SETTLEMENT ARCHAEOLOGY—ITS GOALS AND PROMISE

Bruce G. Trigger

Abstract

Settlement Archaeology is defined as the study of societal relationships using archaeological data. A separate approach is required because of the inadequacy of the concept of "phase" or "culture" for the investigation of this sort of problem. An examination of the history of Iroquoian warfare in the light of archaeological and ethnological data suggests that while the archaeologist's ability to interpret prehistoric social phenomena remains severely limited, the questions raised by this sort of approach are important and, among other results, will stimulate a desire to pay still greater attention to traditional problems of cultural archaeology.

For a little more than a decade—ever since the publication of Gordon Willey's (1953) report on Prehistoric Settlement Patterns in the Virú Valley—there has been an increasing number of studies devoted to the examination of prehistoric settlement patterns. Generally it has been claimed by those involved that these studies will shed new light on various aspects of ancient social structures that until now have received relatively little attention from archaeologists. The term has been appearing with considerable regularity in the titles of publications and grant applications, indeed so regularly that a person may be forgiven for suspecting that it is sometimes used as an excuse to apply for a large grant to do much the same sort of research that archaeologists have been accustomed to doing on a more modest scale for a generation or more. Certainly an interest in the social structure and social behavior of ancient peoples is not new; Daniel Wilson (1851: 486) defined it as one of the goals of prehistory when he coined that term in 1851. Walter Taylor's (1948) conjunctive approach was above all a reminder to archaeologists primarily concerned with cultural chronology of the need to study all aspects of culture, which means the social and ideological as well as the technological. European archaeologists have long been accustomed to excavating entire towns and villages and to reconstructing the nature and use of the various buildings found inside them (DeLaet 1957: 101–03). Indeed the term Siedlungs-archäologie was first used (albeit in a different sense than it is used today) by Kossinna (1911). Are the skeptics perhaps not right when they suspect that Settlement Archaeology is merely a new term for something that archaeologists have been doing all along? Moreover, although no one has referred to it in print, the opinion seems to be current that Settlement Archaeology, with its societal interests, is as much as anything an excuse being used by some archaeologists for side-stepping the fundamental job of defining cultures and working out cultural chronologies. Obviously a certain amount of hostility has been aroused by the implication that Settlement Archaeology is not merely a new technique or focus of interest within archaeology but a fundamentally different approach, and one that is superior to those that have been current up until now. Such claims seem feeble and pretentious in the absence either of a clear statement of what the aims of the approach are or of any spectacular results of its application. In the light of these doubts, the bystander has reason to ask if Settlement Archaeology does represent a pioneer effort of any real importance and, if so, what is its relationship to the existing discipline of archaeology.

I believe that Settlement Archaeology does represent an approach of some importance, but one that will strengthen rather than replace or destroy the kinds of archaeology that exist at this time. Moreover, I believe that it has come into existence as a result of genuine problems in archaeological theory and, hence, is destined to fulfill a real need within the discipline. This sort of relationship would be in keeping with the development of archaeological theory to date.

Like most historical disciplines (except cosmology and earth history, which are unable to control the time dimension), prehistoric archaeology has had a development of theory that is not characterized by the abrupt replacement of old theories by new ones. Instead, it is character-
ized by the slow development of new theories and orientations that find a place for themselves alongside the older ones. The result is a fabric from which little is lost but in which new elements serve to enrich older ones. It is well-known that prehistoric archaeology grew up alongside Pleistocene geology and was very much influenced by it. The artifact was long considered analogous to a fossil, and it was believed that any particular historical epoch could be defined in terms of a distinctive assemblage of artifacts much as a geological period was defined by a distinctive assemblage of fossil plants and animals (Childe 1956: 26–9). It was generally imagined that cultural evolution had moved forward along similar lines in different regions of the world. The principal concession to the uniqueness of culture was the realization that the rate of progress in various regions was different, and hence it was necessary to distinguish between the stage of progress which a particular assemblage had reached and the period when it existed. It was assumed, more or less as a matter of course, that all cultures that were at the same stage of development were similar in most respects. Moreover, since living examples of ancient societies could be found among the primitive peoples of the present day, the totality of society at any stage of development (except perhaps the most primitive) could be reconstructed using ethnographic data. To do this, nothing needed to be known about any particular prehistoric assemblage except the stage that it represented. This was done through the recognition of certain characteristic artifacts. As long as archaeology continued to work within this sort of conceptual framework, the archaeologist's main concern was not in defining cultural units but rather in tracing the history of the development of individual types of artifacts such as axes, bows and arrows, or wheeled vehicles. This sort of study is still carried on (Rohan-Csermak 1963) and is important for understanding the history of the past. It was obvious, however, from an early stage in the development of prehistory that the stage approach had serious weaknesses (Wilson 1851). Because of geographical and historical factors, all cultures that were believed to be at the same level of complexity were not alike. Moreover, not all cultures in every part of the world appeared to have passed through the same stages. If the nature of local sequences of development was ever to be understood, it was necessary to define meaningful units of culture and to compare them with other similar units. Gradually the components that were excavated were classified in terms of cultures or phases, units that implied a high degree of cultural uniformity, rather than in terms of a small number of loosely defined stages. Cultural uniformity implied some kind of close association on the part of its bearers, and it was assumed that cultures were shared by groups of people who interacted closely with each other. Artifacts were now not studied abstractly and in isolation from one another—like mechanical assemblages of fossils—but rather as the products of functionally integrated ways of life. A tanged copper spearhead was no longer conceived of solely as a stage in the evolution of spearheads but also as a weapon that had played a particular role in a particular culture. The new framework created by this historical, as opposed to evolutionary, approach to human history did not so much necessitate a reinterpretation of data as it provided a supplementary and enriching dimension to the study of cultures in prehistoric times.

