

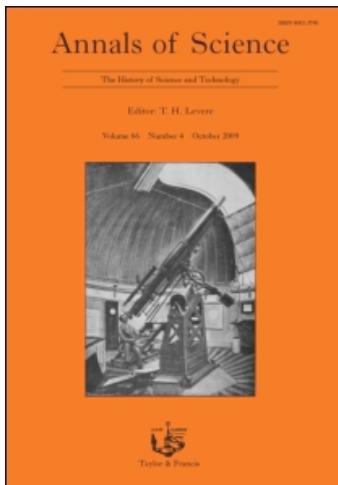
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### A Skeleton's 'Biography'

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## Essay Review

### A Skeleton's 'Biography'

MARIANNE SOMMER, *Bones & Ochre: The Curious Afterlife of the Red Lady of Paviland*. Cambridge, MA: Harvard University Press, 2007. xxii+398 pp. \$39.95/£25.95/€30.00. ISBN-13: 978-0-674-02499-1; ISBN-10: 0-674-02499-0 (hardback).

#### REVIEWED BY

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There are numerous books on the history of palaeoanthropology—one of the most interesting branches of science for the layperson, for it deals with *our* evolutionary history and the subject is not too esoteric for non-professionals. But the field's history is complex and can be approached from a number of standpoints; and particular historical accounts tend to be written with emphasis on work in particular countries. Fortunately, however, Marianne Sommer is not regionally or linguistically constrained. Born in Switzerland and currently working at Die Eidgenössische Technische Hochschule (ETH) Zurich, she took her doctorate at the University of Zurich and has also held appointments in Britain, the US, and Germany. Her academic training extends across biology, history and social studies of science, and English linguistics and literature, and she has interests in discourse analysis and 'ways of knowing' and representation in science. Her main focus is the history of palaeoanthropology, as well as historical publications on non-human primates, with consideration of the relations between science, the media, and the public. Thus, the depictions of early humans and hominids, in words, models, drawings, exhibitions, and so on concern her; and she approaches her topic from a variety of perspectives, with excellent language skills.

We see these capacities and interests ably displayed in *Bones & Ochre*, where Sommer brings together the results of several of her earlier researches as a coherent whole. The book is, in a sense, a history of palaeoanthropology from the end of the eighteenth century to the present, but the author's presentation takes the unusual form of (what she calls) a 'biography' of the famous 'Red Lady of Paviland'—that is, a history of the subsequent work on 'her' almost to the present, linked to the history of other developments in archaeology.

The 'Red Lady' was nicknamed thus as a result of the studies of William Buckland on the human remains that had been found in Paviland Cave on the south coast of Wales at the end of 1822. Buckland examined the site briefly early in 1823, and wrote up his findings in detail in his *Reliquiae diluvianæ* later that year. As is well known, he interpreted the incomplete skeletal remains as being those of a female,

who lived in the vicinity of an ancient British camp situated on the ground above and behind the cave, and he hinted obliquely that 'she' might have been a woman belonging to the oldest profession who serviced the soldiers in the camp. 'She' became known as the 'Red Lady' because 'her' bones were covered with red ochre.

Revisiting one of her previous publications, Sommer shows that Buckland's work was hasty and sloppy: he was only at the cave for a couple of days at most and he published anything but an objective analysis, asserting that the bones were those of a female, without making any assessment of their relative sizes—which later led William Sollas to conclude that they belonged to a male.<sup>1</sup>

It is somewhat difficult to explain the incompetence of Buckland's work at Paviland, but, as Sommer relates, it should be noted that it came hard on the heels of his detailed publication in *Philosophical Transactions* of his work at Kirkdale Cave in Yorkshire, and comparisons with cave deposits in other parts of Europe.<sup>2</sup> At Kirkdale Cave he had examined deposits that he construed as showing the following succession: (1) stalagmite formed prior to the occupation of the Cave by hyenas, (2) an overlying pre-Flood fauna of hyenas and their 'dinner' bones (which were not water-worn but were contained in a stalagmitic bone breccia), (3) Flood sediments, followed by (4) post-Diluvial sediment, also encrusted in stalagmite. The thickness of stalagmite of the upper and lower deposits was taken as an indication of the amount of pre-and post-Diluvial time represented in the cave. It served—to use the contemporary language of Jean de Luc—as a 'chronometer'; and it appeared that the time since the deposition of the Diluvium by the Flood was relatively brief.<sup>3</sup>

It would seem that Buckland simply carried these ideas over to Paviland, and assumed that the 'Lady' had been buried, so that 'she' was at a lower level than 'her' 'natural' stratigraphic horizon. So, 'she' could be interpreted as being 'recent'. One should also consider (as Sommer does) the powerful influence of Georges Cuvier on Buckland's thinking. Cuvier had rejected claims of the existence of fossil humans in Europe, stating categorically that 'the human race did not exist in the countries in which the fossil bones of animals have been discovered, at the epoch when these

<sup>1</sup> Marianne Sommer, "An Amusing Account of a Cave in Wales": William Buckland (1784–1856) and the Red Lady of Paviland', *British Journal for the History of Science*, 37 (2004), 75–92.

