The demonstration of human antiquity: three rediscovered illustrations from the 1825 and 1846 excavations in Kent's Cavern (Torquay, England)

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The authors disentangle the fascinating tale of the investigations in Kent's Cavern, iconic site for the acceptance of early man. The drawings they have discovered in the archives of the Geological Society are the only ones known from the earliest excavations and they are published here for the first time. As this paper shows, it takes intellectual courage to be an archaeologist. Whatever the enormity of his challenge to contemporary religion, I like to think that MacEnery would have been fairly supported by Antiquity*'s reviewing system. But perhaps our doctrinal challenges are lesser ones. . . .*

Keywords: Britain, Kent's Cavern, Palaeolithic, early man

Introduction

Kent's Cavern, Torquay, England (NGR SX 934 642: Figure 1) is one of the most famous sites in the history of archaeology, principally for its early role in the advocacy of a deep human antiquity. Yet remarkably, and despite the fact that major excavations in the cave spanning at least 21 years between 1824 and 1880 involved leading figures such as Buckland, Cuvier, Lyell and Pengelly, no plan, section or other illustration of the nineteenth-century investigations – other than one sketchy section drawing – has ever been formally published, and up to now none was thought to exist. Here, we report on the rediscovery in 2009 of three drawings of the interior of Kent's Cavern, published for the first time with a discussion of their historical significance for our understanding of this site.

Kent's Cavern: nineteenth-century excavations and literature

Kent's Cavern first came to the attention of the scientific world in 1824, when Mr J. Northmore, inspired to search for 'Mithraic temples', investigated the cave in September of that year, and reported his findings of fossils of extinct and exotic mammalian species to the

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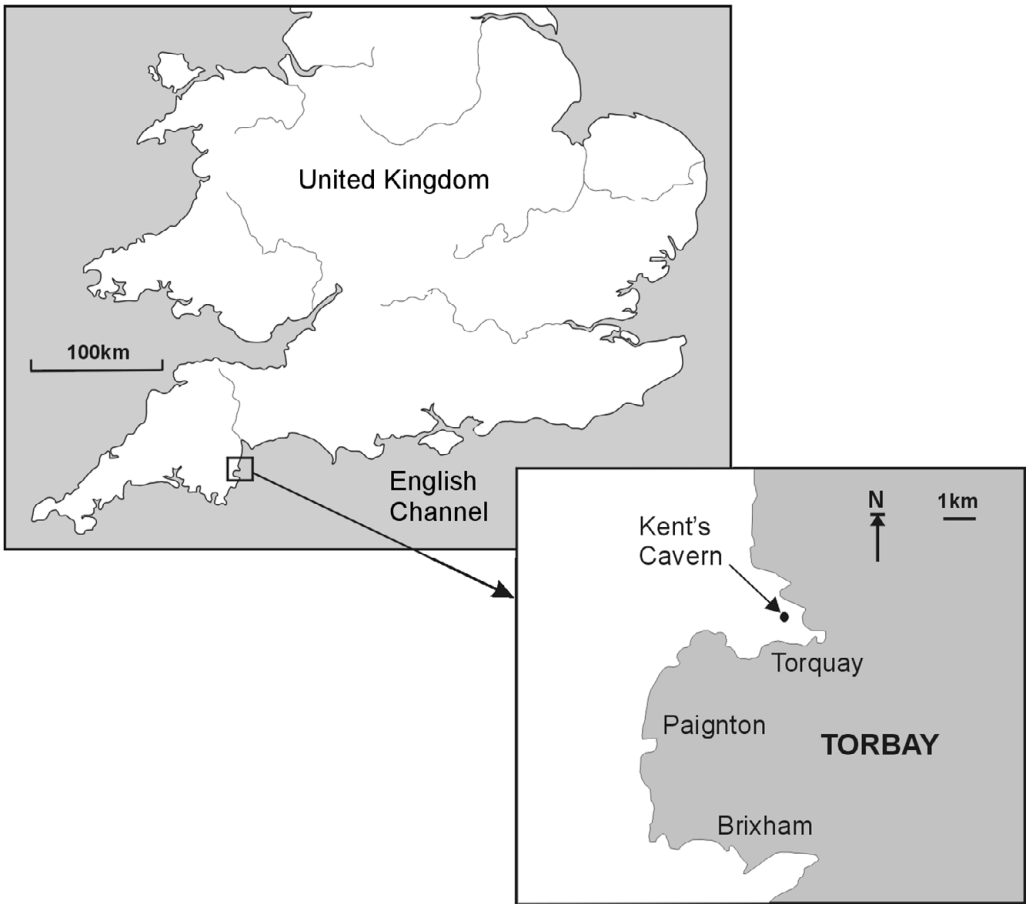