Today, however, the concept of culture itself creates certain problems when archaeologists attempt to reconstruct ancient patterns of life. In particular these problems concern the relationship between society and material culture, the latter constituting the only evidence that archaeologists normally have to work with. Archaeologists like Kossinna (1911) in Germany and V. Gordon Childe (1929: v–vi) in England have argued that a culture is a way of life held in common by a particular people. Kossinna at least would have argued that this people or volk were also characterized by a common language, a common sense of identity, and at least to some degree by ties of social and political unity. Childe (1956: 113–15) has argued that in the absence of written records the political separation between England and the United States could be detected through variations in culture such as in the design of eating utensils and railway platforms. It is often assumed that archaeological sites correspond to communities, cultures to tribes, and assemblages of related cultures to culture areas. Yet is such a one-to-one correlation between social and cultural units possible? Willey and Phillips (1958: 48–51) are among those archaeologists who believe it is not. Traditionally, anthropologists have believed it possible to assign every human being to a well-defined cultural grouping. Today it is clear that
many so-called cultures are separated not by lines but by clines. Changes can be observed, but only gradually and over broad areas, so that cultural units must be defined and studied as arbitrarily as microraces (Garn 1961: 18–20), unless we are to treat every village or household as having its own culture. If some cultures lack well-defined boundaries how can we correlate societal units with them?

Societal units are in many ways as vague as cultural ones but for slightly different reasons. Political structures can, and in complex societies frequently do, embrace several different cultures, each of which retains its own customs and beliefs. On the other hand, a single culture may extend over an area larger than any single political unit. This was true of ancient Greece and Mesopotamia (Childe 1956: 132) and may have been true of the Maya. In the case of the Eskimo a common culture spread far beyond the boundaries of any political or social unit; it was shared by a network of small hunting groups, each in touch with its neighbors but never constituting any sort of social, economic, or political unit. At most, one might argue that communality of language and culture give the Eskimo a feeling of oneness vis-à-vis Indian or White. Yet communality of language and customs does not always mean that people recognize themselves as members of a single group. Walloons or French-speaking Swiss do not believe that they are Frenchmen, nor do lowland Scots feel they are English. On the other hand, groups that are culturally or linguistically quite different may be linked together by various relationships to form a single interdependent group. The weakness of commonly used definitions of culture for the investigation of social phenomena is shown by a recent proposal (Rouse 1965: 9–10) that the peasantry and élite among the Maya be regarded as two separate “ethnic groups.” If such a definition were accepted, the term culture would no longer imply a self-sufficient life style, nor a society, nor any sort of political unit. The simple truth is that while possession of a common material culture implies interaction and close ties among those who possess it, it does not necessarily imply that the bearers constitute a single linguistic, social, economic, or political unit. Social anthropologists, moreover, are keenly aware that the boundaries of social, political, and economic ties may be as amorphous and interlined with those of other systems as are the boundaries of cultural traits.

For all of these reasons it seems highly desirable that an effort be made to study the social, economic, political, and, if possible, the linguistic relations among prehistoric peoples as problems that are quite separate from the delineation of material cultures. As with the study of the history of particular types of artifacts, the data are the same, namely, the material remains recovered by archaeologists; what is different is the purpose and manner in which they are organized and interpreted.

