

11. Material Indicators of Territory, Identity, and Interaction in a Prehistoric Tribal System

John M. O'Shea and Claire McHale Milner

Abstract

Tribes are flexible systems for organizing population within defined territories in the absence of hierarchical structures of social and political control. The ability of such organizational forms to accommodate very different structural poses over time while maintaining their overall coherence makes them adaptively robust and a potential springboard for evolutionary change. These changing spatial configurations generate archaeological signatures that can reveal a great deal about the organization and workings of the past society. The late prehistoric Juntunen Phase of the upper Great Lakes region provides an example of a tribal social formation in which population adopted markedly different patterns of aggregation or dispersal on both a regular (seasonal) and episodic basis. In this paper we examine some of the differing social and spatial scales that are represented in the regional archaeological record. We first describe the larger scales of social integration that were formally demarcated within the Juntunen tribal system and then consider how common classes of material culture are patterned by the differing spatial scales of interaction.

Introduction

At its most essential, tribal social organization is a means of predictably organizing people within a defined territory. In contrast to Earle's (1997) definition of chiefdoms (i.e., a centralized organization of population within a territory), tribal organization lacks the strong central organizing mechanisms of the chiefdom, and instead relies on a variety of 'lateral' mechanisms, (kinship, ideology, cosmology, language, etc.) to structure and coordinate the autonomous communities that constitute a tribe (Tooker 1971; Whiteley 1985). At the same time, tribes share with chiefdoms, as

distinct from simpler bands, a greater absolute size and a firmer definition of territoriality and corporate ownership.

Tribal organization is inherently fluid and flexible. This fluidity is expressed in the degree to which individuals and communities may choose to affiliate with, or participate in, the tribal organization. It is also apparent in the varying ways that population can be distributed within the bounded territory over time. Societies organized as tribes, or as autonomous villages within a tribal confederacy, often exhibit changing patterns of spatial organization. This variation can take many forms. It is most commonly observed as a pattern of regular seasonal moves over the course of an annual cycle (see, for example, Blakeslee, this volume, Chapter 10). At the other extreme, change in spatial organization may occur over long spans of time, reflecting a major reorganization and relocation of population (see, for example, Parkinson, this volume, Chapter 18). Change of this type may, itself, be cyclical, as in periods of aggregation and dispersal of population, or directional, reflecting a permanent change in the relationship between population, society and geography (cf. Minc and Smith 1989). Tribal segments may also shift their spatial configuration episodically over shorter time scales. These changes are often responses to short-term fluctuations in local circumstances or resource availability. Change in spatial distribution is necessarily accompanied by social accommodation and restructuring, as population disperses or aggregates in targeted seasonal postures, or irregularly in response to unexpected stresses or opportunities. Perceived in this light, the flexibility inherent to tribal organization can be seen as both a major adaptive benefit and as a potential seedbed for evolutionary change.

Yet, organizational fluidity is only advantageous if the system also maintains predictability and coherence; i.e. integration. Individuals and

communities must be able to reliably predict the actions of others within the tribe. A tribesman must know how he will be received when he visits another community, and the community must similarly be able to predict the likely course of events when they host or travel to another village in times of plenty or in times of famine. Without this predictability, the ecological and social advantages of tribal organization disappear.

How do you maintain predictability and coordination among autonomous communities? This is where the lateral integrative mechanisms of kinship and ideology come into play. Together they provide a cognized floor plan that describes the cosmological origin and interrelationships among the people and their lands, a shared knowledge base of experiences, and norms of proper situational behavior (cf. Ardener 1981; Rappaport 1979; Sobel and Bettles 2000). It is the existence of this plan, which circumscribes the social and spatial parameters of alternative tribal postures, that provides the essential integration and predictability to the social system. This plan, which is latent in the ideological structures of the communities, is maintained regardless of whether a particular alternative pose is actualized during the lifetime of any given individual. In time of need or opportunity, a shared and legitimized expectation for how the constituent groups should behave and interact is readily found in the ideological sphere.

In essence tribal systems must regularly solve two opposing problems: large-scale integration and local differentiation. To maintain the integrity and functioning of the larger tribal confederacy, it is necessary to maintain ideological and social mechanisms that will promote the tribal identity beyond the range of normal, face to face or familial connections. Common ancestry, language, kinship and cosmology contribute to the creation and maintenance of such an identity. Material culture is frequently used in this role as well, marking group and individual identities in a visible and tangible way (Wiessner 1983, 1984). At the local scale, autonomous communities existing within a tribal confederacy often demarcate their territory and assert their specific identities and resource claims, but without threatening the fabric of the whole.

Several aspects of tribal organization make it particularly amenable to archaeological study. First, since tribal organization is essentially a system for predictably organizing population within a landscape over time, there will inevitably be material representations of this patterned activity (Holl 1993). Secondly, since the archaeological record is

cumulative, the distinct spatial and organizational poses adopted by the society will all be represented. In essence, where a living observer might only see one particular organizational mode, the archaeological record will contain traces of all of the poses that have been actualized by the society. While it remains the archaeologist's task to unravel the palimpsest of differing organizational patterns, the traces themselves are there to be recognized in the record.

A third advantage lays in the role that material culture plays in marking and maintaining social relations in tribal societies. Material objects, whether personal tools, houses, burials or monuments can all play an important role in establishing identity, asserting rights of ownership, and signaling membership in corporate units (cf. Stevenson 1989). To the degree that these important messages and relationships are encoded in material objects, they too may be represented in the archaeological record. Furthermore, since the importance of material objects in denoting personal and group identity increases at greater social distance, i.e., the less frequent the face to face contact (cf. Wobst 1977, 1999), material symbols may provide particular insight into the larger scales of tribal identity and membership (cf. Welsch and Terrell 1998). At the same time, material culture may also provide information relating to patterns of interaction and learning that may not have been intentionally encoded by the past communities (cf. Sackett 1982), or which may only have been recognized by a specialized subset of the population (Wiessner 1983). This aspect of the material record is also accessible to archaeological analysis.

In the balance of this paper, we describe several levels of spatial organization that were regularly signaled in the late prehistoric Juntunen system of the upper Great Lakes. The unique cultural and ecological context of the Juntunen populations provides a particularly useful case for examining the archaeological representation of a flexible tribal system. The late prehistoric period also represents a time frame within which a relatively stable territorial system can be viewed without the confounding influence of European contact or interaction with other socially complex polities. Following a brief overview of the Juntunen system, we will describe how significant scales within this system were given material expression by the Juntunen people, and then consider how these and other scales of social interaction and identity are manifested in other common classes of archaeological material.

The Juntunen Phase

The late prehistoric Juntunen Phase in the upper Great Lakes derives its name from the Juntunen site, (20MK1), a multi-component fishing camp and ossuary located on the western end of Bois Blanc Island in northern Lake Huron (McPherron 1967a). The Juntunen phase traditionally dates from the beginning of the 13th century and continues, at least in its material form, until the time of contact (Milner and O'Shea 1990). The main site occurrences stretch from the region around the northeast shore of Lake Superior and Sault Ste. Marie, through the Straits of Mackinac south along the lacustrine zone to roughly the Au Sable River in northeastern Lower Michigan, and eastward on the northern Lake Huron shore and islands as far as Manitoulin Island (Fig. 1). Although the sites of the Juntunen phase are relatively limited in their spatial distribution,

Juntunen type ceramics are found over a much wider area.

The unique coastal focus of the Juntunen distribution is a product of a complex subsistence system that coupled hunting, gathering and fishing, with the cultivation of maize. While hunting, gathering, and fishing were long practiced in the region, maize appears to be a relatively late addition to the diet (cf. Crawford et al. 1997). Nevertheless, during the Juntunen phase, isotopic evidence suggests maize contributed significantly to the diet (in the range of 14-18% of the total dietary intake, Brandt 1996). The viability of maize cultivation was, in turn, strongly influenced by the micro-climatic influence of the Great Lakes. This phenomenon, known as 'lake effect', produces an ameliorated climate and a significantly lengthened growing season in those land areas adjacent to the Great Lakes (cf. Albert et al. 1986; Phillips and McCulloch 1972). This climatic effect increases the effective

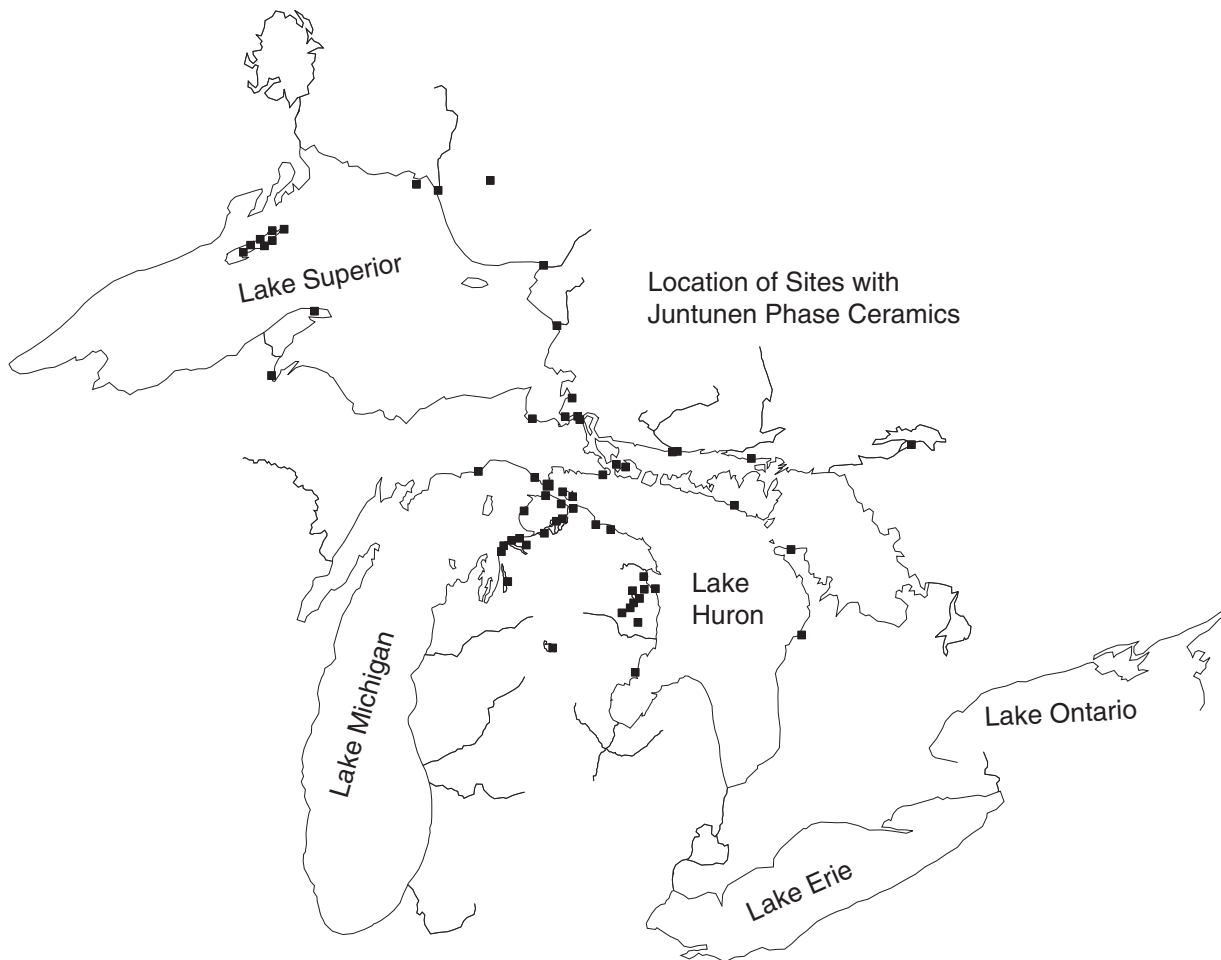


Fig. 1. Map of Juntunen territory and site distribution.

growing season to 120-140 days, (compared with an average regional growing season of 70 days inland) enabling acceptably reliable maize cultivation to take place (USDA 1911). The regional distribution of Juntunen Phase sites closely mirrors the area of significant lake effect around the margins of the upper lakes.

