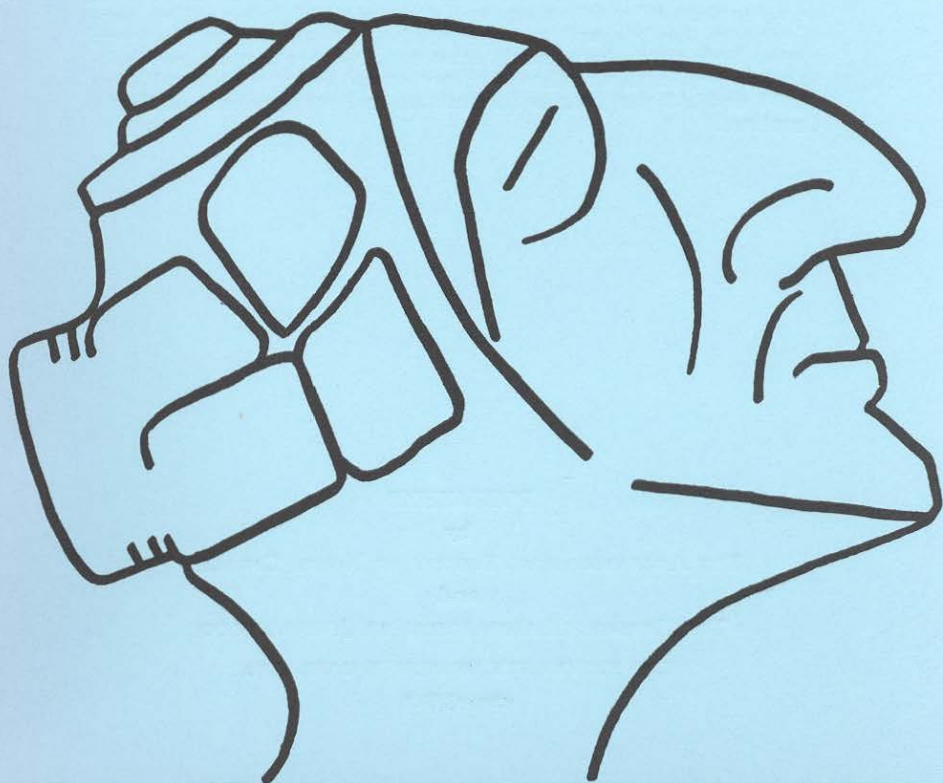


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CONCEPTIONS OF TIME IN EASTERN UNITED STATES ARCHAEOLOGY:

PART II

Aubrey W. Williams, Jr.

EARLY BELIEFS ON MAN IN AMERICA

ORIGIN OF AMERICAN INDIANS

The study of aboriginal man and his culture in the New World has gone through many stages of growth and development. Basic to the study of American Indians has been the attempt to locate their place of origin and to place their various cultural traditions within a general chronology.

It would seem that the first considerations about the American Indians centered in how they could best be used. The Spanish explorers and conquerors used Indians to subjugate other Indians, and after Cortez's astounding conquest of Mexico, required them to pay tribute to the conquerors. Beyond this, the news of a "new" people and continent, unknown to Europeans before Columbus's return to Spain in 1493,¹ posed intellectual problems for many Europeans. One of the first problems created by the discovery of the New World was whether the American Indian was a human being; this was settled in 1509 by a royal edict from King Ferdinand of Spain. In part the edict reads:

The Lord our God created the heaven and earth and one man and one woman. Of all these nations God our Lord gave charge to one man called St. Peter that he should be lord and superior to all the men in the world and that he should be head of the whole human race . . . this man was Pope. One of these pontiffs who succeeded to St. Peter as lord of the world in dignity made donation of these isles and terrafirma to the aforesaid and to their successors.²

The "aforesaid," King Ferdinand, with this edict claimed all the land of the New World, and also proclaimed the Indians in America to be part of the human race. But the questions con-

