

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

18. The Atheist Breakaway

Robert Owen's response to clerical attacks in 1839–1840 had massive sectarian repercussions. To streamline the management of the burgeoning community, the 1839 Birmingham Congress agreed to unite the propagandizing "Association of All Classes of All Nations" with the fund-collecting "National Community Friendly Society" into "something more wonderful still" (in Holyoake's facetious phrase): The Universal Community Society of Rational Religionists.¹ The operative was "*Rational Religionists*", which was a contradiction in terms to Holyoake's way of thinking.² But this fall-back position was a subterfuge. It was to get round the prosecutions initiated by the Manchester clergy, who had taken the Hall's gate keepers to court for charging on the door for Sabbath lectures, which was illegal, except in churches. So Owen had the Halls registered with the Bishop's Court as a place of worship for the sect of Protestants, called "Rational Religionists".³ But the attempt to thwart the Sabbath noose only snared them tighter. The Bishop's Court then insisted that local missionaries take an oath that they really were Christians: that they believed the Scriptures to be the revealed word of God. In Manchester and Bristol, lecturers who had preached diametrically opposite doctrines, after a lot of soul-searching and defiant manoeuvres, finally bit their lips, took the oath, and perjured themselves to keep their Halls open.⁴

The Manchester missionary who knuckled under was Robert Buchanan (giving him the soubriquet "Rev.-swear-at-last"). But it was to little avail. The day after his talk at the Hall of Science "on 'Geology, and the Mosaic Account of World-Making,' with dioramic illustrations",

1 Holyoake 1875, 1: 193; *Union*, 1 (1 Dec. 1842): 367.

2 Holyoake 1892, 1: 134.

3 Royle 1974, 66–67.

4 Podmore 1907, 2: 534–36; Royle 1974, 66–68; Holyoake 1906, 1: 158–62.

Town Mission preachers and hecklers flooded the theatre, and the altercation stopped proceedings.⁵ Then, on inaugurating the new hall of science in Whitehaven Cumberland, in 1842, Buchanan was besieged by a mob, the hall was destroyed and he “ran for it; but was hunted, caught, and very roughly treated”. The mob, containing many women, went on to burn the shops and houses belonging to the socialists.⁶ The beating finally forced Buchanan to abandon peripatetic Owenite lecturing altogether.

The cumbersome “Universal Community Society of Rational Religionists” slimmed its title down to the Rational Society in 1842, with Saull, as usual, one of the Society’s auditors.⁷ The Halls of Science continued to operate under this legal protection as licenced sites of religious observance, and, for four years, Owenism as a mass movement peaked under these strange conditions. By now, sixty-two branches were enrolled, and 50,000 people attended Sunday lectures weekly.⁸ And while the Bishop of Exeter had thought to stamp out socialism, his outburst in the Lords actually resulted in 50,000 copies of Owen’s reply being sold.⁹

In fact, tract production was massively stepped up, thanks to the London Tract Society (based in John Street), whose meetings Saull would chair. The Society managed to shift increasing numbers, from 50,000 in 1840, to 140,000 in 1841–42 (in the same period the *New Moral World* increased its circulation sixfold).¹⁰ They were cranked out with a labour-intensive hand press, even as the editor of the *New Moral World* dreamed of the day when they had “steam-driven cylinder machines throwing out printed sheets by the Million”.¹¹ Still, in a pamphleteering age, the socialists almost held their own against the flood of religious

5 NMW 10 (14 Aug. 1841): 56.

6 NMW 10 (29 Jan. 1842): 247–48. B. Taylor (1983, 189) points out how often women—the religious pulse of the family—were the hecklers.

7 NMW 11 (10 June 1843): 418; 12 (8 June 1844): 401.

8 Podmore 1907, 2: 469.

9 A. J. Booth 1869, 204.

10 NMW 11 (1 Oct. 1842): 116; (22 Oct. 1842): 139. 1841–42 was the peak: 12 (21 Oct. 1843): 136; (4 Nov. 1843): 150; 13 (12 Oct. 1844): 126; (19 Oct. 1844): 136. The London Tract Society developed provincial branches and changed its name to the Rational Tract Society in 1842.

11 NMW 13 (11 Jan. 1845): 229–31; also 13 (5 Oct. 1844): 116; (24 May 1845): 387. The tracts were dispatched to the branches at 4d a dozen.

tracts, anti-corn-law pamphlets, and Chartist flyers. Pamphlets were sent to all the commercial towns, with the manufacturing districts getting the lion's share, to be distributed by the local branches. Emigrants were encouraged to pack them in their trunks, and they were translated and sent to European cities. The proselytizing of their anti-capitalist, culturally-deterministic, regenerative message reached its peak in 1841. Religious evangelists complained that the John Street depot was not only pinching their Bible-distribution techniques, but their pupils as well, as one Sunday School graduate was spotted working there as a secretary.¹² The tract distributors were also copying religious foot-in-the-door techniques: socialists were encouraged to lend pamphlets and call back for them later to engage the reader. So successful was the Tract Society that it was soon holding its own festivals and tea parties, with Saull in the vice-chair below Owen, or chairing himself.

All the while there was simmering anger at Owen's registering the socialists as "Rational Religionists" and encouraging missionaries to take the oath—"be-reverended", in firebrand Charles Southwell's words.¹³ Others equally refused to play "the whore to the priests," as Southwell's Bristol colleague William Chilton said.¹⁴ Since Southwell was the highest-profile defector and started a more militant trend with extreme scientific repercussions, it will pay to look at him in greater detail.

Charles Southwell was prodigiously talented, highly opinionated, and socially irresponsible (in a non-Owenite sense). He had started as an unpaid Lambeth lecturer, delivering a hundred and fifty talks in 1839 in his spare time. His punchy rhetoric on socialism, marriage, capitalism, or Creation attracted huge audiences. Up to a thousand turned up on Kennington Common each Sunday to hear his soapbox harangues on the uninspired Bible.¹⁵ For a piano finisher, he was astonishingly literate. Quips and quotes would effortlessly roll off his tongue. A melodramatic delivery helped, but then the Thespian trod

12 *Evangelical Repository* 1 (Oct. 1840): 209–10. Fyfe 2004 on evangelical tract production.

13 *OR* 1 (4 Dec. 1841): 33.

14 W. Chilton to G. J. Holyoake, 26 Dec. 1841, Holyoake Collection no. 22, Co-operative Union, Manchester; Royle 1974, 68.

15 *NMW* 6 (10 Aug. 1839): 665; (7 Sept. 1839): 733; (21 Sept. 1839): 763; (2 Nov. 1839): 861.

the boards in the theatre as well as the park, and he happily deployed “subversive Shakespeareanisms” in his political repartee. As Marsh says, “Shakespeare gave gloss and heritage to atheistical materialism”.¹⁶ But it took a toll, so Southwell swapped his day job at the piano-forte factory for paid Owenite lecturing. He was assessed on his knowledge and tested on his speaking skills and allowed to put “S.M.” (Social Missionary) after his name.¹⁷

London loved Southwell, and he was massively in demand. His talks on marriage were interspersed with Saull’s on science at the City Road Mechanics’ Hall, while his lectures on “Drama” followed Saull’s on “Geology” at John Street. In fact, he was a star attraction at the A1 Branch, exhibiting a huge talent for ancient science and classical literature as much as biblical exegesis.¹⁸ Southwell was Carlile redivivus, eager, chafing at the bit, aggressively atheistic. He had even taken on an ageing anti-socialist Carlile at Lambeth in a marathon two-night session late in 1839, in a hall “crowded to suffocation” with hundreds unable to get in.¹⁹ Young Southwell might have been wittier and nimbler, and whether or not he could outflank the old fox he certainly had his uncompromising style. It quickly showed. When he guest lectured in Dover in October 1840, the local press were startled by his “violent manner” in debunking religion. There was no disguising his virulent tongue. The Bible was so many “cunningly-devised fables”, Christianity so many “wild absurdities” which “taught man to murder and to do all those things which were against the first principles of our nature”.²⁰

