REIGN OF THE BEAST THE ATHEIST WORLD OF W. D. SAULL AND HIS

Museum of Evolution

Adrian Desmond





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Cover illustration: A spoof of the "Devil's Chaplain", the Rev. Robert Taylor (left, on the podium). His patron, the atheist Richard Carlile, is seen on the right, landing a punch. The wine merchant W. D. Saull funded both men and grounded his evolutionary talks in their dissident sciences. Such pastiches reinforced the prejudices of pious readers, by depicting the moral rot caused by irreligion. The wall posters on the left advertize contraception manuals and licentious memoirs, and a lecture by "Miss Sharples", Carlile's common-law "wife". Taylor's character is being impugned by portraying the mayhem caused by his infidel oratory. Beyond the brawling and debauchery, thieves are shown in the audience (bottom right) and a dagger-wielding agitator (centre). In reality, Taylor's congregations were respectable and attentive.

Etching, in the author's possession, entitled "The Triumph of Free Discussion" (the motto of Carlile's Fleet Street shop selling subversive prints). The caption reads, "A Sketch taken in the Westminster Cock Pit on Wednesday the 24th. of September 1834. Subject A Lecture by the Revd R. Taylor, A.B.M.R.C.S. 'On the importance of Character'." Cover design by Jeevanjot Kaur Nagpal

24. Museum and Pantheon for the Masses

What Saull's museum held at this point has to be pieced together serendipitously. Its original core was one of the important early nineteenth-century fossil shell cabinets (Sowerby's), yet we know little of it. Mantell's museum in Brighton, or Roach Smith's in Finsbury, are better known partly because they had printed catalogues. Compilation lists are essential for geology museums because they record data necessary for correlation: the stratum and locale from which the fossils came. It would be surprising if Saull's lacked one, given the radical attacks on the British Museum for its own lamentable cataloguing practices. Here, critics made plain that a catalogue was "the soul" of the collection, and that exhibits without proper classification would lack "any perceptible bond of connexion." The fossil connections, clearly, were something Saull was keen on. But, if Aldersgate Street had a catalogue (perhaps produced by Godfrey, the superintendent), it vanished during the museum's catastrophic breakup after Saull's death.

In lieu of a listing, the contents have had to be construed from scattered sources. That in itself calls for a huge proviso. The results are highly selective, because the literature is obviously skewed. As with fossils themselves, sampling techniques reflect a preservational bias. The press picked high-impact or exotic items to publicize, in order to pique the punters' interest, rather than what was typical. Specimens might be mentioned because they were huge and spectacular, such as the *Iguanodon* dinosaurs or Big Bone Lick mammoths, or giant coalage tree ferns; or for their beauty, like the pear-shaped sea lilies. These

¹ MacNeil 2017, 6, 16, 20; McOuat 2001; Knell 2000, 92.

were the show-stoppers.² The scientifically significant, new species and such, are known because their details were recorded in monographs. Most notably, the palaeontologist Richard Owen cherry-picked the best Aldersgate Street reptiles for his papers on British fossils. Many of Saull's ichthyosaurs, plesiosaurs, dinosaurs, and more, appeared in these monographs, which were ultimately bound together in Owen's monumental four-volume *History of British Fossil Reptiles* (1849–84).

This is a very low sampling rate. The featured specimens scrape the surface of the 20,000 total and show nothing of the whole. We have no idea of the vast majority of exhibits and know little of their finer arrangement and specific didactic use. Duplicates, found in fellow republican agitator John Lee's collection, might give some clue to the commoner specimens. In that case, Iguanodon remains from the Isle of Wight figured large, plus fossils from Saull's native Northamptonshire, an ammonite and fish palate (suggesting a further bias towards this region). There were Tertiary Pecten shells from New Jersey, showing that Saull was buying or trading American specimens. Otherwise the samples were the sort that Saull's museum was famous for: the fern fronds of Pecopteris, and the perplexing "spotted-stems" (Stigmaria fucoides), which in the mid-1840s had finally been shown to be the roots of Sigillaria tree ferns, from immediately below the coal seams.3 The other Lee swaps were nummulites (the sort which Saull exhibited at the Numismatic Society), a small Jurassic sea urchin Cidaris diadema, a Cretaceous sponge, and a boat oyster, a common fossil.4

The most frequently featured in press reports were those gigantic reptiles that transfixed the Victorians, especially the *Iguanodon*. This is not surprising, given their exposure by Richard Owen. Under his guidance, life-size *Iguanodon* and *Megalosaurus* reconstructions were shortly to be erected in the grounds of the Crystal Palace, when it moved to Sydenham in 1854.⁵ Saull's *Iguanodon* too became the cause of the

² For example: A. Booth 1839, 121; *Iguanodon*: G. F. Richardson 1842, 402; largest *Ichthyosaurus platyodon* centrum: Lydekker 1889a, pt. 2: 101–02; the showy ammonite *Ceratites nodosus*: Spath 1934, 477.

³ Confirmation that *Sigillaria* trunks in the coal seams were connected to *Stigmaria* roots, and that these were the same plant, came from Hooker 1848.

⁴ Delair 1985, catalogue numbers 1332, 1356–62, 2412, 2462, 2599, 2607, 2625, 3388–89.

⁵ J. A. Secord 2004a.

famous controversy between Mantell and Owen, after Owen had used it to erect the new group, 'dinosaurs'. The other prominent display specimens might have been the tree ferns from the coal measures. Saull had a vested interest in these, with the Parisian expert Adolphe Brongniart having created a new species, *Sigillaria saullii*, from an Aldersgate Street specimen, although whether it took pride of place, we do not know.⁶

How Different was Saull's Museum?

