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SOME PROBLEMS CONCERNING THE ANTIQUITY OF MAN IN THE NEW WORLD

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The continued discussion of the Frederick, Oklahoma, finds makes pertinent again some remarks concerning one of the most persistent problems of American anthropology—the antiquity of man in the New World.

Most anthropologists believe that man originated in the Old World, and that, whatever the date of his arrival in the New World, his culture was of a type analogous to the very recent periods of the Paleolithic (Old Stone) Age in Europe. The absence of fossil or living representatives of the higher primates bears out the first statement; what evidence we have in the form of cultural remains testifies to the second.

But regardless of our answer to the general question concerning the antiquity of man in our hemisphere, we must remember that every find alleged to represent ancient types of man constitutes a specific problem. We must not decide particular cases by the application of general conclusions. I mean, to be more specific, that while man may have a great antiquity in America, this does not necessarily mean that the Frederick finds are a hundred thousand years old or thereabouts.

The American situation is similiar to that which exists in Europe concerning the "Eolithic question" and the "problem of Tertiary Man," which archeologists and paleontologists have been discussing for some decades. There, we find authorities like Boule and others taking the position that while Tertiary Man may have existed, no certain evidence of the fact has as yet been brought forth.

The problem at Frederick, then, is not unique in its perplexity. Important finds of recent years alleged to represent Pleistocene types of man in America have been reported from Colorado, Texas; Folsom, New Mexico; and Melbourne and Vero, Florida. These are not all such finds that have been brought to the attention of anthropologists, paleontologists, and geologists. Many of our scientists and perhaps all of our amateur diggers, seem to believe that their Americanism is not complete unless

they can prove that man iriginated on this continent or, at least, that he has been here for scores of thousands of years. Some, impressed by the force of arguments from general principles, have been extremely uncritical in their handling of evidence. What enthusiasts will do is indicated by the affair of th late Hesperopithecus haroldcookii, now declared by Professor Gregory to be an extinct relative of the peccary. Mr. Cook, one of the protagonists of the authentic antiquity of the Frederick material, has even asserted that Pliocene man lived in Nebraska.

How reasonable are the claims made in favor of the existence of even Pleistocene man in the New World?

Contrast the evidence from America with the definitely stratified, superimposed beds, rich in animal, human, and cultural remains found in Europe during the last 75 years. Hrdlicka has thus summarized our situation.

"Not a single skull or skeleton of a lower or other type than that of the Indian. Not one cave with old art on its walls;; not one to this day has shown the presence of pre-Indian habititation. Not a single refuse heap or habitation site with ancient bones or implements. Notwithstanding the life works of Putnam, Thomas, Clarence B. Moore, Holmes Feweks, Hough, Moorehead, Mills, and many others, not a scrap of bone or implement that can generally and with full confidence be accepted as geologically ancient. Also not a single discovery by non-anthropologists that has so far stood the test of critipque or that can show more than Indian-like implements, Indian-like pottery, Indian-like skull or bones, or such an association with really old animal remains that could definitely exclude the possibility of chance." Important negative points are the resemblance of the skeletal remains to our present-day Indians, and the lack of artifacts in the habitable caverns of middle United States. Emphasis is placed, also, on the fact, gained from European experience, that isolated finds can not be successfully used.

And what answer has been made to these statements? Apart from the reiteration of old affirmations, merely the piling up of hypothesis upon hypothesis, ignoring all the accepted facts of archeology and anthropology. There are two favorite hypotheses.

- (1) That man has remained unchanged in America since the early Pleistocene. It is hardly conceivable that this could be true, and the Old World evidence is all against it, but many continue to believe it, on the ground chiefly, I suppose, that it cannot be refuted.
- (2) That the art of stone working was perfected much earlier in America than in Europe. Hay has repeatedly stated this, as have others.

^{*}Wissler, C., Sci. Mo., 2:234ff. (1916).

Two such statements may be cited. "Our anthropologists have still more difficulty in accepting the view that early Pleistocene men were able to produce flint weapons as skillfully chipped as those found in late Pleistocene in Europe. They ought to recognize the possibility that in eastern Asia there developed an earlier and more advanced technique and that this made its way into America far sooner than into Europe." J. Wash. Acad. Sci. 19:98 (1929). "Because stone implements appear only in Europe late and are crude it is concluded that the art of working stone must have had a similar development in America. The writer believes that during the first interglacial stage men came from Asia and brought with them the art of skillfully chipping flint." Science 67:443 (1928).

The history of the development of the art of stone working is well known, and if archeology gives us any certainty, it is that finely chipped and polished stone tools are not synchronous with Aftonian deposits. It has not generally been recognized that the presence of metals or metates or mealing slabs is regarded by archeologists as making the Frederick materal of even more recent date. Indeed, arrows are not found in Europe in any of the deposits of the Old Stone Age. Furthermore, it may be mentioned that anthropologists being dialecticians too, have reversed the argument of Hay concerning the contemporaneousness of artifacts and the bones of extinct animals. Boas⁵, and others indicated that the geological position suggests that these forms may have become extinct much later than is usually assumed.

I have deplored the use of the argument from general principles to settle particular cases. As everyone knows, such logic is not confined to those who believe in the existence of man in America in Pleistocene times. What needs to be emphasized is that each case should be judged on its own merits, although not without a recognition of the accepted facts and reasonable rules of evidence. There are, however, anthropologists who have given

Despite dogmatists on both sides, however, progress is being made on this important problem, apart from the growing realization of the need for careful and critical examination of the evidence, without preconceptions or bias.

There is a need for a complete critical examination of the Frederick situation. With the artifacts found representing a recent type of stone work, there must be some explanation, in terms of geological process, for the incongruity which exists between the archeological and the geological evidence. The task, as an anthropologist sees it, belongs principally to the

[&]quot;The early phases of the paleolithic culture as such never entered the American continent at all.... Our first American immigrants seem to have entered the New World somewhere on the Solutrean culture horizon." Nelson, N. C., Anthropologist, 20:438 (1918).

⁶Boas, F., Sci. Mo., 28:11 (1929).

⁸Cf. Goddard, P. E., M. Anthropologist, 29:262-268 (1927).

¹Cf. the statement of Dr. Hrdlicka of the United States National Museum: "There may be discouragement in these repeated failures to obtain satisfactory evidence of man's antiquity in America, but there is in this also a stimulus to renewed patient, careful, scientifically conducted and checked exploration; and 'the end to be attained is worth the energy to be expended.'" (Bulletins, Bureau of American Ethnology, 33:98 (1907)) Dr. Hrdlicka, who is our greatest authority, has claimed repeatedly that nothing would so stimulate American archeology as an authentic discovery here of early man. As he has so often said, all that he is demanding is unequivocal expert evidence. Of Dr. Hrdlicka's works the following may be consulted for discussion of our problem: Skeletal Remains suggesting or attributed to Early Man in North America, Bulletins, Bureau of American Ethnology, No. 33 (1907); Early Man in South America, Ibid., No. 52 (1912); Recent Discoveries attributed to Early Man in America, Ibid., No. 66 (1918); Remarks in a symposium, Amer. Anthropologist, 14:1-12 (1912); The Race and Antiquity of the American Indian, Sci. Am., July, 1926, pp. 7-9.

geologists. That is why I am so glad that Professor Evans is bringing his hypothesis to you for discussion. We await with interest his verdict, and that of his colleagues. But if Professor Evans is not correct, some other geologist will, I hope, give us the solution.

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^aCf. Boas, F., Sci. Mo. BRSVVV (1919); and Holmes, W. H., Bulletins, Bureau of Am. Eshnology, 60:93 (1919).