

A RE-EXAMINATION OF THE CONCEPT OF THE TRIBE: A CASE STUDY
FROM THE UPPER YADKIN VALLEY, NORTH CAROLINA

by

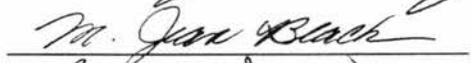
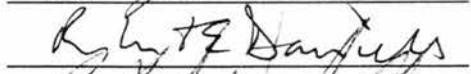
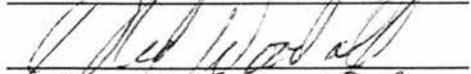
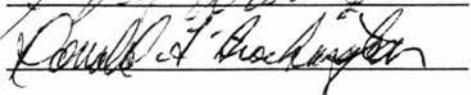
Rhea J. Rogers

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Approved by:

	Advisor
	Reader
	Reader
	Reader
	Reader

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RHEA J. ROGERS. A re-examination of the concept of the tribe: a case study from the upper Yadkin valley, North Carolina. (Under the direction of Carole L. Crumley).

ABSTRACT

Tribes sought in the archeological record are usually modeled as autonomous and bounded social or ethnic units. Such a model has failed to account for the nature of patterning observed in the archeological record of the Late Woodland of the upper Yadkin River Valley of North Carolina. An alternative model of tribal social organization which better accomodates the data is developed, drawing from general ethnographic information of egalitarian societies, ethnohistorical accounts of the region and previous archeological work. Using heterarchical structuring principles, this model describes tribal organization as sets of non-coterminous social networks situated on the physical landscape.

Archeological data from 29 contemporaneous Late Woodland sites within the Great Bend region of the Yadkin River are assessed against the expectations generated by the network model. There is clear evidence for differential and overlapping boundaries expressed through material culture. Analysis of discord between the social organization described by ethnohistoric accounts and that indicated by archeological data reveals social behaviors operant in the region prior to contact.

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CHAPTER I INTRODUCTION

THE RESEARCH PROBLEM

The assumption that recognizable cultural differences exist between groups of people has guided the bulk of anthropological inquiries (Barth 1969; Wobst 1977). In terms of field research the notion of cultural difference has translated into boundaries. Anthropologists interested in describing a culture, comparing cultures, detailing the effects of interactions between cultures or showing how a culture changes through time find it necessary to bound distinct groups. Practical criteria for setting the limits of a social group may vary widely, ranging from language groups, to informants' groupings, to environmental variables. Once found, such a group is sometimes christened a "tribe" by the anthropologist.

In archeology, cultural difference is almost always thought to be reflected in material culture. Yet debate over how to understand difference and similarity of material remains is not conclusive (Hodder 1987:134). Perhaps most distressing is the all too common research situation in which the archeologist knows through ethnohistoric documentation that numerous distinct groups or tribes existed, but such groups are indistinguishable in the

archeological record (e.g. Trigger 1968). The power of the written account usually forces the archeologist to believe that her/his data are inadequate and that archeology can produce only incomplete results. Yet it behooves archeologists to recognize that these data are just as valid as the written accounts and more importantly, that they are informing on the nature of cultural differences. These situations may simply signal the need to rethink current models of prehistoric, non-complex social units, namely the tribe.

In this study it is assumed that a primary goal of archeology is to define the social behaviors of the past which have created the archeological record. To that end it is essential that a linkage be established between the archeological record and the patterns of past behavior. Particular observations made on the archeological data base must be referencing particular behavioral sets. It must be recognized, however, that the structure of the observations affects the interpretations of behavior. If the organization of archeological data obscures pattern, then the interpretations made from the data may be erroneous (Cordell and Plog 1979:407). Specifically, the arrangement of artifact distributions into normatively defined sets may in certain cases be obscuring the true nature of the data. Labels such as "culture area", "phase", "society", "tribe", or "ethnic group" are often applied to such artifact complexes. Left unexamined is the linkage between the

construction of the complex and the application of the social label. Often the way that the artifact set is defined becomes the way that the tribe is defined. By default the former serves as the template for the latter. Labels are handy devices because they can transmit a great deal of information very quickly. They may be used as a kind of shorthand. Yet it should be acknowledged that labels possess these qualities because they connote norms. An item can be labelled because it can be essentialized. Thus one danger with labels is that they suggest that sets of labelled items are mutually exclusive categories. In social terms this translates into bounded socio-political units.

Archeologists have always been aware of this problem. In fact it is clear that many ways of labelling cultural manifestations in the archeological record were never intended to be construed as past cultural realities. [See, for example, McKern's (1939) cautionary statement in this regard.] Nevertheless, such organizing devices cannot help but have certain influences on thinking.

Archeologists find themselves in a quandary. Organizing archeological data around a constructed norm is convenient; other methods are usually extremely unwieldy. In practice the development of such normative groupings usually leads to the delineation of spatial boundaries--i.e. the spatial extent of the artifact complex or phase, but do those boundaries represent a modern convention or some past reality? Further, how hard and fast are those boundaries?

Generally there is considerable overlap in certain classes of material culture from region to region. The possibility that the definition of any particular artifact complex is to some extent arbitrary must be entertained. Archeologists need alternatives to the traditional models of social organization that do not necessarily force the researcher to think in terms of politically or socially bounded, normative cultural entities.

This research has two purposes: first, to develop a model of tribal organization that can serve as an alternative to the conception of tribes as normative, homogenous and bounded social units. Second, this research will attempt to apply the alternative model to a set of archeological data from the upper Yadkin valley of North Carolina. In the following pages the historical development and refinement of the concept of "tribe" is traced, along with its consequences for interpretation in American archeology.

As mentioned above, the recognition of the potential contradiction between past ethnographic reality and current archeological labels is by no means new. Many have struggled with the problem. Walter Taylor, for example, discussed it as "the fallacy of misplaced concreteness" (1967), which he identifies as the mistake of leaping from the observation of the similarity of archeological remains to the assumption of past cultural unity. Certainly the

arbitrary nature of most taxonomic schemes in archeology has long been recognized. In fact, McKern, author of the Midwestern Taxonomic System (McKern 1939), pointedly stated that the classificatory scheme was arbitrary in the sense that it was intended as a purely descriptive organizer, not to be confused with possible ethnographic correlates (or cultures). In fact, McKern developed his taxonomic system specifically because of the abuse the term "culture" had suffered in archeological discourse (Griffin 1966:327). Numerous papers, especially in the 1950s, dealt with the correspondence, or lack thereof, between archeologically derived taxons of material culture and certain ethnographic forms. The tendency to attribute cultural validity to a group of traits without logical or empirical justification was codified as a result of Willey and Phillip's development of a nomenclature of archeological units (1958).

In attempting to come to grips with the temporal, spatial and formal frameworks within which archeologists must operate (usually simultaneously), Willey and Phillips outlined a set of definitions. Among them is the spatial division called the region, delimited more or less by physiographic features and "...roughly equivalent to the space that might be occupied by a social unit larger than the community, a unit to which we may with extreme trepidation apply the term 'tribe'..." (1958:19). Obviously Willey and Phillips were aware of the twofold danger in their designation: first, that the geographical delineation

of a region may be somewhat arbitrary. A region may coincide with environmental conditions exactly, or a region may simply be an area that an archeologist has bracketed for study. In either case, there need not be any logical correspondence between a region thus defined and a culture group. Recognition that such exists at the broad level was of course the underpinning of Kroeber's and Wissler's culture area concept (and ultimately, one of its downfalls). Second, the region (however defined geographically) may contain a unified cultural group (i.e. a group possessing "a high degree of cultural homogeneity" (1958:20) or it may contain several such groups. [Note that Willey and Phillips do not define tribe; like much of the literature of the period tribe seems to mean "that which is not a nation or state."]

Willey and Phillips justified the equation of region with tribe by pointing to the distribution of "tribes" in the early historic period in North America. While this assertion may be a valid one, it fails to acknowledge the possibility that these tribal designations may have been more the result of 16th, 17th and 18th century European nomenclature and expansionism than aboriginal reality. Early written accounts such as Colonel George Chicken's (Mereness 1916) unambiguously show how Europeans and Euro-Americans tried to impose their own order on the social systems of the aboriginal population in order to facilitate the administration of trade (see also Voss and Blitz'

discussion of the Choctaw (1988:128). The same premise is evident elsewhere in American archeology. In fact, the assumption that ethnographic boundaries recorded (and possibly created) by Euro-Americans in the 19th century had a prehistoric existence provided the impetus for the widespread adoption of W.D. Strong's Direct Historical Approach on the Plains. The approach can be criticized because it assumes a continuity of form between extant "tribes" and past political entities. The boundedness (or apparent boundedness) of tribes on the Plains, considered archetypical of the tribe in general, may have been an artifact of Euro-American expansion and Native American removal (Grinnell 1923:14-15; Lowie 1935:4; Oliver 1962; Hassrick 1964:22).

In archeology, the time-worn controversy over "found" units (i.e. those having past cultural validity) and "created" units (i.e. those invented by the archeologist) had already been fought over the concept of types in the 1940s and early 1950s (cf. Krieger 1944; Brew 1946; Spaulding 1953; Ford 1954) and a thorough examination of the problem could fill many pages. Suffice it to say that despite the acknowledgement that archeological taxons were not necessarily congruent with any cultural reality of the past, there was and remains the implicit assumption that real ethnographic boundaries do exist, an assumption bolstered by evidence gleaned from the ethnohistoric record. In much of North American archeology the label "tribe" has

come literally to embody that assumption.

The ad hoc usage and refinement of the term "tribe" in the anthropological literature of the 19th and 20th centuries was changed by Elman Service's definitions of "primitive" social organization (1962). Prior to that time, the meaning of "tribe" or "tribal society" was vague and could be applied in a variety of ways. Over the past 30 years, the term has acquired a very specific meaning, and, along with Sahlins' and Service's (1960) bands, chiefdoms, and states, helps to form the backbone for describing both prehistoric and extant social and/or political organizations. The pervasiveness of this schematic framework is striking. Today, virtually every introductory anthropology textbook uses this scheme (e.g. Haviland 1990; Bates and Plog 1990; Crapo 1990; Peoples and Bailey 1991; Kottak 1991). Contrast this with earlier texts whose formats more closely resemble a Boasian historical particularist approach (e.g. Lowie 1940; Hoebel 1958; Titiev 1959), covering such aspects of culture as handicrafts, dress and ornaments, diffusion and language. Tribes do occasionally appear within the discussion of specific cultures, but the definition of tribal society is nowhere explicit. Rather, any non-state level society could be subsumed under the heading tribe (cf. White 1949:377-379).

The emerging (or re-emerging) concern over questions of culture change could not be adequately addressed by this

dichotomous scheme because the features distinguishing individual tribes lacked consistency (Steward 1955:45). Steward advocated a less static view of tribal organization, (i.e. the earlier notion of defining tribal culture on the basis of a shared, normative behavior set or list of culture elements), in favor of an emphasis on the levels or stages of sociocultural integration (1955:44-47).

The neo-evolutionary perspective in anthropology actively embraced this view. Specifically, the neo-evolutionists sought to define the general evolution of human social organization. General evolution, a term coined in Sahlins and Service's Evolution and Culture (1960), entails the notion that "...evolution generates progress" (Sahlins and Service 1960:13). General evolution is defined as the succession of different levels or stages of development (Sahlins and Service 1960:28). This decidedly 19th century evolutionary scheme was improved upon, however, by explicitly stating that the succession of levels was not phylogenetic. In other words, while it was asserted that general evolution--i.e. progress--was a real process in cultural development, it was suggested that each specific culture did not necessarily pass through each evolutionary stage (but cultures might, in fact, "leap frog" one another or stages).

In order to apprehend cultural evolution as such it is necessary both to define progress and to set up specific levels of progress. White (1949:367-368) and Sahlins and

Service (1960:20-21) asserted that the amount of energy captured by a system determined its level of progress. Specific cultural systems could be organized into different levels of development by constructing a typology on this basis. Thus the band-tribe-chiefdom-state hierarchy was born.

This scheme of general development was framed initially on the basis of energy capture (White 1949; Sahlins and Service 1960:37). Higher levels of societal integration were the result of increased "thermodynamic achievement" (Sahlins and Service 1960:35). Thus the types, or stages, of cultural development were thought of as a general progression marked by ever-increasing rates of productivity.

When Service (1962) later fleshed out the framework he did so on this basis. Bands were generally characterized as hunter and gatherer groups; tribes were neolithic; and chiefdoms, too, were neolithic but also displayed specialized production and redistribution as a result of the diversity of the environments in which they occurred and their greater population densities (1962:59-60;110;143-144). Nevertheless, it was acknowledged that exceptions to these generalizations existed.

The new typology and the New Archeology

Service's typology, as well as White's cultural evolutionism, undoubtedly had a marked influence on the genesis and subsequent development of the "New Archeology."

It is easy to understand how Service's ready-made framework fed directly into the new breed of archeological interpretation. If analogy based on ethnographically-known societies was to be the most basic device in the archeologist's kitbag, then Service's work was nothing short of an analogic cheat sheet. Building the bridging arguments to link archeological data with Service's typology was a straightforward activity: the band-tribe-chiefdom-state framework provided unambiguous definitions for which archeological correlates could be easily developed; data could be compared with the correlates and the level of social organization could be assigned (e.g. Peebles and Kus 1977; Creamer and Haas 1985). Service had provided archeologists with an instant explanatory framework. Service's approach is clearly a materialist one, spawned by Leslie White's cultural evolutionism. White's tripartite division of culture into technological, sociological and ideological subsystems (1949) is essential to Service's classifications: in general, Service centered his analysis in the sociological subsystem, defining his culture types on the basis of differences in social organization. White explicitly states that social systems are a function of the technological system (1949:366); thus Service's different culture types are determined by demographics, which are themselves ultimately determined by the technological and subsistence base (Service 1962:110, 143). Given this close correspondence between materialist factors and culture type,

and because these materialist variables are more easily identified in the archeological record, the popularity of Service's typology with archeologists is readily apprehended.

The potential for the process to encourage sloppy thinking is obvious and ultimately defies the purported purpose of the New Archeology; archeological manifestations are explained in terms of the typological concepts applied to them rather than vice versa. Rather than testing for the presence of, for example, tribal boundaries, it could be assumed a priori that they existed. If all cultural systems in the ethnographic record could be placed into Service's culture types, then uniformitarianism certainly implied extinct societies could be so placed as well. One need only to show that a community or a group of communities displayed the traits indicative of one of the forms of social organization. Ironically, Service himself recognized that tribal boundaries probably would not manifest themselves as clearly as the boundaries of a more closely integrated group such as a chiefdom (1962:166-167).

In archeology the problem was (and has become) that the search for boundaries was not always overt. Rather, the creation of boundaries was sometimes simply the function of naming the "heartland" or core of an archeological complex. As Willey and Phillips had earlier pointed out, the designation of regions was itself a somewhat arbitrary process, arising out of geographic phenomena or the level of

archeological research in an area, or both. Thus boundaries might simply be indexing areas where archeologists had concentrated their efforts or where different research institutions had conducted investigations, though it was anticipated that prolonged research would eventually yield recognizable culture areas. In archeology the key term for such a heartland is the phase. Willey and Phillips define phase as:

an archaeological unit possessing traits sufficiently characteristic to distinguish it from all other units similarly conceived, whether of the same or other cultures or civilizations, spatially limited to the order of magnitude of a locality or region and chronologically limited to a relatively brief interval of time [1958:22].

Willey and Phillips are well aware that the boundaries of a phase in space and time may not be neatly defined. Nevertheless a phase becomes a phase when the archeologist recognizes a discontinuity or a differential relative frequency of style and form in material culture. A phase becomes a tribe by default. A tribe, or a collection of tribes exhibiting some overall similarity, may by the same process become a culture. Yet the logical connection between the distribution of an artifact type and a social grouping remains in many cases to be demonstrated (Charlton 1981:155).

In fact, in archeology many times different "culture groups" or phases are distinguished only on the basis of different relative frequencies of the same artifact types.

Such cases evoke memories of the Bordes-Binford debate over Mousterian tool assemblages from France, wherein the Binford's argued that it was unlikely that separate tribes or ethnic groups would mark social boundaries by creating assemblages containing the same types of tools but in different proportions (Bordes 1961; Binford and Binford 1966). Finally, because the spatial distribution of different artifact classes do not always covary, it forces the archeologist to prioritize some classes over others by considering one to be "more diagnostic" than another (Renfrew and Bahn 1991:168; Shennan 1978). This is not to suggest that studies of cultural boundaries per se have been wholly ignored. In fact some of the earliest successes of the New Archeology were studies of boundaries. Deetz (1965), Hill (1967) and Longacre (1964) reasoned that there were certain logical connections between stylistic discontinuity and the presence of a boundary. They argued that certain pottery attributes were being transmitted via mechanisms of social organization (e.g. post-marital residence patterns, lineages). Their studies did not, however, attempt to negotiate the boundaries around entire societies. Theirs were studies of intra-community organization. Nevertheless, their positive results helped to spawn an interest in unraveling social organization through the study of style (cf. Whallon 1968).

If boundaries were not specifically sought in the archeological record as part of a research design, or if a

discontinuity in a "diagnostic" trait was assumed to represent a meaningful social boundary, then it was all too possible to wed the Servicean typology with taxonomies like the McKern system. Whether intentional or not, the result was a transformation of analytic units (often trait lists) into full-blown societies or cultures. Once Service's typology had become (rightly or wrongly) geographically bound, American archeology was left to deal with the array of spatial-culture-units, much the way that cultural anthropologists had had to deal with culture-areas a half-century earlier.

What I would argue is that the transformation of artifact complexes into societies does real damage to the tribal concept because of the way that complexes, and by extension tribes, are defined. The ease with which artifact complexes and social entities could be hybridized may be one reason why archeologists tended to ignore the emerging refinements and critiques of the tribal concept and ultimately ignored questions of structure and process. In fact, it can be argued that archeology barely acknowledged the real changes to the concept of tribe that Service (1962) himself offered. The prevailing methodological understanding of tribe most closely resembles the traditional definition offered by Steward:

...[I]t is a construct that represents the ideal, norm, average, or expectable behavior of all members of a fairly small, simple, independent, self-contained, and homogeneous society.... It

represents essential uniformities which are shared by all persons, despite some special modes of behavior associated with age, sex, occupation, and other roles.... Tribal society is not divisible into genuine subcultural groups which have a quasi-independent existence and distinctive way of life. The concept of tribal culture emphasizes shared behavior [1955:44-45].

Thus a tribal society may be defined only by the distinctive (and particular) features of its behavior set, not by the structures and processes that characterize this kind of society's internal organizing principles (which is precisely the innovation that Service's work offered). In archeology the above definition may be operationalized simply by defining a normative set of elements of material culture. This activity is precisely the way that archeologists set up phase designations or ceramic complexes; thus archeological practice encourages such a static, normative view of "tribal" societies. Societies distinguished archeologically on this basis suffer the same interpretive problems that Steward noted for ethnologists' tribes. In either case, the social unit is defined in an essentially Boasian historical particularist way; questions of culture process are moot. An explanation for the longevity of the static definition in archeology (lagging behind cultural anthropology) may be simply that the band-tribe-chiefdom scheme legitimized the use of the pigeonhole, with little regard given to its theoretical content (and in archeology, with little regard given to how to recognize its organizational structures). A chronic problem with the tribal concept is that structurally

it is often viewed as a collection of non-traits. That is to say that it is often set off against the chiefdom or the state and thus it is defined by the organizational features which it lacks, as opposed to the features that it actually possesses (Steward 1955:44; Creamer and Haas 1985).

Despite the persistence of the normative, content-oriented view of tribes in archeology, the concept of tribe in general anthropological thought has undergone many assaults and revisions. Service's emphasis on sociocultural integration caused him to identify features of tribal organization that would be common to all tribes. In his view the existence of the tribe is predicated on the existence of pan-tribal sodalities. These include organizations such as warrior societies, age-sets, secret societies, and sometimes clan organizations, which integrate the tribe beyond the level of the residential group. It is the extent of the sodalities that defines the limits of the political unit. Service admits (1962:167) that the boundaries of a tribe may not always be clear because they are contingent, based upon the structural pose being struck in a given situation. Nevertheless, the tribe is a distinct social entity, to be distinguished from other such entities forming its superorganic environment (and which may, in fact, necessitate the formation of the tribe).

Fried (1975) attacked the notion of tribes as bounded, discrete political units. His thesis was that tribes as

currently understood are a secondary phenomenon brought about by the manipulation of indigenous peoples by colonialist and imperialist nation-states (1975:10). He found that the essence of the tribe cannot be found in any diagnostic trait such as language, economic system, war unit or named group of people, thus dispelling the more traditional view of tribes. In the same vein Southall expressed the anthropologist's difficulty with tribes:

The difficulty of identifying one 'tribe' clearly and distinctly from another is often represented as a troublesome test which the anthropologist must pass....The difficulty is undeniable, particularly in the case of stateless societies, and meticulous exploration of the distribution, interconnections and meaning of the various elements in culture and social structure is of vital importance in such situations, but insistence on defining some global discrete entity as tribe may simply be a refusal to recognize the fundamental characteristics of this kind of society....The contingent nature of their structure, subdivisions and boundaries is of their essence, not something to be swept away by penetrating analysis. The representations of adjacent stateless societies as a neatly discrete series of named units is to misunderstand and misrepresent them [Southall 1970:40-41].

These statements might seem nihilistic, suggesting that the essential feature of tribes is that they have no essential features. Actually, the critique focuses on the realization that tribes, as conceived within the band-tribe-chiefdom framework, are simply organizing units, either for the anthropologist (Southall 1970; Wobst 1978) or for an administrative body (Fried 1970). Structure and boundaries are imposed on them from the outside. The structure is

arbitrary, a construct applied at the expense of social reality.

This realization directly parallels the debates in archeology over archeological taxons. Similar to the tribe, the phase must be acknowledged as an organizing unit only-- not as a cultural reality. Though tribes have fallen by the wayside in some ethnographic quarters, they have been maintained in archeology because of the easy correspondence between tribes and various archeological taxons such as the phase. It is no doubt disturbing to archeologists to ponder the loss of the tribe because with it must go the phase.

The death of the phase

The phase has been the cornerstone of much archeological research in North America. As an organizer of data it has been useful, but archeologists must realize that in this capacity it has actively and sometimes erroneously structured interpretations of the past. This is because the phase and the tribe (as traditionally understood) are fungible constructs. If the tribal construct is a distortion of tribes (as Southall suggests), then the application of the phase to the archeological remains of tribes is a distortion. Phase becomes a meaningless collection of things when dealing with this kind of society. To be explicit: the phase is not a meaningful concept in dealing with the archeological remains of an acephalous, non-normatively arranged society. As an organizer of data

the phase only obscures the meaningful patterning behind an imposed norm (i.e. the trait complex). This problem closely resembles the problem described by Cordell and Plog above (1979).

The interrelated problem of the phase and the tribe is a problem of scale. Marquardt and Crumley have defined effective scale as "...any scale at which pattern may be recognized and meaning inferred" (1987:2). The band-tribe-chiefdom-state framework implicitly assumes that pattern can be recognized at a corresponding scale for each type of society. What Southall (1970) and Fried (1975) point out is that tribes do not exhibit patterning at the level of the tribe; that is, they are not patterned at the level of the polity. This is why anthropologists say that tribes do not exhibit boundaries, and this is why tribes are so difficult to identify archeologically. Often the archeologist's inability to find this social organization is considered an occupational hazard, reflecting a deficiency in archeologically derived data. The apparent lack of patterning may be due to the scale at which pattern is sought. As previously noted, tribes are often described as a set of non-traits, and negative evidence is used to prove their existence. This is because the band-tribe-chiefdom scheme assumes no scalar changes, and tribes are conceived and constructed as chiefdoms waiting to happen, as spatial hierarchies with no -arch. That is, tribes are considered at the scalar level of the polity, just as chiefdoms are;

however, because "the tribe" does not ordinarily operate at this level, evidence of "the tribe" is often found to be lacking. Yet tribes do have structure and content; current models simply are not set up to recognize the kinds of data a tribal system will produce.

In order to use archeological data to test for the presence of a tribal system it is necessary first to develop an alternative model which takes the various criticisms of the tribe into consideration. Chapter II examines specific models of tribal organization from the ethnographic and archeological literature and offers a revised model.

INTRODUCTION TO THE STUDY AREA

The archeological data which will be used to investigate an alternate model of tribal organization are drawn from the upper Yadkin River valley, which lies in the northwestern North Carolina Piedmont (Figure 1.1). The North Carolina Piedmont is a broad physiographic zone which extends from the fall line westward to the Blue Ridge escarpment. It is an area of rolling hills and semi-mountainous terrain with elevations of about 400 feet amsl near the fall line and rising gradually as one approaches the Blue Ridge to nearly 2000 feet amsl.

The Piedmont is dissected by several river drainage systems of which the Yadkin is one. The Yadkin River originates in Watauga County, North Carolina. Its

course follows a series of parallel fault lines including the Brevard Fault, which run generally east-northeast. In Surry County the Brevard Fault divides, sending the Yadkin through the resistant rock of the Sauratown Mountains Anticlinorium, composed of metagraywacke and biotite schist (Brown 1985). Upon leaving this formation the river enters the Inner Piedmont Belt, composed of less resistant metamorphic gneisses and schists, where it is allowed to follow a more typical south-southeastern course and creating the "great bend" of the river. In the course of the great bend, a few kilometers downstream from the Yadkin-Ararat river confluence, the river shoals. Over this five kilometer stretch the river bed is filled with large rocks, making navigation difficult if not impossible. There are no floodplains here; the steep ridges extend all the way to the river's edge. The hazardous area is known locally as Beans Shoals, and historically it has always presented a problem to travel (an aborted 19th century attempt at building a canal around the shoals stands today as testament to this fact).

Floodplains along the upper Yadkin River vary considerably. Immediately upstream of the great bend and shoals area, the resistant bedrock results in narrow and isolated floodplains which are backed by abruptly rising uplands. Downstream from the shoals, the meander belt of the river is wider, resulting in slightly more expansive floodplains, though these, too, vary a great deal in terms

of size and distribution.

East of the Great Bend region of the Yadkin River lies the Carolina Slate Belt (Figure 1.1), a northeast-southwest trending zone underlain by metavolcanic rocks. The formation consists of slates, breccias, tuffs and flows, some of which were important resources to prehistoric inhabitants of the Piedmont for the manufacture of lithic tools. At its nearest point, the Slate Belt lies some 55 straight line kilometers from the study area (Woodall and Claggett 1974:4).

In addition to the Slate Belt, several other potential sources of lithic raw materials are located in and near the North Carolina Piedmont. The Coconocheaque formation and the Copper Ridge dolomite of Smyth County, Virginia, as well as the Beekmantown formation of Smyth and Russell counties, contain chert in nodular form (Holland 1971:106-107). These areas lie about 97 km north of the study area. The Dan River basin, which contains sedimentary deposits of the Triassic Period and within which occur small deposits of chert, jasper, and chalcedony (formed by minerals precipitated out of the sediments and collecting in pockets), is located just east of the study area, extending from Germanton (in Forsyth County), northeastward into Virginia (Woodall 1975:4). Small amounts of lithics from these various formations appear to have been used by Woodland people living in the upper Yadkin valley.

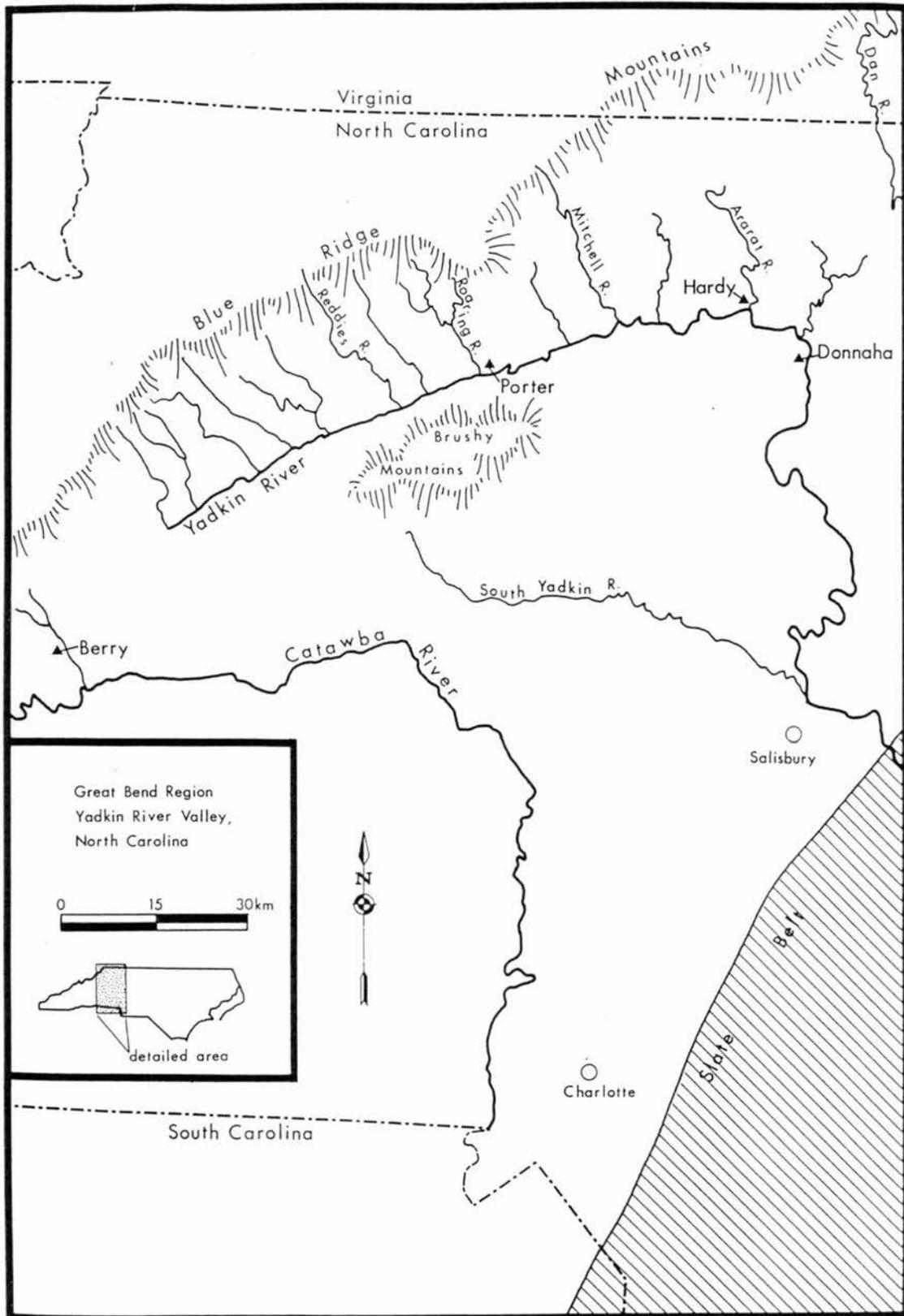


Figure 1.1. The Great Bend Region, Upper Yadkin River Valley, North Carolina.

The climate of the Piedmont is temperate and humid, with an average annual rainfall of 124 cm and a mean temperature of 15°C. The Piedmont usually experiences 200 frost free days each year. The flora of the region is characterized by an oak-hickory climax forest. Prehistorically, and into the early historic period, the fauna of the Piedmont included the white-tailed deer, bear, elk, bison, large cats and wolf (Lawson 1937:118). Smaller mammals included the beaver, skunk, squirrel, opossum, rabbit, raccoon and fox. Other fauna which appear to have been important to prehistoric people include the wild turkey, terrapin and turtle, rattlesnake, and various kinds of freshwater fish and shellfish.

It is widely held that the late prehistoric people of the North Carolina Piedmont were organized into tribes (Coe 1952; Hudson 1965; Baker 1975; Wilson 1983:40-41; Davis and Ward 1990). These simple Siouan-speaking folk, whose lifestyle is typified by the Late Woodland remains of villages and hamlets found along the Yadkin and Dan rivers, are usually contrasted against a different, more highly organized, tradition found to the south. This dichotomous viewpoint casts the Siouan hill tribes on one side and Mississippianized southern chiefdoms on the other. Coe (1952) first systematically described the material distinction based upon the differences between the

conservative Late Woodland Piedmont tradition and the Pee Dee phase as typified at the Town Creek site. The Town Creek phenomenon, replete with its temple mound and Lamar style pottery, is an enigma which stands in contrast to the contemporary Late Woodland tradition. Some have invoked invasion (i.e. site unit intrusion) as an explanation for Town Creek (Baker 1975:158-162; Coe 1952:309), maintaining that more advanced, Muskoghean-speakers entered the North Carolina Piedmont, bringing with them their material culture ensemble and establishing this northerly outpost of the Mississippian.

That North Carolina contains within it two distinct material culture traditions has long been recognized and was first described by Holmes (1903). Holmes, an artist, ambitiously undertook a stylistic study of aboriginal American pottery as a part of the Bureau of American Ethnology's mound explorations, defining broad ceramic areas on this basis.

Holmes' South Appalachian group of complicated stamped pottery has become synonymous with Lamar, a subarea of the Mississippian (Williams and Shapiro 1990:4). Thus the complicated stamping tradition has become associated with the Mississippian phenomenon, and by extension, with chiefdoms. The textile-impressed tradition, considered by Holmes to be a northern tradition, was associated with lesser cultural elaboration. Specifically, in historic times the South Carolina-North Carolina-Virginia Piedmont

was observed to be the home of some two dozen tribes, each speaking a distinct language or dialect. Most are believed to have been Siouan languages (Mooney 1894). Thus the tribe has long been considered the entry point into the study of social organization in the North Carolina Piedmont. Coe cautions against facile equations of distinct "tribal" dialects and distinct culture groups. He rightly points out that "[t]here is no necessary relationship between the language a people spoke and the other elements of their culture" (1952:301).

The anthropological refinements of the concepts of the tribe and the chiefdom occurred long after the recognition of the two broad material culture areas within North Carolina and the recognition of numerous small dialect groups within the Piedmont. The grafting together of observable material differences, recorded linguistic differences, and finally the neo-evolutionary framework of cultural stages has been a natural tendency on the part of archeologists and culture historians. The less impressive material culture found in the Piedmont (as opposed to areas farther south and west) combines easily with the expectation of a less complex form of sociopolitical organization, namely the tribe. The plethora of named aboriginal groups in early historic times only bolsters this assumption. Despite Coe's (1952) warning, each named group could conceivably become a tribe within the Servicean typology. By subsuming these under the categories of tribes, the

region as a whole can then be contrasted against the chiefdoms in the Lamar region. The theoretical underpinnings responsible for the designations "tribal" and "chiefdom" make these two culture areas analytically separate. This practice may have artificially widened the gap between these two regions. In other words, the boundary created by archeologists between Lamar (or South Appalachian Mississippian) and Piedmont or Siouan hill tribes is reified by the analytical categories applied to either. This boundary ignores the earliest observations of complex intermingling of material traits, which bespeaks an equally complex array of social behaviors weaving together the entire region (Holmes 1903; Coe 1952). Understanding such social behaviors is the primary goal of this research.

CHAPTER II
ETHNOGRAPHY, ETHNOHISTORY AND THE ARCHEOLOGICAL MODEL

If a tribe is not a unified entity, what is it? When offering a revised view of a long-held concept, language becomes problematic. Specifically, the use of the term "tribe" itself is probably unfortunate because it suggests a thing, as opposed to a condition. It is probably best to say that there is no such thing as a tribe, there are only tribal systems. The apparent order that the band-tribe-chieftdom framework lends to cultural phenomena by allowing anthropologists to compartmentalize different groups of people may be artificial. As an anthropological tool it is sometimes a useful device. However, in the investigation of real processes it may at times obscure the anthropologist's view. This is especially true in archeological interpretation, where the assumption of difference, and hence of boundaries, may preclude testing of such notions.

Ultimately, in moving away from a model of bounded political units to one of social networks, the question of boundaries must be addressed. Social organization must be translated into archeological consequences; boundaries--however defined--are the most commonly sought means of accomplishing that translation. Networks imply a lack of boundaries. How then, is social organization to be gleaned from the archeological record?

In this chapter I develop an alternative archeological model of tribal organization which emphasizes its protean nature. This model will stand in contradistinction to a more traditional archeological model of tribal organization which emphasizes sociopolitical boundedness and unity of behavior and hence homogeneity of material remains. To establish this viewpoint, two broad avenues of inquiry will be followed: first, general analogy and second, direct historical analogy (Charlton 1981). Direct historical analogy and general analogy differ very little in their approaches; the difference between them is the reasoning used to justify the application of either analogy. Both entail the use of ethnographic information to assist in identifying the cultural behaviors responsible for the appearance of the archeological record. The direct historical analogy assumes that it is appropriate to apply the interpretation because there exists an historical connection between the extant culture group and the makers of the prehistoric residues in question. Demonstration of such continuity strengthens the belief that the application of the analogy is appropriate.

General analogy uses ethnographic information for the interpretation of remains, too; however no historical connection is asserted. In fact, ethnographic data (including data derived from the subfields of ethnoarcheology and experimental archeology) from any point on the globe could potentially be applied to a particular

archeological problem. Historically the use of general analogy is based on the assumption of uniformitarianism or general evolution. The notions of 19th century evolutionism, specifically that all human cultures could be cataloged into structurally similar stages of cultural development, certainly have lent credence to such general analogy and still exist in modified form today (Charlton 1981:136). In fact the premises which allow archeologists to apply Sahlins and Service's band-tribe-chiefdom framework based on the identification of a few traits represent just such a survival. That there exists a link between the ethnographically derived model of organization and the archeological case remains to be demonstrated. Ethnoarcheology and experimental archeology have begun to elucidate real social processes that result in particular material patterns, and thus have begun to bridge the gap currently covered by the assertion of an existing analogy (Charlton 1981:143).

The application of labels such as "tribe" and "chiefdom" to social groups named in the ethnohistorical record of the Southeast has bolstered the notion of the boundedness of individual polities. The primary purpose of this chapter is to evaluate the ethnohistorical record against a different set of anthropological theories, namely those embodied by the study of heterarchical structures (Crumley 1987). The resulting interpretive framework will then serve as a basis for considering the archeological data

examined in chapters IV-VI.

ETHNOGRAPHIC MODELS

Ironically, much of the seminal work done on tribes in the mid-twentieth century fully appreciated the complex, variable and amorphous nature of tribal organizations (e.g. Service 1962). It is this very complexity that makes essentializing the tribe a welcomed convenience. It was the subsequent characterization of the neo-evolutionary stages and their misapplication to ethnographic and archeological situations which resulted in the flurry of critiques of the concept of the tribe (Helms 1967; Southall 1970; Campbell and Levine 1972; Fried 1975; Wobst 1976).

These earlier studies of tribes show them to be highly complicated. In fact, it is difficult to fault anthropologists for essentializing the characteristics of tribes if one has ever spent any time trying to grasp the workings of an acephalous polity. Evans-Pritchard's (1969) explication of the Nuer social system shows it to be an intricate structure operating simultaneously in several dimensions. The individual "structures" that he delineates are often, by his own admission, working at counterpurposes. Reducing such a system to the linear written word, or at best, a two-dimensional figure, makes it easy to overlook the internal complexity.

A key to understanding a tribal society, or any

heterarchical structure, is the element of time. For it may be argued that while the constituent parts of a tribal society remain roughly constant through time, their arrangement does not. They are constantly coming together, breaking apart and reshuffling. Static visual representations of tribal social structure--invariably structured hierarchically--falsely reify the unity of the tribe in the mind of the anthropologist. What these diagrams cannot show is the variability of the structure through time, the deletion of some levels of organization and the merging of other elements. Consider the child's game of the cat's cradle. The basic elements consist of a piece of string with its ends knotted together and two sets of hands. Using these basic elements the string is configured into almost an infinite variety of shapes or structures. Now consider an anthropologist observing the game. If she watches for only a few seconds, she might report that cat's cradle consists of looping a string between two hands to make four parallel rows. If she had observed at a different moment she might report a configuration that resembles a rickety ladder. But if she could observe the entire sequence of play, she would see how each player's manipulations reforms the string into a number of different structures. Further, she would see how the choices made by a player affect the subsequent choices of other players as well as herself.

From an archeological perspective the cat's cradle

effect is even more complex because the archeological record of a tribal system is an accumulation of the residues of each and every social configuration. Imagine that each configuration of the string represents a different social network operative within a single tribal system. Tracing and understanding each configuration individually is relatively simple; but imagine how complicated the task would become if all the configurations were simultaneously superimposed. This is the nature of the archeological record. The phase may represent just such a compression of the residues of multiple behavior sets because time has been removed. Yet teasing apart the separate networks producible by the basic tribal structure is the only way to get at the real behavior which created the record. It should be immediately clear that a mere structural description of the playing pieces--in this case one string and 20 fingers--gives no sense of what is possible or what actually happens through the playing of the game.

Tribes as hierarchy

Similarly, describing social organization as a tribe composed of many villages often gives little insight into the actual workings of a society and may be of little or no help to the archeologist. As I have previously suggested (Chapter I), this difficulty is best understood as a problem of scale. Tribes are probably least well understood at the scale of the tribe because ethnographic experience indicates

they rarely, if ever, operate as "a tribe" or polity (Dalton 1977:193; Fried 1975). Indeed Renfrew has argued that the tribe is the most dangerous concept of social organization with which the archeologist must cope because it is the least well understood (1984:43).

I would further argue that our difficulty in comprehending the tribe results from construing hierarchical depictions of tribal spatial arrangements with hierarchical social relations. The two phenomena do not always go hand in hand. For example, despite assertions that tribal societies are non-hierarchical (meaning the persons within them do not fall into rigid hierarchies of power), tribal societies are sometimes described in terms of hierarchical spatial arrangements. Because spatial units are often given labels which have implicit social organization (e.g. the household, the village), spatial hierarchy and social hierarchy may become fused in the mind of the anthropologist. Certainly this is warranted in some cases, for example in a chiefdom where the social hierarchy is reflected in settlement hierarchies.

For descriptive purposes, tribal organization is often depicted as a pyramid or cone of embedded social groups, each increasingly more inclusive (Sahlins 1968:16; Evans-Pritchard 1969:248; Braun and Plog 1982:507). Several households form a lineage; several lineages form a village; several villages form a tribe or tribal section. The framing of this description in hierarchical terms should not

be taken as an indication that tribal social organization is structurally similar to that of a hierarchy such as a chiefdom. Contrary to chiefly hierarchies, in which the highest levels of the hierarchy possess the highest concentrations of power, the "higher levels" of tribal organization have progressively less authority or political integrity. It should be noted that because the tribal organization lacks a focal point, i.e. a principal personage and/or a central place of political or ceremonial importance, the spatial hierarchy used to describe a tribal organization may be only an organizational tool of the observer. Nevertheless if the spatial hierarchy is translated directly into social implications, it has important consequences for the archeologist because it bolsters the notion of unity or boundedness. Where the chiefdom can be conceived as a pyramid culminating in the chief, the tribe is conceived as an inverted pyramid culminating in "the tribe."

Given this cautionary, archeologists should be careful when reading descriptions of tribal organizations such as Sahlins':

...the strength of a tribe is generally in homestead and hamlet, the smallest groups and narrowest spheres. Here, at the tribal infrastructure, social interaction is greatest and cooperation most intense....The social system, accordingly, becomes weaker where it is greater....Its [the tribe's] peripheral communities develop close relations and cultural similarity with neighboring peoples, setting in motion a marginal erosion of tribal integrity, and

rather than a definite inter-tribal border one comes upon an ambiguous zone of transition. Rarely united politically, often not definable with precision, the 'tribe' may be beset by a crisis of identity: it is nameless, except as the people are considered 'Stinkers' or something to that effect by their neighbors [Sahlins 1968:16].

The archeologist translates social relations into the spatial arrangements of material remains. Yet in this case, the equation of spatial relations with social relations may be misleading. If translated literally into material consequences, this depiction may take us far from Service's original notion of tribe, which lacks boundaries and is composed of different groups of interacting individuals (1962:167). Instead, it fosters the notion that tribal organization is bounded. The tribe becomes an entity which is real; thus fuzziness around the edges is something to be explained away, not something to be considered essential to and indicative of this mode of organization. From a network perspective this interpretation probably erroneous; some social relations are weakened as a function of space, others are predicated on spatial separation (e.g. trading partners).

Service avoids such hierarchical depictions of tribal subsystems and thus avoids this conceptual dilemma. However he admits that lineage organization among segmentary lineages may form a progression of relatedness. That is, like Evans-Pritchard, Service understands that in these specific tribal systems genealogical distance correlates

with geographical distance (1962:127). It is probably this feature of segmentary lineages which, because of its spatial referent, is sometimes construed as the basis for a hierarchical description of all tribal structures.

The assumption that the household or the village forms the most cohesive and fundamental building block of the tribe needs to be carefully examined. In archeological practice, the village (i.e. the site or the component) is considered a natural unit of study, and the village is assumed to possess a certain cultural integrity. The village is indeed a logical spatial unit (and thus a convenient archeological unit), or locus. But its spatial unity may mask social disunity or diversity.

If we consider Service's tribes (either the lineal or cognatic) this point should become immediately clear. Lineage affiliation is of primary importance in determining residence and formation of some non-local sodalities. In a simple case of a single nuclear family (consisting of a husband, wife and children) in a matrilineal society, we see that the household contains two lineages: the husband's lineage and the lineage of the mother and children. Depending upon marriage and residence rules, the existence of other non-lineage based sodalities and the resource base, the interests of each of the members of the idealized household could be quite different and perhaps even contradictory. Even in Service's lineal tribe, which consists of unilocal residence groups, the absorption of

non-lineage members into the lineage through residential association may be more apparent than real. Southall (1976) points out among the Nuer that although the segmentary lineage system in theory ties all groups within a given locality to the dominant lineage through association, members of the locally dominant lineage are more likely to acknowledge the validity of the organizational principle than non-members. Thus the "absorption" feature is not perfect. Further, it is clear in many situations that the dominant lineage is not always the numerically superior lineage within that locality (Evans-Pritchard 1969:203; Southall 1976:473). Thus archeologists must be wary of assuming one-to-one correspondences between residential groups (represented archeologically by village sites) and social affiliations.

In this case the village is not the most fundamental unit (nor is the household), and definitions of (or searches for) the tribe which begin with this assumption will impose an erroneous structure upon it. This assumed village structure is bound to be hierarchical, and ultimately, bounded. Recognition of the existence of lineage systems, sodalities, and residence rules forms an alternative baseline for understanding tribal networks. It also modifies our spatial orientation by changing the scale at which pattern is sought. Archeologists need to look beyond the apparent unity of the village and recognize it as a collection of disparate elements or sodalities. The

effective scale then is both intersite and multidimensional. Sites are connected via the existence of social networks embodied in sodalities; but from each site more than one network is operative because sites are composed of individuals, and the social identity of each individual (i.e. the social groups to which he/she has membership) is different. The village is really just a palimpsest of many different interactive networks. [This conception of organization is the egalitarian equivalent of Crumley's (1976) notion of overlapping functional lattices in state-level societies.] The anthropologist's misconception of "the tribe" is that at the level of the tribe it is a single organizational structure which unifies all participants.

As a side note, Wobst (1978) and Levine and Campbell (1972) have suggested that the sense of apparent spatial boundedness inheres from the methods employed in the field. Ethnographers have tended to seek their own group of people in order to avoid stepping on academic toes, and once in the field, real-life constraints often prevent ground-truthing informants' descriptions of boundaries. Thus the anthropological literature is full of bounded "tribes." Wobst further suggests that archeologists tend to accept this received image without question, structuring archeological data to fit this understanding, as opposed to using archeological data to test it.