To get some perspective, we might compare Saull's to another museum. For general collections of fossils, there were only three other private museums in London worth speaking of,⁷ and only one in the 1840s received press acclaim to rival Saull's. That belonged to the Bishopsgate distiller James Scott Bowerbank.⁸ Bowerbank moved his museum to Islington and, in 1846, set it up in a spacious house at 3 Highbury Grove. Eventually he, too, built a dedicated room, forty feet by twenty-eight feet, to take the collection. He was said to have had 100,000 fossils, arranged stratigraphically, and all of them eventually mounted on tablets by his wife Caroline. But here we start to see differences, for the fossils were packed away, as in a modern research museum, in some 400 drawers,

⁶ Two new species were named after Saull, *Sigillaria saulli*: Brongniart 1828 (-1837), 456; Mantell 1851, 32–33; 1854, 129; and *Crocodilus saullii*: Richard Owen 1884 Index to vol. ii, p. vi.

According to Morris 1854, iv. Of the other two museums, one belonged to James Baber (1817–1887), an oil-cloth manufacturer in Knightsbridge. It too contained *Iguanodon* vertebrae (Mantell and Melville 1849, 272, 276, 304) and a few British elephant, rhino, and hippo fossils (Mantell 1857–58, 1: 18). *Nautilus baberi* was named after him, so perhaps he specialized in belemnites and ammonites (Morris and Lycett 1850, 10–13, 109; Anon. 1904, 262; Sharpe 1853, 27; Davidson 1854, 89). The museum is scarcely mentioned in the press, making any comparison with Saull's impossible. The other museum rated by Morris was owned by Sowerby's eldest son, James de Carle Sowerby. He carried on collecting after his father's death and continued the *Mineral Conchology of Great Britain* series. This was an identification guide to fossil shells for high-brow enthusiasts. It ran until 1846, in 113 separate parts, often costing 5s apiece (J. B. Macdonald 1974, 389–95; Cleevely 1974, 422; Elliott 1975). Sowerby's museum presumably specialized in shells, for 5,000 were bought by the British Museum for £400 in 1861. The specialism of this little-known museum again militates against a comparison with Saull's.

⁸ *Civil Engineer* 17 (Feb. 1854): 41–43; G. F. Richardson 1842, 80; A. Booth 1839, 122–23. Timbs (1840, 3: 166) even put Bowerbank's at "the head of private collections", while giving Saull's a bigger write-up, but this was atypical.

rather than being spread out visually, as in Saull's, where they were placed in glass cases or in sequence on open shelves.⁹ It was a telling pointer to a deeper proprietorial divergence.

Bowerbank's museum was aimed more at the "Geologist or student of nature". ¹⁰ During the London 'season', he reserved Monday evenings for scientific *soirées*, where the geological elite could talk shop. At other times, the public was admitted and Bowerbank, like Saull, was praised for this. But here, too, there was a contrast. Access to Highbury Grove was "by appointment". Advanced "permission" was needed, ¹¹ unlike Saull's open house, which put up no intimidating obstruction for working men and women.

Free and open Saull's museum might have been, but there were still complaints that his Thursday daytime opening was inconvenient. As his aim is the "enlightenment of the masses", chided the *Northern Star*,

would it not be well for him to throw his museum open one evening during the week, when "the toiler's work is done," but, perhaps, as Mr. Saull is advanced in years, he might think he should be spared this additional gratuitous labour.

The *Northern Star* suggested his superintendent should undertake the task, so that "the benevolent desire of its great and good proprietor would be more surely and effectually accomplished".¹² It had a point, and for a while Saull did opt for a Saturday opening as well. Night time opening also supposed Saull had gas lights installed.¹³ If not, the glass-case collection of contoured fossil slabs could hardly have been appreciated.

So the press's bracketing of Saull and Bowerbank belies an instructive difference in the proprietors' attitudes. They were on diverging paths, with different political/professional goals. Both men might have had City trade origins, one a wine importer in Aldersgate, the other a distiller

⁹ On the advantage of Saull's glass case display: *Mining Journal and Commercial Gazette* 1 (7 Nov. 1835): 83; *NS*, 31 Oct. 1846, 3. On Bowerbank: Reeve 1863–64, 2: 133; Timbs 1855, pt. 2: 538; Bowerbank *ODNB*. Mantell's was a hybrid system, part case (he had twenty glass cases, Saull had thirty), part closed drawer: *Lancet*, 29 June 1839, 506–07.

¹⁰ A. Booth 1839, 122-23.

¹¹ Williams and Torrens 2016a, 279; Timbs 1840, 3: 166; 1855, pt. 2: 538.

¹² NS, 31 Oct. 1846, 3.

¹³ Zorzi 2019, 27.

in Bishopsgate. Even here there were differences. Bowerbank inherited his rectifying distillery business from his father as a going concern. And he could afford to retire and quit any trading ties in 1847 (at the age of 50) to live a more gentrified 'intellectual' life as a fossil specialist. This was unlike Saull, who was a self-made merchant, built his shop up from scratch, and stayed with the trade, and continued to finance freethought, till his dying day.

