The Rage for Antiquity

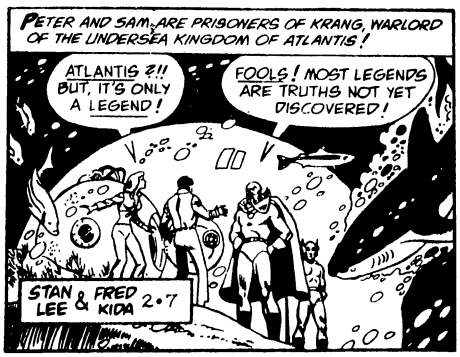
Fantastic Archaeology. The Wild Side of North American Prehistory. STEPHEN WILLIAMS. University of Pennsylvania Press, Philadelphia, 1991. xii, 407 pp., illus. $28.95; paper, $14.95.

"If humans crossed the Bering Strait 12,000 years ago, then who built the 40,000-year-old sites that are scattered from the hills of Pennsylvania to the tip of Chile?" begins an article by Sharon Begley in the Columbus Special Issue of *Newsweek*. James Adovasio of Mercyhurst College, exploring at Meadowcroft, Pennsylvania, reports a snippet from a bark basket and some deer bones "lined with knife marks" that are 19,600 and 15,000 years old respectively. At Old Crow Basin in northwest Canada, archeologists have found broken mammoth bones dated at 25,000 to 40,000 years. The mysterious bones show signs of being broken in the same way, says Begley. Has Jean Auel passed this way? Or has anybody seen the ash-filled hearth ringed with stones and dated by French archeologist Niède Guidon at 47,000 years old?

"Are they at it again?" Stephen Williams, former director of the Peabody Museum of Anthropology at Harvard and author of *Fantastic Archaeology*, might well ask. Such claims add an exciting postscript to Williams's very thorough labor of love debunking in great detail all of the archeological hoaxes that have enchanted generations of people interested in North American prehistory. In this somewhat wordy sequel to the late Robert Wauchope's brief *Lost Tribes and Sunken Continents*, Williams leaves no stone or hoax unscrutinized. He defines Fantastic Archeology as "those alternative views of the past that use data and interpretations that will not stand close scrutiny." In one sense, he is something of a killjoy for archeological enthusiasts and science fiction types, though he does pay homage to the great Chad Oliver and the wondrous Ray Bradbury. In another sense, he is distinctly out of touch with the post-modern deconstructivist thinking of today, where mere empirical evidence seems paltry in the face of inspired intuition and the arcane methods of Michel Foucault—as in *The Archaeology of Knowledge*.

No matter. Williams's book is a wonderful ride through Never-Never Land where Vikings land in western Oklahoma and sail away into the sunsets of the California deserts; where all over the continent are clues by way of ancient Hebrew inscriptions, Egyptian hieroglyphics, Phoenician villages, Ogam inscriptions, Kufic Arabic treatises, golden tablets of Moroni, Norse rune stones and rusted swords, and Barry Fell's sacrificial altars at North Salem, New Hampshire. Paleolithic voyagers stalk his pages on into the Hakluytian recorded voyages of Prince Madoc of Wales in 1170, whose descendants were, according to French explorer Pierre La Vérendrye's observations in 1740 and those of George Catlin in 1832, the blue-eyed blondes that populated the Mandan villages on the Upper Missouri.

Perhaps the Dominican Gregorio Garcia started it all with his *Origen de los Indios del Nuevo Mundo*, two vols., 1607, in which Garcia, noting the contemporary natives' inferiority, "observed" clear evidence that Carthaginians, the Lost Tribes of Israel, East Asians, and refugees from the sunken city of Atlantis had actually populated America. At any rate, Garcia started a long and fascinating literary tradition, including the works of Caleb Atwater, Williams College trained, who found "Hindoo" remains, straight from the banks of the Ganges, in America (no matter, Columbus himself discovered the Ganges in South America); the great panoramist Dr. Montroville Dickeson, who, besides inventing Ohio and Mississippi mounds and being present at the burial of De Soto, found projectile points that he happily called "Bull Dozers," thereby adding a standard term to current American vocabulary; Josiah Priest, the best-selling author of *American Antiquities and Discoveries in the West* (1833), in which Danes, Norwegians, Mongols, Tartars, Egyptians, Romans, Greeks, Hebrews, Phoenicians, Italians, and Africans roamed the continent, strewing it with debris from coins and other "artifacts" to hieroglyphics; and those fantastic fort-like mounds along the Ohio and the Mississippi that were so carefully described and measured by E. G. Squier and Edwin Davis, who prudently drew no conclusions about origins. And then there is the unsinkable Constantine Rafinesque, late of Transylvania College, Kentucky. The brilliant Rafinesque (who anticipated Darwin), inveterate faker that he apparently was, at least had the courage to challenge Josiah Priest on every point and demand a face-to-face debate.