Tribes as network systems

Having reconsidered the structure of tribal societies and its implications for scalar considerations, attention must turn to the practical problem of space. Ultimately, archeologists must translate social organization into spatial organization because archeology uses as its primary data the spatial distribution of artifact types, styles, sites and resources. Using a traditional model of tribes as bounded entities, the cultural landscape can be divided into units based on similarity of material culture. Thus boundaries are created. Interaction, or lack of interaction, can then be charted across boundaries. Yet without boundaries, archeology is reduced to a mere description of variation. In the end the tribal conundrum for the archeologist is to find order in the data without imposing a false structure on them. If, however, on our hypothesized cultural landscape, we replace the bounded spatial units known as tribes--archeologically known as phases--with a web of social networks which crisscross through loci known as sites, have we, in fact, gained any insight at all? The natural tendency would be for archeologists to locate the spatial extent of all individual networks and mark boundaries around them. The problem of "the tribe" has been reinvented.

Clearly we need an intellectual escape hatch. One possible way out of the dilemma is to consider the function of tribal (or any social) organization, writ small. Tribal

organizations do have spatial, ecological and social limitations which help to give them shape and structure.

Service states that the key to tribal integration, that is the structural element which gives the tribe any solidarity, is the pan-tribal sodality (1962:113,115). More recently, these have been understood as cooperative networks, forming lines of transmission for goods, information and personnel (F. Plog 1979; Braun and Plog 1982). They are the means by which individuals obtain material livelihood and political protection, mates, as well as access to religious realms (Dalton 1977:194).

In other words, tribal systems are problem-solving networks, providing the basic physical, economic and social requirements. Modeling tribes as social networks shares some commonalities with the sociological perspective of exchange network theory, which is perhaps best exemplified by the work of Richard Emerson. Both understand actors--be they individuals or collective groups--as loci within a system of interconnections. Resources, broadly defined, move among actors according to the kinds of relationships established between them (e.g. power, dependency). But where archeologists must of necessity be preoccupied with the problems of identifying the existence of social networks through physical and spatial manifestations, Emerson's exchange approach assumes that exchange network relationships always exist and thus concentrates on the structural forms of exchange relations and how they may

change over time. Emerson's approach is grounded in operant psychology (Turner 1986:289), and is based on the assumption that actors will engage in exchange relationships that yield gratification (1986:291-293). Note that, at least initially, Emerson avoided the psychological issues of how individual actors define value and gratification--i.e. cognitive issues (Turner 1987:225). As a means for describing and detailing social structures in network situations, archeologists may benefit from some of the insights provided by Emerson's exchange network approach.

As mentioned, archeologists are prone to understand social networks in terms of human responses to the physical, as well as the cultural environment. Braun and Plog rightly state that we can expect to see social networks operating on any landscape where there are people (1982:507). They understand the intensity of such social networks to be a response to environmental unpredictability. The more environmental risk, or unpredictability, the more integrated a region will become. Thus they assume that the networks are almost always in place; it becomes the archeologist's job to measure the intensity of the contacts within the network in order to apprehend organizational principles and changes therein. Their assertion that local autonomy is an impossibility is well-founded (Saitta 1983; Wobst 1974). Small local groups must maintain contact with other such groups simply to maintain a viable breeding population (Wobst 1974). Likewise, other important resources are not

uniformly distributed across the physical landscape and must be taken into consideration. Thus no local group is an island. To some extent (depending upon local conditions and in the absence of centralized authority) they are always reliant upon distant contacts.

Braun and Plog's approach has been critiqued by Saitta (1983) for its assertion that tribal networks are non-decomposable. In other words, although it is acknowledged that tribal systems are composed of networks, ultimately it is the aggregate tribal unit which is under consideration archeologically. The net result from such a theoretical viewpoint is that "the tribe" as a concept has retained most of its integrity, only with the recognition that the size of the interactive unit (the tribe) will vary depending on environmental conditions. Thus the original problem of scale has not been circumvented at all.

Saitta asserts that researchers must begin to attack the decomposability problem and investigate the individual subsystems which are the tribal organization. The obvious problem, from an archeological perspective, is the current dearth of middle range theory linking particular material residues with specific tribal subsystems. Some recent ethnoarcheology has begun to address this problem, for example Hodder's (1977) work in the Baringo District of Kenya.

THE ETHNOHISTORICAL RECORD

Having considered the case for tribal organizations being composed of different social networks it is necessary to evaluate the available evidence for the presence of specific networks that may have existed in the study area of the northwest North Carolina Piedmont.

Ethnohistory is a set of techniques and methods for studying culture through the use of diverse written and oral traditions. It shares much with archeology as a subdiscipline and is an important line of evidence enabling the archeologist to do anthropology (Charlton 1981).

For the purposes of this research it is necessary to read the pertinent documentation for clues that can inform on the following questions: what is the evidence for social organization in the North Carolina Piedmont? What can careful reading of the documents reveal about social relations? How can early observations be joined with other lines of evidence to form a model of social organization?

INTRODUCTION TO THE ETHNOHISTORICAL RECORD OF THE NORTHWEST NORTH CAROLINA PIEDMONT

Observational evidence of the social systems within the study area consists of shreds of shreds. Efforts at assessing the record for clues about the nature of tribal organization are confounded by many factors. The first is the nature of the observations. None of the European visitors of the 16th, 17th and early 18th centuries were

specifically interested in social structure, and thus none offer a penetrating analysis as such. Evidence of social organization slips into the accounts, of course, but efforts at unraveling the complexities of native social and political relations seems to have been largely expedient, based on hours or perhaps a few days of interactions in any given locale. Further, the Europeans were witnessing a social system wholly foreign to their own. Lacking a technical jargon for describing what they saw, they had to record their transactions in their own parlance. Twentieth century scholars must exercise caution when sifting through these accounts, remembering that the worldview of a 16th century Spaniard or a 17th century German would be nearly as foreign to us as the Native Americans were to them. Thus any latter-day glimpse of native systems is passing through a double cultural filter. Facile translations of "tribes" and "chiefs" into the Servicean typology of band-tribe-chiefdom-state are to be avoided.

A second difficulty is the paucity of observational data specifically from the upper Yadkin valley. Most European travelers were simply "passing through" on their way to some other destination. For example, Captain Juan Pardo, leading an expedition of the interior for the Spanish crown, made a foray to the Yadkin in the mid-16th century, probably in the vicinity of Salisbury, North Carolina. On his first and second expeditions he met with two "chiefs" from the Yadkin. Pardo eventually built a small fort on the

Yadkin and established a mission there in an attempt to Christianize the Indians (Hudson 1990). A century later John Lederer, a German, traversed the region but probably did not visit the Yadkin; nevertheless his travels likely did bring him close to the Yadkin valley (Wilson 1983:601-602). In truth, the plethora of proposed routes for Lederer's journey makes it difficult to single out any one route (cf. Briceland 1987:104-107). James Needham and Gabriel Arthur's 1673-1674 expedition appears to have traversed the Yadkin valley, though interpretations of the exact locations vary (Alvord and Bidgood 1912; Briceland 1987). In fact, Needham was killed shortly after crossing the Yadkin River near Yattken Town (perhaps located near present day Salisbury). Finally, John Lawson's famous Carolina voyage of 1700-1701 is believed to have taken him to the Yadkin, to a group he identifies as the Sapona (thought to be recent immigrants to the Yadkin valley), probably just south of Salisbury (Wilson 1983:123).

The Juan Pardo Expedition, 1566-1568

Captain Juan Pardo led two expeditions from coastal South Carolina into the interior Southeast between 1566 and 1568. European politics provided the impetus for Pardo's mission, specifically from Spain's desire to solidify its claim to La Florida in the face of French incursions. Pardo was given additional tasks, including searching for valuable minerals and gems, finding a route to the Spanish silver

mines in Mexico, and securing food supplies from the natives of the interior. Because the expeditions were the official business of the Spanish crown they were documented by an official scribe, Juan de la Bandera, who accompanied Pardo and his soldiers.

Pardo's contact with the people of the upper Yadkin valley was not insubstantial. Hudson (1990) places the town of Guatari on the Yadkin River, perhaps near present day Salisbury, North Carolina. On his first expedition, Pardo and his men spent over two weeks at Guatari, and upon his departure Pardo left his chaplain and four soldiers behind to Christianize the Indians. Pardo returned to Guatari during his second expedition, again for a prolonged stay of almost three weeks, during which time the Spanish and natives constructed Fort Santiago. Again, upon his departure Pardo left a corporal and 16 or 17 soldiers behind. Yet for all the Spanish activity centered on the Yadkin there is relatively little written information available.

Hudson interprets Guatari as a "typical" Mississippian chiefdom, though by his own admission there are problems with this interpretation (1990:91-94). Mississippian chiefdoms have been interpreted as ranked societies containing as many as three tiers of political authority (Steponaitis 1978; Smith 1987:13-15; Hudson 1990:61). The largest Mississippian chiefdoms seem to exhibit this structure, for example Coosa and Moundville. The three-

tiered structure is reflected in settlement hierarchies, generally containing large multiple mound sites, small (often single) mound sites and villages or hamlets (Steponaitis 1978; Smith 1987:13). This three-level structure is also thought to be reflected in the native terminology recorded by the Spanish. The three offices indicated were grand chief (for which the natives apparently had no generic name), mico and orata. Pardo encountered well over 100 oratas on his journeys, and due to their numbers these are interpreted by Hudson to be low-level headmen, either of a single village or perhaps several villages (Hudson 1990:62). Micos were far less plentiful. In fact, Pardo met only three: Joara mico, Guatari mico, and Olamico. Bandera (in Hudson 1990) refers to both the micos and oratas as "caciques" or chiefs. Oratas and micos usually had the same name as the principal town, village or territory with which they were associated, though this was not always the case. In the (apparently) typical fashion their appellation thus would form a compound, for example Guatari mico.

Micos are interpreted to be higher in the political hierarchy than oratas. In the instances where a mico existed, the oratas are clearly subordinate. Large groups of oratas would come to the principal town (the town of the mico) to "make the Yaa" and to bring food to Pardo's men. The "Yaa" was a sign of obedience, which Bandera translates as "I am content to do what you command me to do" (Hudson

1990:260-261). This is thought to be indicative of the existence of a system of tribute, a hallmark of the chiefdom. The assembled groups often asked Pardo where the tribute should go and he commanded them to send maize or deerskins to different locations. The apparent ease with which the caciques complied to these orders seems to indicate that they were accustomed to paying tribute.

Beneath the oratas are a host of other titles, and it is less clear how they fit into the apparent structural hierarchy. Bandera often notes the presence of mandadores, principal men and occasionally, ynahaes at such assemblies. Some oratas had mandadores; some towns had both a cacique and a mandadore as well as principal men. Pardo encountered two ynahaes at Tocaes on the French Broad River at a gathering of oratas. Bandera explained that the ynahaes were like justices or sheriffs (Hudson 1990:276). They seemed to rank close to oratas. In short, the plethora of titles would indicate a complex system of roles and ranking.

Paramount or great chiefs, the pinnacle of the three-tiered system, were a rarity. Pardo himself heard of two, but met neither.

It is probably best to think of the three-tiered political hierarchy as an ideal type to which few if any of the Carolinian polities conformed. In this sense, Guatari was not a typical Mississippian chiefdom. In Guatari "...there have been and are two chieftainesses who are the lords and not unimportant in comparison to the other chiefs

because in their going about they are served by pages and ladies" (Bandera in Hudson 1990:302). Bandera identified these ladies as Guatari Mico and Orata Chiquini when they visited the Spanish at the town of Otari (on the Catawba River), noting that "Meco is a great lord. Orata Chiquini [is] a lesser lord" (Bandera in Hudson 1990:263). At this time the women stated that they had authority over 39 caciques, and that they had constructed a house for maize storage, as Pardo had commanded on his first visit to Guatari. Two of the Spanish soldiers who had been left at Guatari accompanied the women. Hudson notes that the subjects of Guatari, unlike those of other territories, seemed somewhat reticent about joining in to assist and serve Pardo (Hudson 1990:109-110). This suggests to Hudson that Guatari's hierarchy may have been underdeveloped, perhaps because it was a very young chiefdom (1990:93).

Hudson also suggests that Guatari was in competition with Joara, a chiefdom situated on the upper Catawba River (1990:90). He cites as evidence an incident in which two caciques, Chara Orata and Adini Orata, came to Pardo at the town of Joara and expressed their desire to switch their allegiances (literally, "...to make the Yaa...") from Guatari to Joara (Hudson 1990:279). This instance of switching has interesting implications for archeological models of sociopolitical boundaries. From an archeological perspective, the manifestations of such fluidity must be considered. Even if a political entity is somehow bounded,

those boundaries may be quite ephemeral through time. The effect of such switching in the archeological record is either: one, to make the boundaries invisible, or two, to make boundaries appear to overlap, especially since the time required by the actors to effect the change is minuscule.

Indeed, the archeological evidence from the upper Yadkin supports the notion that social structure here was not rigidly hierarchical. One of the most obvious features which is lacking is mound construction. The only reported mound site, the T.F. Nelson mound, was located in the headwaters region of the Yadkin in Caldwell County (Powell 1894:333-342). Recent attempts at relocating the putative site have failed (M. Mathis, personal communication). The artifacts recovered from the site are today in the Smithsonian collections and include a Citico style gorget, copper tubular beads, large columella beads, iron celts, polished stone celts, stone disks and other exotica. Hudson attributes the lack of substructure mounds and the general reluctance of Guatari's subjects to the polity's youthfulness, although I suspect that given ample time, the Yadkin polity would never have developed into something we would recognize as a "full-blown" Mississippian chiefdom. Ultimately the physiography of the upper Yadkin valley was probably working against the coalescence of political authority in a single tribute-gathering chief. Arable floodplains along the Yadkin and its tributaries tend to be small compared to other Southeastern rivers and patchy in

their distribution. Thus late prehistoric populations appear to have been dispersed and opportunistic in their exploitation of the land base (Marshall 1988). If Mississippian chiefdoms were predicated on the sustained production of maize surpluses, it is doubtful that Yadkin River populations could have supported such a system.

A quick comparison of the ethnohistorical record and archeological evidence reveals discord. The general outlines of the sociopolitical structure of the Yadkin valley described by Bandera fall under the Mississippian umbrella, but archeologically it is not recognized as Mississippianized. It is not even recognized as a chiefdom, but rather has been understood as a tribe or band level society (Woodall 1984). It is clear from Bandera's writings that the Yadkin players, Guatari mico, Orata Chiquini, the 39 unnamed caciques and Chara Orata and Adini Orata were no strangers to the system of southeastern politics. How, then, should the non-agreement between the two records be explained? It is evident from the written sources that Guatari is not a letter-perfect chiefdom, if it is a chiefdom at all. In fact, the use of the standard titles (mico, orata, cacique) may be deceptive, masking an underlying diversity in the roles that these individuals actually played. Use of these titles may be indication of emulation behavior on the part of the Guatari participants.

On the other hand, the data are perceived as being problematic because of 20th century definitions of chiefdom

and Mississippian, which tend to cast these conditions as black or white. Either a society is a Mississippian chiefdom or it is a less complex, peripheral tribal group. In the Guatari case, we seem to be dealing with some sort of hybrid, a society existing in a gray area which may actually have characterized many Mississippian societies.

In terms of social organization, a situation such as the one perceived in Guatari should remind anthropologists that the band-tribe-chiefdom scheme, like any other classificatory scheme, is a tool and is arbitrary (Sturtevant 1983; Leacock 1983:17). It does not necessarily accurately mirror reality. Indeed this discord raises the vastly important issue of sociopolitical articulation between the Mississippian and the Woodland. If we cling to the notion that on the one hand we are dealing with chiefdoms and on the other tribes we are left with a distinctive set of expectations for the boundary between the two culture areas. It should be recognized that these expectations are generated in part from the analytical separation that this particular neo-evolutionary framework has forced between the concepts of the tribe and the chiefdom. Such separation may not be warranted. A comparison of the written record with the archeological record suggests that some attention should be focused on the interactive relationships between "Mississippianized" societies and non-Mississippian societies. Such study may reveal that the neat division drawn in anthropological

theory between hierarchical and non-hierarchical societies is not nearly so clear on the ground. It is safe to say that while archeologists construct a barrier between these peoples in latter-day reconstructions, no such wall existed in reality. Thus to argue over whether Guatari was a nascent chiefdom or a fortuitously located tribe is pointless. The sociopolitical system can only be understood in its own right, not via a preconceived label. Obviously the social structures enabling sociopolitical interactions across vast distances and "culture areas" existed.

Other critical details about the Guatari polity are difficult to extract from the Bandera accounts. It would be helpful to know how large it was. Could there have been more than one mico in the upper Yadkin valley in the mid-16th century? Adini Orata and Chara Orata traveled to Joara in their effort to switch allegiances. We do not know the oratas' point of origin; therefore it is difficult to assess the role that distance played in forming political affiliations. Hudson suggests that the two oratas may have come from the headwaters of the Yadkin (1990:90). The headwaters of the Yadkin are a good bit closer to Joara (presumably at the McDowell site; approximately 50 km) than is Salisbury (i.e. Guatari; approximately 100 km) is. The Guatari mico indicated that she had 39 caciques who were her subjects. Ignoring the question of their loyalty, the number can help provide an educated guess as to Guatari's spatial influence. If each cacique represented a single

village, then 39 contemporary villages (20 upstream and 20 downstream) of Guatari would indicate an expanse of as much as 100 km. This assumes that the polity was restricted to the Yadkin River and that it was 39 consecutive villages that participated (in other words, there were no hold-outs or gaps).

Bandera indicates that when Pardo summoned workers it took all of the subjects three days to arrive at Guatari (Hudson 1990:284). Assuming that it took half this time for the most distant subjects to receive the message, actual travel time could have been up to one and a half days. Pardo traveled approximately five or six leagues a day in this territory, thus a one and a half day excursion might have covered as much as 7.5 to 9 leagues, or 30 to 36 km. This estimate roughly accords with the settlement data (above), placing the outer limits of Guatari's influence within a circle with a diameter of 70-100 km; this means that at the very least, the most downstream portion of the study area was encompassed within the polity. However, I would caution that this may not be an accurate conception of Guatari's sphere of influence. If Hudson is correct in surmising the Oratas Chara and Adini came from nearer the headwaters or even the Dan River, then this suggests that spatial contiguity was not necessarily a requisite to chiefly control.

These spatial considerations take us back to the question of boundaries which might be visible in the

archeological record. A bounded, contiguous polity would be expected to generate discrete markers of its boundaries. On the other hand, a polity composed of a patchwork of villages, and one whose membership fluctuated, might not be able to generate discrete spatial boundaries.

A second critical consideration is discerning rules of descent and acquisition of titles. Unfortunately the Spanish documents barely speak to this question. Evidence from the Pardo and the earlier Hernando DeSoto expeditions indicates that social status was inherited matrilineally (Hudson 1990:67). This, of course, agrees with DuPratz's (Swanton 1968) later description of the Natchez, a group on the Mississippi River in Mississippi. The French observed in this society that the great chief inherited his political authority via his mother, the white woman. The father's lineage was unimportant, except that it differed from the mother's. Other lineages were ranked in relation to the chief's lineage.

The existence of female chiefs does not seem to be unusual and likely is a consequence of the matrilineal descent system. DeSoto found that the great chief of Cofitachequi was a woman, as were the two caciques from Guatari that Pardo encountered. At Joara there was an old cacica (woman chief), and her son was a principal man of the city (Hudson 1990:277). Thus the case for matrilineal descent, though not always explicit, is reasonable.

Unfortunately the rule of matrilineal descent reckoning

does not help to unravel how the variety of titles and/or offices were distributed or related (specifically, the *micos*, *oratas*, principal men, *mandadores* and the *ynahnes*). As mentioned above, all of these titles are thought to comprise a structural hierarchy, although another interpretation is possible. Recently Knight (1986) has reanalyzed Mississippian socio-religious organization as a triad of competing cult institutions, each of which controlled a different aspect of supernatural belief and ritual. He suggests that Mississippian may be understood as a structural type of religious organization, as opposed to the more traditional trait list approach. This interpretation circumvents the problem (mentioned above) of accounting for localized variability among various Mississippianized cultures. Mississippianized in Knight's sense means adherence to a threefold division of ritual activity manifest in the iconography; such belief "...crosscut[s] other cultural and ecological boundaries..." (Knight 1986:685), binding the Southeast loosely under a common organizational structure.

The notion that different cult institutions were engaged in dialectical relationships means that sociopolitical organization from one province to the next, or from one time to another, would not necessarily have been identical. Extant sociopolitical organization would have been an expression of the relationships of the cult institutions to one another; thus the structural type would

allow for a certain amount of fluidity of form.

Similarly, the notion of structural poses suggests that sociopolitical structure is not a constant. Gearing (1968) has described how the male population of Cherokee villages in the 18th century possessed four social structures which were operative at different times of the year. The existence of various organized groups, for example matrilineal clans, households and the body of elders, articulated individuals in different ways at different times, depending upon the activity being undertaken (hence structural poses). Categories of age, sex and kinship relations crosscut all of the different organized groups, structuring individuals' behaviors within those groups (at times when they were operative). Thus the same two individuals would relate to each other very differently at different times, depending upon which structural pose was in effect. In the affairs of the household, for example, a father and son would be bound together and share interests. However in the event of a murder, the village would be split along clan lines, and the same father and son would belong to different groups.

Gearing's description of the four structural poses and their various purposes leads one to wonder whether the Spanish intrusion in the Southeast was provoking a particular structural response in the societies with which they interacted. Thus, for example, the role of orata may have been mobilized above other offices or sociopolitical

organizations.

The Indians Pardo met may have been acting in this manner. Oratas appear to have been instrumental in organizing tribute payments, but their authority may have ended here. The ynahaes were said to be akin to sheriffs; the mandadore is interpreted as a commander, Hudson thinks perhaps war chiefs (1990:66). Authority appears to have been divided and dispersed among these many roles. We tend to write off the importance of these ancillary offices because the Spanish had fewer interactions with them. Yet this lack of intercourse would be consistent with our expectations if the relative importance of the offices was determined by the structural pose being struck. If the Spanish intrusion consistently invoked the same response (the same structural pose), then in the eyes of the Spanish the sociopolitical structure was static and hierarchical. But the relative arrangement of the different offices or institutions may have been quite different immediately before and after the Spanish passed through, contingent upon the circumstances and internal dynamics of the specific society.

LATER EXPLORERS

More than a century passed between Pardo's last expedition and the next round of European explorations of the interior. Looking back from the late 20th century, the difference between 1570 and 1670 seems insignificant; both

times are remote from the present. But in real human terms it is a considerable length of time. In the 20 odd years intervening between Hernando DeSoto's and Pardo's expeditions many changes had occurred within the social systems of the interior Southeast. Old World diseases may have already had a marked effect on the interior (Dobyns 1983:263, 270-271, 293-294). For example, Cofitachequi, the seat of a paramount chieftainess in DeSoto's day, had declined to a simple town by the time Pardo traveled there (Hudson 1990:64).

Thus the degree to which 17th century documentation may be relied upon to faithfully reconstruct late prehistoric native social systems may be small. These accounts generally give a picture of a much changed social landscape, with the sprawling, complex polities of the 16th century having collapsed into smaller units akin to Service's composite tribes (1962:119; Hudson 1990:188). Though many of the names recorded for these groups seem to have some correspondence to groups that existed in the previous century, it is evident that populations had declined sharply, causing geographical movements and coalescence of remnant groups.

John Lederer's Travels, 1669-1670

In 1672 an English translation of the accounts of John Lederer's travels into the Virginia-Carolina interior was published. Lederer's brief narrative describes three trips

into the backcountry and the numerous Indian groups encountered along the way. Unfortunately a combination of Lederer's questionable character and certain inconsistencies in his text have caused scholars to debate the veracity of his claims for nearly a century (Thomas 1903; Cumming 1962; Baker 1975; Wilson 1983; Briceland 1987:102-103; Hudson 1990:198-200). It is widely believed, however, that he did make at least two of the alleged journeys, and that he obtained some of his ethnographic information about the Carolina Indians from native informants (Wilson 1983:602; Hudson 1990:184). If the information is indeed accurate, then it is an early and interesting description of native culture and worldview.

Lederer devoted several pages to a general description of "...the Manners and Customs of the Indians inhabiting the Western parts of Carolina and Virginia" (Lederer 1966:3). According to Lederer, the Indians were divided into four matrilineal, exogamous clans:

From four women, viz. Pash, Sepoy, Askarin, and Maraskarin, they derive the Race of Mankinde; which they therefore divide into four Tribes, distinguished under those several names. They very religiously observe the degrees of Marriage, which they limit not to distance of Kindred, but difference of Tribes, which are continued in the issue of the Females: now for two of the same Tribe to match, is abhorred as Incest, and punished with great severity [Lederer 1966:4-5].

Lederer also indicated that the Indians were divided into "nations."

Every nation give his particular Ensigne or Arms:
The Susquesahanaugh a Tarapine, or small Tortoise;
the Akenatzy's a Serpent; the Nahyssanes three
Arrows, etc. [Lederer 1966:4].

Lederer's account of his second (and most controversial) expedition ironically provides the most ethnographic details. Perhaps the most striking feature of his description is the incredible diversity it reveals. If true, towns separated by no more than forty miles apparently had very different forms of government, ranging from egalitarianism to absolute monarchy. Yet the narratives from the towns which Lederer most likely did visit reveal an underlying communal spirit which seems in keeping with that which is known about these Piedmont Indian groups from other sources. Status was accrued with age, with the senior members of the community commanding the most respect. Property, especially food, was held in common and shared. Closely cooperative villages were spread out across an area of several miles. Thus a "nation" often consisted of more than one village. Twice Lederer commented that he was unable to meet the king of a nation because he lived in a town some miles away.

It is difficult to know what Lederer was actually trying to describe. The terminology of kings, princes and nations is certainly misleading. The description of two "kings" at Akenatzy, "one presiding in arms, the other in hunting and husbandry" (Lederer 1966:13) suggests that real

executive power was not necessarily invested in the office of the king. Instead, he may have been describing an egalitarian system.

Arthur and Needham, 1673-1674

This expedition is notable for its breadth and the long-distance social dynamics that it reveals. No firsthand accounts of the expedition exist; the available account consists of the information that its benefactor, Abraham Wood, was able to extract from the testimony of different participants (Alvord and Bidgood 1912:210-226). Needham and Arthur's journey began from Fort Henry, Virginia, carrying them far to the west to the town of the Tomahitan Indians, which has been tentatively placed in eastern Tennessee (Alvord and Bidgood 1912) or northern Georgia (Briceland 1987). From here Needham returned to Virginia to report back to Wood, leaving Arthur in the town. On his return to the Tomahitan town, Needham was murdered by one of his traveling companions near the Yadkin River. Arthur remained in the company of the Tomahitans for an entire year, apparently "going native" out of necessity. Arthur traveled extensively over the Southeast with his Tomahitan companions, participating in both trade and warfare expeditions. Recognition of the routine nature of these interactions stands as a cautionary against the assumption that material culture areas represent non-interacting and stationary groups of people. Recently Briceland's historical

analysis of the journey has suggested that:

They [the Tomahitans] visited friends and kept up with the activities of peoples living on every river system of the Southeast. The Tomahitan challenge the notion that native peoples clustered together into regional confederations based on language and culture. It is usually thought that these units were friendly to their own and hostile to others. Tomahitan friends and enemies were, instead, a patchwork of native communities spread across the entire Southeast. A portion of the Tomahitan were 'great lovers of the Occaneechees.' Yet the Tomahitan were not a Siouan people of the piedmont as the Occaneechee are considered to be.... Their interactions suggest that native friendships and enmities were more a product of particular events than of great cultural differences [1987:168-170].

Although Wood's rendering of the expedition does not offer a great deal of specific evidence about the social structure of Piedmont groups, the evidence that it does provide for broad regional interactions is an important consideration for reconstructions of social behavior among and between named groups.

John Lawson's Expedition, 1700-1701

In the winter of 1700 John Lawson set out from Charles Town, South Carolina, on a journey into the backcountry of North and South Carolina. Like Lederer before him, the Englishman Lawson traveled with native guides, visiting and observing many different Indian villages along his route which led him into the Carolina Piedmont as far west as the Catawba and Yadkin rivers. Lawson himself identified the Yadkin as the Sapona River, a branch of the Cape Fear

(1937:43). Scholars on the subject agree that Lawson was mistaken in this identification, and that in fact the Sapona town and fort that Lawson visited here was at the Trading Ford near Salisbury, North Carolina (Mooney 1894:41; Hariss 1937:xi; Wilson 1983:123).

Lawson's intimations regarding native social structure are consistent with Lederer's report. Further, neither Lawson's description nor Lederer's contradicts the basic structural principles revealed by the Spanish. Similar to Lederer, Lawson spoke in terms of Indian nations and kings, and like Lederer, he indicated that these nations were separated by only a few miles. In fact, Lawson was quite struck by this phenomenon, remarking:

The three Nations I now mentioned, do not live above ten Leagues distant, and two of them, viz: the Tuskeruros and the Woccon, are not two Leagues asunder; yet their Speech differs in every Word thereof, except one....Now this Difference of Speech causes Jealousies and Fears amongst them, which bring Wars, wherein they destroy one another; otherwise the Christians had not, (in all Probability) settled America so easily, as they have done, had these Tribes of Savages united themselves into one People or general Interest, or were they so but every hundred Miles. In short, they are an odd sort of People...[1937:251].

Lawson met many kings along his journey. He stated that the king was the ruler of a nation (1937:206). Beneath the king were numerous other titles and ranks. Conspicuous amongst these was the war captain, who appeared to rank close to the king. Lawson described the ceremony

accompanying a feast held by the Waxhaws (probably on the Wateree River) at which Lawson himself was seated between the King and the War Captain. This description is reminiscent of Lederer's account of the Akenatzy government (above) under two kings: a war king and a hunting and husbandry king (1966:13). Further, Lederer stated that it was the custom for the man responsible for a feast ("he that makes the entertainment") to be seated between the two kings (1966:13).

In addition to the king and the war captain, Lawson noted that nations had numerous counsellors who convened to discuss and decide all affairs. Seniority was an important index to status (1937:33), and such counsellors were "the ancientest Men of the Nation" (1937:206). In other words, Lawson seemed to be describing a council of elders which conducted business on a consensus basis. "After every Man has given his Opinion, that which has the most Voices, or, in Summing up, is found the most reasonable, that they make use of without any Jars and Wrangling...." (1937:206-207).

Lawson wrote that these counsellors decided all important business, including waging war, making peace, conducting trade with other Indian nations or Europeans and hunting (1937:33, 206). Lawson indicated that these various titles entailed some sort of ranking system. He wrote,

When an Englishman comes amongst them, perhaps every one is acquainted with him, yet, first, the King bids him Welcome, after him the War Captain, so on gradually from High to Low...[1937:33-34].

Yet he also indicated that status was acquired through age (1937:33) and personal achievement, for example hunting (1937:208-209). Thus he seemed to be relating the characteristics of an egalitarian society. Membership in the council was likely determined by age, as is the case for the Cherokee described by Gearing (1968).

Lawson said that the title of king was inherited through the matrilineage. The king's sister's son was heir to the throne (1937:207). This is consistent with both Lederer's and the Spaniards' observations (above).

Lawson occasionally noted the presence or arrival of Indian ambassadors (e.g. 1937:32). He suggested that such official visits between nations was not unusual. Lederer, too, made mention of a Rickohockan ambassador arriving at Akenatzy (1966:14). [Lederer goes on to describe how the ambassador and his five traveling companions were murdered during a feast ceremony. Lawson described similar scenes, for example the ambush of some Machapunga ambassadors by the Coranines (1937:212) and the Saponas' intent to burn five "Sinnagers" prisoners at a feast (1937:44-45) (it is thought that these were likely Seneca from New York (Merrell 1987).] Lawson remarked that the Indian nations were perpetually at war with one another (1937:239). The situation that he described presents an interesting problem: the Indians were divided into numerous distinct nations, usually situated no more than fifteen miles from one another. They often

differed in dress, language and customs, and enmity seemed to be rampant. Nevertheless there was an underlying commonality. Far from being isolated nations, they were highly interconnected. Lawson remarked that "[i]t is very odd that News should fly so swiftly among these People" (1937:41). Certainly there appears to have been a great deal of information flow among these native inhabitants, facilitated by frequent comings and goings of traders and ambassadors. Lawson indicated that Indians were well versed in traveling and had tremendous knowledge of the landscape (1937:21-217). When an offender (of a serious crime) was to be executed, Lawson reports that all members of the nation, and everyone else (presumably allies) within 100 miles was summoned to attend the ceremony (1937:207).

The motivation for war seemed to be a limited blood feud. Lawson stated that nations went to war over the loss of a member (1937:210) and that they were relentless in their pursuit of revenge (1937:212). Warfare apparently consisted of ambushing scouting parties or unsuspecting visiting ambassadors. Prisoners might be tortured, tortured and killed, killed outright or sold as slaves to the English (1937:211-212). The activity cannot be described as a true blood feud because the feud ended with the killing of the guilty party and did not initiate further retaliation.

All of this described activity begs the question of what a nation was. The information pertaining to them juxtaposes two very different interpretations. On the one

hand nations were distinct groups of people, perhaps best understood as bound ethnic groups. They spoke different languages, they dressed differently, and Lawson noted some subtle differences in material culture such as house construction. On the other hand they were highly interactive. They followed the same rules of war, they concluded peace treaties, formed alliances, traded with one another and intermarried. Their governmental structures were very similar if not identical.

Clearly Lawson was puzzled by these nations--they were in his opinion too small to make any sense. Lawson never explicitly stated what he meant by the term nation. The nation seems to have been the village or groups of villages affiliated under a "king." At the time of his observations, the nations varied greatly in size and numbers, though usually several neighboring villages belonged to the same nation. Although Lawson stated that the king was the ruler, Lawson did not indicate that the king had any real executive power. Decisions were made by the convened counsellors, not by the purported monarch. What the king did appear to do was to deal with the English when they were present. This is not unlike Pardo's experience, wherein the caciques (the "chiefs" or oratas or micos) dealt with the Spaniards, while the mandadores (war chiefs), principal men and ynahes played ancillary roles.

Thus if we momentarily suspend the various terminologies, there seems to be an underlying structural

continuity to these societies. What seems to be different is the spatial extent of the polities. According to the Spanish observations, one or several villages might be represented by a cacique (orata); many oratas then were affiliated with a mico, uniting (in various degrees) a larger area, perhaps covering lengthy stretches of river drainages. Lawson's observations give no indication of this second tier (mico level) of cooperation. Unlike the Spanish, he made no mention of tribute payments going to the kings. Instead, Lawson's kings seem to conform more to the lower caciques, Bandera's oratas. The rudiments of the political structure which Lawson depicted resemble the 16th century structure disclosed by Bandera, but lack the higher orders of control characteristic of the earlier chiefdoms. Whether this lack was due to a metamorphosis of the social system in the wake of the upheavals of contact or due to wholesale replacement of the local population or due to the fact that such higher levels of organization never existed in many of these places (e.g. Wilson 1983:56; Hudson 1990:188) is not clear. On the other hand, Lawson may simply have been inducing a different structural pose than the one created by the encounters with Pardo. Thus it was the same system, but configured differently to meet the occasion.

The case for tribes in the North Carolina Piedmont is largely based upon interpretations of Lawson's observations.

Indeed, it is very tempting to interpret each of Lawson's nations as a Servicean tribe. The small size of each tribe or nation, which troubled Lawson, might simply be an artifact of the decimation of native populations by Old World diseases. The amalgamations of such nations into single nations, such as Lawson suggested the Sapona, Tutero and Keyauwees were on the verge of doing (1937:45), would be the logical result of this depopulation. The frequent movements of people/nations is also interpreted as a consequence of trauma. Thus Lawson is depicted as witnessing the jockeying of the tattered remnants of once larger nations; these societies are believed to have been operating in aberrant ways as a result of the traumas they were experiencing (e.g. Hudson 1990:188).

While disease and depopulation were important forces which should not be underestimated, the premise that Lawson's nations were the remnants of autonomous tribes or chiefdoms should be examined. Hudson discerns almost a one-to-one correspondence between the named groups identified by Lederer and Lawson and the chiefdoms listed by Bandera (Hudson 1990:185-188). He interprets Lawson's kings as chiefs or caciques. Their position had changed much since the 16th century, and Hudson suggests that the basis of their authority may have rested on their relationship with European traders (1990:188). In fact it may be the case that the Europeans' perennial insistence on knowing who was in charge may have amplified the importance of the king,

chief or cacique (at least in their own minds). An alternative interpretation is that Lawson and others were witnessing a sociopolitical organization similar to that observed by the Spaniards, but lacking the higher orders of political control often associated with chiefdoms (namely, micos and paramount chiefs). This structural omission does not automatically render the observed groups Servicean tribes.

SUMMARY

From the various ethnohistoric sources applicable to the northwestern North Carolina Piedmont we learn of a heterogeneous society which understandably had changed a great deal during the 16th and 17th centuries. Yet despite the remarkable influences to which it was exposed, certain underlying structural principles endured and can be discerned.

Both the Spanish and the English observed a system of peoples living in riverine villages, engaged primarily in plant husbandry but also reliant upon wild food gathering and hunting. Villages varied in size and population and perceived importance. A group of villages formed a nexus of cooperation, sharing land, food produced from the land and hunting resources, and perhaps engaged in a tributary relationship. Some sort of sociopolitical apparatus linked such villages together into emically recognized cooperative units. The constituents of such a nexus probably did not

remain constant through time, with individuals or communities changing primary associations and joining different cooperative units. The means of sociopolitical integration may have been contingency based, exhibiting a heterarchical structure which could arrange itself differently at different instances. The cooperative units were linked to other homologous cooperative units within a large web of connections. Rivers and interriverine trails linked the southeastern landscape into a network. Matrilineal descent reckoning appears to have been the norm. Status was acquired primarily through descent and age; individual achievement may or may not have been important.

THE ARCHEOLOGICAL MODEL

The primary goal of this chapter is to develop a model from which a specific set of expectations for the appearance of sociopolitical boundaries in the material culture of the late Late Woodland of the upper Yadkin valley can be made. To this end several lines of evidence have been drawn together to try to reconstruct the behaviors operative at the time. The first body of evidence, general analogy, attempts to review crossculturally derived information thought to be pertinent to understanding the study area. Such general analogy cannot provide details about cultural content, but can help to delineate the broad outlines of social structure. Secondly the ethnohistorical

record was reviewed for specific evidence, which, when understood in terms of the general framework provided by general analogy, helps to detail the nature of peculiarities of the social system. Archeologically derived information forms a third corpus of knowledge about the study area. By combining, and where necessary, contrasting, these lines of evidence it is possible to build a model of the social system which can be tested using independently derived archeological data. In order to be tested, the model must ultimately be translated into the material consequences of the specified behaviors. Thus it is necessary to define the nature of the boundaries that such a social system should produce.

Topocentric Boundaries

The chapter began with a discussion of scalar considerations. It is suggested that anthropologists' inability to locate hard and fast boundaries around putative tribal groups stems from the erroneous assumption that such boundaries exist. Anthropologists carry with them into the field the notion that tribes have centers and fringes; yet this geography of the tribe seems to be the creation of the researcher, serendipitously centering the tribe wherever they locate their research (Campbell and LeVine 1972; Wobst 1978; Renfrew 1984). When tribal boundaries are actively sought, they seem to behave like rainbows' ends: when you think you are getting close they simply vanish.

An alternative concept of tribal organization is the social networks model. Scale again is an important consideration, and a lack of recognition of its importance has hampered development of this alternate concept. Tribal network models have met with limited success because the effective scale of the inquiry has not been modified. Archeologists often operate under the assumption that a collection of such networks still constitutes a tribe, as opposed to being simply a collection of networks. There is an implicit assumption that some overarching authority mechanism oversees all networks and ensures their coordination. This coordination is facilitated by the hierarchical arrangement of networks: networks which differ in inclusiveness are envisioned as being embedded or nested like concentric circles.

Yet there is no a priori reason to assume that all networks operative at a single site are of the same size, magnitude, direction or frequency. Assuming that the aggregate spatial extent of a collection of tribal networks delineates the tribe assumes that there is a center. Yet it is widely recognized that a salient feature of tribal organization is the lack of a center. If there is no core, there is no periphery. The "tribe" itself is a convenient fiction--the notion that tribal networks can be lumped together into a recognizable entity is an artificial act undertaken by researchers who believe in the reality of an emic unit known as the tribe.

Yet archeological space still consists of loci of past activities--i.e. sites--and these must be understood in terms of some order. To deal with the conceptual cul-de-sac that the abandonment of the center/edge creates, I propose that tribal systems be understood in terms of something I call topocentric boundaries. A topocentric boundary is specific to the geographical point from which it is observed. If a different point is considered, then the boundary will be different. This view acknowledges that sites represent nodes within the social networks in which they are engaged. The assemblage of networks operative at one site is not likely to be exactly duplicated by that at any other site. This is because sites are the residues of the activities of many people. These individuals are the building blocks of social networks--networks exist through the interactions of the people who recognize themselves as members. Egalitarian villages are composed of individuals with diverse memberships, including different lineage affiliations, clans, special interest groups such as Service's sodalities, trading partners, etc.

Each site is the remains of the network activities of its membership. Thus topocentric boundaries are a useful tool for the archeologist because they handle the variability created by the participation in these various networks. Topocentric boundaries enable the archeologist to consider each manifestation of social interconnectedness separately, from the perspective of the site in question.

This is important because it is likely that different social networks had different geographical and/or social focal points imparting particular cants to specific social networks. These focal points may shift through time, depending upon social circumstances. The focal points of the actors within a given locus will shift, depending upon the activity in which they are engaged; and the actors will literally shift position around focal points. This shifting occurs because activities are to a certain extent contingency based, and activities change on a day-to-day or month-to-month or year-to-year basis. Further, people are not necessarily stationary, and when they move they may take some network affiliations with them, thus changing the spatial configuration of the networks.

The use of topocentric boundaries shifts the effective scale to that of the individual networks constituting the social organization. It dispenses with the formation of boundaries in the conventional sense, recognizing that a social system composed of multiple networks of differing shapes, sizes and intensity levels is unlikely to produce conventional boundaries.

Archeological investigation of topocentric boundaries (to be more fully discussed in Chapter III) must necessarily center on variability within sites and comparisons of each aspect of variability to the variability at other sites. In this way the "decomposability" problem of tribal social networks may begin to be addressed. It is proposed that

topocentric boundaries are created by participation in social networks: what is the evidence for the existence of such social networks in the study area? Further, what might be the expected content of such networks?

Social networks in the northwest North Carolina Piedmont

Is there evidence to support the replacement of conventional boundaries with topocentric boundaries produced by social networks? Non-agreement between archeological and historical data suggests that the current scalar focus of boundaries may be ill-conceived.

Two levels of boundary formation, one conventionally recognized by archeologists, the other perceived through ethnohistory, warrant scrutiny. The first is the precept that there existed a meaningful boundary between the "Mississippian heartland" and the "Woodland hinterlands." Clearly some boundary behaviors were not operating on this scale, as evidenced by the Bandera documents and tentatively suggested by Needham and Arthur's account. Comparison of the Spanish observations and the archeological record reveals that although the people of the Yadkin valley were a part of the overall Southeastern sociopolitical arena, it is barely detectable archeologically. This realization has two implications: first, from the archeological perspective, that the handful of "Mississippian" traits in the material culture package of the Late Woodland needs to be regarded as more than just leakage or anomalies slipping across some

hypothesized cultural barrier. Obviously pan-regional social structures (widely recognized emically) existed, enabling the flow of items and ideas. These structures may have been specific social identities that cross-cut the boundaries of different social groups (e.g. Schortman 1989; Knight 1986) or they may have been more generic structures such as age-sets, which, in non-literate societies, can integrate different people across vast regions (e.g. Daniels 1982).

Second, from an emic perspective, it implies also that players did not recognize "Mississippian" as a unified entity to which allegiance could be marked through strict adherence to a material culture package. Taken together, it seems unlikely that we are dealing with hermetically sealed cultural entities. Mississippianized to an archeologist means a transformation of material culture; to wit, people should begin stamping pottery, building mounds and growing vast quantities of maize. It may be time to reexamine the middle range theory which has become formulaic in its assumptions. For example, do mounds always indicate multiple-tiered hierarchical chiefdoms? Does a lack of mounds indicate an egalitarian social system? How did regions with mounds and regions without mounds articulate socially and politically? By drawing lines around areas with mounds and areas without, archeologists tend to overshadow the connectedness that existed across regions. The evidence tentatively suggests that Mississippian was

not a single institutional structure replicating itself like an amoeba, but rather was a vast array of interlocking systems, each with its own peculiarities determined in part by ecological considerations and previous historical developments and heritage.

Endeavoring to reinterpret the Mississippian is a project far beyond the scope of this research, and, at any rate, is probably unwarranted. The revision offered above--that is, recognizing pan-regional cross-cutting social institutions or networks that served ultimately to interconnect the entire Southeast--is additive, accommodating the historical and archeological evidence for interaction. Based on traditional interpretations of the region, which indicate the juxtaposition of two wholly different social systems, namely tribes versus chiefdoms, it has been widely assumed that there was also a lack of correspondence between any of the social institutions, and therefore, a lack of social or political articulation. Yet clearly such interactions did occur. These may be elucidated through a model of multiple social networks.

The fact that the boundaries of historically known polities such as Joara and Guatari are not readily visible in the archeological record is also telling. Differences marked by differing relative frequencies in common artifact types (Levy et al. 1990) are not convincing indicators of sharp political boundaries. There are two possible explanations for this lack of clarity. First, it may be

that boundaries will not manifest themselves at the scale of the polity. Societies such as Guatari may have only rarely unified to act as a polity, instead operating primarily along familial, lineage, village and intervillage (sodality) lines. Individuals' primary affiliations thus would be to the lineage, sodality or village, not to the overarching polity. The second possibility is that the lack of evidence for political boundaries may be a result of rapidly shifting alliances. In this scenario, the polities do have sharply marked boundaries, but because these boundaries shift frequently, the archeological record is a palimpsest of many different border configurations. The result is blurred or invisible boundaries. The case of the two oratas attempting to switch their obedience from Guatari to Joara is certainly suggestive of this phenomenon. Certainly, this event resonates with Leacock's observations on the working of egalitarian politics, wherein a primary characteristic is the ability of actors to opt in or to opt out of a collective action (1983:20).

Most likely, however, a combination of these two explanations is closest to the truth. Fluidity of boundaries caused by social actors' ability to easily switch allegiances indicates a common structure cross-cutting polities. If this is the case, then the questions of social networks versus allegiance to a well-defined center are not necessarily analytically separate. Instead, they fall under the same category as the problem of the Mississippian/

Woodland boundary question (discussed above).

As an alternative to the unitary boundary problem, here it is proposed that the social organization of the northwest North Carolina Piedmont be understood as a system consisting of multiple, separate and only partially overlapping social networks. As Braun and Plog (1982:507) have suggested, these networks vary greatly: some are "shallow" personal interconnections whereas others are "deeply embedded", ritually sanctioned relationships. The existence of these latter networks permit long-distance interactions across what appear to archeologists to be cultural (really, normative sensu Hodder 1986:8-9) boundaries. These are exemplified by Schortman's "salient identities" (1989), which form subsystems that can unite widely separated and internally different social groups. Thus the discussion above of the articulation of the study area with groups traditionally recognized as Mississippian suggests the existence of one (or more) such social network.