In terms of exhibits too, Bowerbank's was a much more focussed museum. A visitor could find some of the same fossils in each museum. Take the ancient snake from Sheppey, the Palaeophis toliapicus (which in life might have looked like a boa constrictor ten feet long). There were skull fragments in Saull's museum but a better specimen in Bowerbank's. 14 The reason was that Bowerbank specialized in fossils found in the sediments containing the snake, the London Clay—Tertiary deposits laid down after the great Age of Reptiles had passed. Here, too, there is an instructive story. Like Saull, Bowerbank exploited the new sewerage and water-supply excavations but for totally different ends. While Saull went to the bottom Roman levels, Bowerbank was descending the shafts below Archway Road because they cut through the London Clay, giving him a unique chance to view the strata foot by foot. 15 He followed the clay outcrop all the way through Kent to the Isle of Sheppey, where his main collection was made. He became an expert on the molluscs, bivalves, and nautiluses from the London Clay, and he made his name in 1840 by monographing the fruits and seeds he found, which resembled those from tropical plants today (showing that Britain was then equatorial). 16 His collection of London Clay fossils was the largest in the world by 1840, and 180,000 of his fruits and seeds eventually passed to the British Museum.¹⁷ Unlike Saull's museum, Bowerbank's was obviously a specialist research hub.

¹⁴ Richard Owen 1841 [1842], 180; Richard Owen 1850b, 63–65; Mantell 1844, 2: 780.

¹⁵ Robinson 2003.

Williams and Torrens 2016b; Robinson 2003. It was the same with fossil sponges. Bowerbank began collecting them in the forties, built up the largest collection in the country, and went on to monograph them.

¹⁷ By 1879, five thousand of these had been curated and they yielded 154 new species: PP. An account of the income and expenditure of the British Museum (special trust funds), for the financial year ended 31st March 1879, LVII.611, 37. C. Tyler, "Memoir of Dr. Bowerbank", in Bowerbank 1864–82, xiv; A. Booth 1839, 122–23; Bowerbank 1840.

And Bowerbank took this interest further. Fossilist *soirées* at his house led to his forming the London Clay Club in 1836 with fellow experts. ¹⁸ This vocational dedication was very different from Saull's political motivation.

Being committed, keeping his political nose clean, and spurning trade for science, Bowerbank was respected by the geological gentry. He not only named many new species from the London Clay, but a number were named after him. There was a cowrie shell *Cypraea bowerbankii* and a sea-urchin *Cidaris bowerbankii*, and so forth, even a genus *Bowerbankia*, a bryozoan or simple moss animal. His devotion, research-grade museum, and voluminous publications made him well known. It gained him a place in *Portraits of Men of Eminence*, and a Fellowship of the Royal Society in 1842. His career goals pushed him far from the radical Saull, whose exhibition for working-class instruction had a very dissimilar intent.

Bowerbank's mounted specimens were what fellow experts came to see on a Monday night. The origin of these open Monday sessions again points up how distinct his attitude was from Saull's. Bowerbank was a founder of the Microscopical Society in 1839. Here he tested new recruits to the Society, showing them a pretty slide and weeding out the dilettantes by their response. Protocols were being set up such as would eventually lead to professional approaches to science. He bought the latest microscopes and turned them on fossil fruits, pterodactyl bones, and fossil sponges; in doing so, he was first to show that the flint in chalk was composed of silica from sponges. So many microscopists came to use his Tully-modified achromatic microscope (only the fifth one ever made), that he was forced to set aside Monday night each week for them¹⁹ and, by the forties, the geologists as well. These "scientific" open days, then, were of different complexion from Saull's. They served a distinct function, scientific patronage rather than secular propagandism. Saull welcomed men of science, but, as the Northern Star said, the "masses" were his real audience.

¹⁸ Long, Taylor, Baker, and Cooper 2003, 354. Sowerby illustrated many London Clay specimens in his *Mineral Conchology* (Elliot 1970, 334), fossils that passed to Saull, but he never followed up in the way Bowerbank did.

¹⁹ Long, Taylor, Baker, Cooper 2003; Reeve 1863–64, 2: 133; Tyler's memoir in Bowerbank 1864–82; Michael 1895, 10.

The differences even showed in the way satirists spoofed the two men. An innocuous lithograph of "Highbury Grove in 1846" showed Bowerbank's one-storey annex marked "Megatherium Mansion", with jesters standing at the door carrying placards announcing "80,000,000 New Fossil Fruits Just Arrived", and a sign on the house: "Society of odd carriers outside offering "Real Fossil Turtle Soup, Pterodactylus Tail D[itt]o."²⁰ The cartoon was non-threatening, with no dark undercurrent: eccentricity is the worst it implied. How different from the *Penny Satirist*'s obsession with Saull's monkey men, with its sinister hint that, for all the absurdity, this was morally pernicious.

Sometimes it was more than a hint. Smith was catering to ever larger readerships now. He had started a new venture, the *Family Herald*. To get issues out with the speed necessary to meet his swelling audience, eager for the latest drama, poetry, and science, Smith initially used machinery to typeset, print, and bind the penny weekly. But only for a year: there was a certain irony to the old socialist union supporter being stymied by the London Union of Compositors, who objected to women working the machinery, so Smith had to revert to manual printing. Still, the venture proved a success, and the *Family Herald* was one of the most successful penny mass-market magazines.²¹ But, even here, Smith would not let go of Saull's monkey, typically complaining in 1844 that

materialism at one time appeared determined to set itself up as a species of religion. Atheism denied the very being of the creative mind, and man's own mind was deemed a mere vapour from the body, which it controlled and animated. Everything was material. Soul, body, and spirit were all so many species of matter; and matter—the dross of existence—was seated on the throne of God himself. With such ideas, down come poetry, imagination, the fine arts, religion, morals; man loses respect for himself. His dignity is compromised, his divinity is denied, his immortality doubted, his divine sonship sneered at. He is merely a logical and philosophical animal—a shaved, and untailed, and cultivated monkey, as Mr. Saull, a materialist and philosophical lecturer, used to describe him, to the amusement of his auditors.²²

²⁰ Robinson 2003; Williams and Torrens 2016a, 281.