But Southwell flexing his atheistic muscles was Southwell snubbing the new softly-softly approach of the Central Board. He was losing sympathy for the spineless Board, which was growing as “self-complacent” as “a bearded Methodist Conference”.²¹ The crunch came when the missionaries had to swear the oath as “Rational Religionists”. Right into 1841, he sympathized with the “poor fellows who had large families” and who needed their lecture income, so he refused to

16 Marsh 1998, 111.

17 NMW 9 (6 June 1841): 351.

18 NMW 6 (26 Oct. 1839): 848; 7 (16 May 1840): 1213; (6 June 1840): 1286; (13 June 1840): 1310; (20 June 1840): 1320.

19 NMW 6 (2 Nov. 1839): 861; (14 Dec. 1839): 957.

20 NMW 8 (17 Oct. 1840): 252.

21 Southwell 1850, 60.

condemn them, even if he would “rather fall dead on the platform, than take the oath in question”.²² Kowtowing was never his way. But as the year wore on, it would rankle more and more, and oath-taking would only exacerbate other grievances. By then, he had been re-assigned to Birmingham (he moved in November 1840). Here he helped raise £800 to move the headquarters from a small room in Well Lane to the Southcottian Lawrence Street Chapel, which was capable of holding a thousand.

On 13 June 1841, he moved again, to become a lecturer stationed at Bristol Hall of Science, where he opened up the discussion classes to the public and democratized their proceedings, creating elected Presidents and Secretaries on a three-monthly rotation.²³ The paternal, undemocratic aspects of London A1 Owenism galled him, as it did others, and he started moving Bristol in new directions. There was now a hint that nothing was off the table in these classes. His new co-worker, a young compositor “*with brains*”, William Chilton, added that they were “imitating the Eclectics”, who believed that “that no one man”—he was pointing at Owen—or “system ever yet contained within themselves all truth”.²⁴ These were intimations of a world beyond Owen, and that it would arrive sooner than expected.

At the end of his three-month stint in Bristol, Southwell had had enough. He returned to London and announced he was resigning as a Social Missionary. It caused a sensation. Even though his valedictory lecture on 26 September 1841 to explain his decision was given at a few hours’ notice, it was to a packed hall. By all accounts, it was the most forceful and funny off-the-cuff talk he had ever given, with the Owenite greybeards taking the brunt. Once Owenism had been the “very poetry of politics”, but that was before socialism had been “churched, shorn of its consistency”, and its preachers “reverended”. It had lost its way after the Bishop had forced a “shuffling, equivocating, white-feather policy”.²⁵ Stopping impromptu questions after lectures for fear that they introduce controversy was short-sighted. Encouraging poor socialists to take the

22 *NMW* 9 (14 May 1841): 351.

23 *NMW* 8 (12 Dec. 1840): 381; 9 (22 May 1841): 316; 10 (3 July 1841): 7; (11 Sept. 1841): 86.

24 *NMW* (11 Sept. 1841): 86; Southwell 1850, 65.

25 *OR* 1 (4 Dec. 1841): 33–34; (8 Jan. 1842): 58; (5 Mar. 1842): 90–91; (9 Apr. 1842): 131; *NMW* 10 (23 Oct. 1841): 134–35.

oath as Rational Religionists was cringe-making. "Religion is the blight upon the fair harvest of reason", which made this a "miserable, truckling, unprincipled policy". In Southwell's view, they should have stood their ground. He was straining at the leash. Like other democrats, he hated Owen's strangling of branch democracy, and his patriarchal hold.²⁶ He hated the rampant "idolatry" of "our dear father". This fawning, with Owen succumbing to the "poison of flattery", was a stumbling block to developing a more progressive stance. He wrote off the *New Moral World* as a blinkered party organ, whose editorial policy was designed to stop the more adventurous from rocking the boat. His shaft was not surprising, for the NMW editor had refused to run his farewell address or even his letter explaining his resignation.

A Spate of Atheist Prints

The "thing was damned", Southwell said, defecting. He took Chilton with him, the sharp twenty-six-year-old compositor on the *Bristol Mercury*. Compositors were elite artisans. Literacy marked them out, they had to be able to read fast and hammer metal type accurately—meaning they often had to interpret copy, which necessitated spelling and grammatical skills.²⁷ They had even been known to suggest improvements to authors themselves.²⁸ Chilton was among the most incisive. He was also another doctrinaire infidel—in fact Holyoake called him "the only absolute atheist I have known".²⁹ In Chilton's words, he was not prepared to "coquette" with the priests. Or with the Central Board; the malcontents pricked Owen, the *New Moral World*, "a disgrace to our society", and the "weak stomachs" of flunkies.³⁰ Now, by adopting an aggressive stance, they helped spawn the first independent and overtly atheist literature. Southwell's *Oracle of Reason* (1841–43) premiered on 6 November 1841. It proudly declared on its masthead that "WE WAR NOT WITH THE CHURCH,

26 Claeys 2002, 253–54; Royle 1974, 69; Southwell 1850, xiv.

27 P. Duffy 2000.

28 Compositors even suggested a better title for one of Charles Darwin's books: Desmond and Moore 1991, 547.

29 Holyoake 1892, 1: 142. Chilton also had Chartist sympathies: he was a delegate to the Birmingham Chartist conference in 1842: *Evening Star*, 28 Dec. 1842, 3; Royle 1974, 68–72; Chilton ODNB.

30 OR 1 (16 Apr. 1842): 142.

BUT THE ALTAR; NOT WITH FORMS OF WORSHIP, BUT WORSHIP ITSELF; NOT WITH THE ATTRIBUTES, BUT THE EXISTENCE, OF DEITY."³¹

In its train came a welter of confrontationist prints. Owen's truckling had opened up the deeper fault lines, and uncompromising atheists were prying the crack open. Within weeks of the *Oracle* appeared the *Atheist and Republican* (1841–42), by another fallen star, Frederick Hollick. These circulating missionaries had long circled around one another. Hollick had been made district missionary in Birmingham when Southwell left for Bristol, although his flock complained that he was not advancing socialism but his own agenda.³² His collective had three numbers of the *Atheist* out by 18 December 1841, and nine issues in June 1842, by which time Hollick himself had sailed to America.³³ There followed another atheist print, the half-penny *Blasphemer*, which appeared on 1 January 1842, but, like the *Atheist and Republican*, "after burning for a while, [it] flickered and died".³⁴

At this point, Saull's long-time friend Henry Hetherington weighed in, with yet another atheist paper. In February 1842, he started the *Free-Thinker's Information for the People* (1842–43). It mimicked Chambers's respectable *Information for the People*, but junked the twee and anodyne and substituted the subjects on which "all such publishers are studiously silent", namely, a debunking of prophecies, miracles, supernaturalism, and gospels. It also had lashings of Hindu mythology and Pagan philosophy, all picked for their anti-clerical impact.³⁵

It was old-style confrontation appropriate to Hetherington's purpose. Saull's geological-perfection principle was as secondary as Owen's "beatific scenes" awaiting us in the new moral world. The object was to change society so the servant could sit at the same table as his master. Hetherington remained less interested in perfecting man than in removing the "curse" of the dispossessed.³⁶ Central to that curse was the village clergyman, educated among the gentry at Oxford University

31 OR 1 (12 Feb. 1842): 67; (6 Nov. 1841): 1. J. A. Secord 2000, 307; Rectenwald 2013, 235–36; Mullen 1992; Desmond 1987.