1. The first people to discover the New World were the ancestors of the Indians "discovered" by Columbus. Also, Lief Ericson's voyage took him to the vicinity of Cape Cod about A.D. 1,000.
2. *Mitra*, 1933, pp. 5-6.

cerning *how* and *when* the Indians got to the New World were still a subject of controversy. In the sixteenth century human chronology was restricted to about 6,000 years. According to the beliefs then held, the Indians could not have come to the New World before 5,000 B.C. Now the newer and more refined time-fixing methods for prehistoric habitation sites leave little doubt that a series of migrations across the Bering Straits occurred during the last stages of the Pleistocene age, and have continued ever since.

Early post-Columbian writers held a variety of opinions regarding the origin of the American Indians. Hernandez de Oviedo, in the *Historia general y natural de los Indias* (1955), discussed the Spanish claims to the New World. He held that the Antilles were the Hesperides, the ancient domain of Spain under King Hesperus, and that St. James and St. Paul had preached the gospel in the New World, thereby justifying the edict of 1509 and its claim that the new lands belonged to the Holy Roman Empire.³

The Spanish Jesuit Father Joseph de Acosta wrote in 1608 a refutation of the common opinions of his day, that the American Indians were the descendents of Plato's Atlantis, and of the theories that the Indians were descended from the ten lost tribes of Israel.⁴

A Dutch scholar, Hugo Grotius, in *De Origine Gentium Americanarum* (1642), first stated the theory that the Indians were Norwegian. He held that the Indians were descended from the Norse who had traveled from Norway to Iceland, on to Greenland, Labrador, Newfoundland and eventually to all parts of North America (except Yucatan).⁵

These and other theories set forth by the writers of the sixteenth century reoccur frequently in literature and in anthropological writings, even up to 1940—for example, the theory that American Indians had no New World ancestors in antiquity, and that the Mound Builders were not the ancestors of the Indians met by the Europeans, but a different, militant, race (Norse, Aztecs, Israelites). Besides such speculations these early writings are important for providing bits of information on the customs and habits of the various tribes in the New World, as well as a

3. *Ibid.*, pp. 15-16.

4. *Ibid.*, p. 16.

5. *Haven*, 1856, p. 13.

record of cultural contacts between the Europeans and the Indians.

The English, Dutch, and French settlers in North America began to push westward from their Atlantic coastal bases during the seventeenth century. These settlers and traders frequently found "Indian relics" and other evidences of aboriginal settlements no longer inhabited. Narratives of the explorations of the land in the West (to the Mississippi River) often contained speculations concerning the origins of the Indians. The speculation of Le Page du Pratz is reminiscent of theories in the sixteenth century noted above. Du Pratz gives a description of the settlements, inhabitants, soil, climate, and crops grown on both sides of the Mississippi River. His description of the Natchez states that they "may justly be supposed to be descended from some Phoenicians or Cartaginians who had been wrecked on the shores of South America."⁶ He also writes that the "Mexicans came originally from China or Japan,"⁷ and arrived in the New World by crossing the Bering Straits. He includes the migrations across the Bering Straits the Tartars, who came after the Japanese and Chinese had reached Mexico, and populated the north-eastern sections of the North American continent.⁸

In 1750, the King and the Universities of Sweden sent Peter Kalm, a professor of Economics at the University of Abo, on a scientific tour of North America. His observations were published in 1772, under the title of *Travels into North America*. This work is full of ethnographic data on the Hurons, Iroquois, Eskimos, and the various tribes in the Quebec area. It also contains some interesting theoretical statements regarding the origin of the American Indians. Kalm observed that "It is not certain whether any other nations possessed *America*, before the present *Indian* inhabitants came into it, or whether any other nations visited this part of the globe, before *Columbus* discovered it. . . . In vain does one seek for well built towns and houses, artificial fortifications, high towers and pillars, and such like, among them, which the old world can shew from the most ancient times."⁹

This statement is somewhat modified a few pages later, when he observed that "in later times there have, however, been found a few marks of antiquity, from which it may be conjec-

6. Du Pratz, 1763, p. 110.

7. *Ibid.*, p. 119.

