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Pseudoarchaeology: Archaeology's Long-Lost Cousin?

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PSEUDOARCHAEOLOGY: ARCHAEOLOGY'S LONG-LOST COUSIN?

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Pseudoarchaeology: Archaeology's Long-Lost Cousin?

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Since its emergence as a scientific discipline in the nineteenth century, archaeology has been a privileged occupation. The men who practiced it were socially, educationally, and economically affluent—and often did not study their own history, but the history of people who had been colonized. In modern years, there has been a push to decolonize archaeology and expand the field to include others who were not historically represented in constructing archaeological narratives. This includes women and other minorities, indigenous peoples, and those of varying socio-economic status. Archaeology has come to be seen, not as the privileged study of the advantaged, but the collective history of all peoples (Holtorf 2005). Archaeologists have thus been encouraged to educate and engage in programs of public outreach in order to facilitate a broader understanding of this collective history.

While there have been many strides in making archaeology more inclusive, there is still a tendency for some members of the public to view archaeologists as distant from average people. The historical top-down methodology of archaeological investigations has left a residual legacy. This methodology grants the archaeologist the agency to control the dominant narrative and interpretation of the archaeological record. The distancing of archaeological theory away from the public has created a misunderstanding of everyday people about how scientific work is conducted. While this is not a new phenomenon, nor one limited to archaeology; it is especially prevalent in this discipline and leads everyday people to interpret their exclusion from archaeology as a result of elitism in the field (Williams 1991, 13). This perspective leads to a distrust of academia and leads many members of the public to view pseudoarcheology as appealing for its inclusivity. While most archaeologists realize that archaeology is not simply the process of digging into the ground, but includes the theory and methods that go into interpretation of objects; this is not always apparent for many members of the public. This

invisible theoretical backbone is the very essence of what archaeology is. Pseudoarchaeological theories are dangerous because they undermine and de-value the work of academic archaeologists who invest time and energy into working under scientific methodologies to increase the reliability and credibility of their work.

The aim of this paper is to examine the theories of pseudoarchaeologists and compare them to the cultural-historical explanations of archaeological sites in the late nineteenth century/early twentieth century in an effort to show the relationship between the two theories. It will be my argument that, although clearly different in many ways, archaeology in its early history shared many of the same assumptions that form the basis of pseudoarchaeology. For this paper, I will be using Erich von Däniken's 1968 book *Chariots of the Gods?* to illustrate this comparison. This work can be seen as the epitome of the pseudoarchaeological genre as it was the first one to gain major traction within the general public. Since its release, the book has sold more than 63 million copies (Penguin Random House 2018)—not just in von Däniken's native Switzerland, but all across the world.

Pseudoarchaeology

Definition

Pseudoarchaeologists are often called many things, including 'fringe archaeologists', 'cult archaeologists', 'fantastical archaeologists' or the more cordial 'alternative archaeologists' (Denning 1999, 20). Supporters of fantastical archaeologies hold unconventional beliefs that are often in conflict with the scientifically agreed upon narrative and traditional theories of the past. These beliefs fall somewhere between fantastical to outdated and colonialist. It had been suggested that the difficulty in defining pseudoarchaeology is due to the wide variety of

'alternative' theories (Holtorf 2005, 10) as well as the difficulty of creating a binary or

dichotomous distinction between scientific and non-scientific beliefs when, in reality, they lie on

a spectrum (Denning 1999).

Some authors (Denning 1999, 19) have incorporated beliefs in dowsing, ley lines,

paranormal activity, as well as pseudoscience into the same category of 'fringe archaeology.'

Others, such as Cole (1980, 2) defines this as the use of psychics, ancient astronauts, as well as

dowsing and pyramidology. Holtorf (2005, 11-12) defined 'alternative archaeologies' as versions

of the past advanced by outsiders (non-archaeologists) and dismissed by academic

archaeologists. For this paper, I will accept the definition that Cole (1980) has used, which sees

pseudoarchaeology as based on the use of sensationalism, misuse of logic and evidence,

misunderstanding of the scientific method, and internal contradictions in arguments. I will accept

the definition Denning (1999) has set forth in regards to 'fringe archaeology' as a pseudoscience,

but I will limit the scope of my definition by only including ancient aliens in my definition and

excluding all other 'alternative' theories.