While maize could be grown successfully in the coastal areas, cultivation still entailed substantial risk. The intensively agricultural Hurons in northern Ontario experienced frequent failures (Heidenreich 1971; Trigger 1987). For example, during the period AD 1628-1650 when accounts are provided by Jesuit observers, the Hurons experienced severe crop failure one in every three to six years (O'Shea 1989:64). The character of this risk can be illustrated by considering historical data on crop yields during the earlier half of this century (prior to the introduction of high productivity hybrids) along the western Lake Huron shore area (Fig. 2). During the 34 years between 1909 and 1949 for which records are available, the average yield of corn from Alcona County farms was 28.9 bushels per acres, yet the actual yield values exhibit a series of sharp peaks and troughs, ranging from a maximum value of 48 bushels per acre to a minimum of 12 bushels per acre. This pattern of extreme interannual fluctuation in yield is a hallmark of agriculture when practiced in marginal settings. The potential yield does not significantly decrease, but variability in yield from year to year becomes more pronounced.

A second important aspect of upper Great Lakes agriculture, which has a major impact on the Juntunen system, is the pattern of *spatial variability* in productivity. While maize yields are similarly variable in adjacent areas, the timing of good and bad years is not strongly correlated (Table 1). For example, the correlation of annual maize yields between Alcona and Iosco County (the county immediately to the south of Alcona) was only 0.32 which, in terms of predictability, means one can only explain about 10 percent of the yield of one county by knowing the value of the other county. The correlation between Alcona and Alpena County (the next county to the north) is somewhat stronger at 0.68, but which still predicts less than 50 percent of the variation in values between the counties.

The significance of these weak correlations for a subsistence cultivator is that your 'bad year' often will not be a bad year for your neighbor. As such, social relations that interlink farmers throughout a region can level out shortages result-

ing from poor local harvests. In regions exhibiting more homogeneous patterns of good and poor harvests, such a social strategy would have been of limited value (cf. Halstead and O'Shea 1982). In essence, the Juntunen communities were tied both to the lake effect zone of the major lakes and to a spatially extensive network of relatives and trade partners.

Since the Juntunen settlements were confined to the relatively narrow lake effect zone, the rudiments of their territories and exploitation zones can be approximated with some confidence. In northeastern lower Michigan, for example, exploitation areas would have been anchored on the Lake Huron shore and extend inland following the region's major waterways (Cleland 1992) to the edge of the lake effect zone (Fig. 3). An estimate of the size and likely population composition of band territories in the region are derived from the spatial extent of probable exploitation zones as well as from evidence for field size and storage capacity (Table 2) (O'Shea 1988). Since these territories are parallel to one another along the Lake Huron coast, each band would share the same configuration of neighbors and boundaries. Each would interact with adjacent Juntunen bands to both the north and south. Likewise, each territory would have shared an 'international' boundary at the Lake Huron shore along which interaction with Iroquois populations from the east occurred; and a less distinct inland boundary, which may have served as the zone of contact with inland hunter-gatherers. Given this configuration of spatial relationships, distinct kinds of expected interaction and social marking can be anticipated in each direction.

The Juntunen tribal system can be visualized as a nested series of progressively larger interaction zones (Table 2). At its base, the Juntunen system appears to be composed of very small residential units, in the range of 30 persons (possibly 4-6 families). The location of these settlements shifted regularly as differing wild and domesticated resources were sequentially exploited over the course of the year.

Three to four such residential groups occupied immediately adjacent, and possibly even overlapping, areas in what constituted a band territory. The band territories, as presently modeled, average about 1250 km² (compared with a total Juntunen system that is on the order of 17,000 km² in area), oriented perpendicular to the Lake Huron shore (Fig. 3). These territories, each containing on the order of 125 persons, probably equate with the areas of local exchange.

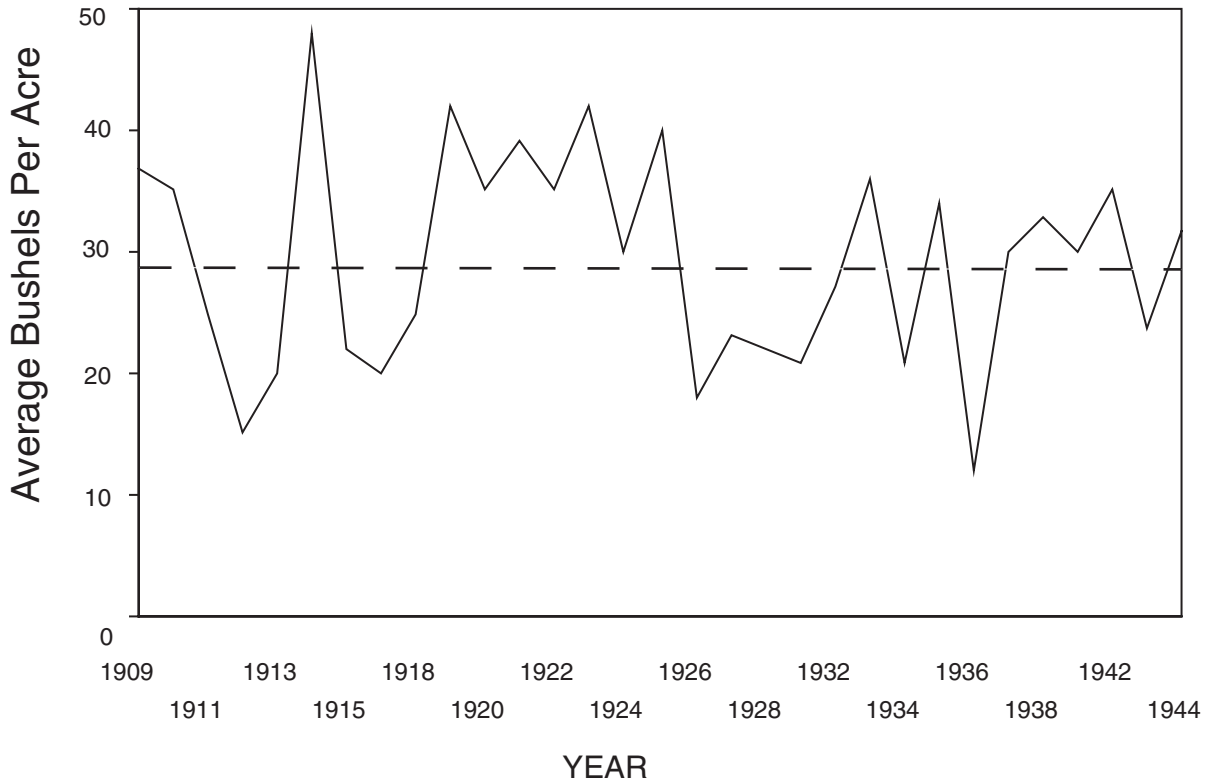


Fig. 2. Historic maize yields in Alcona County, Michigan.

Table 1. Correlation of annual maize yields by county, 1909-1949.

County	Correlation (r)	Explained Variance (r ²)
Alcona–Alpena	.680	46%
Alcona–Iosco	.323	10%
Alpena–Iosco	.543	29%

This local level would be the most commonly utilized scale of interaction beyond the residential group, itself. Interaction between the small residential units would be common. Such groups may have seasonally aggregated for resource harvesting and would presumably be the first to be called upon in the event of local scarcity. In addition, they would have been an important source of both mates and manpower for cooperative undertakings. Such interactions were undoubtedly structured through ties of kinship and marriage, although as McClurken (1988) notes for the historic era Ottawas, such ties were extremely fluid and opportunistic in nature. Furthermore, they probably necessitated few formalities to legitimize and maintain the relationships.

Above the scale of the band territories, there is evidence to suggest interaction at the level of the macro-region and beyond. Within the Juntunen system, this higher level, termed here the tribal level, in fact may not truly have operated at the scale of the Juntunen system as a whole, but rather as northern and southern macro-regions (see discussion of ceramics below). Large numbers of people from these macro-regions aggregated periodically at particular localities for ritual activities, such as those surrounding secondary burial in large collective ossuaries. Since relatively large numbers of people would have to be provisioned, the range of potential locations for such aggregations was probably limited to areas with extremely abundant fish resources, such as the Straits of Mackinac

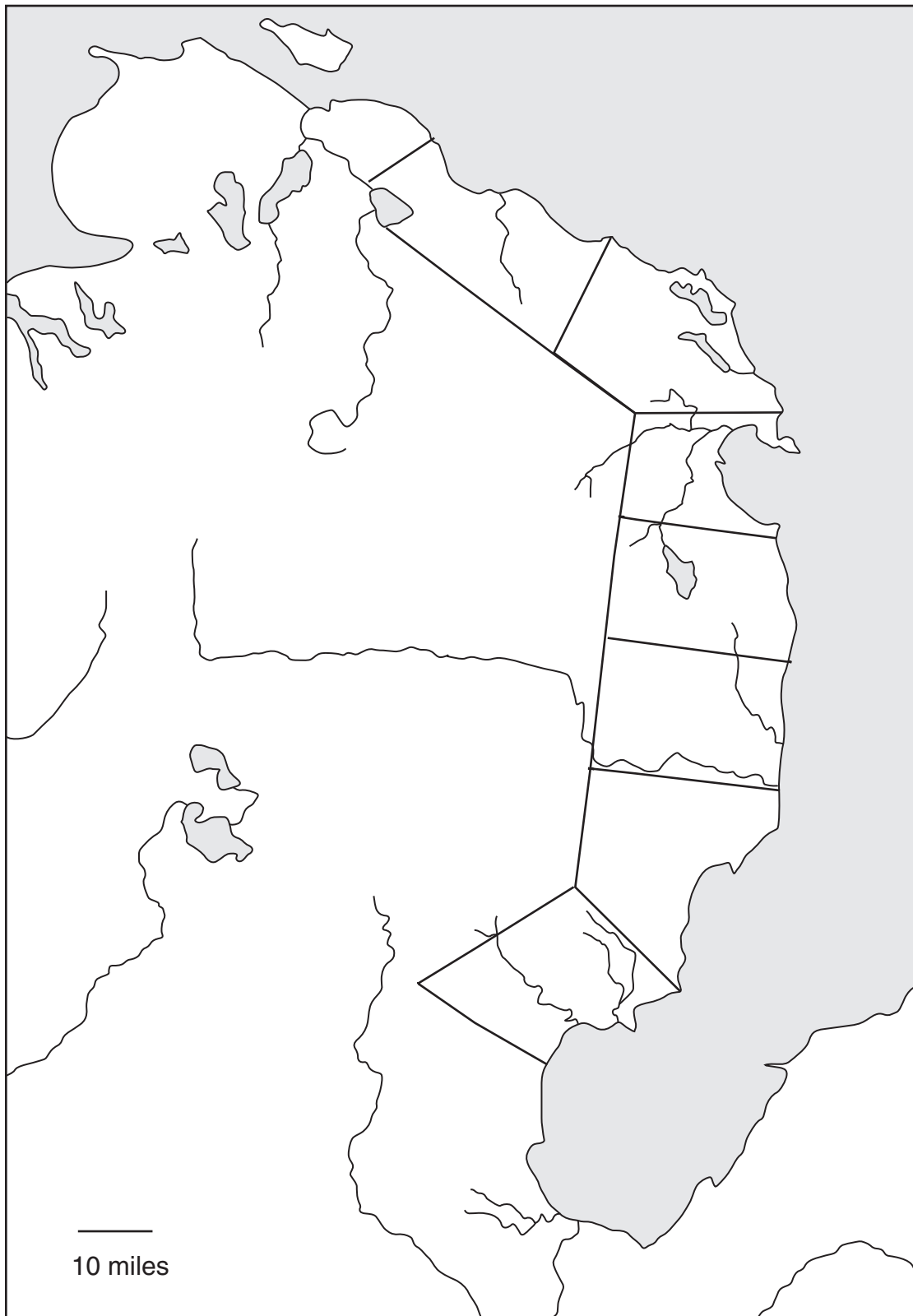


Fig. 3. Modeled Juntunen band territories in northeastern lower Michigan.