²¹ Blake and Demoor 2009, 213–14; Cox and Mowatt 2014, 8–9; McCalman 1992, 64.

²² Family Herald 2 (26 Oct. 1844): 394.

Saull and Bowerbank stood cultural worlds apart. Saull's money and energy were ploughed into dissident causes, and this kept him marginal to gentlemanly geology. His museum, more general, didactic, and exhibitionist, was aimed at artisans, with its shelves of fossils simplifying life's ascent from monad to man in a visible way. Socialist intent meant Saull eschewed Bowerbank's more vocational bent. Only in Highbury Grove did you find a research emphasis on 'museum-quality' fossil fruits and sponges, neatly stowed in drawers, and a bench of microscopes.

One last point will stress how far apart these curators stood in the 1840s. Bowerbank remained focused. He never joined the Antiquaries, Numismatic, or Archaeological Societies, and Saull's goal to push from fossils to savage ascent was never Bowerbank's. By contrast, being integrated into the practising geological community, Bowerbank was instrumental in founding a body dedicated to publishing subscription-only fossil monographs, The Palaeontographical Society (founded 1846). Surprisingly, even though Saull paid his dues to all manner of learned clubs, 23 he was not a subscriber to the Palaeontographical. Yet, this might have seemed closest to his heart. After all, Richard Owen's many monographs on *British Fossil Reptiles* for the Society featured Saull's specimens. Either fossils were losing their appeal, with Celtic and Roman antiquities taking over, or the society was simply too specialized. The Palaeontographical was all technical arcana, by expert fossilists and rock-face collectors. Saull had departed from the clam-shell cognoscenti, men whose arcane knowledge now set them apart. But with the age showing increasing respect for the scientific clerisy, it was Bowerbank who would end up in *Men of Eminence*, whereas the collapse of socialism left Saull in historiographical obscurity.

²³ Besides those already mentioned, he subscribed to the Ray Society (e.g. *Daily News*, 15 May 1846, 2–3; on whose founding see Gardiner 1993); the Camden Society, set up to publish early historical documents ("Members of the Camden Society ... 1st May, 1847", 14, appended to *Camden Miscellany* 1 [1852]); and was a member (1852–53) and councillor (1853–54) of the new Chronological Institute, established to provide a more exact comparative chronology across cultures: *Transactions of the Chronological Institute* pt. 1 (1852): 39, 65; pt. 2 (1857): 125.

The Eye of the Beholder

Critiques of science ran the gamut among artisan radicals, from distrust because it was in bourgeois hands, to dismissal due to its irrelevance to socioeconomic transformation, while others were ready to co-opt it in an anti-clerical cause. Saull had to connect with all sorts. Then there were the gentlemen dropping in on a Thursday: the geological gentry, Anglican clergy, phrenological enthusiasts, London historians, and Roman antiquarians, all brought their own contexts to bear, to make sense of the exhibits. Whether artisan or bourgeoisie, the visitors came with a bewildering spread of cultural expectations.

Some might not have appreciated Saull's materialist museum at all. Take the sacred socialists from Alcott House, in Burton Street, up the road from the old Owenite institution. They were unlikely comrades. In their "Aesthetic Institution", that refuge "for distressed or curious radicals" reacting to an encroaching materialism, a sentimental judgement of good and evil was substituted for hard-core science as a way of understanding. Acting replaced knowing. Action meant behavioural adjustment, pacifism, celibacy, teetotalism, vegetarianism. And with this physical puritanism came a love of lay-empowering practices: phrenology, hydropathy, mesmerism, and astrology.²⁴ It was not only the "bourgeoisie's evermore arrogant, elitist, and humanly abstracted utilitarian conception of science"25 that they feared but the new atheists flexing their muscles. For the sacred socialists, phrenology revealed a deeper "spiritual organization" that made man more than an Owenite rational animal. Their idealism and disdain of science ran counter to Saull's outright materialism. So it is debatable whether these "aesthetical young men with their hair divided down the middle" would have found Saull's monkey-based 'evolution' emancipating or spiritually uplifting.

The same was probably true for a fellow pacifist, the Chartist Thomas Cooper. He was the true impoverished autodidact: an illegitimate dyer's son, lapsed Methodist, and apprentice shoemaker, who had taught himself Latin, Greek, and Hebrew. Cooper was the "Chartist poet" and erstwhile admirer of Feargus O'Connor. He had served his time,

²⁴ Latham 1999, 20, 80, 168, 175.

²⁵ Cooter 1984, 202-04.

in Stafford gaol, and used it to write a "Prison Rhyme" in ten books, The Purgatory of Suicides, which even an appreciative foe, the Monthly Christian Spectator, thought an "incontestably great poem". 26 This man of "immense influence", as Charles Kingsley acknowledged, 27 might have scorned the mysticism of the young fops and their retreat from science. "Arrest science!", he laughed, "You might as well try to put out the sun." Cooper's own wobbly Christianity had finally been knocked over by David Friedrich Strauss's Life of Jesus; and, in Cooper's hands, the debates in John Street were shifting from God's existence to the historical veracity of Christ's teachings.²⁸ The eloquent Cooper, who could recite "Satan's speech from Milton with magnificent effect", 29 remained a deist through the violent years, although he would later regain his Christian faith and go on to attack evolution.³⁰ But, for the moment, he too lectured Chartists on geology and was happy to upset the "orthodox reckoning of the Mosaic Age of the World". And he saw no "fear for morality if even the New Testament Miracles become generally disregarded and treated as legends", as he said at John Street.31 Yet even now his respect for science was as much to do with pointing out the "perfections of the divine Mind; for God manifests himself in every object of science". So Saull's religiously liberating explanations would have jarred badly.