Spiderman as archeologist. [From *Fantastic Archeology*; courtesy of Marvel Entertainment (*The Amazing Spiderman*, 7 February 1985)]

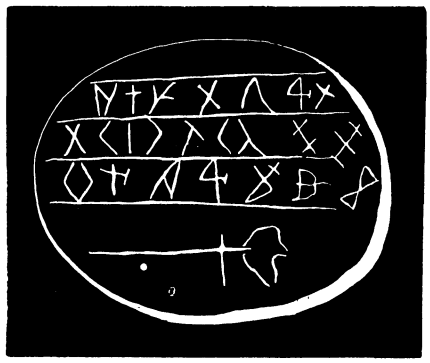
In early 19th-century America there was—and perhaps there still is—a mania for finding those ancient roots that Europe had and we apparently did not. Without roots deep in antiquity we could not, in Lincoln's terms, "bring forth a new nation." Jefferson knew that when he bit on the challenges from the naughty Voltaire and the scornful Abbé De Pauw, who declared North America a continent "but lately risen from the sea, full of miasmal swamps" with very small animals and child-like prepubescent natives with no facial hair and no "amative" drives. Jefferson, of course, sent General Sullivan crashing through the Maine woods in search of the lordly moose, and others to bring back the mammoth bones from Big Bone Lick out West, where he was convinced that mammoths, not buffalo, did roam. As president, Jefferson dug frantically in mounds and collected vocabularies in search of an ancient America. And finally he penned the classic *Notes on the History and Present State of Virginia*. He must have blessed Charles Willson Peale for exhuming *two* "mastodons," one of which he shipped to Europe. Ah, but those early Americans dazzled by the Mound Builders were a gullible lot, as described by Stephen Williams.

The list of the gullible is long in this long book. See Henry Rowe Schoolcraft, discoverer of the source of the Mississippi, taken in by the Grave Creek Stone marking a "Sythian" burial, and the Davenport, Iowa, Academy of Sciences swearing to the authenticity of the mysterious, childlike Davenport calendar stones, while the canny P. T. Barnum dupes thousands with the Cardiff Giant, a hoax first perpetrated by George Hull and the Reverend Jacob Gass. Daniel Brinton of the University of Pennsylvania, America's first academic archeologist, likewise put his stamp of approval on the wily Rafinesque's translation of the Walam Olum, or the creation myth song of the Lenape, or Delaware, Indian ancestors who, starting from Asia, reached the Mississippi just in time to name it.

In Williams's book, too, you can hear all about Mu and Atlantis and Charles Whittlesey and Daniel Loper and even Dylan Thomas, who urged, "Do not go gentle into that

good night," which none of the characters in this book do. Michigan relics brought forth by William H. Scotford provide eyewitness views of the Deluge and the Tower of Babel, the symbolic episteme for most of early American archeology. However, after thoroughly demolishing the Viking Runestone discoveries, Williams does acknowledge, to this reader's relief, that the Vikings at least "were here" at L'Anse aux Meadows, where the evidence is incontrovertible. He does, however, describe in detail just how Harold Gladwin in *Men Out of Asia*, the story of the Polynesian discovery of America, kidded America's leading archeologist of the early 20th century, Alfred Vincent Kidder. Professor Cyclone Covey, an unlikely professor, struts his brief hour across the stage with the specious Tucson crosses; then there is best-selling Barry Fell, the Harvard professor of marine biology, and Professor George F. Carter of Texas A&M, who swear to the archaic authenticity of Mystery Hill, the North Salem archaic amusement park where Native Americans and colonial farmers probably lived, much like those who lived in Calendar II, a "megalithic" subterranean rock chamber in nearby central Vermont where a wooden lintel was recently dated at 200 years old. Fell and Carter too discovered "the Libyans of Zuñi." Fell's books, *America B.C.*, *Saga America*, and *Bronze Age America* (where there was no bronze), have sold well, and he has lectured widely. In fact, Williams's present treatise on the truth will probably never approach the popularity of Fell's works and is no match for the Psychic Archeology in which one sees visions of the past made popular by Frederick Bligh Bond, Stefan Ossowiecki, J. Norman Emerson, Jeffrey Goodman, Stephan Swartz, and the enormously popular Edgar Cayce. Who could match these giants of Fantastic Archeology? Their stories alone overshadow Williams's attempted account of what really happened in the peopling of America that forms the epilogue of this present book. The real drama of those early paleo-Indian peoples with their Folsom points, Clovis kill sites, and Midland Minnies seems prosaic beside the rogues' gallery of hoaxers. Barnum only scraped the surface when he said "there is one born every minute." How could he know how deep within the human psyche the rage for mystery and antiquity boiled?