Figure 1. Map of Torbay showing the location of Kent's Cavern.

eminent Oxford geologist William Buckland (Pengelly 1868; Kennard 1945). Buckland, who had by this time already established the presence of extinct animals at Kirkdale Cave, Yorkshire and the Goat's Hole cave at Paviland, Gower (Buckland 1823) was quick to recognise the palaeontological significance of this new site and following his own (and others') brief explorations encouraged another interested cleric, the Rev. John MacEnery of Tor Abbey, to undertake fuller investigations.

MacEnery's excavations, probably intermittent, spanned November 1825 to August 1829 (Pengelly 1869; Kennard 1945), winding down two years before Darwin sailed on HMS Beagle. MacEnery amassed an enormous collection of fossils and a number of Palaeolithic stone tools from different parts of the cave. He recognised very clearly that his work established the co-occurrence of human artefacts with extinct animals (Kenrick 1861, reproduced in Pengelly 1878: 157), contradicting the accepted biblical teaching on human antiquity, yet in the case of Kent's Cavern he was unable to demonstrate deep human antiquity to the wider world. The extent to which Buckland – or a combination of Buckland and Cuvier – suppressed MacEnery's discoveries is debatable. As Grayson

(1983: 77) notes, *'in the archaeological literature, Buckland has been seen as a retrograde force, retarding the progress of prehistoric archaeology, at least in England'*, something usually blamed on his institutional background (Oxford, the Church of England's foremost intellectual establishment). Buckland was committed to reconciling biblical teaching on creation with the newly-emerging geological evidence for the antiquity of the Earth, and to upholding the prevailing 'progressivist' theory that the Mosaic deluge was the last of a series of floods. Extinct fauna had already perished in earlier floods as the world 'developed' into a form in which it was ready to receive humans. Because of this background, therefore, Buckland remained an opponent of arguments claiming an association between humans and extinct animals, and it has even recently been claimed that he wilfully ignored evidence supporting the contrary position (Weston 2008).

Polarised views such as this conceal greater complexities underlying Buckland's position, and do little justice to the man. Grayson (1983: 77-8) notes that it was in fact as a result of Buckland's work that discoveries of humanly-made artefacts and fossil animals were found in British caves in the first place, and that Buckland was understandably cautious of the dangers of cave stratigraphy and what today would be described as stratigraphically intrusive objects and fortuitous associations of items of different ages. Nor did opposition to the notion of human antiquity disappear with Buckland's generation; as Grayson (1983: 77) notes, even more vociferous objections to human antiquity were forwarded by his uniformitarian successors such as Lyell. One must remember that in order for the new discipline of geology to gain acceptance at intellectually-conservative Oxford it had to be demonstrably in accord with the text-based biblical tradition at the university (Rudwick 2005: 610), and from a modern perspective it is often easy to forget the effect of such a major constraint on Buckland. He was unambiguous in promoting a non-literal interpretation of the Genesis account of creation, revealed by a deep-time Earth history, something which, if accepted by natural scientists, *'. . . may have been news to many in Buckland's audience* [at Oxford], *and to some a source of anxiety about possible conflict with traditional religion*' (Rudwick 2005: 611). He was also unambiguously supportive of the global distribution of flood deposits, and of Cuvierian catastrophism. Perhaps it is not surprising that he was cautious about extending deep time to humans, and in this debate his views would have dominated British natural science, since, *'for the powerful figures in Britain, France and Germany it was simply Buckland who counted'* (M. Sommer *pers. comm.*).

