

SECTION 21.0 CHANGING VIEWS OF SITE DYNAMICS

Much of what has been presented in the preceding sections on environments, chronology, material culture, site structure, and settlement, are topics that comfortably fit within the processual orientation of archaeology. The earlier sections concentrated on the recognition of patterns that pertained to the interactions between the ecological setting and adaptive behavior. Examination of these patterns of interactions through time provided for inferences about behavioral continuity and change. As indicated in the problem orientation section (Section 2.0), archaeologists have begun to move beyond the traditional ecological paradigm, analyzing other phenomena that are preserved in material patterning, including study of the role of social and ceremonial factors. In this sense, we need to look at not only how people are bound by constraints and opportunities of the natural environment, but also how the social and natural world is socially transformed and constructed. Behaviors in societal realms operate and may be studied on different scales of resolution, including as historical contingencies and evolutionary processes.

The Hickory Bluff excavations and experiences provided the opportunity to examine sites and the material record in a new light, re-examining long-held notions in archaeology. One of our earlier points was that theoretically oriented practitioners, in general, have not specifically worked with the realities of comprehensive data from site excavations, especially as it applies to the Native American record. In addition, a point was made that regional archaeologists have not routinely examined humanistic approaches against the material record, despite the fact that there is a burgeoning and successful application of these kinds of interpretations in the archaeology of other regions. The following discussion attempts to build on earlier sections which indicated a strong relationship between environments and adaptive responses, demonstrating how social and ceremonial factors also played a role in shaping society and adaptive evolution. Given the admittedly novel nature of this undertaking as part of our cultural resources management (CRM) investigations of the Mid-Atlantic, we recognize that there is much room for further elaboration and exploration in the future. We do, however, attempt to show how productive research can be conducted using a number of examples from the Hickory Bluff site excavations.

Among the significant intellectual shifts in archaeology during the last decade has been the critical reappraisal of how the past is presented and the introduction of alternative viewpoints to more satisfactorily reshape research strategies. A significant aspect of the Hickory Bluff investigations was an active Public Outreach program. While public outreach was originally conceived of as an educational tool to provide feedback to the community, public engagement altered the way in which we conceived of our craft. Indeed, public interaction resulted in a sharper appreciation for the importance of how we told our stories about the past. Because it also resulted in a closer interaction with Native Americans, public outreach encouraged us to re-evaluate our interpretations and helped us to address alternative, and sometimes complementary, perspectives.

The following discussion examines the local framework from the perspective of historical events and conditions. Examination of historical contingencies provided us with a way to examine unique circumstances without glossing over some interesting variability as so often is done in general schemes. It can be opined that paying attention to detail matters, as these details

lead to organizational variables and feedback between local precedents and large-scale responses. The following section also examines meanings that may exist in social and ceremonial contexts, and how these may have been conceived as individualistic and community expressions are examined. These expressions are a way in which people mitigated their cultural and natural environments.

LOCAL AND HISTORICAL CONDITIONS

Behavioral signals in the archaeological record may be viewed as a product of historic precedents and local circumstances. As archaeologists, we may examine these residues as unique circumstances on many scales of resolution, for example, artifacts, features, the site and the landscape. If we consider that each of these scales was the product of a complex array of local conditions and historical contingencies, we can begin to evaluate how personal behaviors and local societies were expressed, and how these expressions, in turn, conditioned larger-scale societal organizations and their change through time.

Artifacts

As a basic unit of analysis, artifacts contain much information that can be explored with respect to histories. Projectile point forms provide a good example of how material culture is the product of general processes and specific conditions and events. As detailed in Section 13.0, there are recurrent projectile point forms at Hickory Bluff that are consistent with those found throughout the region, confirming a general stylistic pattern. Analysis to decipher the relative influence of raw materials and rejuvenation in point form indicated that certain general patterns could be shown. For instance, there was a general trend between artifact size and raw material, and the majority of small stemmed points were made of cryptocrystalline materials. Indeed, the characteristics of the raw material and their forms contributed to point morphology; points made of local gravels were of a size range consistent with the original clasts. However, while some general patterns were shown, it was concluded that variability of projectile points within and between types was the consequence of many factors that are sometimes difficult to isolate, including cultural style, function, raw material, craftsmanship, use, and re-sharpening. Therefore, an integrated series of factors are likely responsible for point morphologies. The end result is a complex amalgamation of general trends and particularistic contingencies that are not straightforward in the final form.

