

THE SUCCESSION OF WOODLAND HORIZONS IN THE CARBONDALE AREA

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During the summers of 1938 and 1939 excavation was carried on by the Department of Anthropology of the University of Chicago at the Cove Hollow Rock Shelter in Jackson County, at the suggestion of Mr. Irvin Peithman of Carbondale.¹ At the close of the 1939 season excavations were continued on a twelve-month program until the fall of 1941 by the W.P.A. Museum Extension Project under the sponsorship of the Southern Illinois Normal University, the State Museum at Springfield, and the University of Chicago. Six village sites in Jackson and Williamson counties were excavated, and an extensive surface survey was made of these two counties. As a result of this work, evidence was found of an archaic pre-pottery culture, four stages of Woodland culture, and manifestations of the Middle Mississippi culture. This paper describes and interprets five of the six horizons thus established.

No component of the archaic pattern has been found in stratigraphic relationship with other cultures in the Carbondale region. However, a number of small open camp sites, with no depth of village debris, have yielded a distinctive complex of artifacts. This complex includes the bell-shaped pestle; nutting stones; bannerstones, or atlatl weights; caches of large, parallel-sided chert blades; long diagonal-notched projectile points; grooved axes, and

possibly the hematite plummet. Typologically this complex equates with similar material found in situ and recognized as belonging to a pre-pottery horizon in the shell heaps of Indian Knoll in Kentucky, Wheeler Basin in Tennessee, and Pickwick Basin in Alabama.² More recently artifacts belonging to this complex have been found in Massac County at the Faulkner Site.³ Here, a hunting and gathering group, using no pottery and hunting primarily with the atlatl and spear, definitely preceded the first pottery using group of the Baumer Focus. There is a close similarity between artifacts of the Faulkner Focus, and the camp site materials from the vicinity of Carbondale. As additional evidence, the only portion of a grooved axe to be found in the extensive excavations around Carbondale was found in the lowest level of the Crab Orchard village, underlying the oldest pottery type in the area.

The type site for the oldest focus in which pottery was present was the first village site excavated at Crab Orchard. Here, on a small knoll approximately two hundred yards from Crab Orchard Creek, was a small village originally covering roughly four hundred square feet. The village refuse, or midden, was a homogeneous black layer which extended downward from two to four feet, and which contrasted strongly with the yellow sterile clay

beneath it. Throughout the village area numerous round straight-sided pits with flat bottoms had been sunk one to two feet into the basic clay. Originally, in all probability, they were approximately three feet deep, and were utilized as storage pits. Later they apparently became receptacles for trash, many of them possibly remaining open for a number of years, from the evidence of pottery style changes represented in the refuse.

The pottery of this first Woodland complex, which has been called the Crab Orchard Focus, is rather distinctive, although it demonstrates a definite generic relationship with the pottery of the Baumer Focus in Massac and Pope counties.⁴ The paste is thick, rather porous, and red to reddish-brown. The tempering material is uniformly crushed rock, quartzite, or feldspar, with temper particles ranging up to six mm. in size. In the lowest levels at Crab Orchard two forms of surface treatment appear to be associated with the same ware. The first is cord roughened, with long vertical single cord impressions, applied with a cord-wrapped paddle, or possibly rolled on with a cord-wrapped dowel. This type of surface treatment was apparently of short duration, and lasted only during the beginning phases of the Crab Orchard Focus. The second surface treatment consists of impressing the surface with a small segment of woven fabric, possibly a part of a plain plaited, or plain twined wicker basket. This gives the jar the appearance of having been formed inside a basket. However, the irregularity of the impressions and the

fact that some jars show a vertical warp impression on the interior of the jar, indicate that a small woven mat was used in malleating the clay. Occasionally these impressions are made in imitation of the woven fabric by the use of a cord-wrapped dowel. This ware has been called Crab Orchard Fabric Marked.

The most common pottery shape in this focus is a long, conoidal jar with a slightly constricted neck and a flattened base. This flattened base is significant in that it appears to demonstrate a cultural relationship with the flat-based fabric-marked jars found at the Ledbetter Site in west Tennessee⁵ and with flat based jars from Adena Sites.⁶ The earlier flat bases are hardly functional, being only two inches in diameter for jars twenty or more inches in height. Later, the flat bases were increased to an average of six inches in diameter.