<sup>2</sup> William, Buckland, 'Account of an Assemblage of Fossil Teeth and Bones of Elephant, Rhinoceros, Hippopotamus, Bear, Tiger, and Hyæna, and Sixteen other Animals; Discovered in a Cave at Kirkdale, in the Year 1821: With a Comparative View of Five Similar Caverns in Various Parts of England, and others on the Continent', *Philosophical Transactions of the Royal Society of London*, 112 (1822), 171–236.

<sup>3</sup> There are, however, problems here. Sommer writes (p. 49): '[t]he proportion of the stalagmite layer below the diluvial mud to that above seemed to function as a measure for the proportion of the ante- to the postdiluvial period. In this way, the thin upper layer of stalagmite confirmed the recent date of the Deluge as assigned to it on the basis of the Scriptures'. This finds a warrant in what was written in Buckland's *Philosophical Transactions* paper and in his *Reliquiae diluvianæ . . .* (2nd edn, London, 1824, 48–51). He referred to a 'limited quantity of postdiluvian stalactite', which suggested that 'the time elapsed since the introduction of the diluvial mud has not been one of excessive length' (*Reliquiae*, 51). However, Buckland also wrote (*Reliquiae*, 48) that the quantity of antediluvian stalagmite 'cannot be very great' and he referred to the quantity of post-diluvial stalactite as being 'much greater than that formed in the two periods, during and before which, the cave was tenanted by hyænas' (*Reliquiae*, 50–51). Moreover, Buckland's cross-section of the Cave, published in 1822 and again in 1823 and 1824 (*Reliquiae*, Plate II, figure 2), suggests the formation of a greater quantity of post-Diluvial than of ante-Diluvial stalagmite. Thus, there appears to be some contradiction. However, the problem seems to be of Buckland's making, not Sommer's. Perhaps his belief in a short post-Diluvial period of time was simply preconceived.

bones were covered up'.<sup>4</sup> And since Buckland supposed that his Kirkdale Cave sediments represented the residue of the Flood, which he identified with Cuvier's last catastrophe, it followed that he did not *expect* to find ancient, antediluvian human remains in Britain, even though the Bible clearly indicated that there had been antediluvian humans (Noah, etc.) somewhere. So, Genesis needed to be reconciled with Cuvier! Buckland's escape route was to suggest that the antediluvians had lived in distant Asia. The problem didn't really arise for Cuvier, as he didn't identify Noah's Flood with his last catastrophe.

From this tangle, much followed, for Buckland was not one to abandon a position, once adopted. So, when in the 1830s the physician and archaeologist Philippe-Charles Schmerling published his discovery of human relics in Belgium associated with fossilized animal bones, this threatened Buckland's credibility. His response was, as Sommer shows, argument by ridicule—in a lecture in Bonn in 1835 in which he 'demonstrated' that of a fossilized bear bone could be made to adhere to his tongue<sup>5</sup> whereas Schmerling was (apparently) unable to get one of his claimed human bones to do likewise. So, Buckland absurdly maintained, Schmerling's evidence could be set aside; and it was again rejected in Buckland's *Bridgewater Treatise* (1836), without additional relevant discussion.

Further developments in the way of discoveries and interpretations were slow but steady after Paviland, with famous excavations conducted at places such as Kent's Cavern near Torquay (c.1825 to 1829 by John McEnery, who, as Sommer shows, was induced to change his interpretations by the influential Buckland), the Somme Valley (1837 by Jacques Boucher de Perthes—controversially), and (after Buckland's death) Brixham Cave, also near Torquay (1858 by William Pengelly and Hugh Falconer). Buckland rejected the Kent's Cavern finds and, suggests Sommer, probably the Somme findings also, as evidence of antediluvian humans. But Buckland's authority did not outlive him, and by the 1860s other *prehistoric* remains had been found in the south of France by Édouard Lartet and others. Lartet's type specimen (discovered in 1868) came to be called Cro-Magnon Man, after the name of the cave in the Dordogne where he found such skeletons.

It was Lartet and the British amateur archaeologist Henry Christy who, visiting Oxford in 1863, realized that the bones of the 'Red Lady' (by then moved to the comfortable surroundings of the Oxford Museum rather than draughty Paviland Cave) were comparable to those of Cro-Magnon type, and belonged to what John Lubbock had dubbed the Palaeolithic. This interpretation met some initial resistance, but archaeologists were gradually won over, and Buckland's rejection of antediluvian humans came to seem more like an embarrassing mistake than the voice of authority. The Darwinian Revolution was already having its effect in palaeoanthropology—even in Oxford.