Williams's book, though nearly exhaustive, is not perfect, however. It leaves out the U.S. Army's Topographical Engineers' discoveries and discussions of Canyon de Chelley, Zuñi, the Three Hopi Mesas, the Pecos ruins, and ancient Chaco Canyon, all done in the 1850s. These important finds raised the question whether the Southwest Indians were the advance guard of the Aztecs or whether these



The Grave Creek Stone, supposedly from a burial mound found in 1819 in what is now West Virginia, shown at approximately actual size. The inscription on the stone was variously deciphered as reading "The Chief of Emigration who reached these places has fixed these statutes forever," "The Grave of one who was assassinated here. May God to avenge him strike his murderer, cutting off the hand of his existence," and "What thou sayest, thou dost impose, thou shinest in thy impetuous clan and rapid chamois." [From *Fantastic Archeology*]

sites were mere steps on the road to Tenochtitlán, as Alexander von Humboldt speculated. Williams also credits John Wesley Powell with being head of the U.S. Geological Survey in 1879, when his friend Clarence King occupied that role until 1881. Also, Powell took no photographer on his first trip down the Colorado in 1869; but later, on his second trip, Jack Hillers, soon to be one of the West's greatest photographers, learned on the job when E. O. Beamon deserted the expedition. Williams also sees Cyrus Thomas and William H. Holmes as "myth-destroyers par excellence." It was Thomas who coined the absurd myth "rain follows the plow" and Holmes who stubbornly held up early man studies for nearly 20 years in perpetuating his "recent man" myth. No, Williams's book is not perfect, but it clearly reflects the fun that he has had teaching generations of Harvard students all about Fantastic Archeology and what to do when they venture forth into the wide, wide world of the "dig."

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Precision Teaching

Physics as a Calling. Discipline and Practice in the Königsberg Seminar for Physics. KATHRYN M. OLESKO. Cornell University Press, Ithaca, NY, 1991. xx, 489 pp., illus. $39.95.

Though much has been written about the shaping of physical theory and experimental method, we know far less about the shaping of physics teachers and their teaching methods. Nor is this neglect surprising, considering how little respect teachers traditionally receive in our society; yet without good science teachers, we would suffer not only a lack of scientists but a complete lack of general scientific literacy. From this perspective, then, it is worth taking a look at the kind of teaching that helped to make 19th-century Germany a leading scientific nation.

The title of Kathryn Olesko's well-researched and informative examination of this relatively neglected subject suggests her intersecting concerns. Olesko emphasizes that physics in those days was not just the profession it increasingly became, but a "calling," to which a student was ideally drawn by inner conviction and natural talents. To pursue such a calling required first of all discipline, which in the case of physics meant careful, systematic training in the observation of natural phenomena, in the controlled, accurate application of scientific instruments, and in the application of quantitative techniques including error analysis. This was the goal of Franz Neumann, director of the Königsberg University Seminar for Physics from its establishment in 1834 to his retirement in 1876. Using extensive primary sources, including Neumann's laboratory exercises, appended to an almost complete set of his annual reports to his superiors in the Prussian educational bureaucracy, Olesko devotes the bulk of the book to elucidating the evolution of Neumann's teaching. Her analysis brings out a seemingly "curious paradox" (p. 303); while Neumann's exercises were nominally designed to teach "theoretical" physics, they mainly focused on the perfection of experimental techniques that could close "the gap between what could be expressed mathematically [in theory] and what was actually realizable . . . under laboratory conditions" (p. 313). Neumann thus ultimately came to have "what might be called a predilection for [reducing] error over [arriving at new] truth" (p. 302), his fanatic pursuit of quantitative precision making him almost paradigmatic of one type of 19th-century physical scientist.

After discipline came practice. Olesko thus devotes her concluding chapter to the "ethos of exactitude" reflected in the subsequent work of Neumann's students, noting the theoretical and experimental weaknesses that in some cases arose when mathematical precision became an end in itself. She also shows how Neumann's methods eventually gave way to others placing less emphasis on error analysis. This discussion will be of particular interest to historians of the physical sciences. Of more general interest is