32 NMW 7 (20 June 1840): 1320; 9 (12 June 1841): 367; 10 (21 May 1842): 371.

33 NMW 10 (18 Dec. 1841): 200; 10 (25 June 1842): 424; Royle 1974, 75.

34 NMW 10 (1 Jan. 1842): 216; OR 2 (4 Feb. 1843): 62.

35 FTI 1 (1842); NMW 10 (12 Feb. 1842): 264; Royle 1974, 75.

36 PMG, 4 Apr. 1835; 12 Sept. 1835. Claey's 2002, 175–230. Claey's points out that Hetherington also doubted that home colonies would ever thrive without competition. By contrast, Saull stayed with Owen on this point.

or at Cambridge. His village presence with the magistrate and squire ensured compliance among commoners; as such, the clergy were seen as the policing agents. Hetherington's anti-clericalism never dimmed. It hardened further when he was charged with selling a "blasphemous" set of pamphlets—the Manchester socialist C. J. Haslam's ridiculing *Letters to the Clergy*—and given another jail term, four months in 1841. Saull chaired a meeting in John Street to petition Parliament for his release. But no one was sanguine of success, when the jailing was clearly for mixing attacks on clerical extortion with demands for equal rights for the poor.³⁷

Fresh out of jail, and angry, Hetherington commissioned articles for his *Free-Thinker's Information*. Despite his previous reluctance to use science, Hetherington now ran sermons in stone to illegitimate the clergy's spiritual sanction, but in an unexpected way. The opening article, on the "Mosaic Account of the Creation and Fall of Man", used geological immensity to contradict Genesis. It was penned by twenty-year-old Thomas Frost, a Croydon-bred printing apprentice, yet to fully grasp the Owenite doctrine of the "influence of circumstances" and trying his hand at writing.³⁸ It rehashed the story of those giants which so fascinated his generation: the exotic "Ichthyosaurus and Plesiosaurus, two gigantic sea reptiles ... the monstrous Iguanodon, the remains of which have been found sixty or seventy feet long", and so on. They had been mainly amphibious, Frost assumed, thriving in a torrid, oceanic world. Only two fossils of contemporary "marsupial animals" were known, real rarities, whose bones from their island homes must have washed down the rivers to be luckily preserved in the sediment. When dry land predominated, so did the mammals, and Palaeotheriums and mastodons became the new "lords of creation".³⁹ It was a simple story to score simple points. The earth had passed through untold aeons, an immensity of time beyond the ken of humans, let alone Genesis. And the *Iguanodon* and *Ichthyosaurus* were extinct, each genus had vanished, every species and every individual. The rock strata were ledgers of the dead. Mortality did not begin with Adam's fall; in nature's mausoleum, it had been recorded since time immemorial.

37 Hetherington 1840; NS, 27 Feb. 1841.

38 Frost 1880, 15; 1886, 40; Frost ODNB.

39 Frost 1842, 6–7; Desmond 1984 on the controversy over these first fossil mammals.

The interesting thing about Frost's piece, and possibly the reason why Hetherington published it, was that there was no perfectibility, the bedrock of Saull's geological Owenism. Saull swore that nothing but "Socialism fully carried out can meet or remedy the manifold evils that afflict mankind", and that a democratic education would put society back on the path to progress. He expected clergymen to fall in, and echoed Owen in believing that even "the highest ranks of society" would eventually follow suit.⁴⁰ Hetherington had long scoffed at the idea of the wealthy voluntarily relinquishing power and profit. The "designing knaves", using the Church "to perpetuate their plunderings", could no more join a co-operative than socialists could attain Utopia through tea parties.⁴¹ He had no need of Saull's "universal law" of fossil progression, still being heavily promoted to underwrite the march to the millennium.⁴² So, where Saull had commandeered the directionalist fossil record of the Oxford don, the Rev. William Buckland, Hetherington published Frost's article in the *Free-Thinker's Information*, which appropriated the discordant science of Charles Lyell.

Great authorities were needed to command respect. No matter that geology's gentrified exponents were otherwise anathematized by activists: by the canons of the age, the men of science were seen as rationally constrained by nature, which gave their scientific voice its validity. Because Genesis was directional—a miraculous sequence of creations culminating in Adam and Eve—Frost had Lyell offer a conflicting image. At £2 7s, six week's pay for a Dorchester Labourer, Lyell's three-volume *Principles of Geology* was aimed at wealthy readers. Genteel book buyers expected the conventional pieties. And since Lyell was to suggest that nothing stronger than today's climatic and volcanic forces were needed to change past landscapes, he was careful to assuage readers' fears that such did not apply to ancient species as well. Any hint that past life had been altered by everyday causes would have been morally reckless. What sort of delinquent would brutalize man by making him a better sort of ape? Lyell himself was revolted at the fantasy of a blood line imperilling man's immortal soul. So he crafted *Principles* to avoid any imputation of bad taste or judgement. He undermined

40 NMW 7 (20 June 1840): 1319–25.

41 Hetherington [1832], vi; *FTI* 1 (1842–43): 245–51.

42 NMW 8 (18 July 1840): 37.

talk of life's inexorable rise, undercutting potential evidence for the transmutation from 'lower' to 'higher' forms. The fossils pointed to no continuous upward direction, and any evidence to the contrary was an artefact of preservation.⁴³ This part of Frost's article was what attracted Hetherington: Lyell's denial of the "progressive development of life from simple types" in the old strata "to completer developments" in the later rocks.

In Frost's paraphrase, life was "complex and complete" from the first. There was no "gradual development", nothing to correspond to the Genesis of the Sabbath sermon. Armoured fish were turning up in ancient Scottish rocks, and scales and footprints possibly told of tortoises at the same time. Even the odd reptile had now been found in strata as deep as the coal seams. Mammals were absent from these early deposits only because of the odds against the preservation of their remains. At the time they had probably been living on scattered islands in the wide oceans, and their carcasses had not been preserved because they required estuarine sediments for entombing. But who knew what would eventually turn up? The first fossil monkeys had unexpectedly been found in the late 1830s. So perhaps ancient humans were awaiting discovery. This left a twin-pronged conclusion: that complex life was unimaginably ancient, and that "Millions of years are inadequate" to explain its entombing formations. Therefore, geology could provide no comfort to Genesis, whether of Six Days or Six Thousand Years. But the lack of progression also proved that there had been no natural trajectory towards Heaven or the Millennium.⁴⁴

By the time the *Free-Thinker's Information for the People* came out, Charles Southwell was in prison. Southwell had been an idiosyncratic Owenite, a fellow traveller who had not travelled very far. Having bridled at Owen's patriarchy and his truckling to Christians, he had founded the *Oracle of Reason* with a more confrontationist aim. It was an "exclusively ATHEISTICAL print",⁴⁵ whose calculated crudity raised the expected storm. The opening inflammatory articles were Southwell's, refuting God's existence and undercutting the clerical props of the Anglican state. The crudity peaked in the fourth number. Southwell's