It was in that city that the polymathic William Sollas, taking up the Oxford chair in 1897, began a thorough re-examination of the 'Red Lady' (a matter not mentioned in E.A. Vincent's history of the Oxford Department) and the cave where 'she' had

<sup>4</sup> G. Cuvier, *Essay on the Theory of the Earth. Translated from the French of M. Cuvier . . . by Robert Kerr, F.R.S. & F.A.S. Edin. With Mineralogical Notes, and an Account of Cuvier's Geological Discoveries. By Professor Jameson* (Edinburgh and London, 1813), 131.

<sup>5</sup> According to Sommer, Léonce Elie de Beaumont, who attended the meeting and left some account of it, recollected that Buckland spoke for a time with a bone sticking to his tongue and out of his mouth! This seems to have been a prime example of his penchant for humour (or buffoonery).

been found.<sup>6</sup> Sollas found hundreds of implements (as compared with the one recorded by Buckland in his hasty visit to Paviland). And he was able to 'situate' the skeleton in the taxonomic system that had been gradually elaborated since Buckland's day—specifically as a *Cro-Magnon male* belonging to the Aurignacian culture. He agreed with Buckland that the body had been buried, but thought that the broken animal bones found in the cave were the relics of human repasts, not the result of earlier diggings. Given that Buckland had prided himself on the correct interpretation of hyena tooth-marks on bones in the Kirkdale Cavern, it was not particularly impressive that he failed to note scratches on the Paviland bones as being the work of humans. But then, he did not think humans and animals that are now extinct in Britain could be contemporaneous.

Having dealt in some detail with Sollas's work, Sommer leads us securely through the complications of palaeoanthropological thought in the late nineteenth century and into the twentieth century, still using the Paviland work as a kind of guiding thread, with considerations of analogies between ancient man and modern hunter-gatherers that were stimulated by (among others) Sollas's book *Ancient Hunters and their Modern Representatives* (London, 1911). Sommer's book culminates in a discussion of the extensive work of Stephen Aldhouse-Green of the University of Wales (previously Keeper of Archaeology at the National Museum of Wales in Cardiff) with a multidisciplinary and multinational team. This work involved a detailed re-examination of the literature on the topic, re-excavation of the site (yet again!), the preparation of an exhibition at the Museum, and the publication of an edited volume entitled *Paviland Cave and the "Red Lady": A Definitive Report* (Bristol, 2000).

Sommer's discussions of these late twentieth-century investigations are in many ways the most interesting part of her book, partly because they are fresh (we heard of Buckland's Kirkdale and Paviland work in Gillispie's *Genesis and Geology* [2nd edn, New York, 1959] and were given more detail in Rupke's *Great Chain of History* [Oxford, 1983]; and some of Sommer's particular insights—such as the role of humour in trying to buttress a shaky theory—have been published previously; see note 1) and partly because she offers us some valuable oral history, resulting from interviews with Aldhouse-Green and others. In addition, she addresses the question of the rhetoric (or semiotics) of science displayed in the exhibitions and artistic representations of the humans who occupied the cave in prehistoric times. The differences between the several representations are rather extraordinary. In concurrence with Sommer, I suggest that all are open to doubt (see below). And the differences reveal the instability of the 'definitive' findings of the 2000 *Report*.

Both Buckland and Sollas had imagined that Paviland Cave might have been used for some kind of ritual or magical purpose. Sollas opined that the cave provided quite a congenial place for habitation, looking out over the Bristol Channel, with a fertile hinterland that would have provided rich hunting territory. Sommer introduces her readers to four images relating to the 'Red Lady': (1) by an Italian artist Gino D'Achille, prepared for an exhibition at the National Museum of Wales in 1980 when Aldhouse-Green was working there; (2) a watercolour by Angela Swainston prepared according to a brief by her archaeologist sister Stephanie Swainston, reproduced in the *Report*; (3) a model of the clothed dead 'Red Lady' before 'her' burial, prepared

<sup>6</sup> E.A. Vincent, *Geology and Mineralogy at Oxford 1860–1986* (Oxford, 1994).

for an exhibition at the Museum in 1996; and (4) a painting by Anne Leaver for the partners Stephen and Miranda Aldhouse-Greene (another archaeologist), published by Stephen Aldhouse-Green and Raymond Howell in 2004 and again by Stephen and Miranda in 2005.

I accept that these images were prepared for the general public, and do not in themselves undermine the scientific work of the *Definitive Report*. Yet they do provide an idea of what the archaeologists imagined the historical or social circumstances were at the time of the interment of the 'Red Lady'; or what the archaeologists wanted the public to imagine about such matters. D'Achille's picture is perhaps the most implausible. It depicts a dignified group of people standing or kneeling round the 'Red Lady's grave, variously holding firebrands, well-made spears, and some kind of wand. But it is the clothing that is truly ridiculous. The woman and man kneeling over the corpse have well-groomed hair and the (attractive) woman is dressed in a kind of pleated dress such as might have been worn in the nineteenth century. One of the spear-carriers wears a kind of elegantly tailored smock.

