A fresh look at Nebraska man

Andrew Sibley

Wolf and Mellett in their Talk origins paper, The Role of 'Nebraska man' in the creation-evolution debate,¹ claim Nebraska man was a careless mistake by an honest scientist. However, the evidence suggests that Osborn deliberately overstated the find because the theory of evolution was centre stage in a struggle for control of education policy in America. It is true that in the end, the Nebraska man find was not central to the Scopes Trial, but it was used as an effective tool to undermine Bryan, the well-known opponent of evolution and prosecution lawyer at the trial, and it proved useful in the campaign to promote evolution.

Background

Tarold Cook, a rancher and occasional paleontologist, found a small well-worn tooth in 1917 that later gained notoriety as Nebraska man. The tooth was found in the sedimentary layers in the Northwestern part of the State of Nebraska, and was later promoted at a time when evolution was under attack by William Jennings Bryan. The find also became enmeshed in public disagreement ahead of an important trial related to the future of education policy in America. The sedimentary layers in which the tooth was found were at the time thought to be Pliocene, although more recently they have been re-classified as Miocene by geologists. Some five years after Cook found the tooth he submitted it to Henry Fairfield Osborn for identification on the 14th of March 1922. Osborn, then President of the American Museum of Natural History in New York, was a noted vertebrate paleontologist, and without conducting extensive studies hurriedly replied to Cook about his excited conclusions. Within a month of receipt, Osborn had declared that this tooth looked 100% anthropoid,² and announced it to the greater American public as the first American anthropoid ape, giving it the impressive name Hesperopithecus haroldcookii.

While Osborn maintained social connections with the Episcopalian church in New York, he seemingly had reactionary sympathies and he was also a leading member of the American Civil Liberties Union (ACLU). Osborn's view of evolution was that of orthogenesis, believing that an internal pantheistic force had driven the evolution of man towards a predetermined goal. However, during the late 1920s, he changed his view from believing that mankind had evolved from an ape ancestor to argue instead that apes and human beings had a common ancestor and had evolved along parallel paths towards a common goal. This was written up in Man Rises to Parnassus (1927), and his concern was to distance the evolution of man from apes, seemingly because of popular rejection of such a notion. In his book, Osborn also divided humanity into three distinct 'stock', each consisting of different species with obvious eugenicist and racist overtones.3

At the time of the Nebraska find he was aware of moves by the ACLU to challenge the ban that was in place that prevented the teaching of evolution in some schools. Christian campaigners had made the teaching of creationism the only option in many American schools, and this did not please the evolutionists at a time when education policy in America was under development. The tooth from Nebraska appeared to provide useful material in support of evolution in the few years preceding the Scopes Trial which was later held in Dayton, Tennessee.⁴

Evolutionists today seek to play down the erroneous find, claiming that it was not widely accepted by the science community, and assert that it was a simple mistake quickly corrected by the evolutionary scientists themselves. For example, Wolf and Mellett¹ claim that other discoveries helped to limit the damage to evolutionary science from the fallout from Hesperopithecus such as that of Australopithecus and Sinanthropus, the later more commonly known as Peking man. The fraudulent Piltdown man find was also working its magic in the minds of people and helping to craft the acceptance of evolution in society during the period of the 1920s. However, it is not so easy to play down the way Nebraska man was handled as being a simple error. An examination of the available evidence and statements suggest that it was not only used to promote evolution in the mind of the public ahead of the important and carefully arranged court case, but also to undermine Bryan, who was the chief opponent of evolution in America at the time.