I propose to define Settlement Archaeology as the study of social relationships using archaeological data. This study includes an inquiry into both the synchronic, or structural, and diachronic, or developmental, aspects of these relationships. It differs from current “cultural archaeology” in that it does not seek to understand various aspects of social relationships simply as further traits to be enumerated as part of the trait complexes of archaeological cultures (Childe 1956: 129–31) but rather as functioning systems of economic, political, and affective relationships. In drawing this distinction, I am more than splitting hairs. To give an example, if one were to compare two early civilizations in terms of cultural traits, one would compare ancient Egypt with ancient Mesopotamia. In the first half of the third millennium B.C. Egypt, however, constituted a single state whereas Mesopotamia was made up of many city states. Hence, if one were comparing political organization, the units that would be comparable would be one Mesopotamian city state against the whole of Egypt.

It is hard enough for the archaeologist to reconstruct the subsistence patterns and economy of the groups he studies although these are the aspects of culture that are most clearly reflected in the archaeological record. The social and ideational aspects of culture, to say nothing of patterns of social relations, have always been considered much harder to work with (Hawkes 1954: 161–2). Is it not possible that Settlement Archaeology has set itself a laudable but hopeless task? This time alone can answer, but developments so far suggest that much may be learned about the past through a settlement approach. Three basic levels of analysis can be defined: the individual structure, the settlement, and settlement distributions; and each level may be analyzed independently of the others (Trigger 1967). By studying the layout and use of structures—which include
houses, granaries, workshops, temples, and markets—much can be learned about the structuring of nuclear family and larger residential units and also about class divisions and occupational specializations within a community. Some associations appear quite close, such as the one between long houses and unilineal descent groups. On the other hand, many groups that have unilineal descent live in nuclear family houses; hence, we have only a way of identifying some situations in which unilinear arrangements were present, not the cases where they were clearly absent. Where multinuclear family dwellings occur, but the main unit lacks a hearth, we may assume that we are dealing with a polygynous extended family. Among other groups, however, the various wives may each have had their own house or even have lived in separate villages. Temples and specialized structures such as granaries (either individual or communal) may reveal a good deal about occupational specializations or communal organization. While many useful insights may be gained concerning the social structure of particular prehistoric groups, few, if any, perfect one-to-one correlations may be discovered between types of buildings and various sorts of social structures.

The study of settlement plans can also reveal information concerning social relations. Chang's (1958) cross-cultural study of neolithic villages suggests, for example, that a patterned layout of houses frequently is associated with extended family structures and that villages made up of several blocks of these houses frequently consist of several lineages. Attempts are also being made to reconstruct community organization through the analysis of artifact distributions within single components (Deetz 1965; Longacre 1966; Hill 1966). These studies seek correlations between residential divisions (often based, or presumably based, on kinship) and design motifs or different occupations. In more complex societies, social, occupational, and ethnic distinctions may be reflected in the pattern of a community. Except among hunting-and-gathering groups, where several sites may be occupied in the course of a single year and bands may scatter and come together depending on the season, the settlement normally corresponds to a community. The location and nature of individual buildings (in addition to their type) may indicate something about the government, religious, and other socially integrating institutions of the community. The presence or absence of trade goods and a study of the economic activities of the community as a whole should do much to reveal its economic structure and its degree of self-sufficiency. In many places, however, particularly in the tropics, activities take place in the open air and hence leave no obvious "fossils" in the archaeological record. Consequently, on this level as well, it is often easy to say that some sorts of social activities were present, but it is hard to say what other ones were not.

A study of the spatial relationships between different communities may reveal something about ecological and political arrangements. Some communities may be shown to be dependent, either economically or politically, on other communities. The settlement of economically marginal regions may be related to the development of mining or trade, and the avoidance of certain areas may reflect the relationships between different political groups. Inferences drawn from data at one level can be crosschecked with those drawn from another and with other kinds of information. The conclusion that a large area lying between two groups of settlement was a no-man's-land would be supported if it could be shown that the individual villages on each side were fortified and if large numbers of weapons and the bodies of people who had died violent deaths were recovered. It would also have to be demonstrated that the intervening area was not abandoned because it was disease ridden, or otherwise unsuitable for settlement. It seems possible then to make at least some limited inferences about social structure and social relations if we interpret the evidence recovered by archaeology in terms of the primary units of settlement patterns, whether individual structures, community layouts, or the distribution of settlements. The quality and profundity of such inferences will undoubtedly improve as ethnologists are stimulated to use their own data to learn more about the spatial aspects of human behavior. Settlement Archaeology could conceivably be an important bridge between archaeology and ethnology.

The limitations are, of course, obvious. Human relations are complex, and totally different structures can often serve the same function. It is a simple fact that not all lineage organized societies have produced long houses. Moreover, similar buildings often serve totally different functions. In one community an especially large house may be the private residence of an impor-
tant chief, in another merely a building used for public gatherings. Village squares may be used indiscriminately for markets, rituals, or public celebrations, and the evidence recovered from them may provide to the archaeologist little or no clue concerning their function. Where there has been marked cultural continuity, as in the Arctic or in Polynesia, ethnographic data may help greatly in interpreting archaeological data. In the southwestern United States a kiva can be recognized as such even in Pueblo II, and it may be assumed to have played much the same role in community life then as it does today. This sort of interpretation is always a bit risky, however, and under no circumstances should it be extended beyond the culture area originally designated.