Briefly, it is suggested that certain salient identities such as mico and orata cut across local groups, binding together Southeastern populations into a single large political arena. Based on both the ethnohistorical and archeological evidence, it appears that such salient identities were not necessarily predicated on the existence of a rigid social hierarchy (namely the chiefdom) but could exist within a variety of social configurations. This seems to be the case in the Yadkin valley, where there is evidence

for the existence of a mico and oratas, but little or no evidence for the existence of permanent social ranking (i.e. a chiefdom).

Other social networks no doubt existed, but probably differed radically from this one in terms of their membership, spatial extent and social effects.

The question of how to delineate and discover individual social networks operative in the Yadkin Valley region during the late prehistoric is not easily answered. The archeological record of the Late Woodland of the North Carolina Piedmont lacks the rich iconography seen to the south which provides a window into ritual life and organization of worldview (cf. Knight 1986). Nevertheless this should not be viewed as an impediment to developing valid research questions. By combining structural principles (gleaned from studies of neighboring societies such as the Mississippian, as well as from the ethnohistorical record and crosscultural studies) with the known cultural landscape of the Yadkin valley region, a surprising level of specificity can be achieved.

Landscape

Landscape is an important concept in that it links the physical world with the human one. "...[L]andscape is the spatial manifestation of the relations between humans and their environment." (Crumley and Marquardt 1987:1). The physical world exists independently of its human

inhabitants, and the distribution or spatial arrangements of some aspects of the landscape are contingent upon the physical ordering. But humans also construct certain elements of their surroundings (e.g. houses, villages, markets), thus shaping the landscape culturally. Thus any notion of landscape useful to anthropological research must recognize the dialectical relationship between these two aspects of spatial organization.

Because social networks are inextricably bound to the landscape (both physical and cultural) it is appropriate to model them in terms of known features of the landscape. For the upper Yadkin valley the landscape can be defined in terms of the spatial distribution of resources and the processes which connect people and resources. It should be noted that resources here are defined broadly, including not just items necessary to physical survival, but social, political, cosmogenic, and religious resources as well. This is because in human societies resources are defined not only on the criterion of items necessary to sustain human life; resources are also culturally defined.

Table 2.1 summarizes some important elements of the upper Yadkin Late Woodland landscape. It can be regarded as a heuristic device, identifying resources and processes gleaned from the ethnohistorical and archeological records. These data are presented in a problem-solving language, which should not be construed as indication that social

RESOURCE/CONSTRAINT	REQUIREMENTS OR SOLUTION	RESULTS
subsistence: (primary considerations) farming	arable floodplain	territoriality or tethering/or system of land usage rights
hunting	maintenance of uplands catchment area	territoriality or a system of land usage rights
gathering	maintenance of catchment areas in diverse ecological settings	territoriality or a system of land usage rights
(secondary considerations) exhaustion of locale	unoccupied catchments or new niches	periodic shifts of population
non-local resources: lithics	ability to procure, given the form of the existing system of territoriality or land usage	exchange networks/or access rights
salt	ability to procure, given the form of the existing system of territoriality or land usage	exchange networks/or access rights
marriage partners	maintenance of a viable breeding population	social networks and/or movement of personnel according to rules of lineage or clan exogamy
political ties	ability to interact with groups in different ecological and/or political niches	existence of a "diplomatic" parlance and/or salient identities which are recognized across broad geographical areas

Table 2.1 Resources and Processes affecting the Late Woodland Settlement System of the Upper Yadkin Valley, North Carolina.

processes are being governed strictly by efficiency considerations. Rather, it acknowledges the dialectical relationship between the physical and social landscapes. Specifically, this presentation format should make the

cumulative and recursive nature of the system clear. For each "problem" presented, there is always more than one solution. In some cases, a "problem" may not even be recognized as such. However the solutions enlisted by a particular social system are finite, and can be defined in terms of the overall social matrix. Recognition of the dialectic is important because it allows us to see how certain solutions generate novel "problems" and thus help to give the overall configuration shape and form. This suggests that historical factors may have as profound an effect on the landscape as geomorphology.

A cursory consideration of Table 2.1 reveals the complexity of the aggregate social system. Each (known) element of the total system has a complex articulation to other elements, conditioning some, being conditioned by others. Each aspect is briefly described below.

Subsistence

It is clear both from archeology and ethnohistory that the subsistence base was founded upon a combination of horticulture, hunting and gathering of wild plant foods (Mikell 1986; Lederer 1966; Lawson 1937). In the upper Yadkin valley, hunting and gathering appears to have maintained considerable importance in the subsistence regime (Mikell 1986) unlike more southerly regions where domesticates predominated. Nevertheless horticulture was at least equally important, and this reliance was accompanied

by a settlement preference for sandy floodplains along the Yadkin and its tributaries. Upland Late Woodland sites are virtually unknown.

Floodplain settlement introduces certain spatial limitations to the settlement system because of the size and physical distribution of arable floodplains. Floodplain size and site size are positively correlated (Barnette 1978), thus village populations probably varied greatly, from single households to large agglomerations (Woodall 1990; 1984). Floodplain distribution would also physically separate populations, generating a need to maintain some means of integration. These means could vary from personal relationships to institutionalized interfaces.

Floodplain settlement and investment in storable domesticates also generates a degree of sedentism. Indeed, villages appear to have been inhabited (at least by some portion of the resident population) year-round. Bell-shaped pits appear to have been used as storage receptacles, presumably for food surpluses (generated either through husbandry or gathering). Sedentism introduces a whole array of "problems" to the settlement system. It limits the land area that can be exploited for hunting and gathering because it limits the distance from which the village site can be reasonably provisioned. Thus the villages have a certain "tethering" effect. This tethering may also affect the acquisition of other resources. An example is non-local lithics. It is assumed that direct procurement of such

lithics was precluded by a sedentary village pattern. Thus social lines of procurement had to be established and maintained (Woodall 1987).

Also, the importance of wild food resources must not be underestimated. Maintenance of catchment areas, sufficiently large to accommodate the village population, and inclusion of topographic and biotic diversity within those catchments, would act as a centrifugal force on village sites. Thus maintenance of communications lines between villages would be a challenge to the system.

A secondary problem posed by the settlement preference and the horticultural complex is that sedentary villages cannot be sustained indefinitely. Without significant land improvement projects (for which there is no archeological evidence) Yadkin floodplain soils can be expected to decline sharply in productivity after only four years (Curle 1962). This problem can be temporarily overcome through field rotation. However, given the comparatively small sizes of the Yadkin floodplains, eventually it will become necessary and/or expedient to move the village site to an entirely new location. Periodicity of site abandonment is not known, but may be on the order of every 25 years (or roughly a single generation) (Marshall 1988:138).

These periodic shifts of population can only be undertaken so long as there is always some unused arable land, and so long as village groups are not prevented from moving by other competing groups. This means that there

must be some emically recognized rules of land use, distribution and/or acquisition. Large, uninterrupted territorial claims do not seem to have been the solution; at least there is no archeological evidence that such territories existed.

Non-local resources

Non-local resources which seem to have been important to the system include lithic raw materials, salt and marriageable partners. This list is probably not all-inclusive; perishable items may have figured into the system but are unknown because of their lack of residues.

Lithics. The archeological record of the upper Yadkin valley contains abundant evidence of lithic use. Late Woodland lithics can be divided into two categories of raw material: locally available white quartz, obtained through direct procurement and non-local cryptocrystalline lithics, likely obtained via long-distance exchange networks. White quartz outcrops are a ubiquitous sight in the Piedmont, and quartz is always a constituent of Late Woodland lithic assemblages. Nevertheless, quartz seems to have been a less preferred raw material. Indeed, it is more difficult to fashion into stone tools than the more fine-grained metavolcanics.

Exotic cryptocrystalline lithics from a variety of sources are also common in Late Woodland sites, though in

differing proportions dependent upon site location and size. These appear to have been highly favored raw materials. It has been suggested that at least some non-local lithics (specifically, felsites emanating from the Uwharries to the south of the study area) were obtained by local big men and then distributed locally along kin lines (Woodall 1987). The two major sources of cryptocrystallines are located in the Carolina Slate Belt, to the south, and the Ridge and Valley Province to the north and west of the study area. Given the long distances from which these lithics were originating, it seems likely that some kind of exchange network existed in order to facilitate their movement. Even if certain individuals from within the Yadkin valley were directly procuring these resources, they could not have acted in a vacuum. Social mechanisms allowing access for extraction and travel to and from sources must have existed. Maintenance of these connections would therefore have been an important priority of sedentary populations.

Salt. Although there is no evidence in the archeological record of the northwest North Carolina Piedmont of the acquisition and use of salt, mention is made of it here simply to highlight the fact that there may have existed many essential resources which generally escape our attention because of their ephemeral nature. Despite the fact that they cannot be detected archeologically, they may have exerted considerable influence on social contacts.

Use of salt in the late prehistoric period in the Southeast is well documented (Brown 1980). Several methods for producing salt were observed by the early European explorers. Bandera notes that salt was produced near the sea 140 leagues down the river from Guatari (in Hudson 1990:302). Lederer reports seeing cakes of salt at Sara (1966:16), though he did not know from where the Indians had obtained it. Mooney (1894:58) conjectures that it may have been obtained from a group to the north in southwestern Virginia. Indeed, this idea is not without merit. A large rock salt deposit exists in Saltville, Virginia (approximately 60 miles north of the study area), and was the site of a salt works during the American Civil War (Williams and McEachern 1973:34). Thus salt, like high quality lithics, has a sporadic natural distribution and this is a factor with which human groups must cope. In fact, the Moravians of Salem, North Carolina, were regularly traveling as far as Fayetteville, North Carolina, in the 18th century in order to procure the substance (Williams and McEachern 1973:3). Like lithics, social mechanisms must have existed enabling the procurement of salt (see above).

Marriage partners. Wobst (1974) has suggested that in order to model Paleolithic social units it is necessary to frame two important spatial considerations: first, the minimal equilibrium size, which is the number of people required to guarantee the presence of a suitable mate for each group

member; and second, the maximal equilibrium size, which is the maximum number of people that can be effectively integrated given the structure of the social system (1974:154).

Clearly, these two sizes are not consistent for human groups, but vary depending upon population densities, marriage rules (i.e. who makes a suitable partner), demographics (i.e. mortality, fertility), form of social organization, etc. In other words, they are highly influenced by all of the other aspects of the system. Nevertheless, it is necessary that some sort of social network which can communicate the availability of partners, and which can subsequently connect them, exist.

Ethnohistorical and historical documentation suggests that lineage exogamy was practiced in the Southeast (Gearing 1968; Lederer 1966). Thus social networks cross-cutting lineages would be necessary. Further, marriage often necessitates the movement of certain personnel; such movements are governed by post-marital residence rules [though these, of course, are not always strictly adhered to in practice (Bourdieu 1977:27)]. An analysis of metric traits of skeletal populations from three Yadkin valley village sites show that within-site male populations consistently form internally homogeneous groups, whereas within-site female populations are heterogeneous (Seifert 1991:152). This evidence suggested that residence followed rules of virilocality or avunculocality (Seifert 1991:159).

Given the evidence for matrilineality in these societies, avunculocality seems more likely.

Political Arena. It must be acknowledged that at least some upper Yadkin personnel were engaged in social interactions well beyond the Yadkin valley or even neighboring drainages. The appearance in the archeological record of distinctive artifacts (usually as grave furnishings) common to much of the Southeast, coupled with ethnohistorical accounts showing the sociopolitical connectedness of the region, suggests the existence of a spatially extensive network (or networks). This network(s) crosses diverse ecological and cultural boundaries. The purpose of such a system is unknown; however one result of such a network would be to provide a broad-based communications web.

The creation of distinctive identities (perhaps marked by distinctive badges such as the artifacts mentioned above) whose roles were understood by players near and far would enable predictable interactions even if the individuals involved were personally unfamiliar with one another. In other words, such identities might constitute a kind of diplomatic lingua franca which allowed groups and individuals to deal effectively over long distances and through a changing sociopolitical landscape. Such a system would enable groups with extremely different political organizations to interact. Internally, the distinctive

identities might have very different implications (specifically, who could potentially fill these roles and how permanent their power within that role might be), but for the purpose of intra-group interaction, the rules of conduct would be consistent.

There may have been other constraints comprising the matrix of social life on the Yadkin which have been overlooked. Nonetheless, this brief outline of the requirements of the settlement system suffices to give some insight into possible mechanisms of social organization. The first obvious conclusion to be drawn is that the more constraints placed on the system and the more spatially dispersed the resources, the larger the network must be in order to solve all of the critical problems (cf. Wobst 1974). This basic set of constraints requires that no single village can be autonomous; otherwise none of the basic requirements can be met. The second observation is that, given the different dispersal patterns for the different basic resources, players at any particular locus will have to devise complex solutions if they are to solve all of the problems (roughly) simultaneously. Lineages and/or sodalities (however defined) literally form the lines of transmission within the solution system. Thus it behooves the players at any given locus to maximize the number of possible transmission lines emanating from their locus. It should also be clear that different solutions will be

preferred at different loci within the overall system. Cognition of the players will also be important, because some solutions may be perceived to be more expedient than others (but may not be the most parsimonious if considered strictly in terms of net kilocalories, or some other measure of efficiency).

Alternatively, the various "problems" can be solved by joining a sufficiently large population together under a common identity (i.e. a socio-political entity) which can usurp local decision-making processes and can conduct pan-regional transactions.

These two different organizations should leave very different residues in the archeological record due to the very different behavior sets that either entails. Chapter III discusses the linkage between identity and material culture. It is reasoned that because individual identities are constructed largely by the memberships held in various social units, material expressions of identity are likely to inform on the structure of a society. Thus the aggregate patterning of material culture should serve as a window on social organization.

CHAPTER III RESEARCH ORIENTATION

FORMAL VARIATION AND STYLE

The question guiding this research to this point is simple: what is a tribe? Two contrastive models of tribal organization, one a unitary entity, the other a heterarchical structure composed of multiple networks, were offered in Chapter II. In order to be of any use to the archeologist, it must further be asked: how can tribal organization be recognized archeologically? The material residues of tribal behavior present a challenge because we are unaccustomed to dealing with fluid, decentralized and contingency-based systems. Boundedness is easier to grasp than unboundedness. Further, the nature of archeological data requires that at some level, information be normalized. This cannot be avoided. Usually this is understood as the phase designation. What is implicit in the phase designation is the assumption that all data classes inform on the same system. Refinements of the notion of tribe show that understanding the tribe as an aggregate whole betrays the salient feature of tribal organization (namely, the lack of an aggregate organizational entity). The scale at which tribal organization is generally sought may thus obscure it by indiscriminantly combining the remains of all of the

varied behaviors resulting from participation in different social networks.

For the archeologist, only boundaries which can be perceived through discontinuous spatial distributions of things are useful. Boundaries which existed in ephemeral media--such as language and ideas--are only accessible if they were expressed in material ways. Thus archeologists have devoted much time and effort to establishing connections between emic boundaries and material manifestations. Often such discussions fall under the rubric of theories of style, a topic over which much ink has been spilled (Weissner 1984, 1985, 1990; Sackett 1977, 1985, 1990; Wobst 1977; Hill 1985; Hodder 1986). Archeological interpretations of stylistic behaviors have become much refined since the initial articulation of stylistic theory in the 1960s (Deetz 1965; Longacre 1964; Hill 1967), despite the existence of many differences of opinion and nuance of interpretation. Nevertheless, most current participants in the debate acknowledge that there is an underlying unity to theories of style (Weissner 1990). To wit, style communicates information about its maker or bearer (Weissner 1990; Wobst 1977). From an archeological perspective, this tenet of style theory is fundamental because it serves as a point of connection between material variability and behavior. Successful stylistic analyses have been predicated on the assumption that style communicates (to the archeologist, to the people involved, or to both)

information about the identity of the maker or bearer. Yet some of the earliest studies have been critiqued in recent years because of their mechanistic understanding of the creation of stylistic variation. These early studies (e.g. Hill's, Deetz's, and Longacre's) adhered to a set of assumptions provided by the social interaction theory of style. The fundamental assumption here is that there is a positive correlation between the degree of social interaction of social actors and the degree of similarity of their styles (Hill 1985). Thus people who are socially close and who come into frequent contact with one another should exhibit more similarity of style than people who are socially distant and who infrequently interact. It should be noted that although certain aspects of the social interaction theory of style have been modified, this assumption remains basic to most, if not all, archeological interpretations of style.

Two aspects of the social interaction theory which have come under scrutiny are the meaning of dissimilarity of style and the notion that style producers passively absorb style. One logical conclusion of social interaction theory is that dissimilarity of style is created by social isolation. Specifically, dissimilarity of style indicates little or no social intercourse. This tenet has been modified following Barth's (1969) discussion of ethnic boundaries and the role that dissimilarity plays in facilitating social interaction between members of different

groups. In short, boundaries exist despite a flow of information and even personnel across them. In archeology these processes have been modelled under the information exchange theory of style (Wobst 1977).

Information exchange theory questions the implicit assumption that style producers are passive receivers and transmitters of style. Though social interaction theory does not explicitly require style to be received and produced passively (Hill 1985), it is true that, in many stylistic analyses embracing interaction theory, style production is viewed as a rote activity (e.g. Longacre 1964). Information exchange theory understands the primary role of style to be the communication of identity. Social actors create and maintain social boundaries through the manipulation of visible style. Thus style is subject to active selective pressures.

What these two theories, and other more recent archeological theories of style, share is the belief that group unity is expressed through a commonality of style. Thus it is no great conceptual leap to move from artifact assemblages to tribes. But because the recognition of the nature of tribal organization necessitates a scalar shift away from the unit known as the tribe, it also means the scale at which patterning in stylistic variation is sought must shift.

Macdonald (1990) argues that style is a highly complex phenomenon because the behavioral processes behind

it are so complex. Macdonald suggests that style operates at a variety of levels (e.g. the individual, the society) and thus messages transmitted by a style depend upon the social context within which it is found (see also Sackett 1990:37). Further, style is multireferential, meaning that "...rarely will any stylistic variable of interest be attributable to only a single level of social process." (Macdonald 1990:55). Such social processes are not necessarily nested or hierarchical (Macdonald 1990:53); therefore it is not necessarily logical to assume that the aggregate outcome of stylistic behavior is a one-to-one reflection of unitary group identity.

If, as Macdonald argues, style is "...the complex material outcome of intricate and dynamic social processes..." (1990:55), then the intricate processes must be appreciated. Because archeologists often seek macro-social, political or cultural boundaries, it is often assumed that summary aggregations of stylistic variation can be read as signals of aggregate social, political or cultural affiliation. The research goal structures the level at which variation is organized; in this case it implicitly assumes that ultimately all stylistic behavior is attributable to membership in the larger group. But as Macdonald suggests all those subgroups or subsystems to which an individual may belong do not necessarily contribute to a unified entity. In the case of tribal organization, it was argued in Chapter II that "the tribe" is problematic

when viewed as an entity. In short, a collection of tribal social networks does not necessarily possess an emergent feature known as a tribe. Thus, for the purposes of stylistic inquiries, it will be taken as axiomatic that social actors cannot signal allegiance to a social entity which in their minds does not exist.

The scale of investigation into the patterning of material variation is thus critical. Obviously the scale at which patterning is sought is, at least to a certain extent, dependent upon the research question. If a tribe is a unitary entity, then the phase is an appropriate tool for classifying and comparing material variability. If, however, a tribe is not an emergent feature of tribal organization, then phase designations are probably not appropriate. Too much information and variability are lost by reducing all classes to a single norm.

Unfortunately, this conclusion leads into the gaping chasm that exists between the observable elements of material variation and identifying the complex behaviors that are responsible for them (Braun and Plog (1982) have referred to this as the "non-decomposability" problem). Calling into question the issue of identity construction creates enormous theoretical problems for archeologists. It means starting from the bottom (i.e. material variability) and working up (i.e. grouping variability in meaningful ways). Any act of normalizing data entails a loss of information. How does the researcher know if patterning has

been sought at the "correct" level?

Specifically, the ethnographic data available do not provide enough detailed information to tell the archeologist going into the study which social processes are acting on the creation of stylistic variation in different material items. While Weissner's arguments for identification via comparison are compelling (1984), many prehistoric archeologists have no way of knowing what aspect of identity is on the line in specific artifact classes. Therefore it is difficult to know where pattern is to be sought. For example, archeologists cannot always assume a priori that lineage affiliation will be evident in ceramic variability and thus simply look for intrasite patterning, the form of which is taken to be indicative of residence patterns. In short, archeologists must be wary of putting the cart (theory) before the horse (data). If lineages or other unitary groups are assumed at the outset, usually they can be found.

What is Style?

Style, like ethnicity, is one of those terms which is virtually impossible to pin down definitively. Depending upon the research question, the nature of the data and the social context in which it is found, archeologists have proffered myriad definitions of style. Nevertheless, archeologists tend to agree at the broadest level that style is a way of doing things (Hodder 1990). The fact that there

are many different ways to accomplish the same end, and that humans select, for many different reasons, certain ways of doing, generates the variability that archeologists recognize as style.

In the past the term style was often reserved only for material attributes which had no apparent functional value. A favorite example is the decorative elements added to ceramic vessels. In recent years this partitive view of style has been replaced with the notion that function and style are not necessarily so easily divided. In some social contexts style may have its own function, for example communicating identity of strangers in order to regularize interaction (Wobst 1977). Further, two styles, or ways of doing, may be functionally equivalent but simply different (Sackett 1990), as in differing stone tool styles.

Sackett has in fact argued that style resides in material culture wherever equal choices (what he calls isocrestism) for manufacture and use exist and are made (1990:33). Thus virtually all material culture is (potentially) subject to stylistic analyses. Sackett's arguments have provoked lively debate (Binford 1986; Weissner 1984), as well as some resolution (Weissner 1990). What has emerged from these debates is a clarified discussion of the possible relationships between isocrestic choice, style and ethnicity, and the possibility that even the most mundane formal variation may inform on identity. Sackett defines background or vernacular style as

the bedrock design notions artisans of any given group inherit and in turn perpetuate as the agents of that group's craft tradition, notions that are as deeply and unconsciously imbedded in their behavior as their motor habits, the dialects they speak, or the received opinions they hold with respect to questions of proper conduct or the supernatural. Inculcated as much by insinuation as by instruction, and therefore all the more unquestioned, these design notions thus constitute a kind of substratum to the group's style, the heavy sediment that lies at the bottom of its reservoir of stylistic production [Sackett 1990:39].

Note that his notion of vernacular style is not entirely novel. It lies at the core of many of the social interaction school's arguments and a similar though not identical concept has been articulated by Hill (1985) as the style unit pool.

In attempting to reconcile the social interaction and information exchange schools, Hill's style unit pool is a useful concept. Hill models the style unit pool on the gene pool, and it is "...described at any given time as a frequency distribution of the various different kinds of stylistic units within it (meaning all of the kinds of stylistic units known to the people in the community whether or not they are being used by members of the community); it is thus a pool of style unit knowledge" (1985:376). Invention and/or diffusion produces new style units. Selection is the result of artisans' choices from the pool. Hill argues that such choices are consciously made and adaptively driven, excluding from consideration variation

produced by differential motor habits (1985:378). This, of course, differs from Sackett's notion of isocrestic variation, which may be the result of deliberate choices or simply taken for granted choices.

The style unit pool is a helpful conceptual tool for the archeologist, and I would argue that we include within it both explicitly conscious stylistic choices as well as Sackett's isocrestic style. The advantage of Sackett's isocrestism is that it tells the archeologist where to look for style--it is not necessary to know if a style was actively participating in communicating identity or not. An item made in a particular style might have little or no symbolic content to its bearer, it might simply be the way things are done. Yet if that same person and style are thrown into a social context where others do the same thing differently, it might become symbolically loaded. Thus a taken-for-granted can inform upon group affiliation.

Sackett rightfully points out that most prehistorians need an isocrestic model of style because they rarely have the luxury of detailed ethnographic descriptions to guide their inquiries into style. Thus there is usually no way to know just how a style was communicating and negotiating identity. Sackett's model does not stipulate which particular behaviors are responsible for generating formal variation--he simply argues that any formal variation which is equivalent can be read as style (1990:39). Indeed, it is clear that specifying the behavior set responsible for a

particular stylistic outcome constitutes for the prehistorian a real challenge--and often an impossibility. Recognition of the complexity of the behaviors contributing to style production is a dismal prospect for many archeologists who see little chance for recovering them from the modest remains with which they must work.

Isocrestic variation serves as an entry point into the data. It enables the archeologist to begin prying apart formal variation. Once patterning in formal variation is identified, the analysis of contexts may enable some hypotheses about the behavior sets involved.

Formal variation in the Study Area

The crux of the research is to link patterns observed in formal variation of various artifact classes with a particular form of social organization. The foregoing discussions have suggested that different artifact classes (or even attributes) articulate with different social subsystems in different ways. This is because ultimately, artifacts must be understood in terms of the individuals who created and/or used them. Individuals' identities--however complex they might be--are constructed through the social systems in which they participate and are in part mediated by material culture, in part reflected in material culture. Variation in material culture of the Late Woodland of the upper Yadkin valley exists in a number of forms, although very little of the formal variation is what Sackett would

term "style-rich." By this it is meant that very little of the observable variation is purely adjunct or decorative style, but rather is style that is built-in as isocrestisms.

Formal variation will be considered separately by data class, falling under the categories of ceramics (Chapter IV), lithics (Chapter V), and burial practices and feature patterns (Chapter VI). One reason for the separation of these data classes is that it is assumed that slightly or entirely different social processes were responsible for each class. For example, procurement systems likely involving exchange affect the distribution of lithics, whereas it is believed that ceramics were produced domestically for domestic use. Unfortunately, for most classes, or attributes within classes, it is unknown how they specifically articulated with the social behaviors. In this sense the patterning of the data will have to be relied upon to help specify how they fit into larger systems and/or social structures. Nevertheless, certain broad expectations of patterning can be delineated from the alternative models of tribal social organization. The key question is: at what scale(s) does pattern occur? It has been suggested that the scale at which behaviors are patterned is different in a hierarchical (unitary) sociopolitical entity than in a heterarchical (network) system. It is expected that these scalar differences will affect the appearance of boundaries in the archeological record.

THE SITES

Analyses of each of the four data classes were performed in order to reveal patterning that might inform upon social organization of the Late Woodland of the upper Yadkin valley. However before data bearing on this research interest could be generated, it was necessary to identify sites which were roughly contemporaneous and which belonged to the appropriate time period. Only a small fraction of the sites within the study area have been excavated, and of these, radiocarbon dates have been obtained from only two. Thus the burden of segregating sites fell on a comparison of ceramic assemblages. Because three isocrestic attributes had been isolated for analysis (below) of patterning relevant to social organization, it was necessary to select chronologically sensitive variables which did not overlap with these. Site selection and temporal assignment are discussed below.

As mentioned, the vast majority of the sites within the study area are known only through surface survey. Five reconnaissance pedestrian surveys, undertaken between 1974 and 1991 (Woodall and Claggett 1974; Woodall 1975; Woodall and Rogers 1989; Woodall 1990; Rogers and Woodall 1992), have covered approximately 70 contiguous kilometers of the Great Bend region of the Yadkin River, stretching from the Davie County line to the confluence of the Roaring River in Wilkes County, North Carolina (Figure 1.1). As a result, a

total of 140 Woodland sites have been identified and located.

The Woodland of the North Carolina Piedmont, marked by the introduction of ceramics and arrow points, begins at about AD 1 (Rogers 1989b; J. Davis 1987; Claggett and Cable 1982), and lasts until Contact. Thus for the purposes of this study it was necessary to examine artifactual assemblages carefully in order to identify sites from the 15th century. Segregating Early, Middle and Late Woodland ceramic assemblages is easily accomplished; each is recognized by its distinctive ceramic wares, the Early Woodland of the Piedmont (AD 1-600) being characterized by Yadkin series ceramics, the Middle Woodland (AD 600-1000) by the Uwharrie series and the Late Woodland (AD 1000-1500) by the Dan River series (Coe 1952). Thus an initial examination of assemblages quickly discriminated between components belonging to the Late Woodland on one hand, and Early Woodland and Middle Woodland on the other. Very few sites within the study area belonged to either the Middle Woodland or the Early Woodland; however those that did were excluded from consideration.

Of the remaining Late Woodland sites, it was still necessary to narrow down the focus to sites dating to the 15th century. This involved a closer examination of the ceramic assemblages. Attempts at discerning temporal differences in Late Woodland ceramic assemblages of the upper Yadkin valley have met with reasonable success

(Marshall 1988; Rogers n.d., reported in Woodall 1990:112; Rogers 1989a), although the temporal resolution is fairly coarse-grained (on the order of 150 years).

Temporal segregation of Late Woodland ceramic assemblages was initially undertaken at one of the excavated sites within the study area, the Hardy site, 31Sr50 (Marshall 1988). Ceramics recovered from the excavated features at the Hardy site were seriated using several attributes which were known to show time transgressive trends within the Dan River series (Abbott et al. 1986; Gardner 1980; Woodall 1984:77; Rogers 1984; Woodall 1990). Trends which have shown the clearest temporal patterning are changes in temper, wall thickness and interior scraping. Briefly, over the course of the 500 year period in question, Dan River ceramics exhibit a reduction in both the size and amount of temper, a reduction in wall thickness, and an increase in smoothed interiors (Marshall 1988:62-68). These trends have long been considered problematic by researchers, however, because they are not absolute (see Gardner 1980). By this it is meant that a sparsely-tempered, thin-walled, smoothed interior ceramic type does not replace its predecessor. Rather, the different attribute states co-occur throughout the entire Late Woodland, fluctuating only in relative frequencies. Thus comparisons of ceramic assemblages result in relative chronological orderings; there is no magical cut-off date marked by the appearance or disappearance of a particular type or attribute state. This

is important because it means that assemblages, and not sole specimens, must be compared for dating purposes.

At the Hardy site, seriated features were grouped on the basis of ceramic similarity (aided by cross-mends between features) into three distinct clusters. Radiocarbon dates were obtained on a total of six cultural features, associated with ceramics. These dates, presented in Table 3.1, suggested the presence of at least three separate occupations (Marshall 1988:125; Rogers 1989a), one dating to the early to the late 11th century, one to the mid-13th century, and one to the late 15th/early 16th century.

Table 3.1. Radiocarbon dates associated with ceramics from the Hardy Site, 31Sr50, Surry County, North Carolina.

Provenience	Radiocarbon Lab No.	Radiocarbon date	Corrected dates
58-8	Beta-22871	1030 \pm 70	AD 885-1155
9-8	Beta-22870	720 \pm 60	AD 1225-1340
87-7	Beta-28997	680 \pm 90	AD 1215-1410
90-3	Beta-28998	730 \pm 70	AD 1220-1335
94-3	Beta-28999	780 \pm 70	AD 1190-1315
59-5	Beta-22502	340 \pm 70	AD 1420-1650

*all dates were corrected within a 95% confidence interval using the correction tables of Klein et al. 1982.

These dates and the ceramic assemblages associated with them thus form the baseline against which other ceramic assemblages can be compared and tentatively dated. It should be noted that in the absence of radiocarbon dates, such dates are really only relative ordering devices. No regularized (and therefore absolutely datable) tempo of

ceramic change has been defined which could yield dates as precisely as Binford's kaolin pipestem formula (Binford 1972). Thus, for example, a date of 1325 does not necessarily mean that an assemblage dates to that year, but rather indicates that the relative frequencies of the various ceramic attribute states are intermediate between the middle and late assemblages at the Hardy site.

Clearly, based on this ceramic research, Late Woodland assemblages could be effectively classified as early, middle or late. Because the radiocarbon date on the latest component at the Hardy site falls within the time range of interest to this research, this ceramic assemblage formed the basis of comparison for the other sites within the study area. The method of comparison (relative frequencies of attribute states) required that very small assemblages be excluded from consideration. Thus only ceramic assemblages containing more than ten sherds (ten being an arbitrarily chosen cut-off point) were used. Each sherd from each Late Woodland site was coded for several attributes, including vessel form, type of temper, amount and size of temper, exterior surface, interior surface, presence or absence of decoration and wall thickness. Aggregate assemblages were then compared (on the basis of size and amount of temper, wall thickness and interior surface treatment) to the temporally-defined Hardy site assemblages and classified as early, middle or late. In the end, 26 surveyed sites were identified as belonging to the late Late Woodland and thus

eligible for inclusion in the study (Figure 3.1).

Obviously one factor which cannot be controlled for is the problem of multi-componentcy. In addition to providing useful ceramic indices, the Hardy site demonstrates that Late Woodland settlement systems involved the sequential reoccupation of preferred loci over long periods of time. Multiple components can be teased apart through careful analysis of excavated remains, but in surface remains may be difficult to detect. The nature of ceramic change makes distinguishing mixed assemblages a challenge. Non-concordance of attribute patterning with any of the defined trends at the Hardy site is suggestive of multi-componentcy. This was noted at two sites, 31Yd39 and 31Yd32; both assemblages are included in the study, with all of the appropriate caveats offered. The assemblage from 31Yd39 is one of the larger ones from the study area (N=418) and so it is hoped that "contamination" from an early component will have a minimal effect on the data. Because ultimately the multi-componentcy problem cannot be solved (save for excavating all of the sites, and preferably obtaining radiocarbon dates from all), it must be acknowledged as a potential liability of any study using surface materials, and the study must proceed as best it can.

The Excavated Sites

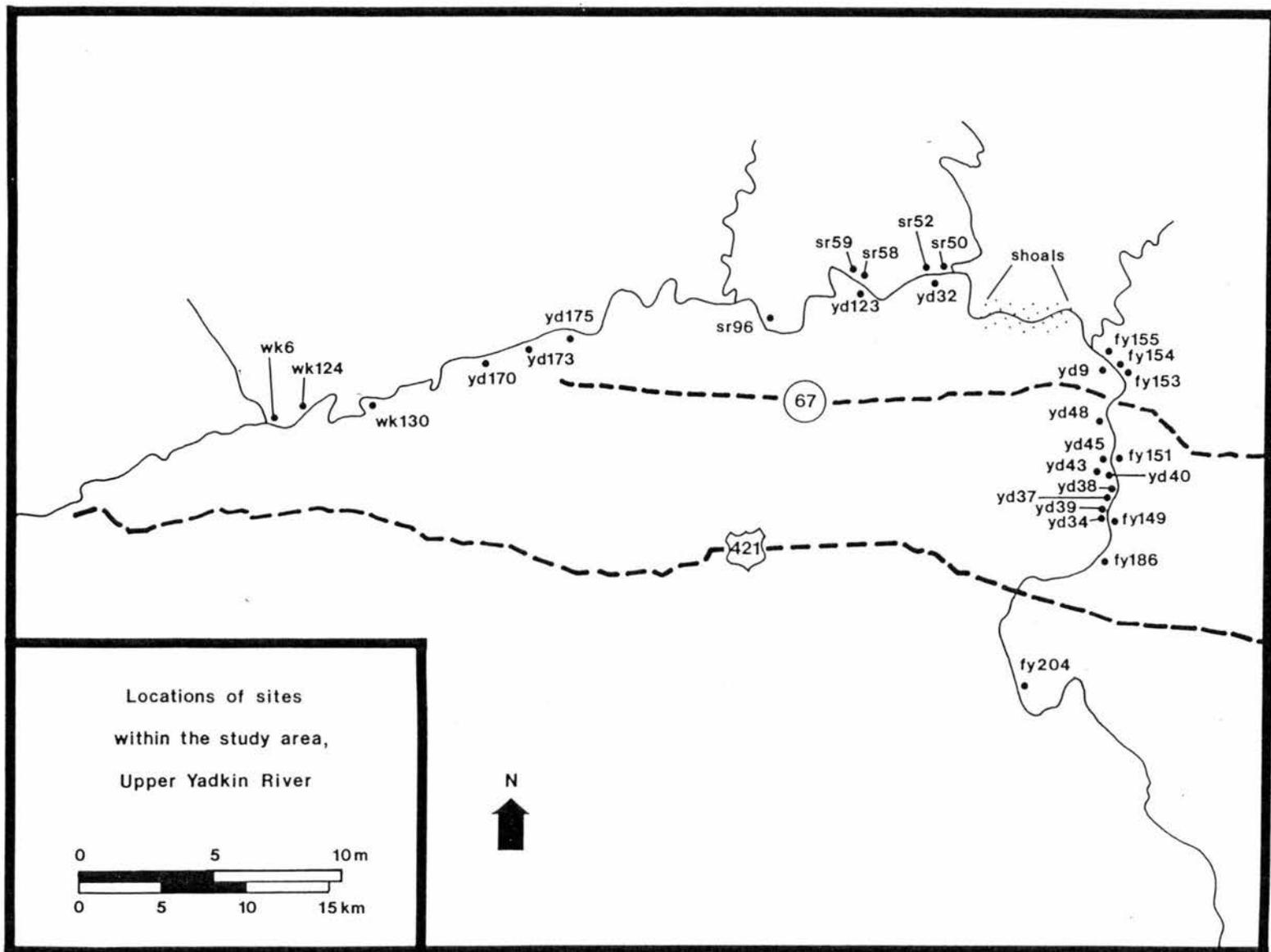
A small number of sites within the study area have been

partially excavated, including 31Wk6 (the Porter site), 31Sr50 (the Hardy site), 31Yd9 (the Donnaha site), and 31Yd41 (the McPherson site). Both 31Sr50 and 31Yd9 are multi-component sites, and both contain components attributable to the 15th century. The other two sites, 31Wk6 and 31Yd41, appear to be single components. Analysis of the ceramics from 31Yd41 indicate that this site likely dates to the 13th century and thus was excluded from the current study. The ceramic assemblage and burial goods at 31Wk6 are, however, suggestive of a mid-15th century occupation, and thus this site was deemed eligible for inclusion. Each site will be briefly described below.

The Porter Site, 31Wk6. The Porter site is the westernmost site included in the current study (see Figure 3.1). It is situated on an expansive floodplain on the eastern bank of the Roaring River where the Roaring and the Yadkin rivers converge. The site was initially recorded as a result of testing of the bottom prior to issuance of a sand mining permit. In the summers of 1990 and 1991 a portion of the site was excavated by crews from the Wake Forest University Archeology Laboratories. A total of 52 excavation units (usually 2 meter squares) were completed, revealing an abundance of aboriginal features including trash pits, postholes and human burials.

The floodplain on which the Porter site is located is somewhat unusual in that it has a markedly undulating

Figure 3.1. Locations of the sites used in the study, upper Yadkin River, North Carolina.



surface which appears to be a consequence of its proximity to the Roaring-Yadkin confluence. It is believed that overbank flooding of the Roaring River has scoured the bottom, resulting in the northwest to southeast trending ridges across the bottom. These features may have been present in aboriginal times; excavation on the downward slope of one of these ridges revealed Late Woodland artifacts lying on the top of a buried surface which conformed to the modern surface. This buried surface was capped by 40 cm of coarse alluvial sands, likely the result of a single flooding episode. Late Woodland cultural features are located along the highest portions of the bottom, following these ridges. Whether this is a result of aboriginal settlement of ridges, or destruction of parts of the site is not entirely clear.

The surface configuration is in part responsible for the two distinct stratigraphies observed at the Porter site. Low-lying areas exhibit a stratigraphic sequence consisting of a light brown sandy loam plow zone 0-25 cm below surface, over a sandy alluvium which extends to a depth of approximately one meter below the surface, under which lies clay. Areas at slightly higher elevations (i.e. on the ridges) display a stratigraphy of light brown sandy loam plow zone to a depth of approximately 30 cm below surface, over a yellow brown sandy loam. Aboriginal features were clearly visible immediately beneath the plow zone here, and no midden was noted. Thus it is likely that some

unspecified portion of the features has been truncated by modern plowing. Features ranged in depth from 41 cm below surface (100.17 meters above datum) to 178 cm below surface (98.87 meters above datum). The plow zone above areas containing features yielded abundant artifacts. A combination of factors has made it difficult to assess the areal extent of the site. The landowner put the land into pasture several years ago in order to discourage artifact collectors from visiting the site. Thus surface visibility is poor or non-existent. Further, the lack of a midden makes site boundaries difficult to define through shovel testing. It is estimated that the site covers a minimum of 1 hectare.

The excavated portion of the site revealed the feature patterns of two structures, one interpreted as a circular house measuring approximately 5 meters in diameter, the other a large structure covering an area of at least 18 meters by 10 meters. Additionally, eight human burials were excavated, of which four are sub-adults and four are adults (Bogdan et al. 1990; Bogdan et al. 1992). Several trash pit features, one of which included a dog burial, were also excavated.

The Porter site lies approximately 27 km south of the Blue Ridge Escarpment. The Brushy Mountains, a series of monadnocks, lie 8 km south of the Porter site. The headwaters of the Roaring River lie to the north some 30 km.

The Hardy Site, 31Sr50. The Hardy site lies some 43 km (straight-line distance) downstream from the Porter site, near the confluence of the Yadkin and Ararat rivers. The Hardy site was the focus of three summers' work from 1986 to 1988. Over that time a total of 94 excavation units (usually 2 meter squares) was excavated. In the summer of 1987 following spring flooding and scouring and bulldozing of the surface of the bottom containing the Hardy site, it was realized that many aboriginal features were visible on the surface. Intensive walk-over survey located features and these were plotted on a contour map. Consequently, it was recognized that features spatially clustered in three discrete areas of the bottom. Excavations in 1986 had concentrated near one of these localities (designated the central sector); excavations in 1987 and 1988 sampled from the other two previously unrecognized clusters (designated the east sector and the west sector respectively).

As described above, at least three components are present at the Hardy site. One of the components represented in the west sector of the site dates to the 15th century. Stratigraphy in the west sector consisted of a plow zone of yellow brown sandy loam over sterile sand. Aboriginal features (some of which were visible on the surface) extended from the plow zone into the sands below to a maximum depth of 143 cm below surface. No midden was observed in this sector of the site.

Excavations in the west sector revealed a circular

feature pattern which may represent the remains of a single circular house, 4 to 6 meters in diameter. Arranged around the perimeter of the possible house pattern were numerous pit features, including three human burials. Additionally, several trash filled pits were excavated from the late component of the west sector. Detailed descriptions of the 1986 and 1987 excavations are available in Woodall (1990).

The Donnaha Site, 31Yd9. Downstream from the Hardy site and the Beans Shoals lies the Donnaha site. The site is situated on the natural levee of one of the larger floodplains along the upper Yadkin, the floodplain covering over 100 hectares. The size of the bottom is due to differential geology of the river valley downstream of the great bend, where the river enters the Inner Piedmont Belt with less resistant gneisses and schists (see Chapter I). Excavations by the Wake Forest University Archeology Laboratories were undertaken in 1973, 1975 and 1982.

A series of excavation units were placed along the floodplain. This work revealed an extensive midden deposit, covering an area of approximately 100m by 60m, with its long axis paralleling the river and the crest of the natural levee. Excavation showed that the basic site stratigraphy consists of a plowzone (approximately 30 cm deep) over a dark midden varying in thickness from 20 cm to over 1 m, over yellow sterile sands (Woodall 1984:17). This work also revealed the complexity of the Donnaha site, which is

apparently the result of numerous occupations from AD 1000-1500.

For the purposes of this study, the EU 34 and 35 area was selected for analysis because it is believed to date to the appropriate time period. The stratigraphy here was typical for the site, consisting of a plow zone over a midden zone ranging from 35 to 60 cm thick, over yellow sterile sands. Cultural features were often evident where they penetrated the midden and extended into the sterile sand, being difficult to differentiate from the midden itself. The excavated area covered approximately 70 square meters, uncovering numerous human burials, trash-filled pits, posthole patterns, and one possible "pithouse" feature pattern. A complete description of the 1973 and 1975 excavations is available in Woodall (1984).

CHAPTER IV CERAMICS

LATE WOODLAND CERAMICS OF THE UPPER YADKIN VALLEY

The vast majority of the Late Woodland ceramics recovered from the upper Yadkin valley fall into the Dan River series. The series has a relatively large geographical distribution in North Carolina and Virginia. Its type site is 31Rk1, "Sauro Town", which is situated in the Dan River drainage some 60 kilometers northeast of the Great Bend of the Yadkin River. In addition to the Dan and upper Yadkin valleys, Dan River series ceramics are recovered along the Smith River in southwestern Virginia (Abbott et al. 1986), in the Eno and Haw drainages (Davis 1987) and have been identified as far north as Botetourt County, Virginia (Geier and Moldenhausner n.d.). Also in western Virginia are two other series, namely the Clarksville and Wythe series (Evans 1955; Holland 1970) which are virtually identical to the Dan River series (Gardner 1980:4-6).

The Dan River series was defined by Lewis (1951) and Coe and Lewis (1952); later this definition was refined by Gardner (1980). Dan River ceramics are tempered with river sand, sometimes in addition to crushed quartz. Vessels are

manufactured by coiling or annular rings, which are welded together through a combined process of malleating the exterior of the vessel with a paddle and smoothing and scraping of the interior and sometimes the exterior. The most common vessel form is a conoidal based jar with everted or slightly flaring rim. Exterior surface finishes, usually the result of impressions made in the wet clay by the paddling process, include net-impressed (most frequently), cord-marked, fabric-impressed, brushed or combed, corncob impressed and plain or smoothed. Interior surfaces vary from heavy scraping (with little or no effort made to smooth) to different degrees of smoothing up to burnishing. Adjunct decorative elements are infrequent and limited, including punctations and incised lines, usually found on the lip of the rim or around the neck, though occasionally occurring on the body of vessels as well (Coe and Lewis 1952; Gardner 1980; Marshall 1988).

The Dan River series appears to be long-lasting. Radiocarbon dates in association with Dan River ceramics from sites in North Carolina and Virginia range from AD 900 (Abbott et al. 1986) to AD 1520 (Marshall 1988). Slight changes do occur within Dan River assemblages over this 600 year period, however, making it possible to segregate Dan River assemblages temporally (Marshall 1988; Woodall and Rogers 1989). Two considerations have been found to be important in determining chronological position of Dan River ceramics. The first is that no single attribute shows

independent, straight-line directional change through time. Rather, co-occurrence of certain attributes must be considered together. Some attributes, such as exterior surface, seem to show little if any temporal trends. This means that, secondly, whole assemblages need to be assessed as opposed to individual specimens. This is because any given suite of attributes may occur at most time periods, but the relative frequency in an assemblage of one set of attributes vis a vis another set changes through time. The variables which exhibit the most marked directional change are interior surface treatment, size and amount of temper and wall thickness. It has been suggested that the trends noted in these attributes are responding to changing functional requirements (namely storage versus cooking functions) placed on the ceramics (Marshall 1988:105-109). These functional needs are thought to be a response to dietary changes evinced by acceptance of new cultigens ca. AD 1200.

Other minority wares are also recovered in the upper Yadkin valley in varying proportions. The next most frequent ceramic is a soapstone (or steatite) tempered ware which currently has no series or type designation in North Carolina. In regard to temper it is similar to the Burke series, which is frequently found in the upper Catawba valley (Levy et al. 1990). It differs from the Burke series, however, in exterior surface treatments and decoration. The Burke series is characterized by its

steatite temper, which varies in size and amount added to the clay. Keeler notes an east-to-west trend in the Catawba valley of increasing quantity of steatite particles added to the paste (Keeler 1971:32). In addition to steatite, the paste often contains sand or crushed quartz. The most common exterior surface treatment is curvilinear complicated stamping, which comprises approximately 50-60% of the series. Burnished and plain exteriors are the next most common (Keeler 1971:32-36; Levy et al. 1990:162). Interiors of vessels are usually smoothed or burnished. Rim treatments vary by vessel form; complicated stamped jars usually have folded rims decorated with reed punctations or fingernail notches. The plain vessels are usually cazuela bowls with plain or incised rims (Keeler 1971:35). Keeler also notes that in McDowell County, North Carolina, Burke ceramics display a curious mixture of traits normally associated with Pisgah ceramics (Dickens 1976), especially in terms of rim treatment.