The projectile points belonging to the Crab Orchard Focus are predominantly large and broad, with slightly excurvate sides, straight shoulders, and small straight or slightly expanding tangs. Although not common, the most distinctive point for this period is small, with a small shallow notch, often on only one side, a straight parallel sided tang greater than half of the over-all length of the point, terminating in an excurvate base. Flake and core knives, scrapers, and chopping tools are common. A few small ovoid hoes were found, with the characteristic dirt polish on the blades. However, these were probably used to dig the numerous pits rather than in agricultural pursuits. Celts, which were rare, were short

and broad with irregularly tapering polls.

Although the stone artifacts overshadow the bone in numbers, a distinctive bone complex appears in the various components of this focus. This is significant, for due to soil conditions, no bone artifacts were recovered in the Baumer Focus to the south. Sharpened splinter awls of mammal and bird bone, and sharpened antler tines are common. Less common are deer metatarsal awls in which the joint has been utilized as a handle. Two large antler "drifts" or flaking hammers and one drilled handle were found. Although the antler projectile points actually found were rare, their relative frequency in the complex is apparent from the number of discarded antler blanks, which were cut in such a fashion that a tanged tine would be available for use as a projectile point. The four finished points which were found were uniformly long, with rather shallow sockets and triangular tangs. The sockets had been gouged out of the soft interior of the antler with a sharp tool.

As yet there has been no indication of house structure in connection with any of the Carbondale Woodland horizons. However, in the Baumer Focus, square houses were found,⁷ and we may assume that semi-permanent houses were built in Crab Orchard Focus. Burials in the Crab Orchard Focus were of the bundle type, placed in irregular pits. There was evidence of the cremation of two infants in small round fire-pits.

The similarities between the Crab Orchard Focus in the first stage of its development and the Baumer

Focus are quite marked. Surface treatment and vessel shape are alike, although Baumer pottery is predominantly limestone-tempered, whereas Crab Orchard is predominantly quartzite or feldspar. Projectile point types in both foci are similar. In particular one common type with weak shoulder, expanding or parallel-sided tang, and excurvate base demonstrates a link with the Adena of Kentucky.⁸

A second stage of development of the Crab Orchard Focus has been noted in a number of components along the Crab Orchard Creek. This is marked by the intrusion of Hopewell influences in the basic Crab Orchard Focus. Rim sherds of the type classified as Type 3 by Cole and Deuel⁹ appear. Cut and drilled animal jaws and teeth; stone reel-shaped gorgets; round and diagonally notched projectile points; caches of ovate "hornstone" disks and fragments of unworked copper, galena, and mica are found in this level. It is significant to note that Hopewell did not supplant the Crab Orchard Focus, but merely added new elements to the basic culture. Hopewell design techniques were copied in the Crab Orchard ware, and we find cross-hatching and punctating of the rim and channel collars on Crab Orchard Fabric Marked jars. Zoned decoration, trailed and fine line incising, and punctate and dentate stamping are all present.

Recently a conical mound near the Mississippi River east of Carbondale has been found to contain a Hopewell burial. Here, on the Twenhofel Site, an extended burial was found, covered with a blanket of river pearls; two pairs of copper ear

spools; an ovate fluorspar gorget; armlets and wristlets of rectangular shell gorgets, and Illinois Hopewell and Crab Orchard Fabric Marked pottery. A surface survey of the adjacent village site showed a high percentage of Illinois Hopewell sherds and Crab Orchard Fabric Marked sherds.

Two interpretations of this situation can be made. Either a Hopewell group came down the Mississippi from the Illinois River center and settled on the Twenhofel Site, or the burial mound represents the ceremonial aspect of a highly influenced Crab Orchard Woodland group. Either possibility argues for the contemporaneity of Illinois Hopewell and Crab Orchard.

After the influence of Illinois Hopewell had waned, one ceramic trait, apparently introduced by the Hopewell culture, persisted in Crab Orchard pottery. This was the technique of punching a single or double row of holes parallel to the rim from the interior of the jar, producing a row of nodes around the exterior. This appears in Crab Orchard Fabric Marked and a later pottery type tentatively classified as Crab Orchard Cord Marked.

In the stratified Raymond Site, a second Woodland horizon appears in later levels above Crab Orchard material. This has been designated as the Raymond Focus. The similarity of this focus to the Lewis Focus in Massac and Pope counties is striking.¹⁰ Both represent a meager culture with few artifacts, and in the case of the Raymond Focus, a decadence of ceramic technique.

