However, granting that further finds of a similar nature should firmly establish the pre-Columbian use of shell trumpets in parts of the mound-building territory, it seems to me that we will then have solved one question only to raise another more important one. Supposing that the use of such trumpets existed in the period antedating by a reasonably short time the advent of the early New England settlers, then how is it we do not seem to be able to find the slightest reference to such a use in the myths, folklore and legends of the tribes inhabiting this area when discovered? And, if no reference does exist, would it not be reasonable to suppose that when such shell trumpets are found in this mound territory, it might be an indication of a considerable age for a site, or even a different culture?²⁰⁷

To my mind, the line of research opened up by this question of shell trumpets in this particular territory offers a most intriguing problem. To attempt to cover it properly necessitates the coöperation of the many readers of AMERI-CAN ANTIQUITY, particularly those specializing in the archaeology of this large area. Their specialized knowledge, now that the matter has been called to their attention, should lead to the ultimate solution of the question.

What is first required is an examination of those conch shells stored in institutions, such as Mrs. Robertson was so prompt in undertaking. By plotting such finds on our maps we would soon be able to note graphically which groups of mounds had such trumpets, and coördinate this data with the finds of other worked marine shells, such as *Busycon perversum* containers, Olivella and Marginella beads, *Oliva sayana* pendants, and so forth. With such information as a basis, it should be possible to establish tentative trade routes, separate the various cultures, and possibly, in time, lay the foundation for the beginning of a chronological outline. Specimens of marine shells from each section would, perhaps, permit me, by a study of their relative degree of disintegration, to work out such a tentative chart.

Will our readers now assist in this project? From the spontaneous spirit of coöperation shown in the archeo- and ethno-conchology research, I believe that they will do so.

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CULTURE IDENTITY OF THE OZARK "TOP LAYER"

In Volume 26, No. 1, pp. 1–21, of the American Anthropologist, n.s., Mr. M. R. Harrington briefly described the salient features of the remains found in

²⁰⁷ A. L. Kroeber has already shown us how it would appear that at Chincha, Peru, one culture (the earlier) apparently ignored, or paid but slight attention to the *Spondylus princeps*, whereas the following one (the Inca) quite evidently held this shell in the highest religious esteem, the latter confirmed historically by Spanish chroniclers at the period of the conquest of Peru. Other similar examples from various parts of the world can be found in my files.

the Ozark region of northwestern Arkansas and southwestern Missouri. Two separate archaeological cultures are distinguished. Harrington called the earliest remains the Ozark Bluff-Dwellers culture, and the group of traits that was occasionally found on top of some of the sites he called the "Top-Layer" culture. Upon the conclusion of the excavations in the Ozark region Mr. Harrington visited an Iowa Indian settlement in northeastern Kansas where he came into contact with a non-professional archaeologist, Mr. Edward Park. Upon examination of Mr. Park's collection Harrington noticed that the remains of a culture said to be the latest in that region, "was characterized by a series of objects identical with those the writer (Harrington) had found to be typical of the 'top-layer culture' in the Ozark rockshelters."

The possibility that the latest culture, as identified by Park, might be Kansa remains, and the "Top-Layer" Osage, is set forth in the Anthropologist article. W. D. Strong in his *Introduction to Nebraska Archaeology*, on page 284 refers to Harrington's paper and mentions that the Nebraska culture is also found in northeast Kansas. There is a possibility, says Strong, that the "latest culture" of Park may be a development out of the Nebraska culture, and also that it might be Oneota. The list of traits given by Harrington for the "Top-Layer" is as follows: small, often triangular flint arrowpoints; double-pointed, sharply beveled knives; duck-bill or spoon-shape scrapers; the celt; flat, circular hammer-grinders; mortars with a cup-shape cavity; small L-shape catlinite pipes; grooved sandstone shaft smoothers; bone fishhooks; corn; shelltempered pottery of globular form, flaring rim, angular incised decoration, and flat, strap-like handles. This complex of traits certainly identifies the "Top-Layer" as a division of the Mississippi Pattern. Unfortunately, Harrington was unable to illustrate these finds in this short report.

The latest work by Hill and Wedel, Vol. XVII, No. 1, Nebraska History Magazine, identifies the "latest culture" of Park with the Oneota of Iowa. Therefore, on the basis of the list of traits given by Harrington and his statement regarding its resemblance to the "latest culture" in northeastern Kansas, I should like to point out the probability that Harrington's "Top-Layer" will eventually be classified in the Oneota aspect of the Upper Mississippi phase.

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Reversed Stratigraphy

In a recent publication, George C. Vaillant states: "Archaeological dating, in the absence of specific written testimony, depends on stratigraphy, the study of sequence in the ground of layers of human culture. Especially favorable for such research are rubbish heaps, since the objects at the base of an