The unnamed steatite-tempered ware in the upper Yadkin is, however, virtually identical to Holland's (1970:67-69) Smyth series, found in the North, Middle, and South Forks of the Holston River, the New River and the Roanoke River. The Smyth series' spatial distribution forms a southwest to northeast trending band through the central portion of southwestern Virginia. Smyth series exterior surfaces, similar to those found in the upper Yadkin, include net-impressed and net-roughened, plain and scraped. Also like

the upper Yadkin ware, the Smyth series interiors include both smoothed and scraped surfaces. The steatite temper in the Smyth series is usually finely crushed or even pulverized, although occasional large chunks of temper (ranging from 2 mm to 10 mm) are observed. Also, the paste often contains sand in addition to steatite. Holland places the series chronologically between AD 1200-1400.

Shell-tempered ceramics are extremely rare, though not unknown. At least some of these ceramics appear to be traded in to the Yadkin valley and thus do not represent an indigenous tradition.

Although this very small percentage of the ceramics recovered from Late Woodland sites in the upper Yadkin valley appear to be trade goods, it is generally assumed that ceramic production was a household or village affair. In truth almost nothing is known about the context of ceramic manufacture in the Late Woodland. Ceramic manufacturing and/or firing areas have not been identified archeologically, nor have clay extraction sources been identified. Although early explorers occasionally noted the existence and appearance of aboriginal pottery none apparently took a keen interest in it. Assumptions about pottery production thus are based primarily on ethnographic analogy. Fewkes' (1944) monograph on the contemporary pottery manufacture of the Catawba serves as a basis for many assumptions about prehistoric artisanship. Fewkes' observations of traditional potter's craft on the Catawba

reservation near Rock Hill, South Carolina, is intended to elucidate technical procedures of manufacture, and many of his observations do, in fact, correspond to archeological evidence (1944:71).

Among the Catawba, the women tend to be the potters. Knowledge and tradition concerning ceramic manufacture are shared by all members of the community (with the possible exception of the location of preferred clay sources, which may be closely guarded secrets), although actual production is a household affair. Fewkes suggests that the ceramic craft is transmitted through the lineage. Nevertheless, the resultant ceramic tradition is a homogeneous one, with little internal variability existing within the community as a whole (Fewkes 1944:72).

Indeed, very recent ethnoarcheological studies of ceramic production stand as cautionary tales against facile assumptions about the social processes influencing manufacture. Intensive ethnoarcheological research among the Kalinga, a "tribal" society in the Philippines, has yielded many insights into the household production and distribution of ceramics in a traditional society. Longacre's Kalinga research (Longacre 1991; Graves 1985) reveals that social factors traditionally thought by archeologists to be important in determining form and content of style do not operate as simply as once hoped. Perhaps most importantly, the research shows that there is no single social determinant of stylistic behavior. For

example, archeologists' assumptions that lineages should be visible in pottery styles because pottery manufacture is usually taught by mothers to daughters has not been substantiated. Kin groups or work groups may influence a potter's style very little. Rather, the structure of a design system may be known across the entire interactive community and variation may crosscut kin lines or work group affiliation, but may cluster around birth cohort (i.e. the age of the potter) (Graves (1985:30). Thus in the Kalinga case ceramic design production seems to conform to Sackett's notion of vernacular style (see above) or Hill's (1985:376) style unit pool concept, wherein potters are familiar with (or learn) a basic stylistic repertoire which constrains choices, but within which potters may vary in an almost random fashion. Graves has suggested that Kalinga ceramic design variability may play no role in the transmission of social messages (Graves, in Longacre 1991:104). Thus social selective pressures, such as a need to signal group or subgroup affiliation, is not constraining potters' choices. This would explain the lack of significant patterning between design configurations and social factors.

The Kalinga research indicates that although design variability does not reflect cohesive social groups, distinctive vessel shapes (i.e. profile) do reflect regional differences. Men and women can readily identify "foreign" vessel profiles, suggesting that this attribute does play a role in transmitting group identity (Longacre 1991:108).

Thus group identity is expressed (or reflected) through style. The cautionary is that the archeologist cannot assume a priori which group identity will be expressed, nor can they assume the scale at which identity will be expressed.

Assumptions

In the upper Yadkin valley it is assumed that we are dealing with a series of loci (village sites) where pottery was made, used, broken and deposited into the archeological record. It is assumed that vessels were manufactured domestically and that they usually did not leave the locus where they were made (although it is plausible and even possible that they were being exchanged between households or even villages). Potters were faced with isocrestic choices for exterior surface treatment, type of tempering agent and use of adjunct decorative designs. Other aspects of manufacture may have been isocrestic; however these variables have been selected because data pertaining to them are readily available and because they do not pertain to the technological innovations (described above) associated with changing functional demands on Late Woodland ceramics. Further, these criteria were not used in assessing chronological position of assemblages.

temper type. Temper is an important technological consideration in ceramic manufacture. Most ceramics will

not survive drying and firing without the addition of some aplastic material to the paste. The size and amount of temper required to successfully bring a vessel through these processes varies positively with the size and thickness of the walls of the vessel (Braun 1983:123). After a vessel has been fired, temper has important effects on the mechanical properties of the pot. Crack initiation is encouraged by the presence of large temper particles; however crack propagation is also inhibited by such particles (Bronitsky and Hamer 1986:97-98). Thus selection of size and amount of temper may have very pronounced effects on a vessel's technological efficiency. Much research has been specifically aimed at identifying technological properties of cooking vessels (Braun 1983, 1987; Bronitisky and Hamer 1986; Schiffer and Skibo 1987; Steponaitis 1984). These considerations are not considered isocrestic; clearly a potter's goal is to produce a useable vessel, and she/he is constrained by the necessary technological considerations. Therefore for the purposes of this study, considerations of size and amount of temper will be held in abeyance.

I will argue, however, that choice of tempering material is an isocrestic choice. For this attribute, the style unit pool consists of all tempering agents that would be known to inhabitants of the study area, including quartz (both crushed quartz and river sand), soapstone (steatite), shell, limestone and grog (crushed fired clay). Although

each of these materials has different mechanical properties, some, for example, being more efficient agents in cooking vessels than others, I would contend that behavioral processes other than strictly functional considerations are affecting choices of material used. If technological efficiency were the only consideration in the mind of the potter we would expect to see markedly different ceramic assemblages from what is actually observed. Further, availability of tempering materials (again an efficiency consideration) does not appear to be the primary determinant of temper choice. River sand is, of course, ubiquitous in riverine village settlements. Sand may, in fact, be a natural inclusion in many of the clay sources available to potters. Clay deposits nearest to sites are alluvial deposits which invariably contain some sand. White quartz is also an ubiquitous resource; however processing the quartz (crushing) is an arduous project. Shellfish would be readily available from the Yadkin, and lenses of discarded shells are commonly found in trash pits in Late Woodland sites within the study area. Yet despite its availability, shell is a rare temper type in the study area. Soapstone outcrops are also found throughout the Yadkin valley (Woodall 1975:4).

In short, despite knowledge of tempering alternatives and availability of tempering materials, other processes seem to have been affecting potters' choices of materials. In fact, the persistence of quartz tempering in the Piedmont

may represent the continuation of a highly conservative pattern in the ceramic tradition (Coe and Lewis 1952) stretching back to at least AD 600 (if not earlier).

exterior surface treatment. As mentioned, upper Yadkin valley Late Woodland ceramics display a limited array of exterior surface treatments. These form the basic style unit pool for this attribute--it is assumed that all potters within the study area were familiar with all surface treatments and could potentially select any of them. Exterior surface treatments do not appear to confer any technological efficiency to these ceramics, being a by-product of the paddle and anvil construction technique. Thus it is unlikely that potters selected particular surface techniques in order to enhance functional capabilities of their pots (e.g. heating efficiency).

decoration. Adjunct decorative elements are sometimes found on Late Woodland ceramics from the study area. These differ from surface treatment in that they appear to have been added to vessels after completion of their form (but before firing) and appear to have no technofunction. The individual decorative elements contributing to the style unit pool are relatively few: incised lines, punctations of various shapes (e.g. jab punctations, reed punctations, triangular punctations), finger pinches, fingernail impressions, appliqued fillets and loop or strap handles.

Rim forms also are subject to minor variation, including rounded lips, flattened lips and folded rims. Notching or nicking of the top or front of the lip may occur in combination with these different forms. Thus the elements belonging to the style unit pool are fairly limited. This handful of elements can, however, be combined into an almost infinite number of different combinations. While these Late Woodland ceramics are quite homogeneous, they are infinitely variable.

The degree to which decorative design was symbolically loaded is unknown, and thus the specific social processes affecting individuals' choice of design are obscure. In truth, stylistic analysis of Dan River decorative motifs (as alluded to above) is a problematic enterprise for the archeologist. This is because of the lack of standardization in design motifs. Design motifs in Late Woodland ceramic assemblages are so idiosyncratic that most attempts at categorizing them result in each decorated specimen forming its own group. Thus attempts at identifying meaningful social groups by identifying discrete stylistic groups are usually stymied (e.g. Woodall 1987).

Archeological theory is ill-equipped to deal with such apparent chaos. Archeologists seek pattern and then specify behavioral correlates. If pattern cannot be identified, behavior is difficult to fathom. Because it is usually assumed that adjunct ceramic decoration is the result of active stylistic behavior, it is also often assumed that the

form of the decoration is a conscious reflection of the artisan's identity. As described above, some of the earliest successes in stylistic analyses were based on the notion that design motifs on pottery were reflecting coherent social units such as lineages (Deetz 1965; Hill 1967; Longacre 1964). Thus chaos is interpreted as evidence of a social pathology such as a group identity crisis or unprecedented individualism.

The assumption that all adjunctive design carries a heavy symbolic load may be mistaken. Longacre's (1991) and Graves' (1985) Kalinga research has demonstrated that the social identities which archeologists consider important (i.e. lineage affiliation) may not be the ones that are being expressed in stylistic variation. In fact, the social factors influencing design may be quite ephemeral or incidental. Adjunct ceramic decoration may in some cases fall under the rubric of vernacular (or background) style, meaning that the designs do not represent heartfelt emblems of identity to the artisans. The designs are merely elements which exist in the style unit pool and which may be chosen for various reasons. If so, then every decorative option, including the decision to decorate or not, is isocrestic (or functionally equivalent). This is because there is no active competitive value inherent in stylistic choice in this instance. Such a notion is contrary to Wobst's (1977) argument that highly visible styles are subject to selective pressures because they are actively

involved in communication. In other words, in Wobst's view style is functional (in the social realm), just as a knife is functional. Therefore, stylistic choices are constrained by their need to efficiently and effectively transmit salient messages, just as a knife's form is constrained by the requirement that it effectively and efficiently cuts other objects.

Wobst does, however, point out that adherence to a specific style may be relaxed if competition (i.e. the need to signal identity) is relaxed (1977:328). In short, when style moves from being active to being passive (or vernacular), it is free to vary more.

Therefore an analysis of design variability in Late Woodland ceramic assemblages cannot assume a priori that adjunct style is highly symbolic (and hence a direct reflection of identity) just because it is adjunct. Though it would be convenient if every lineage or village group in the Yadkin valley had its own distinctive motif, previous research suggests that the social processes influencing design production were far more complex and perhaps less accessible (Marshall 1988:78; Woodall 1987). Perhaps the most valuable contribution that a study of design variability can make is to identify the levels or scales at which patterning does or does not exist. Previous attempts at interpreting ceramic designs have been hampered because they began with the assumption that social identities in the Yadkin valley were unitary and that they should be directly

reflected in stylistic variability. This initial assumption has dictated the scale at which patterning has been sought. Yet the unwieldiness of the ceramic data suggests that the scale may be incorrect and that a reconsideration of the original premise is in order. Potters' choices of designs were the result of behavioral processes; what these processes may have been should be reflected in the scale of pattern.

In sum, during the process of ceramic manufacture potters were faced with a series of isocrestisms and made different choices. As noted, there are many more isocrestic choices embedded within the procedure, but only those isocrestisms which display internal variation have been teased out for consideration. For example, the coiling method of vessel manufacture is an isocrestism. Several other methods exist whereby the same effects may be achieved, but invariably Piedmont potters employed coiling. Because it displays no variation, it does not yield insight into the study of cultural difference (although it does bespeak a vague underlying unity of style across the entire eastern United States). It should be noted that isocrestisms become limited once the style unit pool is defined. Thus although the potter's wheel is an isocrestic choice for vessel formation, if it was not in the universe of known ways to make a pot, it was not a consideration for potters. Thus to say that potters made vessels by coiling

rather than on a wheel is not a highly informative statement. But knowing that a number of isocrestic options were known to potters, but were selectively employed, tells a great deal about social processes that were in operation.

First during the preparation of the clay potters had to select a tempering material. Second, in forming the vessel, potters selected from a variety of tools to weld the coils and to even the walls. Rims were finished in a number of ways. Finally the choice to add decorative elements (or not) was made. If decoration was applied, the motifs had to be devised from the repertoire of stylistic elements, and portion of the vessel to be adorned also had to be selected.

One suspects (though this is purely conjecture) that much of this process was dictated by motor habits acquired during mastery of the craft and that very little was subject to conscious or symbolic choice. In other words, much of the process of pottery production would fall under the rubric of Sackett's (1990) vernacular or background style. This is not to deny the role of behavioral processes such as Weissner's identification via comparison, whereby artisans negotiate their identities in relation to other artisans. Choices to imitate, simulate or avoid others' styles form a continuing process of creating relative identity throughout the life of the artisan (Weissner 1984, 1990). Identification through comparison is a process which creates and maintains the style unit pool. It is also a behavioral basis guiding selection from that pool, and as such may be

very actively or passively recognized. Thus the operative question for the archeologist is, with whom is comparison being made and what is the resultant effect on expression of relative identity? The first part of the question may be addressed by defining the style unit pool. One obvious problem with this approach is the problem of negative evidence--just because a style is not expressed does not necessarily mean that it was not a known element of the style unit pool. In the absence of formidable physical barriers it is likely that many far-flung regional styles would be known to artisans. Thus it is reasonable to conceive of the style unit pool as consisting of an active pool--i.e. those elements which are known and used with any regularity--and an inactive pool--which consists of all those styles in the region with which it is likely that artisans had at least passing knowledge, but which may not have been actively employed.

This may seem like a long way to go to reinvent the notion of culture difference and culture areas, but in fact such specificity at the attribute level is important in order to study possible network activity. This is because the content of the networks which may have been influential on ceramic production (e.g. marriage patterns, lineage affiliation, work groups, tribal affiliation, etc.) is unknown. Therefore let us assume that the universe of comparison for a potter situated at a single site is composed of all the ceramic styles which are in manufacture

within a 100 kilometer radius. This is the universe, broadly defined, within which the potter must negotiate her/his identity. The possible processes impinging upon negotiation then must be revealed through the patterning of the choices made within that universe.

CERAMIC ANALYSIS

Above the isocrestic variables relevant to a stylistic analysis of Late Woodland ceramic assemblages have been discussed. The variables which were isolated for consideration are exterior surface treatments, tempering agent and decorative elements. These isocrestisms were selected because it is believed they reflect meaningful behavioral patterning (in the form of identification via comparison), as opposed to reflecting purely technological constraints.

In order to reveal the nature of the spatial patterning of similarity and/or difference among the ceramic assemblages from the sites of the study area, it was necessary to compare every site with every other site. This comparison was accomplished using the Brainerd (1951) and Robinson (1951) coefficient of agreement. This analysis did not include decorative elements, which were treated separately (see below).

The Brainerd-Robinson coefficient of agreement was initially devised as a method for seriating archeological

sites, though the logic inherent in the method makes it equally useful for assessing similarity (and hence connectedness). The coefficient measures the similarity between the percentage distributions of a single artifact class, (for example pottery types) between pairs of sites. Sites with identical percentage distributions would yield a coefficient of 200; sites with complete disagreement (i.e. completely different assemblages) would yield a coefficient of 0.

Expectations

The fundamental inquiry addressed by the ceramic comparison is the spatial distribution of similarity. As mentioned, the Brainerd-Robinson method was developed initially as an aid to seriation. According to the method, if archeological units are ordered in the matrix in their correct chronological sequence, the numbers in the matrix will display an ascending-descending pattern. Specifically, coefficients should rise in value from left to right as one approaches the diagonal axis. To the right of the axis, values should gradually decline. The seriation method requires that archeological units be rearranged until this ascending-descending pattern is achieved.

Obviously chronological sequencing is not a consideration in the present study because all sites within the study are roughly contemporaneous. The sites are already ordered in the "correct" sequence, namely their

relative positions along the Yadkin River. Nevertheless, the assumption that proximity should yield an ascending-descending pattern of coefficients serves as an entry point into these data. Here, of course, the assumption of proximity refers to space rather than time. If in tribal societies social distance is positively correlated with geographical distance, then sites which are spatially closest should display the highest degree of artifactual similarity, thus resulting in an ascending-descending pattern in the matrix. In other words, for any given site within the matrix, the sites nearest it (i.e. those closest to the diagonal axis) should be the most similar because these represent the villages with which the most social interaction occurred. The sites farther away (far to the left and to the right of the diagonal axis) should be less and less similar.

These assumptions are clearly based on a unitary model of tribal social organization. Social distance is related to spatial distance because social organization is conceived of as a series of concentric circles, each encompassing progressively more space, as well as progressively less unity (see Chapter II). Sahlins describes this conception succinctly:

[T]he tribe is divided into concentric circles of kith and kin: the household in central position, a circle of lineage kinsmen surrounding it, a wider circle of village relations, on out to the tribal and inter-tribal spheres. Each sphere, otherwise a level of organization, becomes in this

perspective a sector of social relations, relations increasingly broad and dilute as one moves outward from the familial navel [1968:15, original emphasis].

A literal translation of this viewpoint yields the expectation of gradual differences in artifact assemblages as one moves through space. This is not necessarily what Sahlins intended and he is not really wrong in his description. What is wrong is the way that spatial relations are read literally from his figurative concentric circles.

Clearly there are two subversions of how this difference may be manifest, depending upon the nature of boundary formation and maintenance. Based upon a hierarchical model of tribal organization, tribes themselves may be either bounded or relatively unbounded. If tribes are emically recognized units (hence bounded with criteria for membership), then boundary maintenance may be a conscious effort at the level of the tribe, resulting in markedly different styles between tribes (Wobst 1977). In this case, a matrix of coefficients should show discrete clusters of neighboring sites with high similarity values set off from other such clusters (Englebrect 1978).

On the other hand, tribal boundaries may be diffuse (Sahlins 1968; Service 1962); if each village or household recognizes itself as the innermost circle of a concentric arrangement, then the aggregate pattern is one of overlapping circles across space. In this case boundary maintenance may be conscious or unconscious, but the

material result should be similar, showing clinal differences across distance. In terms of a coefficient of agreement matrix, a clinal pattern of difference will register as an ascending-descending pattern.

The above expectations are predicated on a hierarchical interpretation of tribal organization. These may be contrasted with a heterarchical model of tribal network organization, for which the expectations of spatial patterning are different. As discussed in Chapter II, the archeological site (or village) may represent not an unified social entity, but a palimpsest of different social networks (such as clans, sodalities, trading networks). Thus artifactual assemblages from a single site may represent the residues of several different social networks, each with a discrete (but sometimes overlapping) membership; the aggregate network activity at a specific locus constitutes the village site. Because different social networks serve different purposes, and because the resources which networks may access are differentially distributed across the landscape, the boundaries created by participation in network activity will not necessarily follow a distance decay pattern as described above. Rather, some networks will be sprawling (especially those involving the movement of non-local resources) while others may be compact.

In terms of the coefficient of agreement matrix, network activity would be expected to produce an apparently random pattern. Sites with high degrees of similarity

should be both close and far away. Similarly, sites with high degrees of difference should be both spatially close and distant. This is because we would expect several distinct network systems to exist across the same region.

Results

In order to assess the ceramic assemblages on the basis of a coefficient of agreement, it was necessary to define ceramic "types." Because Late Woodland ceramics of the North Carolina Piedmont do not form archeological types, it was necessary to divide assemblages based on the co-occurrence of specific attributes. Thus "types" were constituted by combining a specific exterior surface treatment and a tempering agent. This yielded 16 ceramic "types": quartz tempered/net-impressed, quartz tempered/cord-marked, quartz tempered/fabric-impressed, quartz tempered/plain, quartz tempered/net-impressed under brushing, quartz tempered/brushed or combed, quartz tempered/stamped, quartz tempered/other, steatite tempered/net-impressed, steatite tempered/cord-marked, steatite tempered/fabric-impressed, steatite tempered/plain, steatite tempered/net-impressed under brushing, steatite tempered/brushed or combed, steatite tempered/stamped, and steatite tempered/other. A brief description of each surface treatment and of the temper types is given below.

Exterior surface treatments.

net impressed. This surface is produced by striking the exterior of the vessel with a net-wrapped paddle while the clay is still plastic.

cord-marked. The exterior surface has been struck with a cord-wrapped paddle.

fabric-impressed. The exterior surface has been struck with a fabric-wrapped paddle or the folded fabric alone.

plain. Plain surfaces include both surfaces which have been carefully smoothed and those which are only roughly smoothed. The former surfaces are sometimes smoothed almost to a burnished state, eradicating all traces of tooling and paddling. The roughly smoothed surfaces may be incompletely smoothed, exhibiting traces of tooling and paddling.

brushed. The exterior surface has been scraped with a denticulate tool or some other irregular surface to produce a striated appearance.

net under brushed. These surfaces appear to have been first struck with a net-wrapped paddle, and then scraped with a denticulate, leaving some evidence of the net-impressing underneath a striated surface.

stamped. Stamped surfaces include: complicated stamping, simple stamping and check stamping. Because there were so few examples of any kind of stamping, these were included in a single category.

other. This group included any surfaces which are not represented above, including corncob-impressed.

Temper.

quartz. Quartz temper includes the inclusion of river sand, crushed quartz, or a combination of the two.

steatite. These specimens contain inclusions of crushed or pulverized steatite (soapstone), with particles ranging greatly in size, sometimes as large as 10 mm. Fine sand is sometimes also present in the paste, perhaps as a natural inclusion in the clay.

Every sherd from each site within the study area was coded for several attributes. Thus in order to obtain counts of the 16 "types" for each assemblage, cross-tabulations of tempering material and exterior surface treatment were made. These were then converted into percentages for each assemblage, from which coefficients of agreement could be calculated.

The coefficients of agreement were computed for every pair of sites within the study area, resulting in the matrix shown in Table 4.1. The matrix creates a mirror image on either side of the diagonal axis. The diagonal axis is left blank because it is the comparison of each site with itself (therefore all values along it equal 200). Values are shown on both sides of the matrix, despite the repetition, because of the additive properties of the matrix (Robinson 1951:298). The sites are listed along the horizontal and vertical axes in geographical order from the most upstream

site within the study area (31Wk6) to the most downstream site (31Fy204).

Therefore each column or row can be followed either upstream or downstream from the site under consideration and conformity to a particular spatial pattern can be assessed. Examination of any line reveals the same pattern: there is no consistent ascending or descending trend. Values fluctuate up and down in an irregular fashion. The internal pattern of the matrix can be summarized by the totals for the rows or columns. If similarity of assemblages follows a distance decay pattern (i.e. clinal distribution), then the sums of the rows or columns should reflect this pattern, with values progressively rising to a maximum and then tapering off again. This pattern will occur if similarity is a function of distance. To wit the sites in the middle of the sequence are closer to all other sites than are sites at either end of the sequence (Robinson 1951:298).

Column values within the matrix were added and each resultant sum was divided by a constant (here, 28, or the total number of sites in the study minus one, because the 200 value representing the site under consideration was omitted). When read from left to right the values reveal the same chaotic pattern suggested by an individual reading of each row. There is a weak (though imperfect) trend for the six most upstream sites, which have relatively low totals.

The absence of graduated difference between sites

(either distributed clinally or in spatially discrete clusters) does not negate a model of network organization; therefore it is reasonable to further investigate the possibility that this form of organization existed within the study area. However the matrix presentation lends little resolution to the perception of networks on the landscape. The topocentric boundary model (Chapter II) proposes that sites are nodes within the network system(s) to which they belong. Networks are inextricably bound to the social and physical landscape through which they operate. Therefore sites (nodes) must be related to other sites (nodes). In order to show topocentric boundaries (as perceived through artifact assemblages) graphically, it is necessary to convert the coefficient matrix into a physical and social landscape. To achieve this, the coefficients of agreement for each site were converted into contour maps. The coefficient for each site was plotted on a map of the upper Yadkin valley; then contour lines (using a contour interval of 20) were drawn in, using the coefficients as elevations. High coefficients, which represent sites with similar assemblages, become high elevations. The highest peak on each map is the site under consideration, with an elevation of 200. The other peaks on the map represent the locales with the greatest artifactual similarity, and are presumably the locales with which there are the most intense interactions. Thus the maps literally show the contours of the social landscape from the perspective of each site

within the study area. The contour interval of 20 was chosen arbitrarily; nevertheless it is useful because it helps to "even out" the surface, thus eliminating some of the noise from the raw matrix.

Mapping of the coefficients also serves to show the spatial distributions more clearly than the linear arrangement of the matrix. One important feature of the Great Bend region of the Yadkin River is, of course, the great bend. The river follows an east-northeast course up to this point, and at the great bend turns almost ninety degrees to follow a south-southeastern course. Thus river miles and straight-line distances between sites on either side of the bend can be tremendously disparate. Actually showing the locations of sites on a map, along with their coefficients, makes the physical relationships far more evident.

Visual comparison of all resultant contour maps revealed three distinct contour patterns and two sub-variants (and a summary graphic of all the contour maps is shown in Figure 4.1). The first group (Group I) consists of four of the most upstream sites, including 31Wk6, 31Wk130, 31Wk124 and 31Yd175. This group stands out from all of the others because of its lack of similarity to most or all of the other sites within the study area. Although any of the six groups designated here are difficult to characterize (due to the diversity of attribute associations), Group I stands out for having higher proportions of steatite-

tempered wares overall. Contours of above 100 never extend as far downstream as the shoals, and usually only encompass the sites within the group, and perhaps one or two others nearby. The Porter Site, 31Wk6, stands out among this group because of its lack of similarity to any of the sites within the study area, although it does have some affinity to the sites included in this cluster. One suspects that these sites were more connected to sites upstream of the project area. Unfortunately survey has not been conducted beyond the Porter Site, so this hypothesis must await further research.

The second group of sites (Group II) is more spatially diverse, including a site from the upstream area, (31Wk173), a cluster of sites near the confluence of the Ararat River (31Sr59, 31Sr50, and 31Yd32) and a group of sites between Highways 67 and 421 (31Yd48, 31Yd43, and 31Yd40). The spatial distribution of the sites makes one suspect that Late Woodland people were "cutting the corner" of the bend in the Yadkin, circumventing the shoals region as well as the sites which cluster just downstream of the shoals.

The third group (Group III) has a spatial arrangement similar to the second group and includes two sites between the Mitchell and Ararat Rivers (31Sr96 and 31Sr52), two sites near the confluence of the Little Yadkin (31Fy155 and 31Fy153) and a cluster of sites between Highways 67 and 421 (31Yd38, 31Yd37, 31Fy149, 31Yd45, 31Yd39, and 31Yd34). Again, the most upstream and most downstream clusters are

closer by overland miles than by river, suggesting the Late Woodland people were cutting the corner and avoiding the bend. The most upstream site is about equidistant from the intermediate sites and the downstream sites if the former distance is traveled by river and the latter over land.

The fourth group (Group IV) consists of only three sites and may be a subgroup of Group III. This cluster includes 31Fy204 (the southernmost site in the study area), 31Fy154 and 31Fy151. These three sites consistently fell together to the exclusion of most other sites. These sites do, however, show a greater than average affinity to sites 31Sr52 and 31Yd34, suggesting that they may indeed be linked to Group III.

A fifth group (Group V) consists of three sites, 31Sr58, 31Yd9, and 31Fy186, which show equal affinities to both Groups II and III.

The last group has only two sites, both of which display somewhat anomalous patterns, making them difficult to classify. 31Yd123 probably belongs to the second cluster of sites (Group II), conforming most closely to this pattern; however it also shows certain tendencies of Group III. 31Yd170 fits no particular pattern well and is best described as its own group (Group VI). It shows the closest affinity to 31Sr96; the next order of connectedness is with 31Sr59, 31Sr52, and a cluster of sites between Highways 67 and 421 which belong to both groups II and III (including 31Yd45, 31Fy151, 31Yd40, 31Yd39 and 31Fy186).

The most obvious conclusion that can be drawn from this breakdown of the study area is that the sites do not cluster into spatially discrete groups. Rather, the "boundaries" of the groups show considerable overlap. Further, the clustering of the sites is counterintuitive in that one would expect, for example, all of the sites between Highways 67 and 421 to be more similar to one another than to any other group of sites due to their close physical clustering. Given the peculiar spatial distribution of similarity, it is necessary to examine the possible behavioral implications.

Traditionally in archeological studies, variability in ceramic styles is understood in terms of the movements of females (usually according to post-marital residence rules) who are presumed to be the potters (Whallon 1968; Englebrecht 1978; Longacre 1964; Hill 1967). Recent ethnoarcheological research (Longacre 1991; Graves 1985; Hodder 1977; Weissner 1984; DeBoer 1990) has, however, indicated that post-marital residence rules do not translate directly into ceramic variability patterns. Many other social processes impinge upon the production of variability.

Therefore it seems unwise to attempt to interpret the spatial distribution of ceramic variability simply in terms of the dispersal of members of exogamous matrilineages, though it might be tempting. This is not to say that the movement of potters is not somehow reflected in ceramic variability. Rather, it is cautioned that the reflection of such movements may not be as straightforward as once

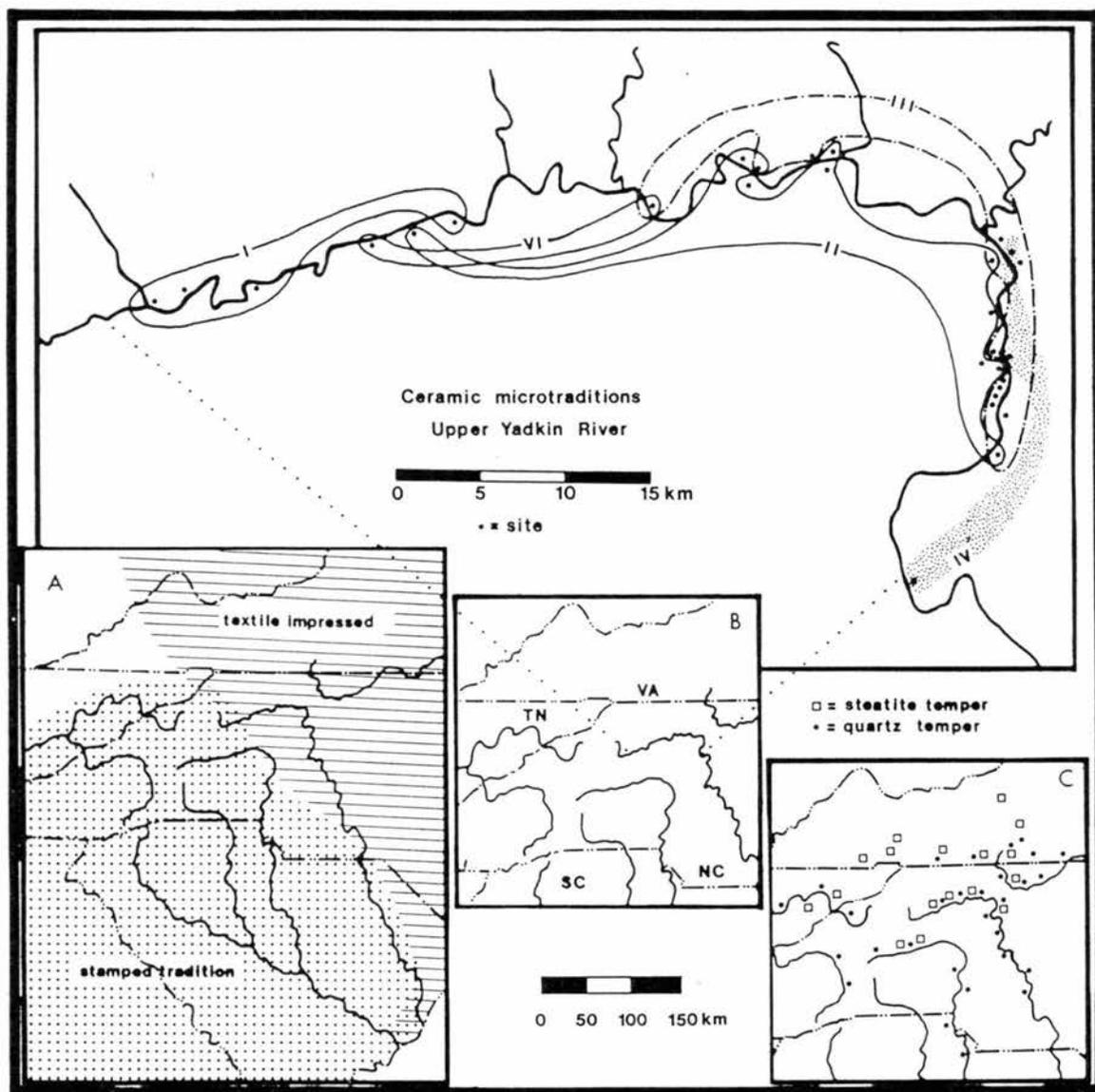


Figure 4.1. Distribution of various ceramic traits of the late prehistoric of the southeastern United States. A.) The distribution of the South Appalachian stamped pottery tradition and the northern textile-impressed tradition (after Holmes 1903). B.) The location of the study area. C.) The distribution of steatite tempered ceramics and quartz tempered ceramics.

believed. In short, there may be no one-to-one correspondence between lineage affiliation and ceramic styles.

Such an interpretation is further ill-advised when one considers the nature of the stylistic "types" upon which the coefficients of agreement are based. The 16 ceramic types used to generate the topocentric contour maps are anything but style-rich. In fact it is difficult to believe that the formal variation represented by the different types could be active expressions of any heartfelt identity. The two isocrestisms involved are akin to the question of whether an American adds sugar to her/his cornbread batter or not-- certainly it might tell us something about the regional identity of the baker (though this would be an imperfect correlation), but it is unlikely to be a highly conscious act and therefore not an active symbol of identity.

Furthermore, in the case of the Yadkin ceramics, the sheer number of attribute states speaks against a one-to-one correspondence between ceramic "type" and a particular social identity, e.g. clan affiliation. Attempting to make this argument leads to two equally untenable extremes: on the one hand, the notion that each assemblage (composed of many different types) is the product of a single corporate identity such as a lineage. This leads to the problem pointed up by the Bordes-Binford debate, namely that different ethnic identities are unlikely to be expressed via the production of differing relative frequencies of the same

basic types. On the other hand is the assumption that each type or variety is the product of a single identity group or lineage. This is reminiscent of the perennial Bell Beaker folk problem (Shennan 1978), which in this case would translate into the net-impressed people, the cord-marked people, etc. ad infinitum. If this were the case, one would inevitably have to wonder how some of the minority ware people managed to hang on when their numbers were apparently so few. (In other words, some ceramic modes have no center of origin or "homeland", but instead are minorities everywhere that they occur).

Table 4.2 summarizes the exterior surface finish data for the entire study area, and shows the overall surface homogeneity for the region. Net surfaces (including both net-impressed and net/brushed) account for the majority of all ceramics at about 60% of the total Great Bend assemblage. Plain surfaces run a distant second at 19%, with other surface finishes constituting small minorities. Stamping of all kinds (complicated stamped, both rectilinear and curvilinear, check-stamped and simple stamped) is conspicuously infrequent in the upper Yadkin valley. This contrasts with the neighboring upper Catawba valley, where curvilinear complicated stamping occurs with a frequency of about 60% (or roughly equal to the proportion of net surfaces in the Yadkin Valley) (Keeler 1971:34; Levy et al. 1990:159). The occurrence of stamped ceramics in the Yadkin may be a product of the trade of vessels from other areas

(notably the Eno and Haw drainages and the Catawba), or may be the result of an indigenous tradition. Certainly its low frequency is a trait which marks the overall Yadkin assemblage from other nearby regions.

	Net	Cord	Fabric	Plain	Brushed	N/B	Stamped	Other	Total
No. of sherds	1555	248	70	595	158	355	53	92	3126
%	49.7	7.9	2.2	19	5	11.3	1.7	2.9	100

Table 4.2. Total number of sherds in each exterior surface treatment category for the study area sites of the Great Bend Region of the upper Yadkin River, North Carolina.

In short, the data simply do not support the contention that there are several unitary social identities which are reflected in ceramic styles. Nevertheless, potters were differentially choosing among the elements belonging to the style unit pool, resulting in more or less similarity between different assemblages. An important point that should be stressed is that a lack of similarity between assemblages within the study area does not necessarily affirm a social isolation model (i.e. the notion that a lack of similarity indicates a lack of interaction). Obviously there was enough interaction to maintain a single active style unit pool across the entire study area. No glaring differences in ceramic types which would place a village (or group of villages) within an entirely different universe are evident. The ceramic "provinces" (i.e. site group clusters) disclosed by the coefficient matrix are not closed groups.

In fact, the memberships overlap. For example, group V is composed of sites which have as much similarity to sites in Group II as they do to sites in Group III. What is interesting is that the overlap is not spatially discrete; as described above, each of the groups, with the exception of Group I, is completely interdigitated with all of the other groups.

This raises one obvious question: what behavioral processes were generating such a pattern? First, it is possible that the apparent pattern was created strictly by chance. If no behavioral constraints were governing potters' selections from the style unit pool, then it is possible that whimsical choices would serendipitously result in assemblages being more similar to some than to others. Alternatively, the perceived similarities may be indexing meaningful social behaviors. Sites sharing high coefficients of agreement may have had more frequent interaction (at least in certain social dimensions) with one another than sites with low coefficients. The nature of these interactions is unknown; they could have entailed an exchange of personnel, ceramics or some other goods, or simply ideas.

In either case, the question of the integrity of the style unit pool cannot be ignored. An overall unity subsumes the intra-and intersite heterogeneity. In other words, two scales of patterning are evident in the ceramic data. One is the microtradition, exemplified by the

tendency of some assemblages to be more similar than others because of biased selections from the style unit pool. The other is the tradition, which subsumes all of the microtraditions under a single umbrella of commonality (i.e. the style unit pool as a whole). The first is a quantitative distinction; the second is a qualitative one. The unity of the pool must have been maintained by a particular set of social processes; however I would argue that the peculiar nature of the ceramic patterning suggests that this unity was not generated by an unwavering mechanical allegiance to an all-encompassing drainage-wide social identity. Rather, the apparent unity of the pool may have been a by-product of the operation of a multiplicity of lower order social processes.

This is because the unity of the tradition seems to be produced by maintaining a very diverse pool consisting of numerous elements which are constantly sorted and resorted. A competent potter within the tradition is one who understands the basic grammar of the style unit pool, and who can then combine the elements within the confines of this grammar (DeBoer 1990; Longacre 1991; Graves 1985). Microtraditions might arise within this grammar, recognizable as preference for certain combinations of elements. The social processes fostering the development of such microtraditions may have little to do with the genetic makeup of the artisan and may have much to do with the social context in which competence is being exercised. For

example, DeBoer argues that "...the fidelity of stylistic transmission does not seem particularly sensitive to the social origins of the artist" (1990:102). An outsider (foreigner) may be more faithful to the canons of the style they practice than an individual born into the tradition. So, ironically, the most homogeneous ceramic assemblages may be the result of the most ethnically heterogeneous populations. Continuing processes of imitation, innovation and borrowing prevent the microtraditions from drifting into entirely new traditions. In terms of Hill's genetic analogy, this means that unit flow remains open.

In the Yadkin valley many different "ways of doing" existed side by side. The sorting and resorting of attribute states does appear to be the case, although this process may not have been strictly a stochastic one. If we take the patterning revealed by the coefficient matrix at face value, then it appears that the specified groups of sites were participating in similar behaviors which produced similar ceramic assemblages (microtraditions). Yet this participation was never so exclusive that it prevented "outsiders" (however defined) from tapping the same pool. The unity of the ceramic tradition suggests a high degree of social connectedness in the northern North Carolina Piedmont and southwestern Virginia. The tendency for microtraditions may be indicative of a degree of social connectedness between the specified groups of sites. At the very least, it does not contradict a model of overlapping social

networks.

Decorative Analysis

Due to the low frequency of decorated sherds it was decided to consider decorative elements separately. As discussed above, the heterogeneity of individual decorative motifs at the sherd level makes this data class doubly difficult to handle. Given these factors, the method of analysis was straightforward: decorated sherds were inspected and when possible, sherds exhibiting similar designs were grouped together. The designs were verbally described by listing each element present. (Here, element will be used to denote a single decorative technique, for example reed punctations. a motif is the sum total of the elements on a sherd; a motif may consist of many individual elements, or it may consist of only a single element.) Of course one problem with working with sherds, as opposed to vessels, is that motifs may not be fully represented. Furthermore, when working with body sherds, it is often impossible to determine the orientation of the decoration relative to the vessel. Rim sherds, which constitute the bulk of the decorated sample, do not possess this problem. Many of the rims included in the study do, however, exhibit minimal decoration, and it may be questioned whether these truly represent decorated vessels. The treatment evident on these rims may simply be the result of the process of finishing the vessel. Nevertheless, the activity of

finishing the rim clearly presented the artisan with a set of choices from which to choose, and as such it is pertinent.

Table 4.3 lists the decorated sherds from each of the sites within the study area. Nine sites had no decorated sherds in their assemblages. Of the rest, decorated and rim sherds constitute a small fraction of the entire assemblage. For the study area as a whole, these sherds comprise anywhere from 0 to 13% of individual assemblages. In the majority of the cases, decorated sherds hover between 4 and 9% of the assemblage. If these figures are accurately reflecting reality, it means that approximately one out of every 15 pottery vessels on Late Woodland village sites in the upper Yadkin was decorated. If we omit from the count the rim sherds which display no additive elements beyond smoothing of the lip, this figure can be cut in half, meaning that only one out of every 30 vessels was decorated with stylistic motifs. There is no evidence to indicate that decorated vessels formed a special functional class; that is, most vessels which exhibit decorative motifs do not appear to have been formally or functionally different from vessels which are undecorated. Decorations occur on the usual repertoire of exterior surface treatments, with no apparent bias or preference for any particular surface. Soot deposits, which may be indicative of a cooking function, are sometimes seen on decorated sherds, suggesting that highly utilitarian vessels were occasionally decorated.

The rim sample is highly consistent across the entire area. Virtually every assemblage contains rims which exhibit exterior surface treatment extending all the way to the lip, which is smoothed on its top edge. Variants of this theme include a smoothing of the rim which results in a slightly folded lip, a smoothing of the rim which everts it slightly, producing a flared rim and smoothing which flattens the top of the rim, making the lip appear square in cross-section. The differences between each of these is subtle and are probably related to motor patterns of the potters.

Another frequent style of rim treatment is the addition of notches or nicks on the top of the lip or on the front (exterior surface) of the lip (see Figure 4.2 A, E, G). These notches or nicks are made in a variety of styles, ranging from large square or circular punctations to lightly incised nicks.

Strictly decorative motifs vary considerably across the sample, although the elements used to produce these motifs is strikingly homogeneous. Most common are incised parallel and oblique lines. These often form chevrons or "V" shapes. Sometimes these "V"s form zones which are filled with punctations (Figure 4.2 I); other times they are left without further adornment. Horizontal bands, formed by various different elements such as incised lines or punctations, are sometimes observed around the necks of jars or just below the lip (Figure 4.2 A, E). Applied strips are rare, but the sites at which they occur are spatially

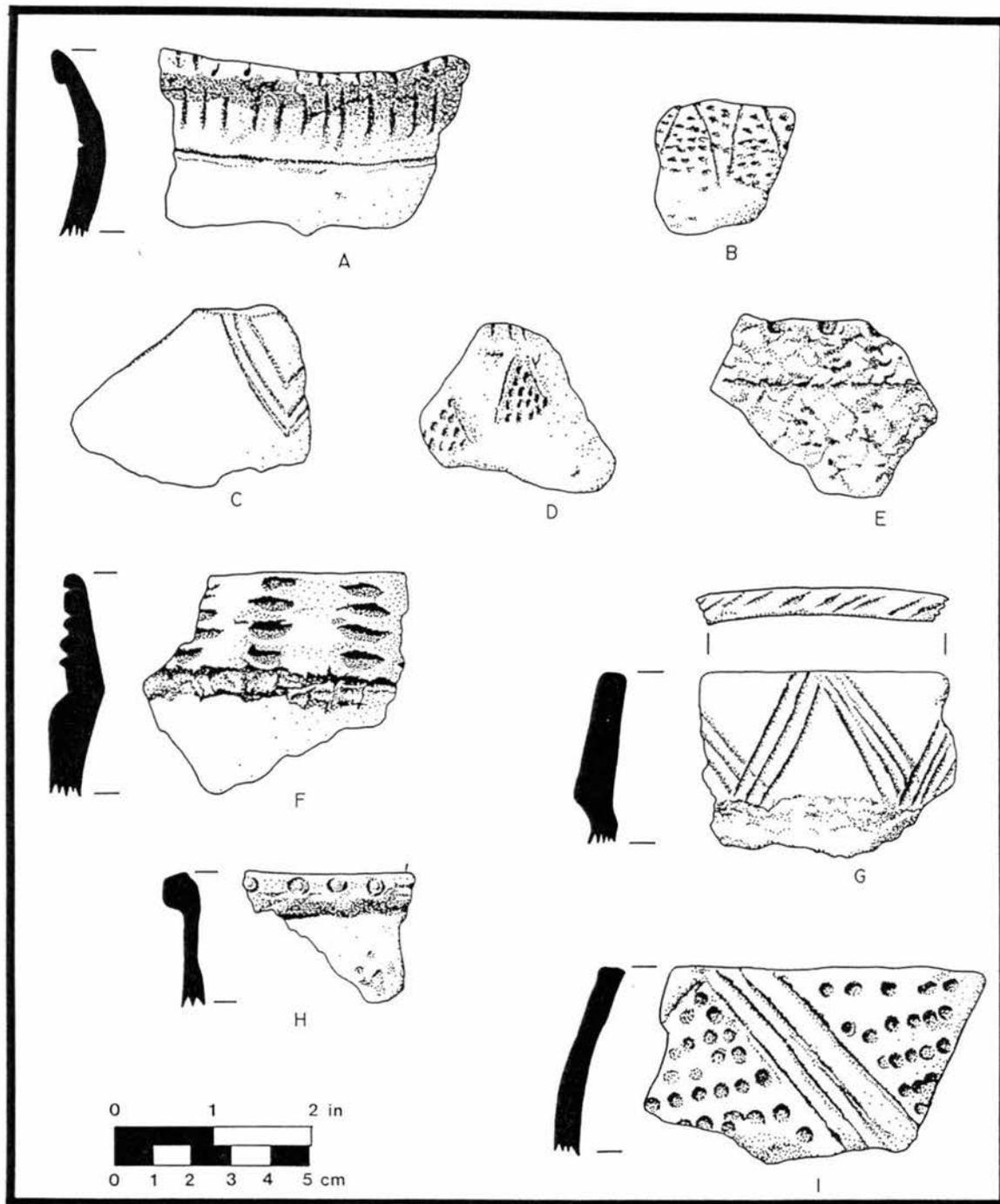


Figure 4.2. Examples of decorated sherds from the upper Yadkin Valley, North Carolina. A-C from the Donnaha Site, 31YD9; D and E from the Hardy Site, 31SR50; F-I from the Porter Site, 31WK6.

dispersed.

