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Title: Ruined Paradise: Geology and the Emergence of Archaeology
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Abstract

The nineteenth-century Kingdom of Naples was the location of two sites crucial to the emerging sciences of geology and archaeology: the Temple of Serapis at Pozzuoli and the partly excavated city of Pompeii. Where the relations between literature and the formation of geology have received some critical attention, archaeology has been less closely examined. The tensions between geology and archaeology are significant in the development of both, especially in the work of Charles Lyell, and this article suggests that in looking at the contrast of the Temple and Pompeii it is possible to see important ways in which such tensions contribute to the developing disciplines.

Key Words

Archaeology; geology; nineteenth century; Lyell; Naples; Temple of Serapis; Pompeii

Ruined Paradise: Geology and the Emergence of Archaeology

When Percy Shelley in his “Ode to Naples” (1820) called that city the “metropolis of a ruined paradise” he was reflecting, as he tells us, on his earlier visit and the “enthusiasm excited by the intelligence of the proclamation of a Constitutional Government” (111). The poem opens elsewhere, however, in Pompeii, the “city disinterr’d” a few miles south-east of Naples and probably the best-known feature of the paradise of ruins, both natural and human-made, that the region represented. It had many literary and historical associations,¹ and the landscape too was dramatic; as well as the phenomena produced by the Campi Flegrei, Vesuvius, the volcano that had brought about the destruction of Herculaneum and Pompeii in 79CE, was still active and there were serious eruptions throughout the eighteenth and nineteenth centuries. The landscape was always seen as deeply connected to human activity. When Shelley climbed Vesuvius in 1818 he, like many others, associated the volcano with the idea of revolution (Jones 2:276; 371) and Lady Blessington, one of the numerous British community in Naples, writes in 1823: “The Neapolitans, like their volcanic country, are never in a state of repose” (Clay 27-8). English liberals, drawn to the fashionable cause of Italian unity, saw Naples as under “foreign” oppression, and writers and intellectuals like the Brownings and George Eliot were public in their denunciation of the tyranny of the Bourbon monarchy, as were many politicians. Gladstone, who had toured the Kingdom of Naples in 1832, returned again in 1850 and saw with horror the conditions of imprisoned liberals, including former ministers, famously quoting a description of the regime as “the negation of God erected into a system of government”(6). Naples then, and its surrounding environs, has a multiple image. It appears as both a location of dynamic (and possibly dangerously volatile) energy and as a place of repression of that energy. It is the territory of historical and natural wonders that was the legacy of the Grand Tour, and the locus of complex political problems which are, as Shelley voices, all dissolved into the landscape.

Alain Schnapp, in his introduction to a collection of essays on eighteenth-century Neapolitan natural history and antiquarianism, describes Naples as ‘a laboratory seething with contradictory ideas, original experiments and fierce polemics that raged between men of letters, presided over by a government which, after a period of reform, rapidly fell back on the status quo and

authoritarianism'. He further remarks that 'what is at play in antiquarianism in Naples during the second half of the eighteenth century is a preview of the debates that would come to surround what we now call archaeology'. (163). I want to pick up that preview in the early nineteenth century and suggest that elements of this Neapolitan landscape do indeed have a profound effect on the emergence of the discipline of archaeology during the nineteenth century, though perhaps in ways rather different than Schnapp indicates. Although the significance of Pompeii and Herculaneum in the history of archaeology seems obvious, given the ubiquity of their representation in the period, (see Hale), the fact that they are almost unique in the circumstances of their destruction could possibly be argued to have had an odd effect on the development of archaeological method and its cohesion as a field of study. In 1930, Leonard Woolley, the excavator of Ur, called such burial by volcanic action "lamentably rare" and observed that "if the field archaeologist had his will, every ancient capital would have been over-whelmed by the ashes of a conveniently adjacent volcano" (26). Preserved complete and with ordinary daily life apparently just paused, the Vesuvian cities served much more easily a fantasy of recovering the past entire, whereas other sites that had been more gradually abandoned or destroyed presented a different prospect, as Woolley puts it of "few objects, and not much history except the melancholy history of decadence"(30). In fact Pompeii, buried by volcanic ash, was more significant in this respect than its twin, Herculaneum, which had been overrun by the lava flows that had set into the much harder pyroclastic stone that resisted excavation, but both are crucial in the paradoxical ideas of stasis and change, morbidity and vitality that develop around them and are formative in the constitution of archaeology.

Relative to other areas of study that emerged as sciences during the nineteenth century, archaeology was slow to develop patterns of professionalization and method, and even in 1904 the important Egyptologist W.M. Flinders Petrie could remark:

Archaeology is the latest born of the sciences. It has but scarcely struggled into freedom, out of the swaddling clothes of dilettante speculations. It is still attracted by pretty things, rather than by real knowledge. It has to find shelter with the Fine Arts or with History, and not a single home has yet been provided for its real growth. (vii)

In Petrie's lament we can see that he regards archaeology as aspiring to the condition of science, still somewhat threatened by amateurism on the one hand and history on the other. By turning our attention to a site on the western side of Naples rather than to Pompeii and Herculaneum I

propose that it is possible to see some of the complications of the struggle with science, but also the outlines of the fissures that continued to mark archaeology long after it attained the status of “real knowledge.” This site is the so-called Temple of Serapis² at Pozzuoli (the Roman town of Puteoli) on the Bay of Baiae, and it is one that became very familiar to British readers as the frontispiece of the first volume of Charles Lyell’s *Principles of Geology*, published in 1830.

