

The Culture Sequence of the Ohio Falls Sites

E. Y. GUERNSEY, Indiana Historical Society

From the time it was first visited by English speaking people, around 1750, it has been customary to refer to the general region round about the falls, or rapids of the Ohio River as the "Falls of the Ohio." It is in this sense that we speak of the "Ohio Falls sites"—connoting a series of important villages, representing several periods of occupation, which overspread an impressively large area upon both sides of the stream opposite the falls, including also four considerable islands which were once attached to the mainland. It should be understood that there are no other falls in the entire course of the Ohio, and that during at least the later phase of occupation of the region by prehistoric peoples passage of this obstruction to navigation was effected by a recourse to one or other of two alternate portages (upon opposite sides of the river), both of which transected an area occupied by Indian villages. Since the Ohio itself comprised one of the major travel routes of Indian peoples, the importance and exigencies of the location may be well imagined.

Taking into account the fact that these villages occupied collectively many hundreds of acres and maintained an aggregate population from first to last of several thousand souls, the Ohio Falls sites may be properly considered as among the largest and most important upon that archaeologically prolific stream. For reasons which will appear, we may also believe that no other similar region has possessed a more intriguing congeries of historical and scientifically interesting association.

During excavation for the Louisville & Portland Canal (1826-30) in situ skeletal and cultural remains of a prehistoric people were observed at various recorded locations at reported depths ranging from twenty to forty feet. Artifacts then recovered and preserved are, so far as we have ascertained, referable to the so-called Indian Knoll culture complex. In Louisville's first city directory, published 1832, reference is made to the discovery of decayed "trunks of cedar trees" within the clays underlying this cultural stratum. In fact, it is now known that great numbers of such trees, which are usually cypress, tupelo or other representatives of a typical swamp flora, have been from time to time revealed throughout a wide area below the falls, as flood waters have dissected the overburden of alluvium. They are the reminders of a spectacular glacial lake, many miles in extent, developed during the Pleistocene epoch by the filling of the Ohio's early channel, the lake eventually degenerating into a vast tree covered marshland.

Although Professor William W. Borden was perhaps the first to recognize this geologic phenomenon, Dr. Charles Butts has quite recently provided a vivid reconstruction of the geologic scene during and following the Pleistocene cataclysm. The deep burial of the ancient villages, referred to, he properly attributes to the deposit thereupon of vast quantities of alluvium incidental to the bodily shifting of the Ohio's

course, some two or three miles northwestward, across the old lake bed to its present channel about the falls.

It may be believed that during an early occupational phase the Ohio Falls villagers were actual lake dwellers, though the presence of lacustrine marl and glacial outwash sands and clays immediately underlying the lowest culture strata upon both sides of the river suggests that the once impressive lake was then greatly diminished in area. It is quite probable, also, that prior to the shifting of the Ohio's channel the early villages upon the Kentucky side were integrated with those upon the present Indiana shore (Clark's Point, Elrod and Newcomb sites) which we have been calling collectively the Clarksville sites. Other geologic involvements, such as the recession of the lake's shoreline to the southwest and the very gradual recession of the rapids in the other direction, are interesting matters unessential to our present purpose. One of the numerous anomalies observed during our investigation of the Clarksville sites respects the discovery within compact shale strata of firmly cemented projectile points, workshop material and even human bones. This was readily explained by a determination that the inclosing shale represented an earlier regularly bedded stratum which had been disintegrated by extreme fluvial action, redeposited, and cemented by iron carbonate.

Aside from these very involved geologic phenomena, the Ohio Falls region provides the locale of numerous traditions, by no means local in origin or importance, which have a bearing upon our present subject. For example, the earlier historians believed that the Falls of the Ohio was the southernmost point reached by La Salle in his alleged discovery and first navigation of the stream (1669-70). Among the major objections to an acceptance of the fragmentary and disputed supporting evidence, upon which French claims to the Ohio Valley were mainly based, has been the belief that the discovery accounts described the falls region with utter disregard of its actual physiography. The geological evidence amply proves, however, that the two questioned accounts describe the local landscape as it must have appeared circa 1670 so accurately as to suggest they were provided by an eye witness. Even so, it is not impossible that the information could have come from Seneca informants, the Iroquois having been entirely familiar with the region. In fact, there are traditions of Iroquoian origin referring to a "silver lake" at the falls whose bottom was "shining and white." In any case, an acceptance of the discovery tenet would be archaeologically important only insofar as it would suggest there were no Indian villages in this quarter at the time of La Salle's alleged visit, and that there were such somewhere to the south as one followed the Indiana highlands.