Some of the sherds from the Porter site assemblage are curious insofar as they exhibit a mixture of traits. An example is illustrated in Figure 4.2 F. This rim has been modified to give it the appearance of a collared rim, and it is decorated with carelessly applied hachure indentations, apparently in imitation of the Pisgah series. The sherd is steatite-tempered and is roughly scraped on its interior. Keeler (1971:40) notes the same kind of co-mingling of traits in Burke series assemblages from sites in McDowell County, North Carolina. Indeed, this phenomenon was noted by Holmes' seminal survey of aboriginal pottery of the East (1903:148). In terms of the behavioral implications, these data are difficult to assess. It should be noted that the "foreign" design elements are poorly executed and probably would not be considered competent examples of the Pisgah tradition. Certainly the behavioral mechanisms allowing these traits to seep into the western fringes of the Yadkin and Catawba valleys warrant further study.

With such a small sample of specimens, one hesitates to draw hard and fast conclusions. Yet what these data do indicate is that potters within the entire study area were drawing from the same style unit pool and producing roughly similar results. Although no two decorated sherds are exactly alike, any decorated sherd from any assemblage could easily be lost amongst the sherds of any other assemblage. In other words, despite the idiosyncrasy of motifs, there is

an underlying homogeneity to the entire sample.

This is striking given the degree of difference exhibited between some assemblages as indicated by the Brainerd-Robinson coefficient of agreement. The similarity of decorative designs cross-cuts differences of manufacture (i.e. tempering agents and exterior surface treatment), giving the region an overall visual homogeneity.

Ceramic Disks

Among the collections of potsherds from a few sites within the study area are found ceramic disks. Many of these disks are crudely fashioned, suggesting that they were made first by chipping the edges of a sherd into a rough circle. The edges then might be ground to produce a smooth circular disk; however in many cases the circumference of the edge is smoothed incompletely, leaving remnants of the jagged edge. This suggests that the end-product (a smoothed and rounded disk) observed by the archeologist may not have been the true goal of the maker in producing circular sherds. In other words, disks may have been produced as a by-product of some other activity in which circular sherds were employed, and their regular shapes may have been the result of their use over long periods of time.

Ceramic disks are abundant in the ceramic assemblage from the Porter site, 31Wk6. A single specimen was recovered from the Hardy site, 31Sr50, and one disk was collected from 31Yd39. The specimen from 31Yd39 is

especially curious because it was made from a complicated stamped, steatite-tempered potsherd that would be most at home if it had been found at the Porter site.

Ceramic disks are common in some late prehistoric phases in the Southeast, including the Pisgah phase of western North Carolina (Dickens 1976:144), the Dallas phase of eastern Tennessee (Lewis and Kneberg 1946:106-107), and the Mississippian of northern Georgia (Wauchope 1966:189). Their limited presence in the upper Yadkin valley suggests ties to these areas; however, because the function of these pieces is unknown, it is difficult to speculate about the nature of these ties.

Table 4.3. Decorative motifs on ceramics from sites in the Great Bend Region of the upper Yadkin valley, North Carolina.

31WK6, THE PORTER SITE

- 20 rim, smoothed on top
- 2 rim, smoothed and slightly folded and slightly flared
- 3 rim, smoothed and slightly flared
- 1 rim, smoothed on top, w/ horizontal row of vertical incised lines
- 7 rim, parallel sets of oblique lines (forming chevrons) incised between lip and neck:

5 occur on collar-like rims, 2 also have notches on top of lip (Figure 4.2 G)

1 is incised on the net-impressed surface

1 the fields between the sets of lines are filled w/circular punctations (see Figure 4.2 I)

- 2 rim, collar-like rim, w/hachure-like indentations (see Figure 4.2 F)
- 2 rim, smoothed and folded, w/circular punctations, front of lip (see Figure 4.2 H)
- 1 rim, plain, slightly everted, w/large strap handle, (note: sherd is shell-tempered)
- 2 rim, notched, top of lip
- 1 rim, collar-like rim w/notches, top of lip
- 4 rim, notches, front of lip
- 1 rim, smoothed on top and flared, w/nicks, front of lip, and horizontal band 3 cm below lip, consists of short horizontal incised lines
- 1 rim, smoothed on top, w/two parallel (and horizontal) rows of small jab incisions
- 1 body, row of circular reed punctations (cazuella bowl?)
- 3 body, parallel incised lines
- 1 body, incised cross-hatched lines (total of nine)
- 1 body, vertical rows of fingernail pinches

31WK124

- 1 rim, smoothed on top and slightly folded
- 1 rim, plain
- 1 rim, flattened on top
- 1 body, incised lines in chevron configuration

Table 4.3. Decorative motifs on ceramics from sites in the Great Bend Region of the upper Yadkin valley, North Carolina, continued.

31YD173

- 1 rim, slightly folded and w/sloppy notches, front of lip
- 1 rim, smoothed and slightly folded
- 1 rim, smoothed and slightly flattened on top
- 1 rim, smoothed and w/notches, top of lip

- 1 rim, plain
- 1 body, w/incised "V"s, filled w/cross-hatches
- 2 body, w/row of jab punctations

31SR96

- 1 rim, smoothed and w/notches, top and front of lip
- 1 rim, smoothed on top, folded and roughened
- 1 rim, smoothed and nicked on top of lip
- 1 rim, plain
- 1 rim, flattened on top, nicks on front of lip
- 1 body, row of finger pinches
- 1 body, one incised line w/short incised lines perpendicular to it, above and below
- 1 body, drag punctations (orientation unknown)

31SR59

- 1 rim, smoothed and slightly folded
- 1 rim, smoothed, w/large jab notches, front of lip
- 1 body, finger pinches
- 1 body, row of jab punctations

31SR58

- 1 rim, smoothed and w/nicks on top of lip
- 1 rim, smoothed and slightly folded
- 1 neck, faint jab punctations around neck, parallel to lip

31YD123

- 1 rim, smoothed, w/three oblique parallel incised lines

31SR52

- 1 rim, plain

Table 4.3. Decorative motifs on ceramics from sites in the Great Bend Region of the upper Yadkin valley, North Carolina, continued.

31YD32

- 1 rim, plain
- 1 rim, smoothed on top and front and slightly flared

31SR50, HARDY SITE, FEATURES DATED TO THE LATE COMPONENT

- 4 rim, large notches, front of lip (see Figure 4.2 E)
- 3 rim, notches, top of lip
- 1 rim, circular punctations, top of lip
- 6 rim, smoothed on top
- 1 rim, smoothed on top and slightly folded
- 1 rim, smoothed on top and slightly folded, with one incised line, parallel to rim, 2 cm below lip
- 1 rim, smoothed on top; crenelated
- 2 rim, plain
- 1 body, row of jab punctations; incised "V"s filled with punctations (see Figure 4.2 D)
- 1 neck, two parallel incised lines, parallel to rim
- 1 body, one horizontal incised line
- 1 body, one horizontal row of circular punctations, (cazuela bowl?)

31SR50, HARDY SITE, FEATURES OF UNKNOWN AGE (POSSIBLY BELONGING TO LATE COMPONENT)

- 4 rim, notches, front of lip
- 3 rim, smoothed on top
- 2 rim, smoothed on top and slightly folded
- 1 rim, smoothed on top and folded
- 1 rim, slightly folded, applique strip w/large notches parallel to rim
- 1 rim, plain, w/two parallel incised lines, parallel to lip
- 1 body, cluster of small circular punctations
- 1 body, one large circular punctation

Table 4.3. Decorative motifs on ceramics from sites in the Great Bend Region of the upper Yadkin valley, North Carolina, continued.

31YD9, THE DONNAHA SITE

- 6 rim, smoothed
- 1 rim, roughened on top, slightly flattened, w/one incised horizontal line 3 cm below lip
- 1 rim, plain, w/incised cross-hatched lines creating diamond pattern
- 2 rim, smoothed and slightly folded
- 2 rim, w/notches, front of lip
- 3 rim, smoothed and slightly everted
- 1 rim, smoothed on top and everted, notched on top of lip, w/vertical incised lines forming a horizontal band around neck, w/ one horizontal incised line beneath band (see Figure 4.2 A)
- 3 rim, plain, slightly everted, w/notches on top of lip
- 1 rim, flattened and roughened on top
- 1 rim, nicks on top of lip, w/applique strip w/nicks
- 3 body, parallel sets of oblique incised lines
- 1 body, single set of oblique incised lines
- 4 body, one row of jab punctations
- 1 body, three parallel rows of jab punctations
- 1 body, two parallel incised lines
- 1 body, incised curvilinear design
- 1 body, incised "V"s filled w/small punctations (see Figure 4.2 B)
- 1 body, incised chevron design (see Figure 4.2 C)
- 1 neck, two parallel incised horizontal lines

31FY153

- 1 rim, large notches on top
- 1 rim, smoothed on top,
- 1 rim, smoothed and slightly folded, slightly flared

31YD48

- 3 rim, smoothed and slightly folded
- 1 rim, smoothed on top
- 1 rim, nicked, top of lip

31YD45

- 1 rim, smoothed and slightly flared

Table 4.3. Decorative motifs on ceramics from sites in the Great Bend Region of the upper Yadkin valley, North Carolina, continued.

31FY151

- 14 rim, smoothed on top
- 3 rim, smoothed and slightly folded, slightly flared
- 1 rim, smoothed and everted
- 4 rim, notched, top of lip
- 1 rim, notched, top of lip w/ row of oblique lines below lip
- 1 neck, w/ suspension hole and cluster of punctations
- 1 body, row of notches
- 1 body, two parallel incised lines
- 2 body, three parallel incised lines

31YD43

- 1 rim, smoothed and slightly flared
- 1 rim, large notches, top of lip

31YD38

- 3 rim, smoothed and slightly flared
- 2 rim, plain
- 2 rim, notched, top of lip

31YD37

- 1 rim, partially smoothed on top, finger pinches just below lip forming a horizontal band
- 1 rim, smoothed and flattened on top, applique strip immediately below lip covered w/careful notches
- 1 rim, smoothed on top

31YD39

- 5 rim, smoothed and slightly folded
- 1 rim, smoothed and slightly flared
- 8 rim, smoothed on top
- 1 rim, smoothed on top, incised horizontal line immediately below lip, oblique incised line below this
- 3 rim, roughened on top, slightly flattened
- 1 rim, smoothed and flattened on top
- 3 rim, smoothed and nicked or notched on top
- 1 body, covered w/cross-hatched incised lines
- 1 neck/body, incised "V" filled w/oblique lines and four parallel oblique lines
- 1 neck/body, three parallel oblique incised lines

Table 4.3. Decorative motifs on ceramics from sites in the Great Bend Region of the upper Yadkin valley, North Carolina, continued.

31YD34

3 rim, smoothed on top

31FY204

3 rim, smoothed on top
1 rim, notched, top of lip, irregular punctations
immediately below lip in a horizontal row

CHAPTER V LITHICS

LITHIC USE IN THE UPPER YADKIN VALLEY

As described in Chapter II, Late Woodland people of the upper Yadkin valley were reliant on stone tool technology, as evidenced by the presence in the archeological record of arrow points, bifacial and unifacial tools such as scrapers and an abundance of debitage. Lithic assemblages from sites within the study area display variation in the types of lithic materials represented and their relative proportions. It is clear that some lithic materials were being procured from distant sources, notably the Uwharries in the Carolina Slate Belt, and the Ridge and Valley Province of southwestern Virginia and eastern Tennessee, including Mt. Rogers in Virginia. Other lithics were being obtained from nearer sources, namely jasper which outcrops at several known loci within the Piedmont (and probably at more, currently unknown spots). White quartz was locally available, with outcrops frequent throughout the entire study area.

Unlike ceramic production, viable choices for lithic procurement and use are far more constrained by physical factors over which Late Woodland people could have little or

no control. The first constraint is spatial distribution of the resources. Whereas the resources necessary for ceramic production (clay, temper) have fairly uniform distributions across the study area, lithics do not. While quartz distribution is uniform and abundant, other lithic resources have very patchy distributions. Secondly the form of the raw materials is a constraint. Much of the material emanating from the Ridge and Valley Province occurs naturally in nodular form. This means that the maximum size of flakes is determined by the size of the nodule, as opposed to the size selected by the flint knapper. Thus formal variation which might appear to be stylistically important might simply be a function of the natural properties of the raw material.

Nevertheless important social processes are also contributing to the variation observed in the distribution of lithics at archeological sites. Key among these are procurement strategies. Several nested options exist within procurement choices, all of which involve a degree of sociopolitical mediation. The first question is access: direct or indirect? If direct, relations with people along the travel route and at the source must be socially negotiated. It is assumed that a degree of territoriality existed within Late Woodland settlement systems. Thus the landscape contains people, and people manage access to territories. The social mechanisms of control are currently unknown, but we will assume they exist. In short, there was

no no-man's land. Thus negotiation would leave residues of the interaction involved.

If access is indirect, relations must be negotiated with people who do have direct access. Clearly there are many methods by which this end may be accomplished, such as down-the-line trade or the establishment of trade centers (Renfrew 1977).

Woodall (1987, 1990) has proposed for the downstream portion of the study area (from the shoals downstream) that felsites from the Carolina Slate Belt were being traded in to the largest Late Woodland sites (size as measured through areal extent of the surface scatter) directly. Felsites were then dispersed from these large sites to neighboring smaller villages and hamlets via kin lines. Felsite to quartz ratios in this portion of the study area show a bimodal distribution, with higher proportions of felsite occurring at large sites, lower proportions at small sites.

Similar studies have not been undertaken for the upstream portion of the study area, with the exception of the Hardy site, 31Sr50, and its immediate environs. This evidence tentatively suggests that the exchange network operative downstream of the shoals did not exist in the same form upstream of the shoals. It is suggested that the shoals, an unnavigable five kilometer stretch of the Yadkin River, inhibited high volume trade of non-local lithics (Woodall 1990:115-116).

This suggests that a physical barrier may have been

influencing selection of social strategies. However, it should be noted that a study of ceramic decorative designs above and below the shoals revealed no significant differences, suggesting that a lack of social interaction was not the determinant factor (Woodall 1987). In other words, some social relationships existed intact across the barrier while others (those moving Slate Belt lithics) did not.

Lithic procurement strategies employed in the upstream portion of the study area need to be examined. Further, comparison of the upstream area with the downstream area must be made.

LITHIC ANALYSIS

The lithic analysis was undertaken with several objectives in mind. First among these was the problem of identifying the strategies used for procuring non-local lithic materials. As described above, previous studies have addressed the problem of acquisition and dispersal of felsites from the Carolina Slate Belt for sites located in the downstream portion of the study area (Woodall 1987, 1990). Therefore one goal of this analysis was to see if a similar pattern could be discerned in the upstream area. Further, the distribution and possible mechanisms for acquisition of other non-local materials, notably chert and chalcedony from southwestern Virginia and eastern Tennessee,

needed to be addressed.

In order to assess these various questions, the lithic assemblage from each of the 29 sites within the study area was initially divided on the basis of raw material type. The following raw materials were recognized: quartz, felsite (a generic term which includes andesite, rhyolite, breccias and tuffs), chalcedony, chert and jasper. Each debitage assemblage from each site was then catalogued using the following categories: primary flakes (debitage exhibiting cortex covering more than 50% of its surface), secondary flakes (cortex covering less than 50% of its surface), and tertiary flakes (debitage with no cortex). Cores and core fragments, which are rare, were excluded from consideration.

In order to initially study the distribution of lithic raw material types, only debitage from each site was considered (Table 5.1). Each site's lithic assemblage was broken down into the five raw material categories (above) and counted. Next the percentages of felsite in each site's assemblage was plotted (Figure 5.1). The sites are arranged on the horizontal axis in their geographical order, from the most upstream on the left to the most downstream on the right. The location of the shoals is represented by the shaded area.

Site	Felsite	Quartz	Chert	Chalcedony	Jasper
WK6	1817	1872	1649	0	15
WK124	162	111	16	0	2
WK130	69	27	9	0	0
YD170	103	7	2	0	0
YD173	147	58	5	0	1
YD175	38	32	4	0	0
SR96	363	572	0	0	4
SR59	19	65	1	0	1
SR58	16	126	2	2	0
YD123	34	57	3	0	0
SR52	13	74	0	0	1
YD32	24	19	1	0	0
SR50	1733	1280	22	0	99
FY155	13	14	0	0	0
YD9	906	80	4	25	31
FY154	2	5	0	0	0
FY153	128	20	0	0	0
YD48	1	4	0	0	0
YD45	26	14	0	0	0
FY151	279	48	0	0	0
YD43	209	70	1	0	0
YD40	24	10	0	2	0
YD38	31	15	1	0	0
YD37	35	8	1	0	1
YD39	173	77	0	0	0
FY149	1	3	0	0	0
YD34	13	19	0	0	0
FY186	11	32	0	0	0
FY204	15	14	0	0	0

Table 5.1. Raw counts of lithic debitage raw materials from sites within the Great Bend region of the Upper Yadkin River, North Carolina.

This exercise confirmed the patterning proposed by Woodall (1987) for the distribution of felsite among sites downstream of the shoals. Large sites (>1 hectare) tend to have greater percentages of felsite than do small sites. The pattern is not confirmed upstream of the shoals,

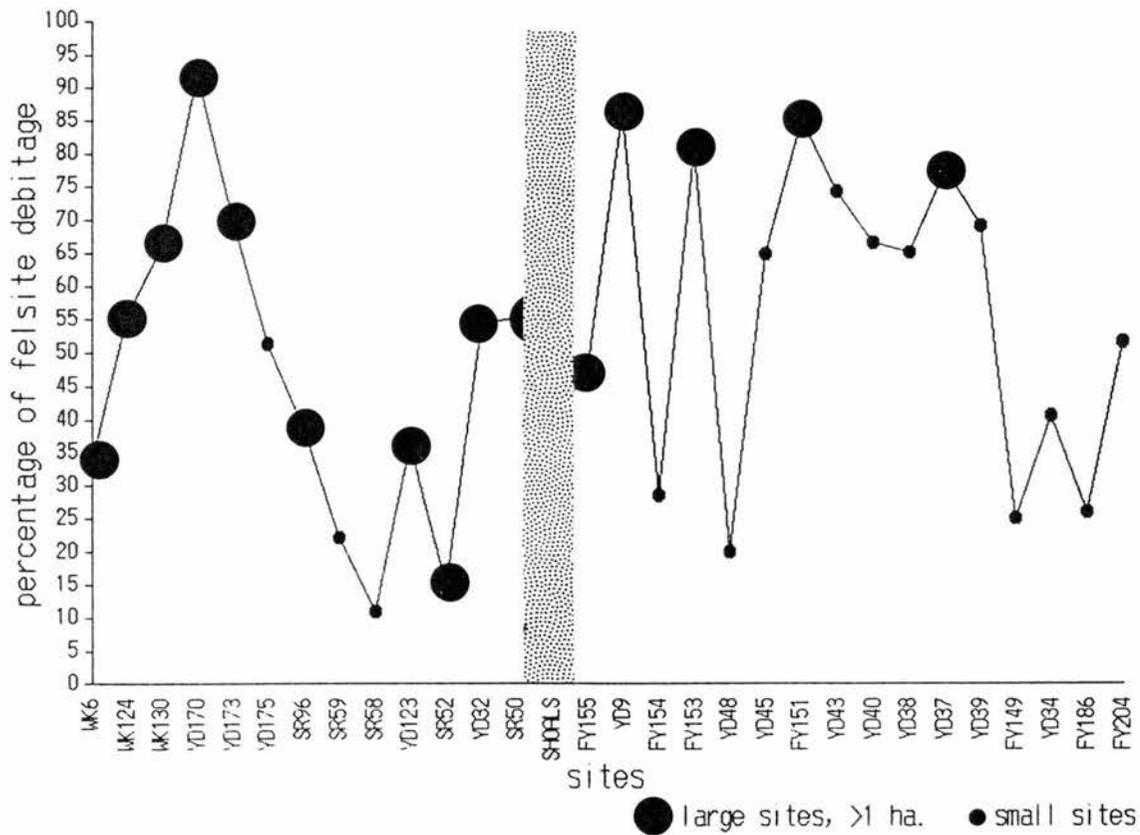


Figure 5.1. The percentage of felsite in lithic debitage assemblages from Late Woodland sites in the upper Yadkin Valley, North Carolina.

however. Among these sites, site size and the amount of felsite do not appear to be correlated. Large sites may have either a high or low proportion of felsite in their assemblages. Further, sites upstream of the shoals tend to have less felsite overall. In other words, the percentage of felsite in assemblages tends to be smaller upstream than downstream. The aggregate felsite assemblage from all sites upstream of the shoals constitutes 53% of the combined felsite and quartz assemblage, whereas downstream of the shoals, felsite accounts for 81% of the total felsite and quartz assemblage. Finally, the distribution of felsite upstream of the shoals conforms more closely to a pattern of down-the-line-trade from two sites, 31Sr50 (which is the first Late Woodland village site upstream of the shoals) and 31Yd170.

These data suggest that sites 31Sr50 and 31Yd170 may have enjoyed more direct access to felsite raw materials and were subsequently sharing it with their neighbors. Woodall (1990:113) has suggested that we might expect to see a higher proportion of primary and secondary debitage at these sites (i.e. those which were receiving exotic lithics in bulk via a long distance exchange network) than at other sites. This should be the case if large amounts of unprepared raw material, or raw material in the form of large primary and secondary flakes, were being brought into these sites. Reduction of cores with cortex or large flakes with cortex should have been more common at these sites,

resulting in a debitage assemblage with higher proportions of primary and secondary flakes (Renfrew 1977).

In order to test this proposition, the felsite debitage assemblages from each site were broken down into primary, secondary and tertiary flakes (for definitions, see above). Because many of the assemblages contained no primary flakes, it was later decided to combine primary and secondary debitage into a single category, i.e. debitage with cortex. The percentage of felsite debitage exhibiting cortex is compared against the percentage of felsite in the overall lithic assemblage for each site in Table 5.2 and Figure 5.2.

These data do not confirm the notion that sites 31Yd170 and 31Sr50 had preferential access to felsite raw materials. In fact, the relative frequencies of primary and secondary flakes are not noticeably different at any of the sites upstream of the shoals, suggesting that the specific distributional processes outlined above were not in operation.

Furthermore, if all of the felsite assemblages from within the study area are considered, there is no noticeable pattern distinguishing sites above the shoals from sites below the shoals in the relative presence/absence of cortex. Because it was observed (above) that sites upstream of the shoals tend to have lower proportions of felsite overall, it might be expected that people at these sites would have exercised more stringent conservation techniques. In fact, this does not appear to have been the case. There is a weak

tendency for sites with high proportions of felsite to have less felsite debitage with cortex, and vice versa (Figure 5.2). This tendency directly contradicts Woodall's (1990) proposal that sites with large felsite assemblages should contain higher amounts of primary and secondary debitage.

The assumption that the amount of cortical debitage is a direct index of the technological activity of core reduction has been recently criticized (Sullivan and Rozen 1985). It has been shown that cortical variation within an assemblage may be the result of many different factors, including raw material type used, size of the nodule or core, the type of procurement strategy used, as well as stylistic factors (Sullivan and Rozen 1985:756). Therefore it is wise to reconsider the lithic data in terms of these factors. Two of these factors may be strongly influencing the appearance of the upper Yadkin assemblages, and are briefly considered here.

The first factor may have to do with the natural form of the raw materials being acquired. It is possible that the upstream sites were obtaining felsites from different natural sources than downstream sites. Upstream sites are nearer to felsite sources in Virginia and Tennessee, in which the lithics occur in nodular form. The downstream sites are closer to the Slate Belt, where lithics occur in large outcrops. Reduction of small nodules would produce more cortex per episode than would reduction of non-nodular lithics. The net archeological result might be similar

SITE	% OF LITHIC ASSEMBLAGE WHICH IS FELSITE	% OF FELSITE ASSEMBLAGE WITH CORTEX
31Wk6	34	31
31Wk124	56	10
31Wk130	66	23
31Yd170	92	15
31Yd173	70	20
31Yd175	51	16
31Sr96	39	16
31Yd123	36	18
31Sr59	22	37
31Sr58	11	25
31Sr52	15	38
31Yd32	54	29
31Sr50	55	21
31Fy155	48	25
31Yd9	87	15
31Fy154	29	50
31Fy153	81	25
31Yd48	20	36
31Yd45	65	20
31Fy151	85	12
31Yd43	74	19
31Yd40	67	40
31Yd38	65	30
31Yd37	78	24
31Yd39	69	20
31Fy149	25	40
31Yd34	41	42
31Fy186	26	45
31Fy204	52	41

Table 5.2. The percentage of felsite comprising lithic assemblages compared against the percentage of each felsite assemblage with cortex from Late Woodland sites in the upper Yadkin valley, North Carolina.

distributions of cortical materials upstream and downstream. Nevertheless, these similar distributions may be the result

of very different procurement procedures or exchange networks.

The second factor which may be important is the nature of the procurement system. Because the inverse relationship between presence of cortex and amount of felsite exists both above and below the shoals, the analytical separation of the two sub-areas may not be warranted. It is possible that identical procurement strategies were being employed across the entire study area, resulting in the similar patterns. Alternatives to the model of lithic acquisition by large sites and localized dispersal to smaller neighboring sites (i.e. a unitary tribal model of centers and peripheries) must be considered. Unfortunately, the lithic data may present the problem of equifinality, namely, that different socioeconomic processes may result in identical (or nearly identical) patterns in the archeological record. In this case, high proportions of felsite at large sites may be interpreted differently depending upon the kind of procurement system (i.e. direct or indirect acquisition) that is assumed to be in place. If indirect acquisition is assumed, then large village sites may be interpreted as receiving station for imported raw materials (Woodall 1987, 1990). In this interpretation, large villages are assumed to have more sociopolitical power than small villages; large villages are the homes of big men who serve as centers of acquisition and redistribution.

However, if direct acquisition is assumed, then

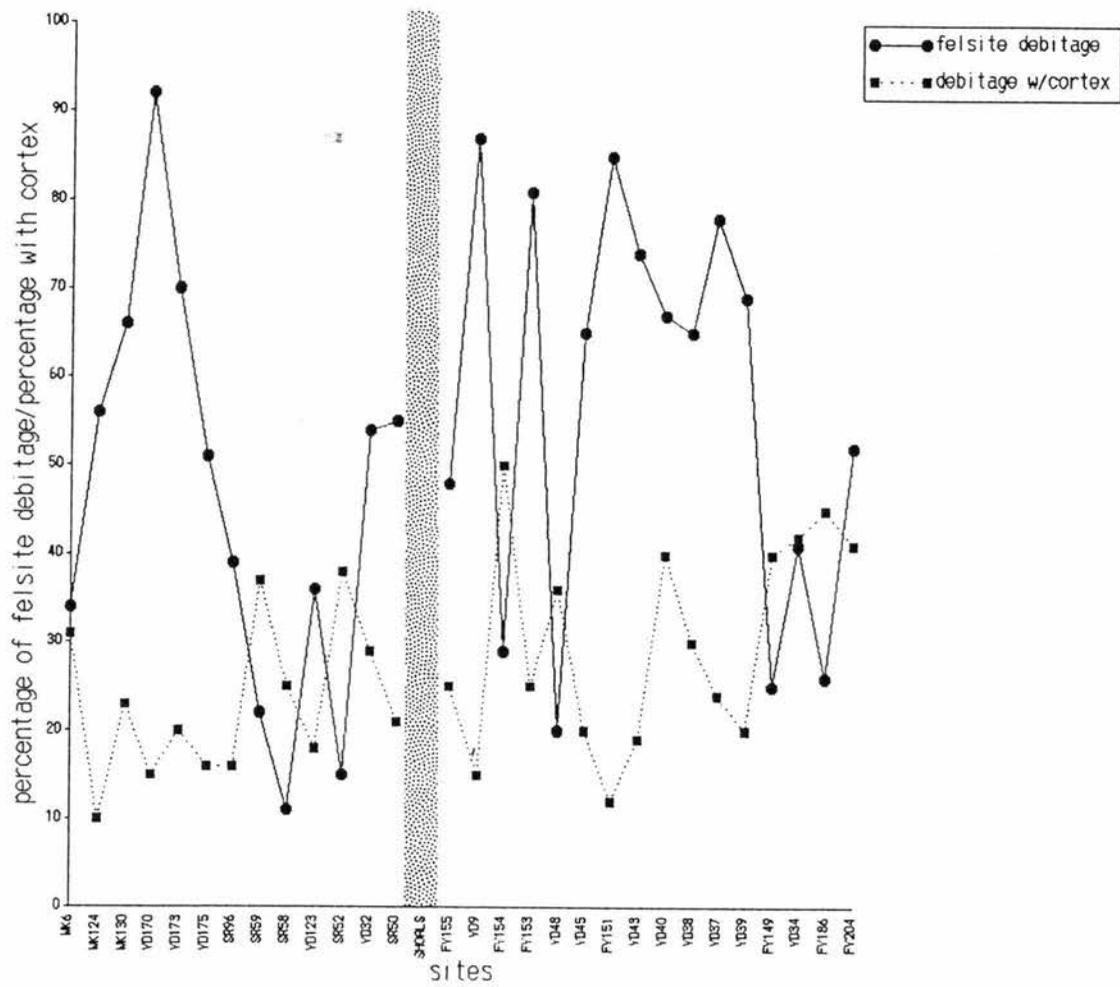


Figure 5.2. The percentage of felsite comprising lithic assemblages compared against the percentage of each felsite assemblage with cortex, from Late Woodland sites in the upper Yadkin Valley, North Carolina.

differential proportions of non-local materials may simply be reflecting differential village populations and/or longevity of the site settlement. Larger population means that more individuals are potentially available to procure resources; site longevity means that the longer a site is inhabited, the more materials can be brought into it. The differential proportions of debitage categories may simply be indexing the volume of flint knapping activity on sites.

Because the debitage categories give no indication that certain sites enjoyed a monopoly on access to lithic raw materials, the possibility that non-local lithics were directly procured must be entertained. An embedded procurement system, in which lithics were obtained during hunting or trading expeditions (Binford 1979) is not beyond the realm of possibility. The ethnohistorical record gives ample evidence of the adult male population of villages absenting themselves for hunting forays. It is also clear that "territories" were not strictly observed during these trips, since most of the warfare activity occurred when different hunting parties encountered each other in the backwoods. Thus there is no a priori reason to believe that men or women were restricted to a small catchment area encircling their own villages. In fact, such territoriality could not be tolerated by an egalitarian social system using direct procurement procedures because it is requisite to the development of asymmetrical economic relations. Because there is no marked distance decay pattern (specifically,

sites located farther from lithic sources do not have less lithic material than sites nearer the sources) across the survey area, people from all sites must have had an equal ability to acquire these materials.

Complete resolution of the questions of lithic procurement strategies awaits additional data. Geologic sourcing of non-local lithics found on archeological sites would probably lend clarity to the situation; currently the points of origin of these lithics can only be assumed.

Chert, chalcedony and jasper constitute small minorities of the lithic assemblages from the study area (Table 5.1; Figure 5.3). The one notable exception is the Porter Site, 31Wk6, where chert and chalcedony comprises nearly a third of the lithic assemblage. At the other sites within the study area, these two raw materials (which are thought to be originating from southwestern Virginia and/or Tennessee) together constitute less than 10% of any assemblage (if present at all), usually hovering close to zero. Given their (apparently) very low occurrence in assemblages, it is difficult to know if their spatial distribution as indicated in Figure 5.3 is an accurate reflection of reality or an artifact of chance. If chert and chalcedony are rare constituents of all assemblages, the chances of recovering even a single specimen from surface survey is low. This is obviously a hazard of using survey data which must be accepted.

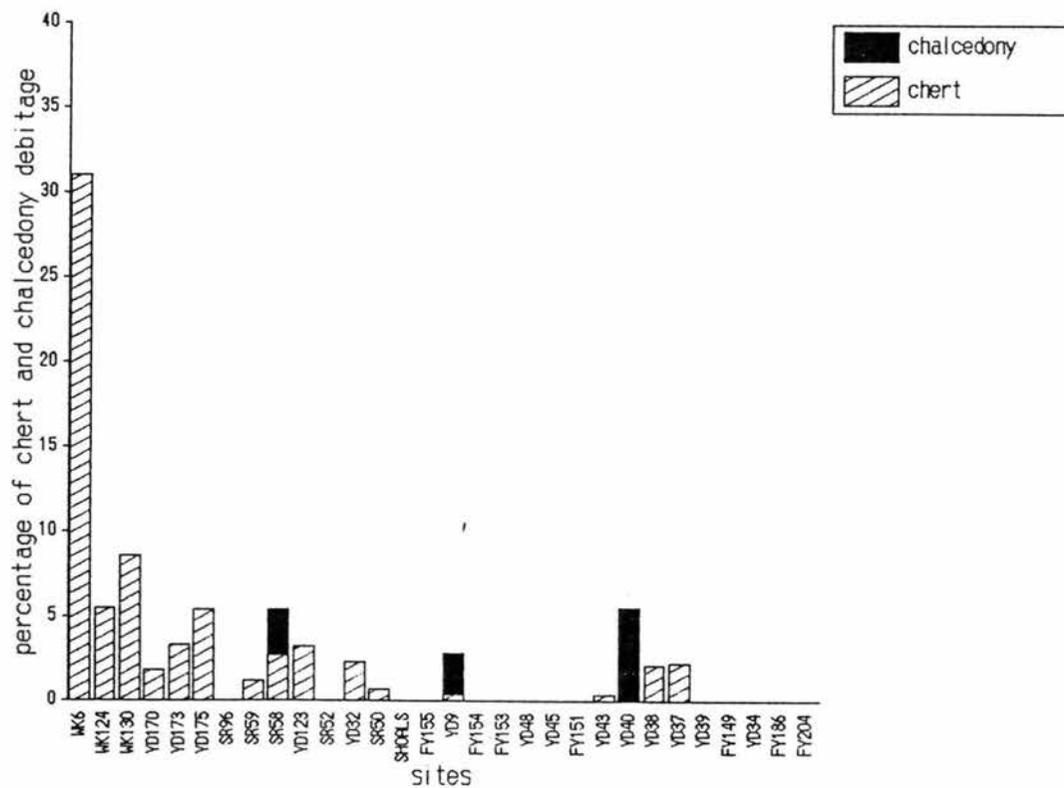


Figure 5.3. The percentage of chert and chalcedony debitage in lithic assemblages from sites in the upper Yadkin Valley, North Carolina.

On the other hand, if we assume that the data do accurately reflect the occurrence of chert and chalcedony, the spatial pattern is curious. Upstream of the shoals, these raw materials constitute a small but persistent portion of the lithic assemblages. These continue to be found downstream of the shoals at 31Fy155 and 31Yd9, but the distribution stops abruptly here. Chert and chalcedony are absent from the downstream sites, with the curious exception of sites 31Yd43, 31Yd40, 31Yd38 and 31Yd37. It is interesting that these sites are spatially clustered, suggesting, perhaps, some kind of active cooperation in sharing these raw materials once obtained. It is not impossible that the people at these sites were obtaining these lithics from people at sites upstream; the ceramic data indicate that all four of these sites have close affinities to upstream sites. More striking than the ceramic data, however, is the pattern of felsite distribution among these sites. Although 31Yd43, 31Yd40 and 31Yd38 are classified as small sites (<1 hectare), these sites (as well as 31Yd39) have relatively high frequencies of felsite debitage. In fact, the frequencies at these sites is nearly as high or higher than the large sites in the downstream area. Perhaps these four sites were actually a single cooperative unit, thus resulting in fairly homogenous lithic distributions. In other words, these sites may not have been autonomous units--their spatial

segregation may be more apparent than real.

Jasper occurs in very low frequencies at a few of the sites within the study area. It is interesting that of the nine assemblages containing jasper specimens, four are sites which were excavated or extensively tested. What this may be telling us is that jasper is such a small constituent of Late Woodland lithic assemblages that it is likely to be missed unless intensive recovery methods are employed.

The pattern of jasper distribution at sites within the study area is not particularly informative. If its relative frequency can be taken as an index to its importance as a resource, jasper does not appear to have been critical to Late Woodland people. It may have been acquired incidentally as part of an embedded procurement system (Binford 1979). This seems especially likely, given the sporadic occurrence of jasper outcrops in the uplands of the region.

CHAPTER VI FEATURES

Feature patterns were broken down into two different categories for study. The first is burial features; the second is features indicative of structures. Each is considered separately below.

MORTUARY PRACTICES

The excavated Late Woodland sites within the study area have yielded numerous human burials. Surprisingly, little formal analysis of mortuary behavior beyond the descriptive level has been undertaken. One reason for this apparent neglect may be the hodge-podge of variability that these Late Woodland burials exhibit. In short, the lack of standardization or consistent co-variance of attributes does not make this data set particularly amenable to study. Nevertheless, a brief summary of mortuary practice will be offered.

Late Woodland burials of the region do not occur in specialized precincts (i.e. cemeteries) but are typically found scattered among the general village features, including postholes, trash pits and storage pits. Burials were sometimes placed under the floor of an existing

structure, sometimes around the perimeter of a structure, and sometimes not associated with a structure at all. The shape, size and depth of burial pits varies. Some pits are quite deep, others shallow. Common shapes are the shaft and side chamber pit, and the simple oval pit (Figure 6.1), although other variants are also known. Burials consist of primary inhumations, and body posture is fairly consistent, with most individuals flexed or semi-flexed. Position of the arms and hands varies, however, as does the orientation of the body. Grave accompaniments, especially personal adornments such as shell bead necklaces, are present in about half of the known cases. When goods are present, the amount and type vary considerably, ranging from carved shell gorgets to projectile points to pottery vessels. Presence or absence of grave accompaniments does not appear to be dependent upon age or sex, although certain types of grave goods do appear to be associated with specific kinds of individuals.

The general outlines of the Late Woodland mortuary program of the northwestern Piedmont are similar to those described for the Pisgah phase of the North Carolina mountains (which, in turn, are similar to other contemporary phases in Tennessee and northern Georgia; Dickens 1976:131-132). One notable difference, of course, is the lack of mounds in the northwest Piedmont. The mortuary remains of the upper Yadkin valley have been interpreted as being indicative of an egalitarian society, with status based

solely on sex and age (Woodall 1984:105).

It is regrettable that many mortuary studies seem to be preoccupied with the question of status. Specifically, is social status achieved or ascribed? Formal variation in mortuary practices has long served the archeologist in the task of unraveling social organization which apparently hinges on this one question (e.g. Binford 1962; Peebles and Kus 1977; Buikstra 1977; Peebles 1983). Archeologists have been particularly interested in defining the material consequences of hierarchical social ranking so that it can be identified in the archeological record. This preoccupation has much to do with the evolutionary typology of band-tribe-chiefdom-state within which many archeologists have traditionally worked.

Unfortunately, the practice sometimes leads to the unsubstantiated assumption that the identification of only one or a few key variables in mortuary behavior will enable the correct classification of the entire society into one of these types (Tainter 1978:115; Sturtevant 1983:3-4). As discussed in Chapter I, this pitfall of the evolutionary-classificatory approach has permitted many studies of formal variation to stop well short of their full potential.

Like any other archeological research, mortuary studies have been problem-oriented. Because the evolutionary framework has dominated archeological thought, problems other than the correct identification of societal type have often been overlooked. If, as I have argued, the societal

level of abstraction is an inappropriate scale at which to analyze tribal organizations, then many of the assumptions forwarded for egalitarian mortuary behavior may miss the mark.

This is because received notions of mortuary behavior view it as a communication system which conveys information about the identity of the deceased (Tainter 1978:113). It is therefore reasoned that because the deceased was a member of different social institutions and because mortuary ritual involves an interaction between the deceased and the living members of these institutions, these various identities should be reflected in the ritual. Burials therefore are believed to contain fossilized information about the entire social structure; mortuary ritual is believed to show the society in microcosm (Tainter 1978:110; Binford 1962). And while much attention has been devoted to developing generalizations about the appearance of rank differences in mortuary remains, explanation of difference which is not attributable to ranking has been neglected (Tainter 1978:131).

Macdonald (1990) cautions that mortuary style is the outcome of complex behaviors which are both group and individually-inspired. He further suggests that the many group memberships which may be expressed in mortuary ritual may be overlapping, but this does not necessarily mean that they are nested. Thus for the archeologist, reading the social information encoded in burial practices is not as

straightforward as earlier practitioners may have led us to believe. The sad truth is mortuary ritual may not be an accurate stylistic representation of the totality of the social system.

Burials are perceived as "style-rich." We recognize a great deal of self-conscious symbolism in burial ritual; and perhaps because we regard it as such a significant event, we, as archeologists, have had considerable difficulty in separating stylistic variation--whatever the source--from symbolic meaning in mortuary remains. Unlike ceramic studies, in which it is easy to analyze decorative motifs without ever worrying about the symbolic content of circles versus triangles, mortuary studies almost always entail an entanglement of etic and emic perspectives. For example, Binford's seminal arguments (1962) regarding the shift from egalitarian achieved ranking to ascribed ranking in the Old Copper complex of the Great Lakes region are based in part on the symbolic meaning of the forms of the copper artifacts. He proposes that "...among egalitarian societies status symbols are symbolic of the technological activities for which outstanding performance is rewarded by increased status" (1962:222). On the other hand, he contends that in ranked societies, such badges should not mirror technological activities, but should be more esoteric in nature. This is because "[t]heir form would normally be dictated by the ideological symbolism which rationalizes and emphasizes the particular internal ranking system or the

means of partitioning the society" (1962:222). Binford's argument that the copper artifacts are symbolic items (as opposed to being utilitarian) is based upon etic considerations of energy efficiency; his assertion that the various forms are symbolic of different social orders is based upon a comingling of etic and emic judgements. Key to the argument is the belief that the meaning behind the form of the artifacts represents the structural basis of the social organization.

Thus we tend to assume that mortuary behavior is a metaphorical representation of the salient features of the social system writ large. I would argue that although most (if not all) mortuary programs are highly symbolic, reading that symbolism is problematical. For example, while some archeologists would argue that a high degree of redundancy is the direct reflection of a non-complex, egalitarian social system (Saxe in Tainter 1978:129), others could equally well argue that a high degree of redundancy is the result of a false consciousness which masks tremendous social inequalities in life through an elaborate display of equality in death (Pearson 1984:64).

Because archeologists believe all aspects of mortuary behavior are highly loaded symbolically, they seem to expect more out of mortuary data than other data classes and therefore we are driven to look at cosmogenic implications of the various components of a burial program, rather than simply treating it as another aspect of material

variability. This is not to deny that the symbolism exists; in fact such deep symbolism may be present in all formal variation (Hodder 1986). The point is that before archeologists can begin sorting out meaning, it behooves most studies to first simply identify pattern without assuming that pattern recognition ensures typological classification of the society.

First and foremost, at what scale is patterning evident? Most mortuary programs display idiosyncratic patterning, and this has been cited as one of the pitfalls of many mortuary studies (Tainter 1978:118). One reason that idiosyncrasy is lamented is that it makes confirmation of the logical proposition that individuals of lesser social significance should have "fewer positive components in their significata relative to others" (Saxe in Tainter 1978:125) difficult or impossible. In fact, ethnographic testing of the proposition has been inconclusive. What these data may be telling us is, as Macdonald suggests, that the social processes responsible are not ultimately reducible to a single over-arching hierarchy of social relationships culminating in the society. If the patterning evident in mortuary variability is not informing on archeologists' etic conception of a particular society, that may be indication that that etic conception does not exist in reality, but is a construction.

Mortuary programs, like other aspects of material culture, can be analyzed in stylistic terms. As a starting

point, this approach offers the advantage of avoiding the temptation to immediately attach meaning to the various attributes observed. Instead, a stylistic analysis seeks patterning in the spatial distribution of attribute states, much like a ceramic analysis. Mortuary rituals are full of isocrestic variability, especially if we momentarily ignore the idea that variation is due to rank or status differences. Disposal of the dead is an activity which entails the negotiation of the identity of both the deceased and the living who are involved in the event. Processes such as identification through comparison (Weissner 1984, 1990) may be invoked to explain the differential choice of attribute states from the style unit pool for each burial. (Whether that choice was actively exercised or whether it was passive, i.e. followed by prescription given the identity of the dead, is not currently important). Clearly the style unit pool for mortuary practice contained many options (again, whether individuals involved in the practice understood the attribute states to be options or obligatory is a separate question, to be addressed later). Size, shape and depth of the burial facility, inclusion or non-inclusion of grave associations and direction of the body represent just a few of the attributes for which several choices existed.

It should be noted that in the absence of corroborative evidence such as ethnographic observations, a prehistoric mortuary program contains many imponderables which may

confound attempts at understanding patterning. For example, what does a burial population from a single site represent? These individuals may all have been members of the village, or members of a household, in which case it is likely that more than one lineage is represented. On the other hand, burial practices may have required that deceased individuals be returned to the village of their birth or the territory of their lineage. Treatment may have been different for men than for women. The possibilities are numerous, as the ethnographic record shows. In short, accurately identifying the source(s) of variation in a mortuary program is a difficult proposition.

Early explorers provide a little information on native mortuary ritual. Both Lederer (1966) and Lawson (1937) mentioned native burial customs in passing. Lederer's treatment is generic, apparently summarizing the beliefs of the natives of western Virginia and North Carolina. He wrote:

Their places of Burial they divide into four quarters, assigning to every Tribe one: for, to mingle their bodies, even when dead, they hold wicked and ominous. They commonly wrap up the corpse in beasts skins, and bury with it Provision and Housholdstuff for its use in the other world. When their great men die, they likewise slay prisoners of War to attend them. They believe the transmigration of souls: for the Angry they say is possest with the spirit of a Serpent; the Bloudy, with that of a Wolf; the Timorous, of a Deer; the Faithful, of a Dog, etc. and therefore they are figured by these Emblemes [1966:5].

Note that by "Tribe" Lederer is apparently referring to four exogamous matrilineages or clans (see discussion, Chapter II).

Lawson witnessed at least two burials, though both of these were among groups living not in the Piedmont but on the coastal plain. The descriptions that Lawson offers are not of primary inhumations, but rather describe the ritual and method of preparing bodies for secondary deposition (i.e. removal of the flesh from the bones), a practice which was common to the eastern region (Lawson 1937:17-18, 59, 190-192).

Thus the ethnohistoric accounts are of limited assistance in helping to understand mortuary practice in the northwestern North Carolina Piedmont.

Description and Analysis of Burials

Human burials have been excavated at three sites from the study area, the Porter Site, 31Wk6, the Hardy Site, 31Sr50, and the Donnaha Site, 31Yd9. Descriptions of each burial assemblage are offered below.

Burials from the Porter Site

In the course of the two seasons of work at the Porter Site, seven burials (accounting for eight individuals) were uncovered. The inhumations are of two principal types, the first an oval pit with straight sides and a flat bottom (see

example, Figure 6.1), the second a shaft and side chamber pit (see example, Figure 6.1). Burials were clustered around what appeared to be the posthole pattern from a house (see Figure 6.6). Burials were both arranged around the perimeter of the structure and placed under the floor of the structure. The exception to this general pattern was burial 31-6, which was anomalous in several respects (see below).