Table 2. Organizational scales within the Juntunen tribal system.

Social Scale	Spatial Scale
Residential Unit (30 persons)	Settlement Locality (280-420 km ²)
Band (125 persons)	Band Territory (1250 km ²)
Inter-Band (375 persons)	Adjacent Territories (3750 km ²)
Tribal (1500-2000 persons)	Major Aggregation Sites, Tribal Territory (17,000 km ²)
Inter-Tribal	A Large Area

and Sault Ste. Marie. At these localities, the limiting factor on resource exploitation is labor for harvesting and processing the catch, rather than the abundance of the resource itself (cf. Cleland 1982). As such, relatively large autumn and winter populations could be provisioned without serious ecological consequences.

A second important feature of these aggregation sites was their potential for leveling out more serious episodes of resource failure, which might overwhelm local and regional buffering mechanisms. Such a movement of people at the tribal level was more deliberate, entailing the movement of large numbers of people, perhaps whole bands, and would accordingly have been accompanied by greater formality. Although such locales provided a potential fall back in years of serious agricultural shortage, there were limits to the density of population that could remain in these places for any length of time. Similarly, a band that was forced to relocate would be vulnerable to loss of the permanent facilities and fields that existed in their home territory, and would have had a strong incentive to return as soon as possible.

Regular interaction also occurred at the intertribal scale during the Juntunen Phase. While intertribal exchange may, in some instances, have occurred over smaller distances than tribal contacts, they were set apart by the different character of the interaction and by its likely content. In the case of the historic era Huron of Ontario, trade outside of the confederacy had a strongly complementary character; exchange was employed to acquire goods or materials that were locally scarce or not available (Trigger 1985, 1987; G. Wright 1967). These exchanges, however, were not exclusively complementary and included a wide range of bulk foodstuffs. The exchange of complementary goods and durable items served to regularize and maintain these foreign linkages over time (cf. Ford 1972; O'Shea 1981).

Given the linear arrangement of Juntunen territories, the focus of intertribal trade would vary depending on placement within the Juntunen territory. In the southern portion of the Juntunen distribution, for example, exchange appears to have linked Juntunen populations with both more intensively agricultural peoples in the Saginaw Valley to the south, and with mobile hunting-gathering groups living in the colder interior of the Lower Peninsula of Michigan. Similar connections linking Juntunen settlements with other agricultural and forager systems would have existed throughout the Juntunen area, although the specific directions and areas articulated would have been unique for each locality.

The Juntunen tribal system can best be understood as a loose series of small social units that during normal years shifted from subsistence focus to subsistence focus within the limits of a defined home territory. During years of scarcity, these groups might move considerable distances and aggregate into large elaborate encampments, and then return again to their small settlements. Such a system would obviously imply different kinds of interactions at differing social scales. Within a band territory, or even between adjacent territories, we would expect there to be a fair degree of regular, face to face contact, as well as significant levels of intermarriage and immediate kin relationships. At larger social and spatial scales, relations would presumably be more formalized, relying less on direct prior contact and more on conventions and tribal ideology. Nevertheless, prolonged contact among individuals at these aggregation sites would no doubt also have repercussions in terms of friendships and future trade partnerships.

With this brief introduction, we can now turn to consider how natural features, built structures and portable material culture were used to denote and facilitate the operation of the regional system. In much of the discussion that follows, observa-

tions from northeastern Lower Michigan, and the Hubbard Lake region in particular, are used to represent the regional operation of the Juntunen tribal system. In the later discussion of material culture patterning, the entire Juntunen distribution is considered directly.

Marking Tribal and Local Identities within the Juntunen System

In a tribal system such as that described for the late prehistoric Juntunen system, material culture can represent differing levels of interaction and integration both overtly and passively. By overt, we mean the intentioned and conventionalized use of material markers to designate identity, boundaries and ownership. Such overt uses would be recognized by most members of the society, and possibly even by individuals outside the tribal system. By passive use, we mean identifiable distinctions that arise as a result of regularized patterns of interaction but which were not specifically created to communicate distinction or identity. Passive markers may, at a very fine scale such as the individual maker, have been designed to express ownership or maker, but such markers would have only been recognizable to a small segment of the total population, and as such could not have performed a meaningful role in asserting group identity or membership (Wiessner 1983).

In this distinction between overt and passive use of material culture, we are in one sense returning to the distinction between functional and isochrestic variation discussed by Sackett (1985) and Weissner (1985). Our focus, however, which is explicitly concerned with integrating differing social and spatial scales of interaction, renders moot some of the issues in that earlier controversy. For instance, a single category of material may simultaneously express overt meaning at one level of scale and passive variation at another. Our purpose here is not to further engage in that particular debate, but rather to illustrate how these different kinds of patterning in material culture are represented in the record of the Juntunen tribal system.

Overt patterns of identity and boundary marking in the Juntunen system occur at three levels: the level of the tribal confederacy as a whole, the level of the macro-region, and the level of band territories. At the apex of the hierarchy is the demarcation of the tribal system as a whole. Ceramics are particularly useful in this role since they provide a visible and highly malleable medium for

the creation of such messages. Since they also have a relatively short use life, the designs must be regularly reproduced as new vessels are made, reinforcing the immediacy of the identity.

The second scale at which intentional identity marking is observed is the level of the macro-region. Such marking behavior is actualized at aggregation localities where individuals without prior face-to-face contact must reside and cooperate under potentially stressful conditions. These sites are the locations on which the critical success or failure of the system rests. The extreme importance of these localities suggests that a broad range of cultural, ideological and material means to ensure acceptance and cooperation should be exploited (cf. Smith 1996:283). These are the locations where meeting rituals, including collective ossuaries, will occur and in which material symbolism of mutual identification is expected.

The third scale at which overt identity marking is observed is at the level of the band territories. Given the necessary orientation of these territories, each band would share a common boundary with two other Juntunen bands, an 'international' border with anyone traveling along the shore of the Great Lakes, and a less distinct interior boundary, potentially shared with non-agricultural forager groups. These boundaries were created via a combination of built structures and the ideological incorporation of major nature features. Together these produced a cultural landscape that was at once distinctive and recognizable.

Natural Features and Built Structures in the Demarcation of Tribal Boundaries

Over much of the Juntunen site distribution, and particularly in its southern extent along the western shore of Lake Huron, the region lacks the major outcrops or rock faces, which might be utilized for marking territories via rock art or representation (cf. Dewdney and Kidd 1962; Zurel 1999a). As such, other kinds of features were used to demarcate space. In character, these features would need to be analogous to rock art in the significance of their location, their visibility and their relative permanence. In northeast Lower Michigan, such marking was achieved via a combination of built structures and named natural features, which provided a cultural annotation to the natural landscape.

The most striking expression of the blended use of natural and built features is found along the

Lake Huron shore, itself. The shores of the Great Lakes provided for a level of population movement and goods transport that was simply not possible in most inland areas of North America. If early European accounts are any guide, native transport technology was well developed and extensively utilized (cf. Morse 1984). Travelers, however, seldom struck across open water; they usually opted for the comparative safety of coastal waters. In the absence of formal navigational charts or maps, the recognition of landmarks was of great importance.

The lakeshores provided many obvious landmarks; river mouths, spits, points and bays. The addition of constructed features, such as mounds, offering stones, marker rocks and built enclosures, transformed the coasts into a cultural landscape, signaling collective claims of identity and ownership (Hinsdale 1931). For example, the cultural annotation of the natural lakeshore features along the western shore of Lake Huron is striking (Fig. 4a). Mound groups are located on a number of these natural features. Along stretches of the lakeshore where prominent natural features are lacking, named 'sacred rocks' seem to perform a similar function. The lakeshore is also annotated by the presence of 'offering stones', which again tend to occur on prominent features. In effect, the important 'international' boundary represented by Lake Huron, was rendered meaningful by layering a cultural veneer over the top of highly visible natural features.

Many of these same elements, such as enclosures and mounds, were employed to mark other kinds of boundaries as well. For example, elaborate built stone enclosures were constructed at the northern and southern ends of Thunder Bay. Unlike the markers along the lakeshore, these features cannot be directly observed from the water. While their function and origin remain enigmatic, they may mark lateral boundaries between bands, rather than the 'international' boundary represented by Lake Huron. Earthwork enclosures and mounds also seem to have been used to denote boundaries between Juntunen bands and possibly also to establish resource claims vis-à-vis inland hunter-gatherer groups (see Fig. 4b). Each of these categories of markers is briefly described below.

While waterways and major shoreline features appear to have figured prominently in Juntunen territorial marking, they were not the only natural features utilized in this role. A series of large glacial erratics along the Lake Huron shore were accorded particular significance by local inhabitants as noted in early histories of the region (see Fig. 4a).

These include the 'White Rock' near Presque Isle and the 'Black Rock' near Greenbush. Both are large isolated boulders that stand on the beach near the water's edge. In the case of the White Rock, at least, the boulder was annotated with pecked images. The location of these two named boulders is interesting, since both occur on long featureless stretches of the lakeshore and are easily visible from the water. There were, no doubt, other isolated boulders along the lakeshore that were significant, but no record of their location and importance survives. Indeed, the existence of the White Rock is only known through photographs taken by Wilbert Hinsdale in the 1920's (on file UMMA). Hinsdale also reported seeing offerings placed on White Rock during this visit, suggesting that the stone retains an ongoing importance to at least some local inhabitants.