Background

Erich von Däniken was born in Zofingen, Switzerland in 1935. He was raised a strict

Catholic and claims that it was during times of personal introspection in which he questioned the

philosophical tenants of his religion that lead him to some of the conclusions he outlines in

Chariots of the Gods?. After his required schooling, von Däniken apprenticed as a hotelier. By

1966, von Däniken had worked his way up to manager and began working on a manuscript he

called *Erinnerungen an die Zukunft,* or *Memories of the Future* which would be later translated

into English as *Chariots of the Gods?* in 1969 (Story 1976, 1-2). To gather source material for

his manuscript, von Däniken traveled extensively to both North and South America as well as to the Middle East and northern Africa. The expense of travel soon exceeded his income and he was convicted of fraud, embezzlement, and forgery in 1970. He had falsified bookkeeping records and references for credit in order to obtain loans he could not afford. He was sentenced to three and a half years in jail and a 3,000 franc fine. During this time, von Däniken's book became the best-selling book in West Germany. With this windfall, von Däniken was able pay back his fine to the Swiss government (Story 1976, 6).

Von Däniken's work was not the first nor the last of its kind. Archaeology as a discipline has fascinated people since its inception and the stereotypical ideas of what an archaeologist should look like and persist to this day. The romanticized notion of a young, strong, male adventurer who traverses the dangerous outdoors to explore new worlds has captivated audiences and intrigued people who also longed for this sense of adventure (Holtorf 2005, 40). Beginning in the mid-twentieth century, this fascination manifested itself in the form of books capitalizing on the public's desire for works documenting great explorations and discovery. One such book, published in the 1950s, was C.W. Ceram's novel, *Gods, Graves, and Scholars* which narrated the fictional stories behind several well-known archaeological investigations. While this book captured readers' imaginations, scholars have argued that the archaeological arguments it attempted to support were quite weak such as the belief that Polynesia was settled by South Americans in Pre-Columbian times (Williams 1991, 2-3). This trend continued into the 1960s and evolved into what this paper defines as pseudoarchaeology. Works of pseudoarchaeology were similar to their predecessors in the way in which they used narratives to illustrate their point, but differed in the way in which their conclusions were drawn.

Louis Pauwels and Jacques Bergier's *The Morning of the Magicians* preceded von Däniken's work by nearly a decade and Robert Charroux's book *One Hundred Thousand Years of Man's Unknown History* preceded von Däniken's first edition by five years. Many of the conclusions von Däniken posits in *Chariots of the Gods?* had previously been hypothesized by Pauwels, Bergier, and Charroux such as the Ark of the Covenant as an electric condenser, the Nazca lines as signals to extraterrestrials, and the Great Pyramids and Egyptian culture in general as the result of contact with outer-space aliens. After the publication of von Däniken's book in 1968, there was discussion of a possible suit over plagiarism, but it was waylaid by the inclusion of Charroux in von Däniken's later editions of his book (Story 1976, 5).

The content of works by von Däniken and others like him have been described as "playing fast and loose with archaeological facts" (Williams 1991, 3). The blatant misuse of the scientific method and simultaneous adoption of the "terminology of scientific investigation" (Story 1976, 7) has vexed academic archaeologists immensely. The scientific method has four basic steps that one must completed to perform scientific research (taken form Story 1976, 8):

1) Observe and gather facts
2) Formulate a hypothesis that is logically possible
3) Test or verify the hypothesis
4) Determine the probable truth of the hypothesis if it survived testing

Von Däniken has certainly observed and gathered information—even going into debt to do so. His hypotheses are also quite robust. He has no difficulty in constructing a narrative that fits into what he has observed and from the perspective of an outsider with no background in the topics that von Däniken is discusses, it would seem that his hypotheses make logical sense given his observations. It is only at the third step, testing, that von Däniken's theories fail to stand up to scientific criteria. The second glaring fault in von Däniken's logic is his exclusion of data that

does not support his hypothesis. When questioned about this fact in an interview, he replied "It's true that I accept what I like and reject what I don't like, but every theologian does the same" (Quoted in Story 1976, 13). It is notable that according to his own personal ontology, von Däniken does not envision himself as a scientist, but rather a theologian. "Belief is paramount over evidence" (Williams 1991, 24). In this way, belief in fantastical explanations can be seen as analogous to beliefs in religion (Cole 1980, 4). Von Däniken does not need the validation of the scientific method when he is relying on his audience to believe without evidence.