Even more opposed to Saull's funny monkey business was his old socialist nemesis 'Shepherd' Smith. He had made no bones about it in every publication since his old *Crisis*-editing days. Smith was another who warmed to the aspirations of socialism just as he warned his readers off a nasty one-sided materialism. "Materialists always attach themselves to the body politic, and sneer at the soul ecclesiastic", ran his leader "Our Double Nature" in the *Family Herald*. It branded Saull, as Smith always did, as an extremist with anti-religious "feelings amounting to abhorrence", who was as bad in his way as the blinkered

²⁶ Monthly Christian Spectator 2 (Nov. 1852): 669–77; Loose 2014, 42–46, 116–18.

²⁷ Larsen 2004, 48ff; Marsh 1998, 82. The radical hero of Kingsley's *Alton Locke* (1850) was based on Cooper.

²⁸ Monthly Christian Spectator 2 (Nov. 1852): 672, 676.

²⁹ W. E. Adams 1903, 1: 170.

³⁰ Thomas Cooper 1878; 1872, ch. 24.

³¹ *Cooper's Journal* 1 (16 Mar. 1850): 174, 186–87; Goodway 1982, 58. Thomas Cooper ([1842], 11) was another knowledge Chartist who claimed to "popularize Chartism, by delivering familiar and elementary lectures ... on geography, geology, astronomy ...", as if the sciences were integral to the movement.

clerics who "speak contemptuously of the body". Preaching moderation and mutual respect, Smith could nevertheless not help pronouncing the "spiritual power in every country whatsoever is the strongest, the most permanent and enduring", ready to redress any materialist imbalance. This spiritual reserve would be called up if another "revolution like that of '92 [the French Terror] were again to give [the materialists] exclusive possession of power".³² Readers were left in no doubt that the spiritual element ran deep, while a spirit merchant with a monkey was a shallow entertainer.

Saull had to persuade all sorts. His lecturing over the glass displays, and his question-and-answer sessions, would seek the audience's acquiescence for a new unimpeachable authority outside of Church and Throne, and which worked in the listeners' best interests. His talks re-crafted the social grievances of the downtrodden and related their solution to the new palaeontological science: of planetary changes allowing life to pull itself up unaided, and grant itself inalienable rights. The museum placed the working-class visitor in a new natural position, not at the bottom of the heap, but at the culmination of geological history, by a material process which guaranteed political sovereignty, all of which was expected to transform the artisan's self-perception and bring about the political millennium. This was Owenite self-reformation at work.³³

Many out-and-outers wanted science 'correctly' interpreted, as in Saull's sense: made to speak as part of their "sociopolitical and socioeconomic struggle and humanist morality". It was to allow workers "to assert their dignity and worth and self-reliance and ... be better equipped to contest obscurantism and social injustice". When it came to readers of Holyoake's *Reasoner* or Robert Cooper's disciples (the current Antichrists of the Christian evangelical press), Saull was preaching to the converted.

We see this in the young Robert Cooper's secular lectures on Moses or the "Origin of Man". These were theatrical stage shows by the early

³² Family Herald 7 (27 Oct. 1849): 412-13.

³³ Lundgren 2013 has shown Francis Galton later using science in his Anthropometric Lab in a similar way to expose "exhibition-goers ... to new perspectives on everyday habits and social practices", in order "to learn how to turn observation back on themselves" and change their own way of life.

³⁴ Cooter 1984, 202-04.

fifties, with a visitor reporting it was like going to "a Drury Lane opera or a gin palace saloon":

playbills informed us of the nature of the performance—admission was to pit, gallery, and boxes, according to a tariff of charges—persons went round the assembly hawking books and pamphlets—and a professional orchestra diversified the entertainment with stringed instruments and vocal score.³⁵

Such twopenny talks trashing Creation or Moses could be hectic, with jostling, evangelical gate-crashing, and heckling. Cooper once even fainted at a particularly fraught event. Given the preponderance of the religious press, we know most about Cooper from these antagonistic sources. New journals like the *Monthly Christian Spectator* (founded 1851), *Bible and the People* (founded 1851), *Defender* (founded 1855) and *Bible Defender* (founded 1856), dutifully shadowed the "Secularists"—Holyoake's neologism was enthusiastically adopted—to expose this "banditti of Freethought". They painted Robert Cooper as "coarse, rude, ludicrous, and outrageous" as he dilated "upon the sublime doctrine of a resurrection from the grave", with the audience "plunged into loud gustos of laughter". Secularity with the audience "plunged into loud gustos of laughter".

Saull was in the thick of it. He could be found at a Cooper lecture on "The Soul" in the City Road Hall of Science.³⁹ And it must have been to Saull's taste, with Cooper not only demolishing souls and denying resurrections but more positively referencing "Facts from Anatomy and Physiology in relation to Materialism".⁴⁰ Cooper's *Immortality of the Soul*

³⁵ The Association, or Young Men's Magazine [1855]: 32–33.

³⁶ Preston Guardian, 29 May 1852.

³⁷ *Bible and the People* ns 2 (1854): 36.

³⁸ The Association, or Young Men's Magazine [1855]: 32–34, painting a derogatory portrait of the "great crowd" at a Sunday meeting in 1852 in an (unnamed) "great Secularist-hall" in London.

³⁹ Reasoner 13 (4 Aug. 1852): 128; (25 Aug. 1852): 166.