A related category of marker is offering stones (sometimes termed Manitou stones). McKenney, in his tour of the Great Lakes in 1826, provides a striking description of one such offering stone that was located on North Point on Thunder Bay:

It is about one hundred yards from our encampment [on North Point], and forty steps from the beach, in a thicket of pine and spruce, and aspen. The place is cleared of all kinds of undergrowth, and is of an oval figure, about twenty feet by ten feet, in the longest and broadest parts. In the center of it are about twenty stones, four of which are larger than the rest; and each of these, I should judge, would measure three feet every way. The path leading to this sacred place is well trod by those who come to make their offerings to this pile of stones, *which is the manito!* Upon the four principal stones were the offerings of these benighted people, in tobacco, bits of iron, pieces of old kettles, pipes, and various other things. The four large stones the Indians said had been there always, and the little ones had gathered around them since. McKenney 1972:330 (emphasis in the original)

A portage camp was found in this vicinity during archaeological survey, although the shrine was not relocated. A similar offering stone is traditionally attributed to the top of Mount Maria at the south end of Hubbard Lake. Early historians claim this stone was hollow, covered by a stone lid, and possibly incised on one side with a face. According to local traditions, offerings were placed within the stone's hollow compartment. The existence of such shrines is relatively common among Algonquian peoples, and it is likely that many more once existed in the region. Unlike the prominent named

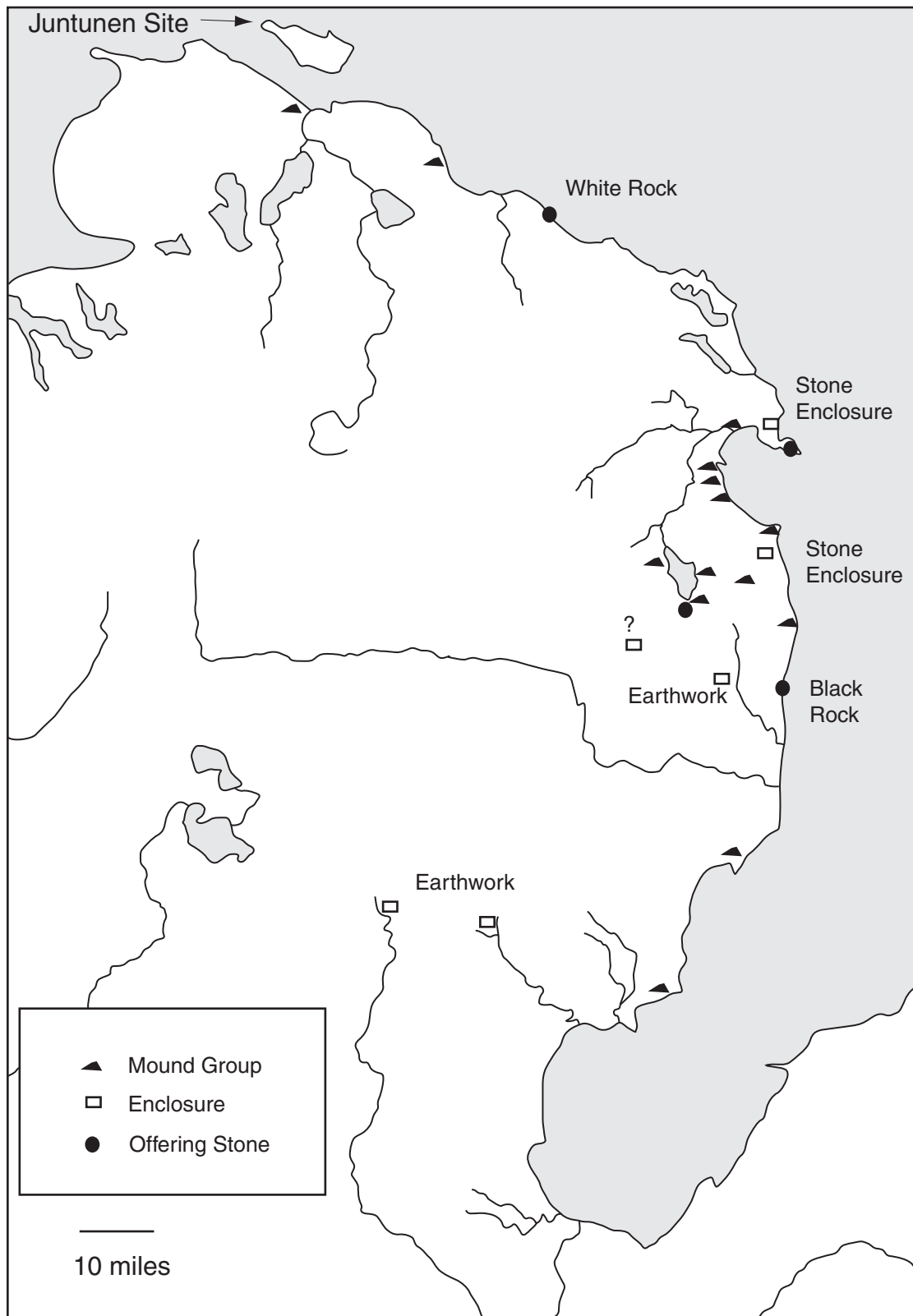


Fig. 4a. Distribution of built markers.

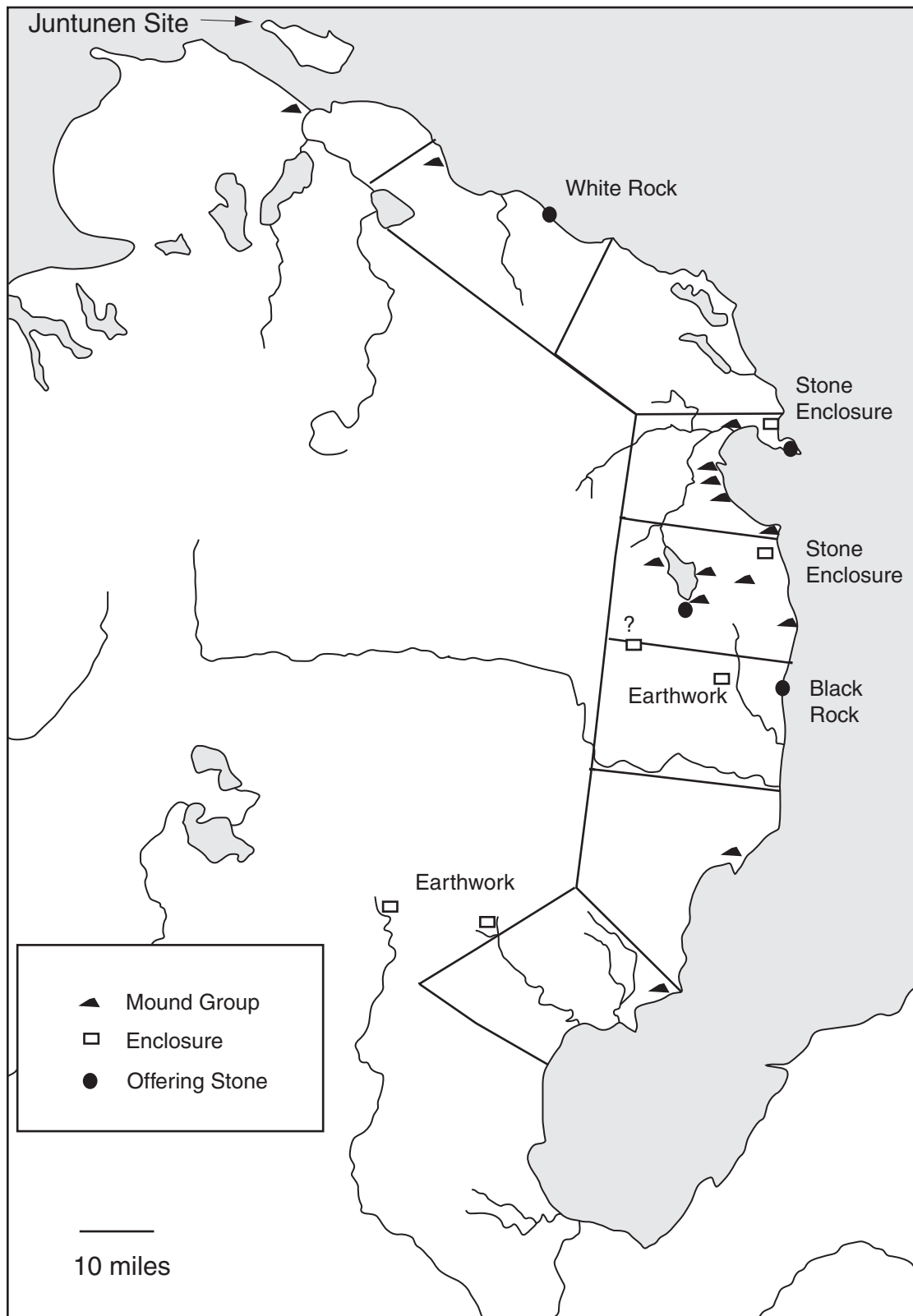


Fig. 4b. Distribution of built markers relative to modeled band territories.

rocks, these latter two offering stones both are sited in locations that would not be directly visible from the water, although by virtue of occurring on major topographical features, they would have been easy to locate.

Possibly related to the offering stones are hollow stone cairns, which are recorded in a number of locations in the coastal areas. Constructions of this kind are known from Drummond Island where they appear to have functioned in historic times as burial receptacles (Charles Cleland, pers. comm.). Yet cairns of this same form have been observed on the western Lake Huron shore and do not appear to have contained human remains. The hollow character of these structures raises the possibility that they may have functioned in a manner similar to the offering stones, or that they may have been used as temporary receptacles or caches. The cairns known from northeastern Michigan are associated with stone enclosures (see below).

Two classes of built structures—enclosures and mounds—may have demarcated Juntunen band territories. These built features appear to have had somewhat different functions. Enclosures—also called earthworks—tend to be roughly circular in shape with an encircling ditch. Earth was piled on the inward side to form an embankment. The northern Michigan enclosures that date to the later Woodland period range in size from 150 to 360 feet in diameter (Greenman 1927; Milner and O’Shea 1998).

There has been considerable debate about the function of these enclosures. By virtue of the ditch and bank, they were initially supposed to be defensive works. This interpretation continues to prevail for the enclosures in southern Michigan (cf. Zurel 1999b). The frequent gaps in the embankments, inconsistent occurrence of palisades, and the absence of other overt signs of violence have, however, made warfare a less likely explanation for the northern enclosures. Instead, their location, typically at the head of major watersheds, points to the possibility that they served as meeting places for ceremonies and trade (Milner and O’Shea 1998). One such enclosure that can be linked with certainty to the Juntunen system in northeast Michigan is the Mikado Earthwork (20AA5) (Carruthers 1969). Mikado is located well up the watershed of the Pine River near the point where the ‘lake effect’ would have had little effect on the growing season. However, the enclosure is in a position to facilitate exchange between Juntunen band territories, as well as with inland hunter-gatherers. While earthworks tend to occur in simi-

lar settings, e.g. on high ground near the head of branching river systems, they would not be visible at any distance within the prevailing forested environment.

A second variety of enclosure has become known only recently. These are stone enclosures, of which two are known from the western Lake Huron shore, one on North Point near Thunder Bay, and the other near South Point. These structures are represented by low linear walls of stacked stone, which enclose roughly rectangular areas. Neither stone enclosure appears to have had a ditch. Both enclosures do have hollow cairns located within and around them. During the historic period, local farmers have extensively modified the South Point structure, thus obscuring its original configuration. The North Point enclosure is more sheltered and is located in an area that has not been cultivated. As such, it provides a better idea of the overall plan of the structure. The stone enclosures are located in the vicinity of prominent landmarks, yet like the earthworks, their actual existence would not have been obvious without prior knowledge of their presence.

