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

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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

# 6. Founding the Museum — June 1831

Historians have long complained that too little attention is paid to the content of museums.<sup>1</sup> But simply enumerating items is insufficient. We need to understand the way they functioned in discrete contexts, how the contents were presented, how they were viewed, and what social message they carried. On the extreme fringes it is often easier to gauge the underlying intention, which is too easily masked in genteel bourgeois settings. Particularly in times of crisis, in the aftermath, say, of the French Revolution, the ideology can become overt as controlling or liberating factors become visible.<sup>2</sup> The year 1831 was one of those stressful times, with angry demands reaching a crescendo in the run up to parliamentary reform.

Saull opened his museum in June 1831 at the beginning of a long, hot summer, a summer which saw three months' debate in the Commons over the Reform Bill. Radicals grew ever angrier at events. Hetherington started his *Poor Man's Guardian* on 9 July 1831, days after the museum opened, with the clarion call, so redolent with multiple meanings, "we ... deny the authority of our 'lords' to enclose the *common* against us". For his suffrage campaigners the bill was a "deceit" perpetrated by the "*'liberal'* (Ha! ha!) whites".<sup>3</sup> And Hetherington knew just what to do with museums, stuff them full of dethroned kings and defrocked priests.<sup>4</sup> So heightened were tensions that when the Lord's threw out the Reform Bill on its second reading that October—with twenty one bishops

<sup>1</sup> Torrens, 1995, 282. Only recently has this begun to be rectified: Knell 1997, 2000; Taylor and Anderson 2017; Berkowitz and Lightman 2017.

<sup>2</sup> Morrell 1971, 43.

<sup>3</sup> PMG, 9 July 1831.

<sup>4</sup> Republican (Hetherington), 11 June 1831, 7.

voting against it-riots broke out, some church congregations walked out in disgust; and, in Bristol, despite three cavalry troops arriving in the city, the bishop's palace was burned down.<sup>5</sup> Saull's whirlwind of activities-those outside of his regular wine and fossil trading-was astonishing in these months. He was simultaneously operating in multiple radical, infidel, and co-operative spheres. While negotiating for the museum in April, he was trying to bail Taylor for his Easter sermon on the Crucifixion, with its call for a "Radical Reform in the Kingdom of Heaven".<sup>6</sup> Fearful, like Hetherington, that they were all at this point under intelligence scrutiny, Saull nevertheless secretly helped keep the Rotunda afloat.<sup>7</sup> He was attending its Sabbath blasphemy extravaganzas and its new inflammatory Monday NUWC meetings, which started up in May, within days of his finalizing his museum purchase. He was talking at the Optimist Chapel, looking for new venues for Owen to succeed Albion Hall, and fund-raising at the BAPCK for the jailed news vendors. So many irons were being forged in the political fire of the moment. If, however, we pull focus, we can see that, in simple strategic terms, the museum was founded at the junction between the end of Saull's 'blasphemy' phase and beginning of his Owenite one.

This was also a fleeting, forlorn moment of revolutionary optimism. Within days of the museum's founding, Saull was organizing the first anniversary celebrations for the July Revolution in France and its "victory over kingly despotism". Here with Carlile's erstwhile shop assistant James Watson (1799–1874) and others, he sang the *Marseilles* in French (*de rigueur* at such events).<sup>8</sup> Henry Weisser has even claimed that this public anniversary meeting was a "turning point" as an all-working-class affair, a symbolic moment when class consciousness became incarnate.<sup>9</sup> Spirits were high and expectations still higher: "N.B.—If another Revolution should occur in the mean time, they will both be celebrated at the same time," ran Hetherington's advert for the

<sup>5</sup> M. Brock 1973, 244–55; Halévy 1950, 42.

<sup>6</sup> HO 64/17, f. 48; HO 64/11, ff. 200, 296.

<sup>7</sup> HO 64/11, ff. 229, 446 (29 Nov. 1831).

<sup>8</sup> Republican (Hetherington), 25 June 1831, 8; 6 Aug. 1831, 6; PMG, 6 Aug. 1831. Robin Eagles' thesis in Francophilia in English Society 1748–1815 (2000) might easily be extended to this period, at least so far as many in the radical working classes were concerned.

<sup>9</sup> Weisser 1975, 35.

meeting, three days after the papers announced Saull's museum open. With the self-identifying group hailing one another "Citizen Watson" and so on in the euphoria, Saull became, for a fleeting moment in 1831, "Citizen Saul" [*sic*].<sup>10</sup> It was a propitious moment to announce to the *sans culottes* his own geological Temple of Reason.

No wonder the year saw new church militants crusading against the infidels, those "sorry warriors" whose pernicious and "illegitimate" geology threatened the "great Armageddon".<sup>11</sup> These friends of the French Revolution had made "Omnipotence" impotent and "babbled out their puerile conditions about a progression in nature".<sup>12</sup> But whether geology threatened or fascinated, there was no doubting its draw. While science could serve many masters, some apprentices wanted it to go further. Again, in April 1831, as Saull was preparing to negotiate for his exhibits, the Herald to the Trades' Advocate heard from its readers that it featured too little science.<sup>13</sup> Even the young Hetherington was warmly sympathetic to science. The Poor Man's Guardian would, admittedly, become famous for its distraction-free advocacy of workers' rights, with reform first, science education second. And its radical correspondents attacked the Whigs' milk-sop mechanics' institutions, which diverted the workers with so much pap, and featured complaints that artisans were "saturated" with science.<sup>14</sup> Saull's printer friend John Cleave would equally lash the Whig institutes, accusing them of diverting the mechanics from more threatening economic studies with "zoological and geological sciences, and all the other ologicals".<sup>15</sup> The message was 'emancipation first'. But this socially-controlling, fodderstuffing image<sup>16</sup> did not apply to all mechanics' institutions, and notably not to London's. Helen Flexner's study, by contrast, has shown that it allowed partial worker control, worker self-instruction, women's participation (at least on occasions), and in one respect it went to

<sup>10</sup> Republican (Hetherington), 25 June 1831, 8; 29 Nov. 1831, 192.

<sup>11 [</sup>Murray] 1831, xiii–xv.

<sup>12</sup> John George Children to William Swainson, 11 July 1831, William Swainson Correspondence, Linnean Society; Desmond 1989, 147.

<sup>13</sup> Herald to the Trades' Advocate, 9 Apr. 1831.

<sup>14</sup> PMG, 6 June 1835, also 1, 8 Sept. 1832.

<sup>15</sup> *TS*, 31 Dec. 1835, 4. Cleave was talking in John Savage's radical Mechanics' Hall of Science in Marylebone, and was referring to a conventional Creationist geology and innocuous zoology.