A second tradition, having many variants, makes the Falls of the Ohio the locale of the extinction of a resident white (or Welsh) people by a superior force of Indians of normal pigmentation. Dr. Henrico McMurtrie, writing in 1919, devotes several pages of his "Louisville and Its Environs" to the support of this tradition, citing as evidence the presence of many hundreds of human skeletons, at Clarksville (Elrod site) and upon Sand Island, these presumably representing the

unburied remains of the victors and vanquished. In his "North American Indians," Catlin has included a map showing a theoretical migration route of the Mandan from the Gulf, along or upon the Mississippi and Ohio, to a terminus in the vicinity of the falls, where "three ancient works" are figured.

It is not surprising that Webb and Funkhouser, in their "Ancient Life in Kentucky," have discussed this topic at considerable length, stating that: "It is difficult to refrain from drawing conclusions which would tend to support the Welsh Theory," and closing with the query: "Could it be possible that the Welsh really were among the earliest known inhabitants of Kentucky, and that they were the ones we have been calling the 'Stone Grave People?'"

A third tradition, this especially important because somewhat supported by historical evidence, makes the falls region the early home of the Siouan Osage people. That the tradition was held by the Osage themselves is reported by Featherstonhaugh. The narrative of Pere Anastasius Douay (circa 1687) includes the Quapaw with the Osage as earlier joint residents of the lower Ohio region. Pere Jacques Gravier (1700) places the Dhegiha-speaking Sioux in the same general territory. Upon the basis of these and numerous other references, Swanton has recently shown the Osage as probable residents of the Ohio Falls region, concluding also that another Siouan tribe, the Ofo, were responsible for the important Fort Ancient site at Madisonville, Ohio. However, the same writer suggests a joint occupation of the lower Ohio, about 1700, by the Shawnee and Siouan Mosopelea—which last he believes are to be identified as Ofo. As possible earlier residents of the region in general, present evidence suggests an inclusion of the Yuchi (whose language Swanton considers closer to the Muskogean-Siouan than any others), and perhaps of the Kaskinampo (who were Muskogean).

In his report to the Indiana Geological Survey for 1873, Borden provided the first published account of the Clarksville sites of scientific value. He had visited the locality many times, had collected and studied surface material, and had made such superficial excavations as were typical of the period. Having accompanied him upon subsequent visits, now forty-odd years ago, it is possible for us to vouch for the general accuracy of his statements. But we found it necessary, upon our recent return to the sites much earlier visited, to admit that there was very little surface evidence remaining to suggest a necessity for excavation.

Borden recognized at Clarksville, or thought he did, "graves containing skeletons of prehistoric times and of a more recent period." He described, in fact, cultural traits and material representing two distinct occupations, both apparently prehistoric, the earlier of which may be easily recognized as pertaining to the Indian Knoll complex. Fifty years ago, however, it was possible to locate with precision the remains of transitory camps of the Shawnee—who were occupants of record of the falls region immediately preceding the period of first white settlement.

As described by Borden, burials at the Elrod site were customarily "enclosed by pieces of slate set on edge, and rather in a sitting posture."

Some of the pottery, he observed, "was marked as if moulded in a plaited basket; some had ears [lugs] that probably served for the attachment of a bail. One piece probably represented an owl, and was evidently used for drinking purposes." Objects of copper were rare, but occasionally found. It is obvious that these surface burials and artifacts have no possible connection with other material he elsewhere describes. In short, he here referred to a superficial culture stratum which has since disappeared, except for a few remnants observed during our own survey. In fact, only three of the roughly elliptical "slate graves" Borden described were observed among some two hundred burials of very different type studied during our survey.