⁴⁰ Reasoner 13 (27 Oct. 1852): 320; R. Cooper 1853, 57–72 discussing medical aspects of neuro-stimulation, which could be seen to prefigure Henry Maudsley's work, but for decidedly different ends. There is no sign that Cooper was responding to Francis Newman's new edition of *The Soul* (1852). Newman's addition to the dissolvent literature might have augmented the Victorian crisis of faith, but Cooper's was intent on turning it into a catastrophe of faith. Newman's was a 'natural history' of the soul, but Cooper's was a real natural history, with working-class earthiness and recourse to the anatomy of brains, monkeys, and human races.

(1853) was still culled from the old Jacobins, William Lawrence, John Elliotson, and Sir Richard Phillips, but, in places, it began to foreshadow the scientific arguments of respectable bourgeois 'honest doubters', not that the latter would show anything but disdain for these street 'scoffers'. Some of Cooper's language Holyoake considered near the knuckle, but it mirrored a long history of in-your-face rhetoric used by the "vile rabble", smarting at the denial of its rights.

Saull's museum and monkey lectures were suited to angry youngsters like Robert Cooper, uncompromising destructives with a penchant for shock. Cooper positively begged for the ad hominem arguments in the Christian press. A religious interloper at John Street reported on the "feebleness and frothiness" of Cooper's talks. "Effeminate" and "affected" was the *Monthly Christian Spectator*'s summary, sexist imagery used to suggest his (woman's) weakness of mind. To the Defender, he was "a little man with spectacles, and a rather well cultivated hirsute appendage, which he wears entirely below his mouth". He "tickles the sillier portion of his audience, with such questions as, In what portion of the human frame does the soul reside?" And then he tells them, "It is these delusions that keep the masses in the mud." A leitmotiv of the reviews was the "miserable audiences" Cooper attracted. They had little capacity to understand, only to be roused—a play on the prevalent view of the hovelled classes as visceral beasts, semi-domesticated animals fit only to be shepherded. His listeners were to be found in filthy dens—as at the Chartist Hall in Newcastle: "up one flight of dirty stairs, from one of the entrances to the Butcher Market", a prejudicial image to stir

42 R. Cooper 1853, 79; Reasoner 14 (2 Mar. 1853): 137.

⁴¹ Rectenwald 2013, 2016 ch. 4, discusses 'secularism' as a likely source for the later scientific naturalism, even though Holyoake is not mentioned in Dawson and Lightman 2014. Secularism has been successfully followed into John Chapman's bourgeois circles by Rosemary Ashton (2006). Many of the later arguments for scepticism were being thrashed out at the Utilitarian Society, but in a bitter political context, making the rollover to 'scientific naturalism' far from easy. Aspirational 'honest doubters', notably the young T. H. Huxley, distanced themselves from the street "scoffers". Even though the student Huxley had seen the squalid side of pauper life (indeed his own life had its squalid side, with one brother-in-law addicted to beer and opium, and another jailed for debt [Desmond and Darwin 2021]), and though he claimed that he took "a deep draught of abomination" himself, he was ambitious to climb into scientific society and cautious in his social alignments. Since he saw the key to character in the "temper and tone" of religious views, he despised "those miserable men", who used scepticism for "disturbing the faith of others" (Desmond 1998, 13, 657–58 n. 20).

the magazine's polite Christian readers. These "lowest of the working classes" were being whipped up, with the "extreme infidel" telling them that "mankind had been befooled, bechurched, and Priest-ridden enough, and that it was now time that they were elevated to that high and glorious position, which by nature they were intended to occupy!"⁴³

The Defender's menacing imagery had caught the drift. Cooper was on the verge of starting his own freethought journal, the London Investigator (1854), which would run the obligatory "Origin of Man" series as a central pillar. For Saull, that made Cooper a soul mate. Saull attended his lectures and championed the *Investigator*. Even on his deathbed Saull requested that its distribution be boosted. Cooper reciprocated with praise for Saull's evangelizing and called him a merchant who had risen "above the sordid associations a competitive system is calculated to develope". 44 The puffing is not surprising looking at Cooper's derivative post-Oracle, post-Vestiges dash through the nebular origins of planets and the long geological rise of life leading to the natural "Origin of Man". It was everything Saull had taught for a generation, a gushing of Enlightenment ideals in a "healthy stream of secular knowledge [to] wash into oblivion the dust and mire of superstition" and end "the reign of delusion and slavery". These were Cooper's words, but they could have been Saull's. It was the same exhortation for the worker to read the sermons in stone "as carefully as he has listened to the sermons of the pulpit, and these pious hallucinations will be exploded." Like a piece of Saullist scientism, the series on fossils was written in the same "easy and popular style, to present our readers with the facts of science versus the delusions of superstition. Nothing will so effectually tend to snap the priestly wand."45

But, while Saull might have had such secularist sympathizers, there were as many who could not complete the journey with him. The rocks having shown that animals emerged when conditions permitted was one thing, but that "man was developed, as naturally and necessarily", without any "miraculous interposition", was another. Even Cooper's talk stopped at a bland "energy in nature" able "to develope animal

⁴³ Defender 1 (6 Jan. 1855): 12; (25 Feb. 1855): 119; (17 Mar. 1855): 171; Monthly Christian Spectator 2 (Dec. 1852): 718; R. Cooper 1853, 15.

⁴⁴ LI 2 (June 1855): 46.

⁴⁵ LI 1 (May 1854): 26; (June 1854): 41; (July 1854): 58.

forms", including humans. No mention of a monkey ancestry here. On this count, Cooper never got beyond Holbach, positing only that "that matter—'mere matter,' should insensibly develope animal vitality". 46 It showed how heretical Saull had been with his monkey a generation earlier.