<sup>16</sup> Shapin and Barnes 1977; cf. Topham 1992.

extremes, presenting "science as negotiable rather than given".<sup>17</sup> And, surprisingly, many of our subsequent radical activists cut their teeth here, including Saull, Hetherington, Lovett, and Watson. Hetherington, active in a management capacity, actually planned to publish his own "Monthly Journal of Philosophy, Science and the Arts" in 1828, three years before he started the *Poor Man's Guardian*.<sup>18</sup>

Many ultra-radicals recognized that geology, rightly cast in materialist mould, could be liberating. So long as the god of the Anglican dons could be portrayed as miraculously creating new species through history, then a self-sufficient alternative could help kick away the church's Creationist crutch. Geology thus became part of the anticlerical chorus, now reaching its crescendo. This made the science more than suspect for many in the pews, with its long ages and succession of ancient worlds, supposedly tenanted by repellent crocodiles and "disgusting" lizards,19 long before the advent of man: the very idea was "silly, disgusting, and ... injurious".<sup>20</sup> To suggest that grotesque reptiles had the earth to themselves for untold aeons was daft, for they could neither have adored nor given thanks to their creator.<sup>21</sup> Even to moot such times without "immortal" humans was worrying, despite the reassurance of apologists on the providence of Britain's coal fields, which proved that man was in God's mind from the start.<sup>22</sup> Antiinfidel preachers warned of geology in Jacobin hands, because of the bastardized anti-Christian deductions being drawn from it. Making it accessible to the masses meant that "hundreds of sciolists can shoot off some philosophical popgun against the rock of ages".<sup>23</sup>

#### Saull Puts His Money Where His Mouth Is

All the while Saull had been collecting fossils. His out-of-pocket expenses were now split between Owenite stumps and fossil auctions. In 1839, when Abraham Booth published his literary and scientific

<sup>17</sup> Flexner 2014, 189–90.

<sup>18</sup> LMI management minutes, 29 Dec. 1828: Birkbeck College, London University.

<sup>19</sup> Times, 27 June 1845, 6.

<sup>20</sup> Christian Advocate, 29 Dec. 1834, 415; Freeman's Journal (Dublin), 17 July 1839.

<sup>21</sup> NMW 6 (12 Oct. 1839): 811.

<sup>22</sup> J. H. Brooke 1979, 40.

<sup>23</sup> British Critic 1 (Jan. 1827), 200.

compendium, *The Stranger's Intellectual Guide to London*, he said Saull had been collecting for ten years, and the results "may vie with any private Museum of a similar nature in the kingdom".<sup>24</sup> That would put his start date around 1829. We know that, by this time, Saull was visiting the huge museum in Lewes, near Brighton, built up by the surgeon and self-publicizing antiquarian and fossilist, Gideon Mantell. By 1830, Saull and Mantell were sending one another parcels and swapping specimens.<sup>25</sup> Late in life, Saull put the start date for his collection at around 1828. But, in fact, his interest can be traced back further. In the *Letter* to his vicar, explaining how the changing obliquity of the ecliptic could explain Britain's previous torrid climes, Saull mentions as proof "the innumerable fossil remains of plants and animals found in the higher Northern latitudes, which could exist only in tropical climates, many specimens of which, I am possessed of."<sup>26</sup> That printed letter was dated Christmas Day 1827, so we know that by then his collecting had begun.

The fact that he was elected a Fellow of the Geological Society in June 1830 is circumstantial evidence that the collection was already sizeable. After all, it was presumably the reason he was nominated, for there is no sign he had started his geology lectures by that point. The Geological Society was embracing wealthy buyer-collectors as much as rock-face hammerers and aristocrats mindful of their civic duty. But how did an indicted deist, Carlile supporter, "Devil's Chaplain" backer, and Owen acolyte become a Fellow? Being warm-hearted, wealthy, and easy among old money helped, and having huge fossil assets helped more. But it was notably the reform lobby that got him in.<sup>27</sup> The body

<sup>24</sup> A. Booth 1839, 121.

<sup>25</sup> J. A. Cooper 2010, 38, 43, 47. Mantell's museum concentrated on fossils from the South-East of England. For descriptions of it at this time: Bakewell 1830; *American Journal of Science and Arts* 28 (1835): 194–97; Mantell 1836; and radical Thomas Wakley's appraisal in the *Lancet*—keen to play up the "philosophical" accomplishments of GPs in his campaign against the medical baronets: *Lancet* 2 (29 June 1839): 506–07; Cleevely and Chapman 1992; A. Brook 2002.

<sup>26</sup> Saull 1828a; 1853, viii.

<sup>27</sup> Saull was elected on 4 June 1830. I should like to thank Wendy Cawthorne, Geological Society Library, for the information on Saull's backers, who included George Birkbeck, more radical than is generally supposed at the LMI (Flexner 2014). Saull had been an LMI member from 1824, had stood (unsuccessfully) as a committee member in 1825 and had donated numerous books to its library, including Jean Louis de Lolme's *Constitution of England*, which advocated an extension of the franchise. Birkbeck was also a physician in the General Dispensary in Aldersgate Street, a charity supported by Saull. Another backer was

geologic, like the body politic, had its bourgeois radical contingent, but they were a small minority; and, even then, an out-and-outer like Saull sat on the fringe. Those who were initiated with him that June prove the point. Of the five inducted into the society, three were Cambridge divines, including a future Dean of Hereford and Archbishop of York.<sup>28</sup> Anglican priests were more a force in the gentlemanly body, on both the front and back benches, than co-operative collectors. The fiercely anti-clerical Saull, who would shortly chair meetings of the "Society for the Extinction of Ecclesiastical Abuses" (that is, the radical reform and disestablishment of the Church), was far from a typical candidate.<sup>29</sup> It shows how much a museum counted. While the divines were keeping up with the challenging science as part of their calling, Saull was admitted because of his enthusiastic collecting.

In 1831, he moved his business a few doors up the road, from 19 to No. 15 Aldersgate Street. This was a more substantial corner site, with entrances on both Aldersgate Street and Falcon Square, allowing for warehousing, stables, and the new museum. When a bankrupt hatter sold the lot a decade earlier it was advertised as a

capital and very extensive PREMISES, most eligibly situated ... comprising a spacious and very attractive shop, of considerable depth, and with double bowed front, light counting-houses, extensive manufactory, including bowing-rooms, making-shops, dye-house, stiffening-shop, finishing-rooms, warehouses, large reservoir, &c. &c, a coach-house, two-stall stable, &c.; the domestic apartments are very capacious and numerous ...<sup>30</sup>

In 1831, Saull bought the property from a leather cutter and adapted it for his wine-importation business and fossil emporium.<sup>31</sup> It was only fifteen doors from the latest London landmark, the newly-completed General Post Office. This huge classical building was viewed by locals

the geologist Henry de la Beche. He had been first to describe the *Plesiosaurus*, and Saull shared his fascination with the new giant fossil reptiles. De la Beche was enamoured of all things French and was himself anti-clerical. He dismissed religious enthusiasm as "humbug" and, like Saull, saw salvation in science (McCartney 1977; J. A. Secord 1986b).

<sup>28</sup> Philosophical Magazine 8 (Aug. 1830): 147.

<sup>29</sup> *TS*, 12 Oct. 1832, 1; on the Geological Society Anglican consensus, Rudwick 1985, 31–32.

<sup>30</sup> MC, 8 Feb. 1821, 4.

<sup>31</sup> Perry's Bankrupt and Insolvent Gazette 6 (1 Jan. 1831).

and strangers alike with awe as befitted "the brain of the whole earth", channelling the empire's torrential volume of letters.<sup>32</sup> And that was the prestigious direction for museum visitors: 'close to the General Post Office'. It was this prominent position that made the venue so valuable. As the *Mining Journal* said, "So fine a collection as the present being thus rendered accessible, in the very centre of London", with its huge catchment, is what made it a must-visit site.<sup>33</sup> Here, Saull converted the lofts over the stables to house the collection.<sup>34</sup>

Relocating the whole business, presumably to house the new fossils, showed a huge commitment. The timing suggests that Saull moved to these larger premises precisely because he needed the space to accommodate his newest acquisition. He now bought one of the premier fossil collections in the country. It had belonged to the late James Sowerby, a talented engraver and collector, well known because he illustrated the publications of his rich patrons.<sup>35</sup>

Sowerby's museum, forty years in the making, included many unique 'type' specimens. The collection was an old-style cabinet with

some thousands of minerals, many not known elsewhere, a great variety of fossils, most of the plants of English Botany about 500 preserved specimens or models of fungi, quadrupeds, birds, insects, &c. all the natural production of Great Britain.<sup>36</sup>

This was far more than Saull wanted. He was primarily after the fossils. Sowerby had intended that his collection should illustrate the entire fossil life of England. Sowerby's sons had taken over after their father's death in 1822 and turned it into a paying museum in Mead Place, Lambeth. They had planned to re-locate the museum more centrally, making it a proper London money-making attraction,<sup>37</sup> but George Brettingham Sowerby I (his son) was in financial straits by March 1831:

<sup>32</sup> Brady 1838, 37; Cruchley [1831], 43.