As indicated in Sections 12.0 and 14.0, the ceramic assemblage conformed in many ways to both regional and Delmarva types, comprised of recognizable types such as Marcey Creek, Dames Quarter, Wolfe Neck, Popes Creek, Mockley and Hell Island wares. However, some marked variability existed that is of interest for examining local conditions. For example, the Marcey Creek ware, perhaps the most easily recognizable ware in the Mid-Atlantic due to the use of steatite for tempering, exhibits much variability in temper and construction. The variability in the percentage and frequency of temper, the qualities of the steatite and tempering agents, and the varied nature of the paste inclusions differentiated the ceramic vessel lots. Indeed, the method of manufacture of the Marcey Creek wares varied from slab-based to wide or narrow coil-constructed. These tempering and manufacturing variations are certainly expressed in the region, and variations were evidenced in our preliminary review of the type specimens from the Marcey Creek site and the Selden Island site in Virginia. The analysis of clay sources

suggested that Marcey Creek vessels were manufactured in other areas and imported. A hint of local manufacture comes from Vessel Lot MA02, one of the coil constructed Marcey Creek vessels that shared similarities with Clay Tempered vessel lots in having a conical shape, scraped surface treatment, and clay inclusions in the paste.

Variability becomes particularly expressed for wares referred to as “clay tempered,” often defined as Coulbourn, Nassawango, and Wilgus types. The Clay Tempered wares at Hickory Bluff showed variability in surface treatments, cordage used for surface treatments, tempering agents, and paste inclusions. These differences were the product of a number of circumstances, including the re-use of older vessels. While variability was evident, analysis of the source material indicated that several Clay Tempered vessels were likely produced locally, as their natural inclusions and matrix characteristics were consistent with local clays. The analysis of the Marcey Creek and Clay Tempered wares, therefore, showed the interplay between regional influences and local circumstances on stylistic traits, source location and movement of vessels, manufacture and temper variability, and re-use factors.

Comprehensively, the Hickory Bluff point and ceramic types share attributes that are congruent with regional styles. It is clear that certain correlations can be made between variables as part of general material culture types. While there is an apparent desire to adopt and maintain particular stylistic traits, there is wide-ranging differentiation in local areas as witnessed in the Hickory Bluff assemblages. This suggested that material culture was molded to specific and localized expressions that are connected to event histories, natural conditions, functions, and social contexts. There appeared to be local expressions on common themes, but these changed according to the specific artifact type and the spatial scale being considered. These expressions were not equal within point assemblages nor within ceramic types. As an example, the Marcey Creek assemblage displayed variability that seems to be a mixture of territorial expressions that cross the Delmarva and Chesapeake Bay. Conversely, the Clay Tempered wares appeared to be a more localized phenomenon specific to the site area and the Delmarva Peninsula.

Analysis of tool use at Hickory Bluff revealed a wide variety of possible economic activities associated with food preparation and processing (cutting meats and plant materials, splitting bone for marrow, and cracking nutshells), hide working (scraping and abrading), wood working (scraping and planing), and tool production (bipolar reduction and resharpening groundstone tools). Additional activity associated with the production and maintenance of perishable items, such as cordage, bone, antler or hide, was suggested by the presence of awls (Figure 13.52), drills (Figure 13.55 and Figure 13.56), graving tools (Figure 13.57), and residue from scrapers (Figure 13.66 through Figure 13.74). Ritual activity may have involved preparation of plants and herbs for medicinal use or grinding of minerals for pigment. Over 200 tools from Hickory Bluff exhibited multiple working edges demonstrating extensive single task use, multiple uses associated with a single task or multiple uses. Different working edges on the same tool type (i.e., triangular pitted stones with battered and abraded surfaces) hinted at possible interrelated tasks (e.g., tool production activities for bipolar reduction, platform preparation and percussion knapping). Some tools were intentionally shaped (i.e., pitted stones, Figure 12.33 and Figure 13.63) and most likely represent highly curated tool forms. The

variability in tool use demonstrates not only the range of behavior that occurred at Hickory Bluff but tool use patterning of associated functional edges.