Buckland's character, however admirable, does not excuse the demonstrable objections he had to human antiquity, notably, for example, in his dismissal of the Red Lady of Paviland as post-diluvial (Sommer 2007). It is clear that MacEnery's confidence in his own observations wavered, and it was probably the intellectual standing of Buckland (and Cuvier, to whom MacEnery sent fauna and whom he visited in Paris in 1831) that caused him to stand down. This was clearly the opinion of Rev. John Kenrick, who recalled that an eminent geologist and colleague of MacEnery revealed that: *'M'Enery had no doubt whatever as to the occurrence of flint implements in the lower accumulation with extinct animals; this I know from repeated conversation with him. But, Buckland would never hear of it; hence the confusion in his views when he came to write his account of the cave and its contents*' (Kenrick 1861, reproduced in Pengelly 1878: 157). A later excavator, R.A.C. Godwin-Austen, refused to demur; emphatically stating his case in a paper read before the

Geological Society in 1840 (Godwin Austen 1840, reproduced in Pengelly 1868: 496), although he confused his own case by implying contemporary human bones which others refuted.

So, with his scientific mentors unready or unwilling to accept evidence of humans co-existing with 'ante-diluvial' animals (those that had existed before Noah's flood), and torn by his heretical views (Kennard 1945: 187), MacEnery entered into a state of self-denial over his own observations, leading to confused, fragmentary and contradictory written accounts of his work that remained unpublished on his death in 1842. The manuscript was subsequently lost for some five years, eventually being rediscovered sometime around 1846, among a number of papers bought by a Mr Lear at an auction of MacEnery's personal effects in 1842. It was later published by Edward Vivian (MacEnery & Vivian 1859) in an edited form (effectively a version of *Fasciculus A*) with a series of plates of faunal specimens and Palaeolithic stone artefacts that MacEnery had prepared before his death (MacEnery & Vivian 1859; Pengelly 1869; Kennard 1945). No plans or sections were included.

The report to the Torquay and Tor Directory (see below) mentions a MacEnery manuscript then in the possession of Mr Lear, so it must have resurfaced prior to November 1846. Its loss and ultimate uncertainties encouraged the Torquay Natural History Society to return to the cave in 1846 in an attempt to resolve the *'date of its occupation by human inhabitants'* (Pengelly 1878: 161). The Committee excavated new trenches in two areas of the cave (near the entrance of Clinnick's Gallery and in the Lecture Hall), as well as a horizontal shaft that extended eastwards underneath the stalagmite floor from MacEnery's old trench in the Sloping Chamber (Pengelly 1878: 177-80). Satisfied that stone tools were associated with the remains of extinct animals stratified under a continuous stalagmite floor, R.A.C Godwin Austen read a report of the excavations before the Geological Society on 12 May 1847, on behalf of Vivian and colleagues. The paper was subsequently submitted for publication in the Society's transactions along with accompanying illustrations (Kennard 1945). This publication was, however, suspended pending Buckland's validation. This was never forthcoming and the paper remained unpublished, the only contemporary account being published in the *Torquay and Tor Directory* for 6 November 1846 (reprinted in Pengelly 1878: 162-6).

Two decades later the British Association for the Advancement of Science funded an astonishing 16 seasons of year-round excavations in the cavern (costing a total of £1900), led by William Pengelly, who, as part of his campaign, published all the existing literature on Kent's Cavern including several of MacEnery's draft 'fascicules', reworked manuscripts some of which were intended for publication (Pengelly 1868, 1869, 1871, 1878, 1884). This massive body of work, totalling 776 quarto pages, contains only one drawing, MacEnery's sketch section of the Bear's Den, in *Fasciculus C* (Pengelly 1869: 310).