From a study of remnants of this last prehistoric culture stratum, coupled with a careful examination of material collected from the sites half a century ago, it is possible to reconstruct the associated material culture with reasonable accuracy. In addition to these data, however, an investigation of additional sites in the region (Prather, Koons, Willey and Aydelotte sites) enables us to conclude that an identical culture pattern is held by each site, thus providing the additional conclusion that a rather general occupation of a quite large area in Clark and Floyd counties is indicated.

As reconstructed, the culture embraced a brachycephalic people who built small, rectangular house structures, without wattling, which they sometimes afterward burned, erecting thereupon low, elliptical earth mounds. Their dead were interred customarily (either in extended or flexed positions) beneath the prepared clay floors of these structures, accompanied by numerous "grave goods," including objects definitely funerary and others to be classed as ornaments worn by the deceased. In the former class were pottery vessels comprising shell-tempered ware, smoothed and bearing either two or four strapped handles, containing land snails (*Helicidae*) or other articles of food, and water bottles of similar pattern. Sometimes actual bodies of large fish were included. For a reason not understood, large masses of galena, usually flattened by abrasion, were often deposited in the grave. Small bi-concave, perforated discoidals of stone were sometimes carefully placed in apposition to the forehead of the subject. Usually, but not always, the body was covered by a blanket of coarse matting.

Probably to be classed as ornaments were large, circular gorgets of shell (*Busycon*) of marine origin, from which a central disk had been cut; bifurcate bone hairpins similar to those now in use, or others resembling a slender awl; double-pointed awl-like objects of polished bone which were probably thrust through the nasal septum; various objects of copper, including large conventionalized figures of birds, carved in wood in relief and overlaid with copper.

They made and used elbow pipes of stone, these sometimes bearing an encircling ridge at the extremities. But they also possessed fish-effigy and keel shaped pipes similar to those figured from Madisonville, these and other artifacts suggesting, perhaps, a contact with this Fort Ancient center. Small, perforated discoidals are numerous; as are also rectangular gorgets of slate and argillite. The celts are of exceptional fabrication—of erratic material, flint and hematite. The typical grooved

axe is fully grooved, poorly made, usually much worn. The projectile points, largely of blue-gray Wyandotte chert, are mainly of small triangular type, though large notched and stemmed examples are numerous. The chipping is consistently excellent.

The pottery is usually shell tempered, though there are occasional grit tempered vessels which suggest a contact with other people. The characteristic strap handle is often modeled in raised linear patterns, but does not bear incised or stamped decoration. Under-rim decoration includes dentate (or nodal) repeat designs, and incised chevron-repeat or parallel-linear patterns. Small effigy heads are sometimes attached to the rims of flat vessels and there are occasional effigy bottles. Salt pan vessels with fabric impressions were apparently numerous.

In general, the culture is southern in character, displaying many traits exhibited by the Gordon-Fewkes pattern of Myer, for which that writer suggests a possible Madisonville influence. Objects of bone are so rare that one concludes this material was little used. Such artifacts are apparently confined to metapodial "beamers," a few fish hooks, large ulnae awls and smaller ones poorly worked, and occasional objects of ornament.

Underlying this culture stratum at the Clark's Point and Elrod sites, at a customary maximum depth of two feet, a thin band of hardened sand-clay (2 to 5 inches) is usually apparent. It represents, no doubt, sediment deposited during a time of complete inundation of the general area, at which time it could not have been occupied. Immediately underlying this horizon are the midden deposits, two to four feet in depth, accumulated during a somewhat intensive occupation by a group displaying a culture complex considerably inferior to that just described. These people were the principal and earliest occupants, also, of the nearby Newcomb site.