Radical Pantheon

[D]isregard the philosophers, the sneerers, and the scoffers ... whilst they are looking with pity on the poor enthusiast, who adores the relic of some pious saint, they themselves are unconsciously actuated by a passion for relics which is, in many respects, less reasonable, less honourable, and less intelligent than his. I have often wondered at the idolatry of the geologist and the antiquarian, and accused them of it. They deny it, as the Catholic does even when caught in the very fact of adoration. They say that they preserve these relics for scientific purposes But they are mistaken. It is a real worship; for after having obtained all the scientific information which the relic can communicate, they burn with such desire to be personally possessed of it and to preserve it in their shrine of antiquities...

Saull's nemesis Shepherd Smith, musing on geological idolatry.⁴⁷

If Saull's really was a *radical* museum for the masses, how else did this manifest? What was its most telling difference from conventional museums or vocational meeting-places like Bowerbank's? Moving beyond Saull's use of geology and antiquities to prove human perfectibility for Owenite reasons, or the fossils themselves "as facts much to[o] hard for the parsons", 48 we come to its most unexpected aspect.

Perhaps the best way to see it in its radical light is to follow the *Northern Star's* reporter as he filed his story in 1846. Recall that Feargus O'Connor's Chartist rag outraged the establishment, who slammed it as politically "detestable, on the ground of sedition. This bad man is like Dante's evil angel, bearing in his hand a two-edged weapon of sin and death." O'Connor was "spreading ... a political and social pestilence" by addressing

⁴⁶ LI 1 (June 1854): 41; (July 1854): 57.

⁴⁷ J. E. Smith 1873 [1848], 1: 310.

⁴⁸ NS, 31 Oct. 1846, 3.

those classes in whose minds disaffection and infidelity are most easily implanted. The chief design of our more licentious writers and speakers is, to deride the Established Church and defame its ministers, and thus weaken man's natural respect for his religion, and, by consequence, his dependence upon his Creator.⁴⁹

The *Northern Star*, then, was an impeccable source. Who better than O'Connor's hack to show us the truly radical aspect, totally missing from the guide books?

Saull had glorified thousands of priceless relics in his altar to 'evolution'. Such sacred objects gave their possessor the power to pontificate, they were the vestiges that connected us with creation, the literal Word of 'evolution'—his direct route to the evolutionary godhead. These prized petrifactions bestowed scientific authority, as much as any saintly bone in a Catholic shrine. But Saull's mausoleum went considerably further when it came to veneration. It was literally a place of radical pilgrimage.

Some exhibits made the museum the ultimate mediating place, where Chartists, socialists, atheists, Christian Freethinkers, and radical millenarians could all find common ground—those who could, and those who could not, accept the monkey-man, or go the "whole orang", as Charles Lyell had it.⁵⁰ The museum was more than artefacts pointing towards a radical 'evolution'. These were embedded in a rich cultural environment that tapped a deeper vein of radical emotion. This wider crafting of Saull's display could both draw and unite the radical factions. To them, it was less the *Iguanodons* that were the attraction. Rather, it was Aldersgate Street's real *memento mori*, for the museum was also a shrine—a mausoleum in more than one sense—which made it a proper place of veneration.

The reason lay in one corner of the lower gallery. Saull's warehouseman William Godfrey led the *Northern Star* reporter to it. Here was a closed closet, whose contents "we are sure will much interest many of our readers". On the door Godfrey had written the words:

Nature stamps all men equal at their birth, Virtue alone the difference makes on earth.

⁴⁹ The Age, 28 Aug. 1842, 4.

⁵⁰ K. M. Lyell 1881, 2: 365.

These were instantly recognizable lines from the revolutionary Spencean George Petrie's "noble poem" entitled "Equality". Petrie had penned probably the most celebrated agitational poem of the age (which, the reporter added, had "passed through so many editions, and is yet so much in request"). The lines were Petrie's motto, modified from Voltaire. Our conductor (Mr. Godfrey) appeared, like most of its readers, to be smitten with that charming work, and from its pages we have imbibed the great truth that True Freedom only knows Equality."

The Chartist paper then ran a huge extract from "Equality". In fact, well over a third of the review of Saull's museum was a quote from Petrie's poem, suggesting where the real interest lay. Worse things had been said about the King, but the publisher of Petrie's twopenny poem (R. E. Lee) had still been indicted for issuing it⁵²:

Like nature's God, he self-existent reigns,
And links those rolling suns in golden chains;
Those suns again their satellites entwine
With places, pensions, sinecures, and wine;
The satellites extend the circle more,
'Till every idle scamp on Britain's shore
Obtains a birth among the reckless brood
Who drink our blood, and eat our flesh for food...

But this den of fossil iniquity did more than celebrate "Equality" from the "poet for all time". It not only had the corpus, but Petrie's corpse as well. For inside the cupboard the reporter was astonished to find Petrie himself, or, at least, his "complete skeleton". Startled by coming face to face with the insurrectionary hero, the reviewer concluded:

We are sure when the numerous disciples of this truly great poet and veritable democrat, shall learn that the bones of their master are enshrined in this museum, they will at once commence a pilgrimage to the shrine, and while gazing at the dry bones, imagine they hear Petrie's once eloquent lips speak those truthful words, that his pen so copiously indited, and which are sent forth to the world in the poem of "Equality." 53

⁵¹ Voltaire, Eriphile, act II, scene I (1732).

⁵² PMG, 20 Oct. 1832, 576.

⁵³ NS, 31 Oct. 1846, 3. For Chartists reading "Equality" out loud at weekly meetings, see NS, 16 Mar. 1844.