The rediscovered illustrations

While addressing the Torquay Natural History Society on the subject of Kent's Cavern in 1858, Vivian expressed regret at not being able to show drawings from the recent excavations, as they were in London being engraved for a paper to be submitted to the Geological Society

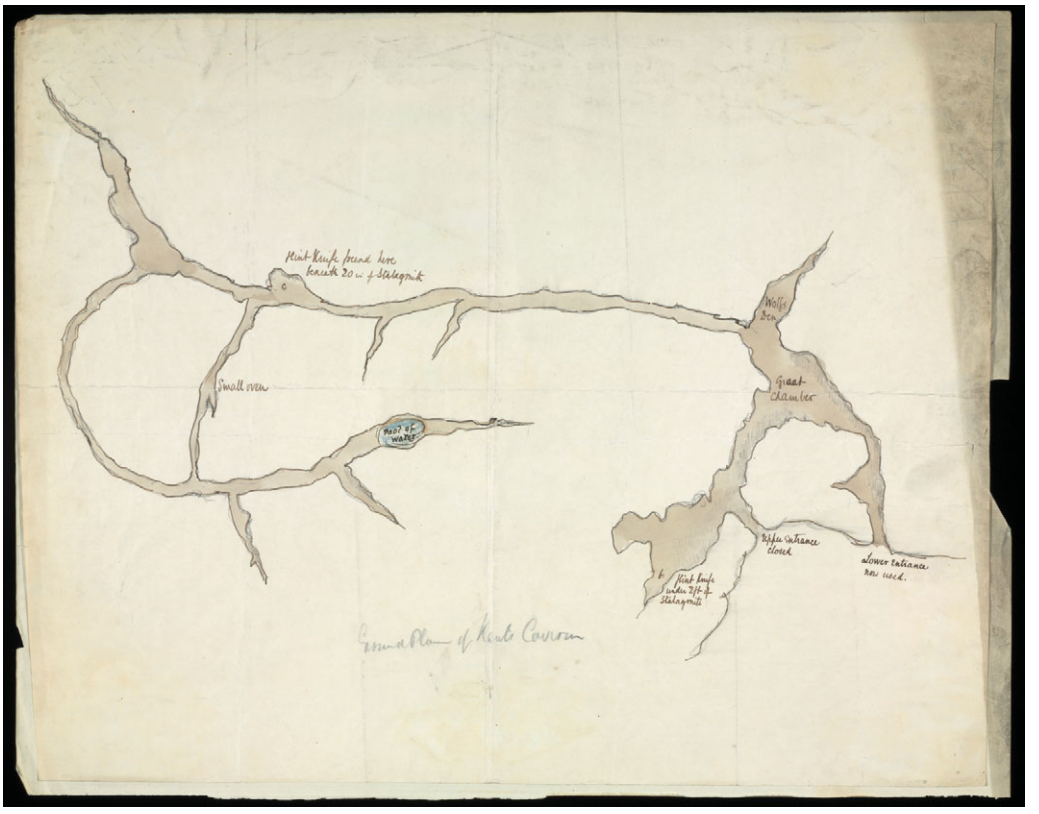

Figure 2. Plan of Kent's Cavern drawn in 1846 by the Kent's Cavern sub-committee of the Torquay Natural History Society (© Natural History Museum, reproduced with permission).

(Kennard 1945). The paper was never published, and, although Kennard guessed that the materials must still be with the Geological Society, the associated illustrations lay in their archive until we visited it in January 2009.