Although von Däniken has written extensively since his first publication in 1968, my argument will be solely based on *Chariots of the Gods?* as that is his most well-known work. The format of *Chariots of the Gods?* takes the reader across time and space to various archaeological sites and ancient monuments spread all across the world. Von Däniken begins the work by attempting to set up an argument for the existence of extraterrestrial life. He uses the vastness of the universe and the incredible diversity that exists on Earth as the foundation for his hypothesis of ancient visits to Earth from extraterrestrials which forms the basis for his theories throughout his book. Von Däniken then takes the perspective of a "primitive being" encountering space travelers for the first time. He details how he believes these "primitive beings" reacted to these travelers without providing evidence of this encounter ever happening. Throughout the rest of the book, von Däniken focuses on specific case studies to support his argument of highly sophisticated extraterrestrials having visited Earth in ancient times. He often invokes the Christian Bible paradoxically. Although he uses the Bible as a historic source and seeks to convince the reader that God's commandments in the book of Exodus were in actuality the commandments of extraterrestrials (von Däniken 1970, 57); he also urges his readers to "summon up the courage to leave the lines along which we have thought until now and as the

first step being to doubt everything that we previously accepted as correct and true" (von Däniken 1970, 73), which would include leaving the belief in the Christian God as well as the Bible.

While the temporal and physical locations in which von Däniken finds evidence of ancient aliens varies wildly, each of his theories are based on the assumption of a few common themes that shape the way in which von Däniken is constructing his ancient alien worldview. Cole (1980, 2) has stated one of these main themes is that "experts are closed-minded elitists." Each of these themes is loaded with meaning and reveal both the estrangement between and innate connectedness of archaeology and pseudoarchaeology.

Throughout *Chariots of the Gods?,* von Däniken shows his skepticism of traditional scientific studies. It begins with the first sentence of the introduction which reads:

> It took courage to write this book, and it will take courage to read it. Because its theories and proofs do not fit into the mosaic of traditional archaeology, constructed so laboriously and firmly cemented down, scholars will call it nonsense and put it in the Index of those books which are better left unmentioned (1970, 9).

This passage wonderfully shows von Däniken's misconceptions of what academic science does. He mistakenly cites the nature of traditional archaeologists as "firmly cemented down" when in reality theories about the past are in constant revision and are their value is reevaluated whenever new data is discovered. It is also not unheard of for scientists to be wrong. Many archaeologists fell victim to the hoax of the Piltdown Man, yet this mistake was eventually self-corrected by the scientific method (Story 1976, 13). Von Däniken's main frustration with traditional archaeology is the lack of creativity and its "stereotyped pattern of thought" that "leaves no scope for imaginative ideas and speculations" (von Däniken 1970, 68). Most of the academic response to the explosion of von Däniken's book was to simply disprove his theories. This may be due to the belief that these theories are "beneath their dignity" as serious investigators to even consider

something as absurd as ancient aliens visiting Earth (Story 1976, xv). The hope that refuting von Däniken's theories would be enough to convince his readership that they were incorrect had much of the opposite effect. Von Däniken's rejection by traditional academic study has, if anything, elevated his status in the community that was built around the belief in his theories. "These movements also frequently exhibit a common psychological pattern characterized by delusions of grandeur, paranoia, and martyrdom to which is added the romantic theme of David and Goliath—the rugged individualist layman against the Establishment" (Cole 1980, 2). In von Däniken's case, "Goliath" is the academic establishment and he sees himself as forging a new path separate and distinct from the science of academic archaeology—although I would suggest that this path did not take von Däniken away from academic archaeology but closer to an earlier form of the discipline.

Historic Archaeologies

Culture-historical archaeological theory reigned supreme between the late nineteenth and mid-twentieth century. The key component of this theory is the concept of ethnicity and the attempt by archaeologists to attribute objects to particular groups of people (Trigger 2006). It also attempted to track how these different groups interacted and came into contact with one another through diffusion, or the spread of cultural ideas from one group to another, and evolution, or the change of societies from 'savages' to 'barbarians' to 'civilized society'. The following three case studies are examples of the use of cultural-historical in the nineteenth century to make inferences, albeit flawed, about the origins of archaeological sites.

<u>Great Zimbabwe</u>

Built between the eleventh and fifteenth centuries, during the Iron Age of southern Africa, Great Zimbabwe was a city which now stands partially in ruins. Its most distinguishable feature is its high towers and walls which were built without mortar. The first written historical account of the ruins of Great Zimbabwe come from a German schoolteacher and early European explorer of the interior of Africa, Karl Mauch. From 1865 to 1872, Mauch traveled around southern Africa focusing his journeys mainly in what is now South Africa, but journeying as far as the Zambezi River in 1872. It was during one of his last journeys that Mauch set eyes on Great Zimbabwe. While he traveled extensively, his travels were not without purpose. It was in South Africa that Mauch came under the influence of R.A. Merensky who was serving with the Berlin Missionary Society. Having heard stories and tales of the ruins, it was Merensky's conviction that they represented what was left of the Ophir of Solomon, which was thought to be one of the richest kingdoms of Biblical times (Burke 1969, 1-4). The ruins were called Zimbabye or Zimbaböe/Simbaöe, the latter spellings most likely due to the Portuguese source of this theory. Merensky had attempted to travel to the ruins himself, but was stopped by outbreaks of hostility and disease (Burke 1969, 1-4).