The material culture found at Hickory Bluff was a reflection of specific behaviors and expressions of a Chesapeake Bay and Delmarva society. It is this interplay between the general and specific that must be examined more closely, if we wish to understand specific groups of people and how they relate to other communities.

A Look at Features

With respect to features, a basic observation was made that consistent and generic types were present at Hickory Bluff (i.e., basin features, thermally altered stone [TAS] features), which share some common morphological characteristics. However, this broad categorization, while adequate on some descriptive level, also hides much variability in shape, content, and formation histories.

At the start of the basin formation study, a basic premise was that cultural and natural inputs through time were likely to range over a large spectrum. This premise was in contrast with the more common and polarized pithouse-tree throw interpretations. The term “basin” was deliberately adopted to connote no functional interpretation prior to analysis. To investigate a range of potential formation processes, the Hickory Bluff study consisted of detailed basin excavations, an experimental program, and comparative research. During archaeological excavations, all patterns were recorded including tree rots, root penetration, animal burrows, voids, and other soil anomalies. The basin study, presented in Section 10.0, consisted of theoretical modeling (based on ethnographic, archaeological, and biotic observations) and analysis (morphology, geochemistry, dating, and contents). The study indicated some general patterning in the formation of basins, but also a large difference in the features in physical manifestation and material content and therefore, function and history. The large basins were found to share certain morphological characteristics that generally indicate tree related origins, and either direct use and/or cultural infilling during or after occupation. The small and medium sized basins displayed more variability in morphology and artifact content, which indicated differences in cultural and natural origins, use, and postdepositional influences. The overall analysis indicated variation in use life and depositional histories, showing that cultural and natural processes interact in intimate and detailed ways. The basic premise was certainly borne out in the experiments on feature degradation and infilling, and excavations of tree rots and tree throws. In the experiments, basins were attractions for plants and trees; therefore, overlaps between cultural and natural processes are to be expected. The implication for archaeologists is that feature origins and post-formation histories are quite complex and not straightforward even within gross types. It is toward this basic fact that much research needs to be directed.

TAS clusters, as described in Section 11.0, do not suffer from the same problem as the more enigmatic basin features. TAS clusters are clear cultural manifestations that are affected by both cultural and natural post-depositional agents after their formation. As a starting point in considering heated rock concentrations at Hickory Bluff, a decision was made to use the inclusive term, “thermally altered stone,” as opposed to the more narrowly defined term, “fire-cracked rock” (i.e., implying only fractured). Modeling (ethnographic, archaeological, experimental, and sweatlodge observations) and analysis (feature morphology, spatial

boundaries, refitting, material types, fracturing, heat alteration, stone size, and percent complete) indicated major sources of variation between features. This source of variation was directly related to functional variability and differences in feature use life history. As examples of large functional variation, Feature 46 contained the largest number of TAS (n=727), the largest diversity in raw material, and highly fragmented, often non-refitting, smaller sized fragments indicative of a high intensity of use and the removal of large fragments and stones for re-use (Figure 11.16). On the opposite extreme, Feature 173 consisted of a single fragmented boulder (which had previously functioned as an anvil or in a grinding function, Figure 11.48), heated in place based on the high percentage of refits and spalls; missing pieces also indicated that the cluster was scavenged for certain larger pieces. While only two examples are provided here, the main point is to show that when all 39 TAS features are considered, a large degree of functional variation is to be expected. While TAS was traditionally only counted (and sometimes weighed) before discard in past excavations, the detailed analysis in this study indicates that this data source provides an unprecedented source of behavioral information. Individual and community actions can be deciphered with closer examinations of TAS features.

Features, as an analytical unit, are probably the most under-appreciated and least understood categories of archaeological phenomena in the Mid-Atlantic. Features are probably the most pliable and flexible source for variation, as contents of material residues vary, and the shapes of features differ as a consequence of available construction materials and variability in substrates. Interpretation of the origin of features, particularly basins, is often not straightforward; Hickory Bluff provided evidence for combined processes, including natural and cultural interactions. Moreover, some features are apparently quick-time individual expressions as part of one single event, whereas others, such as TAS features, show variable degrees of multiple event behaviors, thus introducing overlaps and re-use behaviors, occurring in one occupation or series of occupations. These major and minor variations are of utmost importance to our understanding of behavior as they are signs of differentiation in function and activity. It is suggested that, while certain general behaviors will likely explain the origin of features, local conditions certainly play a large role in their formational histories. The substrate, the materials, and the particular behaviors occurring in sites like Hickory Bluff should contribute to a large, mainly untold story on function.