8. *Ibid.*, p. 120.

9. Kalm, 1772, pp. 121-122.

tured that North America was formerly inhabited by a nation more versed in science and more civilized than that which the Europeans found on their arrival here; and that a great military expedition was undertaken to this continent from those known parts of the world."¹⁰ Kalm was evidently aware of the mounds in the Ohio Valley and was restating the earlier opinions that the builders of the mounds were not the ancestors of the present Indians. He believed he had found evidence sufficient to show that the Indians he observed were descendants of people from northeastern Asia, who had come over the Bering Straits relatively recently. It is interesting that he did not follow the theory of Hugo Grotius, that the American Indians were from Scandinavia.

Americans were also interested in the Indians. While most Americans of the eighteenth and nineteenth centuries simply wanted the Indians out of the way of new settlements, there were exceptions. Thomas Jefferson drafted a system for collecting data on the American Indians under governmental sponsorship that was eventually incorporated into a bureau of ethnographic research in 1846. Jefferson planned for the expedition of Lewis and Clark to the Northwest to include reports on the American Indians they would encounter. His instructions were to ascertain:

their names and numbers; the extent and limits of their possessions; their relations with other tribes or nations; their language, traditions, and monuments; their ordinary occupations in agriculture, fishing, hunting, war, arts and the implements for these; their food, clothing and domestic accommodations; the diseases prevalent among them and the remedies they use; moral and physical circumstances which distinguish them from known tribes; peculiarities in their laws, customs and dispositions; and articles of commerce they may need or furnish and to what extent; and considering the interest which every nation has in extending and strengthening the authority of reason and justice among them as it may better enable those who endeavour to civilize and instruct them to adapt their measures to the existing notions and practices of those on whom they are to operate.¹¹

Jefferson, interested also in the origin of the American Indian, wrote:

Great question has arisen, from whence came those aboriginal inhabitants of America? Discoveries long ago made, were sufficient to show that a passage from Europe to America was always practicable, even to the imperfect navigation of ancient times.

10. *Ibid.*, p. 123.

11. Page IV of Thomas Jefferson's draft quoted in the Memoir of Meriwether Lewis, Cone, 1893, p. 27.

In going from Norway to Iceland, from Iceland to Greenland, from Greenland to Labrador, the first trajet is the widest; and this having been practised from the earliest times of which we have any account of that part of the earth, it is not difficult to suppose that the subsequent trajet may have been sometimes passed. Again, the late discoveries of Captain Cook, coasting from Kamschatka to California, have proved that, if the two continents of Asia and America be separated at all, it is only by a narrow strait. So that from this side also, inhabitants may have passed into America; and the resemblance between the Indians of America and the Eastern inhabitants of Asia would induce us to conjecture that the former are descendants of the latter, or the latter of the former: excepting the Eskimaux, who from the same circumstance of resemblance, and from identity of language, must be derived from the Greenlanders and these probably from some of the northern parts of the old continent. A knowledge of their several languages would be the most certain evidence of their derivation which could be produced.¹²

Jefferson compared the number of languages in the New World with that in the Old World and discussed the time involved in language changes:

But imperfect as is our knowledge of the tongues spoken in America, it suffices to discover the following remarkable fact. Arranging them under the radical one to which they may be palpably traced, and doing the same by those of the red men of Asia, there will be found probably twenty in America, for one in Asia, of those radical languages, so-called because, if they were ever the same, they have lost all resemblance to one another. A separation into dialects may be the work of a few ages only, but for two dialects to recede from one another till they have lost all vestiges of their common origin, must require an immense course of time; perhaps not less than many people give to the age of the earth. A greater number of those radical changes of language having taken place among the red men of America, proves them of greater antiquity than those of Asia.¹³

Thus the American Indian's origin was a subject of speculation from the discovery of the New World to the beginning of the nineteenth century. The Indian was officially declared a member of the human race in 1509; various authors related the Indian to Europe, Israel, China, Japan, and Mongolia. By 1800, it was thought that several "races" of people had inhabited North America, and that the Indians met by the Europeans were of a race different from those who had erected the earth-works found abandoned in the Ohio Valley. After the turn of the nineteenth century investigations and speculations continued; and, as we

12. *Jefferson*, 1787, p. 162.