The pig's tooth did have some small similarities with human molars in terms of general size and shape, but such similarity between the teeth of peccaries and humans was known. And bearing in mind that it was well worn, Osborn in fact failed in his duty as a leading scientist by not taking more time and care with his study and announcements. A young colleague of Osborn, W.D. Matthew, together with Harold Cook, had written a joint paper in 1909 that explained the close similarity between the molars of humans and pigs. Matthew and Cook had previously noted:

'The anterior molars and premolars of this genus of peccaries show a startling resemblance to the teeth of Anthropoidea, and might well be mistaken for them by anyone not familiar with the dentition of Miocene peccaries.'5

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Osborn receives the tooth

Upon receipt, Osborn quickly made a number of casts of the Nebraska man-tooth, sending copies to twenty-six institutions in Europe and America (see figure 1). Although evolutionists may claim that this erroneous identification was a case of a simple mistake caused by an over-excited imagination, this tooth served a very useful purpose in the few years and months before the important trial that undermined Bryan. Osborn promoted this find with a great deal of enthusiasm, and in the few months ahead of the famous Scopes Trial he succumbed to the temptation to extract maximum publicity from this find in exchanges with his anti-evolution opponent Bryan.

However, looking at statements made by Osborn in the period following his initial enthusiasm, he does seem to begin to carefully qualify his view with a degree of

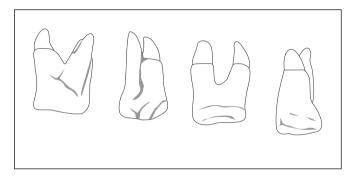


Figure 1. A drawing of the Nebraska-man tooth. From left to right; posterior, outer, anterior and inner perspectives. (From Smith).¹³

uncertainty in later announcements before returning to the 'truth' of this tooth. Osborn was seemingly careful to protect his reputation following disagreement in Britain from notable paleontologists over the Nebraska find. A group of leading authorities in paleontology in America had cast doubt on the authenticity of the fossil, and this news leaked out in the *American Museum Novitiates*, 6 January 1923. After initial enthusiasm, Osborn was at the time happy to settle for the hedged middle ground with identification of the fossil given as an anthropoid ape, although not necessarily a direct human ancestor.

In the early 1920s, prior to the find of this tooth, Bryan had begun to campaign against evolution in defence of Christian faith after an illustrious political career, and he was seen as a major and growing threat to evolution. In 1921 Bryan preached directly against evolution, noting that Darwin gave mankind a family tree that started in water, and then traced its lineage to European Apes, not even providing the American people with the luxury of American ancestors! Also, through investigations and discussions during his speaking engagements, he discovered that in those schools that were teaching evolution as fact there was a corresponding negative impact on Christian belief, commenting:

'The teaching of evolution as a fact instead of a theory caused the students to lose their faith in the Bible, first, in the story of creation, and later in other doctrines, which underlie the Christian religion.'6

'The greatest enemy of the Bible is the numerous enemy, and the numerous enemy today is the believer in the Darwinian hypothesis that man is a lineal descendant of the lower animals.'

However, as a result of religious and patriotic sentiment in many parts of America, evolution was not totally accepted in American society, with creationist teaching continuing in many schools. Recognising the threat posed by Bryan to evolution, Osborn, as the leading establishment figure in America for the Darwinists, began to campaign against Bryan. It was in the *New York Times* of the 5th of March 1922 that Osborn wrote an article challenging Bryan to not be afraid to look at the evidence for evolution. Osborn commented:

'If Mr. Bryan, with open heart and mind, would drop all his books and all the disputations among the doctors and study first-hand the simple archives of Nature, all his doubts would disappear; he would not lose his religion; *he would become an evolutionist.*'8

Rather conveniently, only nine days later on the 14th of March 1922, Osborn received the well-worn tooth from the very State of Nebraska that Bryan was from. At the very least this tooth clouded Osborn's judgment as Wolf and Mellett suggest, and perhaps he couldn't contain his excitement in announcing the evidence to the world as an American ape-man. At the National Academy of Science announcement in 1922, Osborn used this artefact to mock Bryan's faith, suggesting that Bryan should consult a certain passage in the book of Job, 'Speak to the earth and it shall teach thee'. Osborn commented that this was a 'remarkable coincidence that the first earth to speak on this subject is the sandy earth of the Middle Pliocene Snake Creek deposits of western Nebraska.'9