Several illustrations exist that are pertinent to human antiquity in Britain, such as John Frere's illustration of handaxes found at Hoxne in 1797 (Frere 1800) and MacEnery's illustration of stone tools from Kent's Cavern, produced in the 1830s but posthumously published in a large version format of *Cavern Researches* in 1859 (MacEnery & Vivian 1859: Plate T). The only illustration of a Pleistocene palaeontological 'site' is the fanciful drawing of 1821 by William Conybeare showing Buckland entering the Kirkdale cave replete with live hyenas (e.g. Rudwick 1992: 41). But Geological Society library reference LDGSL 146 (Figure 2) shows a plan of Kent's Cavern as it was in 1846, and, judging by the descriptions given by MacEnery, probably as it was in the 1820s. It provides our first glimpse of the original cave system, as experienced by the early visitors, and provides the earliest illustrative evidence of a British excavation pertinent to the human antiquity debate. It shows an area much smaller than the Kent's Cavern we know today, which is almost entirely the product of Pengelly's major excavations that cleared blocked passages, revealed numerous new passages and undervaultings and drained a lake in one chamber. The limited accessibility revealed by

the illustration also aids our understanding of why certain areas were selected for excavation, and makes sense of the route normally taken by guides through the cavern:

> *'We shall commence then with the common entrance* [by 1824 the North Entrance] – *thence follow the direct course of the upper Gallery* [i.e. the Great Chamber, Lecture Hall and SW Passage] *and its lateral Sally Ports – we shall return on our steps as far as the vestibule, or sloping chamber, and, without stopping there advance into the cave at its extremity – from which we shall turn on the left into the region of the Bear's Den or the Water – We shall then return thence by the oven, retrace our steps by the arcade, traverse once more the sloping chamber in our way to the wolf's den, which forms its right branch, and finally terminate our labors* [sic] *in the grand vestibule*' (MacEnery *Fasciculus A,* reprinted in Pengelly 1869: 218).

Crucially, the plan also records the position of two of the 1846 Exploration Committee's finds, noting flint artefacts under thick stalagmite in the Lecture Hall and close to Clinnick's Gallery. It was these findings, underneath undisturbed intact stalagmite that, 13 years before the events at Amiens (Gamble & Kruszynski 2009), should have firmly won the case for a deep human antiquity; although this was not to be so.

Accompanying this plan is the section in Figure 3 (Geological Society library reference LDGSL 146) showing the deposits through part of the cave. Although there is no scale, the stratigraphy and the relative proportions of each deposit fit precisely with the descriptions of the 1846 excavations in the Sloping Chamber, immediately adjacent to MacEnery's earlier diggings (Pengelly 1878: 163). The section shows the classic upper sequence of Kent's Cavern: black mould (containing Holocene archaeology) overlying a thick granular stalagmite floor, which in turn caps the fossiliferous and implementiferous cave earth. It also agrees fully with MacEnery's textual description, showing a thick and undisturbed stalagmite floor capping the cave earth, which is shown to have contained a number of large blocks, again in agreement with later descriptions of the cave earth.

It is unclear who drew the illustrations reproduced in Figures 2 and 3. The excavations were superintended by the Torquay Natural History Society, in which Vivian and Pengelly were leading figures. As Vivian was an artist it is possible that he drew the illustrations himself – the annotations on the drawings are certainly very similar to known samples of Vivian's hand-writing. However, one cannot rule out the possibility that they were drawn by one of the excavation team, or even that they were drawn by the skilled hand of a person not routinely connected with the excavation. All one can say is that that they were drawn by or on behalf of members of the Kent's Cavern sub-committee of the Torquay Natural History Society, who conducted the excavation.

