Darwin among the archaeologists: the John Evans nexus and the Borneo Caves

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The two decades from 1860 to 1880 were one of the most formative periods in the emergence of modern attitudes to scientific inquiry in England, in what were later to become the specialized disciplines of the natural and human sciences. At this high point of Victorian prosperity a small group of scholars established both the principal questions for future research, and the character of the institutions which were to pursue them, in increasingly professional ways, during the following century. Most of the men (for it was an overwhelmingly male community) who were involved with these developments had independent means, either as inherited wealth or as a result of their own involvement in business affairs; and in consequence they were less restricted in pursuit of their interests than many of their successors who occupied paid positions in scientific institutions and universities (Levine 1986; cf. Chapman 1998). Many, indeed, were notable polymaths, and the committees which convened to organize the prosecution of a range of inquiries on topics of natural history and broadly anthropological or archaeological questions were composed of the same set of recurring names. This short note records one such episode in 1878, towards the end of that favoured period, which brought together some names which are familiar in the narratives of their own disciplinary histories, and illustrates the social and financial ties which linked them.

John Evans and the Victorian scientific community
(Sir) John Evans (1823–1908, FRS 1864, KCB 1892) was typical of the knowledgeable amateur participation made possible by a successful business career as a paper-maker (Evans 1943). Beginning with an interest in numismatics (and especially the pre-Roman coins of Verulamium, near to his factory at Nash Mills in Hertfordshire), he published a pioneer article on Celtic coins in 1849, a major work on the subject, The Coins of the Ancient Britons in 1864, and an application of Darwinian natural selection to numismatics in 1875; but he had already been a Fellow of the Geological Society since 1857, and even published original observations on the brain of Archaeopteryx in 1865. However, his reputation as a natural scientist stemmed principally from his involvement (with his friend (Sir) Joseph Prestwich, then a wine-merchant but later Professor of Geology at Oxford) in making known the discoveries made by Boucher de Perthes in the Somme gravels around Abbeville during the 1850s. Both Englishmen had connections with France through their respective business dealings. Prestwich was particularly concerned with Pleistocene (‘drift’) deposits and their extinct faunas, Evans with antiquities; so that reports of the association of flint artefacts with elephant and rhinoceros bones aroused their curiosity and led to their famous trip with other members of the Geological Society in May 1859 when they observed the association directly (Grayson 1983; Van Riper 1993; Coye 1997). Prestwich’s paper reporting these observations to the Royal Society that month was matched by Evans’ paper on the flints to the Society of Antiquaries in June, following a meeting at Nash Mills with its Director, (Sir) A.W. Franks of the British Museum (Evans 1860; 1862; Prestwich 1861). Evans also gave a verbal account of the flints at the Royal Society meeting, to an audience which included Sir Charles Lyell, Roderick Murchison, T.H. Huxley, Michael Faraday and Charles Babbage—a cross-section of the Victorian scientific élite.

This occasion, crucial to the acceptance of a high antiquity for humanity, was the foundation of Evans’ reputation in the scientific

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community, and led to lasting contacts — especially with Lyell (originally a lawyer before turning to geology) and Huxley (a rising star in London scientific circles), but also a growing involvement with fellow-antiquarian (Sir) John Lubbock (later Lord Avebury), member of a prosperous banking family and later a Liberal politician, now best known for his archaeological work (and notably his book *Prehistoric Times* of 1865). A neighbour of Darwin in Kent, Lubbock was also a friend and protégé, and it was perhaps through his intermediacy that Evans was encouraged to consult the expert naturalist and by then famous author of *The Origin of Species*.1

Evans’ reputation amongst geologists was high. Lyell (who had stayed as a guest at Nash Mills) made frequent reference to his expertise in the *Antiquity of Man* (‘my friend Mr Evans, before cited . . .’ 1863: 187), and the copy he sent personally to Evans in advance of publication has a handwritten dedication. It was a particular satisfaction to Evans to receive in 1880 the Lyell Medal of the Geological Society. Huxley, too, became a personal friend. As one of the few professional scientists (and poorly paid: he was on more than one occasion assisted financially by Darwin), he was frequently involved with the running of scientific institutions and served in several offices in many of them; and in these capacities he often had occasion to be grateful for Evans’ organization and sense of business (e.g. Evans 1943: 156). Evans continued to correspond with Huxley on a wide range of matters, and one letter of 1890 indicates the breadth of their shared interests (Huxley 1900):

The Grand Hotel, Eastbourne
August 12, 1890
My dear Evans — I have read your address [to the Anthropological Section of the British Association, 1890] returned herewith with a great deal of interest, as I happen to have been amusing myself lately with reviewing the ‘Aryan’ question according to the new lights (or darknesses).