In the early nineteenth century geology was already more distinctly recognisable as a science, not least because of its crucial role in industrialisation. Geology was not fully professionalised, however, and its objects were not quite disentangled from its companions in the eighteenth-century cabinets of curiosity. The progress of geology and its relations with literature have received some excellent critical attention in recent years, (see, for example, O’Connor, Rudwick, Buckland, Heringman, Geric) but its role in the emergence of archaeology has been less considered, with some studies assuming, as Glyn Daniel does in an early history, that “there could be no real archaeology before geology, before the doctrine of uniformitarianism was widely accepted” (24). Other studies treat both as rather undifferentiated practices of digging concerned with the past or locate the division between them largely in institutional terms (see Torrens, for example). Post-processual archaeologists such as Michael Shanks, Christopher Tilley and others have produced ground-breaking explorations of the conceptual work of archaeology, but as Shanks, Jeffrey Schnapp and Matthew Tiewes note ‘anything other than a strictly internalist account of the discipline may well be far off.’ That observation was made in 2004 and although there have been some fine responses (see, for example Zimmerman, Gere) to their call for ‘a dialogue between reflections on archaeology as a modern discipline and inquiries into the archaeological imagination in nineteenth- and twentieth-century cultural forms’ (1), such a non-internalist account still remains largely unrealised.

It is clear that the development of geology is dependent on its ordering of relations with archaeological objects and both geology and archaeology struggle with the place and definition of history and antiquity. The eminent excavator John Lubbock, later Lord Avebury, writes in his *Pre-Historic Times* (1865) that “Archaeology forms, in fact, the link between geology and history” (2), but it is equally clear in looking at the contrast of Pompeii and Serapis in the early decades of the nineteenth century that it is critical in stabilising them at a distance from one another, keeping them apart as much as linking them. For Lyell, history becomes a kind of

quarantine, a place where certain kinds of accounts of humanity can lodge, while pushing others further away into a proto-archaeology. As a consequence, archaeology begins to acquire the some of the characteristics that mark it still in the contemporary popular imagination.

Lyell and the Temple

On the publication of *Principles* Lyell was only the most recent user of the Temple of Serapis. Goethe, for example, had visited the site in 1787 and produced a solution to the “architectural-natural-scientific problem” that he had observed: the strange markings on the three pillars remaining upright in the ruins. The “problem” was that the surface of the middle third of the pillars showed damage from marine molluscs suggesting that, having been built on dry land, the columns had at some point been submerged in water but had then been raised up again above sea level. The markings on the pillars showed that there had been at least two significant movements in the two thousand years since construction, a subsidence of over twenty feet and a rise of the same amount, but there was no consensus of explanation of how this had occurred.

Goethe’s ‘solution’, positing that silt had formed a lagoon above sea level around the Temple, was published with drawings in 1823. It was translated into English and discussed by the Scottish geologist Robert Jameson in his opposition to ideas about a dynamic earth, but Goethe’s contribution was only one of many from all over Europe. It is, as Martin Rudwick comments, a “desperate and ad hoc” solution, but nevertheless an indication of the way in which the Temple of Serapis had already become the subject of an international debate with far-reaching implications (*Worlds* 112). The Temple had first been investigated in 1749-50, at about the same time as Herculaneum and Pompeii and, like them, at the request of the King of Naples, Charles VII. The French architect Jérôme-Charles Bellicard had visited just before the excavations began when only the top part of the three columns was visible above ground. He revisited the site the following year in a group consisting of several important architects, art historians and writers (Ciancio *Teatro* 111). Bellicard’s account was illustrated by Charles-Nicolas Cochin, who also illustrated J.J. Winckelmann’s version five years later, and was architectural in detail, with plan sketches of the site. Winckelmann notes the curious markings on the pillars, but it would seem that the question of what they were originates with an English clergyman, John Nixon (Ciancio *Teatro* 113). Nixon’s letter to the Royal Society in 1757 gives a long description of the ruins, extrapolating religious functions from them, after which he says: “I

beg leave further to mention a remarkable appearance” and hypothesises that the bottom part of the pillars was buried by debris and the middle submerged in water with the tops extending above it. He assumes that the water has risen, rather than that the land has changed position, but recognises the changing nature of the earth:

the innovation supposed to have happened in it will not, I presume, be thought improbable; especially in a country so plentifully stored with combustible matter in its interior parts, and consequently so liable to changes in its outward form, as this is, and has been for many ages. (173)

From 1750 there is a steady stream of images of the Temple produced by Italian, French, German and British artists; Turner, for example, made sketches of the temple during his visit of 1819. Perhaps the most important illustration, however, is from Andrea de Jorio’s *Ricerche sul Tempio di Serapide in Pozzuoli*, published in Naples in 1820.³ The illustration was useful to those who had not visited the site but were aware of it as one of the very few known examples of substantial change in sea level relative to land. A number of German and Italian geologists owned copies of Jorio’s book and included Pozzuoli among their examples, (Rudwick *Worlds* 105-13) and when Lyell began publication of *Principles* in 1830 he chose a re-drawn version of Jorio’s illustration for the frontispiece of the first volume.