EXPLORING THE NON-SECULAR

While some attention has been given to social and ceremonial aspects in organizing Delmarva societies, a main issue concerns the degree to which non-secular aspects of behavior could be ascertained. To construct questions about non-economic behavioral aspects, various approaches to archaeology were explored (Section 2.0) and elements of the anthropological and ethnohistoric literature were reviewed for further insights (Section 5.0). In reviewing belief systems of Eastern North American and Delmarva peoples, a number of lines of evidence were considered which might have material consequences in artifacts, features and the site landscape.

Artifact Meaning

Artifact color, decoration, and breakage were used to investigate symbolism and potential cognitive and belief systems (Section 15.0). Some projectile points, the ulu and the gorgets were made of darker colors, which may symbolize death, disharmony, and decay. Other projectile

points, the small mortar and pestle from Feature 202 (Figure 13.64: 2379-1 and Figure 13.65: 2379-2), and fragments of hematite were red or reddish orange in color, which may represent animation or transformation between life and death. The reddish orange hue associated with the tools from Feature 202 strengthens the interpretation that they were used ritually. Some projectile points were white which may symbolize life and light. Reflective substances also embody light. Several artifacts found at Hickory Bluff, such as the steatite tempered Marcey Creek ceramics with its distinctive sheen, the mica tempered Hell Island ceramics and fragments of isolated mica were reflective, perhaps symbolic of light. Variation in color (light versus dark) also may symbolize the duality of the life and death cycle and transformation processes from one to the other. Projectile points, used for killing game, were made of both light and dark lithic materials. The duality is characterized in the fact that even though game is hunted and killed, it provided food (life) for the hunters.

The TAS features reflected different combinations of colors present on the site landscape primarily with brown, red and white. In addition to color aspects, TAS features represent the force of transformations, producing heat, light, and smoke. Warming fires provide heat against the cold; cooking fires transform raw subsistence resources into meals. Sweatlodge fires transform secular rock into spiritual forces providing smoke and steam for purification and transcendence to the spiritual realm.

While rare, certain traits recorded in the artifact assemblage show some degree of free expression and experimentation. Variability within ceramic types was common at Hickory Bluff and may be a sign of novel invention and social experimentation. Individual expression may be seen on a few, albeit minimally decorated vessels, including incised marks on Mockley, Townsend, and Minguannan vessels. Incised lines on the gorgets may also carry meaning (Figure 12.37 and Figure 12.38).

Breakage patterns may also indicate ritual behavior. The gorgets and ulu may have been intentionally broken and snapped in various places (Figure 12.37 through Figure 12.39). The gorgets exhibited wear along their break lines, indicating use after they were broken. This is in accordance with other items found in ceremonial contexts, sometimes interpreted as “ritually killed” (Thomas 1976).

Features

With respect to the cultural and functional interpretation of features, it is often the case that they are considered in relation to economic activities, such as processing facilities or for cooking purposes. Review of the ethnohistoric literature and our observations from the sweatlodge experience indicated that commonly excavated TAS features must also be viewed in the context of social and ceremonial domains. The sweatlodge ceremony produced a variety of TAS features each having a different set of thermal characteristics, all of which resulted from ceremonial behaviors.

The most striking aspect of the TAS features at Hickory Bluff was their variety in size, shape, and rock characteristics (Section 11.0). While some of this variability is certainly related to formation processes and re-use behaviors, their variety suggests the operation of some social and ceremonial dimensions. The clearest and most obvious TAS pattern on site was the spatial

position of the three large feature clusters on the bluff above the river. Among the possible alternate interpretations is a sweatlodge interpretation, as these places are often situated in close approximation to a water source for bodily immersion after exit from the lodge. The feature locations also may have been intentionally placed along the stream edge as a visual source of light and smoke to signify the occupation or communicate over a distance. The position of these three feature clusters would have made visual sightings along the river easier.