As one example of the utility and limitations of the settlement approach, I propose to examine the development of one institution, namely warfare, among the Iroquoian-speaking peoples of the Northeast. This is a topic about which there has been much speculation but little in the way of systematic study. It is also a subject concerning which a lot of historical and ethnographic data are available. These provide a reliable jumping-off point for an investigation of prehistoric times.

In the early part of the 17th century, when they were first contacted by Europeans, the Iroquoian speakers of the Northeast lived in sedentary villages and practiced intensive slash-and-burn agriculture. Each village consisted of a number of long houses which might contain from one to two dozen nuclear families, although the average number was eight to ten (Tooker 1964: 40). The largest villages were palisaded and appear to have contained several thousand people. According to the Jesuit Relations, the basic unit of Iroquoian social and political organizations was the matrilineal sib or extended family, each of which appears to have had its own civil chiefs and war leaders. These sibs retained a considerable degree of political autonomy and were known to move from one village to another if they were dissatisfied with the conduct of other sibs in the village (Wrong 1939: 32; Thwaites 1896, Vol. 8: 105). Village councils consisted of the representatives of these sibs, plus other men known for their bravery or experience. Tribes were made up of a number of villages whose inhabitants shared a common dialect and/or a common history. By the 17th century at least three confederacies had grown up: the Huron, which embraced four tribes; the Iroquois, which embraced five; and the Neutral, which embraced an undetermined number. The tribes belonging to such confederacies did not make war on one another. The Huron one, which may have been the oldest, seems to have resulted at least in part from the coming together of various tribes in a region that was well suited for trade with the northern hunting tribes even prior to the rise of the fur trade (Trigger 1962). It is significant that the four Huron tribes lived very close to each other near the south end of Lake Huron, whereas the Iroquois of New York State formed five settlement clusters separated from one another by considerable distances. The Huron appear to have obtained much of their meat and skins through trade and hence were little affected by the fact that this large concentration of population drastically reduced the amount of game that was available nearby. This dependence on trade also seems to have produced especially large villages (Trigger 1963).

At the time of contact all of the Iroquoian peoples appear to have been in a state of chronic war, either with other Iroquoian tribes or confederacies, or with neighboring Algonkian groups, and sometimes with both. Sagard and Champlain, two early French writers, inform us (Tooker 1964: 29–39) that each year 500 to 600 Huron warriors fanned out in small groups in the Iroquois country and there performed acts of daring and tried to capture trophies — scalps, heads, and especially prisoners, whom the Huron took back alive to their villages. Such a party was usually made up of young men who were recruited at a feast given by the prospective leader of the group. This individual directed the war party and took the credit or blame for its outcome. He also appears to have cooperated with the chiefs in disposing of prisoners, usually turning them over to Huron families who had lost relatives to the Iroquois. These prisoners were adopted by such families, and the men were usually savagely tortured to death in a public ceremony that lasted several days and in which the whole village took part. Raids normally were made in the summer when the Iroquois women were working, and often living, in their fields, and many men were away fishing or trading. The chiefs sought to keep enough warriors at home to defend the Huron villages against similar attacks launched by the Iroquois.
Three attributes of Huron, and no doubt of Iroquoian warfare in general, are of special importance:

First, it was the means by which young men acquired personal prestige. The civil offices in Iroquoian society were hereditary within particular lineages, but since the order of succession within the lineage was not defined, the young men of these lineages no doubt vied with one another to acquire reputations as warriors. Moreover, by gaining a reputation for bravery and prowess in war a man not belonging to one of these lineages might hope to win a respected place in his village council. Prowess in war was not the only avenue to prestige, but it was an important one, and this made most young men anxious to fight. The chiefs, who were older men, generally tried to restrain these warriors, in part because they were jealous of younger rivals but also because they were concerned about the reprisals that would follow (Thwaites 1896, Vol. 23: 91).

The second factor involved in Iroquoian warfare was blood revenge. Raids were made at least in part to avenge previous murders. Since these reprisals were usually regarded as killings by the injured side, they served to generate a continuous and self-perpetuating pattern of conflict between certain tribes (Thwaites 1896, Vol. 10: 273). Blood revenge was conceived of as possible from the lineage level up, and the understanding of its disruptive effects is shown by the special efforts which the Huron made to suppress it within their confederacy. The Jesuits report that in Huron law blood vengeance was considered the worst of all crimes—far exceeding murder (Thwaites 1896, Vol. 10: 223). Every effort was made to assure that compensation was paid to prevent the need for blood revenge, and, significantly, this compensation was paid between the villages or lineage groups involved rather than from the murderer to the relatives of the man he had killed (Tooker 1964: 52).