It certainly gave Smith's complaint about fossil shrines a new twist. Saull's cathedral actually contained the holy of holies, relics of a heroic sinner.

Quite how Petrie's skeleton arrived here is a mystery, but the roguish Pierre Baume's involvement seems certain. The forty-three-vear-old Petrie had died mad in Hanwell asylum in 1836, and tittle-tattle had him driven insane by his wife Mary and Baume—the former for taking up Owen's marriage views too literally, and the latter by his affection for the former. Indeed, there was a whisper on the street that Baume, now co-habiting with Mary, had actually poisoned Petrie.⁵⁴ Saull was not alone in stocking his shrine with saintly relics. Baume had wanted William Thompson's skull for his own phrenological lectures. (Where Thompson's skull ended up is an open question.)55 Curiously, in 1837, Baume offered Saull a body for dissection, which Saull wisely declined, and a skeleton. Even if not Petrie's, it shows that Baume was dispersing anatomical remains.⁵⁶ Anyway, Saull's old comrade Petrie the revolutionary who had once drawn up plans to storm the Tower of London—was now hanging, not in Newgate, but in Saull's closet, the object of real veneration.

The reverent could peek at other radical relics. Phrenological cabinets, which typically stocked the skulls of murderers, madmen, and celebrities to illustrate their cranial anomalies, had accelerated the trend in skull collecting. They help explain Saull's accumulation of human remains, if not his more idolatrous intent. The museum also had the head of that rich, witty patron of freethought, Julian Hibbert.

At least in this case it was semi-legitimate. Hibbert had been a munificent donor to Carlile and Watson, financing their presses. And, with Saull, he had helped set up Carlile in the Rotunda. But he was another to die young, in 1834, only weeks after outraging "public

⁵⁴ Cooter 1984, 211 n. 34; Lovett 1920, 1: 51. Petrie's poisoning was mooted in Petrie [1841], 24–25; Chase 1988, 158 n. 33.

⁵⁵ Donovan 1876, 202–03; Pankhurst 1991, 130.

W. D. Saull to P. Baume, 16 Aug. 1837, Manx Museum, MM 9950 uncatalogued. Roger Cooter kindly supplied a transcription of this letter. Baume's donation of bodies for dissection was not new. He delivered his unmarried sister Charlotte's, who died in childbirth, and her stillborn child's, to London University in 1832, with such speed that he was at first charged with her murder. In fact, she had been a fellow republican, presumably in the Carlile mould, and it had been her wish: R. Richardson 1989, 236.

decency" by declaring his atheism at the Old Bailey.⁵⁷ His will stipulated Saull as an executor (along with John Brooks, the radical bookseller, and a coal merchant) and that "there be no funeral". Baume was officially implicated in the body snatching this time, for Hibbert bequeathed him forty guineas that he might "do his best to see that my body or corpse is partly or wholly dissected any where for the benefit of Science & my Skull or head be given to the London Phrenological Society to which I have for many years been a subscriber..."⁵⁸

Hibbert's family was rich on West India pickings. Slavery had bought them civic security among the gentry as sheriffs, members of the judiciary, and Church trustees. Julian's brother was about to buy Bilton Grange in Warwickshire, to signal this social ascent, and have Pugin convert it into what would become one of his masterpieces.⁵⁹ Almost in defiance, Julian had led a spartan life, dying in temporary lodgings in Hampstead. His republican and atheist foibles always risked damaging the family's respectability, never mind the Old Bailey ignominy or that he was using Saull and a coalman as trustees. Now the family tried to limit further damage by thwarting his wishes. They had the body removed to a Holborn undertaker, and he was buried at night in Kensal Green Cemetery, attended by close relatives. But it seems that not all of him was in the coffin—by nefarious means (he disguised himself as an undertaker), Baume had managed to extract the head. 60 It seems that a medical school took it to dissect the brain, which is not hard to imagine in the resurrectionist years, when there was a dearth of corpses.⁶¹ How Julian Hibbert's head was subsequently rendered down to a skull can only be conjectured. Anyway, it too ended up in Aldersgate Street.⁶²

⁵⁷ Gauntlet, 2 Feb. 1834, 824; DPMC, 1 (7 Dec. 1833): 356; Bell's Life in London and Sporting Chronicle, 2 Feb. 1834.

⁵⁸ Julian Hibbert, Will, 6 Jan. 1834, Public Record Office, National Archives. An abridged version of the will in the press did not mention Baume: *MC*, 29 Mar. 1834; *The Satirist, and the Censor of the Times*, 30 Mar. 1834; *Patriot*, 2 *Apr.* 1834.

⁵⁹ Donington 2014: 204, 224.

⁶⁰ Wiener 1979; Holyoake 1906, 2: 550-51; McCabe 1908, 1: 294.

⁶¹ Wiener 1983, 209. In Manx Museum is another letter from Saull to Baume (undated, MM 9950 uncatalogued, transcription by Roger Cooter) in which Saull responds to Baume's request that he (Baume) be put in touch with a hospital surgeon regarding a donation, although which corpse this relates to is unknown.

⁶² That it was genuinely Hibbert's skull is suggested by Richard Cull's (1850) craniometric studies, read on 25 April 1849 to the Ethnological Society. This used the skull for measurement. Since Saull was a member, he presumably loaned it.

Saull's museum was part-pantheon. Not only did it enshrine the distant fossilized dead, but more familiar bones made it a place of homage. Here stirring poetry evoked the glory days of the cause, and the lost heroes of the movement drew all under their mediating gaze. It was the stuff of radicals in every sense.