The final category of built structure employed in the Juntunen territorial system is mounds. The secondary function of funerary structures as territorial markers and resource claims is well documented cross-culturally (cf. Goldstein 1976). The Late Woodland mounds of the Juntunen region appear to have been used in this way. The mounds are not particularly large, rarely exceeding a meter in height, although they may occur in clusters. When such mounds have been excavated, they often reveal a sequence of single interments, which may suggest a periodic reuse or renewal of the feature and its associated cultural claims (cf. Hinsdale 1929).

Mounds are found in two settings. Along the Lake Huron shore, mounds (more typically mound groups) were a primary means of marking shoreline landmarks (see Fig. 4a). The mounds are not scattered continuously along the shore, but are clustered on key landmarks. They appear to assert both the cultural identity of the shoreline and presumably also the edges of individual band territories. The second context in which mounds occur is along inland lakes. Large lakes, such as Hubbard Lake, had at least three clusters of mounds at different places around the lake. Smaller lakes typically had only a single mound or mound cluster. These mounds do not delineate the edges of territories, but rather seem to represent specific resource claims within band territories.

A consideration of northern mounds as an element in the Juntunen territorial system raises issues of a purely chronological and cultural-historical nature. Mound burial becomes common in northern Michigan during the Middle Woodland period, and continues into the Late Woodland period. In later Late Woodland times, secondary interment in collective ossuaries becomes common, although mound burial continues to be used, at least in the upper Great Lakes. The long time period during which mound burial is practiced raises the question of the specific cultural origin of the mounds that are being attributed to the Juntunen territorial system. Unfortunately, this is an issue that cannot be directly assessed. Many of the mounds reported in the early part of the twentieth century have been destroyed or looted, and mounds that do survive to the present are rarely investigated, out of respect for Native American wishes. Among the small number of mounds that have been studied, most are of Late Woodland age. Some, such as the Devil's River mound group, can be definitively attributed to Juntunen times (Fitting 1970). This is interesting in and of itself since it implies that both ossuary and mound burial were practiced by the same cultural group. Yet, from the perspective of the territorial system, the chronological origin of a particular mound group may be less important than the geographic location it occupies.

Over time, built structures also become a part of an evolving cultural landscape. In this role, the prior constructions of earlier peoples are incorporated into new and unrelated systems of cultural meaning. This phenomenon is well known in the incorporation of Neolithic structures and Bronze Age barrows into the social landscape of late prehistoric Europe (cf. Bradley 1993). The same process of incorporation may have operated in the Juntunen territorial system. Preexisting mounds occurring in the proper location were incorporated into the Juntunen territorial system, complementing new mounds constructed by Juntunen peoples.

Two other features that modify the cultural landscape, in this case as a means of legitimizing and solidifying identification with the macro-region scale of the tribal system, are the ossuaries and long house at the Juntunen site. The large long house was constructed early in the Juntunen sequence and was repaired or rebuilt numerous times during the period of site occupation (McPherron 1967:233-236). The use of a long house is extremely interesting in this context since in

'normal' times, the Juntunen people do not appear to have dwelt in such structures (although they were presumably well known throughout the Great Lakes region). The implicit symbolism of bringing the many visitors to the site 'under one roof' in a long house must have been particularly potent. It may also have provided a living parallel to the collective symbolism represented by the adjacent ossuaries.

A second distinguishing, and no doubt highly significant, feature was the creation of a series of collective ossuaries. These ossuaries represented the secondary interment of the skeletal remains of numerous individuals. Clark (n.d.) has shown that the deposition of remains within the ossuaries was not haphazard, but rather that sets of remains were held within bark containers, which were then deposited into the ossuaries. The collection of the remains of deceased relatives, and the transport of these to the Juntunen ossuary would most assuredly have been an evocative act, as would the joining of these remains with those from the other Juntunen communities. In addition to the ossuaries, numerous ritual deposits were also encountered at the site, including the interment of a dog, an eagle and a snowshoe hare (McPherron 1967:193; for discussion on animal burials elsewhere in the upper Lakes, see Smith 1987). All of these features would have promoted an enduring and overarching identity as well as a permanent claim to place that would have persisted even in the absence of actual occupancy.

While both mound burial and ossuaries appear to have played a role in the demarcation of the Juntunen territorial system, the integration of these differing forms of funerary treatment does merit some additional comment. By the later Late Woodland period, mound burial was not the normative pattern for the disposal of the dead, this role having been assumed by the multistage collective burial system observed at the Juntunen site. Rather, mound burial appears to have been a specialized form of interment that was employed episodically (for a similar situation in southern Michigan, see Norder et al. 2002). Based on present evidence, it appears that collective ossuaries and mounds played complementary roles in the Juntunen social system. While the mounds emphasized boundaries and restricted claims, the Late Prehistoric ossuaries evoked the collective aspect of macro-regional, if not tribal, membership. For example, the Juntunen ossuary occurs at a regional aggregation site and consists of the commingled remains of individuals from throughout the

Juntunen region. These individuals were initially interned in their home territories and then, at a later point, their skeletal remains were transported to the Juntunen ossuary. The poignant symbolism of death appears to have played a role in both the long-term demarcation of local boundaries and in the assertion of tribal membership. The connection between individuals receiving mound burial and the territorial functions of the mounds raises interesting possibilities, although we cannot on present evidence specify the nature of this connection.

While the combination of built and natural features provides an interesting glimpse of the Late Prehistoric territorial system, there are obvious analytical issues. First, mounds, earthworks, and shrines are extremely vulnerable to destruction and vandalism. At best, the surviving sample of markers can only be taken as a chance remnant sample of the monuments that once existed in the landscape. Second, many of the built markers appear to have stood in lieu of distinctive natural features, such as points, river mouths, which may have been the more important and preferred markers. As such, to what extent can prominent natural features, by themselves, be assumed to have served as territorial markers or landmarks? This, of course, opens the door to tautology if a particular river or point was not redundantly marked by cultural constructions.

In the Juntunen case, we derive some assistance from the ecological constraints of the subsistence system, and from the orienting effect of Lake Huron. We also benefit from relatively recent archaeological data and the ability to draw upon historic and ethnographic sources. However, such aids will not always be available, particularly for studies of ancient tribal systems. It is useful, therefore, to consider how the dynamics of the tribal territorial system is imprinted and detectable in common categories of material remains such as ceramics and lithics.

Material Culture and Spatial Variability

To this point, we have considered natural and built features that were used intentionally and assertively to demarcate territories, resource claims, and to signify membership in the tribal confederacy. These features essentially represent the boundaries within which the elements of the tribal system predictably operated. They provide a plan for integrating and regularizing the shifting

adaptive posture of local communities. It is likely, of course, that other media of material culture performed similar roles, although probably with a less long lasting duration.

Material culture can also be expected to show the *results* of episodic patterns of aggregation and dispersal, representing the interactive side of the tribal dynamic. We term these patterns *passive*, in the sense that they were not intentionally designed to communicate meaning (and indeed may not have communicated anything beyond the identity of individual makers or procurers in the context of the Juntunen system). While not arising as a result of specific intent, various classes of material culture do show evidence for regular long-term patterns of interaction. In our discussion here we briefly describe evidence for two classes of material culture that show the effects of tribal interaction during the Juntunen period.

Ceramics

A recent study of regional variability in Juntunen phase ceramics (Milner 1998) indicates that while pottery played an overt role in demarcating the Juntunen confederacy as a whole, it also varied at differing spatial scales within the Juntunen territory as a result of long-term patterns of interaction. The highly standardized style canon of Juntunen ceramics, despite the broad geographic distribution of Juntunen pots, has been commented upon for some time (McPherron 1967a, 1967b). In fact, the homogeneity of Juntunen pottery contrasts sharply with the stylistic profile of earlier phases during which ceramic variation is minimal and occurs in a pattern that largely reflects declines in interaction among relatively mobile pot producers with distance (cf. Brashler 1981).

Claims of stylistic patterning across space, however, have rested on impressionistic comparisons between a limited number of sites. Furthermore, it has only been recently demonstrated that the Juntunen phase lasted for 400 years rather than the previously held 200-year duration (Milner and O'Shea 1990; Milner 1998). Analysis of Juntunen phase style, unfortunately, remains constrained by an uneven distribution of known sites, small and extremely variable sample sizes, and poor temporal control. Despite these caveats, a systematic look at an expanded sample of 66 Juntunen phase sites reveals an overarching regional homogeneity as well as some intra-regional ceramic variability. Indeed, the fact that these patterns were identified despite sample limitations

suggests that the data are inherently robust and can provide insight into Juntunen phase tribal organization.

During the Juntunen phase, ceramic vessels were directly involved in food preparation and consumption. The high percentage of vessels with food residues (57%; N=1063) and the wide range of vessel sizes, reaching diameters of at least 42 cm, indicate these functions. Vessels may have entered directly into feasting or food sharing activities among people who interacted daily as well as with socially more distant people. The functional data, therefore, indicate that Juntunen vessels had the potential to enter into overt communication of identity as well as carry other types of information about interaction at a variety of spatial scales within the tribal system.

The significance of tribal scale identification and interaction is reflected in the overarching homogeneity of style, the nature of clinal variation, and the persistence of the Juntunen style. Juntunen style homogeneity is evident in a wide range of stylistic variables. This homogeneity is defined by co-variation among attributes, redundancy between attributes from different levels of a design hierarchy, and strong constraints on diverse design choices including the shape and size of vessels, the number of decorative bands, and the types of design configurations placed in different design fields (Table 3). The overall simple layout of Juntunen design permits replication by socially distant members of the region, while some latitude in detail and technical attributes is retained. In fact, it is surprising that any patterned intra-regional variation was discovered considering the

remarkable adherence to relatively rigid stylistic canons.

Some stylistic characteristics vary in a clinal pattern across the region for the entire phase. Clinal variation is evident in lip thickness, shape and surface treatment; decorative technique and design configuration on the rim; and the number of decorative bands below the rim. Although this patterning may be partly due to declining interaction from community to community and movement of people among them, there is no way to discriminate among possible sources of variation with the available data. However, the steady rather than random or heterogeneous patterning across the region in multiple traits does indicate a relatively stable spatial configuration of population at the regional scale.

Interestingly, the Juntunen region can be divided into northeast and southwest style macro-regions based on diverse traits ranging from decorative techniques to configuration choices (Fig. 5). For example, sites in the northwest Lower Peninsula of Michigan, the western Upper Peninsula, and the Straits of Mackinac are characterized by higher frequencies of exterior punctate and interior decoration, and multiple rows of decoration below the collar than sites along Lake Superior and the St. Marys River. This division could be an artifact of poor sample sizes and uneven site distribution, but the number and types of variables that reflect this boundary as well as its duration for 400 years is intriguing.

The existence of these intra-tribal macro-regions is further demonstrated by the stylistic profiles found in aggregation site assemblages. People

Table 3. Constrained stylistic attributes of Juntunen pottery.