<sup>33</sup> Mining Journal and Commercial Gazette 1 (7 Nov. 1835): 83.

<sup>34</sup> Notes and Queries, 7th ser., 10 (6 Sept. 1890), 184.

<sup>35</sup> On the Sowerbys mineral conchology and the larger questions their work raised about stratigraphic zoning, ancient environments, and the implications of comparisons of living and extinct forms for placing the poles in ancient times, see Elliott 1975.

<sup>36</sup> Conklin, 1995; St. James's Chronicle and General Evening Post, 9 Apr. 1831, 1.

<sup>37</sup> Cleevely 1974, 426-28.

hence the sale of his own as well as his late father's collection.<sup>38</sup> The private sales of James Sowerby's cabinet ran from 18 April into the first week in May 1831.<sup>39</sup> Saull snapped up most of the fossil and mineral portion.<sup>40</sup> He got the majority of fossils, including the good ones, the 'type' specimens of fossil invertebrates figured in Sowerby's *Mineral Conchology*, and he kept Sowerby's own identification labels on them.<sup>41</sup> What he paid is unknown, but, considering that Stevens's auction room in Covent Garden (a favourite for natural-history objects) shifted some of the leftovers for exorbitant sums,<sup>42</sup> it must have been substantial. With the liquor trade obviously flourishing, Saull was on a buying spree. His long pocket showed as he prepared to bid £40 (a labourer's yearly wage) for the fossil-seller Mary Anning's ichthyosaur from the Lyme Regis cliffs in May 1831—and even then he did not get it.<sup>43</sup>

In June 1831, Saull pooled Sowerby's "extensive" collection with his own and announced the new museum open. Founding such an institution did Saull's reputation no harm during the Whig ascendancy, with its 'steam-intellect' desire to promote 'useful' knowledge. The Whig evening paper, the *Star*, lauded him:

Mr. W. D. SAULL, F.G.S. and F.R.A.S. of Aldersgate-street, the most liberal and public spirited friend of science in the City of London, having recently become the possessor of the extensive Geological Museum of the late Mr. Sowerby, Mead-Place, Lambeth, the whole of which has been stratigraphically arranged, with the addition of Mr. Saull's previous collection of fossils, and will be open for the free inspection of scientific gentlemen and friends, every Thursday morning, at his residence, as

<sup>38</sup> Matheson 1964, 219. The auctioning of James Sowerby's specimens is not to be confused with his son George Brettingham Sowerby's own sales in 1828–33, advertised in MNH 1 (May 1828), 96. More of GBS's own collection was sold in 1831–33 by Thomas and Stevens's auction room on 22–26 Feb., and 14–16 Mar. 1831: MC, 12 Feb. 1831, 15 Mar. 1831; *Times*, 23 Feb. 1831, 8.

<sup>39</sup> St. James's Chronicle and General Evening Post, 9 Apr. 1831, 1; 12 Apr. 1831, 1; 28 Apr. 1831, 1.

<sup>40</sup> He evidently did not take the preserved birds, insects, fish, shells and left-over minerals because this "remaining portion" went under the hammer separately in June: *Times*, 9 June 1831, 8; Conklin, 1995.

<sup>41</sup> They were still on when the British Museum acquired them: Anon. 1904, 322.

<sup>42</sup> For instance, "among Mr. Sowerby's shells, Mulleria, £20, and Voluta junonia, £15" (Allingham 1924, 30, 84–85).

<sup>43</sup> Knell 2000, 206. The surgeon Sir Astley Cooper bought an ichthyosaur from Anning late in 1831 (B. B. Cooper 1843, 2: 140), so Saull may have been pipped. On Anning's prices, Taylor and Torrens 1986, 143–46.

above. Geology, or Nature's own history of her own transitions and improvements, is now become one of the most popular, as well as most interesting, objects of general pursuit, and we consider public thanks to be due to Mr. Saull, for his liberality in thus promoting its study.<sup>44</sup>

Since Sowerby had been the de facto taxonomic expert on conchology and a describer and figurer for the works of many elite geologists, his collection would have been a draw for the "gentlemen". Hence "scientific gentlemen and friends" were Saull's invitees for the *Star*, which appealed to the liberal bourgeoisie in science and politics.

However, listen to Citizen Saull, liberty cap on, as a habitué of radical/blasphemy dens, summon a very different audience, the sans culottes. In Carlile's absence, the Rotunda, in a rotten state of repair, was run by his lover Eliza Sharples, assisted by Gale Jones, from February 1832. It was aflame with seditious and blasphemous harangues in these months. Here Saull, Hibbert, and Gale Jones would add inflammatory asides after Sharples's own lectures, "each in their usual strain of abuse of both Church and State", the spy added typically.<sup>45</sup> Here, too, the NUWC continued to demand universal suffrage and a free press; not, said Hetherington, that the powers would tolerate "such a proposition coming from 'the scum' (as they are called)".46 The "scum" was Saull's target audience. Were working people to get the vote and take power, educational ventures would be needed to bring their schooling up to snuff. Indeed their "want of knowledge" made a proper rational scientific and economic education essential. Saull expanded on this after one Sharples lecture. Materialist reasoning was needed to counteract religious obscurantism, and science as a "force [was] fatal to that of tyranny and priestcraft. (Cheers.)". With the poor deprived of schooling, except by the local dame or Sabbath lessons, the people would find that it would add "more to their comfort and happiness to cultivate the sciences ... than to intrust [sic] themselves to the guidance of the priest, who deals only in mysteries". He

concluded by volunteering his services to aid the cause of science and liberty, by public lectures, at any time or any where, and invited the audience to inspect his museum, which he very courteously and kindly

<sup>44</sup> Star, 22 June 1831, 4.

<sup>45</sup> HO 64/12, ff. 36–38, 47; Isis 1 (3 Mar. 1832): 59–60. Parolin 2010, ch. 8.

<sup>46</sup> PMG, 5 Nov. 1831.

said should be open to them every Thursday, when he should be ready and willing to give them every information in his power.<sup>47</sup>

A familiar figure at the Rotunda, Saull had probably been offering to throw open his museum to working men from the start, but this report in February 1832 was the first evidence in print. Women, too, had probably been invited early on, but the first confirmation in print we get comes from 1833.<sup>48</sup> Nor is this surprising. The new historiography shows how active the women were in radical, blasphemy, and co-operative circles. They can no longer be written out as liberty-cap makers supporting their husbands but must be seen as more politically active shopkeepers, pamphlet sellers, theatrical demagogues, and jailed seditionists.<sup>49</sup> Saull was using the Rotunda and undoubtedly his other platforms to promote the new exhibition among the increasingly status-conscious working men *and* women.