43 J. A. Secord 1997, xxx–xxxv; Corsi 1978; Bartholomew 1973; Ospovat 1977.

44 Frost 1842, 6–7.

45 OR 1 (1842): Preface ii.

sexual frankness was uncommon for his day. It seems to have bordered on obsession, judging by his shocking *Confessions*. But coupled with his earthy delight in “old and rude” English, it could re-craft the Pentateuch as a depraved Shakespearean tragedy. The dramatist, who had “smelt the lamps”, could not resist playing the Old Testament as “a history of lust, sodomies, wholesale slaughtering, and horrible depravity”.⁴⁶ But the crudity cut much deeper. Where Owenites generally displayed a cultural generosity, he was a racist. He seemed at times to anticipate the race warrior Dr Robert Knox in dispensing stereotypical judgements (hence modern Greeks were a “pirating, lying people”; Egyptians “a degenerate race”, and so forth). And like imperial phrenologists he could place foreign heads beyond educational redemption: the small brain of the “Carib” or “stunted, dwarfish Laplander” rendered them immune to Owenite benevolence.⁴⁷

Southwell’s was a toxic combination. He rejected a Christian ‘soul’ encompassing all races; therefore he lambasted all talk of Adam and Eve as common parents of all races; and he rejected Owen’s forgiving cultural relativism. The result was a rarely seen moral drift and racism. When he lashed that “revoltingly odious Jew production, called BIBLE”, he was, as others have pointed out, cashing in on the prevalent “anti-Semitism as an alienation tactic”.⁴⁸ Southwell confessed that he meant the “Jew Book” diatribe to cause outrage “and, with that view, used terms the most offensive I was able to use.”⁴⁹ The old hands hated it. Carlile loathed the “splutter and clatter” of his socialist enemy and cancelled his subscription. Even the dagger-brandishing Julian Harney was saddened by the *Oracle*’s “ribaldry and disgusting language”—although, like Carlile, he contributed to Southwell’s prison fund. One wonders whether Saull was so disgusted. Here, after all, was the activist who had financed Taylor’s theatrical assaults on the “Jewish vampire”, and had supported Smith’s Antichrist—and he too routinely supported

46 OR 1 (1842): 25; Marsh 1998, 111–14; Royle 1974, 76; Mullen 1992.

47 Southwell 1840, 2–5, 10. Southwell had access to Charles White’s *An Account of the Regular Gradation in Man* (1799), which posited separate origins for the ‘lower’ black and ‘higher’ white races (OR 1 (1840): 5–6). Stenhouse 2005, examines how Southwell’s venom turned on Maori Christians after he emigrated to New Zealand in 1856, how he rejected amalgamation, or the notion that Maori could be civilized, and how finally he embraced genocide as an option.

48 Marsh 1998, 113; J. A. Secord 2000, 312–13; OR 1 (1842): 25.

49 Southwell 1850, 66.

Southwell's fighting fund. Others put Southwell's language down to an expletive tit-for-tat, the "same Billingsgate abuse" used in "Christian attacks [on] the Infidel".⁵⁰

Shrieking insults did indeed fly both ways. For Evangelicals, this atheist profanity was a warning that Satan's work was almost done. The *Oracle* fulfilled the prophecy of the sixth vial in Revelation—it was the "Unclean Spirit from the Mouth of the Dragon [the Devil]", spreading "its filthy slime over Christendom".⁵¹ But society was asymmetrical, Christianity was the law of the land,⁵² and Southwell was handed a year's jail term for blasphemy.⁵³

The sentence was a foregone conclusion, given the "somewhat rampant piety of the times", said the *Satirist*.⁵⁴ Large crowds demonstrated at the Halls of Science: 2,000 in Bristol, 1,400 in John Street, with Hetherington doing the branch rounds, starting petitions and collecting funds. Southwell's defence committee made sure that a faithful transcript of the trial, including his ten-hour defence speech, was published as part of the propaganda.⁵⁵ But the Owenite Central Board showed little sympathy, even if it deplored the state's "fierce intolerance". It found itself suddenly sensitive to "violent attacks upon the opinions or prejudices of our fellow-beings".⁵⁶

Young Turks sprang into action all over the country. A twenty-two-year-old in Glasgow, Robert Cooper, started a collection.⁵⁷ Cooper was a shooting star, destined to shine as brightly as Holyoake for a time. He was to the cause born: his father had been on the platform at the Peterloo massacre, and Robert was from the first generation to come out

50 Royle 1974, 75. G. J. Harney to G. J. Holyoake, 17 Nov. 1843, Holyoake Corresp. No. 102, Bishopsgate Institute; R. Carlile to G. J. Holyoake, 16 Oct. 1842, *ibid.*, No. 79.

51 Bickersteth 1843, 8, 21–22.

52 Southwell (*Investigator* [1843]: 71) claimed that the witch-burning Sir Matthew Hale invented that "silly sentence" about Christianity being part of the law of the land, "so often quoted as infallible wisdom, by the judges", as a pretext for crushing those who disrespected Christianity.

53 Southwell 1842, 1.

54 *Satirist or the Censor of the Times*, 23 Jan. 1842, 27.

55 *Nonconformist*, 19 Jan. 1842, 43; *NMW* 10 (22 Jan. 1842): 239; *NS*, 15 Jan. 1842; *CPG*, 5 Feb. 1842. The trial was well reported in the press with long coverage in the *Bristol Mercury*, 15, 22 Jan. 1842, *Weekly Chronicle* 22 Jan. 1842, 4; and *NS*, 22 Jan. 1842, with précis in many London and regional papers.

56 *NMW* 10 (11 Dec. 1841): 191; (25 Dec. 1841): 208.

57 *NMW* 10 (26 Feb. 1842): 280.

of Salford co-operative school, where he had heard Owen.⁵⁸ Evangelical spies smeared him as an “effeminate and affected-looking man”,⁵⁹ but he drew adoring crowds in the North. Like Southwell he had a functional approach to science: what holed and sank the biblical Ark worked. As an example, he held up the French anatomist Pierre Flourens, who found a skin layer in black people that was “altogether wanting” in whites, from which Flourens concluded that the races were “essentially and specifically distinct”. Cooper extended this to argue that they “must have originally sprung from *perfectly separate stocks*” to contradict the Adam and Eve story.⁶⁰ There was no suggestion that Cooper was following Southwell’s path, even if racists were to make Flourens’s findings part of the pro-slavery ideology in the 1850s and 1860s. Cooper stayed loyal to Owen and did not indulge in racial slurs. He had a Rousseauian respect for ancient Confucians and moral ‘savages’⁶¹ and used Flourens only with irreligious intent. But it does emphasize again how artisan atheism in the 1840s could open up potentially dangerous channels.

Cooper’s defence money joined the rest. And although the pleas on Southwell’s behalf to the Central Board fell on deaf ears, it could not stop a benefit concert at John Street. The urbane Saull did his bit: he chipped in, not much, ten shillings here, six shillings there.⁶² Whether this was out of duty, or real sympathy, was a moot point, since atheist breakaways obviously put Owen’s ally on the spot.

58 *LI 2* (May 1855): 28–29.

59 *Monthly Christian Spectator* 2 (Dec. 1852): 718; Royle 1974, 89.

60 R. Cooper 1846, 158–59. The substance (pp. 361–66) of Flourens’ article (*Annales des Sciences Naturelles* 10–Zool. [Dec. 1838], 357–66) was translated as “On the Natural History of Man” in the *Edinburgh New Philosophical Journal* (27 [Oct. 1839]: 351–58). Since Cooper was stationed at Kirkaldy (1842), Glasgow (1842), and Edinburgh (1843, 1845), this was probably his source. As a challenging speaker who drew Edinburgh students, he was actually invited in 1843 to attend lectures at the university. Those of “Professor Millar”, he recalled, “on Practical Anatomy were of eminent service to me”. Possibly this was the new (1842) professor of surgery James Miller, whose historical talks on Pictorial Anatomy discussed religious art. As a Free Church advocate who wrote Christian tracts for labourers (*Edinburgh Medical Journal* 10 [July 1864], 92–96), Miller would certainly have found Cooper a challenge. This gave Cooper “access to libraries in Edinburgh inferior to none” (*LI 2* [Dec. 1855]: 30). Such penetration of a higher learning institution was unprecedented among socialist missionaries.