Mauch set out on his journey in May of 1871 with the express intention of finding the ruins that he had heard so many rumors about. As he questioned people about the possible location of the Ophir, one man in particular gives Mauch news of "quite large ruins that could never have been built by blacks" (Mauch 1969, 139). Mauch had already discounted the prospect of the Africans having built Great Zimbabwe and concluded that the site the man spoke of must be the one he was looking for before he had even seen the site for himself. Adding to Mauch's

conviction was the reports of a magical pot that was filled with a yellow substance and walked by itself.

Mauch finally reaches the site on September 5th, 1871. His journals describe the site as containing walls of brick-sized granite stones held together by "the art of the building," meaning without mortar (Mauch 1969, 141-142). The walls surrounding the site reached between four and twenty feet. Finally, Mauch describes a tall cylindrical tower that rises up thirty feet into the air with a base diameter of 15-16 feet (Mauch 1969, 142). Although Mauch assumed that the wall running along the outside of the structure was a fortification, the tower baffled him: "in vain did I try to discover the reason for this structure." (Mauch 1969, 142). He later remarks on the site's age due to the lack of mortar, which he believes is because of the builders' "ignorance of lime" (Mauch 1969, 185). The overgrowth and unkempt nature also impeded Mauch's ability to see the full extent of the structure or to move around easily within the ruins, which cut his investigation short and necessitated several trips to the site (Mauch 1969, 142).

Mauch had to wait nearly a week before he could visit the ruins again. On his second visit he finds various artifacts on the surface made mainly of carved soapstone (Mauch 1969, 146). He also furthers his earlier discussion of the walls of the ruins and says:

> In some places it is evident that walls have been built in front of caves by the Kaffirs [sic] according to their sense of art, for they have no notion of the regular laying of stones or of bonding. They even think that the walls were built at a time when stones were still very soft, otherwise it would have been impossible for the whites who built these walls to form a square shape! (Mauch 1969, 146-147).

At the end of the second trip, Mauch concludes that these ruins are what Merensky was looking for: the Ophir. The next spring Mauch makes a bold conclusion in his journal:

> The Queen of Seba is the Queen of Simbaöe,
> Psalm 72, 10—The Seba mentioned there is Simbaöe,
> Math. 2, 11—Of the three Kings the one was from here, the others from Arabia and India,
> The reported pot is possibly an Ark of the Covenant,

The ruins are copies of Salomo's temple and palace.

Mauch makes no direct archaeological connections between the ruins of Great Zimbabwe and Solomon's temple which provides the reader for no strong connection between the two other than pure speculation. However, the fantastical stories of cities filled with gold encouraged European settlement in the newly created colony of Zambezia and the supposed ancient settlement of whites in Africa gave a justification to colonialism and the link to the Biblical Solomon gave sanction to the exploitation of the region (Fontein 2006, 5).

Several years later, the first detailed archaeological expeditions were conducted at Great Zimbabwe by Theodore Bent. An Englishman who had had experience at archaeological sites in the Aegean and Asia Minor, Bent began his work at Great Zimbabwe in 1890 (Encyclopaedia Britannica, 2018). Unlike Mauch, who was focused solely on finding the ruins of Great Zimbabwe, Bent looked at many sites of similar nature all across the landscape of southern Africa or Mashonaland as it was termed then. Structures with the mortar-less walls and herringbone and chevron designs in the stone were included in his survey (Bend 1892, 88). "As a feature in the country they [the ruins] are most remarkable—ancient, massive, mysterious, standing out in startling contrast to the primitive huts of the barbarians who dwell around them and the wilderness in nature" (Bent 1892, 87). His conclusion was that all of the ruins that across the landscape were "built by the same race, in the same style, and for the same purpose" (Bent 1892, 87). Although Bent did not agree with Mauch that the ruins were the remnants of the Palace of the Queen of Sheba, he was also not of the mind that Africans had anything to do with constructing the ruins. Living with a group of Shona people, Bent and his crew were led to a group of smaller ruins and told the story of white men who had built the ruins, but Black men had poisoned the water and killed the white men. Bent does not seem to have much faith in this

tale and treats it with a much credence as Zimbabwe being built by the devil (Bent 1992, 75). Bent instead theorized that Great Zimbabwe and all surrounding ruins of similar structure were built by Arabs.