The third aspect of Iroquoian warfare was religious. The torture of prisoners was not simply an act of revenge but was also a ritual act. The underlying motif is reported to have been a sacrifice to the "god of war" or to the sun. Although the prisoner was first tortured inside one of the long houses, he was normally killed at sunrise on a scaffold in the open air. His heart was cut out and his blood was drunk by some of those present. The body was then cooked and eaten, so that the villagers might share in the prisoner's bravery. During their brutal and prolonged torture, prisoners were expected to sing, dance, and express defiance of their captors (Knowles 1940; Rands and Riley 1958: 282–93).

Warfare between the Huron and their neighbors was thus constructed around three main themes—individual prestige, revenge, and sacrifice. These themes were woven into a tight pattern in which each complemented and reinforced the other. Certain elements within this complex may have been a part of the indigenous culture of the Northeast. Others, such as the elevated platform, the removal of the heart, and the killing of prisoners in view of the sun, seem to be of Southeastern and even of Mesoamerican origin. These elements do not represent the diffusion of a whole trait complex so much as that of ideas and elements which played a part in the development of a new captive complex in the Northeast (Knowles 1940).

A few functional explanations have been proposed to account for Iroquoian warfare, and there are certain general theories that can easily be applied to it. Each of these theories has certain historical implications that can be checked against the proper sort of archaeological information. Some of these explanations are psychological; others are economic and demographic. Steward and Faron (1959: 325–30) have pointed out that among the Tupinamba, a people of coastal Brazil with an economy, villages, and warfare not unlike those of the Iroquoians (although they are patrilineal rather than matrilineal), a great emphasis was placed on cooperation among the members of the community. They suggest a possible nexus between the need for harmony in the crowded Tupinamba villages and a projection of hostility against the members of other bands that expressed itself in warfare and the torture of prisoners. Despite the fact that many Iroquoians lived away from the main villages during the summer, there is evidence of much repressed hostility in early descriptions of Iroquoian society. Even if Steward and Faron's theory were to provide a motive for aggression, however, it would not account for the specific forms that the aggression assumed.

John Witthoft (1959: 32–6) has discussed Iroquoian warfare from a psychological point of view. He postulates that warfare increased as corn agriculture replaced hunting as the dominant mode of subsistence among the Iroquoians.
This happened because the decline in men's role as food producers led them to seek more prestige as warriors. Women, on the other hand, projected their resentment at the lack of male participation in routine tasks by transferring their traditional role as butchers of game to a new one as butchers of male captives. This theory has several weaknesses. First, it seems to ignore the importance of fishing in the Iroquoian subsistence pattern and man's role as a clearer of new fields. Surely men were more important in Iroquoian economic life than Wittfoht portrays them. Secondly, the Iroquois and Neutral at least are reported to have tortured captive women and children as well as men; hence, it would appear that torture was not directed against men as clearly as some writers have assumed. These two observations suggest that, even if there was a good deal of tension between men and women in Iroquoian society, it was not a direct result of the prevailing division of labor nor was it the basis of torture. The similarity between Iroquoian and Tupinamba warfare also suggests that an explanation of such warfare does not lie in the matrilineal structure of Iroquoian society. Wittfoht's explanation does not functionally account for the emphasis on blood revenge or the sacrificial nature of the killing of prisoners. For these, only historical explanations are offered.

Andrew P. Vayda (1961) has argued that in many parts of the world warfare among slash-and-burn agriculturalists (such as the Iroquoians) results from a shortage of soil that is easily worked and suitable for growing crops with a digging-stick or a stone-tipped hoe. Under such conditions conflicts are generated by the efforts of one group to seize land that another has already cleared or new areas of fertile soil to replace ones that have become exhausted. Although I am less certain of the data on soil for New York State, I am quite certain that this explanation does not hold for the Iroquoians of Ontario. Enough light soil was available to support many times the maximum Iroquoian population, and it appears that the Iroquoians rarely returned to the same area even after the fields were rejuvenated. Indeed, for the reasons cited above, much of the population tended to become concentrated in a smaller number of areas as it increased. As a result, large portions of Ontario were abandoned as the historic period approached. Since the fertility of cleared land reclined fairly rapidly, there was little cause for one village to covet the fields of another, even if land was hard to clear. It seems more likely that prior to the development of large confederacies, small groups may have fought over choice fishing spots, hunting territories, or similar scarce natural resources. Little, if any, of this sort of competition can be detected, however, in historic times.