Burials, so far as observed, were invariably flexed—usually upon the right side, within shallow graves slightly beneath the village floor level. Although grave goods were sparse, it was customary to include with burials a specialized type of funerary pot of smooth, shell-tempered ware, with an outwardly curved rim to which were attached two looped handles. The typical vessel is small (one-half gallon capacity), the body ovoid in contour. With male subjects an elbow pipe, either of clay or polished stone, was sometimes included. The pipe is unusual in that the distal face of the bowl was customarily supplied with a modeled or incised human effigy face. Objects of ornament included comprised a few beads, usually of bone, cylindrical in shape. Most unusual is the fact that small, ovoid or rectangular pillow-like head supports of worked slate were customarily included with burials. Since this represents an important and somewhat unique trait, a further study of the custom may be expected to prove of diagnostic value. A somewhat similar practice has been reported by Hooten, from Madisonville, and from certain Copena sites, by other observers.

Of particular interest is the fact that the people of this complex were skillful and prolific potters, but were careless or inept in fabri-

ating objects of stone. A careful study of thousands of sherds discloses that almost every form and size of Middle Mississippi pottery was duplicated, including a wide range of bottle patterns. In general, the pottery is hard, of fine texture, carefully moulded and smoothed. Very few vessels were decorated, however, though a small percentum displayed simple incised-rim patterns. A small number were malleated by cord wrapped paddles. Handled examples bear either two or four strapped or looped handles. Fabric impressed salt pan ware seems not to have pertained to the culture.

Although erratic material for the larger stone implements was locally abundant, there were no celts, grooved axes or such worked implements; instead, these erratic boulders were used in their natural form to serve various purposes. Projectile points, though numerous, were indifferently chipped. It is probable that antler projectile points were mainly used. In the manufacture of bone artifacts they were quite proficient, though they left very few objects of this material. Not a single fish hook was found in this stratum. Perforated teeth of bear were sometimes incised in crude design. Strangely enough, an exceptionally unique bodkin-like object of polished bone, bearing decorative patterns comprising a series of parallel incised lines to form most artistic geometric designs, appear at the Clarksville sites in association with the culture we are describing. Identical objects, so similar as to suggest they were made by the same craftsman, have been found by Miller at his McCain site, Dubois County, Indiana, which site has produced no pottery and no pipes. Upon this unusual circumstance we have no comment to offer save that the highly specialized artifact in question was unquestionably made by one and the same people, though the sites at which they have been observed are quite distantly separated. It is possible that the culture complex we have just described, and that observed by Miller upon East White River, represent later and diversely influenced phases of an earlier and purer Indian Knoll pattern.

At both the Clark's Point and Elrod sites, the typical shell-lensed deposits of the Indian Knoll culture pattern appear immediately beneath the stratum we have just described. There is no intervening sod line or other apparent separation of the two deposits, though a close examination of the vertical profiles during excavation usually revealed a more or less culturally sterile interruption, at the plane of contact, in the otherwise homogeneous face. The average depth at which burials were observed was around four feet, though a few were observed at a maximum depth of eight feet. Wherever found, there was no apparent difference in modes of burial or in the character of the associated culture material.

Since the material culture of this complex has been often described, we shall confine our remarks largely to a discussion of the differences which obtain between the type site of Indian Knoll and the considerably larger sites at Ohio Falls. Being assured that the latter sites originally embraced an area comprising several hundred acres, within which there were many hundreds of burials, it is safe to assume that the occupation of these people at this location represented, so far as we now know, their

largest and longest concentration in a single integrated group. We believe also that the Ohio Falls sites comprised the early tribal center of this early group, and that it was here that their culture pattern was least influenced by alien contact.

While these two principal sites possess more traits in common than any of the others, perhaps, they display marked differences. Burials at Ohio Falls were usually flexed (not always so), but none were within round graves as at Indian Knoll. There was at Ohio Falls no copper, no pipes, no pottery. Asphaltum was not used, there were no artifacts of marine shell, and stemmed or notched projectile points were extremely rare, the stemless blades and spear heads typical of the Alabama sites being mainly used, these capably chipped from local cherts. Stone work in general was much superior to that of Indian Knoll. The axe was three-quarter grooved, expertly made, often polished. The cylindrical pestles were symmetrical and carefully finished, their tapered ends unfractured. The barrel shaped lignite beads, common to both sites, were larger, better finished and much more numerous than those from the Kentucky site.