Bent uses the shape of the tower at Great Zimbabwe as evidence towards his conclusions of Arabic construction. While others had categorized it as 'circular' Bent instead argues that the tower was 'elliptical' and of similar nature to temples found in Marib in Arabia (Bent 1892, 92-93). Bent was able to distinguish between different phases of construction of the site and unlike Mauch, carried out excavations. Bent found that the mortar-less walls were of choice not necessity as whomever built the structure knew of cement and made their own out of powdered granite for the construction of the steps (Bent 1892, 92-94). It was Bent's conclusion that Great Zimbabwe served as a dual purpose: the towers were used as religious temples and the walls surrounding them were fortifications (Bent 1892, 103-104).

Bent hoped to strengthen his claims by finding the graves of the "ancient inhabitants" of the site, but all he found were "Kaffir graves" (Bent 1892, 104). In one instance, Bent and his team even uncovered a grave less than a year old. While at first horrified at what they had done, they soon "set sentiment aside and took scientific research as our motto for the future" (Bent 1892, 72). The lack of non-African graves lead Bent to hypothesize that like the Arabs, the builders of Great Zimbabwe moved their dead to safer places away from their habitation (Bent 1892, 104). This, he believed, supported his conclusion of Arabic habitation in the ancient world. Where these people may have gone and what they did with their dead, however, remained a mystery to Bent.

Moundbuilders

      The amazement of settler-colonials and European explorers to great monuments they "discovered" in newly colonized regions was not limited to southern Africa. Neither was their incredulity as to the ability of the indigenous peoples they encountered to have built these monuments themselves. One such example of this occurred in the United States during the 19th century with the theory of the Moundbuilders. Throughout the eastern United States great earthworks were found that took on many shapes and amazed those that found them. Conical mounds could reach as a height of 100 feet and mounds in the shapes of animals such a serpents and bears were also found (Feder 2006, 147).

      When encountered with the question of who was responsible for building the mounds, the basic assumption of American archaeologists was that they were constructed by a mysterious race, the Moundbuilders. The Aztecs, the Lost Tribes of Israel, and Vikings were also suggested as possible builders of the mounds (Williams 1991). Although who they were and why they disappeared remained unanswered by archaeologists at the time; it was concluded that they were not the same people who were found living near the mounds when Europeans arrived. "Many people suppose that they were the ancestor of the Indians, and possessed no higher state of civilization, when in fact no such knowledge could be gained from the aborigines by early explorers" (Fellow 1890, 91). Lack of information and racial biases lead to suppositions supported by cultural notions of European superiority as well as the view of indigenous peoples as "primitive" and therefore lacking the ability to have built such complex and massive earthworks. These views of Native Americans are summarized by J. W. Foster, the president of the Chicago Academy of Sciences and a geologist and archaeologist by trade:

      His character, since first known to the white man has been signaled by treachery and
      cruelty. He repels all efforts to raise him from his degraded position; and whilst he has

not the moral nature to adopt the virtues of civilization, his brutal instincts lead him to welcome its vices. He was never known voluntarily to engage in an enterprise requiring methodical labor; he dwells in temporary and movable habitations; he follows the game in their migrations; he imposes the drudgery of life upon his squaw; he takes no heed for the future. To suppose that such a race threw up the strong line of circumvallation and the symmetrical mounds which crown so many of our river-terraces, is as preposterous, almost, as to suppose that they built the pyramids of Egypt (1873, 300).

Given the character of indigenous people, Foster concludes that they could not have been capable of designing, let alone building, such immense features.

The ideology of native inferiority was built on the theory of cultural progress from savagery to barbarism and barbarism to enlightenment. Enlightenment was the only stage at which civilization could occur and meant the "melioration of the social system, as well as the expansion of the mind and faculties" (Fellow 1890, 90). It is Fellow's argument that the Moundbuilder society consisted of a civilization while the Native American living at the time did not. An example he uses is the superior system of agriculture of ancient people was meant to prove the superiority of the Moundbuilder culture to that of the extant Native Americans:

These appearances, which are here denominated ancient garden-beds, indicate an earlier and more perfect system of cultivation than that which now prevails; for the present Indians do not appear to possess the ideas of taste and order necessary to enable them to arrange objects in consecutive rows" (Fellow 1890, 92).