. . . I rather think there were people who fought the fallacy of language being a test of race before Broca — among them thy servant — who got into considerable hot water on the subject for a lecture on the forefathers and forerunners of the English

people, delivered in 1870. Tylor says that Cuno was the first to to insist on the proposition that race is not co-extensive with language in 1871. That is all stuff. The same thesis had been maintained before I took it up, but I cannot remember by whom.

. . . I would not state the case so strongly against the probabilities of finding a pliocene man. A pliocene *Homo* skeleton might analogically be expected to differ no more from that of modern man than the Oeningen *Canis* from modern *Canes*, or pliocene horses from modern horses. If so, he would undoubtedly be a man — genus *Homo* — even if you made him a distinct species. For my part I should by no means be astonished to find the genus *Homo* represented in the Miocene, say the Neanderthal man with rather smaller brain capacity, longer arms, and more moveable great toe, but at most specifically different.

. . . Hope they gave you a better lunch at Gloucester than we did here. We’ll treat you better next time in our own den. With the wife’s kindest regards —

Ever yours very faithfully,
T. H. Huxley

Evans was a natural organizer, and played a leading role in arranging the International Congress of Prehistoric Archaeology and Anthropology, held in Norwich and London in 1868, which marked a turning-point in the emergence of the discipline in Europe (Kaeser, this volume); but this international dimension was founded upon a richly networked set of connections between the various established institutions of national scholarship (Evans 1900). Besides his Vice-Presidency of the Royal Society, Evans acted as President of the Numismatic Society (1874), was Vice-President of the Society of Antiquaries (1876), and was Secretary of the Geological Society 1866–74 and President 1874–76. He was involved with the plan to unite the Anthropological Society and the Ethnological Society (Burrow 1970: 120–24) in the Anthropological Institute, of which Lubbock served as the first President. The plan for Evans to succeed him in 1872 was frustrated, however, when the membership elected a non-scientist, Charnock; and Huxley immediately resigned in protest. Evans did, however, become President 1877–79 (Evans 1943: 158). Yet another society with which he was associated was the British Association for the Advancement of Science, whose meetings he had attended since 1861, presiding over the anthropological section in 1870 at Liverpool and the geological section in 1878 at Dublin. It is in this context that the set of documents to be presented here takes its place.

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1 For example, Evans found some unusual conical objects in a Bronze Age barrow, and wrote to Darwin for his advice before realizing that these objects were not organic at all. (Evans to Darwin, 14 December 1868, Cambridge University Library DAR 163.36).
The Borneo Caves Expedition

Among John Evans’ personal papers is a sheet of paper setting out a financial calculation (Figure 1). Bearing the heading ‘Borneo Caves’ and the year 1878, it lists a series of names against sums of money ranging from 3 guineas (from Prestwich, now in academic employment) to £30 for his personal contribution, together with two sums of £50 from the Royal Society and the British Association for the Advancement of Science respectively. Its significance is made clear from an accompanying printed handbill from the assistant secretary of the British Association, dated 19 September 1878, noting the text of a resolution taken at the Dublin meeting:
That Mr John Evans, Sir John Lubbock, Major-General Lane Fox [Pitt-Rivers], Mr George Busk, Professor Boyd Dawkins, Mr Pengelly, and Mr A.W. Franks be a Committee for the purpose of exploring Caves in Borneo; that Mr Evans be the Secretary, and that the sum of £50 be placed at their disposal for the purpose.  

Once again, Evans’ organizational skills were in demand; and he set about writing to those of his acquaintance known both for their financial soundness and their generosity. Only one such exchange of letters is preserved, but it is an illuminating record both of scientific interest and financial liberality (Cambridge University Library, DAR 163: 37):

Hemel Hempstead
January 28 1878
Dear Mr Darwin,  
I venture to ask your kind assistance in carrying out some cave explorations in Borneo which Mr Everett, with whose name I think you are acquainted, is willing to undertake. He proposes to devote a year to the exploration and estimates his expenses at about £370 which I have agreed to find for him — the produce of his work in the first instance to go to the British Museum and any duplicates that they may not require will be allotted by a committee. The Royal Society has voted me £50 from the Donation Fund, and I hope to get a similar amount from the British Association, but there is still a large sum to raise by private subscription which I hope to arrange. I think that Huxley has already mentioned the subject to you, and I hope that you will not think me troublesome in making application to you — it seemed to me too good an opportunity to be lost, but I cannot bear the whole expense myself, though I do not like to go a-begging. I suppose that you have seen Gaudry’s new book¹ with which I am sure that you will be pleased.