Ceremonial acts may be considered for certain rare feature types at Hickory Bluff. Three features (202, 203 and 294) appear to represent individual caches and perhaps, offerings. Feature 202/203 consisted of two circular side-by-side basins of the same size and shape, one of which was empty while the other had a single gray cap stone and artifacts in the basin (Figure 7.38). The capped basin contained specialized implements, including a small double pitted stone and a reddened pestle placed side by side, and a cluster of mendable Clay Tempered ceramics. Feature 294 consisted of three vertically stacked artifacts: an anvil, a hammerstone, and an unmodified cobble (Figure 7.16). The tools and objects in these two features likely acted in some economic fashion, but the contexts of these particular finds suggested a deliberation that transcends strictly economic functions. These features were not re-visited, and therefore, it may be proposed that these were not simply lost items in economic context, but rather, it is more likely that features such as these functioned as offerings. This interpretation could also pertain to more obvious caches in the area, such as the substantial biface feature at Carey Farm.

The excavation of basins by site inhabitants may also be associated with the non-secular. The digging into the earth for the construction of side by side Features 202/203 was a deliberate act that placed some reverence in the act of burying objects. It is possible that other basin features on-site acted in a similar fashion, especially when a deliberate excavation and infilling was witnessed. For other features, evidence indicated a close association between basin formation, tree morphology, and artifact infilling. This natural-cultural interaction could transcend purely economic realms, showing an intimate relation between both realms.

The Site and its Landscape

Hickory Bluff is situated in a diverse and productive environmental zone that was clearly highly attractive to Native peoples. The site was located on a bluff, overlooking a major bend of the St. Jones River, just upstream of the Puncheon Run drainage (Figure 19.9). The site occurs in an area where many of the subsistence and technological needs of the populations would have been met. The streamside woodlands and the spring head would have been a highly productive ecological zone, where terrestrial and riverine resources were available. A variety of plants and animals would have been available for food. A plentiful supply of gravel was also present on site for stone tool manufacture. Ease of transport and mobility was also another major reason for site location. The St. Jones River was navigable by canoe, and its banks were likely also the spots for pedestrian trails to the interior and the Delaware Bay. Although the ecology changed over the course of the 3,000 years of intensive occupation, this was apparently a beneficial and reliable ecological zone as indicated by the re-visits over many centuries. Such an attractive environmental zone likely coincided with Native American belief systems which viewed nature and natural resources as the embodiment of a symbolic world. Hickory Bluff, from that broader perspective, can be conceived of as a sacred place in a Native American worldview.

The concept of the circle is a pervasive symbol in Eastern Woodland societies, oftentimes metaphorically denoting the cycle of life, death, and rebirth, the interconnection of all things, and the organization of people in the world (Section 5.0). The circle and its conceptual underpinnings likely interface with many aspects of material culture, such as the construction of TAS cluster arrangements, the manufacture of coiled ceramic vessels, and the selection of particular spheroidal clast shapes for stone tool manufacture. The lifecycle and its symbolic underpinnings may be explored through the evidence for re-use and recycling at Hickory Bluff. On the broadest level, direct evidence for re-use behaviors is clearly preserved since the site location was repeatedly revisited over many centuries, producing a palimpsest archaeological record with overlapping features and mixtures of temporally distinct assemblages. A number of TAS features also support this scenario as overlapping uses are implied and materials from certain features appear to be scavenged. The ceramic and stone tool assemblages show a considerable amount of re-use and recycling. The concept of re-use is implied by the Marcey Creek vessels, which incorporate steatite as tempering agents. Steatite tempering has been conceived of as the replication of former steatite vessels, while the manufacture of conical vessels has been surmised to be copying of basketry (Stewart 1998b). More direct evidence for re-use of Hickory Bluff ceramics comes from the Clay Tempered wares, which clearly show that older vessels were being used as tempering agents. In an analysis of the Hickory Bluff projectile point assemblage, considerable evidence for stone tool rejuvenation, as shown by the asymmetry of edges, was present. Rejuvenation can be part of a continuous process that is conducted over the lifecycle of an object. Re-use can also be implied by the presence of isolated and least common points on site, potentially a pattern related to the scavenging of older materials. The identification of re-use and recycling are not only significant considerations for the study of material culture, but these concepts also are likely an important part of human cognition and belief systems. As time proceeded, the qualities of certain sites were likely considered, not merely as re-used places, but as places where power resided (e.g., traditional ancestral places).