Fig. 1. Frontispiece of *Principles of Geology* (first to sixth editions) as published in England until 1846.

Lyell's engagement with the Temple lasted all his life; he first visited Naples in 1828 and even though he remarks in the first edition of *Principles*, "in concluding this subject, we may observe, that the interminable controversies to which the phenomena of the Bay of Baiae gave rise have sprung from an extreme reluctance to admit that the land rather than the sea is subject alternately to rise and fall" (161), his confidence in "concluding" the subject at that point was perhaps misplaced. Like his vision of the earth, *Principles* and his thinking about the Temple were never finalised; the book was in its eleventh version at his death in 1875, and after his first visit to Pozzuoli he continued to correspond with others about the site. Charles Babbage, who also visited and theorised, lent books and illustrations for Lyell's first course of lectures as Professor of Geology at King's College, London in June 1832 and then again in the following year when Lyell was determined "to give the Temple of Serapis in grand style" (Dolan 306). In 1856 Lyell gave a lecture on the Temple to the Royal Institution in which he gave further

measurements of water levels recorded by various visitors over the preceding thirty years, and he made a last visit himself in 1858 (Dolan 319). The Temple is arguably *the* image of British geology, as it appears on the reverse of the Lyell Medal, awarded annually since 1876 by the Geological Society for outstanding work in the subject. The medal was also to some extent anticipated by Lyell himself as the image appears embossed in gold on the cloth cover some of the later editions of the work, as if it were a seal of authenticity or, indeed, a fossil imprint in the material of the book: one of the “medals of creation” as Lyell’s friend and fellow geologist Gideon Mantell might have called it.

As well as being unusual in depicting a ruin apparently more appropriate to an antiquarian work, rather than the perhaps more expected illustration of a dramatic volcanic eruption or technical drawing, part of the impact of the print would simply have been its appearance, as illustration itself was uncommon. Martin Rudwick notes that late-eighteenth century geology has hardly any illustrations at all and that there is a notable change in the 1830s towards visualisation (150). As Rudwick also suggests, however, this was a special ruin, one that epitomized Lyell’s system and “above all, his intention to use human history as the key to geohistory and to show that the latter was not marked by any overall directional trend” (*Worlds* 299). The use of human history as such a key is risky, however, and it is the decision to use the Temple that shows how conscious of this Lyell was. He needed to draw in the educated middle classes to a “cultured” geology that was more technically informed than the assembling of an ornamental mineral collection, but also more philosophically concerned than concentrating on practical mining techniques. The risk lies in the need to employ the imaginative faculty, but to be able to direct it along the disciplined lines of his principles. As Ralph O’Connor notes, geologists before Lyell had already realised that “narrative had to be handled with care within this new methodological order, resulting in creative tensions with the anti-imaginative rhetoric of empiricism” (“Epic” 210) In most studies, however, the term “narrative” tends to be used in a quite general fashion. Adelene Buckland draws attention to this lack of specificity and makes the distinction between types of narrative: those that are ordering events and those found in fiction, especially the novel (‘Losing the Plot’ 2). This is a crucial distinction in the way that Lyell constructs his geology; it is story-telling, rather than narration as such that must be expelled, and it is in nascent archaeology that the story-telling is lodged.

Poetry and the Temple

Lyell's proposition in *Principles* is not of a new doctrine in the age of the earth debate, but the establishment of a method, a discipline: the foundation of a distinct science. In fact, none of the frontispieces of the three volumes of the first edition of *Principles* are technical drawings, and all the illustrations are a mix of architectural detail, landscapes and diagrams. Luca Ciancio speculates that Lyell's use of illustrations of both scientific and more picturesque kinds allows him to align himself with the eighteenth-century scientific tradition while also promoting recognition of geology by using images that would resonate with the imagination of the ruling class, educated for decades in the visual vocabulary of the Grand Tour (*Colonne* 204). It is more than this, however, as we can see from the opening chapters; establishing the principles means redirecting the course of any existing understanding. It is not only in the illustrations that Lyell demonstrates a consciousness of his readership; he also frequently draws from poetry. His use of poetry is consonant with his choice of Jorio's illustration, calculated to speak to a readership beyond scientific circles, and he employs quotations from many canonical figures including Virgil, Horace, Dante, Shakespeare, Milton, Scott, Burns and Byron. The quotations are not simply used as gentlemanly flourishes; each is evaluated in terms of its relation to the principles that Lyell is endeavouring to establish and he needs to effect a shift in the perceptions of his poetically-literate readers by changing the metaphors conventionally associated with the passage of time and material remains. In his discussion of the Temple of Serapis, Lyell suggests that "it is time that the geologist should in some degree overcome those first and natural impressions which induced the poet of old to select the rock as the emblem of firmness —the sea as the image of inconstancy". He goes on to state that "our modern poet... has finely contrasted the fleeting existence of the successive empires which have flourished and fallen, on the borders of the ocean, with its own unchanged stability," and quotes from Canto IV of Byron's *Childe Harold*:

—Their decay
Has dried up realms to deserts: —not so thou,
Unchangeable, save to thy wild waves" play:
Time writes no wrinkle on thine azure brow;
Such as creation's dawn beheld, thou rollest now. (161)

He quotes approvingly because Byron represents the land as shifting and the sea as constant. His choice is significant because of the influence of Byron on contemporary views of the ruined

classical world; as Cian Duffy has said: “by the end of 1818 Byron’s *Childe Harold IV* had quickly become the most influential –indeed the *defining*—British representation of the “marble wilderness”“(Shelley 161). Lyell needs to enlist Byron to change the metaphor because it is crucial to Lyell’s proposition that in the Temple it is the land that has sunk and *not* the sea that has risen. A measure of Lyell’s success can perhaps also be seen in poetry, as by later in the century it would appear that some poets as well as geologists had overcome their “first and natural impressions”. In 1880 the Canadian Charles Roberts writes of the Temple:

At Pozzuoli on the Italian coast
A ruined temple stands. The thin waves flow
Upon its marble pavements; and in row
Three columns, last of a majestic host
Which once had heard the haughty Roman’s boast,
Rise in the mellow air. Long years ago
The unstable floors sank down. (85)

By 1880, the geological informs the poetic image, rather than the reverse. In another neat reversal of the direction of influence, it seems that Roberts wrote the poem while studying James Dana’s *Manual of Geology* as a textbook. Dana discusses the Temple and uses an illustration of it that is obviously drawn from the same view as the second version of the *Principles* frontispiece that appeared in 1847. Adelene Buckland and Ralph O’Connor have discussed, from different perspectives, Lyell’s use of Byron, and Buckland’s stress (following Tucker) on the contemporaneity of Byron’s work is important, particularly on his rejection of the traditional epic form for something more like a focus on the present moment. The effect of this is to create what Tucker calls a ‘black hole in narrative’ (234), just as Lyell needs to do to establish his principles.

The risk that such employment of literature and history will open up to fanciful storytelling rather than reasoned observation is apparent in another account of the Temple. In 1853 a journalist, N. P. Willis having visited the site writes:

we walked up to the famous ruins of the temple of Jupiter Serapis. This was one of the largest and richest of the temples of antiquity [...] We stepped around over the prostrate fragments, building it up once more in fancy, and peopling the aisles with priests and worshippers. In the centre of the temple was the place of sacrifice, raised by flights of steps, and at the foot still remain two rings of Corinthian brass, to which the victims were fastened, and near them the receptacles for their blood and ashes. The whole scene has a stamp of grandeur. (67-8)

This is a perfect example of what Lyell is carefully attempting to forestall; a mix of apparently factual assertion and the groundless “fancy” of scenes of priests, worshippers and victims. I would argue that such fantasies of building and peopling are actually one of the effects of Pompeii on the public imagination, and as such an illustration of why and how Lyell needs archaeology: because it will draw human narratives (as opposed to the narrative “facts” of human history) away from the orderly reading of the text of earth that geology will provide.

Against Pompeii

Ralph O’Connor claims that Lyell engaged directly with the spectacular appeal of catastrophism in order to weaken its appeal (*Earth* 174), and *Principles* certainly makes full use of dramatic visualisations of earthquakes and eruptions if only to bring them within the sphere of “normal” events, but despite his advocacy of a more orderly and disciplined practice based on observation, Lyell resorts frequently to that which *cannot* be seen because, he says, “our position as observers is essentially unfavourable” as “we cannot see the majority of the processes of formation that take place...it requires an effort of both the reason and the imagination to appreciate duly their importance” and even then “we imperfectly estimate the result of operations invisible to us; and that when analogous results of some former epoch are presented to our inspection, we cannot recognise the analogy” (31). Lyell’s comments show the mixed nature of his conception of the science, involving analogy, reason, estimation and imagination. His geology is always a blended practice; in the first few pages of *Principles* he evokes just about every area of study from law and theology to chemistry and botany, but particularly emphasises history. In fact the comparison he draws for the ideal geology is the uniting of antiquarian and historian, as “remains of former organic beings, like the ancient temple, statue, or picture, may have both their intrinsic and historical value”(7), suggesting that zoologists and botanists could, in the course of their normal collecting, gather specimens for the geologist to examine. It almost appears that he is recommending the alliance of history and antiquarianism in what would constitute the principles of archaeology. Not only does the “ancient temple” appear as the frontispiece, it occurs again here as an exemplary figure of study allocated this time, however, to archaeology. The temporary shifting of the temple off into another field is perhaps explained by the section that immediately follows and concludes chapter 1, where Lyell firmly cleaves geology and cosmogony, separating his science from “questions as to the origins of things”(8).