Believe me yours most truly,
John Evans
Charles Darwin Esq. LL.D F.R.S.

The reply (Figure 2), which came by return of post (a tribute both to Darwin’s promptitude and the efficiency of the Victorian Post Office), was filed with Evans’ papers (Ash.Mus. Dept. Ant/A.L. Evans Gift/1878):

² The reference is to Albert Gaudry, Les enchainements du monde animal dans les temps geologiques. 1878. This is perhaps surprising, since Gaudry’s transformism — in the tradition of the Great Chain of Being — was very different from Darwin’s own perception of the evolutionary process. For Evans, the grand narrative of palaeontology was evidently more important than the mechanism proposed by Darwin.

Down
Beckenham, Kent
Jan 29. 78
My dear Mr Evans,  
I think you are doing a very great service to Natural Science by getting the caves of Borneo explored. I shall be happy to subscribe £20, but I do not send a cheque as if more is necessary I shall be glad to give £30 or £40. I wish someone as energetic as yourself would organise an expedition to the lissacusthe beds in S. Africa, where the cliffs are said to be almost composed of bones.

Pray believe me yours very sincerely,
Ch. Darwin.

Evans had been aware of the potential of cave sites as sources both of Pleistocene faunas and evidence of early human occupation, not only from Pengelly’s work in Devon but from his own visit to the Dordogne in company with Edouard Larret and Henry Christy in 1864. The opportunity to extend such observations to other parts of the world, and especially to the famously large and extensive cave systems of Borneo, must have struck him as particularly opportune; but Darwin was already primed as to the importance of this island. Alfred Russel Wallace, naturalist and co-discoverer of the principle of natural selection, had visited Borneo in 1855 to observe the orangutans which are limited to this island and adjacent Sumatra; and it was here that he composed his first paper (‘The law which has regulated the introduction of species’, prefiguring the famous memoir which provoked Darwin into writing the Origin). Moreover Wallace had written directly to Huxley on the possible significance of the west Borneo caves as sources of evidence for the evolution of the anthropoid apes (Harrison 1956: 550). Huxley, in turn, alluded to them in his discussion of Neanderthal remains in 1863 and even recommended an expedition there in Natural History Review in 1864, while Wallace mentioned in correspondence with Darwin in May of the same year that the British Consul in Kuching would conduct an initial exploration of the caves which might be followed by an expedition funded by subscription.³

³ May 10, 1864
My dear Darwin — The Borneo Cave exploration is to go on at present without a subscription. The new British Consul who is going out to Sarawak this month will undertake to explore some of the caves nearest the town [Kuching] and if anything of interest is obtained a good large sum can no doubt be raised for a thorough exploration of the whole country... A.R. Wallace.

(Burkhardt & Smith 1985— (vol. 12): 73)
It was not until the appearance of A. Hart Everett, however, an acquaintance of Wallace, that a suitable person was found to undertake such a programme (Harrisson 1958). Everett was an amateur naturalist and collector, supplying ornithological material to Lord Tweeddale, President of the Zoological Society, arriving in Borneo to collect birds in 1869, as well as working part-time in government service for the White Rajahs. He visited the Bau cave and the great cave at Niah in 1873, and his account of this huge complex (used in recent times for burial, and where the myriad swallows-nests were traditionally collected for soup) in the Sarawak Gazette would have aided his quest for sponsorship. John Evans, knowing of the rich Palaeolithic harvest in the caves of the Dordogne, provided his link to the London societies and interested individuals who could provide the backing he needed.

Unfortunately, when provided with funds, Everett barely scratched the surface: indeed, Harrisson (1958: 554–9) doubts whether he undertook much serious new research. There was some political unrest, and native populations were reluctant to enable access to their burial-places — and apart from these recent burials, a much larger scale of excavation would have been necessary to fulfil the promise of ‘finding in the deposits on their floor fossil remains of the forerunner of anthropoid apes’ (as Everett represented his mission to a visiting American naturalist, William Hornaday). Hornaday visited him while working at the Bau cave, and described the scene: ‘Here was an evolutionist, with his war-paint all on, and his weapons in his hand — pick, shovel and sieve. Imagine the sensation of a Darwinian actually searching for and finding the link between man and the great apes!’ (Hornaday 1885, cited in Harrisson 1958). The reality, however, was that the anticipated ‘bone-beds’ proved elusive, and Everett (despite claims of a fossil orangutan skull and a mastodon tooth, of which no traces can be found: von Koenigswald 1958) was only able to send back sub-fossil specimens from Bau cave.
and the Paku Flats auriferous sands, or recent material — probably Dayak hunting trophies (Harrisson 1959).