61 R. Cooper 1846, 193–97.

62 *OR 1* (25 June 1842): 224; (2 July 1842): 232; *NMW* 10 (5 Feb. 1842): 256.

The Blending of Life and Society

Four issues of the *Oracle of Reason* were all Southwell printed before the authorities pounced. The legacy, though, was evident. Besides a flagship series of articles “Is There a God?” (to establish the paper’s atheist credentials), another series on “Symbol Worship” (on ancient Hindu and Egyptian religions, to decentralize Moses), there was a more cryptic third series. He initiated it with a teaser: an evocative illustration—the first in the *Oracle*—placed at its head: a near-naked, axe wielding “Fossil Man”. This accompanied the “Theory of Regular Gradation” series, which could occupy a quarter of each eight-page issue, and, continued by Chilton, would run to 48 articles across two volumes. All told, the series stretched to 80,000 words (the size of a book), and that before it spilled over into subsequent publications.

“Regular Gradation” sounds innocuous, but these were inflammatory words. They translate into something like serial transmutation: “the *blending* of one animal into another, the growing out of, or changing of, one form into another”, recorded in the rocks as a gradual progression of life forms from simple to complex. After untold aeons this resulted in mankind, “an animal so long in coming to perfection”.⁶³ A similar concept was shortly to be called “Development”, and, by 1870, the word “Evolution” was taking over, although conceptually very different by that point. Different, not least, in its usage: if nothing else, this overtly atheistic palaeontology in the 1840s left no doubt that the mutation of life was now a constitutive part of anti-clerical propaganda.

As schismatic freethinkers, Southwell and Chilton wielded disquieting doctrines like transmutation to assail the Church rather than support socialism or advance science. “Gentlemen, the learned counsel told you that I wished to reduce man to a level with the brutes”, said Southwell at his trial.⁶⁴ But while counsel was thinking of Southwell’s attack on mankind’s immortal attributes, the literal brute-levelling came in “Regular Gradation”. Whither the “dignity of the soul”, said Southwell in his talk on the tailed ancestry of man, and what use the divine, “were it proved that his flock were, after all, but the fiftieth cousins of sheep”.⁶⁵

63 Chilton, *OR* 1 (2 July 1842): 228; (14 Oct. 1843): 347.

64 Southwell 1842, 30.

65 Southwell, *OR* 1 [6 Nov. 1841]: 6.

This picture gave cynical satisfaction to the insurgent atheists. As hard-bitten editors, struggling through the 1840s' famine and depression, they were slapping down hauteur. The "ridiculous conceits" of the "more *nice-than-wise*" class took a lashing: a class puffed up with its supposed superiority, whose "false delicacy" about mankind's naked animality shielded it from the sordid truth.⁶⁶

How had Southwell got to this point? In two years, he had moved by leaps and bounds to attack human conceits at their core. As his Owenism loosened and atheism strengthened, his science became more extreme. At Lambeth in 1839, he had glossed "Man, in relation to other Animals", to show that mind as well as body "changes under the influence of external circumstances", but simply to set up the malleability of the human brain in phrenological terms, and its susceptibility to Owenite education.⁶⁷ By 1841, as the missionary rattled the bars of his Owenite cage in Birmingham and Bristol, he had moved on to "the true meaning of the book of Genesis", or "Life, Death—the Genesis account of the Creation".⁶⁸ In palaeontology, he now saw true potential.

What seems to have catalyzed his leap was an article with the baited title "L'Homme Fossile" in the popular French *Magasin Universel*. This capitalized on a spectacular find. In the 1830s, fossil human skulls, bones, and worked tools were turned up alongside extinct animal remains in caves near Liège. No one knew how old they were or even if they differed from modern skulls. But it was enough for the radical French geologist Pierre Boitard, in 1838, to title his article "L'Homme Fossile" and open with an ape-savage illustration. Despite its heading, the piece actually romped through the whole of fossil zoology, emphasizing the graduated rise of life. The title was a lure, and readers only encountered this fossil human on the last page.⁶⁹ But Southwell saw the potential. He cribbed Boitard's illustrations, pasting them into "Regular Gradation", including the monkey-faced "fossil man", and clothed the article's framework of gradual complexification with hardcore atheist apparel. Configured thus, the "Theory of Regular Gradation" would blossom into a full-blown naturalistic vision, cosmic in scope. Admittedly it

66 Southwell, *OR* 1 (13 Nov. 1842): "6" [13].

67 *NMW* 6 (14 Sept. 1839): 752; (12 Oct. 1839): 807.

68 *NMW* 9 (8 May 1841): 296; 10 (21 July 1841): 30.

69 Boitard 1838, 240. Rudwick 2008, 412–16; Grayson 1983, 6ff; Riper 1993, 61–63.

moved in a very ramshackle way from planetary formation and life's chemical origin through to an ape ancestry for mankind. And nothing was beyond its evolutionary scope, for, in Chilton's words, unbiased philosophy must admit "that the inherent properties of 'dull matter,' as some *bright* portions ... have designated it," are "sufficient to produce all the varied, complicated, and beautiful phenomena of the universe".⁷⁰

Southwell was still looking imperiously *down*—from the Caucasian crowning heights, from the destination which life aspired to. Hence the "fossil man" he pictured was "man undeveloped".⁷¹ No longer monkey, he was not yet man, but was gazing upwards. The aspect "higher" and "lower" dominated the natural world no less than the social. And, although Southwell and Chilton chafed at the latter, they tacitly accepted the former (as did almost all men of science in the 1840s). They saw mankind as nature perfected—hence the *serial* transmutation. Life was trundling up towards its apotheosis.

On Southwell's jailing, Chilton—who said he had held similar views for "several years"—took over the "Regular Gradation" series, beginning on 19 February 1842. He immediately introduced more modern sources.⁷² He plundered geological and medical tomes, quoting verbatim passages about ascending fossil sequences. As Southwell had said, kicking off the series, fossil animals were "in a state of continual flux"⁷³ and changed gradually into more complex forms. Chilton explained that they did so because the "life-producing and life-sustaining" environment of each age increased, as Saull had argued from Phillips's postulates, and this resulted in an expanding number of varieties and their more modern appearance. As ever, he resorted to the Owenite-Lamarckian stand-by of environmental modification, according to which the developing species "either accommodated themselves to the different circumstances, or became extinct".⁷⁴

70 Chilton, *OR* 1 (19 Feb. 1842): 77.

71 Southwell, *OR* 1 (20 Nov. 1841): 21.

72 Chilton, *OR* 1 (19 Feb. 1842): 77. His sources included geologists Henry De la Beche, Charles Lyell, John Phillips, and William Buckland, and comparative anatomists Robert Edmond Grant, Richard Owen, W. B. Carpenter, Thomas King, and George Newport, although Chambers' *Information for the People* seems to have been the stock source.