By the time of Lyell's publication, seventy or so years since its first excavation, the identification of the site at Pozzuoli as a temple was in question, and Lyell notes the archaeological controversy while at the same time passing over it: "it is not for the geologist to offer an opinion on these topics, and we shall, therefore, designate this valuable relic of antiquity by its generally received name"(156), very much in the same manner as he indicates that cosmogony is not the geologist's province. In the same sentence he goes on to say that he will "...proceed to consider the memorials of physical changes, inscribed on the three standing columns in most legible characters by the hand of nature" – nature is clearly more readable and more reliable than archaeological material as the "hand of nature" has effectively written over the hand of humans, therefore, if accurate narratives about the past are to be read and written, it is the geologist who will provide the narrative. His reading will correct or put in their proper place the human stories that crowd out of ruins.

Principles moves in and out of geology and archaeology; for example in his long archaeological reverie in chapters 13-17 "How the Remains of Man and his Works are becoming Fossil beneath the Waters" Lyell interchanges terms: artificial things are "fossils" and natural things are "monuments". Indeed, he states his certainty that "man and his works" will endure longer than the elements of the natural world:

edifices and implements of human workmanship, and the skeletons of men, and casts of the human form will continue to exist when a great part of the present mountains, continents and seas have disappeared. Assuming the future duration of the planet to be indefinitely protracted, we can see no limit to the perpetuation of some of the memorials of man, which are continually entombed in the bowels of the earth or in the bed of the ocean.

Then he seems to correct himself:

Yet it is no less true... "that none of works of a mortal being can be eternal"...And even when they have been included in rocky strata, when they have been made to enter as it were into the solid framework of the globe itself they must nevertheless eventually perish, for every year some portion of the earth's crust is shattered by earthquakes or melted by volcanic fire, or ground to dust by the moving waters on the surface. (333)

A re-integration takes place as the works become part of the earth, a human-made element. The view that Lyell assembles is a kind of on-going apocalypse, in which the past is just debris accumulating, as he says of the globe, the land is "almost exclusively the theatre of decay and not reproduction" (31). This is modernity as it begins to be experienced in the nineteenth

century: the intensification of historical consciousness and the perception of things as characterised by change rather than essence. Lyell's geology is sharply modern in its espousal of such views of change. It is also in opposition to the apparently fixed state of Pompeii and Herculaneum, frozen in the moment of their destruction, unchanged and unchanging. The 'casts of the human form' to which Lyell refers must be those produced in Pompeii by the peculiar circumstances of the ash cloud as these were unique at the time. The paradox here, of course, is that the stasis of the dead cities is what allows and indeed provokes the movement and vitality of the stories that are fancied to arise from them. Lyell's treatment of the proto-archaeological is more than a throwing off of the dilettante associations of antiquarianism, it is a premonition of the development of archaeology and anthropology, both of which must be constructed, before the fact, as auxiliary to geology.

In this respect the Temple of Serapis is set *against* Pompeii and Herculaneum as it actively refuses narrative explanation in opposition to the outpouring of stories that the excavated cities provoked. Lyell makes the Temple silent, unpeopled, against the babel of the cities. It is an interesting rhetorical switch whereby the Temple has to be stabilised in the service of a methodology that emphasises change, and the frozen cities are dead but full of life. It is tempting to see a novel like Edward Bulwer Lytton's immensely popular *The Last Days of Pompeii* (1834), as the anti-*Principles*, taking up the excluded kind of narrative and solidifying the place of story-telling in nascent archaeology. As well as the dangers of dilettante speculations and the attraction of pretty things of which Flinders Petrie complains, he could have added fanciful narrative; the impulse to fill sites and surround objects with people and their stories. Pompeii is the exemplary location of this and such stories appear from very early after its discovery and only gather further momentum as the century progresses (See Hale; Zimmerman). The actual reproduction, in the 1860s, of the inhabitants from casts made of the moulds of Pompeian bodies that Lyell noticed is a very material manifestation of such imaginative re-peopling.

The designer William Burges, reviewing the International Exhibition of 1862, writes: "Of all the dreams of archaeologists there is none more frequent than that of endeavouring to transport oneself into the domestic life of any given period". (243) Burges writes as though such a response is somehow a natural part of archaeology, whereas what he is actually noting is the

way in which it has become so during the first half of the century. He names Pompeii as one of the ways in which such transporting can be accomplished. The “peopling” of Pompeii, and of later sites such as Nineveh after Austen Layard’s excavations in the 1840s, works through and with the new interest in the present conditions of ordinary life. At the same moment as Burges is writing, Margaret Oliphant makes her famous assessment of Dickens:

Mr Dickens was one of the first popular writers who brought pictures of what is called common life into fashion. It is he who has been mainly instrumental in leading the present generation of authors to disregard to a great extent the pictorial advantages of life on the upper levels of society, and to find a counter-picturesqueness in the experiences of the poor... He has shifted the fashionable ground, and sought his heroes among penniless clerks and adventurers...He has made washerwomen as interesting as duchesses. (574)