Burial 7-9. This burial was located inside and slightly north of an arc created by a line of postholes. This arrangement suggests that the interment may have been placed in the floor of an existing structure (although no house floor was encountered by the excavations, making this observation conjectural).

The burial facility consisted of a straight-walled shaft with a side chamber carved beneath and to the south of the floor of the shaft (see Figure 6.1). The orifice of the shaft was nearly circular, measuring about 110 cm in diameter. The floor of the side chamber was 178 cm below surface.

The remains of a single individual, probably a female, between 17 and 25 years of age, were contained within the small chamber (Bogdan et al. 1990). The body was flexed, lying on its left side, with the head oriented to the east.

A number of goods were associated with the body. Two polished stone spatulate celts were carefully placed next to the back of the individual (Figure 6.2). A mass of

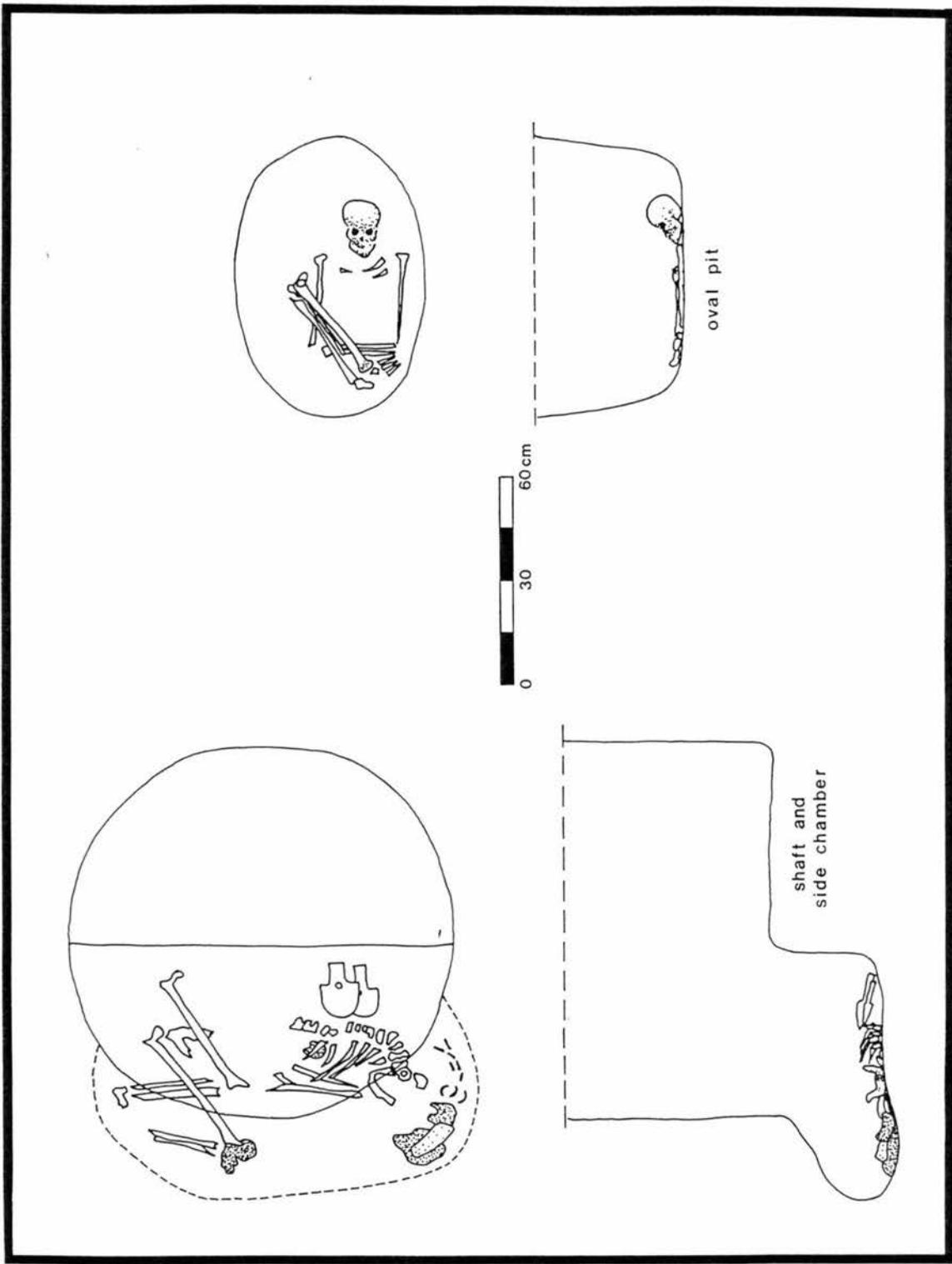


Figure 6.1. Examples of burial styles from the upper Yadkin River, North Carolina.

materials was placed near the top of the head, including 11 rolled copper beads, 8 beaver incisors, what appear to have been pieces of leather, and one or more turtle shells. directly to the south of the head was another concentration of goods, including an abrading stone, several large columella beads, 22 projectile points and a mass of flakes and core fragments. Under the ribs was found the fragmented remains of a small carved shell gorget, probably circular or oval in outline; visible on the concave surface are two engraved concentric circles. At the knees were found three triangular projectile points and a concentration of flakes and core fragments, and seven additional triangular points were placed along the left tibia and fibula. Most of the ten projectile points recovered around the legs were oriented toward the distal ends of the long bones, suggesting perhaps that these were included as arrows at the time of the interment.

Of the twenty-two points recovered from the area around the head, 16 are triangular arrow points. These do not appear to have been oriented in any particular direction and may not have been hafted at the time of the burial. The remaining six points, all manufactured of chert, are curious specimens insofar as they are unclassifiable in terms of any known typology for the region (see Figure 6.3). All six are stemmed, and in general are carelessly manufactured, many being lopsided and poorly or incompletely thinned. Upon close inspection, one suspects that these specimens were

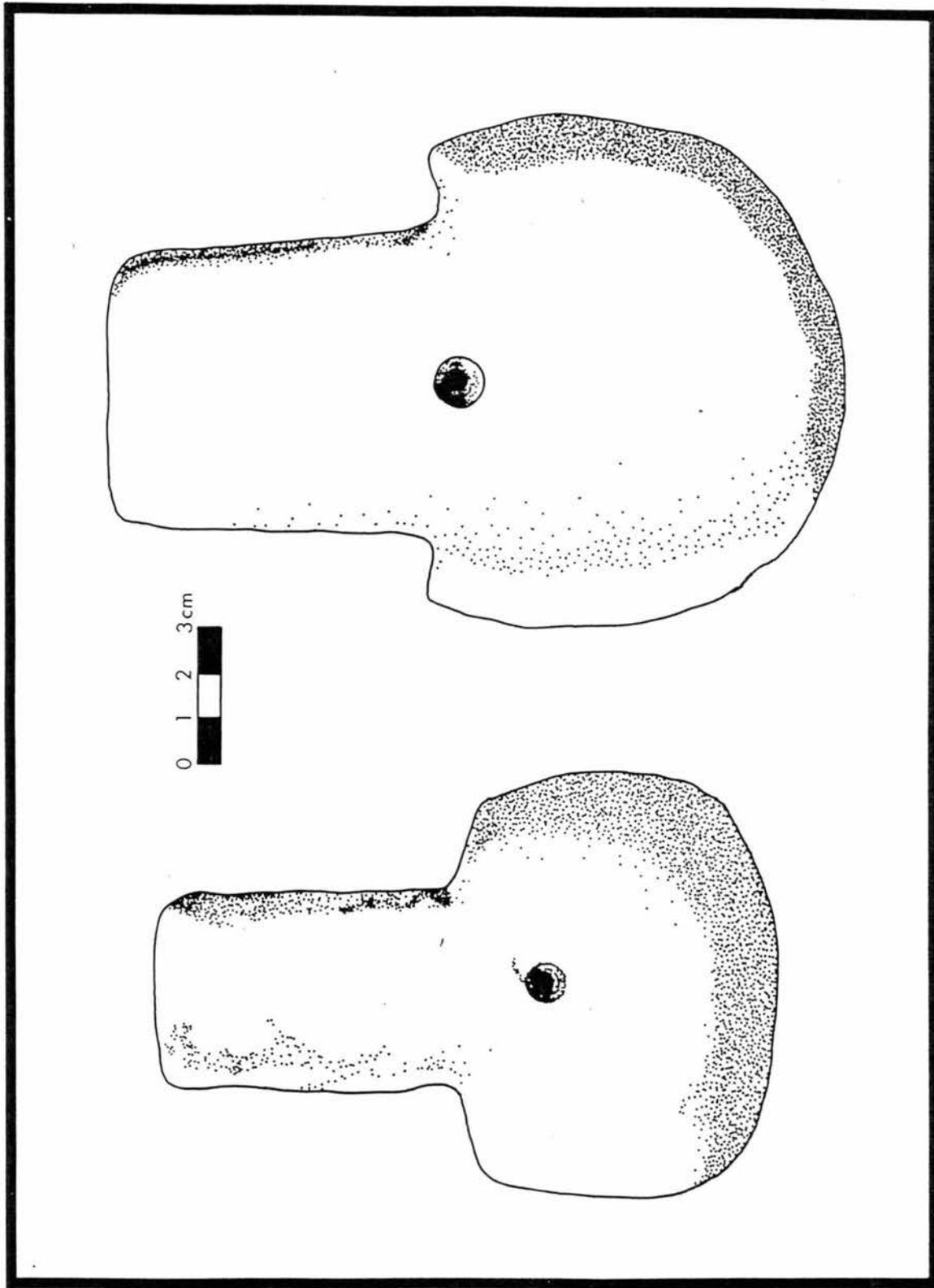


Figure 6.2. Spatulate celts from Burial 7-9 at the Porter Site, 31Wk6, Wilkes County, North Carolina.

intended to be imitations of Archaic points, albeit imitations of poor quality. The fact that all six are manufactured of only two varieties of lithic raw material (two varieties of chert), and that many of the triangular points are made of identical stone, does not contradict such an interpretation.

In his survey of southwestern Virginia, Holland identified several specimens that closely resemble these anomalous points. He identified these as Lamoka, Bifurcated base points, and Merom Expanding Stemmed points (1970:84-89). All of his specimens of these types were made of chert. It should be noted that Lamoka is a type found in New York state, and Merom is from Illinois (bifurcated base is a generic descriptive term). It may be best to consider these type designations as descriptive labels only, and not indicative of any cultural or temporal affiliation. Thus these anomalous points may be part of some small Late Woodland point tradition in southwestern Virginia and northwestern North Carolina. Several similar points have been recovered during survey of Late Woodland sites on the Yadkin between 31Wk6 and 31Sr50. In passing it should be noted that some of these points are reminiscent of the Otarré stemmed points from the North Carolina mountains (Keel 1976:194-196).

This burial is noteworthy not only for the amount and diversity of the materials contained within it, but also for its similarity to other burials in North Carolina and

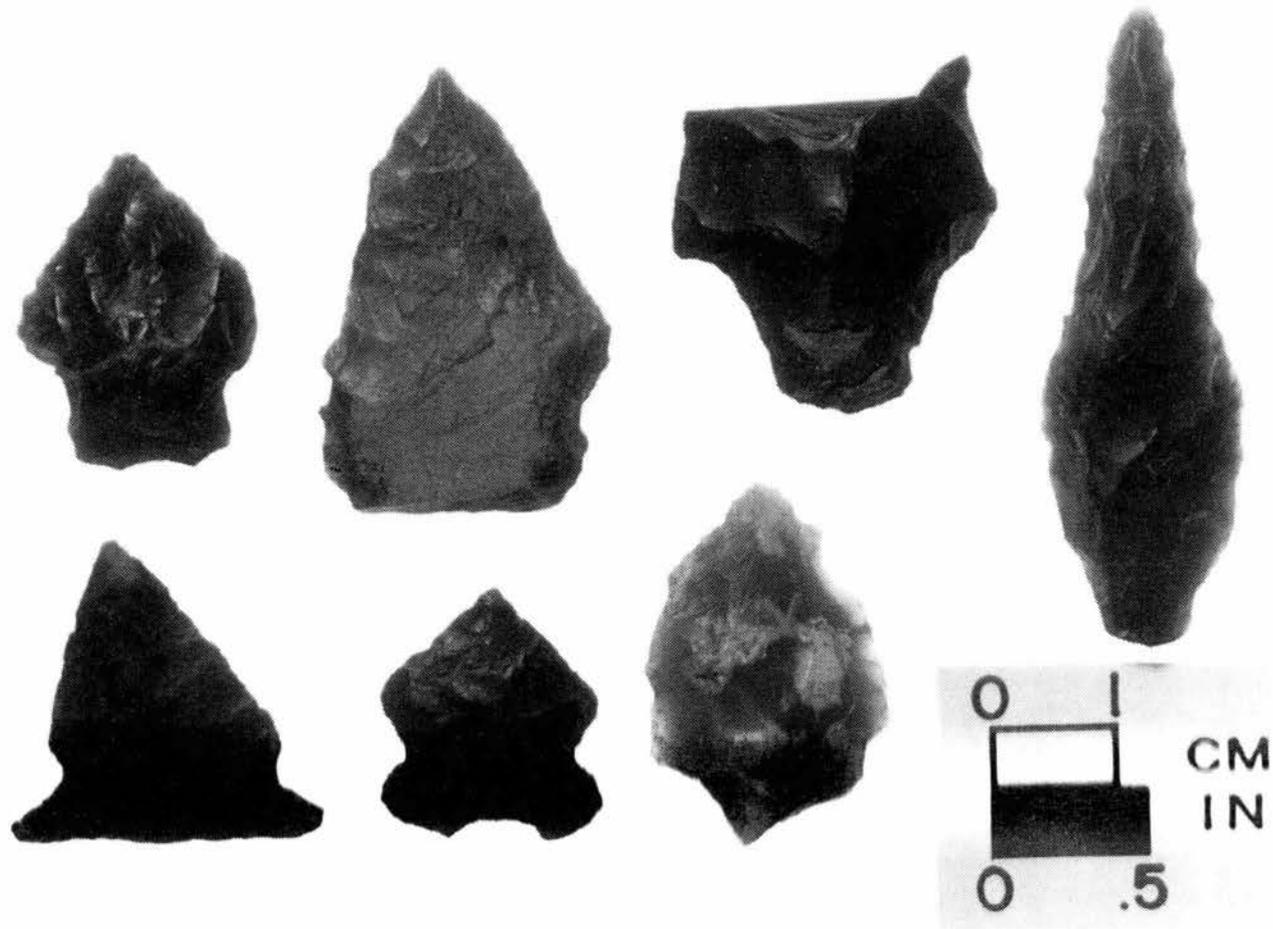


Figure 6.3. Anomalous stemmed projectile points from Burial 7-9 at the Porter Site, 31Wk6, Wilkes County, North Carolina.

northern Georgia. It is similar in many respects to Burial 64-7 at the Hardy site, as well as Burials 3 and 6 at 31Sk1 on the Dan River (Wilson 1983:379-385), a burial from the Berry site in the upper Catawba drainage (Levy et al. 1990:159) and burials from the King site in northern Georgia (P. Garrow, 1990, personal communication; Smith 1987). The presence of the two spatulate celts is especially noteworthy, since these are interpreted to be markers of elite status within the Coosa chiefdom (Smith 1987:101).

Burial 8-5. This burial, like 7-9, also occurs within the arc of postholes, suggesting that it may have been placed under the floor of a structure. This feature was a simple oval pit, approximately 85 cm by 90cm in plan view, extending to a depth of nearly 120 cm below surface. It contained the remains of a child, approximately 5 years old (Bogdan et al. 1990). The body was flexed and placed on its left side; the face was down, with the head pointing to the east. On either side of the head were clusters of rolled copper beads, seven beads in the cluster on the right side of the head, six in the one to the left. Cord fragments are preserved inside several of the beads. Also adhering to the copper clusters were fragments of woven grass, possibly the remains of a mat within which the body was wrapped. A single deer ulna was also recovered from the fill surrounding the burial.

Burial 12-9. This burial was located immediately outside of the arc of postholes enclosing burial 7-9, and may have been placed on the outside perimeter of an existing structure. This shaft and side chamber pit extended to a depth of 136 cm below surface. The shaft orifice measured 65 cm by 77 cm in plan view. The side chamber was excavated east-northeast of the shaft. Contained within the chamber were the poorly preserved remains of an infant approximately 9 months old (Bogdan et al. 1990). Body position could not be determined. Included with the body were a carved shell gorget (Figure 6.4) with the design of a stylized rattlesnake (Saltville variety, after Muller 1966) and a small whelk shell.

Burial 18-8. Burial 18-8 appears to have been associated with the same structure as the above described burials, apparently located on the northern perimeter (see Figure 6.6). This burial was made in a simple oval (nearly circular) pit, its orifice measuring 91 by 93 cm. The bottom of the pit was at a depth of 115 cm below surface.

The pit contained the flexed remains of a single mature adult, sex indeterminate (Bogdan et al. 1990). The body lay on its left side, head to the southeast. Two turtle shells were recovered near the body; these were in poor condition but may have been the remains of a rattle.

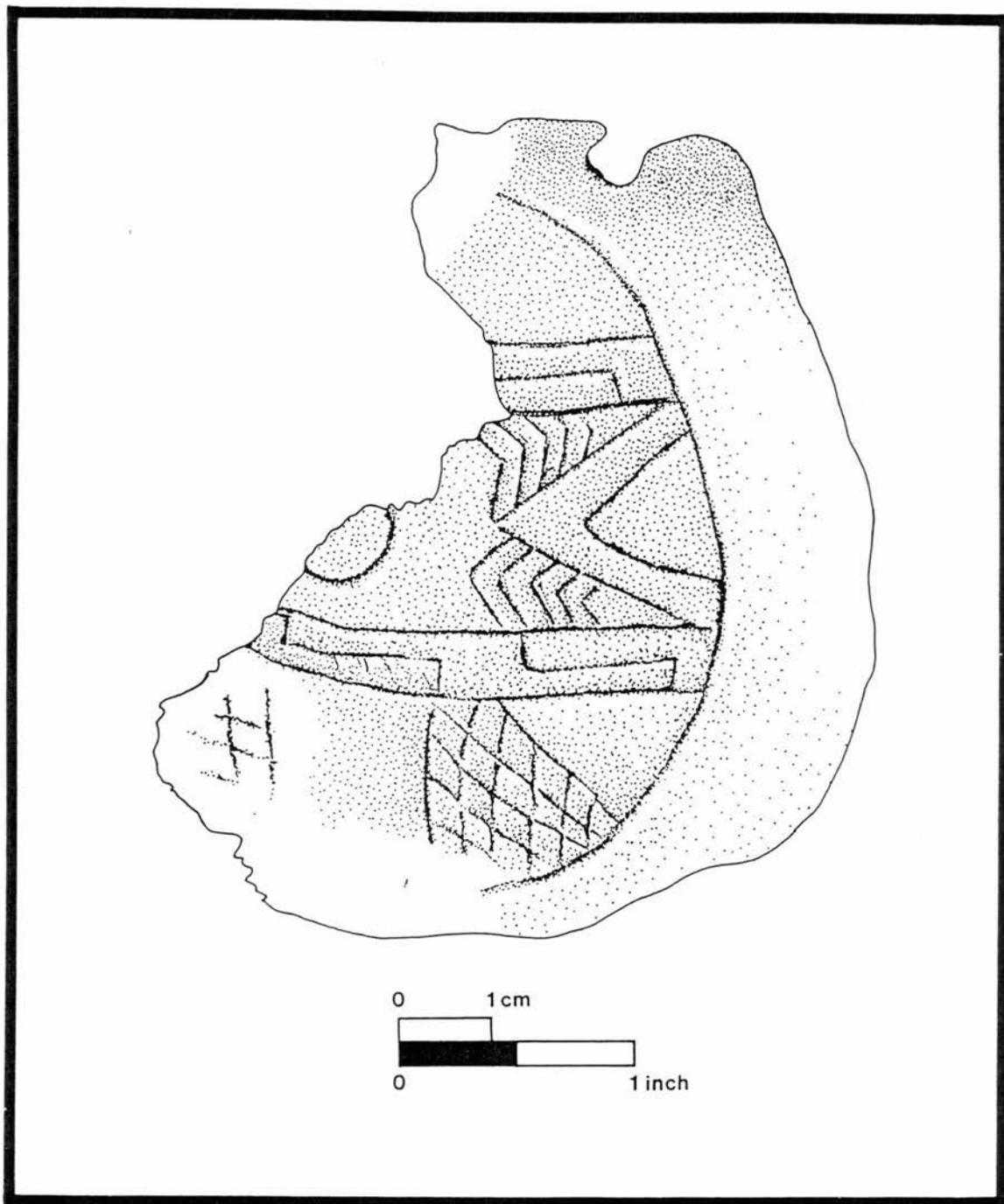


Figure 6.4. Carved shell gorget with stylized rattlesnake design, from Burial 12-9 at the Porter Site, 31Wk6, Wilkes County, North Carolina.

Burial 18-10. This burial was located near burial 18-8. Two postholes features intruded into the top of the burial feature, suggesting that the line of postholes running southwest to northeast across the area were not a part of the oval structure with which the other burials appear to be associated. If this is the case, then both burial 18-8 and 18-10 may have been located inside of the structure, under the floor (see Figure 6.6).

Burial 18-10 was contained within a large oval pit measuring 125 cm by 115 cm in plan view. The pit extended to a depth of 136 cm below surface. The skeletal remains were in extremely poor condition, consisting of a few cranial fragments, dentition and a fragment of the radius. The individual was between 17 and 25 years of age, sex indeterminate (Bogdan et al. 1990). Body position could not be determined, though the head appears to have been oriented to the east. Included with the body (presumably around the neck and chest area) were several strands of columella beads (N=248), apparently necklaces.

Burial 19-6. Burial 19-6 is located at the perimeter of the proposed structure, approximately 4 meters north of burial 12-9. The burial pit was a simple oval, measuring approximately 95 by 80 cm in plan view, and extending to a depth of 115 cm below surface. Contained within the pit were the remains of an individual 16 to 18 years old, sex

Prov.	Age	Sex	Depth	Shape	Size	Associated Structure	Grave Goods	Body Position	Orientation
7-9	17-25	female	178 cm	shaft and side chamber	113 x 109 cm	floor of house	yes; see text	flexed, on left side	east
8-5	5	?	119 cm	oval	91x83 cm	floor of house?	copper tubes, mat	flexed; face down on left side	east
12-9	9 mo.s	?	136 cm	shaft and side chamber	65x77 cm	house perimeter	rattlesnake gorget; whelk shell	?	northwest
18-8	adult	?	115 cm	oval	93x91 cm	house perimeter	turtle shells	flexed, on left side	southeast
18-10	17-25	?	136 cm	oval	125x115 cm	house perimeter	columella shell necklaces	?	east
19-6	16-18	?	115 cm	oval	94x81 cm	house perimeter	shell beads	flexed, on left side	southeast
31-6	adult; sub-adult	male; ?	69 cm	oval trash pit	80x65 cm	in public structure?	no	?	?

Table 6.1. Burial data from the Porter Site, 31Wk6, Wilkes County, North Carolina.

indeterminate (Bogdan et al. 1990).

The body was flexed and placed on its left side with head pointing to the southeast. Five shell beads were located below the mandible, probably the remains of a necklace or choker.

Burial 31-6. This feature was located in a different area of the site, approximately 25 meters east of the structure with which the above burials were associated (see Figure 6.7). This feature may not represent an intentional burial. The skeletal remains recovered from feature 31-6, which represent at least two individuals, were included within a small trash-filled feature measuring approximately 80 by 65 cm in plan view. The pit extended to a depth of only 69 cm below surface, containing shellfish remains, charcoal, potsherds, rocks and burned deer bone.

The human skeletal remains consisted of leg and foot bones of an adult male individual and some cranial and vertebral fragments, a portion of a tibia and a fragment of the ilium of a subadult (adolescent). Additionally, some other skeletal fragments, which may or may not have belonged to the two identified individuals, were recovered. The proximal end of the left femur of the adult was slightly charred. All of the bones of the subadult were charred, as were many of the unidentified fragments. The bones appear to have been dry at the time of burning (Bogdan et al. 1992). No cut marks are evident on any of the bones.

One curious detail in the case of the adult is the fact that the bones, including the bones of the foot, were articulated when excavated. The bones of the subadult did not appear to be articulated, but were mixed with charred deer bone and appeared to be part of the matrix surrounding the adult legs. It should be noted that an unknown portion of the pit containing these individuals appears to have been truncated by plowing. Thus the axial skeleton of the adult may have been present at one time, having been destroyed by modern activities. Nevertheless, the amount of trash contained within the fill of the pit is itself curious; all other burials on the site contained extremely clean fill.

Cyrus Thomas (in Powell 1894:345) reported a somewhat similar burial in a site on the Yadkin River near 31Wk6 (he places the site about seven kilometers east of Wilkesboro, or a few kilometers upstream from 31Wk6). The pit itself was approximately 120 cm long, 75 cm wide, and 150 cm deep. Contained in it was a flexed human skeleton, partially charred, and surrounded by charcoal. Also contained in the fill was general debris of potsherds, debitage and a turtle shell.

Patterning in the Porter Site Burials

The sample of burials from the Porter Site suggests that two main burial modes existed: shaft and side chamber and simple oval pit. All burials (with the exception of burial 31-6, which is so unusual that it will be held from

comparison) contained some sort of associations, though the type and amount varies greatly from one burial to the next. All burials appear to be associated with a single structure, possibly a house. Burial data from 31Wk6 are summarized in Table 6.1.

Burials from the Hardy Site

Four of the burials excavated at the Hardy Site appear to date to the latest component there. In general, the mortuary program at the Hardy site seems to be similar to that at the Porter site.

Burial 60-2. This burial, like burials 64-7 and 94-5, appears to have been associated with the perimeter of a circular structure 4 meters in diameter (Figure 6.8). This observation is conjectural, however, based on the fact that the arrangement of the features in this portion of the site (including the abovementioned burials) form three-quarters of a circle. Very few postholes, which would help to substantiate the observation, were observed. A good deal of daub was recovered from this area of the site, however, lending credence to the notion that a structure once stood here.

The 60-2 burial was in a small oval pit, 65 cm by 50 cm in plan view and 65 cm below surface in depth. The pit contained the remains of an individual 2-3 years of age, sex indeterminate (Weaver, in Woodall 1990). Actually, only the

head and portions of the upper torso were recovered. No evidence of disturbance or intrusion on the original burial pit could be detected; thus it is possible that these body parts were the only ones interred. The remains were located in the far eastern side of the burial pit. Accompanying the remains was a small net-impressed vessel, placed next to the head. Under the vessel were fragments of a woven mat, possibly made of grass, which may have been wrapped around the body.

Burial 64-7. Burial 64-7 was located within the circular feature arrangement. The top of the pit orifice was oval, measuring 50 cm by 100 cm. The burial pit itself was deep, terminating at 107 cm below surface. The fill of the burial pit was barely distinguishable from the sandy matrix surrounding it, making a determination of the shape of the pit nearly impossible. The burial pit appears to have been a straight, narrow shaft, possibly a shaft and central chamber configuration as described by Dickens at the Warren Wilson site (1976:104). The remains of the individual, 25 to 30 years of age, sex indeterminate, interred therein were in very poor condition, making it equally difficult to discern exact body posture. The body was oriented to the south; next to the skull was a mass of materials. The concentration included a cache of primary and secondary flakes and core fragments (8 pieces are of chert, 11 of a black vitric tuff, 41 are of felsite, for a total of 60

pieces) and an Early Archaic Kirk point made of chert. Adjacent to this cluster were two avian long bones, with the ends cut. Beneath the lithics were found several animal bones, including 26 phalanx I turkey bones (drilled), one rabbit ilium, one unidentified mammal bone (drilled) and one beaver incisor. Beneath these were 10 triangular projectile points; one made of chert, one of jasper, one of white quartz and the remainder made of felsite. The points were not consistently oriented, suggesting that they were not hafted at the time of interment. The felsite and the chert match the raw materials included in the flake and core cache lying above.

A small soapstone elbow pipe and two abrading stones, one of flow-banded rhyolite or dacite, the other of slatey rhyolitic tuff, were found near the waist of the individual.

This burial bears some resemblance to Burial 7-9 at the Porter site. It is also reminiscent of Burials 6 and 3 at 31Sk1 as described by Wilson (1983:378-385). It also bears striking resemblance to a burial from the Berry site, 31Bk22, in the upper Catawba valley (Levy et al. 1990:159). With the exception of the Berry site burial, all of these burials are shaft and side chamber interments; thus if these burials are representative of a specific burial mode, it is possible that Burial 64-7 was a shaft and chamber burial as well.

Table 6.2. Burial data from the Hardy Site, 31Sr50, Surry County, North Carolina.

Prov.	Age	Sex	Depth	Shape	Size	Associated Structure	Grave Goods	Body Position	Orientation
60-2	2-3	?	65 cm	oval	65x60 cm	house perimeter	small vessel; mat	?	east
64-7	25-30	?	107 cm	shaft and central chamber?	50x100 cm	house perimeter	yes; see text	?	south
73-3	5-6	?	110 cm	oval	61x 65 cm	no	no	?	east
94-5	8-10	male	103 cm	oval	130x119 cm	house perimeter	shell bead choker	flexed, on back	north

Burial 73-3. Burial 73-3 was not associated with the possible circular structure. This burial may have been associated with a different structure, located among numerous pit and posthole features. No specific feature pattern indicative of a structure can be discerned here, however, so this question remains open.

The burial pit was oval or egg-shaped in plan view, measuring 61 by 65 cm, and extended to a depth of 110 cm below surface. The skeletal remains included the skull and a clavicle fragment of a 5 to 6 year old child (Seifert and Weaver 1989). similar to burial 60-2, only the uppermost portions of the body are represented. The skull was located in the eastern portion of the burial pit, superior axis of

the body pointing to the east. No grave associations were recovered.

Burial 94-5. Burial 94-5 was located within the circular feature arrangement (describe above). The burial pit was a large oval feature, its orifice measuring 130 cm by 120 cm. The pit was 103 cm deep. This commodious facility contained the remains of an 8 to 10 year old male child (Seifert and Weaver 1989), body flexed and placed in the extreme eastern end of the pit. The body was placed on its back, with head pointing to the north. The only associations were 17 shell beads recovered beneath the mandible and probably representing a choker.

Patterning in the Hardy Site Burials

Although it is not entirely clear, two main mortuary types seem to be present at the Hardy site, as at the Porter site. The first is interment in a simple oval pit. The second may be a shaft and chamber style burial pit, although this may have been a central chamber as opposed to a side chamber. Only one of the Hardy site burials contained no grave goods, and this burial was the only one not associated with the circular structure. Two of the subadult burials at the Hardy site are curious insofar as the skeletal remains represent only the head and extreme upper torso of the individuals. Whether this phenomenon is the result of differential bone preservation or is representative of an

unusual mortuary practice is unclear. Burial data are summarized in Table 6.2.

Burials from the Donnaha Site

Twelve burials from the Donnaha site appear to belong to the late component there and are included in this study. Each of these burials is fully described in Woodall (1984) and such descriptions will not be repeated here. Burial data are summarized in Table 6.3.

The burial assemblage from Donnaha is distinct in that only one type of burial facility, namely the small oval pit, is apparent. All such pits are relatively small; that is, they were large enough to accommodate the body. This differs from burials such as 94-7 at the Hardy site, where the oval pit is considerably larger than needed to house the body.

Half of the Donnaha burials contained some sort of grave associations. All such associations are items of personal adornment, and no single individual possessed considerably more goods than any other. Generally, artifactual associations seem to represent a single item per person (e.g. a shell bead necklace consisting of several beads). Presence or absence of associations does not appear to be predicated on age or sex.

Burial 34-28, though modest in appearance, does seem to indicate a considerable expenditure of energy. The small circular structure within which this individual was buried

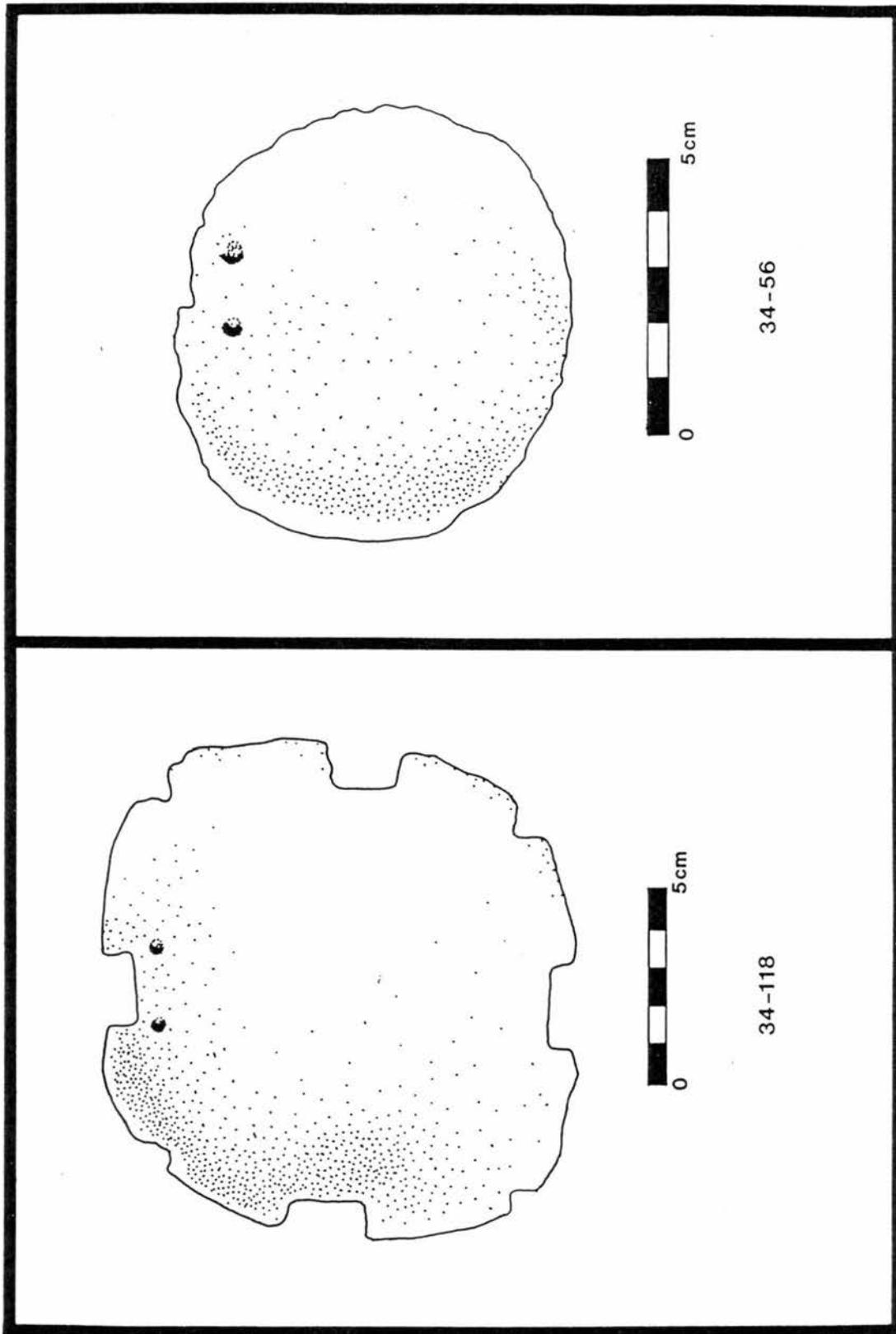


Figure 6.5. Marine shell gorgets from burials at the Donnaha Site, 31Yd9, Yadkin County, North Carolina.

was apparently burned subsequent to the interment. The deceased was an adolescent male; no goods were associated with the grave, which belies the elaborateness of the mortuary ritual if the interment and burning events were linked. Similarly, Burials 34-56 and 34-118 appear to have been interred within special burial structures (Woodall 1984:60). These two burials are notable also because they contained the only two marine shell gorgets recovered from the site (Figure 6.5), perhaps denoting specialized statuses of the individuals.

In all of the Donnaha burials the bodies were flexed, though the orientation of the body (i.e. the orientation of the superior axis) varies considerably from case to case.

The burial regime at Donnaha is similar to that described for the Shannon site, 44My8, a palisaded Late Woodland village site on the Roanoke River in Virginia (located approximately 70 miles due north of the great bend of the Yadkin River). At the Shannon site 100 burials were recovered. Virtually all were flexed burials in simple oval pits; one-half contained grave accompaniments, mostly personal adornments. Presence or absence of grave accompaniments is not dependent upon age or sex. Several of the burials at the Shannon site appear to be associated with house structures, placed in the floor or near the perimeter. Other burials are apparently not associated with a structure. Orientation of the body varies considerably in the Shannon site assemblage (Benthall 1969).

Prov.	Age	Sex	Depth	Shape	Size	Associated Structure	Grave Goods	Body Position	Orientation
34-28	adolescent	male	103 cm	oval	55x80 cm	floor of small circular structure, 1.5 m diameter	no	flexed; on back	south
34-56	25	male	127 cm	oval	75x80 cm	floor of small circular structure, 2.1 m diameter	oval gorget	flexed; on back	southeast
34-117	40-50	male	192 cm	circular	1 m	no	18 shell beads	flexed; on right side	east
34-118	30-40	female	109 cm	oval	60x100 cm	postholes partially surround	log cabin gorget	flexed; on back	north
34-143	18-20	male	157 cm	oval	70x90 cm	no	bone ear pin	flexed; on left side	east
34-144	2	?	125 cm	oval	52x82 cm	perimeter?	no	flexed; on back	northwest
34-166	40+	female	147 cm	circular	95 cm	no	no	flexed; on back	northwest
37-7	adult	?	107 cm	oval	50x85 cm	no	no(?)	flexed, on right side	northeast
37-6	adolescent	male	>107 cm	?; burial intruded on by 37-7	?	no	bone beads? (may belong to 37-7)	?	?
36-19	12-14	?	56 cm	?	?	no	no	flexed, on back	northeast
38-5	1- 1 1/2	?	54 cm	?	?	no	no	flexed, on right side	east
38-7	child	?	74 cm	oval	30x45 cm	no	2 bone beads	?	northeast

Table 6.3. Burial data from the Donnaha Site, 31Yd9, Yadkin County, North Carolina.

Patterning in burials from the Great Bend Region

The amount of idiosyncratic variability evident in the burials described above makes it difficult to compare cases. Close examination of the various attributes shows that there is no strong tendency for different attribute states to occur. Within this small sample the shaft and chamber burials do exhibit certain regularities (i.e. inclusion of grave goods and association with a structure). It should be noted that a sample population of two or possibly three cases leaves this conclusion far from being substantiated, but Wilson's (1983:378-385) descriptions of the burials from 31Sk1 on the Dan River does strengthen this observation. Of six burials, four were shaft and chamber, all of which contained a number of artifact associations. The one simple oval burial pit at the same site had no inclusions.

At the Warren Wilson site (a Pisgah phase village site near Asheville, North Carolina) a similar, though imperfect, pattern is evident. Shaft and side chamber burials have grave accompaniments more frequently than oval pit burials (6 of 14 compared to 1 of 14) (Dickens 1976:126). Dickens suggests (1976:125) that oval pit burials may have been a less formal mode of burial for people of lesser rank or status.

One item that does appear to be strongly associated with shaft and side chamber burials is the rattlesnake

gorget. The one example (Figure 6.4) from the Yadkin River (burial 12-9, 31Wk6) and the two recovered from 31Sk1 on the Dan River (burials 2 and 3) were found in this burial type. At the Warren Wilson site three burials were associated with rattlesnake gorgets; two of the three were shaft and side chamber. (A second rattlesnake gorget has been recovered from the Great Bend region of the Yadkin River. It was recovered from a Late Woodland site along the river in Elkin. No additional provenience information is available (Rights 1947, pl. 77).

Of this entire assemblage of rattlesnake gorgets for which context is known, only one is associated with an adult burial. This exception is Burial 3 at 31Sk1, in which a rattlesnake gorget was included with a 20 to 30 year old female (Wilson 1983). The rest (described above) are associated with subadults, most very young infants. The occurrence of these gorgets with children may suggest the existence of some sort of hereditary ranking (Dickens 1976:128; Larson 1971:67). Rothschild (1983:168) has suggested that infant's burial treatments may closely reflect their parents' status(es) and not their own. Thus, these burials may be an indirect reflection of adult statuses within the household or burial population.

Orientation of the body is highly variable in the sample of burials from the Great Bend region. Of the 21 cases for which orientation of the superior axis could be determined, a plurality were to the east (n=8). The only

cardinal direction which is not represented is west.

Table 6.4. Orientation of Burials in sites from the Great Bend Region of the Yadkin River, North Carolina.

Site	Direction: NW	N	NE	E	SE	S	Total
31Yd9	2	1	3	3	1	1	11
31Sr50	0	1	0	2	0	1	4
31Wk6	1	0	0	3	2	0	6
Total	3	2	3	8	3	2	21

These data show no obvious patterning. There is a weak tendency or preference for easterly orientations (i.e. east, northeast and southeast) which accounts for 67% of all the burials. It is curious to note, however, that at the Warren Wilson site, where burial patterns are in general highly similar to these from the upper Yadkin, orientation is usually (95%) to the west (Dickens 1976:127). At the Shannon site in Virginia, easterly directions accounted for 77% of all burials (Benthall 1969:43).

Of the nineteen simple oval pit burials in the Great Bend sample, twelve contained some sort of grave accompaniments. It is possible that this difference represents differences between contemporaneous households. At the Hardy site, the two oval pit burials associated with the circular structure had accompaniments; the one not associated with the structure contained no inclusions. At the Porter site, all four oval pit burials were associated with a circular or oval structure, and all contained inclusions. It is difficult to assess the spatial

associations of the burials and possible structures at the Donnaha site, so this proposition cannot be evaluated with these data.

In general, the burial data from the upper Yadkin valley are not easily interpreted. The side by side existence of two distinct burial pit styles at two of the three sites can be interpreted in several different ways. If the individuals interred at either site were the members of distinct households, then the differential treatments are not consistent with expectations of distinct family units living together in villages. This is because burial treatments appear to cross-cut household clusters. The differences may be consistent with lineage differences, which would be evident at the household level. Thus clusters of burials may represent members of single households. Differences in mortuary practice within these clusters might be due to the fact that the members of a single household probably belonged to at least two distinct lineages (e.g. Gearing 1968).

On the other hand, the two burial practices may be indicative of status or ranking differences within the village populations. It has been suggested elsewhere that shaft and chamber burials were given to individuals belonging to hereditary groups with greater status (Dickens 1976). If energy expenditure of mortuary ritual is used as an index to the rank or status of an individual, however, some of the (presumably) simpler oval pit burials must have

rivaled some of the shaft and chamber affairs. Burial 34-28 at Donnaha certainly should be considered in this light. Thus whether shaft and chamber burials should be considered as representative of a distinct class of people within late prehistoric sites or not is uncertain.

Two generalizations can be made from the burial data. The first is that the styles of burials do not appear to be indicative of a unitary social identity or collective consciousness which was being expressed through highly consistent burial style. Even the Donnaha sample, which on the face of it appears to be fairly homogeneous and conservative, shows markedly different treatments (involving increased energy expenditures) for different individuals. Burials 34-28, 34-118 and 34-56, all of which were buried within small circular structures which may have been specially constructed for the mortuary ritual, may represent special personages.

The second observation is that the scale at which patterning of burial styles is evident is regional, covering a large portion of the state, as well as western Virginia. Affinities are also observable into Tennessee and Georgia. If burial styles do in some way signal allegiance to social groups, then the data indicate that these groups were spatially quite large.

Archeologists have traditionally looked at mortuary data as a way of learning about the identities of the deceased. The primary identity question has often been

whether status was ascribed or achieved. The Yadkin valley data are equivocal on this point, suggesting that the dichotomy between the two types of status may not be as clear cut in reality as they are in archeological theory.

Momentarily pushing aside the achieved versus ascribed problem, it is appropriate to consider what else these data may be telling us about social identities. The existence of more than one burial mode within late prehistoric village sites in the western half of North Carolina seems to be quite common. Donnaha is an exception, but not unlike the Shannon site in Virginia. As mentioned above, this phenomenon might be considered evidence supporting a mingling of ethnic (or tribal) identities within villages. (This presumes, of course, that burial populations reflect village populations and not something else). This interpretation cannot be dismissed out of hand. If true, the data would indicate ethnic or tribal mixing at Porter and Hardy, and ethnic homogeneity at Donnaha.

However this interpretation seems unlikely if we compare the number of ethnic units (nations or tribes) denoted by early explorers with the number of distinctive burial modes which might be construed as markers of ethnicity. While there are dozens of "ethnic" groups identified by name, there are only a handful of distinct burial modes. Additionally, these early observers lead us to believe that residential groups (i.e. villages) are the building blocks of the nation (or tribe), thus implying

ethnic homogeneity at the village level. Thus the notion that the village or the village cluster was a real ethnic unit that endowed members with singular identities that would be expressed in mortuary practice may be dismissed, at least in most cases. In other words, if burial differences are indicative of ethnic or tribal differences, ethnic identity is being imparted to individuals by some social mechanism other than residence.

Nevertheless, aspects of social identities that cross-cut villages and even river drainages do seem to be indicated by the mortuary data. The consistency of certain burials is striking (e.g. 31Wk6 7-9, 31Sr50 64-7, 31Sk1 burial 3). Each of these burials is more similar to burials at other village sites than to any other burial at the site in which they occur. This phenomenon is suggestive of a wide-ranging regional interconnectedness expressed through salient identities (Schortman 1989). The problem remains, of course, to explain what these various identities might represent in real social terms. Perhaps Lederer's insistence that these Indians strictly adhered to widespread lineage or clan affiliations and that these were observed in burial practice is correct. Hypothesizing the existence of some sort of social groups other than "the tribe" which cross-cut residential groups (in other words, something comparable to Service's sodalities) does help to make sense out of the mortuary data from the region. The exact content of these social groups or sodalities is not readily apparent

from these data, though lineage affiliation cannot be entirely ruled out as a possible explanation. Whether differences in energy expenditure are indicative of incipient social ranking is unclear.

FEATURE PATTERNS

Excavations at three sites within the study area have produced numerous features. Postholes, debris-filled pits (usually designated trash pits, though their initial excavation may have been for other purposes, for example for storage facilities), sterile pits and burial pits are the most common types of features encountered. Because the various patterns evident in feature structure and distribution are the results of "different ways of doing" they may be broadly interpreted as style (see Hodder 1990; Sackett 1990).

Structures and Associated Features

Posthole patterns, indicative of structures which once stood on sites, can be an important line of evidence. Early explorers in the region noted that house styles varied from area to area (Hudson 1990:142-144). For example, Lederer noted that many of the North Carolina groups built round, bark-covered houses, though at the town of Shakor, the Indians covered their houses with mud (1966:15). That house styles may follow ethnic divisions has been shown in ethnoarcheological observation (Hodder 1977).

Feature patterns indicative of structures are one of the least well documented sources of archeological evidence from the Great Bend region. The three excavated sites pertinent to this study have produced numerous features; however clear cut feature patterning has been notoriously difficult to detect.

The Porter Site

The two seasons' work at the Porter site have revealed features interpreted as the remains of two different structures. The first, uncovered during the 1990 season, is a circular or oval configuration, measuring approximately 4 meters east-west (see Figure 6.6). Its north-south dimension is uncertain; a line of postholes oriented southwest to northeast truncate the northern end of the oval pattern. Many of the postholes intrude upon pit features thought to be associated with the oval structure, indicating that this line of posts was erected at a later date. If the oval arc and the line of posts are associated, then this may represent a room or subdivision of a larger structure. No house floor was evident in the excavation of the area. However if one once was present it may well have been destroyed by modern plowing (see site description--Chapter III).