The third illustration (Figure 4) in the Geological Society's archive is perhaps the most interesting, and would have remained hidden were it not for the kind attentions of the Society's assistant librarian Wendy Cawthorn, who suggested we check the library's collection of ephemera. This is a drawing entitled 'A View of the interior of Kent's Cavern near the entrance taken from the excavation' by the artist John Marten, who was active in Devon in the 1820s and 1830s (http://www.devon.gov.uk/localstudies). This is one of only two drawings of the cavern as it was before the excavations of 1865-1880 changed it forever, and the only one to show the location of the earliest excavations. It shows an intact stalagmite

Figure 3. A watercolour section showing the stratigraphy of the Sloping Chamber, produced in 1846 by the Kent's Cavern sub-committee of the Torquay Natural History Society (© Natural History Museum, reproduced with permission).

floor sloping dramatically upwards away from an excavation in the foreground, with figures examining the higher deposits in the background. The picture is housed in a folio containing various illustrations dating from the early 1800s, and on the same page is mounted another drawing by John Marten entitled 'Cazalet's Cave at Anstey's Cove'. This is a vital clue regarding the date and origin of the Kent's Cavern picture.

Mrs Cazalet was an important local fossil collector who appears to have had the pick of MacEnery's early finds. Based on the frequency with which MacEnery mentions Mrs Cazalet (or 'Mrs C') being involved at Kent's Cavern in his manuscript and surviving correspondence, Kennard (1945) made a compelling case that she and her husband had both assisted in and financed the excavations. As Private Chaplain of Tor Abbey, MacEnery presumably had limited means and almost certainly could not have afforded to fund such a major excavation himself. We know that Mrs Cazalet gave 'a fine series' from her collection from Kent's Cavern to the Geological Society in February 1826 (accessioned as GS 413-421 and eventually passing to the museum of the Geological Survey; Kennard 1945), and it seems plausible that Marten's illustrations were part of that donation. MacEnery seems to have started to down-scale his work by December 1826 (a letter from Beeke to Trevelyan, 6 December 1826, published in Pengelly 1878: 145, states that

Figure 4. John Marten's lithograph of 'A view of the interior of Kent's Cavern near the entrance taken from the excavation', produced c. *1825-6 (© Natural History Museum, reproduced with permission).*

MacEnery thought there was little more to be found), while the Cazalets left Torquay for 'beyond Newton' in June of that year (letter from MacEnery to Trevelyan, 19 June 1826, published in Pengelly 1878: 145). We surmise therefore that the drawing was undertaken by Marten sometime between November 1825 and June 1826; probably commissioned by the Cazelets.

Judging by the proposed date, the sloping floor, and the shape of the roof portrayed in the Marten drawing, we suggest that this drawing *must* be of MacEnery's earliest excavations in the 'Vestibule or Sloping Chamber' – his *'main excavation. . . situated about halfway down the declivity of the sloping chamber under the right wall'* (MacEnery *Fasciculus B*, reprinted in Pengelly 1869: 281). As such it provides a unique insight into the nature of the cave in its earliest days of excavation.

The other illustration, previously published in the cave's guidebook, is presented here for completeness but with additional information on its origin (Figure 5). It is by George Rowe and was issued in 1835 as part of his *Views of Torquay and Neighbourhood- Middle Series* (entry S130 at http://www.devon.gov.uk/localstudies/100143/1.html). Rowe was an artist and drawing master from Exeter esteemed for his topographical lithographs of resorts in the