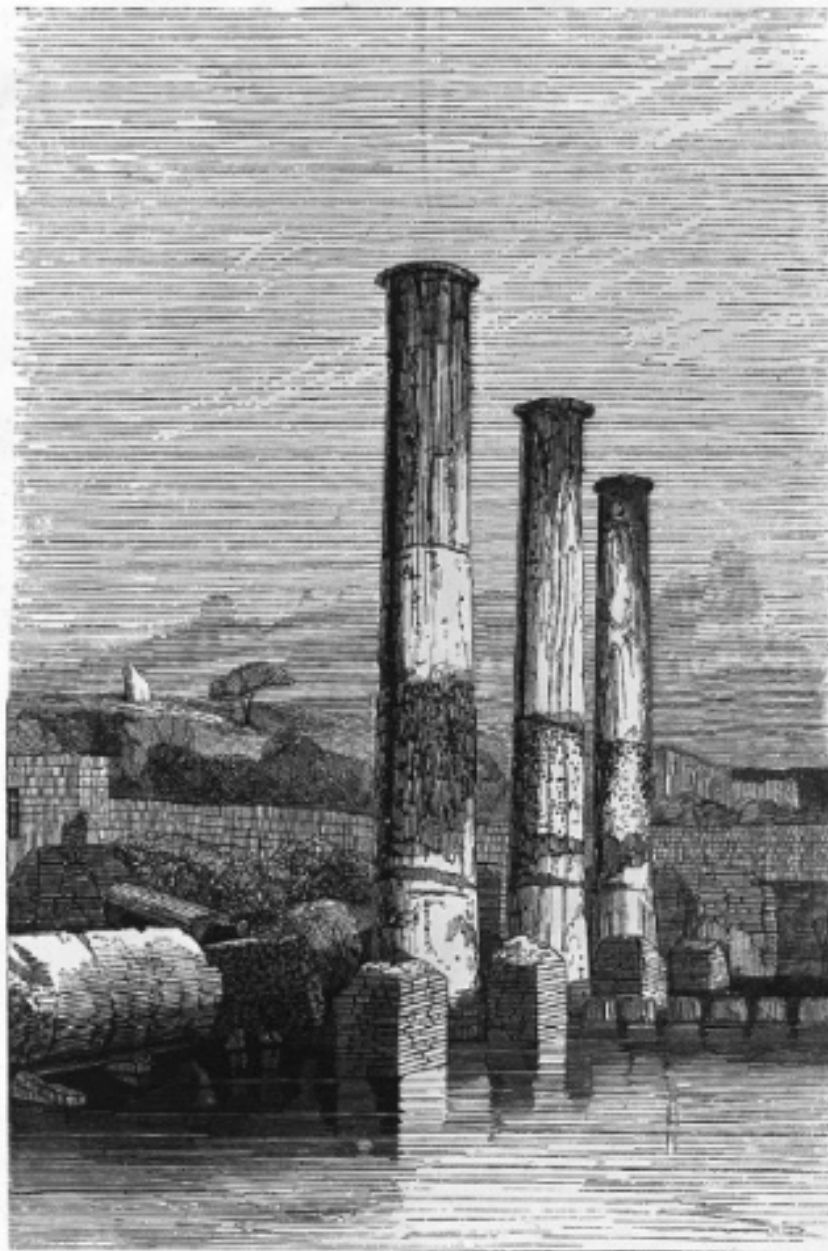
Washerwomen and their stories become interesting, whether they are in first-century Naples, nineteenth-century London or sixth-century Assyria, but they can have no place in the geological landscape.

Political poetics of geology

As James Secord has suggested, Lyell’s work can also be read in the context of the intense political debates around the Reform Act (*Visions* 138). Two Reform Bills had been introduced and defeated in 1831, with the Act finally passed in 1832, in the middle of the sequence of the publication of *Principles*. Although Lyell’s family politics were Tory, his own position was more liberal and he knew that the political implications of his work would not be ignored. Reviews of *Principles* that noted the relations of geology and politics⁴ were only echoing what Lyell himself implies at the very opening of the first volume, where he uses a quotation from James Hutton that begins: “Amid all the revolutions of the globe the economy of Nature has been uniform” and paraphrases that himself in the second paragraph: “As the present condition of nations is the result of many antecedent changes, some extremely remote and others recent, some gradual, others sudden and violent, so the state of the natural world is the result of a long succession of events.” (16) Secord argues that “In the context of reform, the *Principles* was a Trojan horse ...[it] had the imprint of conservative classicism, but hid within a secret army of reform” (*Visions* 172). So there is a clear understanding of the politics of the earth, dissolved, as it were, into environment. In this respect archaeology is “born” into the political landscape of the Kingdom of Naples that Shelley envisions in his ode; bloodied in 1799 by counter-revolution, freed from Napoleon in 1815, only to be placed again under oppressive Bourbon rule.

Revolutionary politics are, for him, as Cian Duffy avers “a kind of ideological archaeology, a cultural disinterring” (“City” 155) but Lyell too is conscious that his science can be put to such metaphorical uses.

In 1847 he published the seventh edition of *Principles* with a new version of the frontispiece, produced from an image taken with a camera lucida, and it is this version that appears in all subsequent versions and is the one found embossed on the covers of the book and on the Lyell Medal.