Coincidence indeed, but Osborn also suggested with a mocking tone that *Hesperopithecus* should really be named *Bryopithecus*, calling Bryan the most distinguished Primate in Nebraska. Osborn was also happy to place the defence of the Nebraska tooth in the hands of a close colleague, William King Gregory. Having been tasked with examining the evidence further, Gregory compared the fossil with teeth from apes and monkeys, and in a first paper in 1923 stated that it 'combines characters seen in the molars of the chimpanzee, of *Pithecanthropus*, and of man, but ... it is hardly safe to affirm more than that *Hesperopithecus* was structurally related to all three.' In a later paper in that same year, Gregory appeared to change track a little, and stated that the closest resemblance was with the 'gorilla-chimpanzee group'. Gregory continued

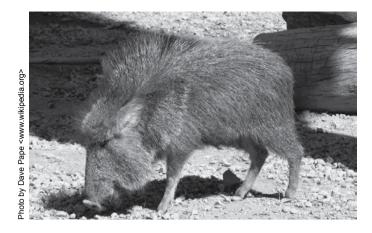


Figure 2. A Chacoan peccary Catagonus wagneri in Phoenix Zoo, Phoenix, AZ. This animal was once thought extinct and is similar to the peccary the Nebraska tooth came from.

fieldwork in Nebraska in the spring of 1925 and began to uncover evidence that what was actually found in the soil of this State was the tooth of a peccary, a type of pig (figure 2). But this work was not written up until 1927, after the Scopes Trial had ended.

Hesperopithecus and the Scopes Trial

It was some three years after Osborn had first received the tooth, in May 1925, and only two months before the Scopes trial, that Osborn again returned to the subject of the Nebraska tooth, this time engaging in deliberate subterfuge while boldly proclaiming to be the herald of truth. In 1923, Gregory had stated the tooth was closest to that of a gorilla or chimpanzee, making a strong link to mankind unacceptable. Also in the spring of 1925, Gregory was beginning to uncover evidence that the fossil was from a peccary. Osborn must surely have been aware of these later findings and doubts by other colleagues, but seemed to ignore them and returned to the theme of the earth speaking to mankind. Osborn chose to cover up the real voice of the earth, and the following categorical statements by Osborn are a travesty of scientific truth, even if at the time he did not know about Gregory's 1925 findings (which is doubtful). He commented:

'What shall we do with the Nebraska tooth? Shall we destroy it because it jars our long preconceived notion that the family of manlike apes never reached the western world ...? Or shall we continue our excavations, difficult and baffling as they are, in the confident hope, inspired by the admonition of Job, that if we keep speaking to the earth we shall in time hear a more audible and distinct reply? Certainly we shall not banish this bit of Truth because it does not fit in with our preconceived notions and because at present it constitutes infinitesimal but irrefutable evidence

that the man-apes wandered over from Asia into North America.'10

It would seem that in the few months before the Scopes Trial, Osborn was using the Nebraska tooth to leave an impression in people's minds that evolutionary scientists were certain that the tooth was from an ape-man. He was seemingly abandoning his earlier enforced caution at the same time that Gregory, his close colleague, was finding further evidence that called for a total rejection of Osborn's anthropoid identification. It was nothing short of deliberate deception. In a series of essays in May of 1925, Osborn wrote that the forthcoming trial would place the Great Commoner in the dock seeking to gain the sympathy of the masses for evolution and against Bryan and his biblical Christian faith. Bryan waited until the trial had almost begun and wrote a robust attack in *The Forum* on the 7th July 1925, suggesting that Osborn's bias in favour of evolution was so strong that it had led him to accept as truth an absurdity:

