Ruby, Bret J. (Glenn A. Black Laboratory of Archaeology, Indiana University, Bloomington), Christine M. Shriner (Program in Classical Archaeology, Indiana University, Bloomington), and Clifford P. Ambers (Department of Geological Sciences, Indiana University, Bloomington)

SOUTHEASTERN STAMPED CERAMICS AT THE MANN SITE: IDENTIFYING LOCAL AND NON-LOCAL PRODUCTION

The Mann site (12 Po 2) is a large multicomponent complex of mounds, geometric earthworks and habitation debris located near the confluence of the Wabash and Ohio Rivers in Posey County, extreme southwestern Indiana. Most of these remains are the result of a late Middle Woodland Mann phase occupation dating between about A.D. 100 and A.D. 500. The scale of habitation debris and earthwork construction has long attracted archaeological interest, as has the recovery of a long list of exotic raw materials and specific artifact forms reflecting significant participation in Hopewellian forms of ceremonialism and status differentiation. But one of the most unique and intriguing aspects of the Mann site material culture is the high frequency of complicated stamped, simple stamped, and tetrapodal vessels in the ceramic assemblage. Carved paddle stamped and footed vessels such as these are commonly found in contemporary assemblages from the southeastern United States, but are exceedingly rare in the Ohio Valley. For example, only 18 complicated stamped sherds have been reported from Ohio Valley sites outside of the Mann phase distribution. In contrast, more than 1,100 complicated stamped sherds have been recovered during just four seasons of limited test excavation at the Mann site (Kellar 1979; Rein 1974). The present study used techniques of ceramic petrography to determine whether or not the complicated stamped and simple stamped ceramics at the Mann site were locally produced.

In common with Ohio Hopewell ceramics, the Mann site ceramic assemblage as a whole can be divided into three series: "Utilitarian," "Hopewellian," and "Southeastern" (see Prufer 1965, 1968). The Utilitarian Series is composed of undecorated plain and cordmarked vessels and represents about 90% of the total collection. The Hopewellian Series represents the largest class of decorated vessels in the assemblage, comprising about 6% of the total collection. This series is defined by a suite of surface treatments and decorative motifs which have interregional distributions in the Eastern Woodlands and serve in part to define larger patterns of Hopewellian interaction. Unzoned rocker stamping is the most common of these motifs at the Mann site, followed in descending order of frequency by unzoned rocker stamped, incised, zoned stamped, red filmed, punctated, and brushed surface treatments. The remainder of the Mann site assemblage is classified within the Southeastern Series. Most of these sherds are complicated stamped, of which the vast majority display curvilinear motifs, with rectilinear designs occurring in the minority. Stylistically, these ceramics are most similar to Early Swift Creek ceramics which are most common in the Georgia Piedmont and Gulf Coastal Plain. In fact, three of the design motifs documented at the Mann site are identical to Georgian examples (Kellar 1979; Rein 1974). Two simple stamped types are also well represented. The most common variety ("fine simple stamped"), has fine, shallow and closely spaced grooves, often resembling brushing, and the remaining variety ("coarse simple stamped") has wide lands and deep grooves. The remainder of the Southeastern Series is represented by tetrapodal supports on plain, cordmarked, and simple stamped vessels.

A non-random sample of 80 sherds from as many vessels was selected for analysis; this

sample represents the range of variability in macroscopic attributes of surface treatment, decoration, paste, and temper within each of the Utilitarian, Hopewellian and Southeastern Series. Standard petrographic thin-sections were prepared for each of the sherds, and the resulting grindings from each of the sherds were saved and mounted on glass slides for subsequent x--ray diffraction analysis.

This study departs from the practice followed in most petrographic analyses of ceramics by incorporating a parallel investigation of reference samples of clay-rich sediments drawn from the local environment. Samples of clay-rich sediments were drawn from a variety of geologic settings in the vicinity of the Mann site. Each of the local sediment samples was formed into bars 20 cm long and 1.2 cm square and fired in a linear thermal gradient furnace which subjected each bar to increasing temperature (from ca. 20-1000 degrees C) along its length. Standard petrographic thin-sections and x-ray diffraction samples were then prepared for each sample.

All of the Utilitarian Series and Hopewellian Series sherds in the sample were found to share a suite of compositional attributes identified macroscopically, microscopically, and through x-ray diffraction with those reference samples taken from the upper four meters of an extensive lacustrine deposit lying beneath and around the Mann site and fired between 500-800 degrees C. All of the complicated stamped and coarse simple stamped sherds in the sample fell within this locally produced group as well. In contrast, the fine simple stamped sherds in the sample displayed an entirely distinct set of compositional attributes. These were characterized by an opaque iron oxide-stained matrix and abundant exotic mineral inclusions including amphibole and epidote. These minerals are characteristic of low- to medium-grade metamorphic rocks and are unavailable in the local environment. The most likely source for these exotic mineral inclusions lies in the Blue Ridge and southern Appalachian Piedmont Provinces.

Previous investigations in the Blue Ridge and southern Appalachian Piedmont Provinces have suggested that sites associated with the Middle Woodland Connestee phase were in direct contact with Ohio Hopewell populations between about A.D. 200 and A.D. 500 (Chapman and Keel 1979; Keel 1976). Primary evidence for this contact comes in the form of the marked similarities in vessel form, decoration, surface treatment and temper between Connestee Simple Stamped ceramics (the most common ceramic type of the phase) and the Turner Simple Stamped B ceramics occasionally found on Ohio Hopewell sites (Griffin 1983; Keel 1976; Prufer 1965, 1968). All of these attributes are also shared with the fine simple stamped sherds from the Mann site. This suggests that the fine simple stamped sherds at the Mann site were manufactured by Connestee phase populations in the Appalachian Summit area.

The ceramic evidence presented here points to some interesting observations concerning broader patterns of Hopewellian interaction. As noted above, complicated stamped ceramics are extremely rare in Ohio Hopewell contexts, and do not appear to be local products (Prufer 1968). Turner Simple Stamped B ceramics are very rare in Ohio Hopewell contexts as well: only 134 sherds from eight sites have been documented (Griffin 1983; Prufer 1968). This suggests that at least in terms of ceramic exchange, Ohio Hopewell interactions with populations in the Appalachian Summit area and the Georgia Piedmont and Gulf Coastal Plain (presumably the source of the complicated stamped sherds from Ohio Hopewell contexts) were sporadic at best, and characterized by the infrequent northern movement of ceramic vessels. Only about 200 examples of the fine simple stamped variety have been recovered from the Mann site, suggesting that this sporadic pattern also characterizes Mann phase interactions with populations in the Appalachian Summit area.

A very different pattern of Hopewellian interaction with the Southeast is evidenced by the complicated stamped ceramics at the Mann site. Rather than a pattern of interaction characterized by the infrequent movement of ceramic vessels, here we see the local production at the Mann site of substantial numbers of vessels using Georgian designs.

The significance of these different patterns of interaction remains unclear, but certainly compromises the concept of a single monolithic Hopewell Interaction Sphere and suggests that future research must seek to identify the multiple mechanisms or processes that apparently underlie the extensive distributions of specific artifact styles and raw materials that we recognize as Hopewellian.

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