The archaeological investigation of settlement patterns in the Northeast should be able to cast some light on the antecedents and development of the historic war complex among the Iroquoians. Fundamental settlement correlates should be observable in the location of villages and the development of defensive works; supporting artifactual evidence should be observable in the form of such things as cooked human bone in the village middens. Some evidence of raiding may also be found in the numbers of individuals who have met violent deaths, and the role of sacrifice can be studied in terms of direct traces of killing-scaffolds (of which none to my knowledge has been recognized) or in the general development of social organization. It appears likely that the development of the sacrificial aspects of torture took place in fairly large community settings. One of the main weaknesses in our work lies in the difficulty of tracing historic ethnic groupings back into prehistoric times. Prehistoric cultures are labelled Mohawk or Onondaga or proto-Mohawk and proto-Onondaga, but there is little proof that these cultures can be identified with, and only with, their historic namesakes or that these cultures, as defined by archaeologists, correspond to peoples as they would have defined themselves. Recent ethnohistorical research, for example, has led me to conclude that the so-called Onondaga sites in the St. Lawrence Valley, which were occupied in the 15th and 16th centuries, were inhabited by a group speaking an Iroquoian language or dialect that was not Onondaga or any of the ones known in the 17th century or later (Trigger 1967). In earlier times the situation was even more confused, and William A. Ritchie (1965: 299–300) has recently concluded that the Owasco culture was produced and shared by groups whose linguistic affiliations were both Algonkian and Iroquoian. Linguistic studies seem to suggest that the Iroquoians have been in the Northeast for a long time. Their arrival has been tentatively correlated with the appearance of the Lamoka culture (Byers 1961: 49) or Hopewellian traits in the Northeast (Griffin
The fact remains, however, that while some Owasco were almost certainly Iroquoians, it is impossible to work out any linguistic affiliations at an earlier period. Since there appears to be no sharp break at any time in the cultural development of the Northeast, it is perhaps safest to drop linguistic units for the time being and speak only of the development of social institutions.

Prior to Late Woodland times, which began about A.D. 1000, agriculture appears to have played only a minor role in the life of the Northeast. The people who lived there prior to this time appear to have depended mainly on hunting and fishing and to have alternated between fairly large summer camps and much smaller and more scattered winter ones (Ritchie 1965). Blood revenge is common among such hunting-and-gathering peoples and was probably present in the Northeast from very early times. Bodies riddled with arrows could be the result of ingroup quarrels, and the extra heads found in some graves could be those of loved ones who had died far off and whose bodies could not be brought back for burial. The occasional headless body found in group cemeteries (Ritchie 1965: 123) is most easily interpreted, however, as evidence that heads were already being sought as trophies in Woodland times. Prior to Late Woodland times this raiding and blood feud took place in a context of small unfortified encampments. In Late Woodland times agriculture became more important, and the population began to increase and become more sedentary. Although multifamily dwellings may have existed in earlier times, the first prototypes of Iroquoian long houses as well as the first palisaded villages (Ritchie 1965: 280) appear in Ontario and New York State at this time. It would be a simple matter to correlate these palisades with increasing warfare. It is also possible, however, that warfare was not increasing but rather that with a more sedentary life greater protection was being sought against the raids that did take place. It is also possible that stockades were at first erected to keep bears and other wild animals rather than human enemies out of the villages. According to James V. Wright (personal communication) of the National Museum of Canada, cooked human bone begins to appear in Ontario sites during the Uren phase about A.D. 1300. The largest numbers of bones are found in sites that Wright dates between A.D. 1450 and 1550, and the amount declines as the contact period is approached. If these findings are confirmed in the state of New York, they will constitute a good index of the rise and decline of cannibalism, and likely of the sacrificial cult, in the Northeast. What are the social and cultural correlates of this trend?

The suggestion has often been made that a shift to agriculture led to the development of the matrilineal social structure that is characteristic of the Iroquoians. It is assumed that matrilineal institutions developed as a result of the assumption by women of a primary role in food production. Prior to this time, when hunting and fishing were the most important activities, there had been either patrilineal or composite band structures. The first of these alternatives was more in keeping with Steward's (1955: 122–50) formulations, since the Iroquois hunted migratory game, but it is hard to accept in view of Murdock's (1949: 190, 216–9) argument that it is hard for a society to shift directly from patrilineal to matrilineal descent. The assumption was also made that the development of matrilineal institutions was paralleled by the development of long houses. Byers (1961) has very cogently pointed out that in historic times many tribes that had matrilineal institutions as fully developed as those of the Iroquoians lived in nuclear family houses that differed little from those seen in the Northeast in Middle Woodland and even in Late Woodland times. The apparent fact that a proto-Iroquoian term, rahak, which means "father's sister," can be reconstructed and that it continued to be used in historic times among the Huron, Seneca, Tuscarora, and Cherokee (Lounsbury 1961) suggests that a bifurcate-merging system of kin terms and hence possible unilateral descent may greatly predate the development of Iroquoian culture (Driver 1961: 315). It is quite apparent that further work in the reconstruction of pre-Iroquoian kinship systems will require the combined efforts of linguists and ethnologists and that archaeologists can play only a minor role in this task.