The bone work of Ohio Falls is also exceptional. Fish hooks of many sizes and of two distinct forms were abundant, and were often included with burials. The Ohio Falls antler hook, always of one pattern, is curved and delicately tapered at the distal extremity, the hook or barb, carefully beveled, showing no sign of fracture. At Ohio Falls, but apparently not at Indian Knoll, slender antler points, smoothed or polished, were often colored by red pigment.

Stone bannerstones of customary Indian Knoll design were abundant at Ohio Falls, and were observed in all stages of fabrication; however, there were none of the winged type. They were often included with burials, sometimes accompanied by antler hooks, but most often without them. Often two or more were deposited together with a single burial. That they were often ceremonially broken is certain, but this was also true (really customary) in respect to the long cylindrical pestle.

Since the type site at Indian Knoll was first studied by Moore, additional sites of this culture pattern have been investigated by Fowke, Webb, the writer and others. It is generally held that the culture pattern, in its early or typical manifestation, suggests a very early people—possibly one of the first groups to occupy the region east of Mississippi River. The observance of typical Indian Knoll bannerstones associated with culture material they believed Algonquian, in certain so-called "ash caves," in western Kentucky, led Funkhouser and Webb to suspect that the Shawnee were the early occupants of these caverns, and that they were followed by a pottery making people who were probably Cherokee. More recently, Webb has advanced the theory that the bannerstones and antler hooks often found in association with Indian Knoll burials comprised weights and distal ends of the spear thrower, or atlatl, such as was used by Basket Maker II people of the Southwest. In our own opinion, it seems logical to suspect that the people of this complex were ancestral to some one or other of our historically

known groups—the identity of which may be determined when our evidence is more nearly complete.

At both Ohio Falls sites at which the Indian Knoll complex has been observed, a distinct sod line appears at the base of the accompanying culture deposit. Beneath this sod line are midden deposits of quite different character, comprising dark and richly organic soil within which moist and decaying shells (Pleurocera, Lithasia, etc.) appear so numerous as to form a homogeneous mass to the depth of two or three feet, where sterile glacial clays appear. Though this deposit must be attributed to human agency, no human remains or artifacts were found anywhere within it. Furthermore, bones of the larger mammals, such as are usually found abundantly in such middens, were extremely rare. On the other hand, those of fish and waterfowl were most abundant. It is of course possible that somewhere within an unexplored portion of this difficultly accessible deposit human remains might have been found.

During our excavation of Block 1, Elrod site, a group of five isolated burials was found within a similar deposit, but at a lesser depth. The flexed skeletons, very poorly preserved and with portions of the crania absent, had been deposited in shallow elliptical graves. In each grave very large rounded boulders had been placed, along with masses of red ochre, more or less decomposed. There were no grave goods of any sort, and there were no sherds or cultural objects in the inclosing midden. Above this group of burials a layer of fragmentary, fissile limestone had been strewn to form a slightly arched mound. More precisely, as a subsequent careful examination revealed, only a quadrant of the actual mound was excavated.

In any discussion referring to early man in America, the problem of the so-called Folsom complex is now included. To this people, whose unique fluted projectile points have been found at numerous sites in the West associated with the bones of Pleistocene mammals, Roberts has recently ascribed an approximate age of 15,000 years. That there was an eastward migration of this group to the Mississippi is now believed, and Folsom-like points have been reported in increasing number from a wide area in eastern United States.

At certain non-pottery surface sites near Ohio Falls such points have been found in considerable number, including examples (patinated and rechipped) of a material resembling our Wyandotte chert, sugar quartz (possibly from the Carolinas) and other suitable lithics whose source is unknown. Similar points have been recovered, indeed, from the islands adjacent to the falls. That their occurrence in Indiana is perhaps only indirectly significant is suggested by our own recent observation of several such points at the Guthrie Creek site, in Lawrence County, in association with pottery and other material which is probably Fort Ancient.

Despite the fact that we must ascribe a considerable age to the earliest cultural remains appearing at the Ohio Falls sites, it is probable that their chronological placement should be reckoned in centuries, rather than in thousands of years.