Attribute	Proportion	Number
Presence of Interior decoration	65.0	927
Presence of Lip decoration	87.1	858
Below the collar decoration	86.0	700
Punctate lip decoration	83.7	739
Horizontal linear rows of collar exterior decoration	72.0	1083
Single band of interior decoration	87.6	601
Single row of elements below the collar	70.2	598
Collars	96.0	771
Regular collar type	75.4	740
Castellations	76.6	245
Square lips	76.1	937
Smooth exterior surfaces	82.8	1051

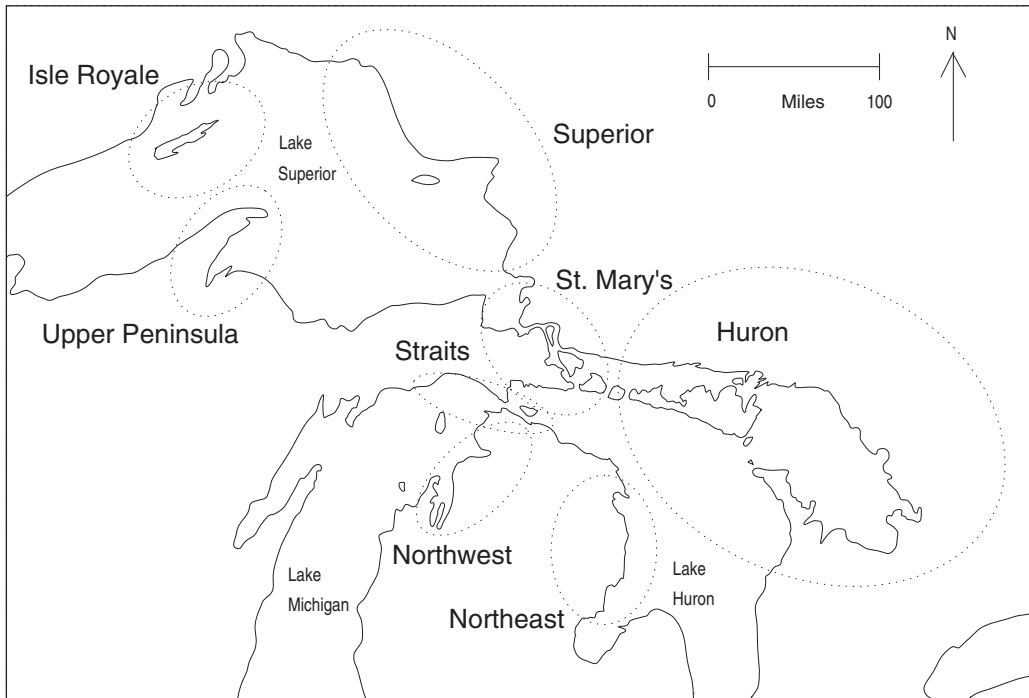


Fig. 5. Juntunen ceramic style regions.

from different local groups periodically gathered to affirm alliances that tied bands together into larger social spheres and, at the largest scale, the tribal region. The ceramic assemblage at the Juntunen site shares characteristics with assemblages from both macro-regions within the tribal region. For instance, the Juntunen site falls between the two macro-regions in percentages of round and paddled lips, and punctate exterior decoration. People from a large area with somewhat different stylistic practices were attracted to the site.

The stylistic profile of another aggregation site, Whitefish Island, suggests changes in the social use of the island (Conway 1977). Prior to A.D. 1400, the site was probably visited by small groups of people to exploit the rich fishery, many of whom came from the northeastern part of the Juntunen region. The assemblage of Juntunen pots shared most characteristics, including high percentages of square lips and thick high rims, with sites along the northeast shore of Lake Superior and sites located farther east. Numerous Iroquois vessels indicate contact with Iroquois visitors as well. Some time after A.D. 1400, however, visits by the Iroquois to Whitefish Island had a stylistic impact, seen in the increase of incised designs that are similar to those on the Iroquois type Lawson In-

cised (Wright 1973). Considering more Late Iroquois stage vessels were found at Whitefish Island than vessels from earlier Iroquois stages, it is probable that sustained intensive inter-regional contact did involve social comparison and related stylistic behavior to sustain inter-regional alliances.

Another stylistic indicator of differing spatial postures within the tribal region points to the existence of band territories. Highly visible and complex stylistic markers such as bands of obliquely oriented impressions and the presence of interior decoration that appear most often in assemblages from the northwest Lower Peninsula of Michigan distinguish one territory from all other territories in the Juntunen region. In a few cases, some relatively rare traits, such as short vertical cord impressions on short bulbous collars, occurred almost exclusively in particular areas, in this case in the northeast Lower Peninsula of Michigan, but they only occurred on a handful of vessels.

Variation between band territories is often quite subtle, occurring as differences in percentages rather than exclusive occurrences of traits. Differences in percentages of subtle, low-level traits are more consistent with passive sharing of traits due to intensive interaction within territories rather than intentional communication of band identity. Sharing of attributes reflects the exist-

ence of stable band territories comprising the region, but does not preclude the movement of small groups of people locally. Unfortunately, known archaeological sites are scattered so thinly across the region that possible variation in minor elements and technical attributes due to differential interaction among local communities is difficult, if not impossible, to isolate. Regardless, the same vessels may be decorated with subtle or minor traits resulting from intensive interaction within bands as well as more visible stylistic markers that may indicate assertion of band membership.

Several unexpected ceramic patterns have been identified that point to the role of inter-regional contacts in tribal organization. First, attributes varying at the scale of the band territory were often derived from contact with extra-regional populations that participated in different ceramic traditions. The results were not failed attempts to copy all stylistic attributes of other traditions, but particular elements or layouts were translated to fit into the overall Juntunen style grammar. For instance, oblique band motifs and horizontally oriented configurations with more than the usual number of rows, all made with cord impressions, characterize Juntunen phase pots found on sites in the western reaches of the Upper Peninsula of Michigan. These characteristics are typical of Wisconsin ceramic tradition pots (Hurley 1975; Salzer 1974). However, Juntunen potters on the Upper Peninsula of Michigan did not adopt the markedly different collar and castellation shapes of the foreign ceramic tradition.

Second, territories that lay along the Juntunen region's perimeter, such as the northwestern quadrant of Michigan's Lower Peninsula and the northeastern shore of Lake Superior, were stylistically more distinctive than other territories. Potters in these territories frequently adopted extra-regional traits that were different from or were minor occurrences in other Juntunen assemblages. In contrast, assemblages from sites along the Straits of Mackinac that lay near the geographic center of the region tended to split stylistic differences between neighboring territories and had far fewer unique characteristics. Obviously, the range of stylistic variation to which groups were exposed was different.

There was also considerable variation in the amount of stylistic sharing across inter-regional boundaries. Similarities between Juntunen and Iroquois vessels in the St. Marys territory were myriad, while Upper Mississippian and Juntunen vessels co-occur at the Sand Point (Dorothy 1980)

and Scott Point sites (Buckmaster 1980) with little if any stylistic interchange. These patterns indicate that contacts across the region's boundaries were commonplace, although some inter-regional boundaries were more permeable than others.

Inter-regional populations continued to employ fundamentally different design structures, often placed on morphologically distinctive vessel forms. Despite this emphasis on difference, these populations obviously had interacted for many years and shared some stylistic attributes. When these populations came together, they brought these different stylistic practices or the pots themselves with them, resulting in assemblages of vessels from different ceramic traditions. The frequent occurrence of assemblages with mixed ceramic traditions in the upper Great Lakes has been recognized for years (Dawson 1979; Pollock 1975; Wright 1963, 1965). Many Juntunen phase sites have yielded vessels from other ceramic traditions, particularly sites that are located along the region's borders such as Sand Point or along major waterways such as Scott Point and Whitefish Island.

At one level, potters operated within a relatively rigid style canon that enabled the fundamental Juntunen identity to be expressed and reaffirmed across a substantial expanse of both space and time. The scale of patterning can only be accounted for via the overt and intentioned use of the ceramics as a medium to express this overarching identity. Yet, in the finer detail of vessel design and decoration, subtle patterns of stylistic variation are detected, which arise as a result of the specific patterns of regular social interaction within the extensive Juntunen territory and with adjacent foreign groups. As such, the same ceramic vessels provide evidence of both overt and passive social marking.

Lithics

The distribution of lithics, and particularly the exploitation of specific raw material sources, is a common topic of investigation, and one that has been explored extensively in the Great Lakes region (cf. Ludtke 1976; Janusas 1984; Fox 1990a; 1990b; Lepper et al. 2001). It has been argued, for example, that the distribution of raw materials in lithics typically will be more informative of local territories, while stylistic elements in other materials, such as ceramics, may be expected to reflect more the movement and interaction of people (cf. Wright 1965). Given its large regional extent, differing portions of the Juntunen system have dis-

tinct local sources of preferred materials. As such, they should exhibit distinct patterns of preferred local cherts and also should exhibit different representation of 'exotic' cherts. This offers the potential for detecting not only the limits of regional provisioning areas, which should overlap local band territories, but will also have the potential to reveal interaction with other macro-regions via the distribution of exotic raw materials.

Before this patterning is presented, though, several caveats are in order. The total number of identified Late Prehistoric sites in the study region is limited, so any patterns observed must be viewed as suggestive, rather than conclusive. Similarly, there are very few single component sites of this age and, given the shallow and sandy character of site deposits within the region, the certainty with which debitage from individual components on a site can be separated is limited. Nevertheless, basic patterns of resource use and provisioning can be discerned.

Along the western Lake Huron shore, the commonly utilized local raw materials are a Devonian chert, known as Bois Blanc or colloquially as 'northern gray', glacially derived nodules of varying size and quality, and Bayport chert, an Upper Mississippian chert with exposures around Saginaw Bay.

More exotic cherts include Norwood, from outcrops in northwest Lower Michigan, cherts from the lower Lake Huron and Lake Erie basins, such as Flint Ridge, Kettle Point, and Upper Mercer, and Wyandotte (Hornstone) from the southern Lake Michigan basin (Luedtke 1976).

Other things being equal, the fall-off in the proportion of raw materials in the lithic assemblages typically reflects two axes, distance and quality. Said another way, we expect the proportion of a given raw material present in an assemblage to be inversely related to the distance from its source, and to be positively related to its quality. Deviations from these expectations may reflect unique properties of the raw material or of the technology involved in its acquisition and distribution. It may also reflect the presence of social boundaries that may impede or facilitate distribution.

The interplay of these factors can be seen in the relative proportions of Bayport chert that are found in Late Prehistoric assemblages as one moves north into the Juntunen territory and away from the Bayport source areas (Table 4; Fig. 6a). There is a clear fall-off in the proportion of Bayport chert as one moves progressively north away from the source area. There is also a coastal effect, in which

Table 4. Bayport chert as a proportion of the entire lithic assemblage and as a proportion of all flaked stone implements.

Site	Proportion Bayport	Proportion Implements Bayport	Period	Site Type
Hampsher	16.6	21.3	Late Prehistoric	Coastal, excavation
Gordon-McVeigh	28.2	35.3	Late Prehistoric	Inland, excavation
Mikado	71.6	66.7	Late Prehistoric	Inland, excavation
Scott	35.7	59.3	Late Prehistoric	Inland, excavation
Scott	42.7	42.4	Early Late Woodland	Inland, excavation
Gaging Station	5.2	16.0	Late Prehistoric	Inland, excavation
Gaging Station	18.9	33.3	Middle Woodland	Inland, excavation
Robb	18.4	44.0	Late Prehistoric	Inland, excavation
Churchill Point	41.1	40.0	Early Late Woodland	Inland, excavation
Allyn's Camp	44.0	48.9	Archaic	Inland, excavation
Beaver Lake	42.9	33	Aceramic	Inland, surface
Calvary Cemetery	50.0	50.0	Archaic	Inland, surface
Goat Lady	26.7	42.9	Late Prehistoric	Inland, surface
Potter's Spring	30.0	40.0	Late Woodland	Inland, surface
Taylor/North Point	42.5	40.0	Late Prehistoric	Coastal, surface
South Point	88.4	66.7	Aceramic	Coastal, surface



Fig. 6a. Proportions of Bayport chert in late prehistoric lithic assemblages. The values that have a box around them represent excavated single component Juntunen sites, and the hatching represents the source area for Bayport chert. The value marked with an asterisk represents the only lithic associated with a surface site.