Compared to Sowerby's original, the museum saw marked changes. Firstly, it was structured differently, for a different purpose. The whole lot, Saull confirmed, "is now stratigraphically arranged".<sup>50</sup> It implied that Sowerby's fossil animals and plants had been ordered another way, perhaps according to their relationships or some other criterion. So many collections, as Simon Knell says, were viewed simply as "an assemblage of unrelated objects, collected without direction and displayed without order or reason. Considerable curatorial input was required to turn collections into a resource for self-improvement".<sup>51</sup> The new stratigraphy was one such ordering principle, with its origin and direction indicators to illustrate the "transitions" and "improvements" of life through time, while emphasizing (in radical hands) its perfectibility and material causation. The fossils were lined up in sequence, according to the strata they came from. Radicals elsewhere were equally emphatic that this was the correct approach. The British Museum would actually be censured by hostile radical witnesses during the Select Committee hearings in 1836

<sup>47</sup> Isis 1 (3 Mar. 1832): 59-60.

<sup>48</sup> MM 19 (25 May 1833): 117–18; Lady's Magazine and Museum 3 (Nov. 1833): 297.

<sup>49</sup> Keane 2006; Frow and Frow 1989; Parolin 2010; B. Taylor 1983.

<sup>50</sup> Star, 22 June 1831, 4; Philosophical Magazine n.s. 10 (Sept. 1831): 237; Arcana of Science and Art 5 (1832): 251.

<sup>51</sup> Knell 2000, 92; M. Freeman 2004, 252. William Bean's fossils in Scarborough were displayed to show "taste", that is, for aesthetic effect: McMillan and Greenwood 1972, 152–53.

for not adopting this kind of chronological organization.<sup>52</sup> Of course, it was not only the radicals who adopted it: Gideon Mantell's museum, rivalling Saull's in size, had also been arranged in a temporal order, as Saull knew from his visits.<sup>53</sup> Mantell was now the "eloquent friend" whom Saull would quote in the *Mechanics' Magazine* about ridding the mind of prejudices as a prerequisite to studying geology. Although Saull was hinting with a Carlilean glint at more than his eloquent friend might have liked.<sup>54</sup>

More noticeable for working men was the entry price to Saull's museum. There was none—they could actually get in free, and without any formality. This was the second major difference from Sowerby's exhibition. Ticketed entry to the Sowerby museum was prohibitively expensive, at ten shillings for three months, or £2 yearly. This barred all but the wealthy elite.<sup>55</sup> Even Mantell's museum charged a shilling for admittance, and then only to entrants signed-in by a member of the Sussex Literary and Scientific Institution (of which it was part).<sup>56</sup> Saull's was a markedly different proprietorial attitude. His was not a moneyspinning exercise but a democratization of transformative knowledge. Free entry was indicative of his socialist philanthropy and something all the newspapers would comment on. Accessibility was the watchword: no gentlemanly propriety was followed, no "introduction" required, which made entry so difficult in the Geological and Zoological Society museums. The "poor as well as rich" could turn up, "without any previous application", and all would be accompanied around.<sup>57</sup> But it was specifically working men whom Saull encouraged to visit-the power brokers of the expected socialist millennium, who needed to be educated for their new role. Or, as he put it on chairing a meeting of the Kingsland and Newington Co-operative Society to set up a Labour

<sup>52</sup> Report from the Select Committee on British Museum, 1836, Parliamentary Papers, 14 July 1836: 21, 74, 78–79, 130–33; Desmond 1989, 148–49; McOuat 2001, 12ff.

<sup>53</sup> American Journal of Science and Arts 28 (1835): 194–97.

<sup>54</sup> *MM* 19 (25 May 1833): 117–18.

<sup>55</sup> Conklin 1995; Cleevely 1974, 426–28.

<sup>56</sup> Mantell 1836, 44. William Bean's private museum, in his Scarborough house, was only open six days in the season to the public, on "being properly introduced": McMillan and Wood 1972, 152–53.

<sup>57</sup> Preston Guardian, 14 July 1855; Karkeek 1841a.

Exchange Bazaar in 1832, "in order to fit them for the great changes which are evidently coming upon the world".<sup>58</sup>

As a proselytizing socialist, Saull was in the vanguard of that wider movement in the 1830s to get free admission to 'public' buildings, not only museums, but also Westminster Abbey, St Paul's Cathedral, art galleries, natural history collections, and so on. Their exclusivity was becoming a national disgrace (in radical eyes), and he was shortly to start committee work under the radical MP Joseph Hume to petition Parliament to this effect.<sup>59</sup> Artisans found it inordinately difficult to gain access to institutions. Even visitors to the British Museum, which had long abolished the ticket system, had to be of "decent appearance", meaning a porter could have the final say.<sup>60</sup> Attire and demeanour were everything. One guide to museum planning twenty years later was still belabouring the point: "forbid the entrance of obnoxious and certain other persons; the rest of the public, if decently attired (hats, not caps, are generally required in France, except for soldiers and sailors), to be admitted either upon signature of name, address, and occupation, or in some cases without such formality".<sup>61</sup> But even a signature requirement was an impediment to the poorly educated and was known to be keeping them out.<sup>62</sup> The class restriction was often obvious, with the genteel preferred to the vulgar; and if the latter had any finer feelings (which the toffs doubted), they were certainly offended by the constant barriers, the need for countersigned letters, the payment, and the scrutiny.<sup>63</sup>

Then there was the price. Sixpence admission was enough to stop the 'lower orders' from coming to the Manchester Natural History Society museum.<sup>64</sup> The same was probably true of the tanner (*6d*) required at Norwich Museum and Liverpool Royal Institution Museum, and then they were only open one day a month. (This was revealed in the naming-and-shaming policy of Hume's Society for Obtaining Free Admission to Public Monuments and Works of Art—which, in 1843,

<sup>58</sup> TS, 26 Sept. 1832, 2; Atlas, 30 Sept. 1832. 660.

<sup>59</sup> Anon. 1837.

<sup>60</sup> Hoock 2003, 259–60.

<sup>61</sup> Quoted by Forgan 1994, 144–5.

<sup>62</sup> MM 24 (5 Dec. 1835): 203.

<sup>63</sup> Cash 2002.

<sup>64</sup> Alberti 2009, 17–18; A. Secord 1994, 399.

still listed Saull's as the only truly free geology museum.<sup>65</sup>) Needless to say, children were barred,<sup>66</sup> and if the working classes could get in they were kept an eye on. That vandalism and theft were expected after their admission was suggested by the surprise that these things *had not* happened at the British Museum after working people were finally allowed in. This was to the dismay of some guards: "I am really sorry to say that not the slightest damage has been done to any one object in the whole Museum", reported one, "not a wing of a butterfly has been touched, not a leg of a spider has been broken, and there[fore] we have no plea to come forward with a recommendation to Parliament to abolish the new regulations."<sup>67</sup> Even the Principal Librarian was aghast at the "vulgar class" being let in and reasoned before a Parliamentary Select Committee that "people of a higher grade would not like *to come to the Museum* with *sailors from the dock-yards, who might bring their girls with them*".<sup>68</sup>

To the next generation such reactionary attitudes seemed positively archaic:

It was formerly said that educating the multitude would make every man a knave or a rebel; that introducing recreations among the populace would end in the tailors' and shoemakers' Saint Monday being extended to all classes of workmen and lasting till Saturday night. It was said that if Parks and Gardens were opened to the people, every tree would be cut up into walking-sticks, every flower-bed be trampled upon; that, if Museums were opened, the wings of every stuffed bird would be plucked, every glass-case broken, the geological specimens picked, and every curious picture in the books of the reading-room torn out.<sup>69</sup>

<sup>65</sup> CPG, 15 Apr. 1843; Anon 1837. Saull was on the Committee of the Society. The Museum of Economic Geology in Charing Cross was, however, shortly to join it as freely accessible, when the newly-knighted Sir Henry de la Beche became its director. This museum was a government initiative to display the industrializing country's mineral resources, but it was targeted more at students, surveyors, and engineers than recreational visitors (Sopwith 1843, 8–9; J. A. Secord 1986b).