Numerous pit features were associated with the postholes. These included six human burials (described in the Mortuary Patterns section), two large trash-filled pits,

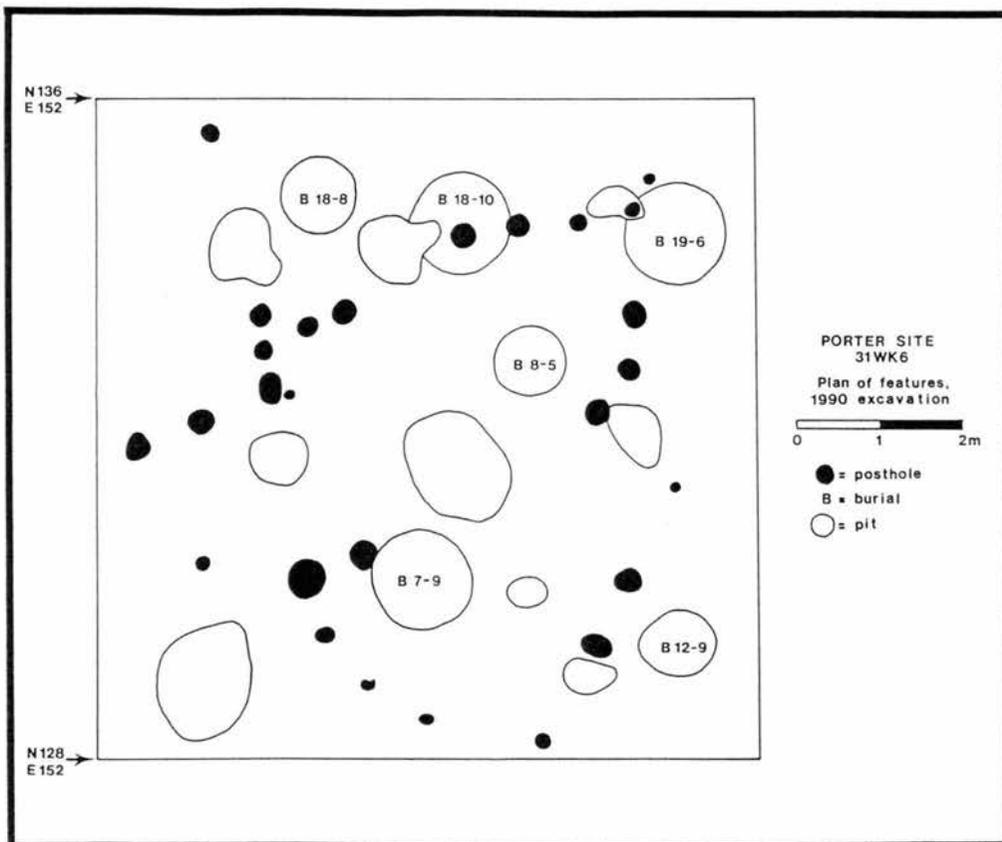


Figure 6.6. Plan of features from the 1990 excavations at the Porter Site, 31Wk6, Wilkes County, North Carolina.

and three smaller sterile (or nearly sterile) features. One of the trash-filled pits occurred in the center of the proposed oval structure. The other large trash pit was located on the outside perimeter. The purpose of the sterile features is unclear, although all are located within the line formed by the arc of the posthole features.

A quantity of daub was recovered from this area of the site, strengthening the contention that a structure once stood at this location. This suggests a wattle-and-daub construction technique, in part consisting of a number of closely spaced poles or posts. Currently, these features are interpreted as the remains of a single household. Burials were spaced in and around the house; presumably these were members of the household. The trash-filled pits may have functioned originally as storage pits. Their placement in and near the house is suggestive of this use. These features may have been intentionally filled with rubbish after the comestibles within them had been consumed. It seems unlikely that a storage pit excavated in these loose alluvial sands, even if it were lined with bark or some other organic material, could survive indefinitely without its walls collapsing. Such storage facilities also might become infested with vermin, necessitating their abandonment.

The second structure, uncovered during the 1991 excavation, is quite different from the first (see Figure 6.7). Its final dimensions are unknown; the excavation

uncovered a portion of it covering 17 meters by 10 meters. The structure consists of a grid-like pattern of postholes; on the northwest-southeast axis postholes are spaced on average 3 meters apart; on the southwest-northeast axis they are spaced on average 4 meters apart. A shallow trough feature, 50 to 60 cm deep and basin-shaped, approximately 1 meter wide, was located within the posthole pattern. The trough was oriented on a northeast-southwest axis (thus aligning itself with one of the axes of the postholes). Another amorphous, shallow feature, perhaps representing a continuation of the trough, was observed along the same northeast-southwest line. At its northeast end this feature measures approximately 80 cm wide and 50 cm deep, and continues in this form for approximately 2 meters along the northeast-southwest axis. The feature then expands into a large and ill-defined stain, 3 to 4 meters wide. Exactly what these two trough-like features represent is unclear, though they may be depressions created by a well-worn pathway within the structure which later filled in with sterile soils. No daub was recovered from this general area, suggesting either that it was an open building such as a ramada, or that a different method of construction was employed such as thatching.

This entire feature complex bears some resemblance to the feature pattern encountered at the Bessemer site, 44Bo26, a Late Woodland village site on the James River north of Roanoke, Virginia. This feature pattern has been

interpreted as a longhouse, 15 by 6 m, with its long axis oriented northeast-southwest. A shallow depression was excavated, interpreted as a trough created by frequent traffic through a house entrance (Geier and Moldenhauser n.d.:17-19).

The function of these large structures is unknown. It is probably telling that at the Porter site (and at the Bessemer site) no human burials were encountered in the area in and around the large structure. The anomalous human remains (i.e. Burial 31-6, in the Mortuary Practices section) which had been burned were found in a debris-filled pit within the structure area, however. The absence of intentional primary inhumations suggests that this may have been a public structure, as opposed to a household. Lawson notes the presence of public buildings which he calls State Houses (1937:33). He observed a number of these, describing them as being larger than private houses, with a pyramid-like roof made of thatch. In these buildings public business was transacted and celebrations or "Revels" were held. Lawson was also given lodgings in a state house at an unnamed town (1937:37).

Many trash-filled pits were excavated within the large structure at the Porter site, most containing abundant amounts of food debris including animal bones and shellfish remains. (Additionally, several pit features containing sterile fill were excavated here. These pits remain a puzzlement.) Faunal and floral analysis of the contents of

these features, and comparison of this feature fill to that recovered in and around single households, would be an interesting avenue of research that might shed further light on the nature of the large structure. For now, it is tentatively interpreted as a public structure.

The Hardy Site

Numerous pit features were uncovered in the west sector of the Hardy site in two seasons' work. Postholes were comparatively rare, however. The alignment of pit features in the northeast sector of the excavated area inscribes three-quarters of a circle, approximately 4 meters in diameter, suggestive of a circular structure around which these features were placed (see Figure 6.8). The features include three human burials as well as several trash-filled pits. Additionally, two postholes occurred within the circular arrangement, and daub was recovered from this area. This pattern is tentatively interpreted as the remains of a single house of wattle-and-daub construction. The size, shape and configuration of features of this house pattern are similar to the household identified at the Porter site.

The arrangement of other features in the excavated area is somewhat misleading because it is believed that they represent two separate occupations (Rogers 1989a). The tangle of features becomes no simpler, however, if the features securely dated to the earlier occupation are removed from consideration. (It should be noted that several

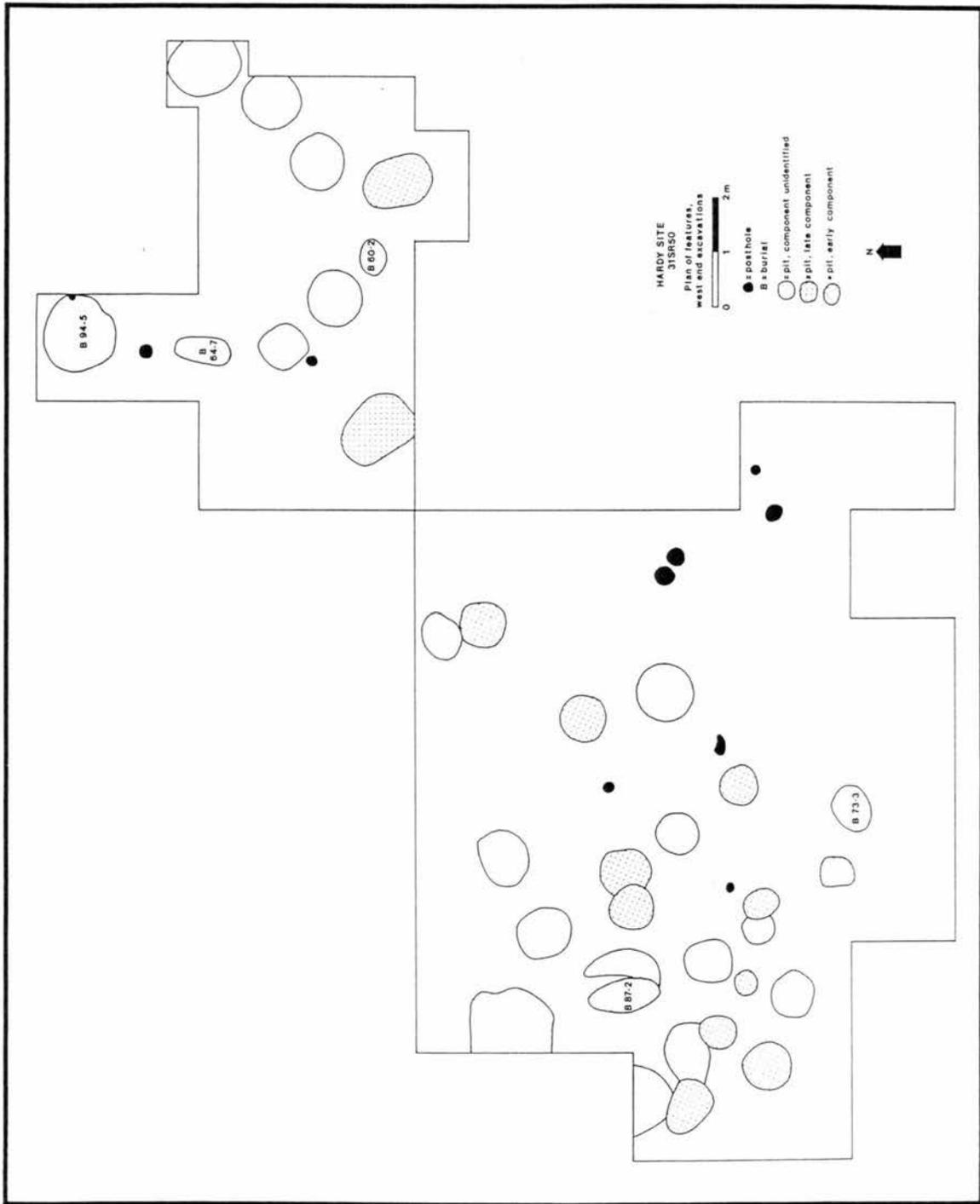


Figure 6.8. Plan of features at the west end of the Hardy Site, 31Sr50, Surry County, North Carolina.

features could not be assigned to either component due to the paucity of ceramics recovered from their fill). No particular pattern is evident in this area of the site. The vast majority of the features are trash-filled pits.

The Donnaha Site

Two types of structures were tentatively identified in the EU 34 area of the Donnaha site (Figure 6.9). The first are small circular structures containing human burials. Three of these, ranging in size from 1.5 meters to 2.2 meters in diameter, were identified in association with burials 34-28, 34-56 and 34-118. The smallest of these structures (associated with burial 34-28) contained a layer of floor trash, and the entire structure was apparently burned following the interment. The other two structures did not show evidence of having been burned; however the individuals contained within these structures were accompanied by the only two marine shell gorgets recovered from Donnaha (Woodall 1984:60). Each of these burials may represent important personages. These structures may have been specially constructed as a part of the mortuary ritual surrounding the deaths of these individuals, whose funerals required a greater-than-normal expenditure of energy due to their status (Tainter 1979:125).

On the other hand, the posthole patterns' associations with these burials may be serendipitous, or these may be part of a larger structure not apprehended by the

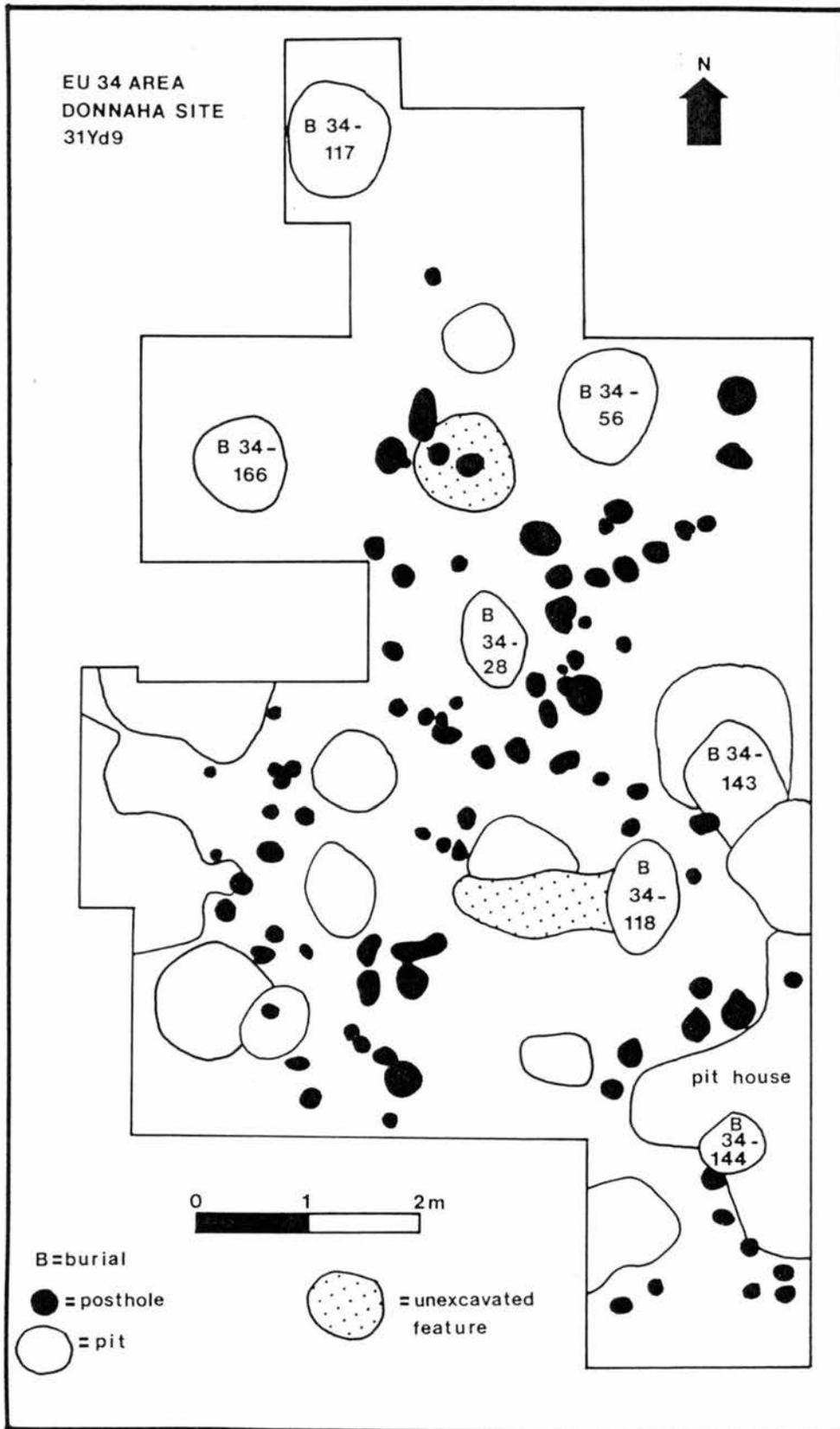


Figure 6.9. Plan of features in the EU 34 area of the Donnahaha Site, 31Yd9, Yadkin County, North Carolina.

archeological work done in this area of the site. At least one of the small structures contained floor trash, a feature normally associated with the living.

The second type of structure is described as a pit house (Woodall 1984:60). This feature pattern was only partially excavated, but the exposed portion suggests a square or rectangular structure approximately 3 meters wide. The structure consists of a moderate depression, about 30 cm deep, with gradually sloping sides and a flat bottom, surrounded partially by postholes (Woodall 1984:45). It is suggested that cleaning of the floor and trampling could have produced the depression feature. The entrance to the structure may have been to the west or southwest, indicated by a gap in the postholes and a narrowing of the depression into a trough-like shape, approximately 80 cm wide. Burial 34-144 is intrusive into the feature. No evidence of wattle-and-daub construction was found at the Donnaha site, suggesting a different method of construction was in use on the site.

Feature Patterns from the Great Bend Region

House Structures

Feature data from the Great Bend region do not form a robust body of evidence. Therefore only tentative comparisons, contrasts and conclusions are in order.

Possible house patterns at the three sites under

consideration suggest different construction techniques were used upstream of the shoals from downstream. At both the Porter and Hardy sites, feature patterns indicative of circular or oval structures, about 4 meters wide were identified. Significant quantities of daub were also recovered in the vicinity of these house patterns, indicative of wattle-and-daub construction.

At 31Sk1 in the adjacent Dan River drainage well-defined house patterns have been excavated. These indicate circular structures, 20 to 30 feet in diameter, with closely spaced wall posts and wattle-and-daub construction. Burials and storage pits were placed in and around the houses (Ward 1983:73-74). Thus there seems to be a certain commonality between house construction along the western stretch of the Yadkin and the nearby Dan River.

This contrasts with house forms uncovered on Pisgah phase sites to the west of the Piedmont. Here house patterns indicate rectangular or square house plans, averaging about 20 feet wide, with entrance wall trenches. Construction consisted of closely spaced wall posts, probably covered with bark or woven mats, possibly with thatched roofs. House floors were slightly depressed and interior hearths were located in the center of house floors, slightly raised and made of clay. Burials and storage pits were located in and around houses (Dickens 1976:94).

The evidence for house construction at the Donnaha site is tentative; however the single example conforms more

closely to the pattern described at Pisgah phase sites than elsewhere.

Special Structures

Two types of special structures are suggested by the Great Bend feature data. The first is the large public building at the Porter site. Other similar structures are currently unknown in the upper Yadkin valley; however a similar feature pattern has been uncovered at the Bessemer site in Virginia. The archeological evidence suggests that such structures were a rarity on Late Woodland village sites. The ethnohistorical record suggests that they were not uncommon, and John Lawson noted several large public buildings in villages that he visited (Lawson 1937).

The second type of structure is represented by the burial structures observed at the Donnaha site. Such structures have not been observed on other Late Woodland sites and their meaning is currently obscure.

Pit Features

The trash-filled pit is a commonplace on Late Woodland sites in the region, and occur at all of the excavated sites within the study area. Their origin and exact function is disputed; some researchers believe these are storage pits which were later filled with refuse, others argue that they were dug specifically as trash receptacles (Woodall 1984:56-57). The excavation of a trash-filled pit at the Hardy site

which had been lined with pine bark lends credence to the former hypothesis. Regardless of their function, their uniform occurrence throughout the region should be recognized as a result of similar behaviors. As a vernacular style, these features may be indicating a background commonality across the region.

CHAPTER VII CONCLUSIONS AND FUTURE RESEARCH

Perhaps the single greatest problem in North Carolina Piedmont archeology is the glaring lack of agreement between the ethnohistoric versions of native social organization and the archeologically derived evidence of social organization. Social boundaries indicated by explorers' descriptions are invisible archeologically, and archeologically defined regions were not confirmed by explorers' notations. Juxtaposing explorers' accounts of polities, nations or tribes against the material residues of interactive behaviors creates a noticeable contradiction. In short, how could the social processes generated by named, autonomous polities result in the patterns evident in the material record? The answer is that given the constraints posed by the initial assumption (bounded sociopolitical entities), the archeological record is not easily explained.

The physical evidence for boundary marking behavior, be it passively produced through mundane enculturation processes or actively wrought and laden with symbolism, is a varied and sometimes contradictory lot. The fact is that no single, hard-and-fast boundary is indicated by the data from the study area. This is because patterning evident in one data class (patterning that might be construed as evidence

of a boundary) does not coincide with patterning in other data classes. Further, much of the patterning that is evident is not discrete. In other words, formal variation within data classes often differs not in kind, but in relative frequency of similar forms.

Grappling with the ethnohistorical record, the different patterns evident in the several data classes reviewed herein and ethnographic analogs presents a very complex picture, one that is not easily accommodated within traditional organizational frameworks (e.g. a tribe or chiefdom). This is because there is no level at which all of the categories can be subsumed simultaneously to form a single comprehensible structure. In short, a hierarchical model of social order simply cannot accommodate the data.

Hierarchy implies levels of organization, with each successive level being more spatially and numerically inclusive. In human terms, this means that identities (taken from group memberships) are nested and ranked. And in theory, it also means that human interactions are structured according to this hierarchy of inclusiveness. For example, in American society, the hierarchy of inclusiveness might be as follows: an individual lives in the hamlet of Grovers Mill, which is a part of the municipality of West Windsor, a township within Mercer County, which is one of 21 counties in the state of New Jersey. New Jersey is a state within the United States. Thus if this individual meets a fellow New Jerseyan, she

will probably identify her affiliation on a municipal or county level. If the same person meets someone from Nebraska, she will probably simply identify her origin on the state level. If she is traveling abroad and meets an individual from Italy, she will probably use the identification of American.

If this were to be translated into tribal terms, the tribe would become the most inclusive level, and long distance relationships should be based on tribal identification. In this case material indices of boundedness should be evident. Yet a review of the available data shows a tremendous amount of stylistic spillage across the region, and further indicates that patterning occurs at different orders of magnitude.

In contrast to a hierarchical arrangement of organization stands a heterarchical arrangement. As opposed to ranked levels of organization, this entails orders of organization which are dispersed. This is the concept of the cat's cradle (Chapter II). Orders of organization within the total system do not necessarily overlap and may differ in inclusiveness. Because of this salient feature of heterarchical organization, archeological units such as the phase are inappropriate condensations of variability. Phase designations, which in practice usually equate to the temporal-spatial distribution of a ceramic style, neatly divide the physical landscape into separate areas, hence fostering notions of separate "culture areas" (see

discussion below). The archeologist's obsession with pottery types, and the unspoken but unrelenting belief that these, more than any other data class, index the extent of real sociopolitical entities, has resulted in the chasm that exists between archeological and ethnohistorical reconstructions of the sociopolitical landscape.

Archeological middle range theorists have yet to document that ceramic provinces coincide with the extent of political, jural or economic structures. (Even if this is the case, archeologists must demonstrate the specific behavioral mechanisms that make pottery styles conform to and mark political boundaries.) This assumption is often taken as a given rather than as a proposition to be tested.

The ethnographic reality is that when tribal societies are atomized into their constituent parts (e.g. the ceremonial conference, economic cooperative spheres, the connubium, territorial groups, etc.), each reveals a very different picture of society. Much of the debate in the late 1960s and early 1970s over the tribe consisted of arguments over which social structure should be deemed the definitional structure of a tribe (Dole 1967; Fried 1975). Heterarchy recognizes that all structures are potentially equally definitional.

The archeological record of the tribe is the product of people acting within all of these structures. It is assumed that different material residues (data classes) are the result of different behavior sets, and that ultimately,

these behavior sets are responses to different sets of conditions and/or structures that comprise the social system. Thus, individual data sets are indexing different realms. Considered simultaneously these reflect the total social environment.

The archeologist's task is to map these orders of organization onto the landscape by following their material residues. The foregoing chapters have attempted to disclose spatial patterns and identify effective scales in separate data classes. The aggregate evidence must now be evaluated in terms of this model. Specifically, what is the evidence for different orders of social organization, and how are these related to the whole?

Tribes

Discrete political entities are unambiguously indicated by the ethnohistorical record. The Spanish recorded the names of towns which were the homes of tribute-gathering chiefs. Surrounding towns affiliated themselves with a chief, thus forming the named polities listed by the Spaniards. A century later other European explorers noted the names and locations of separate Indian "nations," and many of these names corresponded with names noted by the Spanish (Hudson 1990:184-188). This evidence cannot be dismissed as inaccurate. Nevertheless, the material record bears no resemblance to this ethnographic account if we understand the named units (variously called chiefdoms,

tribes and nations) to be autonomous political units.

In considering the available evidence, it seems unlikely that the named nations of the Piedmont constituted autonomous sociopolitical units. On the face of it, autonomous groups should be expected to engage in more boundary marking behaviors. This is especially true in situations where competition or tension exists between groups. Some ethnohistoric accounts indicate that intergroup rivalries and violence were the norm (Hudson 1990; Lawson 1937). Therefore we should expect to see stylistic markers of difference between groups; such markers serve to maintain social boundaries by identifying members of groups and thus making social interactions predictable (Wobst 1977:328).

One possibility is that social boundaries between polities were stringently marked through style, but that these styles were expressed through ephemeral media which are not recoverable in the archeological record. In fact, this is a very real possibility. Wobst suggests that most artifacts are inappropriate carriers of important social messages because they are unlikely to be seen by the target audience (1977:330); therefore mundane and highly utilitarian items may not carry stylistic messages. On the other hand, we would expect items of physical adornment to be highly distinctive. In addition to the visibility criterion, there is another reason why items of physical adornment might have been more appropriate vehicles of

stylistic identification. This is the flexibility requirement. In Chapter II it was suggested that individuals within the overall system sometimes switched allegiances. [In fact, this is probably one of the most salient features of egalitarian heterarchy, and is discussed more fully below.] In switching affiliation, it might be necessary to switch stylistic messages of affiliation, and this is most easily accomplished if the messages are encoded in relatively impermanent media. These would include media which are not likely to be retrieved through archeology: clothing items, hair styles, tattooing and other body mutilations and body painting.

In fact, Lederer recorded that each nation was identifiable by its particular emblem (1966:4) and Mooney recounts how members of tribes in Virginia had their tribal mark painted on their shoulders in order to identify their affiliation (1894:31). Likewise, Lawson noted that each nation's dress was distinctive (1937:203). Further, according to Lawson, a primary difference between nations was their distinctive languages (1937:251).

Thus the reality of some kind of social group cannot be dismissed; however, I would argue that acknowledging the existence of "nations" does not fully disclose the nature of the social organization. The assumption that named Indian nations equate to tribes, and the further assumption that the tribe is the pinnacle of a set of nested social organization (and thus a real entity), is the reason why a

correspondence between the ethnohistorical and archeological records cannot be located. A heterarchical approach removes the tribe from its heralded position at the top of the organizational pyramid and considers it as one of several coexisting social constructions. In so doing, the burden of explaining every data set within the confines of a "tribal" structure is removed. Therefore, for the moment, let us hold the question of the tribe or "nation" in abeyance and consider the sociopolitical landscape as revealed through the material residues.

Ceramics

In terms of demonstrating the existence of separate "tribal" units, ceramics of the northwest Piedmont have been one of the most confounding data classes. No sharp boundaries exist (Figure 4.1) within the Piedmont Late Woodland ceramic tradition and the transition between it and neighboring traditions is somewhat blurred (Holmes 1903). The commonality of these ceramics is uncanny given the amount of territory they cover. Potters were able to share and communicate a consistent set of style elements and an accompanying grammar of usage over hundreds of kilometers. This bespeaks either an unusually conservative ceramic regime or a great deal of (ceramic) information flow. Flow implies a movement (either temporary or permanent) of potters and/or a movement of pots between villages within the region. It further implies a movement of potters and/or

pots across tribal boundaries (assuming that they existed).

Microtraditions identified within the study area on the upper Yadkin suggest that such flow was not completely open. These microtraditions, which amount to biases in favor of certain combinations of ceramic attributes, suggest that interactions were somewhat spatially channeled; however such channels or networks were never completely closed systems of interactions.

It is impossible to specify the exact social processes which created the ceramic record, but for the sake of argument let us assume that ultimately it is indexing the residential movements of potters (women). Writ large, the ceramic tradition's overall uniformity and its blending with other traditions along its perimeters suggests an open network in which potters may move from any point (i.e. village) to any other point. Writ small, the ceramic microtraditions suggest that proximity is not the most important factor governing movement from point to point. In fact, there may exist a certain tendency to avoid proximity. In the four corners region of the American Southwest, it has been argued that increasing ceramic stylistic diversity (i.e. degree of attribute association) accompanies trends of increased localization or autonomy. Concomitant with this localization is a decline in long-distance trade and interaction and increased regional (i.e. local) integration. Yet despite these trends, ceramic diversity seems to be indexing the establishment of broad based, geographically

diffuse, social ties. In other words, the boundaries of different social networks do not necessarily coincide. In this instance, it is argued that shrinkage of some social networks (e.g. exchange networks) prompts the enlargement of others (indexed by increasing stylistic diversity). And because different networks are created by different social mechanisms, they are reflected by different patterns in the archeological record (Plog and Upham 1983:205; Plog 1990:71-72).

If microtraditions in the upper Yadkin are somehow indexing fluidity of residence, this observation (i.e. avoidance of proximity) is not as counterintuitive as it might sound. Avoidance of spatial proximity is a marriage strategy observed in many modern traditional societies, and may be due to a combination of low population densities (therefore individuals are required to "marry out" in order to maintain a sufficiently large breeding population) and due to a need to maintain contacts across larger ecological regions for insurance purposes (Adams and Kasakoff 1976:165).

Skeletal analysis supports the notion that females were moving across the landscape. Comparisons of skeletal populations from three Yadkin River villages show that intrasite female populations are internally heterogeneous, while intrasite male populations are internally homogeneous (Seifert 1991). The ethnohistorical record does not contradict the premise that females were in practice

relocating more than males. Lawson reports that men preferred to marry within their own nation, but that when no appropriate mate could be found (as was often the case), a man would marry a stranger. Appropriateness meant that a mate could not be a close relative, although Lawson does not specifically indicate how relations were reckoned (1937:197). Lederer reports that relations were determined through the matrilineage, describing the existence of four exogamous clans or matrilineages (1966:4).

Given the low Late Woodland population densities, rules of marriage probably forced people to marry and move outside of the nation (here, village cluster) on a regular basis. If membership in the nation were predicated on lineage or clan affiliation, and if it was women who in the main moved after marriage, then within a few generations every "nation" would be a hopeless mix of every other nation. The parsimonious explanation is that membership in a nation was determined by something other than clan or matrilineage affiliation. Each tribe, then, was composed of several lineages and these lineages were common to many different tribes. This means that the lineage may have had limited political reality, but socially it integrated many dispersed groups of people and it necessitated the shuffling of personnel due to the rules of exogamy. Thus in terms of mating and residence patterns, the "tribe" or "nation" may have been an irrelevant concept. Movement of personnel may have been operating independently of or in opposition to

tribal affairs. Many studies suggest that maintenance and creation of such geographically dispersed social contacts accompanies localization (Adams and Kasakoff 1976; Braun and Plog 1982; Plog 1990). At the very least, the ceramic data give no indication of the existence of discrete tribal units.

Burial Practices

Similar to ceramics, burial data are not indicative of the existence of small, ethnically distinct social units (i.e. tribes). Two general classes of burials are present within the study area, namely shaft and chamber and simple oval pit burials (Figure 6.1). Either of these styles has a wide geographical distribution which reaches far beyond the Yadkin valley. The broad spatial distribution and the intrasite mixing of these styles speaks against burial modes as indices of ethnic or tribal identity. In fact, both burial styles cut across archeologically defined culture areas (i.e. phases).

Burial patterns occur at the broadest level of all the data classes observed herein, suggesting a degree of social unity or interrelatedness that supersedes even a supratribal level. A distribution of equivalent political roles and/or ritual practices reflective of a particular worldview which is widespread and which crosscuts culture areas or ecological zones would not be unique. Even without considering the ideological dimension represented in

mortuary ritual, the spatial distribution of distinctive artifact types in burials bespeaks a widespread interactive network, transmitting both the artifacts themselves as well as their meaning and use. The marine shell gorgets (Figures 6.4 and 6.5) and the spatulate celts (Figure 6.2) undoubtedly fall into this category. Each of these types has a broad distribution in the southeastern United States, and each distribution is different. Acquisition of such items must have been based on individuals' participation in sprawling interactive networks. For example, spatulate stone axes are thought to be markers of the chiefly lineage of Coosa (Smith 1987:101).

Recognition of such artifacts and of differential burial treatment leads inevitably to the question of the nature of social ranking. If acquisition of certain specialized artifacts was based upon membership in a particular lineage, is this indication that some lineages were ranked higher than others and therefore that social status was ascribed at birth? The conclusion that a well-defined social hierarchy existed within the Late Woodland tradition seems ill-founded. Though differences are apparent, they do not seem marked enough to be enscribing a socially elite class. The differential distribution of burial traits is still consummate with the workings of an egalitarian society, in which access to certain offices was based upon affiliations ascribed at birth, but within which personal achievement still played an important role (see a

similar discussion in Knight 1986:680). Therefore burial modes may be indexing ascribed differences such as lineage membership, but this does not necessarily imply rigid status differences.

Lithics

The spatial distribution of non-local lithics among sites in the study area is problematic insofar as it can be interpreted as the product of very different procurement strategies. Adoption of one interpretation over another is predicated on assumptions made about the rigidity of territorial claims and the mobility of residents of villages throughout the yearly cycle. If it is assumed that bodies are relatively stationary, then it becomes a question of identifying social mechanisms that would foster the importation (and subsequent localized dispersal) of materials into the area. Woodall (1987, 1990) has proposed a big man model in which large village sites served as centers for the entry of non-local lithics into the local system. The pattern indicative of large village sites acting as centers is not apparent upstream of the shoals, however, where the amount of non-local lithics is not correlated with site size. This lack of patterning may be indicative of a breakdown of the exchange network upstream of the shoals due to the increased distance from the Slate Belt. Corroboration of the model might be expected in the form of stylistic markers of localized units defined by the

large centers and their peripheries, as well as an above- and below the shoals stylistic discontinuity.

Unfortunately, such discontinuities have not been located in the available data sets (this study; Woodall 1987).

Additionally, confirmation might be expected in the form of evidence for the break of bulk of lithic raw materials in the large sites serving as centers (Renfrew 1977). Specifically, lithic assemblages from large sites should contain more primary and secondary flakes as a result of the reduction of bulk materials. This study was unable to find support for this proposition. Instead, a tendency for sites with high amounts of non-local lithics to have low amounts of primary and secondary debitage was observed (Figure 5.2). These data suggest that non-local lithics may have been entering all sites, regardless of size, in the same physical form. This may mean that lithics were being traded in a prepared state--such as large bifaces--and therefore breakage of a bulk supply simply entailed the distribution of prepared units.

Alternatively, the initial assumption that territoriality prevented direct access to resources may be wrong. Means of access other than the bulk shipment of materials to large centers must be considered. Here it has been suggested that formalized exchange may not have been the primary means of lithic acquisition. Because the evidence for strict spatial territoriality is lacking in other data classes, there is no a priori reason to assume

that access to resources was inhibited. Therefore it is possible that lithics were not being injected into the system by outsiders via a formalized exchange system, but rather were entering the system via the routine activities of its membership. [It should be noted that artifacts proposed as trade regulators (marginella shell bead necklaces) (Woodall 1984) are not found in any of the late (15th century) components in the study area, but are restricted to earlier components at the Donnaha site.] If this is the case, then the data would indicate that no one individual within the area had preferential access to non-local lithics. Distance from lithic sources may have been a limiting factor, although it does not appear to have had a marked effect on the distribution of lithics among sites in the study area. This lack of a fall-off in the distribution may in part be due to the existence of multiple (and dispersed) natural sources.

Informal or direct access to lithics is dependent upon a social landscape without barriers. Sustaining social connections across a broad enough area to encompass the resources in question could be achieved by a number of tactics, including the practice of "marrying out", alliances and the maintenance of dispersed lineages. Along with the ceramic data, the lithic data indicate that such widespread social practices may have been unifying a spatially large area.

Feature Patterns

Because our knowledge of feature patterns is restricted to only three sites within the study area, and because these data are so limited, definitive statements based on this data class are ill-advised. Regarding architectural styles, the data reveal a similarity in domestic structures at the Porter site, the Hardy site, and excavated sites along the Dan River. The inhabitants of the Donnaha site apparently employed different construction techniques from their above-named counterparts, perhaps bespeaking adherence to a different set of norms which defined their vernacular architecture. This, in turn, might be recognized as a signal of emic group difference.

The ubiquitous trash-filled pits, found on all of the excavated sites within the region, constitute a more compelling body of evidence concerning behavior. The majority of these pits have been interpreted as storage pits which were re-used as trash receptacles (Woodall 1984, 1990; Marshall 1988; Rogers 1989). Their persistent presence on Late Woodland sites is a puzzlement. DeBoer (1988) has suggested that the use of subterranean storage facilities is a strategy for concealing surpluses. Concealment might be necessitated by a seasonal abandonment of the village site. Certainly the ethnohistorical record of the North Carolina Piedmont reveals that residences were periodically uninhabited, and that large portions of village populations were often absent. Thus protection of food stores could be

achieved through concealment. This view suggests that Late Woodland populations were far more mobile than is often suggested (DeBoer 1988:14). In fact Ward (1985:99) has suggested that this was indeed the case for Late Woodland people living on the Dan River. Concealed storage of surpluses allowed villagers to seasonally abandon sites in order to travel into the uplands while deer hunting.

DeBoer further suggests that hiding surpluses may be an act of resistance. He points out that sedentism and the ability to store surpluses are often viewed as the prerequisites to the formation of a social hierarchy. Yet he contends that

[r]ather than a marker of institutionalized social inequality, subterranean storage is more likely to be a powerful signal of resistance to a new social order in which such inequality might be imposed by human elites, superhuman gods, or some holy coalition between the two. Rather than an index of increasing trade, subterranean storage can just as well be construed to indicate the precariousness of all external relationships, whether based on trading or raiding. In short, subterranean storage can be viewed as a tension point between egalitarian and inegalitarian social formations, in which the outcome is uncertain [1988:14].

Recognition that these kind of behaviors may have been operating on the upper Yadkin valley puts an interesting twist on interpretations of the Mississippianization process. In addition to considering the problem from the perspective of the chiefdom (namely, how do you maintain a centralized, hierarchical order?), it allows us to also appreciate the problem from the perspective of heterarchy.

Specifically, this problem is one of maintaining decentralization of power. Conversion of storage from subterranean to above-ground facilities (such as the granaries observed by the Spanish south of the study area (Hudson 1990) marks many Mississippian societies, and is interpreted as a result of year-round sedentism and the stability of the hierarchical social order (DeBoer 1988:9). Certainly it is not in the interest of tribute-gathering chiefs for subordinates to conceal their surpluses. Preventing centralization means maintaining local control over surpluses, as well as knowledge about them.

Here, then, is an area where the ethnohistorical and archeological accounts are in agreement. Guatari meco's apparent difficulty in extracting maize surpluses from her caciques, as well as the absence of specialized above-ground storage facilities in Guatari (Pardo's maize supply was to be stored on a shelf built into a small house at Guatari (Hudson 1990:263), accords with the feature data indicating subterranean concealment of food surpluses. Effective resistance to centripetal forces such as those embodied in a tribute-gathering chiefdom would entail maintaining control over knowledge of resources that could potentially be tapped (Bender 1989).

In addition to the question of domination and resistance, the very practical question of degree of sedentism must be considered. These data suggest that a high degree of seasonal mobility characterized the settlement

system, thus necessitating the concealment of stores. In terms of real behaviors, this means that while residents were out and about, it was anticipated that non-residents would be traveling through. It stands to reason that the target "audience" of concealment (to loosely borrow Wobst's (1977) terminology) must therefore have been socially distant enough to not know where supplies were hidden. This likely precludes other members of the village, who would be close enough to observe such concealment. Thus in terms of territoriality, it seems likely that the concealment behavior was a response to regular visitations by "outside" personnel. If territories were tightly inscribed and rarely violated by people moving through them, there would be little need for secrecy. Recognition of this has two important implications: first, that "outsiders" constituted a recognizable entity (emically speaking), and second, that interaction (albeit often remote interaction) was anticipated and accepted within the overall system.

The Evidence for Social Organization

Discovering landscape, as constructed by humans interacting with one another and with their physical environment, has been the goal of this research. The concept of topocentric boundaries was introduced in Chapter II as a means of understanding the landscape of a tribal organization. It is unfortunate that topocentric boundaries make a far better concept than they do a diagram. [In fact,

a two-dimensional representation of topocentric boundaries or tribal heterarchy seems to do more damage to the concept than not. I would argue that one factor contributing to this difficulty is the question of just what is being represented by a drawing or diagram: the actual people engaged in the various systems, or the structures themselves and how they are arranged across space? Because understanding egalitarian heterarchy entails understanding what both are doing, reduction to two dimensions omits a good part of the system.] This is because "topocentric boundary" is really a misnomer: its salient feature is the indexing of interconnectedness, not of barriers. Topocentric boundaries do not so much enclose areas as they do show how areas intertwine via social processes and acts. This is not to say that the social landscape is a featureless plain crisscrossed by an infinite number of lines of transmissions. This study has shown that transmissions are channeled, constrained and non-random.

Each data class reveals a different spatial order of patterning. If each class is in turn considered to be the result of the operation of a specific set of social processes (e.g. marriage patterns or exchange networks), the general picture is one of large and sometimes diffuse interactive networks. Further, each "province" thus defined is different in shape and size. Such a picture is not surprising, given the known components of the system as described in Chapter II (Table 2.1). There it was argued

that highly localized autonomy or self-sufficiency was improbable, if not impossible, for riverine settlements in the upper Yadkin valley. This is because each aspect of the system is conditioned by numerous factors, not the least of which is the spatial distribution of the resource in question (which is sometimes determined by social processes).

Therefore it is not surprising that patterning in each of the data classes investigated in this study has revealed a unique fingerprint. Further, the patterning has rendered a picture of a highly complex organizational structure. The difficulty in describing this organization structure stems from the fact that a heterarchical structure lacks a focal point or "hook." Beyond the individual, what is the building block of a tribal (heterarchical) structure? Clearly, no single building block exists.

These considerations return attention to the starting point of this inquiry, which was the array of named tribes which inhabited the Piedmont at the time of contact with Europeans. In light of the physical evidence, the existence of these "tribes" or "nations" becomes the true mystery in need of resolution. Given the degree and spatial extent of interaction indicated by the material record, and given the social processes which must have generated this record, the truly interesting problem becomes the fact that distinctive local groups persisted and maintained their integrity at all. The archeological record is indicative of certain

social processes which should have acted as centrifugal forces, discouraging the provincialism of the "nation."

Perhaps foremost among these forces is the evidence for the widespread spatial distribution of lineages. Clearly "tribes" must have been composed of several resident lineages. This, coupled with rules of lineage exogamy (meaning that people would sometimes have to marry out of the tribe), would mean that membership in the tribe was probably not based solely on lineage membership. Yet nations appear to have had considerable spatial integrity; therefore it is likely that membership was predicated on residence. This factor helps to explain the invisibility of the nations in the archeological record--because residence can be changed almost instantaneously, it behooves players to be able to change stylistic emblems of residence just as quickly. Therefore markers of "national" affiliation should be ephemeral. At the same time, some kinds of structural (and hence material) commonalities must have existed between different groups, enabling players to make such moves. Therefore, I would steal DeBoer's apt observation that tribal "...boundaries...are highly permeable with respect to bodies, but almost inviolable with respect to..." certain kinds of boundary marking (1990:102).

This conclusion begs the question of why Late Woodland people were bothering to maintain affiliation to such small units at all. The nations' localism is probably the key to understanding their *raison d'être*. The critical resource

impinging on the social system at the local level is the subsistence base. As has been pointed out elsewhere, the settlement system contains very real and demanding constraints on land use and maintenance of sufficient catchment areas (catchments which include fallow fields for future use; Marshall 1988). The Late Woodland people of the upper Yadkin adhered to a mixed subsistence economy, including both farming and wild food exploitation (Mikell 1986). As noted in Chapter II, farming placed some stringent demands on the settlement system. Periodic abandonment of village sites, perhaps prompted by soil exhaustion, appears to have been a regular occurrence (Marshall 1988). Wholesale relocation of a village population requires that villages are able to maintain fallow floodplains through land claims recognized by others exploiting the same niche. Thus nations may have been the territorial local group that managed horticultural land use.

Ethnographically it is often the case that land claims are managed through the lineage. For example, among the Northern Iroquois and some Algonkians, use rights to agricultural land passed through the female line (Wolf 1982:166; Brassler 1978:200). In the matrilineal society of the Trobriands, it is the dala which claims land. The dala are the ancestral beings through which matrilineal descent is traced; this corporate group (of related individuals) maintains land claims through geneology and manages land usage through a dala land manager. The office of land

manager is inherited matrilineally. Interestingly, in the Trobriands, the "rule" of avunculocality is usually followed only by the male who is in line to inherit the title of land manager (Weiner 1976:42). In fact most men live in their father's hamlet (i.e. virilocality), and therefore do not actually reside on their own dala's lands.

In fact this may well have been the situation in the Piedmont. "Kings" of nations, probably best understood as village or village cluster headmen, inherited their position through the matrilineage. This suggests that each nation was dominated by a single prominent lineage. Village clusters (i.e. nations) may have taken their identity from the dominant lineage as the land-holding or land-managing unit. This does not mean that village clusters had to be geneologically homogeneous--and probably they were not--nor did the dominant lineage even have to maintain numerical superiority within the cluster. Lineages probably did have to maintain a geneological claim to land use rights, however, and both Lederer and Lawson describe the use of mnemonic devices to aid in the reckoning of long histories. Lawson further notes that these histories corresponded from nation to nation on certain ancient events (1937:191). Clearly this is a necessary feature if all competing nations' geneologies are to be legitimized and rationalized within a single overarching belief system. As a side note, it would not be requisite that lineage land claims staked out and enforced well-defined and mutually exclusive

territories. Land use rights had only to be ensured, including the maintenance of fallow lands in reserve. Latter-day observations of the locational "drifting" of nations (cf. Wilson 1983; Hudson 1990) over time speaks to the possible malleable nature of land claims.

The maintenance of lineage land claims through the perpetuation of geneological ties embodied in the king or headman (or woman) raises additional questions about social ranking and the relationship of different dominant lineages to one another. The burial data indicate the differential (and possibly preferential) treatment of certain individuals within sites. The evidence for or against ascribed social ranking is equivocal (see also Dickens 1976); while it does appear that the funeral rituals of certain individuals entailed considerably more energy expenditure than others, the social principles employed to determine who received such treatment is not at all clear. Put simply, are we observing a system in which members of local segments of a single high ranking lineage are ascribed higher status (and hence office) at birth, or are we observing a system of dispersed lineages within which existed a consistent set of high status offices to which all lineages have equal access? This is a complex issue which will probably require additional data to unravel.

Within the study area it is noteworthy that increased energy expenditure takes on many different forms. For example, at the Donnaha site, it entails the use of special

burial structures (as well as their possible destruction) and the accompaniment of distinctive (and presumably expensive) emblems, i.e. the marine shell gorgets. At the Porter site energy expenditure is evident in the differential use of shaft and side chamber burial facilities and the inclusion of specialized artifacts, including elite sumptuary items (i.e. spatulate celts). The lack of standardization within the study area may indicate the coeval existence of different ways of recognizing important individuals. Whether these differences were based on lineage affiliation is not clear, but would be consistent with the proposed model of social organization.