13. *Ibid.*, p. 165.

shall see, these earlier concepts of the time of migration, the origin, and the routes of the migrating Indians are reflected in the writings of the next period.

ANCIENT MONUMENTS

Americans began moving westward from the coastal settlements along the Atlantic in earnest after 1800. As they moved toward the Mississippi River, single families as well as organized colonists found Indian tribes both hostile and friendly. Earlier relations with various tribes had mainly been in trading. The new push toward the Mississippi placed the pioneers and Indians in direct competition for land. No doubt the settlers felt that the land in these frontier areas belonged to them, via treaties and by law, and that the Indians were legally trespassing when they refused to move from lands granted to Americans as compensation for military services in the Revolutionary War. In addition, these early nineteenth century pioneers often justified extra-legal occupation on the assumption that most of the eastern tribes of Indians had actively assisted the British during the American Revolution, and therefore as traitors had no rights.

As American pioneers moved west they were frequently accompanied by military men, some of whom were given the task of gathering information about new territories for possible future colonization. Expeditions under the direction of a military man were frequently accompanied by geologists, botanists, ornithologists, philologists, and even artists to record what was observed.

The mounds found in Ohio came under the scrutiny of an increasing number of people as the frontier moved westward. One of the first men to publish a description of "ancient fortifications," as they were thought to be, was David Jones, a missionary among the Shawnee and Delaware. In his "Journal of Two visits made to some nations of Indians of the west side of the River Ohio in the years of 1772 and 1773," he related his observations of "the remains of an old fortification, the area of which may be fifteen acres," and claimed "Tis evident to all travellers that this country has been inhabited formerly by a martial race of mankind enjoying the use of iron, for such entrenchments as appear in various places, could not have been made otherwise."¹⁴

The idea that the earthworks found in the Ohio and Mississippi Valleys were ancient fortifications appealed to a great many

14. Jones, 1865, pp. 56-57.

scholars and non-scholars, and one result was a fantastic description of them and their possible use in an article by an anonymous writer published in the *American Magazine* of May, 1792.¹⁵ However, it was generally agreed that the "fortifications" were built by people different from the American Indian of the day. Again the question of origins of the people was raised. Thaddeus M. Harris, a member of the Massachusetts Historical Society, linked the mounds to similar constructions in Asia, and described them as "places of defence erected by Asiatic emigrants."¹⁶ He further stated, "The situation, construction, form and general contents of these Asiatic tumuli, and the American mounds, are so similar that there can be no hesitation in ascribing them to the same people."¹⁷ He also believed the Toltecs migrated to this part of the North American continent after their defeat by the Aztecs. Actually, it seems that Harris was confusing two different types of earthworks, the burial and effigy mounds and the truncated pyramidal temple mounds of a much later date.

Major S. H. Long conducted an expedition in 1819-20 to the Rocky Mountains, and took with him Edwin James, a geologist, who later became an Indian Agent for the United States Government at several outposts during the years 1826 to 1840. James studied and described several graves in the mounds at St. Louis, and stated that "These graves evidently contain the relics of a more modern people than those who erected mounds."¹⁸

The investigative techniques and methods of Caleb Atwater, as well as his interpretations of the Ohio Valley mounds and earthworks, have established him as the first American archaeologist. His work, with accurate chain surveys of the mounds and ancient works at Newark, Mariette, Circleville, Portsmouth, and on the Little Miami River in Ohio, was published in Volume I of the *Transactions of the American Antiquarian Society* in 1820. He stood for the objective treatment of data, field work, and its empirical analysis. Atwater stated that "Our ancient works continue all the way into Mexico, increasing in size, number and grandeur, but preserving the same forms, and appear to have been put to the same uses. The form of our works is round, square, semi-circular, octagonal, etc., agreeing in all these respects with works in Mexico. The first works built by the Mexican

15. *Mitra*, 1933, p. 48.