VIEW OF THE TEMPLE OF SERAPIS AT PUTEOLI, IN 1800.

Fig. 2 Frontispiece of *Principles of Geology*, seventh and subsequent editions published in England from 1847.

The angle has changed to a perspective from the south side of the site, the focus has narrowed and there are no figures. The site appears more ruined as the other fallen columns are in clearer view. Luca Ciancio suggests that the new frontispiece is a product of the older Lyell's growing

demand for accuracy (*Colonne* 188) and Virginia Zimmerman, having identified the figure in the original frontispiece as the “geologist-reader” argues that the disappearance of the figure from the 1847 edition indicates the success of Lyell’s method; the idea of the geologist as a “reader” of the earth is by then so firmly familiar to that insistence upon it is no longer necessary (186). While both these are plausible suggestions, I would suggest that the removal of the human figures after 1847 is an attempt to de-politicise the landscape and again a move that resonates with early archaeology.

The human in the landscape is a problematic figure. Travellers were often unable to reconcile present inhabitants with ancient sites, typically as Percy Shelley wrote to Leigh Hunt from Naples in 1818:

There are two Italies, one composed of green earth and transparent sea and the mighty ruins of ancient times...the other consists of the Italians of the present day, their works and ways. The one is the most sublime and lovely contemplation that can be conceived by the imagination of man; the other the most degraded disgusting and odious. (Jones 2:67)

Where the first edition of *Principles* is published in the midst of the British political tensions of the First Reform Act, the change of illustration happens at a moment of increased turbulence across Europe, culminating in the “Year of Revolutions” in 1848. The removal of people from the illustrations of geology allows the sites to transcend political questions of ownership or government and rest in the “neutral” realm of science. The human figures who do appear in any other illustrations of the Temple after 1847 are emphatically contemporary, by their clothing clearly not local and are depicted in instructive mode; pointing, gesturing, explaining to their companions, reading the “hand of nature”.⁵

As the free-for-all collecting of the eighteenth and early nineteenth century began to be to some extent controlled by national governments it became necessary to construct reasons for the removal of treasures.⁶ The emptying of sites and the elision of local people is critical in this process, breaking any continuity of tradition in making claims over objects. Localness is frequently represented as a danger; the degraded remnants of previous civilizations cannot be trusted to take care of sites or objects and the alienation of local people from their own material is another frequent trope noticeable, for example, in Layard’s accounts of his digs in Mesopotamia. At the same time, the excavators cannot resist searching in the ruins of the people

for the traces of the past: contemporary people are the human remains in whom evanescent glimpses of the past can be seen, in their faces as well as in their ‘primitive’ technological practices. The disappearance of local labour is another feature of nineteenth-century archaeological writing that I would argue comes from this difficult political moment. Nick Shepherd calls it a disciplinary “habit of elision” in the context of twentieth-century African archaeology, where he suggests that “a concern with native labour, its tractability, its cost, its continued supply, runs as a thread through colonial and apartheid histories” and argues that this is precisely mirrored in archaeological site reports (346-7). Although there are clearly further racial dimensions to this habit of elision in a colonial situation, the language is identical to that often used about the British working class in the nineteenth century. In the 1840s and 1850s, when Layard and others are making their expeditions abroad, the tractability of workers at home had become a crucial issue in the context of the booms and busts of early industrialisation. Shepherd also explores Ian Hodder’s observation of a shift in the style and rhetoric of the archaeological site report, noting the latter’s claims that early examples of the genre give actor-oriented accounts and make use of personal pronouns, whereas in the late nineteenth century a “transformation occurs towards more distant, abstract, decontextualized accounts” and the use of the passive voice (350). Similar points have been made about the relationship between archaeology and photography, where conventions have developed that remove authorship and labour to establish a ‘clean’ image (see Bohrer). I would suggest that such moves are not simply the familiar symptoms of aspiration to ‘scientific’ objectivity, but part of the legacy of the shifting of people from geology and its representations.

In the early and mid-nineteenth century accounts, workers become most visible when they are *not* working and frequently they are simply unseen forces raising the objects to the surface. They become, in this sense, like the natural forces of geology that Lyell describes, continually concealing and exposing the remains of man and his works. These archaeological wonders have not been “produced” by human hand, nor do they belong to anyone; the past is neatly disassociated from the local present, only for a new past to be constituted when the object reaches the display spaces of western Europe.

In Lyell’s own case, the disappearance of people from the 1847 frontispiece also speaks of the problem of the earliest existence of humans, and the continuing need to quarantine

geology against narrative. If the ‘sole defining narrative event’ in *Principles* is the arrival of humans and their history provides “the only sustained forward narrative” (Second Introduction xviii) their removal opens the text very differently. Without people, the frontispiece takes away the temptation to “fancy”. *Principles* side-steps questions of the origins of humanity and Lyell was not at this point convinced that that humans had co-existed with extinct animals. It was in the 1840s that finds in caves in Devon and France seemed to confirm the existence of “pre-historic” humans, but Lyell only accepted it publically at the British Association for the Advancement of Science meeting in 1859. He subsequently published *Geological Evidences of the Antiquity of Man* (1863), but in 1847 it was necessary for geology to proceed without representation of people. The frontispiece of *The Antiquity of Man* is also telling; Lyell chooses a drawing of an imagined reconstruction of an early Swiss lake village, and although there are huts, a boat, tools and signs of cultivation, there are no people. As with the displacement of story-telling to archaeology, we can also see a displacement of the problem of humans, the tellers of those stories, in the same direction. Where geology becomes “clean” in its depictions of landscapes and ruins, archaeology remains troubled by people.