73 Southwell, *OR* 1 (20 Nov. 1841): 21.

74 Chilton, *OR* 1 (11 June 1842): 204–08.

Wealth and Power

No freethinker had covered the inflammatory subject so exhaustively before or exploited such up-to-date sources. If this kind of thinking was suffusing the pauper presses, Chilton knew why so few gentlemen savants were prepared to believe it. Carlile, in typical 1820s' language, had seen the squirearchy of science "crouched to the established tyrannies of Kingcraft and Priestcraft".⁷⁵ Chilton now tore into state-sanctioned knowledge likewise, looking at it through class spectacles. The *Oracle* slated authorized science as "a matter of traffic and trade amongst the *savants*, and the higher classes", with polite geologists looking to support from "right reverends, right honourables, &c., in fine, on those who are interested in keeping up the usual common-place *go* in society".⁷⁶ Chilton was not so naive to believe that his materialist science would turn minds, which it could only ever have done in his alley audience. If nothing else, as Secord says, elite science grounded its political authority in expert factual knowledge.⁷⁷ The gentlemen argued that this was arrived at by a royal road of inductive reasoning based on lengthy observation and time-consuming travels, something which put it beyond the reach of women and the working classes. It was the standing of the wealthy 'experts' which gave official science its imprimatur. As Steven Shapin puts it, the claim of true knowledge was assessed according to criteria of personal competence. This relied on trust, which itself was socially generated. And in an age when gentlemen savants were barely distinguishable from their social peers,⁷⁸ those assessments were largely class based, meaning the socialist "scum" were denied a hearing as untrustworthy fanatics.

It was the intractable class nature of the interpretive authority, backed by wealth and rival clerical power, that Chilton was up against. Elite gentlemen were not going to change their minds. But Chilton was not talking *to* them, nor were they listening. The closest the dons and divines came to his trash was to tut-tut about the show trials reported in

⁷⁵ Carlile 1821, 101.

⁷⁶ *OR*, 29 July 1843, 261; Chilton 1842.

⁷⁷ J. A. Secord 2000, 312–13.

⁷⁸ Shapin 1990.

their morning's *Times*. Chilton was actually persuading his angry alley followers of the bias of bourgeois science backed by wealth.

Wealth bought the old order time to indulge. As an old revolutionary (and Saull neighbour) said, "literary pursuits, like law suits, are beyond the means of those who cannot command means to enforce their claims."⁷⁹ Chilton was gazing at another world. He could not have entered the manor's front door, let alone have sat at the same table as a geological savant. It was the tradesman's entrance for him. Though in a higher trade, he probably earned about 48s a week,⁸⁰ so much small change for the rich. On a tight wage, he could only dream of the sums attracted by the geological gentry. The Rev. William Buckland was paid £1000 out of the Earl of Bridgewater's estate to write his *Geology and Mineralogy* (1836)—the book bastardized by Saull and Chilton—on the stipulation that it exhorted "The Power Wisdom and Goodness of God as Manifested in the Creation".⁸¹ As "Regular Gradation" was running, Buckland was chivvying Prime Minister Sir Robert Peel to give his devout Anglican and anti-transmutationist protégé Richard Owen a Civil List pension, a top-up of £300 a year for life. Owen was awarded it after his religious respectability and scientific potential were vouched safe. It was a Peelite prop which would allow a lifestyle to match his scientific rank.⁸² Respectability brought its own reward.

What was said of other talented activists would have applied to Chilton, that "had he been less poor he would have been more famous".⁸³ Although the *bon mot* is not as profound as it seems, because it was poverty-inducing inequality that turned Chilton into an activist grinding a fossil axe. Looking at some of the obscenely rich geologists of his world explains why. Take the "King of Siluria" Roderick Impey Murchison, former military man turned geological imperialist, who followed his Silurian System into Russia, annexing the rocks as it were. He could afford to be conceited. He once lost £10,000 on a single railway speculation, which gave some inkling of his fortune. As a haughty Tory, with a mansion in Belgrave Square, he had a ludicrous "thirst for

79 Allen Davenport's words: *Reasoner* 2 (16 Dec. 1846): 18.

80 *LMR* 1 (13 Nov. 1824): 28.

81 Topham 1992.

82 Desmond 1989, 354–57.

83 *Reasoner* 2 (16 Dec. 1846): 18.

honours" that was duly sated by the Russian Tsar. Though a religious doubter, unconvinced of Christ's divinity, still the old soldier declared he would "stoutly fight for the Church, as a great and essential moral engine".⁸⁴ The Anglican proprieties were kept up along with the appearances. And what glittering appearances: Murchison's Belgravia mansion saw 700-strong *soirées*, and a young John Ruskin attending one in 1842 was agog: "rooms all pale grey & gold—magnificent cornices—with arabesques like those of Pompeii in colour, furniture all dark crimson damask silk & gold ... at least four footmen playing shuttlecock with peoples names up the stairs." Even he admitted this was "coming it rather strong".⁸⁵

So Chilton's question to his poor readers came down to this: if, as he believed, theology and science were "natural enemies", why had they entered into a "hollow conspiracy" during the "fashionable reign of the Bridgewater treatises"? The likes of Murchison provided the answer. To the unemancipated and disenfranchised, the self-constituted guardians of knowledge were using pro-Christian, anti-democratic science to sustain their wealth and rank. For another *Oracle* editor this was why they "ignominiously betray their trust" as "expounders of truth".⁸⁶ To share in the rewards from the exploitation of labour, they were prostituting their science, or such was the radical view on the street. And the rewards were great: the pauper presses were quick to point to the clergy having a financial stake in the status quo: the £9 million collected in tithes and taxes that would be forfeit by secularizing society and disestablishing the church.⁸⁷ But that would be nothing to their losses if democracy followed. Not that there was a chance: Lyell, Murchison, Sedgwick, Buckland, all had a horror of being swamped by the underclass. Lyell spoke for all when he said that good breeding, superior education, and independent station made proper leaders, not a popular vote.⁸⁸

A gruff Dalesman, the Rev. Adam Sedgwick, had cracked the Cambrian system, but he, too, conflated the natural and social strata,

84 Geikie 1875, 1: 263; Stafford 1989, 6, 15, 190, 209; J. A. Secord 1982.

85 J. A. Secord 1986b, 123.

86 *Movement* 1 (1 June 1844): 196–97.

87 Hetherington [1832].

88 Lyell 1849, 1: 33.

no less than Saull or the *Oracle* activists had done. Preaching to the coal-blackened colliers, he reminded the “rabble” of the providential aspect of the coal industry and their own beneficial relations to mine-owners and capitalists, superimposing the moral, economic, and geological orders to gird up class barriers. Even ignoring the atheists’ onslaughts on the Christian faith, their very language was threatening to him: the concept of blending “lower” into “higher” was abhorrent. Sedgwick might have been a Whig and mildly reformist, but the preservation of rank, with all its moral attributes, character, dignity, and ornament, was still of paramount importance to him. Even if he did “wish that the barriers between man and man, between rank and rank, should not be harsh, and high, and thorny; but rather that they should be a kind of sunk fence”, it still had to be “sufficient to draw lines of demarcation” between them. Blending was impossible; this was God’s ditch. As in society, so it was in nature. God’s “elevation of the Fauna of successive periods” was by “creative additions”. Successive groups were introduced—Fishes, Reptiles, Mammals, Man—each with “an organic perfection corresponding to their exalted rank in Nature’s kingdom”. The suggestion by blaspheming democrats that the “lower” could push itself up and transmute into a “higher” rank was anathema for blurring these God-given boundaries.⁸⁹