If Native peoples were technologically and mentally incapable of building the mounds, then the next logical assumption, made by early archaeologists, was that a separate group of people had built the mounds and subsequently disappeared off the landscape. This assumption lead to the construction of the Moundbuilder narrative that used scientific, archaeological techniques and sound methods, but attributed the results of their investigations to a fictitious race of people. This phenomena was most apparent in biological investigations of skeletal remains found in excavated mounds where the authors conduct examinations of the bones, and compare the Moundbuilder remains to other known races as "the Indian possesses a conformation of skull

which clearly separates him from the pre-historic Mound-builder, and such a conformation must give rise to different mental traits" (Foster 1873, 300). This racialization of the Moundbuilders led archaeologists to divide them into their own racial category separate from modern Native Americans and used scientific racism to determine that Native Americans were inferior to the Moundbuilder race who, some argued, were evolving to become less primitive. In regards to a humeral foramen found on older Moundbuilder skeletal remains, but less so on newer graves the author states that he believed that:

> The moundbuilders were slowly outgrowing this Simian characteristic, for the humeri containing the triangular foramens are found in the oldest mounds…in the more modern mounds this foramen is less frequently found, and when present, is small and circular…the elimination of the "degraded affinity" [the foramen] is but one instance of the general evolution (Holbrook 1881, 505).

In the same way that archaeologists attributed biological characteristics to the Moundbuilders, they also attributed cultural characteristics as well such as artistic style and meaning of objects found within mounds. One example of this was the distinction made between the depictions of an otter and a manitu, an Algonquian spirit force, on carved pipes. The author's conclusion was that the Moundbuilders were familiar with the habitat of both and were able to represent each in a way that they understood differentiated one from the other (The American Antiquarian and Oriental Journal 1886, 308). Archaeologists' association of the Moundbuilders with favorable traits (or positive characteristics) while Native Americans became the bearer of unfavorable/negative traits led to the disenfranchisement of these peoples from their heritage in the written archaeological record and this "proof" of their inferiority would serve as justification to treat them as such.

Stonehenge

One of the greatest and most popular megaliths in Europe is that of Stonehenge. The

colossal monument lies in the southern plains of England and its existence has fascinated the

residents of the island for centuries. Set in a concentric circle are massive stones reaching heights

of 10-24 feet and weighing up to 50 tons. The stones are placed vertically on the ground and

extend over six and a half feet into the chalky soil. Lintels weighing up to six tons each were

lifted over twenty feet off the ground and placed horizontally across each vertical stone to form a

ring (Feder 2006, 322-324). The nature of the stones and the complex set of engineering skills

necessary to complete such a task astounded those who encountered the monument.

The first theories of the origins of the monument appear in the form of folklore.

According to legend, Hengist, the Jutish warrior who helped lead the Anglo-Saxon invasion of

England in the 5th century, slayed 460 British nobles at the site of Stonehenge and the Britons

erected the monument to serve as a cultural memory of the event. A similar tale, popularized by

Geoffrey of Monmouth, was the construction of Stonehenge by the wizard Merlin by way of

"supernatural agency" (The Illustrated Guide to Old Sarum & Stonehenge 1888, 37-38).

The fantastical origins of Stonehenge persisted through the first scientific investigations

and in-depth description of the site by John Aubrey in the mid to late 17th century. It was Aubrey

who first suggested that Britons had built the monument and that it had been a temple for their

priestly class, the Druids (Aubrey 1847). These claims were further strengthened by William

Stukeley who expanded on Aubrey's claim and popularized the notion of Druidical construction.

Discussing excavations at Avebury, Stukeley claims:

> Whatever is dug up in or near these works are magnificent remains of the Druid times;
> urns, bones, ornaments of amber, glass beads, snake-stones, amulets, celts, flint-hatchets,
> arrowheads, and such things as bespeak the rudest ages, the utmost antiquity, most early
> plantation of people that came into our island, soon after *Noah's* flood. I have all the

reason in the world to believe them an oriental colony of *Phoenicians*; at least that such a one came upon the first *Celtic* plantation of people here (1740, 4 [edited for clarity]).