Concerning the evolution of community and political organization, archaeology is perhaps able to tell us more. It is likely that prior to the development of intensive agriculture, there were tribal groupings whose members lived much of the year in small family groupings which came together periodically to celebrate rituals and reaffirm their identity as a group.
These bands were held together by ties of marriage and descent, and throughout Woodland times one of the major rituals used to reaffirm group unity appears to have been the burial or reb burial of the group's dead in a common place. Among scattered hunting peoples this sort of band organization is necessary to regulate marriage and land use. It has been noted among the Ojibwa of northern Ontario that as new sources of food and income become available—particularly through government aid—families tend to abandon their winter hunting camps and remain in the larger summer encampments (Dunning 1959). A similar change may have come about among the Iroquoians as a result of a shift towards intensive agriculture. It is unclear as yet what initiated this change, but one possibility is that the abandonment of hunting and fishing as the main sources of subsistence required the development of new varieties of corn suited to the climate of Ontario and New York State. Even today the northern limit of corn agriculture is hardly more than a few miles beyond the northernmost chain of Iroquoian villages. Once it became established, this food-producing economy led to a rapid increase in the population which probably continued to grow until historic times, in spite of a low birth rate and high infant mortality.

As villages became sedentary and grew larger, the old institutions of social control had to be extended and new ones brought into existence in order for the new local groups to function. Even in the 17th century, as we already have observed, the matrilineal sib remained the basic unit of social and political organization. The growth of large political units involved the suppression of blood revenge on the village, tribal, and confederacy level.

A variety of factors probably contributed to this development. Villages occupying the same area and speaking a similar dialect appear to have formed tribes, but it is a matter of speculation to what degree these tribal unions were built on a common sense of identity that had already existed in earlier times. Occasionally, as agriculture became more important, different tribes appear to have settled peacefully beside one another in areas that were favorable for trade and agriculture. There is strong evidence, at least in my opinion, that the nucleus of the Huron confederacy evolved in this way.

Not all of the forces promoting the growth of larger political units were peaceful. At first, there were probably considerable differences in the size of the tribal groupings that developed. Small groups that became involved in disputes over killings must have stood in danger of annihilation. Such groups probably often sought the protection of larger ones in much the same way as the Wenro tribe sought the protection of the Huron in 1638. This tribe, which lived in western New York State found themselves fighting the Seneca and the Neutral at the same time. They asked the Huron for permission to migrate to their country, and in 1638 they did so. Those who survived the trek north were settled in the major villages of the confederacy, particularly in Ossossane which belonged to the Bear Tribe (Tooher 1964: 14).

The Iroquoians also appear to have developed mechanisms for adopting prisoners and whole villages of enemy Iroquoians into their tribes. After the Huron were defeated by the Iroquois in 1649, one Huron tribe, the Tahontaenrat, and part of another, the Arendahronon, asked for and were given the privilege of founding a new town, called Gondougarce, among the Seneca. Many refugees from the other Huron tribes were forced to settle in Mohawk and Onondaga villages (Tooher 1964: 10). Here the men were often killed, but the women and children were incorporated into the tribe. Although the events we describe came about as a result of the fur trade, the patterns that were followed seem to have been much older. It seems likely, for example, that many of the so-called “trade sherds’ found on Iroquoian sites result from the incorporation of female prisoners into the group involved. A careful study of these “trade sherds’ might reveal a good deal about patterns of raiding in prehistoric times. No study has yet been made of the psychological mechanisms that the Iroquois used to integrate enemies into their tribes, although there is highly suggestive literature on this subject.

It seems possible that during the early Iroquoiian period men began to rely on proving their skill as warriors more than they had previously. This was not necessarily because their work had become economically less important, but because fishing and clearing fields provided less of a test of a man’s prowess than did hunting, which probably did decline in relative importance. The result may have been the diversion of the search for prestige into new channels. The counter desire to protect one’s now permanent villages and fields—in short, one’s growing
property — from the attacks of raiders may have led to a growing tendency to suppress and, if necessary, incorporate groups that were chronically hostile. In this way the original pattern of blood revenge grew into a new form of warfare that led to the creation of larger social and political units. At the same time certain ideas of human sacrifice appear to have diffused from the south, as did various other items of material and ritual culture. These became incorporated into a spiralling pattern of warfare. This appears to have happened about A.D. 1300.