Hickory Bluff has many features of sites that are ideal places not only for occupation, but also for association with the sacred. Creation stories contain key symbols relating to the supernatural beings of the sky and powers associated with water (Section 5.0). Sacred locations were often located where worlds merged—in geographic terms—locations situated on high spots, with commanding viewsheds over open water and near low, marshy areas. A site such as Hickory Bluff would have provided many natural resources for continued sustenance. These were also places where shared group social behaviors and the transmission of skills would have taken place. Among reliable resources, Hickory Bluff contained an abundant supply of rock for incorporation into features and manufacture of stone tools. Rock was therefore an important economic and social medium that had a symbolic aspect as a natural resource that sustained life. As such, repeated behaviors in this spot would make the location increasingly important socially and ceremonially.

Among important natural resources and symbols, there was evidence for turtle remains at Hickory Bluff, both in the past, and up until the present. The tortoise figures prominently in stories of creation and was incorporated into the belief systems of Algonquian peoples. The turtle became the embodiment of a creator being and as a mediator between the water and the earth. Turtle remains at Hickory Bluff are few, but their presence and evidence of burning was significant (Table 8.6: 100 percent burned). It is possible that turtles were used for food, but

given their importance in documented rituals, they may also have been a component of on-site rituals. The present-day observations of the construction of turtle nests on-site, and the birth of young hatchlings was likely operative in the past, and it likely fed into both economic and ceremonial aspects of site location.

The position of Hickory Bluff on the St. Jones River provided further reinforcement of an association with the non-secular. The cultural landscape on the middle reaches of the St. Jones River most likely contained spiritual aspects of site location and ritual activity. Use of symbols in cosmology (i.e., cardinal directions), among other things, may have influenced cultural patterning. The most distinct manifestation of the spiritual landscape in this area is the Delmarva Adena Complex. Cultural landscapes associated with the use of mortuary sites in the lower Illinois River valley have been suggested (Buikstra and Charles 1999) and may represent both spiritual and social interaction. The locations of the Adena mortuary site on the east side of the St. Jones River may be viewed as a spiritual landscape where the dead are placed at the intersection between earth (natural universe) and sky (spiritual universe), providing a vertical dimension. The preferential site locations on the eastern side of the river and on elevated areas may have served as markers of territorial boundaries (Buikstra and Charles 1999).

In the Algonquian worldview, spiritual beliefs were correlated with a spatial logic organizing the cosmos, where directions were lined with different deities, powers, and sacred locations, and the cosmos were conceived of as multi-leveled worlds (Section 5.0). The St. Jones Adena site is located on a terrace/bluff at the neck of an oxbow bend. Some Woodland ossuaries in Maryland (including the Adena site, Sandy Hill) are situated in similar settings as the St. Jones Adena Site. These settings include location on the middle ranges of major drainages, in prominent high spots, and with excellent visibility facing open water, which is often viewed to the west (Curry 1999). Other types of cultural landscapes may be based on horizontal symbolism such as the directional shrines and levels of sacredness identified in the Southwest (Snead and Preucel 1999). Although the site patterning in the middle reaches of the St. Jones River may be biased by archaeological investigations, the existing site locations indicate five distinct occupation areas along the east side of the St. Jones River, north of the St. Jones Adena Site (Figure 21.1). General belief of Mid-Atlantic groups was that departed spirits traveled south (Weslager 1972) or west (Rountree 1989). Locating occupations north or east of burial locations may imply creating unobstructed paths for departing spirits.

In further examining the position of Hickory Bluff with respect to directions of the river and sunsets, certain patterns emerge that may have symbolic significance. The location of the site corresponds to the maximum viewshed of the upstream and downstream bend of the St. Jones River (Figure 21.2). In addition, at the location of the site, the sun sets in a west to southwestward position, the direction dependent on the season. Modern day views and sunsets are often unobstructed and spectacular, and it was probably no less so during the past. Taken together, the directionality, the riverine viewshed, the sunsets, and preferential site settings may be important factors in reinforcing, and perhaps conditioning, occupations at Hickory Bluff.

Figure 21.2 Viewshed from Hickory Bluff