

Indians at Detroit in 1707 (See Michigan Pioneer and Historical Collections, Vol. 33, p. 349): "Monsieur de la Mothe, with three sticks of porcelain, speaks to the Outtavois; this porcelain represents the black robe (a Jesuit), as if it were present at the council. . . ." That the term "porcelain" did not necessarily refer to "shell" in the French of New France is indicated by the use of both terms in an inventory of Cadillac's property at Detroit in 1711, in which there is an item of "1 white shell with two divisions of blue porcelain" (Michigan Pioneer and Historical Collections, Vol. 33, p. 524. The original is not given). Note here that the porcelain is described as blue, which is the color of the two specimens under discussion.

All efforts to find some explanation for these two objects other than that suggested in the above quotations has failed. Two visits to the village of Garettsville failed to discover anyone who knew exactly where they were found, and there is no record of any local pioneer pottery manufactories where such things might have been made. The writer saw a fragment of another specimen in the Paine collection at Springfield, Illinois, a couple of years ago. It was identical with those herein described except for the short diameter of the cross section: about one-quarter of an inch less. It was marked "Ohio," and there is no mention of it in the Paine catalogue. C. B. Moore (*Certain Aboriginal Remains of the Northwest Florida Coast*, p. 241) describes an object somewhat similar to these from Ohio, taken from a mound in Florida. It was eleven inches long and two and one-half inches in diameter, with a rounded enlargement at both ends. The material was impure kaolin. It was not fluted or grooved, but showed ". . . traces of decoration in low relief."

The following authorities have been notified of the details concerning these porcelain objects from Ohio: M. Georges Haumont, Manufacture National de Sevres, France; Dr. Georges Henri Ridiere, Museum National D'Histoire Naturelle, Musee D'Ethnographie, Palais du Trocadero, Paris, France; M. Andre Joubin, Rue Berryer 11, Paris (VIII*), France; Mr. R. W. Hemphill, Colonial Sign and Insulator Co., Akron, Ohio; and Mr. F. W. Butler, Akron Porcelain Co., Akron, Ohio. The Manufacture National de Sevres was founded in 1738, but M. Haumont knows of no records of the manufacture of porcelain objects for use in New France. Archaeologists in the northeastern part of the United States, and other students who might have information on the subject, have also been notified.

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UNANSWERED QUESTIONS ON LUDLOW CAVE

Ludlow Cave is in the extreme northwestern corner of South Dakota, far outside the hitherto recorded range of northern Plains ceramic horizons. In 1931, through the courtesy of the excavator, Mr. W. H. Over, I had the oppor-

tunity of examining materials from two superimposed cultural levels at this site. I was particularly impressed by the fact that, below the upper level marked by protohistoric artifacts, there occurred a definite horizon containing potsherds, basketry, shell gorgets, shell and bone beads, and small distinctively notched arrow points. All these artifact types, save the basketry which has not been recovered from similar sites, seemed closely comparable to those from the Upper Republican aspect in Nebraska. The resemblance between the lower level in the Ludlow Cave and the top (ceramic) horizon at Signal Butte (Signal Butte III) was particularly close. It was agreed that the publication of the Ludlow Cave findings would be highly desirable.

In a recent number of this journal (Vol. 2, No. 2, pp. 126-129) Mr. Over has discussed and illustrated certain aspects of his important excavation. Unfortunately, none of the artifacts from the protohistoric horizon are illustrated or discussed in detail. Regarding the lower horizon, such important artifact types as pipes and potsherds are merely mentioned. Potsherds are at present the most valuable single aid to cultural classification. The statement that, "Several potsherds, tempered with burned crushed granite, were not comparable with either Arikara or Mandan pottery," is tantalizing. It was my impression that these sherds were definitely significant in relating the lower Ludlow Cave horizons with the prehistoric ceramic horizons of Nebraska. Perhaps I was wrong, but until these important sherds are fully illustrated and described there is no way of settling this question.

Concerning the significance of the two superimposed layers of Ludlow Cave, Mr. Over lays great emphasis on the small arrowpoints from the lower level. According to him they agree in type with certain points from Montana which Mr. Barnum Brown believes may have been made by the Shoshoni Indians. Mr. Over, therefore, concludes that the lower level points at Ludlow Cave were also made by these Indians or by a closely related tribe. Whether the same people made the associated pottery, shell and bone work, basketry, and the like is not discussed. The small, delicately notched arrowpoint is characteristic of the late prehistoric horizons in the central Plains; the type is equally characteristic of the later Pueblo periods, and is widespread in the High Plains, the Great Basin and the Pacific Coast. It is undoubtedly a relatively late prehistoric diagnostic but seems too widespread to have specific tribal significance. On the other hand, the definite association of this type of point with ceramic remains, shell beads, pendants, and bone and stone artifacts, all strongly suggestive of the late prehistoric ceramic cultures in Nebraska, cannot be ignored.

It was my own opinion that the artifact complex from the lower level at the Ludlow Cave represented an earlier, more widespread occupation of this western region by semi-sedentary peoples, ancestral to the Arikara, and contemporaneous with the Upper Republican and Nebraska aspects in Nebraska. The material illustrated by Mr. Over confirms my earlier impression (compare Over, 1936, pls. 10, 11, with Strong, *An Introduction to Nebraska Archeology*, Smithsonian Misc. Collects., Vol. 93, No. 10, pls. 7, 9, 11, 24, and pp. 291, 297).

However, until the lower level sherds, pipes, and other materials are adequately described, the full significance of this important excavation must still remain in doubt.

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STOPPERS OR MODELING TOOLS

In *AMERICAN ANTIQUITY*, Vol. 2, p. 137, Mr. T. J. Dillingham asks for opinions as to use of the toadstool-shaped pottery implements described and pictured by W. H. Holmes in his work on *Aboriginal Pottery of Eastern United States*.¹⁵³

Identical toadstool-shaped objects of pottery are used by the Cocopa, Diegueño, and Kiliwa Indians of Lower California as "anvils" when "paddling" the plastic walls of pottery vessels in the course of manufacture. Potters of Oudh and the Northwest Provinces of India use similarly shaped pottery anvils,¹⁵⁴ as do also the Ao Naga of Assam.¹⁵⁵

In view of these modern examples of the use of toadstool-shaped pottery objects, it seems likely that those from Mississippi Valley sites were similarly used, as Dr. Holmes suggested.

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ORGANIZED AMATEUR STUDENTS

In an article published a few months ago in *AMERICAN ANTIQUITY*, attention was called to the large numbers of amateur archaeologists who, because of a lack of organization or knowledge, were engaged in a wholesale destruction of archaeological material in the New England area. The article also suggested a plan for standardizing the mapping of sites and numbering the implements recovered from them. Since that time great progress has been made toward organizing these collectors and in standardizing field methods and cataloging in this area. Apparently the purpose of my contentions is about to be justified by definite action in the right direction.

The amateur archaeologists at Attleboro and vicinity have formed an association which they have called "The Wampanoag Archaeological Society." The objects of this society are best stated by quoting from their By-Laws: "to foster and promote the study of archaeology in this area and the collection and preservation of Indian artifacts for historical and archaeological purposes."

¹⁵³ B A E-R 20: 35-36, 1903.

¹⁵⁴ H. R. C. Dobbs, *The Pottery and Glass Industries of the North-West Provinces and Oudh*, *Jour. Indian Art*, 7: 4, pl. 58, 1897.

¹⁵⁵ J. P. Mills, *The Ao Nagas* (London, Macmillan and Co., Ltd.), 95, 1926.