By historic times war was no longer waged by village against village but by confederacy against confederacy. Since these groupings were separated by broad, uninhabited areas and were fairly well balanced against one another, it appears that both the amount of violence and the scope of warfare were decreasing. Raiding continued because the captive complex was now an integral part of Iroquoian culture, but until a new crisis was generated by competition for furs to trade with Europeans and by the introduction of guns, the destruction of villages and the removal of whole groups of people were uncommon. This process is also marked by the diminishing numbers of cooked human bones in village middens. In short, prior to the disruption caused by contact with the Europeans, Iroquoian political relations were tending to become more stable and more peaceful than they had been in the recent past.

At the beginning of this paper, I defined Settlement Archaeology as the study of social relationships using archaeological evidence. Such studies are conceived of as something clearly different from efforts to compile what in essence are merely more extensive trait lists for archaeological cultures. Iroquoian warfare is a test case where an optimal amount of ethnographic information is available and the projection backwards in time has been very short. More than anything else, this example shows what Settlement Archaeology cannot do. The four historic Huron tribes lived close together and had a material culture that appears to have been heavily pooled. As yet there are not enough data to allow us to distinguish the four tribes in terms of artifact assemblages, or indeed to distinguish the Huron from their neighbors the Petun, who were not members of the confederacy. From archaeological evidence alone we would probably assume that we were dealing with one very large tribe. Likewise, using material culture and spatial configurations we might deduce that there had been five Iroquoian tribes, but we would not recognize the existence of the confederacy. In short, we find no simple correlation between settlement patterns and political organization. We have also drawn a blank in our efforts to trace changes in kinship structure through changes in house types. It is not even clear that, lacking documentary evidence, we should be able to tell whether the foreign sherds in a tribal area are the result of trade or of the immigration of people as a result of war. Conceivably whole intrusive villages, when found, would be less of a problem. Even so, without documents a variety of explanations of such villages could be offered. On the other hand, we have been able to note a correlation between larger communities, denser concentrations of villages, and the growth of increasingly elaborate fortifications and cannibalistic practices. Lacking historical evidence the significance of all this would not be as clear as it is, and, even so, much remains to be explained. The problems that are raised serve to stimulate a search for new techniques for eliciting information from existing data, but perhaps even more importantly they also stimulate a desire for more detailed information concerning the nature and distribution of sites. The importance of the settlement approach in archaeology is not that it supplies answers that culturally oriented archaeology does not. Indeed, by and large, the questions it raises are infinitely harder to solve than those raised through the study of cultural relationships. What is important is that Settlement Archaeology forces us to think through problems from a new angle — that of social relations. In doing so it leads us to restudy our data within a framework that is complementary rather than antagonistic to the cultural one. Whatever be the difficulties and inherent limitations of the approach, this is certainly an objective of which the value cannot be denied.

Acknowledgments. This paper is based in large part on a lecture given at the State University of New York at Binghamton, February 11, 1966. I wish to acknowledge with thanks the information concerning the evidence of cannibalism in Ontario Iroquoian sites that has been provided by Dr. James V. Wright of the National Museum of Canada. Dr. Wright’s book The Ontario Iroquois Tradition (National Museum of Canada, Bulletin 210, 1966) appeared as this paper was going to press.
BYERS, DOUGLAS S.

CHANG, KWANG-CHIH

CHILDE, VERA GORDON

DEETZ, JAMES

DELAET, SIGFRIED J.

DRIVER, HAROLD E.

DUNNING, R. W.
1959 Social and Economic Change Among the Northern Ojibwa. University of Toronto Press, Toronto.

GARN, STANLEY M.

GRIFFIN, JAMES B.

HAWKES, CHRISTOPHER

HILL, JAMES N.

KNOWLES, NATHANIEL

KOSINNA, G.

LONGACRE, WILLIAM A.

LOUNSBURY, FLOYD G.

MURDOCK, GEORGE P.

RANDS, ROBERT L. AND CARROLL L. RILEY

RITCHIE, WILLIAM A.

ROHAN-CERMÁK, GÉZA DE

ROUSE, IRVING

STEWARD, JULIAN H.

STEWARD, JULIAN H. AND L. C. FARON

TAYLOR, WALTER W.

THWAITES, REUBEN G. (EDITOR)

TOOKER, ELSABETH

TRIGGER, BRUCE G.

VAYDA, ANDREW P.

WILLEY, GORDON R.
Willey, Gordon R. and Philip Phillips  
1958 Method and Theory in American Archaeology.  
University of Chicago Press, Chicago.

Wilson, Daniel  

Withhoff, John  

Wrong, C. M. (editor)  

McGill University  
Montreal, Quebec  
September, 1966