Fig. 6b. Proportions of Bayport chert relative to modeled band territories. The values that have a box around them represent excavated single component Juntunen sites, and the hatching represents the source area for Bayport chert. The value marked with an asterisk represents the only lithic associated with a surface site.

sites on or near Lake Huron tend to have a higher proportion of Bayport chert compared to inland sites at the same latitude. This presumably reflects an 'ease of transport' effect produced by canoe travel on the lake.

This general pattern was noted by Luedtke (1976), who observed a similar and complementary spatial fall-off of both Norwood and Bayport cherts when she compared a more limited sample of regional sites from all time periods. In the case of the Bayport chert during the Late Prehistoric Period, however, the fall-off to the north is not gradual, as would be expected for simple distance decay, but rather is stepped. Furthermore, these steps broadly correspond to the marked territories of Juntunen bands (Fig. 6b). This pattern suggests a third axis of variation, reflecting the influence of relatively stable territories on the distribution of chert. As a check on this conclusion, the spatial distribution of Bayport was considered for sites predating the Juntunen Phase in the same region (Fig. 7). These site assemblages also show a significant fall-off in a northerly direction, but the fall-off is both smoother and of lesser magnitude than is seen in the Late Prehistoric Period. This form of distribution makes good sense if the earlier hunting, gathering, and fishing societies were more wide ranging in their pattern of resource exploitation and were not participating in a tribal system with smaller and more stable social territories.

The regional distribution of cherts within the Juntunen system is consistent with the expectation for passive material marking. Juntunen sites along the western Lake Huron shore exhibit a 'stepped' fall-off in the quantities of Bayport chert in the assemblages, along with a progressive restriction of the use of Bayport chert for the manufacture of durable, curated tools. In northwestern Lower Michigan, a similar pattern of fall-off is observed, but with Norwood chert rather than Bayport as the preferred high quality local material (cf. Lovis 1973; Hambacher 1992). In addition, the more distant of these chert types, Bayport in the northwest and Norwood in the east, occur regularly in low quantities (in the range of 1 to 5 %) as exotic materials used for the manufacture of durable, curated implements.

While fall-off from a source area, or the wide ranging distribution of materials as exotics, are hardly earth shaking discoveries in the Great Lakes region, the more subtle effect that band territories produced on lithic distribution is much more interesting. The pattern, in all probability, is arising not as a result of any conscious effort to control

access to sources or to control the movement of quarried materials. Rather, the fall-off is likely the result of habitual patterns of population movement and provisioning within the Juntunen territories. In this sense, band territories are affecting the distribution of lithics only in so far as they are tending to shape and channel habitual movements and interactions of the individuals and communities within the region. And, since we are dealing with a combined and cumulative record of such interaction, the very discernability of the patterns in the material record indicates a high degree of stability to these patterns of interaction.

Discussion

This admittedly brief consideration of tribal boundaries and interaction within the Late Prehistoric Juntunen system clearly cannot do justice to the complexity or variability of the archaeological evidence, nor to the cultural variation inherent to the region during the Late Prehistoric period (cf. Bishop and Smith 1975). Yet, even this brief overview is sufficient to illustrate that the Juntunen system exhibited the same core features of tribal organization that are repeatedly described in the contributions to this volume. While the Juntunen system operated for some 400 years and was robust in the face of challenging environmental and subsistence conditions, it was not robust in the face of European contact, and was radically transformed even before the first European observer arrived to record his impressions of the upper Great Lakes. The rapid transformation of this formerly stable social system must give us pause, particularly when we attempt to utilize ethnographic descriptions of tribal organization as models for tribes in all times and all places.

From the perspective of territories and identities within a tribal social system, the levels at which overt marking is observed is in good agreement with theoretical expectations both for the marking of boundaries and specifically for the scales at which material culture is expected to play a formal role. For example, at the base of the spatial hierarchy, it would be unlikely that the members of the small co-residential group would require any material formalization of their identities, nor would we expect to see overt identity marking between the small co-residential groups that comprise the territorial band. Close kinship and frequent face-to-face interaction would render such marking unnecessary and redundant. This is not to say that differences in material culture would not arise among such



Fig. 7. Proportions of Bayport chert in lithic assemblages from earlier time periods.

groups, but rather that formalized social marking of identity between such groups would be unlikely. And even if such relations were marked in the material culture, the cumulative character of the archaeological record would, in all probability, render its recognition impossible. Overt material marking is deployed in those instances where there is less common face-to-face contact, and in those situations where bands do not maintain permanence of place and in which material markers must stand surrogate, asserting claims to use and ownership in the absence of the actual people. Passive marking, by contrast, was observed between areas at many scales, and was a sensitive indicator of regular contact, movement, and interaction.

Beyond the specifics of the Juntunen case, the study highlights a series of more general points relating to the archaeological study of tribal societies. One relates to the interplay between overt and passive social marking. The Juntunen case illustrates one way in which overt marking of social and territorial distinctions is achieved. The particular medium of expression, for example rock art or built structures, and the kinds of natural features that are annotated by such markings, will obviously vary from case to case, but the underlying relationship between long lasting cultural constructions and significant natural features of the landscape can be expected to play out again and again. In the same way, the subtle influence of regular, structured interaction on material culture should also be encountered frequently. Ceramics, as in the Juntunen case, can actually exhibit both varieties of patterning at different (and again predictable) levels of detail. Yet, these subtleties of patterning only became recognizable when large assemblages from the entire region were compared in depth. Another interesting aspect of passive marking that is particularly relevant to tribal studies is that the patterns emerge without intent and without the influence of any centralized control. For example, the discontinuous distribution of Juntunen lithics is visible in the record even though no one overtly controlled access or distribution.

A feature that was crucial to our ability to recognize subtle patterns in the record is the cumulative nature of the archaeological record itself. The cumulative overlay or palimpsest of remains deriving from multiple overlapping uses of sites and localities is often seen as a major limitation for archaeological investigation. Yet in the present case, the emergence of coherent patterns from these palimpsests was a critical element in the detection

and explanation of their occurrence. The shaping influence of the territorial system affected not only the tendencies and habitual behavior of the people in the past, but also the material remains left by them in the archaeological record. Had there been less stability and more variation in the territorial system, the coherent patterns observed in the various classes of material culture would not have existed, and we would instead have witnessed an incoherent smear of variability. In effect, the persistence of patterning within such a cumulative deposit provides increased confidence that the observed patterns are real, and that they are indicative of long-term stability in behavior and interaction.

Finally, while the discussion in the paper was primarily concerned with symbolic marking and identity, our entrée into this system was provided by the unique ecological circumstances of the region and by the particular cultural adaptation to that unique ecology. This should remind us that regardless of our particular research focus, we ultimately are dealing with the products of whole communities and whole societies, and that the patterns we observe are the result of an elaborate and complex overlay of the interests, needs, and intents of the people whose remains we study. Like the cumulative archaeological record itself, we should view this complexity and interdependence as an asset, since it is through these mutual dependencies that we can use archaeology to investigate the workings of tribal societies in the past.

References Cited

- Albert, D. A., S. R. Denton, and B. V. Barnes
1986 *Regional Landscape Ecosystems of Michigan*. The University of Michigan School of Natural Resources, Ann Arbor.
- Ardener, S.
1981 Ground Rules and Social Maps for Women: An Introduction. In *Women and Space: Ground Rules and Social Maps*, edited by S. Ardener, pp. 11-34. Croon Helm, London.
- Bishop, Charles and M. Estellie Smith
1975 Early Historic Populations of Northwest Ontario: Archaeological and Ethnohistorical Interpretations. *American Antiquity* 40(1):54-63.
- Bradley, Richard
1993 *Altering the Earth: The Origins of Monuments in Britain and Continental Europe*.

- Society of Antiquaries of Scotland Monography Series 8, Edinburgh.
- Brandt, K. L.
 1996 *The Effects of Early Agriculture on Native North American Populations: Evidence from the Teeth and Skeleton*. Unpublished Ph.D. dissertation, Department of Anthropology, The University of Michigan, Ann Arbor.
- Brashler, Jane
 1981 *Early Late Woodland Boundaries and Interaction: Indian Ceramics of Southern Lower Michigan*. Publications of the Museum, Michigan State University, Anthropological Series 3(3), Lansing.
- Buckmaster, M.
 1980 Scott Point: A Stratified Late Woodland Site on the North Shore of Lake Michigan. Paper presented at the Midwestern Archaeological Conference, Chicago.
- Carruthers, Peter J.
 1969 The Mikado Earthwork: 20Aa5. Master's thesis, Department of Archaeology, University of Calgary, Alberta, Canada.
- Clark, J. E.
 n.d. Late Woodland Mortuary Practices at the Juntunen Site. Manuscript on file, University of Michigan Museum of Anthropology.
- Cleland, Charles E.
 1982 The Inland Shore Fishery of the Northern Great Lakes: Its Development and Importance in Prehistory. *American Antiquity* 47:761-784.
 1992 From Ethnohistory to Archaeology: Ottawa and Ojibwa Band Territories of the Northern Great Lakes. In *Text-Aided Archaeology*, edited by B. Little, pp. 97-102. CRC Press, New York.
- Conway, T.
 1977 Whitefish Island—A Remarkable Archaeological Site at Sault Ste. Marie, Ontario. Research Manuscript Series, Data Box 310. Ministry of Culture and Recreation, Sault Ste. Marie, Ontario.
- Crawford, G., D. Smith, and V. Bowyer
 1997 Dating the Entry of Corn (*Zea mays*) into the Lower Great Lakes Region. *American Antiquity* 62(1):112-119.
- Dawson, K. C. A.
 1979 Algonkian Huron-Petun Ceramics in Northern Ontario. *Man in the Northeast* 18:14-31.
- Dewdney, Selwyn and Kenneth E. Kidd
 1962 *Indian Rock Paintings of the Great Lakes*. University of Toronto Press, Toronto.
- Dorothy, L. G.
 1980 The Ceramics of the Sand Point Site (20BG14), Baraga County, Michigan: a Preliminary Description. *The Michigan Archaeologist* 26(3-4):39-90.
- Earle, Timothy
 1997 *How Chiefs Come to Power: The Political Economy in Prehistory*. Stanford University Press, Stanford.
- Fitting, James E.
 1970 Rediscovering Michigan Archaeology: The Gillman Collections at Harvard. *The Michigan Archaeologist* 16(2):33-41.
- Ford, Richard I.
 1972 Barter, Gift or Violence: An analysis of Tewa Inter-tribal Exchange. *University of Michigan Museum of Anthropology, Anthropological Papers* 46:21-45.
- Fox, William A.
 1990a The Odawa. In *The Archaeology of Southern Ontario to A.D. 1650*, edited by C. Ellis and N. Ferris, pp. 457-473. Occasional Publication of the London Chapter, OAS, Number 5. Ontario Archaeological Society, London, Ontario.
 1990b Odawa Lithic Procurement and Exchange: A History Carved in Stone. *Kewa, Newsletter of the London Chapter of the Ontario Archaeological Society*, 90(7):2-7.
- Goldstein, Lynne G.
 1976 Spatial Structure and Social Organization: Regional Manifestations of Mississippian Society. Unpublished Ph.D. dissertation, Northwestern University, Evanston.
- Greenman, Emerson F.
 1927 The Earthwork Enclosures of Michigan. Unpublished Ph.D. dissertation, University of Michigan, Ann Arbor.
- Halstead, Paul and John O'Shea
 1982 A Friend in Need is a Friend in Deed: Social Storage and the Origins of Social Ranking. In *Ranking, Resources and Exchange: Aspects of the Archaeology of Early European Society*, edited by C. Renfrew and S. Shennan, pp. 92-99. Cambridge University Press, Cambridge.
- Hambacher, Michael J.
 1992 The Skegemog Point Site: Continuing Studies in the Cultural Dynamics of the Carolinian-Canadian Transition Zone.