16. *Harris*, 1805, p. 175.

17. *Ibid.*, p. 159.

18. *James*, 1905, vol. 14, p. 117.

were mostly of earth and not much superior to the common ones in Mississippi."¹⁹

The scientific treatment of the skeletal remains found in the mounds and earthworks led Atwater to conclude that "The skeletons found in our mounds never belonged to a people like our Indians. The latter are a tall, rather slender, strait limbed people; the former were short and thick. They were rarely over five feet high, and few indeed were six. Their foreheads were low, cheek bones rather high; their faces were very short and broad; their eyes were very large; and they had broad chins."²⁰ Atwater also saw a difference in material culture between the Indians of his day and those of the time of the mound building. He claimed that "The ancestors of our North American Indians were mere hunters, while the authors of our tumuli were shepherds and husbandmen."²¹

The antiquity of the people of the mounds was estimated by comparing the floral growth on the mounds to the floral growth in the areas outside the mounds, and by the changes in the levels and courses of streams that bordered the mound areas. Atwater found no difference between the forest on the mounds and that in the area of the "fortifications" and concluded that an immense amount of time had elapsed since they were abandoned. Trees on the mounds were cut and the rings counted to give estimated dates of the antiquity of these man-made works.

Caleb Atwater's views on the origin and time of the ancient men in North America were well stated in 1831:

If Asia was the original birthplace and home of man, and there is nothing which proves very decisively to the contrary, then the ancestors of our Indians emigrated from Asia in the very earliest ages of the world, before they had learned any one art which has since added to the comforts and conveniences of human life. It must have been, too, before men had domesticated the ox, the horse, the hog, the sheep, the goat, or any beast of the field, or fowl of the earth or of the air; before any of the grasses, by culture, had been changed into grains, such as our wheat, rye, oats, millet, or barley."²²

This statement would hold true for the first series of migrations and is a tribute to Atwater, but it would not hold true for the later migrations that have continued up to the present time.

19. *Atwater*, 1820, p. 187.

20. *Ibid.*, pp. 209-210.

21. *Ibid.*, p. 213.

22. *Atwater*, 1850, p. 92.

In general, the archaeologists that followed Atwater accepted the fact that these mounds and their accompanying earth-works were of an immense age; this age, however, did not go beyond the date of the birth of Christ. These archaeologists' arguments that the Mound Builders were a superior and extinct race of people eventually divorced them from ethnologists who found that mounds were built and used by tribes like the Yuchi, Creeks, Chickasaw, Natchez, and Quapaw of Arkansas as late as 1540.

The objective manner and scientific, empirical approach used by Atwater in his study of the Mound Builder culture prompted other studies such as DeWitt Clinton's *Note on New York* and Lapham's *Survey of Wisconsin*, the latter conducted in 1836 with the guidance and financial assistance of the American Antiquarian Society.

In the same year that Atwater published his study J. H. McCulloch published a book entitled *Researches, philosophical and antiquarian concerning the Aboriginal History of America*. In it the author covered the physical features, languages, archaeology, and social organization of the aboriginal people of North and South America, and stated that he found no resemblances between Asiatic people and their culture and the American Indians and theirs; while recognizing that the Indians of America and the inhabitants of northwestern Asia were of the same general racial stock, he concluded that they had separated from each other in a very early time.