His conclusions represent a form of migration or diffusion theory in which it was believed that cultural evolution occurred due to the dispersal of people or knowledge whose presence in the lives of less advanced cultures boosted their evolutionary progress. These theories precluded the possibility of independent evolution, and in their most extreme form, relied on the presumption that inventions and cultural knowledge had a single place of origin and subsequently spread out to all other areas of the world (Trigger 2006, 155). One of the results of diffusion theory was the establishment of colonial archaeology and the attempt to prove, scientifically, that prehistoric peoples lacked the initiative to evolve themselves. This narrative of the "unchanging primitive" was used as a justification for colonial seizure of lands and subjection of native peoples to the authority of the colonial government (Trigger 2006, 208).

All three examples share common assumptions and biases that shape the resulting conclusions of the authors. The first is that the each author believed that the native peoples who lived (or live) near their sites were too 'primitive' to have the knowledge of skill sets necessary to have built the monuments themselves. Second, the only way the cultural knowledge needed to build a great monument could be present in these 'primitive' groups was if it was brought in from outside. Finally, each archaeologist assumed that the culture that built the each of the monuments in the case studies was distinct and differentiable from all other cultures and could be labeled by the authors. It should go without saying, but the ancestors of the Shona people built Great Zimbabwe, Eastern Woodland peoples built mounds in the United States, and ancient Britannic peoples built Stonehenge. They did it without external help from another culture. The use of archaeology to justify racism is reprehensible. While academic archaeology grew from this movement and as a discipline grew away from the theoretical frameworks of early

archaeology, the same assumptions and ideologies are used by pseudoarchaeologists to justify their hypothesis of ancient alien visitation.

In the same way that early settlers and adventurers were amazed by the gigantic earthen mounds and high stone walls of the continents they were visiting for the first time, Von Däniken is constantly amazed by the wonders of the ancient world. Instead of marveling at the ability of ancient peoples to gain the knowledge and skills necessary to build monuments and cities, he takes a critical lens to their accomplishments and even goes as far as doubting the attribution of some material culture to some societies. On the west coast of Borneo, a network of cave was found that had been hollowed out and inside a cache of fine woven fabric was found. This was a discovery von Däniken finds quite curious, which prompts him to remark, "there are fabrics of such fineness and delicacy that with the best will in the world one cannot imagine savages making them" (110). In another instance, when von Däniken discusses the hypothetical scenario in the world is embroiled in nuclear war, it becomes unnervingly clear that he believes in Lewis H. Morgan-esque cultural evolution:

> Undoubtedly the strategist of an A-bomb and H-bomb war will not direct their weapons against Zulu villages and harmless Eskimos. They will use them against the centers of civilization. In other words, the radioactive chaos will fall on the advanced, most highly developed peoples. Savages and primitive peoples far away from the centers of civilization will be left (von Däniken 1970, 92).

 It is clear the von Däniken does not have a very high opinion of people he does not consider 'civilized'. This begs the question, according to von Däniken, who are the civilized people? He considers the Greeks to have had civilization (von Däniken 1970, 41) and also the Maya, of whom he says, "[they were] intelligent, they had a highly developed culture. They left behind not only a fabulous calendar, but also incredible calculations" (von Däniken 1970, 75). Additionally, Feder (1980) conducted a survey of all the sites around the world in which von Däniken

expresses amazement that ancient people's ability to create something discovered in the archaeological record and divided it by continent. He found that thirty-one percent of the sites were from Africa, twenty-three percent from Asia, four percent from Europe, eleven percent from North America, and ten percent from South America. Aware of his bias or not, it is blatantly obvious that von Däniken has a prejudice against ancient non-European peoples.

This observation is reiterated in von Däniken's belief in cultural evolution through extraterrestrial interaction—a theory that highly imitates hyperdiffusion. Just as culture-historians believed that societies needed to interact with other cultures to evolve is found throughout scientific literature, Von Däniken's assertion that aliens came to earth to give humans knowledge is found throughout *Chariots of the Gods?*. This idea is especially clear in the 'amorous astronaut' theory in which von Däniken alleges that humans were able to evolve because of inter-breeding with aliens that allowed humans to "breed an intelligent human race" and overcome their 'primitive state'. He alleges that the phrase that "God created man in his own image" as proof that God was an alien astronaut (von Däniken 1970, 61).

Finally, archaeologists working at Great Zimbabwe, Stonehenge, and on mounds throughout the Eastern United States were eager to attribute the construction of these sites to people of whose name and attributes the archaeologists knew, or if one did not exist, they would create an identity for this unknown group. At Great Zimbabwe, the connection between attributes and cultures meant that a tentative link was formed between the site and King Solomon. Later, as time passed, the same attributes which were believed to be Hebrew were then thought to be Arabic. Humans have the uncanny ability to see patterns almost anywhere we look. If taken out of context, artifacts lose much of their ability to inform the archaeologist about anything, but when placed in its appropriate place in space and time, patterns emerge that are not fantastical or

imaginary. That is the important of theoretical frameworks—they may be restrictive as von Däniken claims, but they enable archaeologists to make connections based on comparison instead of wild speculation.