<sup>66</sup> Bonney 1921, 2.

<sup>67</sup> Anon. 1837, 6.

<sup>68</sup> MM 24 (27 Feb. 1836): 430. J. A. Roebuck's petition from working men to Parliament in 1833 to have the British Museum and "all other exhibitions of science and art" open on the Sabbath was rejected (*Gauntlet* 1 [28 Apr. 1833]: 182–83).

<sup>69</sup> Reasoner 26 (6 Jan. 1861): 1.

Nevertheless, at the time, prying open the museum doors required an almighty push. The overt class discrimination explains why Saull's precedent was applauded. Unimpeded access was rare, yet here was a warehouse museum free to absolutely everybody, and, astonishingly, "no personal introduction was required", which explains Thackeray's *National Standard*, in 1834, paying the ultimate compliment to Saull:

All those, therefore, who contribute to elevate the moral character by the gratuitous diffusion of scientific knowledge are the benefactors of humanity, and as such, we hold that Mr. Saull deserves well of society, in doing as an individual what the French alone do as a nation—throw their museums and their lecture-rooms open to all the lovers of science, without distinction of either nation or rank in society; and it is hoped that such an example will soon be followed by other generous Englishmen, who love science for its own sake, and delight in smoothing its rugged approaches, and opening its temple to all.<sup>70</sup>

Two decades later, the *Civil Engineer* would *still* be holding France up as an exemplar and demanding wider access to English scientific institutions, citing Saull's "public spirit" for opening his museum.<sup>71</sup> But the "public" aspect of Saull's spirit was part of his socialist calling, and Thackeray's elevation of "moral character" part of his perfectibilist goal. The real target was artisan education for political ends. Still, the press now rated Saull's private facility as "essentially a public exhibition".<sup>72</sup>

Essentially public, but it *was* still private. Unlike state or civic museums, it was in private hands, and it was singled out for praise because many such museums were never opened at all to the public.<sup>73</sup> It contrasted, too, with the exclusivity of the professional bodies at the other end of the social spectrum. Access was coming to be seen as a right rather than a privilege by activists, so even the Geological Society came under pressure. Its museum was open to members (3 guineas dues, 6 guineas admission fees), who could escort guests, but, the liberal *Era* 

<sup>70</sup> National Standard 3 (18 Jan. 1834): 44-45.

<sup>71</sup> Civil Engineer 17 (Feb. 1854): 41–43.

<sup>72</sup> Observer, 27 Mar. 1842, 3. Fossil collectors are prone to being secretive, which also explains the praise for Saull. Even though his museum was only open one day a week, this was better than, say, William Bean's 15,000-specimen museum, which was open to the public for six days, at indefinite times, during the season (*Theakston's Guide to Scarborough* 1854, 131; McMillan and Greenwood 1972).

<sup>73</sup> Such was the case of Hugh Miller's museum: Taylor and Anderson 2017.

newspaper carped, "As this society enjoys public apartments at the public expense, it should ... be thrown more freely open".<sup>74</sup> It was not to be. Such gentlemen's clubs for science specialists resisted the democratic trend, and the rising professionals later in the century only reinforced their exclusivity and left their museums ring-fenced and secure.

Saull would remain a geological outsider. The Geological Society's Star Chamber was a self-electing alliance of Anglican dons and London careerists. They came together as a professional unity government with its own agenda and social etiquette. We get some perspective on this by looking from the outside, from Saull's standpoint. Marginals came no more disparate than the three faces Mantell (himself a side-lined provincial) saw when he popped round to Saull's one day early in 1832. There he found a little group having tea. A more extraordinary sight could not be imagined: he was greeted by an eclectic mix of the millenarian and materialist. Saull was there: the Devil's Pulpit proselytizer, ecliptical swivveller and Owenite anti-capitalist. So too was the dirty little Jacobin himself, Sir Richard Phillips: the anti-gravitation demystifier whose astronomical algorithms could explain the seasons, shifting heat zones, and hemispheric quantities of water. Then came the strangest of them all: the tyro Thomas Hawkins, a twenty-one-year-old Somerset fossil collector extraordinaire (a youngster who had navvies shift a cliff to mine out an Ichthyosaurus), a wild, possessed millenarian, whose fossil "sea dragons" were interwoven into a visionary Mosaic past.<sup>75</sup> It is hard to imagine what the arch-materialists thought of Hawkins, whose tendencies towards hyper-Miltonic poetry made him semi-intelligible, and whose flailings about Pre-Adamites, the AntiChrist, and Voltairian infidels must have made them bite their tongues. All this was eclipsed by his revelatory visions of the ichthyosaur's world:

Theirs was the pre-Adamite—the just emerged from chaos—planet, through periods known only to God-Almighty: theirs an eltrich-world uninhabitate, sunless and moonless, and seared in the angry light of supernal fire;—theirs a fierce anark thing scorched to a horrible shadow: and they were the horrible chimeras.<sup>76</sup>

<sup>74</sup> The Era, 16 Apr. 1843.

<sup>75</sup> J. A. Cooper 2010, 50.

<sup>76</sup> T. Hawkins 1834, 51; Carroll 2007, 2008 for a study of Hawkins as an "eccentric".

This apocalyptic hammerer denounced all who swore by "insensate Matter", those lost souls like Saull and Phillips in their "Paradise of Fools." If God was not speaking through Hawkins, He was speaking through the ichthyosaurs. The millenarian, awaiting the imminent Second Coming, was meanwhile damning "grotesque" notions of self-development. Although Hawkins accepted the obliquity explanation for formerly frozen ages, mankind had a more important "Orbit, the perihelion being with Adam, the aphelion with the Flood."<sup>77</sup> God knows what Saull and Phillips made of this. Being a fly on the wall at this meeting of millenarian and materialist minds would have given us an unprecedented insight into the fossil mediations and unruly exuberance of pre-Victorian palaeontological culture.

It shows why the professional gentlemen were trying to rein in geology. The urban gentry of the Geological Society effectively barred divisive talk of astronomy, mythology, Milton, Moses, and evolution. Their carefully policed science was uncontroversial and respectful. They described their work as a dutiful delineation of the strata. And by not ruffling social feathers they hoped to elevate and ordain their dubious new profession. The trio in front of Mantell stood for everything that was troubling. These *embrouilles* back-benchers, like Hetherington's 'scum', were never to be allowed near the star chamber, however much they envied the ruling coterie.

One thing materialist and visionary shared was the need for fossil museums, although not for the same reasons. This, too, had Hawkins practically babbling in tongues:

Let us haste then to found sumptuous museums, which shall be as sanctuaries for the arts—the divine arts—until ignorance, driven to herd with bats and owls and every unclean thing, ceases to persecute them:— and let us raise noble galleries to receive the spoils of invincible science. Be temple and lower too devoted to their legitimate use, the Majesty on High should be worshipped of his creatures in the face of that spotless heaven which he made to be a figure of his incomprehensible glory and endless perfection.<sup>78</sup>

<sup>77</sup> T. Hawkins 1834, 1–2; 1840, 1–4. The latter, so perplexing to commentators, could easily have been aimed at infidels, his freethinking tea companions, Saull and Sir Richard Phillips, while Hawkins's mention of a Golden Age—of permanent equatorial sun—hints at familiarity with Mackey's *Mythological Astronomy*.