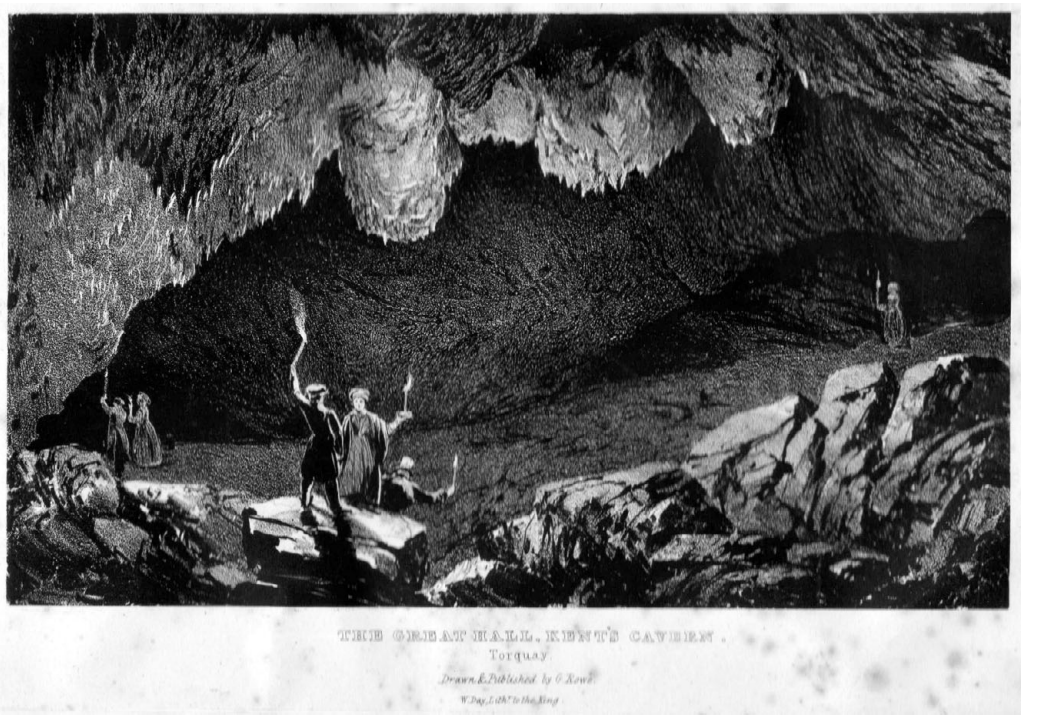

Figure 5. George Rowe's lithograph of 'The Great Hall, Kent's Cavern', issued in 1835 (© Torquay Museum, reproduced with permission).

south-west and south of England (http://adbonline.anu.edu.au/biogs/A060075b.htm). In 1862, following an eventful period in the Australian goldfields, a group of his watercolours won a medal in the Victorian Section of the London International Exhibition for 'faithful and beautiful delineation'. Rowe's drawing is entitled 'The Great Hall, Kent's Cavern', and shows a group of men and women exploring the cave by candle-light, perhaps one of the occasional guided tours mentioned by MacEnery and others. Its title presumably indicates that it is a representation of the Great Chamber, although if this is the case, then the many large blocks later recorded by Pengelly (1884) are not shown. The current owner of the cavern, Mr Nick Powe, believes it to show part of the Vestibule (*pers. comm*. 2009) and when viewed from the Passage of Urns, the ceiling architecture would certainly fit with this opinion. No indications of any excavations are shown.

It is unclear what Marten's or Rowe's influences were, although in a broader thematic and stylistic sense both drawings of Kent's Cavern reflect a contemporary concern with the wild and romantic nature of caves that influenced contemporary artists such as John Martin (not to be confused here with John Marten), poets such as Shelley, Keats and Byron (Sommer 2003, 2007), and even William Conybeare's drawings of Buckland at Kirkdale and Gailenreuth (Rudwick 1992, 2005).

Conclusions

Although 1859 is rightly remembered as the year in which Darwin's *On the origin of species* was first published, the first public airing of his theory – to the Linnean society – occurred in 1856, the year of Buckland's death. In the case of Kent's Cavern, Buckland's role in the debate over human antiquity can only be seen as a disabling factor; it would be one of his last pupils, Charles Lyell and his contemporaries in the few years following Buckland's death that finally put the matter to rest. These recently rediscovered images provide a rare glimpse at the shape of Kent's Cavern as it was during the earliest investigations and the first illustrative confirmation of the descriptions provided by MacEnery, Vivian and Pengelly as the debate raged. Given the iconic status of Kent's Cavern in the history of Archaeology and continuing studies into the Palaeolithic of Britain, we here draw them to public attention, after 160-180 years. They provide further evidence of the strong interconnection between art and science in the nineteenth century and, we suggest, allow us to formally recognise, in retrospect at least, John MacEnery as being the first to unequivocally demonstrate human antiquity, in Kent's Cavern, as early as 1825.

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