I have consulted the web for early photo-images of Inuit people, whose conditions might be comparable to those faced by Palaeolithic humans in Britain, and they bear some resemblances to the clothing and demeanour imagined by D'Achille; but the earliest photographs I could find are from twentieth century. Nineteenth-century photos of Australian Aborigines taken at the time of the first contacts with Europeans suggest much more primitive people. And the Inuit were relatively late arrivals in northern Canada. What would their predecessors, the Thule or Dorset people, have looked like? Much more primitive than the Inuit I would suppose. And the Paviland people came many thousands of years earlier (though we know that the Cro-Magnons in France had advanced art).

Angela Swainston's picture shows a more frigid scene, with the remains of the mammoth that were actually found in the cave with the 'Red Lady' seemingly contemporaneous to the people depicted, whereas Buckland supposed that the humans were much later. A man standing with a spear has an apparently combed beard. His dress is represented as being well cut, though presumably fashioned out of animal skins.

The body of the 'Lady' awaiting interment, modelled for the Museum exhibition, seems to resemble a female, with well-fitting clothing perhaps resembling that of a mediaeval peasant, to judge by the photograph reproduced in Sommer's book.

Leaver's picture (also implausible) shows a rather animated burial scene, with what appears to be a young girl (rear view, so one cannot be sure) wearing what looks a little like cutoff jeans (!) and also a short-sleeved shirt, in a group dancing (?) round some kind of magical arrangement of rings and wands, such as were actually found with the 'Lady' by Buckland, with two squatting 'musicians' providing music from wind-pipes. Aldhouse-Green favours the idea that the 'Red Lady' was some kind of shaman—an anachronistic notion? All this seems to go well beyond what the evidence warrants, though the suggestion might be expected, given that Sommer tells us that Leaver studied rituals in African, Indian (?Red) and Inuit cultures before preparing her drawing. And I note that Miranda and Stephen Aldhouse-Green have recently published *The Quest for the Shaman: Shape-shifters, Sorcerers, and Spirit-healers of Ancient Europe* (London, 2005), which would link up with their suggested interpretation of the 'Red Lady' artefacts.

For a glimpse into what Stone-Age cultures may have been like, Stephen Aldhouse-Green invited the eminent Welsh-born Australian anthropologist, the

late Rhys Jones, to write a concluding chapter about Australian Aborigines for the *Definitive Report*. This is a topic worthy of inclusion, though Jones cautioned against drawing direct analogies, in the manner of Sollas, between prehistoric humans and Stone Age peoples who survived into the modern world. In addition, Sommer reports that Jones induced his cousin, Rhodri Morgan, First Minister of Wales, to write a foreword for the *Report*, and made some suggestions as to what it might say. The result was that the 'Red Lady' was represented as a kind of proto-Welshman and was 'implicated in a discourse on Welsh origins and identity' (*Bones & Ochre*, 265). Sommer sees the *Report* as offering 'her/him as an attempted counterweight to the 'dominance' of France's Cro-Magnon in the popular imagination. She notes some other indications of Welsh nationalism in play, including the efforts to get the remains of the 'Lady' transferred from Oxford back to Wales where they properly 'belonged'.

*Bones & Ochre* is a comprehensive and probably definitive account of the 'history' of the 'Red Lady' from 'her' first discovery to the end of the twentieth century. And, as previously stated, Sommer uses *that* story as a peg on which to hang a more general account of the history of palaeoanthropology—an original and valuable approach to the vast literature on the topic. Additionally, she draws a moral from her story: the Paviland saga has *not* been brought to a definitive conclusion. At best, the *Definitive Report* can only be said to be a snapshot of the way things appeared in 2000. Uncertainties remain, and can never be fully resolved, not even though we now know something about the DNA of the 'Red Lady' and have an idea of 'her' age—though, we are informed, the Oxford Radiocarbon Accelerator Unit was still working on the dating of the remains in 2007.

The whole book makes absorbing reading. Personally, though I am an historian of science by trade, the material that had the greatest interest for me was Sommer's discussions of the interrelations of science and the public, and her considerations of the visual representations of scientific ideas. The earlier part of the story, though scrupulously researched and with a considerable amount of new documentation added, is getting a bit 'long in the tooth'. To see the continuation of old debates through to the present is, however, really intriguing, with the numerous facets of the 'Red Lady's' story shining light in many directions. As always, theory and controversy have permeated both observation and the interpretation and presentation of evidence. We knew that already, but Sommer's book provides a striking exemplification of that 'truism'.