Reports of the work of the expedition (Everett 1879; Everett et al. 1880), were in effect a confession of failure: only recent material was to be found in the caves, which it was concluded were 'too recently raised above the waters of the sea to render it probable that future discoveries will be made' and that 'no further expense should be hazarded' in pursuit of fossil material. In consequence, it was another 80 years before Harrisson's own work demonstrated the astonishing potential of the Niah complex, with its sequence stretching back 40,000 years, and it was to be a further 30 before the recent campaign of work there began (Barker 2001; Cranbrook 2001). The enthusiasm for cave-exploration in other parts of island south-east Asia was not diminished, however, since even as the depressing report was published, the Dutch army doctor Eugène Dubois was beginning his exploration of the limestone caves in the Padang Highlands of central Sumatra between 1880 and 1890. Yet it was not in these caves that the Wallace/Darwin agenda for finding fossil man in this area was to be achieved, but in freshwater sandstone and conglomerate deposits along the Solo River in Java, which Dubois began to explore at the behest of the Dutch government in 1889 — and was rewarded in 1891 by the discovery of the famous calotte and femur of 'Pithecanthropus' (Homo erectus) from Trinil, the first pre-Neanderthal human fossil to receive scientific recognition (Dubois 1894).

In the context of fossil-hunting in Britain, however, there is one more twist to the tale of the Borneo Caves. Everett sent his material to the British Museum (Natural History) in South Kensington, and more was added by his executors, being catalogued in the Department of Geology collections by Arthur Smith Woodward in 1899. J.S. Weiner was able to show in 1951 that the lower jaw of the Piltdown find (made in 1912) was in fact that of a recent orangutan (Pongo pygmaeus) — a species surviving only in Borneo and Sumatra; and the specimen was then radiocarbon dated in Groningen to 500±100 BP (Oakley & de Vries 1959). Although recent reviews of the Piltdown Fraud have suggested that its perpetrator, Charles Dawson, acted alone (e.g. Langdon 1991), a recent investigation by G.M. Drawhorn (1994) points to the fact that Woodward had access to the entire range of faunal and anatomical material used in the hoax, and concludes that these materials were knowingly supplied to Dawson by Woodward. Indeed, the Piltdown assemblage directly reflected Woodward's evolutionary beliefs (a reconstruction of human ancestry and morphological development based on orthogenetic principles) and his conception of an 'Upper Pliocene' fauna based on the material from Trinil. While the matter is incapable of proof, it seems possible that the orangutan jaw which served as the 'Piltdown mandible' had been collected by Everett in 1878. If so, one of the more curious outcomes of Evans' organizing skills and Darwin's generosity in supporting Everett's work in Borneo was ironically to make a contribution to human palaeontology's greatest fake. History — especially the history of archaeology — has strange byways.

**Darwin and Evans: a compliment**

Evans' reputation amongst archaeologists has remained high, principally for his major syntheses Ancient Stone Implements and Ancient Bronze Implements. To this archaeological contribution can be added his tireless sense of public service in connection with the learned societies of his day. His role in the recognition of 'the antiquity of man' is equally celebrated — now as in 1879, when the French author Francisque Sarcey, writing on the Comédie française in the journal Nineteenth Century, ended the article with a compliment to his hosts: 'the people . . . which has revolutionised the world of thought and science with the writings of such men as Darwin, Herbert Spencer, Sir John Lubbock and Evans has nothing to envy in anybody' (Evans 1943: 160). At that moment, at any rate, Darwin and Evans were linked in public recognition — as the two names in the list for which a surname alone was sufficient. Darwin's fame, both in the history of science and in popular imagination, has deservedly been the more enduring; but his kindly and generous response to Evans' request for funds provides further evidence that his greatness as a scientific thinker was matched by a quiet desire to promote the practical progress of his subject. It is a small piece of history, but one worth celebrating.
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References


1900. The origin, development and aims of our scientific societies. London: Trounce.


Horneaday, W. 1885. Two Years in the Jungle: being the experiences of a hunter and naturalist in India, Ceylon, the Malay Peninsula and Borneo. New York. (Reprinted 1993, Kuala Lumpur: Oxford University Press.)