McCulloch stated that he was "decidedly of the opinion that they [mounds] are erected by Indian tribes of North America. The more eminent monuments were most probably raised by nations kindred with the Natchez, Taensas, Maubiliens, etc., if not the ancestors of these very people, whose traditions indeed seem to point out some ancient establishments in the western country."²³ He also challenged the generalized concept of the American Indian, particularly in regard to his "copper-color," and stated that the Indian was of various hues between, and including, white and black. It would seem that McCulloch first stated the theory of a "lost continent" in the Pacific Ocean, as he hypothesized that it did exist and cited many men of science, as well as the Old Testament, to prove it. Though McCulloch was a medical doctor and used the "armchair" method of research, S. F. Haven nevertheless maintained that "No more perfect monument of

23. McCulloch, 1829, p. 32.

industry and patient research connected with this subject has been published."²⁴

Alexander W. Bradford also used the "armchair" method of research to compare the language, concepts of astronomy, religion, physical characteristics, and earth mounds of the New World with those in Europe and Asia.²⁵ Bradford rejected the idea of a "lost" continent in the Pacific Ocean, yet saw the migrations of people across the Pacific at some undetermined past time. The migrants first settled in the highlands of Central America, and then spread to other areas in the New World. Bradford states that "the Mexican and Peruvians resemble the cultivated nations of Oriental Asia; and that the barbarous tribes are broken, scattered and degraded remnants of a society originally more enlightened and cultivated."²⁶ The comparative method used by Bradford included attention to facts and a great deal of patient research. He selected certain traits, both general and specific, and compared them with culture traits in Asia and Polynesia. His studies of the diffusion of certain trait complexes to new areas is well substantiated and reveals an understanding of the process of diffusion, however wrongly he judged the time of the diffusion.

The first Smithsonian Institution publication, entitled *Smithsonian Contributions to Knowledge*, appeared in 1848 and is a "landmark" of considerable scientific interest to American archaeology, especially that of the eastern part of the United States. The authors, E. G. Squier and E. H. Davis, studied the mounds of the Mississippi Valley and sought "in the contents, as well as in the form and position of these works, for the secret of their origin and purpose."²⁷ The authors, while hesitant about the origins of the Mound Builders, recognized the homogeneous character of the people, and by a study of superposition illustrated the successive stages of their growth; they also counted tree-rings on a large chestnut tree growing on the wall of the Fort Hill site in Ohio to estimate an antiquity of at least 1000 years.

The above method of counting tree-rings had been used earlier by DeWitt Clinton in 1811,²⁸ who thought that the Canadaiqua earthworks he found had been built about 1,000 years ago, thus were made by neither the Europeans nor contemporary Indians, but by a prehistoric people. There is no doubt that

24. *Haven*, 1856, p. 48.

25. *Bradford*, 1841, pp. 430-31. In *Mitra*, p. 105.

26. *Ibid.*

27. *Squier and Davis*, 1848, p. 119.

28. *Clinton*, 1882.

Squier and Davis had read Clinton's pamphlet²⁹ on western New York State antiquities, as well as a great many other publications on prehistoric man in North America, yet they state,

The facts presented by the earlier of the authorities . . . have been collected by various authors, either in support of a favorite hypothesis, or with a view of conveying to the world some conception of the antiquities of our country. These compilations, however, have proved eminently unsatisfactory, not less from the vague nature of the original accounts, than from the circumstance that they were in most instances mixed up with the crudest speculations and the wildest conjectures. Even when this was not the case, the fact that the original observations were made in a disconnected and casual manner, served still further to confuse the mind of the student and render generalization impossible. It was under an impression of existing deficiencies in these respects,—the paucity of facts, and the loose manner in which most of them had been presented,—that the investigations recorded in this memoir were commenced and prosecuted. At the outset, as indispensable to independent judgement, all preconceived notions were abandoned, and the work of research commenced *de novo*, as if nothing had been known or said concerning the remains to which attention was directed.³⁰