The Ruined Metropolis

The final image of Serapis that I want to examine is not one that immediately appears as such, though it is probably almost as well-known on its own account. It is Gustave Doré’s engraving of the New Zealander, the final plate in his and Blanchard Jerrold’s *London: A Pilgrimage* (1872).



Fig. 3 Gustave Doré, “The New Zealander”, from Doré and Blanchard Jerrold, *London: A Pilgrimage* (1872).

The image is inspired by Thomas Babington Macaulay's projection of the future, "when some traveller from New Zealand shall, in the midst of a vast solitude, take his stand on a broken arch of London Bridge to sketch the ruins of St Paul's" (228). Macaulay's speculation was first published in 1840 and was already a tediously familiar figure in writing before Doré illustrated it, and it has been widely read in recent criticism, most often in terms of a ruined British empire (see Dingley; Skilton). While imperial anxieties certainly inform the image, I think its resemblance to the illustration of the Temple has been missed. Doré's image is an exact echo of Lyell's original frontispiece, the last and the first plates of their respective volumes. The composition is the same, with the observing figure on a projecting piece of ground to the left, the three pillars in the centre with foliage behind them, even having the same unequal spacing produced by perspective in the original. There are other resonances too. A real New Zealander in 1884, complaining about the "Hackneyed" nature of the image, attributes its source confidently to five preceding uses of the idea, one of which is from Shelley (Colenso). This is Shelley's text:

In the firm expectation, that when London shall be an habitation of bitterns, when St. Paul's and Westminster Abbey shall stand, shapeless and nameless ruins in the midst of an unpeopled marsh; and when the piers of Waterloo Bridge shall become the nuclei of islets of reeds and osiers, and cast the jagged shadows of their broken arches on the solitary stream, some Transatlantic commentator will be weighing in the scales of some new and now unimagined system of criticism the respective merits of the Bells and the Fudges, and their historians.

Shelley's broken arches and colonial future observer very obviously inform Macaulay's vision as, perhaps, does Macaulay's visit to Naples in the year before his article, from where he writes, 'It is the only place in Italy that has seemed to me to have the same sort of vitality which you find in all the great English ports and cities. Rome, Pisa and Genoa are mere corpses, dead and gone... Naples is full of life and bustle' (1:132). The question of the life and death of cities is very present to him in the Neapolitan landscape. Doré includes the ruin of St Paul's that Macaulay mentions, but the New Zealander is not drawing it, rather his attention seems to be on the only other identifiable ruined building in the picture: Commercial Wharf, the name of which is clearly visible. The clothing of the observer is not modern, resembling most closely a kind of costume of the Italian Renaissance. He is drawing, not photographing: the future is the past. Doré's image speaks not just or only of the empires of Rome and London, but of the ruined paradise of Naples and all the cities of the dead that are the progeny of Pompeii. In returning to the founding image of British geology to indicate the future of the metropolis Doré re-introduces

the archaeological narrative that Lyell worked so hard to refuse and consolidates the story-telling that archaeology was to find so difficult to put aside in its subsequent development.

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NOTES

¹ Among them the cave of the Sybil at Cumae, the Bay of Baiae with the ruins of Caligula's bridge, Herculaneum, the scene of Nero's attempt to murder his mother, Tiberius' villa at Capri, the lake of Avernus that Homer and Virgil both imagined as the entrance to the underworld, Hadrian's tomb, the remains of the Greek city and the reputed landing place of St Paul the apostle at Puteoli.

² The site is conventionally called the Temple of Serapis because of the finding of a statue of the god in the vicinity. Some early accounts attempt to reconstruct details of the temple structure, but by the time of Lyell's writing it was quite widely thought not to be a temple but a market building.

³ The drawing was by an American, John Izard Middleton, who had married the daughter of a Neapolitan banker and produced many drawings and observations of ruins and antiquities in the region. His work was often used without credit and was not widely recognized.

⁴ Such as from the *Spectator*: "The earth is an old reformer; her constitution has been subjected to innumerable changes; the signs of radical movements are to be detected everywhere, yet it is by no means easy to ascertain either the course or the causes of the revolutionary phenomena that so perpetually meet the eye of the inquirer". *Spectator*, 14 January 1832, 39.

⁵ There are many images of the Temple after 1847. Sir James Dunlop, in his tour of Italy in 1847 took a calotype picture and there is a rapidly increasing number of photographs thereafter.

⁶ Greece passed its first law restricting the movement of antiquities in 1834; Egypt in 1835.