Based on the notion of ancient non-European people as too primitive to have constructed magnificent structures such as the Stonehenge, North American mounds, or the monument Stonehenge, and instead relying on theories of diffusion to explain cultural change, culture historical archaeology was thought by most to be a relic of the last century. Old roots do not die so easily. Pseudoarchaeology, the beliefs in ancient alien visitations to Earth, has been a mainstay in popular culture for the last fifty years. Part of this popularity is due to the nature of the arguments and the audience at which they are projected. Most of the people convinced of these theories are non-specialists. Due to the distance that has grown between archaeologists and the public, many non-specialists do not have the knowledge to judge when they are being told empirically untrue things about archaeological sites—such as that the great pyramids appeared out of nowhere without any transitional forms (von Däniken 1970, 95). Neither can non-specialists determine when the theories they are reading are outdated and can be linked to colonial agendas and racist sentiments. Although many archaeologists feel that they are above the discussion of these theories, it is a discussion that needs to take place. Archaeology cannot forget where it came from and our heritage of validating racist theories with scientific thought. Those are the roots out of which modern archaeology has grown and as regrettable as archaeology's past has been, it would be more so if we ignored where our discipline developed from. The roots are not dead. A new plant has grown and pseudoarchaeology is the anthesis of that plant. As a discipline with the same roots, archaeology is, indeed, the cousin of pseudoarchaeology.

Bibliography

American Antiquarian and Oriental Journal, The. 1886. "Extra-Limital Animals and Mound Builder's Pipes*,"* Vol. 8(5): 308-313.

Aubrey, John. 1847. *The Natural History of Wiltshire: Written Between 1656 and 1691.* Edited by John Britton of the Wiltshire Topographical Society, London, UK: J. B. Nichols.

Bent, J. Theodore. 1892. *The Ruined Cities of Mashonaland: Being a Record of Excavation and Exploration in 1891,* London, UK: Longmans, Green, and Co.

Cole, John R. 1980. "Cult Archaeology and Unscientific Method and Theory." *Advances in Archaeological Method and Theory*, Vol.3: 1-33.

Denning, Kathryn. 1999. *On Archaeology and Alterity.* Dissertation. University of Sheffield. 1999.

Feder, Kenneth L. 1980. "Foolsgold of the Gods," *The Humanist,* Vol. 40(1): 20-24.

Feder, Kenneth L. 2006. *Frauds, Myths, and Mysteries: Science and Pseudoscience in Archaeology.* Boston, MA: McGraw Hill.

Fellow, H. C. 1889-1890. "The Civilization of the Mound-Builder," *Transactions of the Annual Meetings of the Kansas Academy of Science,* Vol. 12: 90-95.

Fontein, Joost. 2006. *The Silence of Great Zimbabwe.* New York, NY: UCL Press.

Foster, John Wells. 1873. *Pre-Historic Races of the United States of America.* Chicago, IL: S. C. Griggs and Company.

Holbrook, W. C. 1881. "Moundbuilder Skeletons I.," *Science,* Vol. 2(69): 504-505.

Holtorf, Cornelius. 2005. *From Stonehenge to Las Vegas: Archaeology as Popular Culture*. Walnut Creek, CA: Altamira Press.

Illustrated Guide to Old Sarum & Stonehenge, The. 1888. Salisbury, UK: Brown and Co.

Mauch, Karl. 1969. *The Journals of Carl Mauch: His Travels in the Transvaal and Rhodesia 1869-1872.* Translated by F. O. Bernhard, Edited by E. E. Burke. Salisbury: National Archives of Rhodesia.

Penguin Random House. 2018. "Erich von Däniken", Electronic Document.

Story, Ronald. 1976. *The Space-gods Revealed: A Close Look at the Theories of Erich von Däniken.* New York, NY: Harper & Row.

Stukeley, William. 1740. *Stonehenge: A Temple Restor'd to the British Druids.* London, UK.

von Däniken, Erich. 1970. *Chariots of the gods?* Michael Heron, tran. New York, NY: G.P. Putnam's Son.

Williams, Stephen. 1991. *Fantastic Archaeology: The Wild Side of North American Prehistory.* Philadelphia, PA: University of Pennsylvania Press.