What Chilton saw as conscious exploitation was a far more tacit, nuanced, and complex situation. In a pre-professional age, the elite practitioners were invariably Oxford and Cambridge divines, or trained by them, or else wealthy ex-lawyers, military officers, or medical men. In entry ledgers, under “Occupation”, they would write “Gentleman”, to distinguish them from the ‘lower’ orders. That is, they were financially independent, with the time and wherewithal to indulge their passion for the rocks. They could afford to buy and write expensive tomes, and stump up exorbitant society fees. By controlling the learned societies and publications, they became the self-declared arbiters of content and taste. Many had a dual calling: Buckland would become dean of Westminster, Sedgwick added to his Cambridge professorship a prebendary at Norwich Cathedral, which he hoped would net him £600 annually for

89 Clark and Hughes 1890, 1: 515–16; 2: 47, 189; Morrell and Thackray 1981, 31–32, 127.

two months' attendance.⁹⁰ Others would be knighted—Davy, De la Beche, Murchison, and Lyell. Even that young anti-radical and anti-materialist medical professor Richard Owen—already entertaining Prince Albert in his Hunterian Museum and arranging for his own portrait to be hung at the Prime Minister's country house—was to be offered one. All would court their Royal Highnesses. Owen, having been fitted by the palace tailor for the necessary cocked-hat and "elegant attire", would go on to teach the royal children at Buckingham Palace.⁹¹ Lyell was on intimate terms with the Prince Consort at Balmoral.⁹² These scientific gentlemen had more than a stake in the status quo. They were closely knitted into the power structure at a personal level.

For science to succeed at an institutional level, it needed titled and royal patrons. A "By Appointment"-status conferred conviction and gravitas; it helped elevate its ranking alongside the proper professions. And the improving aristocracy, as guardians of morals, manners, and Mammon, saw it as part of their public calling to officiate at these learned bodies. Duty might only mean an honorary station, but the trickle-down effect was palpable. Thus the British Museum was run like a rotten borough. The clergy and nobility considered it a show-piece for the nation's treasures, not necessarily somewhere to advance knowledge. It was revealed in their *noblesse oblige*. Appointments, in the gift of the trustees, headed by the Archbishop of Canterbury, were restricted to safe men of science, while librarians and functionaries were enlisted "from the inferior departments of the church and public offices".⁹³ The Zoological Society was top-heavy with noblemen, who were intent on turning the Zoo into a game park, which promised delicacies for the gentleman's table. The aristocracy conferred prestige; they also attracted patronage, meaning the Zoological Society quickly acquired its royal charter. They could underwrite its success and negotiate face-to-face with government ministers, especially if they required land (as in the Zoological's case in Regent's Park).⁹⁴

90 Clark and Hughes 1890, 1: 435.

91 Desmond 1989, 358; Rev. R. S. Owen 1894, 1: 246–47, 353–55; 2: 98.

92 K. M. Lyell 1881, 2: 156–58.

93 *Hansard* 1836, 31: 308–12; Desmond 1989, 145.

94 Desmond 1985a, 226ff.

Premises too were in the administration's gift, and it was the government which granted the Geological Society its spacious apartments on the site of a former palace. Somerset House, on the busy Strand, was a "magnificent" quadrangular edifice of solid granite, a pile that spoke of permanence and security. With its exquisite statues "consisting of the arms of the British empire, supported by the Genius of England, and Fame sounding her trumpet", the state building would confer patriotic prestige on the Geologicals. It too had royal connections as Queen Caroline's former town residence. Moving here put the geologists alongside the prestigious Royal Society, Society of Antiquaries, and the Royal Academy with its fashionable art exhibitions. But it also put them beside something more sinister. The imposing block was actually a government administrative centre, the income tax and audit office, and, to the horror of campaigners, home to the hated Poor Law Commissioners. The Geological governors sat under the same roof as the "Tyrant of Somerset House", responsible for incarcerating the old and unfortunate—while the cry on the street was for "freedom from the despicable bondage of the 'lickspittle' despots of Somerset-house and Downing-street!"⁹⁵

The Geological's apartments provided a traditional gentleman's club facilities, with reading and lounging rooms.⁹⁶ The same geological squires effectively controlled the British Association for the Advancement of Science. Here again, faced with agitation for "fierce democracy", they rendered it a peripatetic vehicle of calm knowledge, and the odd radical recalcitrant who tried to rock the boat quickly found his avenues for advancement blocked off.⁹⁷ The scientific barons were committed to a pyramidal social structure propping up a wealthy intellectual elite. At most, they promoted gentle reforms as a panacea for working-class discontent. For them, scientific truth had a very different moral dimension. It encompassed responsibility and social stability, and spoke loudly against radical redistribution. It tacitly underpinned 'creation'

95 Baxter 1841, 36; Young 1960, 50; Bartlett 1852, 176–78; Brady 1838, 77; G. N. Wright 1837, 2: 671; Cruchley [1831], 28. Political ties between science and state were also ensured by the huge back-bench presence of Members of Parliament in all the learned societies. In the Zoological Society, nine per cent of members were MPs (Desmond 1985a).

96 Rudwick 1985, 23.

97 Morrell and Thackray 1981, 302, also ch. 1, and 245–56.

and subordinated matter to a guiding Will, whereupon 'duty' could be dictated by Church authority.

This was what an impoverished Chilton was raging at in 1842, during the death and starvation wrought by the economic depression. Where Owenites saw the scientific bosses acting according to their station, Chilton attributed base motives. They were traitors to true science, he seethed in "The Cowardice and Dishonesty of Scientific Men". They lacked the "honesty" to come clean about its materialism, opting to lay it at the Christian altar to preserve their privileges. The knights of science were in league with the political and clerical masters, finding it in their "interests to keep us in this position". "This is the unkindest cut of all; coming as it does, from those who should pour the balm of hope upon the despairing and wounded spirit; instead of which, They smile, and murder us while they smile!"⁹⁸

The scientific Eucharist was handled like "contraband goods," religiously cloaked and kept among the cognoscenti "lest the trade and tithes of the priest be injured".⁹⁹ That religious profiteering amounted to "Nine millions of money", seethed Hetherington, "the greater part of which is paid to lazy luxurious bishops, the younger scions of the aristocracy, or to deans, chapters, deacons, vicars, rectors, &c., &c., most of whom are non-resident, fox-hunting, dissipated, immoral, and unprincipled".¹⁰⁰ The activists were convincing the dispossessed that a self-transmuting nature sanctioned social action against this enemy. Out went the priests' "puerile" notion of "creation".¹⁰¹ No more could life be conjured up at the beginning, out of nothing, than continually, through geological time by a Deity. Instead, the militants promoted an image of spontaneously emerging and self-rising animals and plants. The idea of a ceaselessly tinkering God was laughable—fit only for that joke by Saull's fellow financier Julian Hibbert: "It must be dull work to be eternally trundling a wheel-barrow, and perhaps hard work too for an incorporeal Being."¹⁰² The strata showed lowly species growing into complex ones. But no Almighty craftsman would have worked this way.

98 Chilton 1842, 194.

99 Carlile 1821, 111, 120.

100 *FTI* 1 (1842–43): 251.

101 Chilton, *OR* 2 (14 Oct. 1843): 347.

102 Hibbert 1828, Appendix 3: 7; *Investigator* (1843): 26.

To push the point home, Chilton used a shop-floor analogy: “we do not find a coach-maker, when he has to build a nobleman’s carriage, begin by making a mud cart or pair of trucks.”¹⁰³ Life had built on itself, pulled itself up by its own bootstraps—a perfect artisanal metaphor broadcast by umpteen autodidacts. This self-striving world of life, powered from below, legitimated democratic change. Nature did not need divine sanction, any more than the social atoms needed patrician permission. Sovereignty rested with them: that was their democratic mandate.