<sup>78</sup> T. Hawkins 1834, 30.

Rather than a hymn to His Majesty on High, Saull, with his Owenite faith in rational schooling, saw museums shape impressionable minds and ready them for a very different *socialist* millennium. Or, as "Brother Saull" told a trades' union meeting, training in his ideological facility would render a boy valuable "as a man".<sup>79</sup>

Saull had other forums for museum propaganda, most notably the moderate National Political Union (founded four months after the museum, in October 1831). This was an attempt to weld middle and working-class interest (to the benefit of the former), largely inspired by the Charing Cross tailor and radical co-ordinator Francis Place. He feared that NUWC extremism would derail the reform process. Even Hetherington, in November 1831, before the Reform Bill had passed, admitted that both unions were valuable and that the middle and working classes should co-operate to gain meaningful change.<sup>80</sup> Saull agreed, but many ultras were still trying to push the NPU to wider democratic ends. However, Place and the Whig moderates managed to keep universal suffrage and annual parliaments off the table and most working-class "Rotundanists" off the Council.<sup>81</sup> But the merchant Saull did make it on, and his house became a local enrolment centre for the NPU.<sup>82</sup> From the first the NPU pursued strategies close to his heart: by February 1832 the Council had opened a Reading Room, with Saull contributing to the costs.<sup>83</sup> And a weekly series of twopenny lectures on "Politics, Morality, and Physical Science" were projected-showing how necessary these were considered to be for an expanding electorate. Nothing can be "of more importance to the well-being of the community at large." Science was rigorous in its use of evidence, and "no subject shall be introduced unsupported by evidence, nor ungrounded on truth", and with listeners free to question and reason "the objects of the Union would thus be more materially promoted". Owen thought

<sup>79</sup> TS, 22 Apr. 1835, 2.

<sup>80</sup> Radical Reformer, 4 Nov. 1831.

<sup>81</sup> Miles 1988, 186–90; Rowe 1970a, 39–40; Belcham 1985, 245–50.

<sup>82</sup> Saull was elected on the NPU's foundation in Oct. 1831, and re-elected yearly; Rowe 1970b, document nos. 33, 34, 63, 66 (showing that Saull was proposed by Henry Revell, who was with him in the Southern Metropolitan Political Union); MC, 9 Feb. 1832, 3; Carpenter's Monthly Political Magazine, Mar. 1832, 299.

<sup>83</sup> Examiner, 5 Feb. 1832.

twopence for the lectures too much. Saull went further and waived all admission charges for his science talks at the Union.<sup>84</sup>

More irons went into the fire in these frenetic months. Saull also agitated in the City for the Reform Bill. In September 1831, he was on the Guildhall Committee set up by the aldermen and liverymen to petition the Lords not to block reform.<sup>85</sup> With tensions rising and the third Reform Bill held up in April 1832, Lovett, Watson, and the ultras warned that arming was inevitable in the face of a feared military takeover. Enormous NPU meetings heard Saull call for passive resistance in the form of non-payment of taxes. Withholding tax to prevent "mutilation of the bill" (in Saull's words) became one of the NPU's policies of massive disobedience,<sup>86</sup> and, in this, they were backed by the NUWC.

Although a union designed to keep Earl Grey's eye fixed on reform, the NPU covered much more. Saull spoke frequently, and chaired meetings as often—on the Anatomy Bill (to enable medical schools to obtain legal cadavers and thwart the resurrectionists),<sup>87</sup> on removing the Irish tithes, on returning radical MP Joseph Hume to his Middlesex seat, and so on. Nor was sight lost of spies and the entrapment used by the Commissioners of Stamps' agents to catch news vendors.<sup>88</sup> Saull introduced Polish refugees fleeing after the failed rebellion against Tsarist rule and led three cheers for the eventual "restoration of Polish liberty". But always he would report back his NPU activities to colleagues in more radical venues, at the Optimist Chapel, acting as a sort of mole inside the moderate NPU.<sup>89</sup>

<sup>84</sup> MC, 16 Feb. 1832, 3.

<sup>85</sup> Times, 30 Sept. 1831, 3.

<sup>86</sup> Cobbett's Weekly Political Register 76 (28 Apr. 1832): 247–52; MC, 26 Apr. 1832; Examiner, 29 Apr. 1832; Prothero 1979, 291–92.

<sup>87</sup> Bell's Life in London and Sporting Chronicle, 29 Jan. 1832; MC, 26 Jan. 1832; Examiner, 29 Jan. 1832.

For his chairing of meetings to discuss these points, see *TS*, 17 May 1832, 1; 22 May 1832, 4; 26 July 1832, 2; 16 Aug. 1832, 2; 13 Sept. 1832, 1; 27 Sept. 1832, 1; *MC*, 23 Feb. 1832, 4; 17 May 1832; 16 Aug. 1832; 27 Sept. 1832; *Albion and The Star*, 18 Apr. 1833, 377, 403; *Examiner*, May 1832, 345.

<sup>89</sup> HO 64/12, f. 96. MC, 22 May 1832; TS, 22 May 1832, 4. In 1836 he made a "manly and energetic speech" in celebrating the sixth anniversary of the Polish revolution (TS, 30 Nov. 30 1836, 2), and he was still contributing financially to the refugees in 1850 (Reynolds's Weekly News, 6 Oct. 1850).

Even after the Reform Bill passed, he remained on the NPU council, sitting with Owen's sons, Robert and David Dale Owen.<sup>90</sup> The venue provides evidence of Saull's familiarity with the Irish nationalist, the "Liberator" Daniel O'Connell, a Kerry-born brilliant barrister and MP, democrat and former deist, now fighting for a repeal of the Union. Saull chaired O'Connell's NPU meetings on the government's Irish Disturbances Suppression Bill-a "Bill [that] resembled that monster at hell gates described by Milton"-which put the "poor famished peasantry", in Saull's words, effectively under martial law. While the Malthusian Whigs called for the Poor Law to be extended to Ireland (ministers were already contemplating stripping the indigent poor of outdoor relief-that is, welfare payouts-so forcing them to work for cheap rates or face the deliberately abominable new workhouses), Saull called for "justice, and not the cold hand of charity".<sup>91</sup> Saull, the anti-Malthusian, anti-Poor Law activist, condemned the suppression bill "in a wholesale way". Had the Secretary for Ireland been there, grumbled the Tory Standard, "he might well have exclaimed: 'Saul, Saul [sic] why persecutest thou the bill?""92

Saull stayed at the NPU till the bitter end. The NPU's dissolution was already on the cards in 1833 (such unions had short life spans), with Saull chairing meetings to discuss its fate.<sup>93</sup> It limped on until 1834, long enough to see the Whig ministry itself dissolving, and the threat of the hated Wellington returning. Saull's last act here was to plead "for the people to convince the insane men" who supported the Tories "that they would … not permit reform to be delayed".<sup>94</sup>

Not only was Saull's museum framed against this backdrop of heightened tensions and political lobbying, but his geology talks meshed with the reform hysteria at the radical chapels, the NPU, and

<sup>90</sup> Destructive 1 (16 Feb. 1833): 23.

<sup>91</sup> Albion and The Star, 18 Apr. 1833, 1; "Milton": Morning Post, 4 Mar. 1833. For Saull's chairing of O'Connell's meetings and speaking on the Irish situation, often at the Crown and Anchor, see *TS*, 4 Mar. 1833, 1; *MC*, 4 Mar. 1833; 25 Mar. 1833; *Standard*, 4 Mar. 1833; *PMG*, 9 Mar. 1833. He also condemned the Irish Poor Laws at the Cartwright Club and at the Guildhall (*TS*, 20 Mar. 1833, 3; 25 Mar. 1833, 1).