The pottery is crude, with more or less straight sides and round bases.

Occasionally the rim is punched and noded, and often the lip is notched. The vessel walls are much thinner than were those of the Crab Orchard wares, and the paste is harder. The temper appears to be equally a baked clay, or grit, with a considerable amount of sand included in the paste. The Crab Orchard pottery was formed by coiling but the Raymond pottery was made by the paddle and anvil method. The surface in every case was marked with single cords, presumably with a cord-wrapped paddle.

The predominant projectile point in this focus is a long slender point with a straight shoulder and a contracting tang. Knives are crude parallel-sided blades with a straight base. One long bar amulet, or atlatl weight, and three small ovoid celts were found. The bone complex includes only splinter awls and sharpened antler tips. No burials or houses were found which could be related to this focus.

The third Woodland group in the Carbondale area belongs to the Dillinger Focus. This manifestation, post-dating in stratified sites both Crab Orchard and Raymond, shows a strong combination of Middle Mississippi influences with an indigenous Woodland base. The contemporaneity of this focus with central and northern Illinois foci such as Maples Mills, Pere Marquette, and Jersey Bluff has been demonstrated, and the Dillinger Focus has been placed in the Tampico Phase of the Woodland Pattern.¹¹

The pottery here is predominately grit-tempered and secondarily clay-grit tempered, with no sand included in the paste. The surface is cord

marked, with the impressions of tightly twisted cords running vertically to the shoulder. From the shoulder to the round base the cord impressions are checkered. The vessel forms in the Dillinger Cord Marked ware are more varied than the older Woodland forms. A large globular jar with a slightly constricted neck is the predominant shape. However, bowls and "salt pans" are frequent. A fillet is usually applied around the exterior of the rim, and the lip notched or raised to two or four lugs. Occasionally four to eight small nodes are added to the fillet at the lip in widely spaced groups. Two pottery variants are worthy of notice. The first is a small thick-walled conoidal tetrapodal vase, similar to fragments found on the surface of the village site at Cahokia in the Jersey Bluff Focus¹² and at the Pere Marquette Site.¹³ The second is a small very thin-walled jar decorated with thin applied fillets which have been punctated. Other pottery artifacts were small dippers, a grit-tempered pottery trowel, an obtuse angle pipe, pottery disks, and a plummet-like object.

The stone complex also shows the weight of Mississippi influence. Although there are many of the large Woodland projectile points, the predominant form is a small unnotched, or side-notched triangle. Drills are small with expanded straight bases; flake knives are predominantly ovoid, and celts are thin, with parallel sides. Crude stone discoidals are present. In general the stone complex has been reduced in variety, and the bone complex expanded. Although splinter awls are common, the

characteristic awl for the Dillinger Focus is a cut deer metatarsal, the joint serving for a handle. Bone chisels, antler punches, and bone fish hooks are common. Antler projectile points in this focus are significantly different from those found in the Crab Orchard Focus. They are much smaller, with ovate tangs, and the socket has been drilled and reamed, rather than gouged. Bone tallies cut from large bird bones are common. Tubular and flat bone beads are present but rare.

As in the earlier Woodland cultures, round flat-based pits had been dug throughout the village area. The refuse from these pits demonstrated a wide range of fauna, from the field mouse and mole to the wapiti. Occasional burned and cracked human femori indicated a possible cannibalism. Fish appeared to play a greater role in the diet of these people than of the earlier Woodland groups.

Although wattle and daub bricks were frequent in the refuse pits, there was no positive evidence of permanent houses. A survey along the Mississippi bluffs indicated that the dead of this focus were buried in slab box graves along the Mississippi. However, information regarding the burial complex must depend upon further excavation.

The exact position of the Dillinger Focus in regard to Middle Mississippi has not been determined. Ceramic traits and artifacts show a generalized Mississippi influence which cannot be related definitely to either Old Village, Trappist or Spoon River Foci. Recently Maples Mills and Old Village pottery were found in association, underlying a Spoon River component at the Gerren Site

in Fulton County.¹⁴ This would indicate that the Dillinger Focus possibly preceeds the climax of Middle Mississippi development along the river. The Dillinger Focus may have persisted through the relatively short Middle Mississippi period. However, the absence of specialized Trappist or Spoon River traits would seem to make this questionable. Further information is needed on the ceremonial aspects of the focus. This will undoubtedly come from a more complete study of the burial complex along the Mississippi River bluffs.

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