'Professor Osborn is so biased in favor of a brute ancestry ... that he exultantly accepts as proof the most absurd stories. Each new exhibit—no matter how largely the product of an inflamed imagination—lifts him to a new altitude of exultation, and each one in itself furnishes him sufficient foundation for unchangeable convictions His latest "newly discovered evidence" is a long lost witness captured in Nebraska. He would probably have declared it "irrefutable" even if it had been found in some other State-all the evidence on his side seems "irrefutable" to himbut the fact that it was found in Nebraska, my home state for a third of a century, greatly multiplied its value. Some one searching for fossils in a sand hill came upon a lonely tooth The body of the animal had disappeared, and all the other pieces of "imperishable ivory" had perished; not even a jawbone survived to supply this Sampson [sic] of the scientific world with a weapon to use against the Philistines of today. But a tooth in his hand is, in his opinion, an irresistible weapon. The finder of this priceless tooth, conscious that it could impose upon but a few, even among those who prefer speculation to reason, wisely chose Professor Osborn. He hastily summoned a few congenial spirits, nearly as credulous as himself, and they held a postmortem examination on the extinct animal, which had at one time been the proud possessor of this "infinitesimal" and "insignificant" tooth. After due deliberation, they solemnly concluded and announced that the tooth was the long looked-for and eagerly longed-for missing link which the world awaited. The Professor's logic leaks at every link, but it is no worse than that of his boon companions who, having rejected the

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authority of the word of God, are like frightened men in the dark, feeling around for something they can lean upon.'11

Five days later on the 12th July, at the start of the Scopes trial, Osborn responded in a rather uncharacteristic manner again changing tack. It would appear that he was becoming increasingly aware in June and early July of 1925 that evidence from Nebraska that Gregory was uncovering did not support his assertions that the tooth was from an apeman. However, he did not use his *New York Times* article to correct any misconceptions, but launched into a strong defence of evolution. Osborn reprinted Bryan's claims from five days earlier to leave the impression that the Nebraska find was still evidence for evolution, but then failed to even mention it in his own writing.

It would seem that no evidence in support of *Hesperopithecus* was presented at the Scopes Trail. Having built a strong impression in people's minds, Osborn, who was initially called as a scientific witness at the trial, could leave the evidence out of harms way. In the end, Osborn was not called to give evidence at the trial. It is possible that the ACLU feared that Bryan would bury their case with the truth from Nebraska, and legal teams often change strategies ahead of trials to win the best outcome for their clients. But the truth seems to be that the defence team in fact wanted to lose the trial so that the case could be taken on appeal to a higher court and thus gain a constitutional judgement in favour of the teaching of evolution. Although the tooth was not apparently submitted as evidence, the ghost of *Hesperopithecus* was certainly present as an

impression in people's minds, with no retraction given by Osborn or Gregory during the trail despite their knowledge and growing doubt of what was really found.

Response to Nebraska man in Europe

The influence of Nebraska man also spread to Europe. As mentioned, without showing much caution over the true nature of the artefact, Osborn was also responsible for making casts of the tooth, and sending them to 26 other institutions in America and Europe. In Britain the response was mixed, with some paleontologists expressing scepticism while others were very enthusiastic about the new find. Grafton Eliot Smith was very keen on the discovery and claimed in an article in The Illustrated London News, that Hesperopithecus was the third discovery of a genus of extinct hominids, standing alongside Eoanthropus and Pithecanthropus. This article was accompanied by a notable illustration by Amedee Forestier (figure 3) that was later stated by Forestier to be based on Pithecanthropus, the Java man remains. Smith's article referred to Forestier's imaginative drawing, elaborating on it with mention of various mammals also found in the same strata. Forestier's black and white illustrations were notable in bringing the imagination of anthropologists and archaeologists to life, often being featured in the Illustrated London News in the first few decades of the twentieth century. When he died in 1930, his obituary stated:

'[He] was especially interested in prehistoric man and loved to bring him to life, not by fictitious imaginings but by the most careful reconstructions based on scientific research.'15