The first conclusion reached by Squier and Davis regarding the antiquity of the mounds in the Mississippi Valley and the people that built them was their contention that all the mounds were part of "a single system, owing its origin to a family of men, moving in the same general direction, acting under common impulses, and influenced by similar causes."³¹ Their second conclusion of far-reaching importance was that "the facts thus far collected point to a connection more or less intimate between the race of the mounds and the semi-civilized nations which formerly had their seats among the sierras of Mexico, upon the plains of Central America and Peru, and who erected the imposing structures. . . ."³² Third, the authors maintained that the Mound Builders were agriculturists, and, fourth, that they existed some 1,000 to 1,200 years ago. Their fifth conclusion was perhaps the most influential in the development of American archaeology, for it emphasized the importance of stratigraphy and superposition in the study of prehistoric sites.³³ All these concepts greatly influenced American archaeology.

Five years after the work of Squier and Davis was published,

29. *Squier and Davis*, 1848, p. xxxii.

30. *Ibid.*, p. xxxiii.

31. *Ibid.*, p. 301.

32. *Ibid.*

33. *Ibid.*, p. 119.

another scholarly piece of archaeological literature dealing with prehistoric America was published by the Smithsonian Institution. The author, S. F. Haven, in his treatise "Archaeology of the United States," discussed and analyzed the guesses, hypotheses, and opinions of practically all the men who had written about the prehistoric times of North America.³⁴ Aside from discussing the mounds and "ancient fortifications" found in North America, Haven discounted almost all the theories of migration to America—especially those involving "biblical" origin, Norsemen, and "lost" continents in the Atlantic and Pacific Oceans.

Instead of "higher" cultural groups migrating to the New World, Haven found "that a common element required by philological theories, whether European or American, respecting the origin of population in this country, is *time*—no less than all the time that history can grant; and while they go back nearly to the most primitive form of human utterance for a matrix in which the American system of speech might have been cast, they demand for the special development of that system, and the peculiar phenomena it exhibits, a protracted form of isolation."³⁵

Haven proposed that "A like duration of separate existence would go far to explain the physical peculiarities and idiosyncrasies of the American race."³⁶ And, as well, "having the element of *time* granted, we may go behind the commencement of Chinese, Japanese, and other forms of Mongolian culture, and imagine the ancestors of our aborigines to have been still mere wanderers, without arts, and with no religious faith save the primitive oriental worship of the Sun."³⁷ Haven did not discount the possibility that there were "waifs from other nations, occasionally cast upon these [American] shores."³⁸ But, he added that there were no planned expeditions from other "higher cultures" that came to America and introduced writing, the numerical positional system of counting, or the zero, as others have suggested. Haven concluded that "The deductions from scientific investigations, philological and physiological, tend to prove that the American races are of great antiquity."³⁹

It is evident that, by 1860, American archaeology had been established as a study with methods and techniques for serious

34. Haven, 1856, pp. 1-141.

35. *Ibid.*, p. 152.

36. *Ibid.*

37. *Ibid.*

38. *Ibid.*

39. *Ibid.*, pp. 158-159.

investigation of prehistoric sites. To be sure, the archaeologists were just beginning to apply the theory of superposition suggested by Thomsen and Worsaae, yet the fact that Squier and Davis sought the meaning of the relics and artifacts from their associations with other evidences of man was a good foundation for a study of prehistory in America.

The conceptions of time with regard to the American Indian are quite varied; with a few exceptions, Indian history is described as of "immense age," "great antiquity," an "immense period of time," etc., thus giving us only a very general idea of its duration. Apparently the scholars cited in the previous pages thought of the total duration of the world in terms of 50,000 to 100,000 years; thus man's appearance was thought to be from 10,000 to 15,000 years ago. After 1860, many discoveries helped state the relative age of the earth and the relative age of man; and eventually techniques were developed that were useful in dating events according to an absolute time-scale prior to historical calendars.

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