If lineage membership is related to burial treatment, it may help to explain the patterning of certain consistent burial modes. For example, the child burials included in this group include the carved rattlesnake gorget burial. The consistent association of this highly distinctive artifact with subadult burials in the Southeast has raised the question of whether this is a marker of status ascribed at birth, or simply a marker of an age status (Larson 1971; Dickens 1976; Smith 1987:108). The fact that not all subadult burials within the study area are associated with carved gorgets suggests that some social dimension other than age is simultaneously operating to determine which individuals are marked by this badge. Obviously age and membership in some other sodality that crosscuts the Southeast together determine the designation.

The elaborate adult female burial at the Porter site (burial 7-9) also must be considered in this light. The inclusion of the two spatulate celts (and the general similarity of the burial to burials at the King site in Georgia (P. Garrow, personal communication, 1990), suggests far-reaching affiliations to the Coosa chiefdom. Spatulate celts are believed to be markers of the chiefly lineage (Smith 1987:101). The ability of individuals to trace lineage affiliation to politically powerful lineages may account for the appearance of such items in an essentially Woodland (that is, egalitarian) milieu.

In short, in the upper Yadkin valley we may be witnessing an incipient form of ranking. Locally dominant lineages which could trace a common ancestry with prominent chiefly lineages elsewhere may have been "hitching their wagons" to their putative distant relations in imitative displays such as funerary ritual. Alternatively, the presence of elite personae may be indicative of the practice of out-marriage of some high status females from Mississippian chiefdoms in order to lessen competition among chiefly heirs (Anderson 1990:201) or to forge intergroup alliances. If this was the case, we may be observing the residues of far-flung encroachment of Coosa into the Yadkin headwaters.

Social mechanisms extant within the Piedmont such as institutionalized warfare may have been acting to prevent the coalescence of political power into larger and more

hierarchical units such as the Mississippian chiefdom. Institutionalized warfare between nations is reported by Lawson to be fundamental to their culture (1937:210). Anderson (1990:203-204) suggests that enmity between polities (observed also in Georgia and South Carolina among Mississippian groups) was a sanctioned means of maintaining territories. This, he suggests, was a means of creating physical buffer zones around polities in order to ensure that a wide variety of exploitable ecological zones were available to resident populations. Certainly warfare (really ambushes, most often undertaken when men of different nations encountered each other on hunting forays) was a means of maintaining symbolic boundaries between separate nations. (Whether it was an etic mechanism of territorial defense is another issue; or perhaps it was different depending upon the social organization of the units involved).

Lawson stated that warfare was not undertaken for "interest", but rather was a means of seeking revenge against enemies. He explained that warfare was engaged in when a member of a nation had been wronged by another (usually death). Such an act was avenged by the nation at the insistence of the deceased's relatives, thus creating a structural opposition between (presumably) national units. The decision to wage war (as well as to conclude peace) was in fact made through consultation and consensus among all the "ancient men" or counselors. Restitution might,

however, have been witnessed by all other "friendly Indians" within "...a hundred Miles, (if it was possible to send for them)" (Lawson 1937:207). Lawson also described how warfare could be used as a social leveling device.

This Accusation is laid against an Indian Heroe sometimes wrongfully, or when they have a mind to get rid of a Man that has more Courage and Conduct than his neighboring Kings or great Men; then they alledge the Practice of poisoning Indians against him, and make a Rehearsal of every Indian that died for a year or two, and say that they were poisoned by such an Indian; which Reports stir up all the Relations of the deceased against the said Person, and by such means make him away presently [1937:208].

Thus, by Lawson's account, warfare solidified the unit of the nation by encouraging members to act together on that basis (i.e. within that structural pose). Exercising national unity may well have been an important requirement if nations were highly divided along lineage lines. At the same time, warfare prevented any one nation from becoming too powerful under the leadership of an ambitious individual. If certain critical elements of the overall social system required egalitarian relations among the nations, as for example the direct procurement of lithics, processes for leveling of political power would have been requisite.

In fact given the evidence for egalitarian social relations, the peculiarities exhibited by the Guatari chiefdom deserve further examination. While there is no evolutionary imperative compelling tribal organizations to

move on to a next "higher stage", the fact is that highly integrated chiefdoms existed within the greater social universe to which the Yadkin populations belonged and in which they participated (at least occasionally). Personnel from these chiefdoms may have even been incorporated into the social system. Guatari is viewed as problematical because it overtly possesses the tiered structural organization of a Mississippian chiefdom, but its functioning as a chiefly polity is lacking in the evidence.

Whether ecological constraints (e.g. the ability to produce horticultural surpluses used as tribute payments) or social constraints imposed by the existing organizational structure or a combination of both factors was preventing the development of a chiefdom based on the Mississippian template bears further research. Certainly a heterarchical structure such as the one described herein, which is based on balanced oppositions between different orders of organization, would have to undergo catastrophic reorganization (sensu Renfrew's (1978, 1984) catastrophe theory of change) in order to form a hierarchical, and thereby centralized, polity. In short, Guatari was whatever it was; our categorization of it is simply unclear.

On Egalitarian Heterarchy and Its Future Direction in Archeology

Heterarchy is a descriptive term for a particular way of organizing human relations of all sorts. From these

structural principles the form of the archeological record--for example settlement patterns, ceramic varieties and burial practices--of the upper Yadkin could have been generated. In developing a heterarchical model of a tribal system, this study points up two related problems which archeologists must actively confront. The first is the recognition that the manner in which the archeologist creates archeological data (i.e. the way patterns are generated and recognized from observations made on the archeological record) affects our interpretations and conclusions about the structure of the society that created the archeological record. "...[M]easurement is not the objective theory-free procedure that many positivists thought it was" (Gibbon 1989:115).

The second is a more particularistic realization that one alternative to a hierarchical model of cultural systems is a heterarchical one. The application of a heterarchical model to archeological problems requires a redefinition of what constitutes a meaningful pattern. This necessitates an examination of some of the more basic (and therefore unexamined) assumptions that archeologists often carry with them into the field or laboratory. The view inherited from the logical positivism of the New Archeology that culture is systemic and that that system can always be described in a hierarchical terms is indeed primary. If culture (a panhuman phenomenon) has only one general configuration, and archeologists are simply revealing specific examples of it,

then the same set of principles and measurements can always be used to elucidate it. If, however, this is not the case, then the application of a particular set of measures which can reveal recognizable pattern within a hierarchically arranged cultural system may yield an unrecognizable pattern (read no pattern) when applied to the remains of a heterarchical system.

Perhaps the shortcoming involved in envisioning culture in the terms outlined by the New Archeology positivist paradigm (while completely discouraging a mentalist view of culture) is that it implicitly presupposes that, ultimately, the most essential structure of culture (namely the lowest rung in the hierarchy, the interaction between technology and the environment, taken from White's (1949) model of culture) is structured according to the same basic rules for all people everywhere. The assumption is that although social and ideological considerations are to a large extent socially constructed, technology responds to an environment which is naturally constructed, and hence, always structured according to an objective reality that exists independently from human perception. Thus, a kilometer is a kilometer is a kilometer, no matter what cultural system might be involved; although culturally constructed systems of rationality may vary, (i.e. the rationales that explain how the world works and prescribe behavior within it), ultimately they are responding to the same external "natural" laws which are everywhere identical. This is what

gives the etic view (and hence the archeologist) its privileged position. Because these laws are held to be universal, and because technology is thought to be the realm of culture which responds directly--that is, without any socially constructed filter existing between technology and the environment--to the external reality (the environment), the techno-environmental interactions the world (and time) over must be explainable by the same set of rules. Therefore it is appropriate for archeologists to apply objective measures such as laws of parsimony and net kilocalorie intake to reconstruct the outlines of extinct cultural systems. This is especially acute in the interpretation of so-called simple societies, wherein it is sometimes assumed that ecology has more pronounced influence on the shaping of the rest of the social structure than in "complex" societies which are buffered by their presumably more elaborate technologies and infrastructures.

While I am not willing to dispute the idea that there is a real reality "out there" that operates according to some basic and consistent rules, I would certainly entertain the notion that some of the assumptions embedded in the hierarchical concept of cultural systems and their articulation with the natural environment are questionable. This view of stacked relations between culture's subsystems and the physical environment obviates the possibility that the way in which a cultural tradition perceives, understands and explains its articulation to the environment may affect

its entire structure, and by extension, its archeological residues. As long as archeologists subscribe narrowly to the notion that culture is human's extrasomatic means of adaptation, there is little room left for considering the role that perception of what constitutes the environment might have in structuring the "means of adaptation."

If we have learned anything from the various radical critiques in archeology, it is that the etic-extrasomatic view of culture espoused by the New Archeology is not as inevitable as once hoped. Social constructions of reality have palpable effects on interpretation and hence on behavior. Thus the relationship between technological systems and the environment may not be pure (that is, unaffected by worldview). In fact, the criticism shows that the belief in such a pure relationship is itself a cultural construct. Our view of the structure of culture is predicated on the assumption that human culture and nature are two distinctly different things.

It is easy to see why questioning this relationship is troublesome for the practice of archeology. If objective measures of natural factors, which are generally accessible to archeologists, (unlike other relevant elements such as ancient mythologies), cannot be relied upon to give us direct access into at least a substantial portion of cultural systems, how do we go about the business of doing archeology? How do we know if our conclusions are correct?

This last concern is pivotal, because this is the point

even at times perceived) within the context within which it occurred? Heterarchy offers an alternative to hierarchy insofar as it is a different way of structuring relations of parts to the whole (hence, reality). I would label the concepts of heterarchy and hierarchy not as theory, but rather as alternate and equally viable (depending on context) descriptors of reality. The notion that the application of one descriptor over another is context-dependent has implications for the creation of archeological data.

This study represents a specific attempt to apply heterarchy as a descriptor of a tribal system and to apply archeological methods in a way which enables us to perceive heterarchical organizing principles in a specific context. Perhaps the area most affected by the application of this alternate model has involved the assumptions about the way in which space--or landscape--is perceived and treated. Archeologists almost always begin with the assumption that a people and their space are virtually synonymous. This is not to say that a territoriality instinct runs rampant through the species; it is merely an observation that in late 20th century American thought, people and the space they occupy are tacitly considered definitional of one another.

The archeological phase is the basis for dividing up space (and time) in archeology. A phase must have spatial integrity to be recognized as such. The reasoning implicit

behind the phase construction is that the people who created the remains that can be lumped under the phase heading were together engaged in a single social system. In other words, the phase is the physico-spatial manifestation of a past social structure which was perched upon a definable region of the globe at a particular time.

Yet what makes many phase designations "hang together" is not the inherent unity of its material remains, but the a priori assumption that remains found in close proximity must belong to a single coherent, hierarchically-arranged system. Thus problematic phases (meaning complexes lacking stylistic unity) can be defined by default. For example, many phase designations are founded upon ceramic complexes (see for example Williams and Shapiro 1990:39-77), with other material variation simply riding the coattails. It is necessary to ask, by what real social mechanisms are sociopolitical boundaries translated into ceramic complexes? Is it reasonable to assume that phases consisting of ceramic complexes equate with polities?

What is basic here is the idea that polities or social organizations--however defined--always possess a spatial (territorial) reality. The study of social organization in the upper Yadkin valley has suggested, however, that egalitarian heterarchies are predicated on the lack of spatial integrity. In short, heterarchy entails an entirely different conception of space both for the participants and for the archeologist.

In unraveling the tribal landscape, this study suggests that the structure of an egalitarian heterarchy is based not on spatial integrity, but on apparent contradictions embedded within the sociopolitical landscape. It suggests that the key to apprehending tribal heterarchy is understanding how coexisting elements or orders of organization interact to maintain decentralization throughout a region. Orders of organization here have been modeled as various social networks, each fulfilling different roles. Structural contradictions, which in terms of landscape are often visible as differing scales of organization in material remains, between different networks prevent the ascendancy or permanent priority of any one element over the others.

The realization that egalitarian politics are based on qualitatively different organizational principles which ultimately entail a different conception of landscape is not new. Yet for archeological endeavors, this point is all too often overlooked.

Eleanor Leacock has proposed two basic sociopolitical principles which form the basis for understanding the nature of political power in egalitarian societies. These are:

...first, the parties who are responsible for carrying a decision out or who are directly affected by it must have a share in making it commensurate with their experience and wisdom; and, second, those who do not agree to a decision are not bound by it [1983:20].

In such societies authority does not exist in the form of impersonal, institutionalized power. Individuals and groups of individuals maintain their autonomy through the ability to quietly opt out of a situation. In practice, the only way that individuals can maintain their autonomy is if no one--or no impersonal authority--controls space. Once a group of people and a territory are inscribed and recognized as a bounded unit, the second principle is violated and autonomy--the basis of egalitarian political processes--is lost (Leacock 1983:24-25).

Thus within an egalitarian heterarchy, space is not something which can be divvied up and parceled out. In fact, the system depends on this not happening. In the previous pages I have endeavored to show how a specific system based on these organizational principles might have worked in the upper Yadkin valley of North Carolina. This rendering of tribal heterarchy contrasts with interpretations of mechanical solidarity (sensu Durkheim 1933) which sometimes construe it as an indication of the relative simplicity of this type of social order. Non-hierarchical is not a synonym for non-complex. What this study suggests is that tribal heterarchy is dependent on the existence of diversity, including diversity at the level of the individual (i.e. diversity created by participation in different social networks and a lack of boundedness), while the change to a hierarchical order such as a chiefdom entails a homogenization or streamlining of organization and

creation of boundaries. The maintenance of diversity (which fosters decentralization and enables individual autonomy) begins with the construction of identity of the individual, which encompasses different, and sometimes irreconcilable, facies, which must be negotiated over the course of a lifetime.

A profitable avenue for future research is the pinpointing of factors which would foster the collapsing of heterarchical network systems into unitary and nested hierarchical structures. Differences between the Woodland and the Mississippian are as rudimentary as the relative diversity of their dietary regimes. Whether exploitative niche breadth is cause or effect of sociopolitical organization is well beyond the scope of this work; however such correlations exist and bear investigation.

I suspect that hierarchy is generated by the co-occurrence or conflation of group identity with place. Owning or controlling a place forms a completely different basis for power and political negotiations than those described above for egalitarian societies. Where egalitarian relations must remain spatially dispersed, hierarchical relations are stacked. In this sense, the Mississippian temple mound may actually be a metaphor for Mississippian spatial organization, representing the co-occurrence of an important place with an important power invested in a human. That a spot can take on lasting importance, symbolizing an abstract power existing beyond

the individual who embodies a particular role would be entirely foreign to an egalitarian heterarchy. The durability and relative permanence of this focal point is also counter to heterarchical organization principles, because form (or focal points) changes through time, sometimes with great rapidity.

From a methodological standpoint, the problem for the archeologist becomes one of finding measures or indices of dispersion. It involves demonstrating a lack of centrality or central tendencies and showing an interpenetration of those elements of a cultural system which typically are considered separate and hierarchically arranged. This, of necessity, means dropping archeological conventions which presuppose boundedness and centrality (the example used above was the phase designation). Traditional archeological data classes are still amenable to study--indeed these were employed in this study--and measures need only to be evaluated in terms of expectations for patterning generated by these different structural principles which do not include centralization.

This is why the concept of topocentric boundaries was employed. Topocentric boundaries force the archeologist to work simultaneously within different effective scales by changing the perspective of the archeologist, and topocentric boundaries do not necessarily assume a closed system. An inherent difficulty of topocentric boundaries is that they are messy to manipulate because they are not

amenable to averaging or mathematical normalization. Each topocenter relates to the other topocenters in different ways. Reducing the aggregate activity of multiple topocenters to a single norm glosses the complexity of their interrelations. Therefore multiple sites and multiple data classes must be simultaneously considered, and even then, it is likely that only a portion of the total system is being represented.

Another difficulty with topocentric boundaries is that they blur the conceptual distinction between etic and emic perspectives, and the use of them requires taking a decidedly contextual approach. In this study, mapping the geography of the upper Yadkin valley against the location of key resources and settlement patterns (see for example Table 2.1 and Figures 1.1 and 4.1) helped to generate a discussion about how all of the various elements of the system could be effectively but independently organized using real social processes. Note that the initial model was built using contextual data (but framed within a heterarchical arrangement) such as settlement and subsistence patterns. Certain data classes helped to corroborate the model, for example ceramic and skeletal data, while others suggested different modes of organization than initially assumed, for example the lithic data (which suggested direct access to resources, as opposed to formalized exchange networks through bulk centers) and feature patterns which lend credibility to the alternate view of lithic procurement.

Thinking in terms of heterarchy is by no means easy for members of a hierarchically-arranged society. In some ways its principles are so remote from our own sense of order that they seem mentally inaccessible. Comprehending heterarchy entails questioning the principles which are seemingly beyond question. Far more investigations are needed to provide archeologists with a basis for apprehending heterarchical organization. Primary among these are ethnoarcheological studies of variation in material culture and how it relates to identity and social organization. Further, propositions about how heterarchical relations will structure the archeological record need to be evaluated in real social settings. The foregoing should at the very least highlight the notion that the differences between heterarchies and hierarchies are not simply quantitative--that is, demographic and hence additive--but qualitative. Elucidating and understanding the organizational differences between the two may offer a useful conceptual tool for manipulating and interpreting archeological data.

REFERENCES CITED

- Abbott, Lawrence E., Erica Sanborn, Michelle Vacca, David C. Crass, Elizabeth Dull, and J. Ned Woodall
1986 Archeological Survey of the Proposed Charity Lake Hydroelectric Project, Upper Smith River, Patrick and Franklin Counties, Virginia. Report prepared for the U.S. Army Corps of Engineers, Wilmington District.
- Adams, John W. and Alice Bee Kasakoff
1976 Factors Underlying Endogamous Group Size. In Regional Analysis. Vol. II. Edited by Carol A. Smith, pp. 149-173. Academic Press, New York.
- Alvord, Clarence W. and Lee Bidgood
1912 The First Explorations of the Trans-Allegheny Region by the Virginians 1650-1674. Arthur H. Clark, Cleveland.
- Anderson, David
1990 Stability and Change in Chiefdom-Level Societies: An Examination of Mississippian Political Evolution on the South Atlantic Slope. In Lamar Archaeology, edited by M. Williams and G. Shapiro, pp. 187-213. The University of Alabama Press, Tuscaloosa.
- Baker, Steven G.
1975 The Historic Catawba Peoples: Exploratory Perspectives in Ethnohistory and Archaeology (draft). Report prepared for Duke Power Company, Office of Research, University of South Carolina.
- Barnette, Karen R.
1978 Woodland Subsistence-Settlement Patterns in the Great Bend Area, Yadkin River Valley, North Carolina. Unpublished M.A. thesis, Wake Forest University.
- Barth, Fredrik
1969 Introduction. In Ethnic Groups and Boundaries: the social organization of cultural differences, edited by F. Barth, pp. 9-38. Little, Brown, Boston.
- Bates, Daniel G. and Fred Plog
1990 Cultural Anthropology, 3rd edition. McGraw-Hill, New York.
- Bender, Barbara
1989 The roots of inequality. In Domination and Resistance. Edited by D. Miller, M. Rowlands, C. Tilley, pp.83-95. Unwin Hyman, London.

- Benthall, Joseph L.
1969 Archeological Investigation of the Shannon Site, Montgomery County, Virginia. The Virginia State Library, Richmond.
- Binford, L.R.
1962 Archaeology as Anthropology. American Antiquity. 28(2):217-225.
1972 A New Method of Calculating Dates from Kaolin Stem Samples. In An Archeological Perspective. pp. 343-345. Seminar Press, New York.
1979 Organization and Formation Processes: Looking at Curated Technologies. Journal of Anthropological Research 35:255-273).
- Binford, L.R. and S.R. Binford
1966 A Preliminary Analysis of Functional Variability in the Mousterian of Levallois Facies. American Anthropologist 68(2), pt. 2:238-295.
- Bogdan, Georgiann, David Weaver and Michael Patton
1990 Analysis of the Human Skeletal Remains from the Porter Site (31Wk6), Wilkes County, North Carolina. Ms. on file, Laboratory of Physical Anthropology, Wake Forest University, Winston-Salem, North Carolina.
- Bogdan, Georgiann, Laura Sapplesa and David Weaver
1992 Analysis of the Human Skeletal Remains from the Porter Site (31Wk6), Wilkes County, North Carolina. Ms. on file, Laboratory of Physical Anthropology, Wake Forest University, Winston-Salem, North Carolina.
- Bordes, Francois
1961 Mousterian Cultures in France. Science 134:803-810.
- Brainerd, George W.
1951 The Place of Chronological Ordering in Archaeological Analysis. American Antiquity 16(4):301-313.
- Brasser, T. J.
1978 Early Indian-European Contacts. In Handbook of North American Indians, Vol. 15. Edited by Bruce Trigger, pp. 78-88. Smithsonian, Washington.
- Braun, David P.
1983 Pots as Tools. In Archaeological Hammers and Theories. pp. 107-134. Academic Press, New York.

- Braun, David P. and Stephen Plog
1982 Evolution of "Tribal" Social Networks: Theory and Prehistoric North American Evidence. American Antiquity 47:504-525.
- Brew, J.O.
1946 The Use and Abuse of Taxonomy. In Man's Imprint from the Past, edited by James Deetz, pp. 73-107. Little, Brown, Boston.
- Briceland, A. V.
1987 Westward from Virginia. University Press of Virginia, Charlottesville.
- Bronitsky, Gordon and Robert Hamer
1986 Experiments in Ceramic Technology: The Effects of Various Tempering Materials on Impact and Thermal-Shock Resistance. American Antiquity 51:89-101.
- Brown, Ian
1980 Salt and the Eastern North American Indian. Lower Mississippi Survey, Bulletin No. 6, Peabody Museum, Harvard.
- Brown, Philip M. (compiler)
1985 Geologic Map of North Carolina. Department of Natural Resources and Community Development, Division of Land Resources.
- Buikstra, Jane E.
1977 Biocultural dimensions of Archeological Study: A Regional Perspective. In Biocultural Adaptation in Prehistoric America. Edited by R.L. Blakely, pp. 67-84. Southern Anthropological Society Proceedings, No. 11.
- Charlton, Thomas H.
1981 Archaeology, Ethnohistory, and Ethnology: Interpretive Interfaces. Advances in Archaeological Method and Theory, vol. 4, edited by Michael B. Schiffer, pp. 129-176. Academic Press, New York.
- Claggett, Stephen R. and John S. Cable, assemblers
1982 The Haw River Sites: Archeological Investigation at Two Stratified Sites in the North Carolina Piedmont. Report by Commonwealth Associates to U.S. Army Corps of Engineers, Wilmington District.
- Clifford, James
1988 The Predicament of Culture: Twentieth Century Ethnography, Literature and Art. Harvard University Press, Cambridge, Massachusetts.

- Coe, Joffre L.
1952 The Cultural Sequence of the Carolina Piedmont. In Archeology of Eastern United States. Edited by J.B. Griffin, pp. 301-311. University of Chicago Press.
- Coe, Joffre L. and Ernest Lewis
1952 Dan River Series Statement. In Prehistoric Pottery of the Eastern United States. J.B. Griffin, editor. University of Michigan, Ann Arbor.
- Cordell, Linda and Fred Plog
1979 Escaping the Confines of Normative Thought: A Reevaluation of Puebloan Prehistory. American Antiquity 44(3):405-429.
- Crapo, Richley H.
1990 Cultural Anthropology, 2nd edition. The Dushkin Publishing Group, Guilford, Connecticut.
- Creamer, Winifred and Jonathan Haas
1985 Tribe versus Chiefdom in Lower Central America. American Antiquity 50(4):738-754.
- Crumley, Carole L.
1976 Toward a Locational Definition of State Systems of Settlement. American Anthropologist 78(1):59-73.

1987 A Dialectical Critique of Hierarchy. In Power Relations and State Formation. Edited by T.C. Patterson and C.W. Gailey. American Anthropological Association, Washington.
- Cumming, William
1962 The Southeast in Early Maps. University of North Carolina Press, Chapel Hill.
- Curle, Lawrence D.
1962 Soil Survey of Yadkin County, North Carolina. United States Department of Agriculture, Soil Conservation Service.
- Dalton, George
1977 Aboriginal Economies in Stateless Societies. In Exchange Systems in Prehistory. Edited by T.K. Earle and J.E. Ericson, pp. 191-212. Academic Press, New York.
- Daniels, Robert E.
1982 They're playing our song: media and ethnicity in Kenya. Ms.

Davis, John

- 1987 Early Woodland of the North Carolina Piedmont: New Information from the E. Davis Site. Research report presented at the 44th Southeastern Archaeological Conference, Charleston, South Carolina, November 11-14, 1987.

Davis, R.P. Stephen, Jr.

- 1987 Pottery from the Fredricks, Wall and Mitchum Sites. In The Siouan Project: Seasons I and II, edited by Roy S. Dickens, H. Trawick Ward and R.P. Stephen Davis, Jr., pp. 185-215. Monograph Series No. 1, Research Laboratories of Anthropology, University of North Carolina, Chapel Hill.

DeBoer, Warren R.

- 1988 Subterranean Storage and the Organization of Surplus: The View from Eastern North America. Southeastern Archaeology. 7(1):1-20.
- 1990 Interaction, imitation, and communication as expressed in style: the Ucayali experience. In The Uses of Style in Archaeology. Edited by M.W. Conkey and C.A. Hastorf. pp. 82-104. Cambridge University Press.

Deetz, James

- 1965 The Dynamics of Stylistic Change in Arikira Ceramics. Illinois Studies in Anthropology, No. 4. University of Illinois Press, Urbana.

Dickens, Roy S.

- 1976 Cherokee Prehistory. The University of Tennessee Press, Knoxville.

Dobyns, Henry F.

- 1983 Their Number Become Thinned. University of Tennessee Press.

Dole, Gertrude E.

- 1967 Tribe as the Autonomous Unit. In Essays on the Problem of Tribe. Proceedings of the 1967 Annual Spring Meeting of the American Ethnological Society. Edited by June Helm, pp. 83-100. University of Washington Press, Seattle.

Durkheim, Emile

- 1933 Division of Labor in Society. G. Simpson, translator. Macmillan, New York.

- Engelbrecht, William
1978 Ceramic patterning between New York Iroquois sites. In The Spatial Organisation of Culture. Edited by Ian Hodder, pp.141-152. University of Pittsburgh Press.
- Evans, Clifford
1955 A ceramic study of Virginia archeology. Bureau of American Ethnology Bulletin, 160.
- Evans-Pritchard, E.E.
1969 The Nuer. Oxford University Press, New York.
- Fewkes, Vladimir J.
1944 Catawba Pottery-making, with notes on Pamunkey Pottery-making, Cherokee Pottery-making, and Coiling. Proceedings of the American Philosophical Society, Vol. 88, No. 2, July 1944, pp. 69-124.
- Ford, James
1954 On the concept of types. American Anthropologist 56:42-53.
- Fried, Morton
1975 The Notion of Tribe. Cummings, Menlo Park, Calif.
- Gardner, Paul S.
1980 An Analysis of Dan River Ceramics from Virginia and North Carolina. Unpublished M.A. thesis, University of North Carolina at Chapel Hill.
- Gearing, Fred
1968 The Cherokee in the Eighteenth Century. In The North American Indians. Edited by R.C. Owen, J. Deetz, and A. Fisher, pp. 555-564. MacMillan Co., New York.
- Geier, Clarence R. and Joey Moldenhaus
n.d. The Bessmer Site (44Bo26): Late Woodland Dan River Cultural Component in Central Western Virginia. Report submitted to Virginia Research Center for Archeology, Virginia Historic Landmarks Commission and Virginia Department of Highways.
- Gibbon, Guy
1989 Explanation in Archaeology. Basil Blackwell, New York.
- Gould, Richard
1990 Recovering the Past. University of New Mexico Press, Albuquerque.

- Graves, Michael W.
1985 Ceramic Design Variation Within a Kalinga Village: Temporal and Spatial Processes. In Decoding Prehistoric Ceramics. pp. 9-34. edited by Ben A. Nelson. Southern Illinois University Press, Carbondale and Edwardsville.
- Griffin, James B.
1966 The Fort Ancient Aspect. Museum of Anthropology Anthropological Papers No. 28. University of Michigan, Ann Arbor.
- Grinnell, George Bird
1923 The Cheyenne Indians: Their History and Ways of Life, Vol. 1. University of Nebraska Press, Lincoln.
- Hariss, Frances Latham, editor
1937 Lawson's History of North Carolina. Garrett and Massie, Richmond, Virginia.
- Hassrick, Royal B.
1964 The Sioux. University of Oklahoma Press, Norman.
- Haviland, William A.
1990 Cultural Anthropology, 6th edition. Holt, Rinehart and Winston, Fort Worth, Texas.
- Helm, June, editor
1967 Essays on the Problem of Tribe. Proceedings of the 1967 Annual Spring Meeting of the American Ethnological Society. University of Washington Press, Seattle.
- Hill, James N.
1966 A Prehistoric Community in Eastern Arizona. Southwestern Journal of Anthropology 22(1):9-30.
1985 Style: A Conceptual Evolutionary Framework. In Decoding Prehistoric Ceramics. pp. 9-34. edited by Ben A. Nelson. Southern Illinois University Press, Carbondale and Edwardsville.
- Hodder, Ian
1977 The Distribution of Material Culture Items in the Baringo District, Western Kenya. Man 12:237-269.
1986 Reading the Past. Cambridge University Press.
1987 Converging Traditions: The Search for Symbolic Meanings in Archaeology and Geography. In Landscape and Culture, edited by J.M. Wagstaff, pp. 134-145. Basil Blackwell, New York.

- Hodder, Ian
1990 Style as historical quality. In The Uses of Style in Archaeology. Edited by M.W. Conkey and C.A. Hastorf. pp. 44-51. Cambridge University Press.
- Hoebel, E. Adamson
1958 Man in the Primitive World. McGraw-Hill, New York.
- Holland, C.G.
1970 An Archeological Survey of Southwest Virginia. Smithsonian Institution Press, Washington.
- Holmes, W. H.
1903 Aboriginal Pottery of the Eastern United States. Extract from the Twentieth Annual Report of the Bureau of American Ethnology. Government Printing Office, Washington.
- Hudson, Charles
1990 The Juan Pardo Expeditions, Exploration of the Carolinas and Tennessee, 1566-1568. Smithsonian Institution, Washington.
- Keel, Bennie C.
1976 Cherokee Archaeology. University of Tennessee Press, Knoxville.
- Keeler, Robert Winston
1971 An Archaeological Survey of the Upper Catawba River Valley. Honors paper, Department of Anthropology, University of North Carolina at Chapel Hill.
- Klein, Jeffrey, J.C. Lerman, P.E. Damon and E.K. Ralph
1982 Calibration of Radiocarbon Dates: Tables Based on the Workshop on Calibrating the Radiocarbon Time Scale. Radiocarbon 24:103-150.
- Knight, Vernon J.
1986 The Institutional Organization of Mississippian Religion. American Antiquity. 51(4):675-687.
- Kottak, C. P.
1991 Anthropology: The Exploration of Human Diversity. 5th edition. MacGraw-Hill, New York.
- Krieger, Alex D.
1944 The Typological Concept. American Antiquity 9:271-288.

Larson, Lewis H.

- 1971 Archaeological Implications of Social Stratification at the Etowah Site, Georgia. In Approaches to the Social Dimensions of Mortuary Practices. Edited by James A. Brown, pp. 58-67. Memoirs of the Society for American Archaeology, No. 25.

Lawson, John

- 1937 Lawson's History of North Carolina. Edited by Frances Latham Hariss. Garrett and Massie, Richmond, Virginia.

Leacock, Eleanor

- 1983 Ethnohistorical Investigation of Egalitarian Politics in Eastern North America. In The Development of Political Organization in Native North America, edited by E. Tooker, pp. 17-31. The American Ethnological Society, 1979 Proceedings of the American Ethnological Society.

Lederer, John

- 1966 The Discoveries of John Lederer. Reprinted. Readex Microprint Corporation. Originally published, 1672, Samuel Heyrick, London.

LeVine, Robert A., and Donald T. Campbell

- 1972 The problem of ethnic boundaries. In Ethnocentrism: theories of conflict, ethnic attitudes, and group behavior. pp. 81-113. John Wiley and Sons, New York.

Levy, Janet E., J. Alan May, and David G. Moore

- 1990 From Ysa to Joara: Cultural Diversity in the Catawba Valley from the 14th to the 16th Century. In Columbian Consequences, Vol II, edited by David Hurst Thomas, pp. 153-168. Smithsonian Institution Press, Washington, DC.

Lewis, Ernest

- 1951 The Sara Indians, 1540-1768: An ethnoarcheological study. Unpublished M.A. thesis, University of North Carolina at Chapel Hill.

Lewis, T.M.N and Madeline Kneberg

- 1946 Hiwassee Island: An archeological account of four Tennessee Indian peoples. University of Tennessee Press, Knoxville.

- Longacre, William A.
 1968 Some Aspects of Prehistoric Society in East-Central Arizona. In New Perspectives in Archeology, edited by Sally R. Binford and Lewis R. Binford, pp. 89-102. Aldine, Chicago.
- 1991 Sources of Ceramic Variability Among the Kalinga of Northern Luzon. In Ceramic Ethnoarchaeology. Edited by W.A. Longacre, pp.95-111. University of Arizona Press, Tucson.
- Lowie, Robert H.
 1935 The Crow Indians. Holt, Rinehart and Winston, Fort Worth.
- 1940 An Introduction to Cultural Anthropology. Rinehart, New York.
- McKern, William C.
 1939 The Midwestern Taxonomic Method as an Aid to Archaeological Study. American Antiquity 4:301-313.
- Macdonald, William K.
 1990 Investigating style: an exploratory analysis of some Plains burials. In The Uses of Style in Archaeology. Edited by M.W. Conkey and C.A. Hastorf. pp. 52-60. Cambridge University Press.
- Marquardt, William and Carole L. Crumley
 1987 Regional Dynamics: Burgundian Landscapes in Historical Perspective. Academic Press, New York.
- Marshall, Rhea Rogers
 1988 Intrasite Settlement Patterns at the Hardy Site, 31Sr50. Unpublished master's thesis, Department of Anthropology, Wake Forest University, Winston-Salem, North Carolina.
- Merrell, James H.
 1987 "This Western World": The Evolution of the Piedmont, 1525-1725. In The Siouan Project: Seasons I and II, edited by Roy S. Dickens, H. Trawick Ward and R.P. Stephen Davis, Jr., pp. 19-28. Monograph Series No. 1, Research Laboratories of Anthropology, University of North Carolina, Chapel Hill.
- Mereness, Newton D. (editor)
 1916 Travels in the American Colonies. MacMillan, New York.

- Mikell, Gregory A.
1987 The Donnaha Site: Late Woodland Period Subsistence and Ecology. Unpublished M.A. thesis, Department of Anthropology, Wake Forest University, Winston-Salem, North Carolina.
- Mooney, James
1894 The Siouan tribes of the East. Bureau of American Ethnology, Bulletin 22. Washington, DC.
- Muller, Jon D.
1966 Archaeological Analysis of Art Styles. Tennessee Archaeologist 22(1):25-39.
- Oliver, Symmes C.
1962 Ecology and Cultural Continuity as Contributing Factors in the Social Organization of the Plains Indians. University of California Publications in American Archaeology and Ethnology 48(1):13-18, 46-49, 52-68.
- Pearson, Michael Parker
1984 Social change, ideology and the archaeological record. In Marxist Perspectives in Archaeology. Edited by Matthew Spriggs, pp. 59-71. Cambridge University Press.
- Peebles, C.S.
1983 Moundville: Late Prehistoric Sociopolitical Organization in the Southeastern United States. In The Development of Political Organization in Native North America, edited by E. Tooker, pp. 183-190. The American Ethnological Society, 1979 Proceedings of the American Ethnological Society.
- Peebles, C.S. and Susan Kus
1977 Some Archaeological Correlates of Ranked Societies. American Antiquity 42:421-448.
- Peoples, James and Garrick Bailey
1991 Humanity: An Introduction to Cultural Anthropology. Second edition. West, New York.
- Plog, Fred
1977 Modeling Economic Exchange. In Exchange Systems in Prehistory. Edited by T.K. Earle and J.E. Ericson, pp. 127-140. Academic Press, New York.
- 1979 Prehistory: Western Anasazi. In Handbook of North American Indians. Vol. 9. Edited by Alfonso Ortiz, pp.108-130. Smithsonian Institution, Washington.

- Plog, Fred and Steadman Upham
1983 The Analysis of Prehistoric Political Organization. In The Development of Political Organization in Native North America, edited by E. Tooker, pp. 199-213. The American Ethnological Society, 1979 Proceedings of the American Ethnological Society.
- Plog, Stephen
1990 Sociopolitical implications of stylistic variation in the American Southwest. In The Uses of Style in Archaeology, edited by Margaret Conkey and Christine Hastorf, pp. 61-72. Cambridge University Press, Cambridge.
- Powell, J.W.
1894 Twelfth Annual Report of the Bureau of Ethnology 1890-1891. Government Printing Office, Washington.
- Renfrew, Colin
1977 Alternative Models for Exchange and Spatial Distribution. In Exchange Systems in Prehistory. Edited by T.K. Earle and J.E. Ericson, pp.71-90. Academic Press, New York.

1984 Approaches to Social Archaeology. Harvard University Press, Cambridge, Massachusetts.
- Renfrew, Colin and Paul Bahn
1991 Archaeology: Theories, Methods and Practice. Thames and Hudson, New York.
- Rights, Douglas L.
1957 The American Indian in North Carolina. John F. Blair Publishers, Winston-Salem.
- Robinson, W.S.
1951 A Method for Chronologically Ordering Archaeological Deposits. American Antiquity 16(4):293-301.
- Rogers, Rhea J.
1984 Report on surface treatment of pottery at the McPherson Site, 31Yd41. Ms. on file, Archeology Laboratories, Wake Forest University.

1989a Report on ceramic variability in the west end of the Hardy Site, 31Sr50. Ms. on file, Wake Forest University Archeology Laboratories.

- Rogers, Rhea J.
1989b The E. Davis Site and the origins of the Woodland in northwestern North Carolina. Paper presented at the 46th Annual Southeastern Archaeological Conference, November 1989, Tampa, Florida.
- Rogers, Rhea J. and J. Ned Woodall
1992 An Archeological Survey in the Upper Yadkin River Valley, North Carolina. Report submitted to the North Carolina Division of Archives and History, Raleigh.
- Rothschild, Nan A.
1983 The Recognition of Leadership in Egalitarian Societies of the Northeast. In The Development of Political Organization in Native North America, edited by E. Tooker, pp. 165-182. The American Ethnological Society, 1979 Proceedings of the American Ethnological Society.
- Rouse, Irving
1960 The Classification of Artifacts in Archaeology. American Antiquity 25:313-323.
- Sackett, James R.
1977 The meaning of style in archaeology. American Antiquity 42:369-380.

1985 Style and ethnicity in the Kalahari: a reply to Weissner. American Antiquity 50(1):154-159.

1990 Style and Ethnicity in Archaeology: the Case for Isochrestism. In The Uses of Style in Archaeology, edited by Margaret Conkey and Christine Hastorf, pp. 32-43. Cambridge University Press, Cambridge.
- Sahlins, Marshall D.
1968 Tribesmen. Prentice-Hall, Englewood Cliffs, New Jersey.
- Sahlins, Marshall D. and Elman R. Service
1960 Evolution and Culture. The University of Michigan Press, Ann Arbor.
- Saitta, Dean J.
1983 On the Evolution of "Tribal" Social Networks. American Antiquity 48(4):820-824.
- Schiffer, Michael B. and James M. Skibo
1987 Theory and Experiment in the Study of Technological Change. Current Anthropology 28:595-622.

- Schortman, Edward M.
1989 Interregional Interaction in Prehistory: The Need for a New Perspective. American Antiquity 54(1):52-65.
- Seifert, Mark E.
1991 A Multivariate Analysis of Native American Cranial Remains from Three Sites in the North Carolina Piedmont. Unpublished M.A. thesis, Department of Anthropology, Wake Forest University, Winston-Salem, North Carolina.
- Seifert, Mark and David Weaver
1989 Analysis of the Human Skeletal Remains from the Hardy Site (31Sr50), Surry County, North Carolina. Ms. on file, Laboratory of Physical Anthropology, Wake Forest University, Winston-Salem, North Carolina.
- Service, Elman
1962 Primitive Social Organization. Random House, New York.
- Shennan, S.J.
1978 Archaeological 'cultures': An empirical investigation. In The Spatial Organisation of Culture. Edited by Ian Hodder, pp. 113-140. University of Pittsburgh Press.
- Smith, Marvin
1987 Archaeology of Aboriginal Culture Change in the Interior Southeast. University of Florida Press, Gainesville.
- Southall, Aidan
1970 The Illusion of Tribe. Journal of Asian and African Studies 5:28-49.

1976 Nuer and Dinka are people: ecology, ethnicity and logical possibility. Man 2(4):463-491.
- Spaulding, Albert
1953 Statistical Techniques for the Discovery of Artifact Types. American Antiquity 18:305-313.

Steponaitis, Vincas P.

1978 Location Theory and Complex Chiefdoms: A Mississippian Example. In Mississippian Settlement Patterns, edited by Bruce D. Smith, pp. 417-453. Academic Press, New York.

1984 Technological studies of prehistoric pottery from Alabama: Physical properties and vessel function. In The Many Dimensions of pottery: Ceramics in archaeology and anthropology. Edited by S.E. van der Leeuw and A.C.Pritchard, pp. 79-127. Universiteit van Amsterdam, Amsterdam.

Steward, Julian

1955 Theory of Culture Change. University of Illinois Press, Urbana.

Sturtevant, William C.

1983 Tribe and State in the Sixteenth and Twentieth Centuries In The Development of Political Organization in Native North America, edited by E. Tooker, pp. 3-16. The American Ethnological Society, 1979 Proceedings of the American Ethnological Society.

Sullivan, Alan P., III and Kenneth C. Rozen

1985 Debitage Analysis and Archaeological Interpretation. American Antiquity 50(4):755-779.

Swanton, John R.

1968 Early Accounts of the Natchez. In The North American Indians. Edited by R.C. Owen, J. Deetz, and A. Fisher, pp. 545-554. MacMillan Co., New York.

Tainter, Joseph A.

1978 Mortuary Practices and the Study of Prehistoric Social Systems. In Advances in Archaeological Method and Theory, Vol. 1, Edited by Michael B. Schiffer, pp.105-141. Academic Press, New York.

Taylor, Walter W.

1967 The Sharing Criterion. In American Historical Anthropology, Essays in Honor of Leslie Spier, edited by W.W. Taylor and C. Rilesen, pp.221-230. Southern Illinois University Press, Carbondale.

Thomas, Cyrus

1903 Was Lederer in either of the Carolinas? American Anthropologist 5(4):724-727.

Titiev, Mischa

1959 Introduction to Cultural Anthropology. Henry Holt, New York.

- Trigger, Bruce
1968 Archeological and Other Evidence: A Fresh Look at the "Laurentian Iroquois." American Antiquity 33(4):429-440.
- Turner, Jonathan H.
1986 The Structure of Sociological Theory. Fourth edition. Dorsey Press, Chicago.

1987 Social Exchange Theory: Future Directions in Social Exchange Theory. Edited by Karen S. Cook, pp. 223-238. Sage Publications, Newbury Park, California.
- Voss, Jerome A. and John H. Blitz
1988 Archaeological Investigations in the Choctaw Homeland. American Antiquity 53(1):125-144.
- Ward, H. Trawick
1983 A Review of Archaeology in the North Carolina Piedmont: A Study of Change. In The Prehistory of North Carolina: An Archeological Symposium. Mark A. Mathis and Jeffery J. Crow, editors, pp. 53-81. North Carolina Division of Archives and History, Department of Cultural Resources, Raleigh.

1985 Social Implications of Storage and Disposal Patterns. In Structure and Process in Southeastern Archaeology. Edited by R.S. Dickens, Jr. and H. Trawick Ward. pp.82-101. University of Alabama Press.
- Wauchope, Robert
1966 Archaeological Survey of Northern Georgia. Memoirs of the Society for American Archaeology. No. 21.
- Weiner, Annette B.
1976 Women of Value, Men of Renown. University of Texas Press, Austin.
- Weissner, Polly
1984 Reconsidering the Behavioral Basis for Style: A Case Study among the Kalahari San. Journal of Anthropological Archaeology 3:190-234.

1985 Style or isochrestic variation? A reply to Sackett. American Antiquity 51(1):160-166

1990 Is there a unity to style? In The Uses of Style in Archaeology, edited by Margaret Conkey and Christine Hastorf, pp. 105-112. Cambridge University Press, Cambridge.

- Whallon, Robert
1968 Investigations of Late Prehistoric Social Organization in New York State. In New Perspectives in Archeology, edited by Sally R. Binford and Lewis R. Binford, pp. 223-244. Aldine, Chicago.
- White, Leslie A.
1949 The Science of Culture. Grove Press, New York.
- Willey, Gordon R. and Philip Phillips
1958 Method and Theory in American Archaeology. The University of Chicago Press, Chicago.
- Williams, Isabel M. and Leora H. McEachern
1973 Salt--That Necessary Article. Wilmington.
- Williams, Mark and Gary Shapiro
1990 Lamar Archaeology. University of Alabama Press, Tuscaloosa.
- Wilson, Jack H., Jr.
1983 A Study of the Late Prehistoric, Protohistoric, and Historic Indians of the Carolina and Virginia Piedmont: Structure, Process, and Ecology. Unpublished Ph.D. dissertation, University of North Carolina at Chapel Hill.
- Wobst, H. Martin
1974 Boundary Conditions for Paleolithic Social Systems: A Simulation Approach. American Antiquity 39(2):147-178.
- 1977 Stylistic Behavior and Information Exchange. In For the Director: Research Essays in Honor of James B. Griffin, edited by C.E. Cleland, pp. 317-342. Anthropological Papers No. 61, Museum of Anthropology, University of Michigan, Ann Arbor.
- 1978 The Archaeo-Ethnology of Hunter-Gatherers or The Tyranny of the Ethnographic Record in Archaeology. American Antiquity 43(2):303-309.
- Wolf, Eric R.
1982 Europe and the People without History. University of California Press, Berkeley.
- Woodall, J. Ned
1975 Second Archeological Survey of the Great Bend Area, Yadkin River Valley, North Carolina. Ms. on file, North Carolina Department of Cultural Resources, Raleigh.

Woodall, J. Ned

1984 The Donnaha Site: The 1973, 1975 Excavations.
North Carolina Archaeological Council Publication
No. 22, Raleigh.

1987 Late Woodland Interaction in the Great Bend Area,
Yadkin Valley, North Carolina. Paper presented to
the 44th Annual Meeting of the Southeastern
Archaeological Conference, Charleston, South
Carolina.

1990 Archeological Investigations in the Yadkin River
Valley, 1984-1987. North Carolina Archaeological
Council Publication No. 25, Raleigh.

Woodall, J. Ned and Stephen R. Claggett

1974 An Archeological Survey of the Great Bend Area,
Yadkin River Valley, North Carolina. Ms. on file,
North Carolina Department of Cultural Resources,
Raleigh.

Woodall, J. Ned and Rhea J. Rogers

1989 An Archeological Survey of the Upper Great Bend
Area, Yadkin River Valley, North Carolina. Report on
file, Office of State Archaeology, North Carolina
Division of Archives and History, Raleigh.