<sup>92</sup> *Gauntlet*, 31 Mar. 1833, 128, quoting the *Standard*.

<sup>93</sup> TS, 11 June 1833, 4; Destructive, 1 (15 June 1833): 159.

<sup>94</sup> MC, 17 Nov. 1834; TS, 17 Nov. 1834, 2. On the protests at the thought of Wellington's return to power: *Times*, 20 Dec. 1834, 1; TS, 20 Dec. 1834, 2; MC, 20 Dec. 1834.

the countrywide Co-Operative Congresses. Often his blasphemous or co-operative harangue would devolve into a eulogy for science as he extolled his progressive museum and whipped up enthusiasm for listeners to visit. Having a finger in every radical and co-operative pie, Saull made sure his message about geological time, life's perfectibility, and mankind's destiny was broadcast widely through the radical world.

#### Geology Lecturing

Political and geological activism thus ran in tandem during these turbulent months. Saull's geological lecturing started shortly after the museum opened. The enabling climate for these set-piece talks was now complete: Phillips's astronomical explanations of planetary movements, Carlile's anti-Priestcraft naturalism and Cuvier's fossil ascendancy mated to Owen's perfectibilism. Saull would use the lectures to extract a higher moral meaning from the fossils, then invite listeners to confirm his deductions by studying the artefacts themselves. His first known geology lecture was at the Western Co-Operative Institute in Poland Street, and its date is significant. It was on New Year's Day 1832, the day his pseudonymous Letter from a Student in the Sciences was published, openly attacking religion as a "despotism, reigning tyrannically over the human mind"<sup>95</sup> (See Appendix 2). His last published attack on Christianity coincided to the day with his first known insurgent geological talk. From this point on, an ambiguously-infidel geology was to provide the anti-Christian's shield.

By this date, too, his shift to Owen's camp was complete. In 1831, Owen had taken out a lease on the grand hall in a spacious mansion at 277 Gray's Inn Road, near King's Cross—a former Horse and Carriage Repository—and made it the lecture hall of his "Institution of the Industrious Classes". In this "Great Room" Saull, himself on the Council of the Institution, delivered his first weekly lecture series on geology, with all profits going to the new "Missionary Society", which dispatched trained recruits to run Owenite branches in the provinces.<sup>96</sup> The "Great Room" was to be the headquarters of the tentacled Owenite

<sup>95</sup> PMG, 31 Dec. 1831; [Saull] 1832a, 4.

<sup>96</sup> Crisis 1 (1 Sept. 1832): 104; (29 Sept. 1832): 119; (15 Dec. 1832): 164; (29 Dec. 1832): 172.

empire throughout the country. Here Robert Owen himself lectured, and the Congresses of delegates from the Co-operative Associations of Britain and Ireland would meet. Saull was only one star in a co-operative constellation. Owen's son David Dale spoke on chemistry, as did their American fellow-traveller Henry Darwin Rogers. As a New York professor of chemistry, Rogers had just come over to England (in fact, he was the first American Fellow of the Geological Society<sup>97</sup>), and he would go on to pioneer surveys of Pennsylvania and Virginia. In 1832–33 he alternated with Saull in Gray's Inn Road talking on geology "much to the apparent satisfaction of their audiences", the two ploughing their profits into the social missions.<sup>98</sup>

The geology-fostering environment deeply affected Owen's own family. His boys were to take their love of emancipist science back to America, and David Dale Owen would become famous in his own right as the State Geologist of Indiana by 1836,<sup>99</sup> and go on to direct the geological surveys of Iowa, Wisconsin, and Illinois. Owen's followers who emigrated to New Harmony in Indiana in later years reported that David Dale's mineral museum—collected during his state surveys—was already three times the size of Saull's, now considered the standard.<sup>100</sup>

Saull's brandy depot museum had been crucial in this early Owenite career-building. His own lectures at the "Institution of the Industrious Classes" were "illustrated by many rare and beautiful specimens of fossil remains; among the rest of fossil palm, which is of very seldom occurrence," all taken from Aldersgate Street. And Robert Dale reported that Saull "kindly offered the use of specimens from his extensive Geological cabinet" to the others, so they all provided hands-on, illustrated talks in 1832–33, thanks to the museum.<sup>101</sup>

Saull was deeply embedded in the Gray's Inn Road institution, bureaucratically and financially. The backers thought of buying the leased premises to put it on a more permanent basis, but apparently

<sup>97</sup> Henry Darwin Rogers was initially elected FGS on 1 May 1833. I thank Wendy Cawthorne at the Geological Society Library for information on Rogers and his backers. Gerstner 1994, 22.

<sup>98</sup> *Crisis* 1 (8 Dec. 1832): 159; (15 Dec. 1832): 164; (29 Dec. 1832): 172; (5 Jan. 1833): 174; *PMG*, 22 Dec. 1832.

<sup>99</sup> NMW 3 (29 Oct. 1836): 4; Horowitz 1986.

<sup>100</sup> NMW 12 (8 July 1843): 10.

<sup>101</sup> Crisis 1 (15 Dec. 1832): 164; (5 Jan. 1833): 174.

it was too exorbitant.<sup>102</sup> It was a large venue, which hosted the Third Co-Operative Congress in April 1832, a week's jamboree of the country's co-operative groups, with Saull chairing meetings.<sup>103</sup> Optimism was running high; they started a new paper that month, the penny *Crisis*. It provided a vehicle for Owen's lectures (and soon enough, Saull's), as well as weekly intelligence. The illegal market place was already crowded, and barely had it started when *The Thief* (itself a startup, but run by the more *"light-fingered* gentry") was hooting at it:

The *Crisis*–Rhymes with the *Isis* [another inflammatory penny print, founded in February 1832 by Eliza Sharples], and seems of the same kidney, edited too by Mr. Owen, (Oh! name unmusical to tradesmen's ears!) who talks of Co-operative Congress, explains his principles by a *ball* and *lecture*!!! and professes to sell "Truth and Happiness" price one penny!<sup>104</sup>

Nonetheless the less light-fingered *Crisis* fared well. Early circulation was boosted by philanthropists buying batches, a hundred copies a time, to distribute freely. Twenty thousand copies of early issues were said to have sold.<sup>105</sup> Robert Owen was editor, and, from November 1832 until April 1833, his son Robert Dale joined him. But a revenue drop caused Robert Dale to give the venture to the printer before leaving for the American New Harmony community in Indiana that April. And, while the new proprietor made efforts to improve the type and content, sales began to flag.<sup>106</sup>

Saull did more than emphasize the geological proofs of perfectibility in print. He helped perfect the co-operative system in real time, sitting on the Council of the new "Equitable Labour Exchange" in 1832, run from Gray's Inn.<sup>107</sup> This bartering bazaar was designed to cut out the middle man and ease the unemployment among London's artisans and shopmen. Labour notes were issued for items (valued by their material plus labour costs), and these notes could be exchanged for equivalent

<sup>102</sup> The Satirist; or, the Censor of the Times, 5 Feb. 1832.

<sup>103</sup> Carpenter 1832, 78; Claeys 2005, 4: 77. He similarly officiated at the Fourth Congress in October 1832, *Crisis* 3 (19 Oct. 1833), 64; *Lancashire and Yorkshire Co-Operator* n.s. no. 10 (n.d. [Oct.1832]): 23.

