate neighbors to the southwest, it was not a relationship between equals; they were not participating in managing the exploitation of steatite, and they were therefore not in a position to benefit from this activity economically, either by trade of status goods and ceremonies, or the new foodstuffs. The model would predict that they were involved in the actual extraction of steatite, which was a labor-intensive and potentially hazardous undertaking.

In other parts of the world, the inception of elites and economic strategies based on exploitation was often followed by rapid growth into complex societies sustained by an agricultural economy. This clearly did not happen at this point in New England prehistory, so we must consider a second alternative: collapse. The succeeding Early Woodland period (2500 - 1500 years ago) saw a dramatic reduction in both the complexity and frequency of ceremonial burial practices in the region. With a few exceptions, burials from this time up to the first century of European contact were plain and accompanied by few if any special grave goods. Trade in exotic stones was leveled out across the region as compared to the preceding period. The regional materials which were so important to the Transitional Archaic continued to be produced at the same rate in Middleborough but were much diminished in Westborough. Steatite production appears to have ceased after about 700 B.C., except for smoking pipes. In addition, the average location of sites within drainages and the absolute re-number of radiocarbon dated sites decreased markedly throughout the region around 2600 years ago. Some authors think this indicates a population collapse to concentrated coastal settlements. But Middleborough sites continued in the traditional center areas, very similar to the Transitional Archaic settlement patterns. Most of the Westborough sites of this phase appear to be multi-seasonal camps with high proportions of local stones, including inferior granites. The sites were closer to the centers of the lake basins, and in general have an inward-looking character. This evidence does not support the theory of a population collapse, but a shift in the relationship between uplands and lowlands from dependency to greater isolation. To paraphrase Yeats, the center did not hold.

Curtiss Hoffman is Professor of Anthropology

Illustrations by Molly Sullivan