- Unpublished Ph.D. dissertation, Michigan State University, East Lansing.
- Heidenreich, Conrad E.
1971 *Huronian: A History and Geography of the Huron Indians, 1600-1650*. McClelland and Stewart, Toronto.
- Hinsdale, Wilbert B.
1929 Indian Mounds, West Twin Lake, Montmorency County, Michigan. *Papers of the Michigan Academy of Science, Arts and Letters* X:91-102.
1931 *Archaeological Atlas of Michigan*, Michigan Handbook Series No. 4.
- Holl, A.
1993 Late Neolithic Cultural Landscape in Southeastern Mauretania: An Essay in Spatiometrics. In *Spatial Boundaries and Social Dynamics*, edited by A. Holl and T. Levy, pp. 95-133. International Monographs in Prehistory, Ann Arbor.
- Hurley, W. M.
1975 *An Analysis of Effigy Mound Complexes in Wisconsin*. Anthropological Papers No. 59. Museum of Anthropology, The University of Michigan, Ann Arbor.
- Janusas, S.
1984 *A Petrological Analysis of Kettle Point Chert and Its Spatial and Temporal Distribution in Regional Prehistory*. National Museum of Man, Archaeological Survey of Canada, Mercury Series, Paper 128.
- Lepper, Bradley, Richard Yerkes and W. Pickard
2001 Prehistoric Flint Procurement Strategies at Flint Ridge, Licking County, Ohio. *Midcontinental Journal of Archaeology* 26(1):53-78.
- Lovis, William A.
1973 Late Woodland Cultural Dynamics in the Northern Lower Peninsula of Michigan. Unpublished Ph.D. dissertation, Michigan State University, East Lansing.
- Luedtke, Barbara
1976 Lithic Material Distributions and Interaction Patterns During the Late Woodland Period in Michigan. Unpublished Ph.D. dissertation, University of Michigan, Ann Arbor.
- McClurken, James M.
1988 We Wish to be Civilized: Ottawa-American Political Contests on the Michigan Frontier. Unpublished Ph.D. dissertation, Michigan State University, East Lansing.
- McKenney, Thomas L.
1972 Sketches of a Tour to the Lakes, of the character and customs of the Chippeway Indians, and of incidents connected with the Treaty of Fon Du Lac. Barre, Massachusetts, Imprint Society.
- McPherron, Alan
1967a *The Juntunen Site and the Late Woodland Prehistory of the Upper Great Lakes Area*. Museum of Anthropology, University of Michigan, Anthropological Papers 30, Ann Arbor.
1967b On the Sociology of Ceramics: Pottery Style Clustering, Marital Residence, and Cultural Adaptations on an Algonkian-Iroquoian Border. In *Iroquois Culture, History, and Prehistory*, edited by E. Tooker, pp. 101-107. Proceedings of the 1965 Conference on Iroquois Research, New York State Museum of Science Service, Albany.
- Milner, Claire McHale
1998 Ceramic Style, Social Differentiation, and Resource Uncertainty in the Late Prehistoric Upper Great Lakes. Unpublished Ph.D. dissertation, University of Michigan, Ann Arbor.
- Milner, Claire McHale and John O'Shea
1990 Life After the Juntunen Site? Late Prehistoric Occupation of the Upper Great Lakes. Paper presented at the Midwestern Archaeological Conference, Evanston, Illinois.
1998 The Socioeconomic Role of Late Woodland Enclosures. In *Ancient Earthen Enclosures*, edited by R. Mainfort and L. Sullivan, pp. 181-201. University Press of Florida, Gainesville.
- Minc, Leah and K. Smith
1989 The Spirit of Survival: Cultural Responses to Resource Variability in Northern Alaska. In *Bad Year Economics: Cultural Responses to Risk and Uncertainty*, edited by P. Halstead and J. O'Shea, pp. 8-39. Cambridge University Press, Cambridge.
- Morse, E. W.
1984 *Fur Trade Canoe Routes of Canada, Then and Now*. University of Toronto Press, Toronto.
- Norder, John, Jane Baxter, Albert Nelson, and John O'Shea
2002 Stone Tombs and Ancient Ritual Status Marking and Social Roles in the Early

- Late Woodland of Southeastern Michigan. *Midcontinental Journal of Archaeology* X-XX.
- O'Shea, John M.
- 1881 Coping with Scarcity: Exchange and Social Storage. In *Economic Archaeology*, edited by A. Sheridan and G. Bailey, pp. 167-83. British Archaeological Reports, International Series 96, Oxford.
- 1986 Social Organization and Mortuary Behavior in the Late Woodland Period. In *Interpretations of Culture Change in the Eastern Woodlands during the Late Woodland Period*, edited by R. W. Yerkes, pp. 68-85. Occasional Papers in Anthropology No. 3. Department of Anthropology, The Ohio State University, Columbus.
- 1988 "Marginal Agriculture or Agriculture at the Margins: A Consideration of Native Agriculture in the Upper Great Lakes". Paper presented at the Society for American Archaeology Annual Meetings, Tempe, AZ.
- 1989 The Role of Wild Resources in Small-Scale Agricultural Systems: Tales from the Lakes and Plains. In *Bad Year Economics: Cultural Responses to Risk and Uncertainty*, edited by P. Halstead and J. O'Shea, pp. 57-67. Cambridge University Press, Cambridge.
- Phillips, D. W., and J. A. W. McCulloch
- 1972 *The Climate of the Great Lakes Basin*. Environment Canada-Climatological Studies 20, Toronto.
- Pollock, J. W.
- 1975 *Algonquian Culture Development and Archaeological Sequences in Northeastern Ontario*. Canadian Archaeological Association Bulletin No. 7.
- Rappaport, Roy A.
- 1979 *Ecology, Meaning and Religion*. North Atlantic Books, Richmond, CA.
- Sackett, James R.
- 1982 Approaches to Style in Lithic Archaeology. *Journal of Anthropological Archaeology* 1:59-110.
- 1985 Style and Ethnicity in the Kalahari: a Reply to Wiessner. *American Antiquity* 50:154-159.
- Salzer, R.
- 1974 The Wisconsin North Lakes Project: a Preliminary Report. In *Aspects of Upper Great Lakes Anthropology: Papers in Honor of Lloyd A. Wilford*, edited by E. Johnson, pp. 40-54. Minnesota Prehistoric Archaeology Series No. 11. Minnesota Historical Society, St. Paul.
- Smith, B. A.
- 1987 Dog Burials of Late Prehistoric Algonquian Sites in Northeastern Ontario. Paper presented at the Society for American Archaeology Annual Meetings, Toronto.
- 1996 Systems of Subsistence and Networks of Exchange in the Terminal Woodland and Early Historic Periods in the Upper Great Lakes. Unpublished PhD. dissertation, Michigan State University, East Lansing.
- Sobel, Elizabeth and Gordon Bettles
- 2000 Winter Hunger, Winter Myths: Subsistence Risks and Mythology among the Klamath and Modoc. *Journal of Anthropological Archaeology* 19(3):276-316.
- Stevenson, M. G.
- 1989 Sourdoughs and Cheechakos: The Formation of Identity-signaling Social Groups. *Journal of Anthropological Archaeology* 8:270-312.
- Tooker, Elisabeth
- 1971 Clans and Moieties in North America. *Current Anthropology* 12(3):357-376.
- 1964 *An Ethnography of the Huron Indians, 1615-1649*. Bureau of American Ethnology Bulletin 190, Washington D.C.
- Trigger, Bruce G.
- 1985 Natives and Newcomers: Canada's "Heroic Age" Reconsidered. McGill-Queen's University Press, Montreal.
- 1987 *The Children of Aataentsic: A History of the Huron People to 1660*. 2 vols. McGill-Queen's University Press, Toronto.
- United States Department of Agriculture (USDA)
- 1911 *Yearbook of Agriculture*. U.S. Government Printing Office, Washington, D.C.
- Welsch, R. L. and J. E. Terrell
- 1998 Material Culture, Social Fields, and Social Boundaries on the Sepik Coast of New Guinea. In *The Archaeology of Social Boundaries*, edited by M. Stark, pp. 50-77. Smithsonian Institution Press, Washington.
- Whiteley, P. M.
- 1985 Unpacking Hopi 'Clans': Another Vintage Model Out of Africa? *Journal of Anthropological Research* 41(4):359-374.

- Wiessner, Polly
- 1983 Style and Social Information in Kalahari San Projectile Points. *American Antiquity* 49:253-276.
- 1984 Reconsidering the Behavioral Basis of Style. *Journal of Anthropological Archaeology* 3:190-234.
- 1985 Style or Isochrestic Variation? A Reply to Sackett. *American Antiquity* 50(1):160-165.
- Wobst, H. Martin
- 1977 Stylistic Behavior and Information Exchange. In *For the Director: Research Essays in Honor of James B. Griffin*, edited by C. Cleland, pp. 317-344. University of Michigan Museum of Anthropology, Anthropological Papers 61, Ann Arbor.
- 1999 Style in Archaeology or Archaeologists in Style. In *Material Meanings*, edited by E. Chilton, pp. 118-132. The University of Utah Press, Salt Lake City.
- Wright, G. A.
- 1967 Some Aspects of Early and Mid-Seventeenth Century Exchange Networks in the Western Great Lakes. *The Michigan Archaeologist* 13:181-197.
- Wright, J. V.
- 1963 *An Archaeological Survey Along the North Shore of Lake Superior*. Anthropology Papers 3. National Museum of Canada, Ottawa.
- 1965 A Regional Examination of Ojibwa Culture History. *Anthropologica* 7(2):189-227.
- 1969 *The Michipicoten Site*. Anthropological Series 82, Contributions to Anthropology VI: Archaeology and Physical Anthropology Bulletin 224:1-85. National Museum of Canada, Ottawa.
- 1973 *The Ontario Iroquois Tradition*. Bulletin No. 210, National Museum of Canada, Ottawa.
- 1981 Prehistory of the Canadian Shield. In *Subarctic*, edited by J. Helm, pp. 86-96. *Handbook of North American Indians*, vol. 6, W. C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.
- Zurel, Richard L.
- 1999a Michigan's Rock Art. In *Retrieving Michigan's Buried Past*, edited by J. Halsey, pp. 249-252. Cranbrook Institute of Science Bulletin 64, Bloomfield Hills.
- 1999b Earthwork Enclosure Sites in Michigan. In *Retrieving Michigan's Buried Past*, edited by J. Halsey, pp. 244-248. Cranbrook Institute of Science Bulletin 64, Bloomfield Hills.