<sup>104</sup> Thief, 21 Apr. 1832, 1.

<sup>105</sup> Cosmopolite, 28 Apr. 1832, in HO 64/18, f. 606.

<sup>106</sup> Crisis 1 (27 Oct. 1832): 138; 2 (27 Apr. 1833): 125.

<sup>107</sup> Claeys 1987, 54-55; J. F. C. Harrison 1969, 72; Holyoake 1906, 1: 105.

goods held at the Bazaar, thus avoiding the use of capital altogether.<sup>108</sup> The notes even made their way into the old immoral world: they were so prevalent for a while that theatres accepted them. Carlile too, though he deplored Owenism, took them as half payment on books.<sup>109</sup> Although items at first flooded in (and by September 1832 Owen reported they had "large stocks of goods already in the Bazaar"<sup>110</sup>), it was not a wholehearted success. Nor was the attention it attracted always positive: a utopian absurdity, one critic thought, "which is to pave the streets with penny loaves and roof the houses with pancakes, not to mention the licence it affords with respect to one's neighbour's wife".<sup>111</sup> Some said it was already in a "dying state" by New Year 1833, although in fact they were trading articles to the value of "37,000 hours per week" at this time, but they still decided to merge it with the Co-Operative Society.<sup>112</sup> Saull helped set up local Bazaars besides, for example the Kingsland and Newington Co-op Labour Exchange,<sup>113</sup> so he was well placed to assess their shortcomings. Partly, it was that the labour notes were devaluing as trade goods or the choices dwindled. Then there was a ludicrous inequity in the swaps, as he later recalled, with "some articles of food being wanted much more frequently than others. The baker would be overpowered with articles which he did not want".<sup>114</sup>

Things were in a bad way by the end of 1832. As the spy reported, "a Rich Organ which they had erected on the premises for Balls, Vocal Performances &c together with Chandeliers, Ornaments &c has been seized by the Commissioners of Pavements for the Rates."<sup>115</sup> The local bazaars went the same way. Take William Benbow's at 8 Theobald's Road, a huge, ramshackle place that could hold 2,000, and sometimes did.<sup>116</sup> Here the co-operators—Lovett, Cleave, and Watson—half-splintering

<sup>108</sup> Examiner, Aug. 1832, 551; Hayes 2001; Abrahams 1908; Oliver 1958.

<sup>109</sup> PMG, 8 Dec. 1832. Theatres: McCabe 1920, 80.

<sup>110</sup> MC, 25 Sept. 1832. Others venues followed suit. The Gothic Hall Bazaar in the New Road was reportedly turning over £350 worth of stock a week in August 1832: Cosmopolite, 11 Aug. 1832 in HO 64/18, f. 663.

<sup>111</sup> Abrahams 1908.

<sup>112</sup> TS, 1 Jan. 1833, 2; Cosmopolite, 5 Jan. 1833, in HO 64/18, f. 733.

<sup>113</sup> TS, 26 Sept. 1832, 2; Atlas, 30 Sept. 1832, 660.

<sup>114</sup> The Star of Freedom, 5 June 1852; The Journal of Association, Conducted by Several of the Promoters of the London Working Men's Associations 1852, 182.

<sup>115</sup> HO 64/12, f. 179 (23 Nov. 1832).

<sup>116</sup> HO 64/18, f. 108.

from their NUWC colleagues, set up, or rather climbed up, for they met in the room above the NUWC. Not only was there physical proximity here, but a mongrel mix of radical and Owenite objectives. The close contacts were revealed as the NUWC gave the co-op schismatists money to remedy their dilapidated rooms above, accessible only by ladder. Of course, this co-operative faction remained to the left of the patrician Owen, and, in particular, they hated his pandering to aristocrats. It did not help to see society ladies drop in to the Labour Exchange,<sup>117</sup> or the King be invited as a patron of some new job scheme. But their bazaar, too, faltered and collapsed just the same, late in 1832. And between them, these defunct bazaars left a lot of worthless circulating labour notes.<sup>118</sup>

On the NUWC side, Hetherington in the early thirties stood firm and insisted that political power must precede social perfection. He argued for the same rights as Saull did—suffrage, short Parliaments, ballot, and no property qualification—but insisted that these political gains must come before co-operation could be contemplated. He split opinion and sparked public debates, and made the *Poor Man's Guardian* essential for the more pro-active political wing. For a moment (it was short-lived), he became hyper-critical of Owen, who "exhibits a strange perversity of mind in expecting to realize his political millenium [*sic*] before working men are placed on an equal footing with the other classes". Losing faith in Owen's idealism, he found Owen's tolerance towards the oppressors, the aristocrats, and capitalists "preposterous", which militated against any immediate political rapprochement.<sup>119</sup>

Saull and Hetherington remained the best of friends, even as Saull spoke up for Owen's schemes and Hetherington demanded a prior political emancipation. It infuriated Hetherington to see the "the benevolent Owenites … 'dancing jigs at two-shilling hops', while thousands and tens of thousands of their poorer fellow-countrymen are pining in want and destitution".<sup>120</sup> Owenism put the cart before the horse. The aristocratic masters and middle-men would never let co-operation work, and only when "the working classes succeed in obtaining political power" could Owen's exchanges be implemented. Worse, the house

<sup>117</sup> Lady's Magazine 3 (Nov. 1833): 297.

<sup>118</sup> HO 64/12, ff. 59, 76, 79, 83, 145, 179.

<sup>119</sup> PMG, 14, 21, 28 Jan. 1832; 6, 9 Feb. 1832; 22 Sept. 1832.

<sup>120</sup> Royle 1998, 52; Claeys 2002, 175-82; PMG, 25 Dec. 1831, 14 Jan. 1832.

was dividing against itself: Owenites had split the cause and sapped its strength, which served only to "paralyze the nobler efforts of others". While many wanted to see radicalism and co-operation "go hand in hand",<sup>121</sup> for Hetherington, in the early thirties, perfecting man came second. That said, Hetherington never actually let go of the Owenite doctrines that circumstance creates character, and, therefore, that a better society would produce better people;<sup>122</sup> and he took from Owen his moral-force beliefs. These guaranteed his later return to the fold.

Meanwhile Owen's own house was in trouble. After a fracas with the Gray's Inn building's owner, who used an axe-wielding mob to regain entry, the co-operators were evicted. At the time, Saull was actually in the process of valuing the fixtures ready to move.<sup>123</sup> In February 1833, they rented new premises at 14 Charlotte Street, Fitzroy Square. With its inner court 16 by 120 feet and corridors all round, it could accommodate the Exchange stalls and, in April, artisans started filling them up.<sup>124</sup> At the same time, the managers tried to cut out the banks by starting a "United Trades' Loan Fund", where tradesmen could obtain credit to purchase raw material. Saull was (inevitably) its treasurer.<sup>125</sup>

Barely had they finished setting up the new Charlotte Street auditorium before the sparks started to fly over Saull's deeper scientific views. The *Crisis* now gave the first full-blown account of his evolutionary Owenism, with its monkey ancestry for mankind.

<sup>121</sup> PMG, 14 Jan. 1832, 22 Sept. 1832.

<sup>122</sup> Reasoner 7 (5 Sept. 1849): 152.

<sup>123</sup> Crisis 2 (2 Feb. 1833): 26-27.

<sup>124</sup> Crisis 2 (16 Feb. 1833): 42; 2 (30 March 1833): 95.

<sup>125</sup> Crisis 2 (18 May 1833): 149; (8 June 1833): 174, 175; (10 Aug. 1833): 248.