Quite clearly Forestier's drawings were having a big impact on society, seemingly presenting the interpretation of the tiniest evidence as incontrovertible truth. It was this type of deceitful iconic illustration and overconfident and untested statements by the evolutionists that led Sir Ambrose Fleming to object in a speech in 1935 at the first public meeting of the Evolution Protest Movement:

'Of late years the Darwinian anthropology had been forced on public attention by numerous books or highly illustrated periodicals in such fashion as to create a belief that it was a certainly settled scientific truth, and any objections to it were treated

as the result of ignorance or bigotry.'16

One person who was more circumspect about the Nebraska find was Arthur Smith Woodward, notable for his part in the Piltdown man 'finds' that were later uncovered as fraudulent. Woodward showed some scepticism towards the Nebraska tooth, stating that such a find seemed unlikely. this seemingly on the basis of European prejudice, suggesting that such an artefact could not be found in North America without more conclusive evidence.¹⁷ Woodward was also perhaps keen to preserve the pre-eminence of his own work at Piltdown.

Osborn found himself a little torn as a result of this disagreement in Britain, noting that Professor Elliot Smith had showed too much enthusiasm for the Nebraska find while others

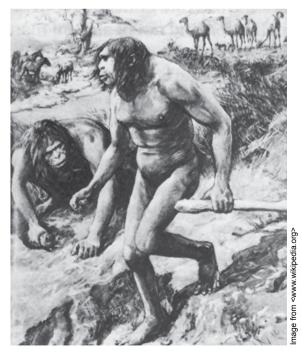


Figure 3. Artistic propaganda of Hesperopithecus by Forestier. (From Smith).¹³

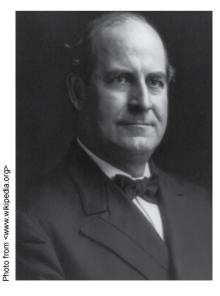
such as Woodward had been too incredulous. It was as a result of this equivocation, together with comments from colleagues, that Osborn found the need to sit on the fence claiming that Nebraska man was an anthropoid ape.

Following the trial

Once the Scopes Trial was over and a couple of years had lapsed, the real evidence surrounding the Nebraska tooth came out. Sadly though, Bryan, having won the trial, died only five days later on 26th July 1925 and did not get to hear about it. It would seem the trial took its toll on Bryan's health. Even though Gregory knew the tooth was probably not all it appeared to be prior to the trial in June 1925, it was still two and a half years later before Gregory's retraction was finally published in the Science journal. With Nebraska man an embarrassment, Osborn also changed his view of the evolution of man, arguing instead that mankind had evolved along a parallel path to that of the evolution of apes.

Most of the glee for Nebraska man's downfall was had by European paleontologists keen to score points against their American competitors. Elliot Smith, perhaps feeling deceived, and forgetting his own over enthusiasm for the find, commented that he found some entertainment value in the fall of this American 'Playboy of the Western World'. ¹⁹ The Frenchman Marcellin Boule had been sceptical about *Hesperopithecus* from the beginning, commenting that this was a 'lesson for paleontologists with too vivid an imagination. ²⁰ He even remembered this lesson in 1957, commenting that 'The Nebraska Ape-Man became a "Pig-Man". ²¹

With Bryan dead, there were few able to take up the fight against evolution. But one notable man was the Baptist pastor, John Roach Straton, from New York. Straton



William Jennings Bryan. The false identification of the Nebraska tooth was used by Osborn to attack Bryan's integrity.

was once a believer in evolution, but later became a firm opponent. In 1924, Straton had criticised Osborn's New York based museum, calling the 'Hall of the Age of Man' a 'Humorous department'.22 Later in 1928, Straton found ample ammunition against Osborn and evolution from the Hesperopithecus affair. Straton commented rather colourfully that the Nebraska evidence should be called:

'Hesperopigdonefoolem osborniicuckoo in honor of Mr. Osborn himself, who defended the tooth heatedly and, cuckoo-like said "Me too" after gleeful dogmatic assertions of Cook, Gregory and others. ... [Hesperopithecus] justifies my assertion of some time ago that evolution is the most gigantic bluff in the history of the human mind.'²³

Conclusions about this episode

Wolf and Mellett suggest three reasons why Osborn might have made this mistake. Firstly, they suggest that the presence of some African species such as antelope in the same American layers in which the tooth was found gave some comparison to various African ape-man research programmes. If antelope could have crossed to America, they speculated, so could ape-men. However, bearing in mind Osborn's swift conclusion about the evidence, it is doubtful whether he really had time to engage in such subtle thinking.

Secondly, they suggest that fragments and splinters of bones found in the layers had similarities with the action of human activity, although as it turned out this evidence had a stronger explanation in terms of the eating habits of hyenas cracking bones to extract the marrow. William Buckland had shown in the early nineteenth century that bone fragments in the Kirkdale caves of Yorkshire had been worked by the action of hyenas. Buckland had fed his own pet hyena, called Billy, scraps of bone and found the same teeth marks as those on bones found in the Yorkshire cave system.²⁴

Thirdly, Wolf and Mellett suggest that the tooth was well worn and as such had strong similarities with that of a primate. They also claim that it may have been rotated by 90 degrees, while the animal was still living, to produce the unusual shaped markings that had more in common with primate wear than that of a pig. Although they give documented evidence in support of this claim, Wolf and Mellett do admit that Osborn should have known better by showing greater caution, especially in light of the research of Cook and Matthew.

So, at the very least, Osborn should have known better in his initial identification, showing greater caution, especially when a close colleague of his had noted and published the similarities some years previously. Later, when evidence began to show that this tooth was from a type of pig, Osborn should have admitted his mistake before the Scopes Trial began and not continue to promote this tooth as an important truthful find, thus allowing the real truth to remain hidden for another two and a half years. While the evolutionary community would want to play down this episode as a simple mistake due to over-enthusiasm, there are aspects of it that look like a deliberate plan of deception on the part of Osborn and

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the evolutionary establishment. The tooth was found in the state of Nebraska, Bryan's own State, and revealed to the world only a few days after Bryan began to campaign against evolution in a major publication. Osborn must have known that the teeth of pigs, especially well worn ones, have close similarities to those of primates and humans.

After showing some equivocation after his initial enthusiasm, due to critical comments from Europe, Osborn returned to the full promotion of this fossil as providing factual evidence for evolution a few weeks before the Scopes Trial began. But at the start of the trial he simply stopped talking about it instead of admitting that it had been erroneously identified. Although neither the tooth nor Osborn made an appearance at the trial, the impression was left that Osborn fully supported its identification as an apeman. However, it would seem that the defence team at the Scopes trial wanted to lose so as to appeal to a higher court for a constitutional judgment. It is therefore more likely that the Nebraska tooth was used as a tool for attacking Bryan, who was seen as an important and dangerous critic of evolution. It is hard to escape the conclusion that all of this falsification of evidence was done as part of a political campaign, fought through the courts, to get evolution taught in schools and to remove the teaching of creation.

The famous Scopes court case was staged to counterattack the influence of creationist thinking in America and the teaching of creation in schools. The evolutionary scientists who claimed to be guardians of good science standards should have acted with greater integrity with their level of education and training, instead of apparently fabricating evidence. Despite their position in society, they made very bold statements about the tooth on the flimsiest of evidence and promoted their conclusions widely and loudly. Despite protestations to the contrary by the evolutionists, it looks very much like part of a deliberate campaign or even a confidence trick on the part of the leading American paleontologists and cannot be dismissed as a simple error. One may wonder how the education of children is improved by the deliberate falsification of evidence in this way.

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Andrew Sibley B.Sc., M.Sc. EDM (Open) is a writer and speaker with the Creation Science Movement in the UK, a meteorologist, and is now studying towards a Ph.D. in theology at Exeter University in England.