The *Oracle* hardliners chipped away at Christianity’s defence of creationist miracles and revelation, but they also hammered hard at “design”. The 1840s saw newer, sophisticated approaches to “design”, based on the archetypal plans linking various animal groups. The most prominent was in another Bridgewater book with a £1000 payoff, *Animal and Vegetable Physiology Considered with Reference to Natural Theology* by P. M. Roget (of thesaurus fame).¹⁰⁴ But the *Oracle* protagonists took aim at a much softer target. That was Archdeacon Paley’s by now decrepit argument underpinning other Bridgewater Treatises, that God’s existence and benevolence could be deduced from the perfect fit of each species to its niche. Such a degree of planning showed foresight, therefore there must be a caring Planner. These old “proofs of design” were “sadly hacknied”, said Southwell; parsons learn the argument “from Paley, Paley stole it from Condillac, and where *he* got it from is not of much consequence”. Others forgot the argument and went for the jugular, with the ultimate ad hominem, that Paley was “the greatest drunkard and debauchee of his time”. And the argument itself left great scope for facetiousness. That eyes were made to see was as silly “as to say that stones were *made* to break heads, legs were *made* to wear stockings, or sheep were *made* to have their throats cut”.¹⁰⁵ So said Southwell, continuing his series “Is There a God?” while sitting in jail.

Not only was there no “design” but, given the unemployment and starvation in the depression, the hubris of Paley’s “happy” nature seemed outrageous. Far from seeing nature teem with delighted existence, the

103 Chilton, *OR* 1 (11 June 1842): 206.

104 On the history of this book, and how Roget was domesticating (cribbing, insiders said) the radical anatomy of Robert Edmond Grant at London University, see Desmond 1989, 222ff.

105 Southwell, *OR* 1 (19 Mar. 1842): 109, 111; (8 Jan. 1842), 61.

struggling Chilton swore that “all nature cries aloud” against such nonsense. Only parsons living luxuriously on tithes wrenched from the down-trodden masses could fancy nature as a hymn to God’s goodness. This was “worse than ridiculous”, it was a “vilely pernicious teaching”.¹⁰⁶ Exposing Paley’s “happy” world—where “all is for the best” with everything in its proper place—was intended to bring the back-broken poor aboard. Cynical *Oracle* activists, looking from below, exposed its dark underbelly. Why had not the squires’ deity designed “less suffering and more enjoyment, less hypocrisy and more sincerity, fewer rapes, frauds, pious and impious butcheries?”¹⁰⁷

Chilton’s “Regular Gradation” series fought on many fronts. As a result, it quickly began to lose coherence. It interspersed attacks on Genesis and design with descriptions of fossil life and digressions on anatomy. Eventually Chilton lost his way in the arcana of comparative anatomy: for nineteen issues he trudged through the organs and tissues of the animal kingdom, lifting whole sections from a medical student’s compendium.¹⁰⁸ Readers complained. They could not see the relevance of undigested comparative anatomy, and they had a point. These illegal prints, bought from street sellers dodging the authorities in working-class neighbourhoods, were violent, angry, and served an immediate purpose. Tolerance only extended to science so long as it had meaning for the struggle. The series had gone off target and some called for it to be scrapped. To pave the way for popular sovereignty, knowledge had to function; the more esoteric it was, or bogged down in minutiae, the more useless. It needed to be simple, demystified, in a word (and an ugly one) “unintellectualistic”.¹⁰⁹ The complaints led to apologies for the “uninteresting and unpopular manner” of the digressions.¹¹⁰

But lack of coherence had a more mundane cause too. Chilton was beset with difficulties—accidents, police raids, and the imprisonment of his fellow editors all helped to break the narrative thread. At one point, five of his friends were in prison, and Chilton was campaigning on their behalf, raising bail, attending court, lecturing, and writing

106 Chilton, *OR* 2 (11 Nov. 1843): 379.

107 Southwell, *OR* 1 (7 May 1842): 165.

108 He was cannibalizing Evers 1838, a hundred-page digest based on the latest works of R. E. Grant, R. B. Todd, P. M. Roget, and others.

109 Johnson 1979, 84–85, 94.

110 Chilton, *OR* 1 (15 Oct. 1842): 356; 2 (24 June 1843): 220.

thirty to forty letters a week.¹¹¹ All of this had to be squeezed into spare time outside of his ten-hour working day as a compositor. His hectic life shows that even the practise of writing could be very different for a man in his position. A gentleman's wealth bought him the leisure to read and write, often (as in Charles Darwin's case) with an amanuensis who would make a fair copy, which would go off to the publisher—and then, in Darwin's case again, he would doctor the proofs at colossal cost, forcing the printers to re-set the type.¹¹² For a scrimping, rushed compositor, for whom time really was money, there was no such luxury. Chilton would have to camp at his works for two or three weeks at a time. "My life was a continual race; I had not proper time to eat, to sleep, and certainly not to think." Some articles were actually set straight to type on the frame, which explains the series' fractured nature. Nor was the series financially rewarding, or the *Oracle* financially viable. Only Chilton's pay cut to subsidize the publisher and a cash float from a John Street insider (we do not know who) kept the paper solvent.¹¹³ But it left Chilton in poverty.

Composed on the fly, his pieces had a searing tone which told of a militant who thought on his feet. That in itself led to a certain serendipity. Impromptu modifications and digressions could be dropped in weekly. For instance, the appearance of Hetherington's *Free-Thinker's Information*, which denied any "progressive development" to give Genesis the lie direct, caused Chilton to take evasive action. He argued that fossil families in "each stratum" might show a simple to complex gradation. Because life, like Owenite man, accommodated to conditions, environmental changes in one period might encourage an extended progression. In the next stratum, simple life would re-appear and start *its* journey upwards. No longer was ascent unilinear or straightforward, even if there was an aggregate increase in complexity. With this, Chilton explicitly ditched a "continuous, *uninterrupted* chain of progression",¹¹⁴ and adopted a more complex image. Although it was never spelt out. Nor was his new image necessarily a genealogical tree. He possibly had in mind a "hundred"

111 Chilton 1847.

112 Desmond and Moore 1991, 322, 325, 596.

113 Chilton 1847. For the stress of other newspaper compositors, see W. E. Adams 1903, 2: ch. 38.

114 Chilton, *OR* 1 (30 Apr. 1842): 159.

parallel lineages, all springing from simple, spontaneously-originated ancestral stock, and each reaching a different level.¹¹⁵

The lurching series was also contingent on the literature that fell his way. A disinterred monkey's jaw bone was noticed to show that long-missing fossils could unexpectedly turn up.¹¹⁶ Elsewhere, he exploited old Jamaica lobby books and cannibalized passages which suggested that humans were so many separate species.¹¹⁷ Ideas and illustrations would turn up in the *Oracle* undigested and disconnected, thrown in with little commentary. How best to introduce Lamarck and his notion of chimpanzees standing erect, freeing their hands, converting warning cries into speech, and emerging as men? Turn Lyell upside down—and that is what Chilton did through five instalments. He simply imported verbatim passages from Lyell's refutation of Lamarck in *Principles of Geology* and stripped out each and every caveat to leave a positive image.¹¹⁸

Human origins were demystified for naked politico-religious reasons. Like Saull's Owenites, the *Oracle* splinter group was antagonistic to any notion of an "immortal principle"¹¹⁹ that would put humans under Divine obligation and legitimize a powerful priesthood. The series was *for* the downtrodden—to show them that the elite puffed "men up with the absurd notion that they are an anomaly among animated existences"¹²⁰ as an excuse to police the poor. It was a defence against clerical protagonists who still asked, as they had in Carlile's younger day: "how can you account for natural phenomena without a god?"

The use of such tactics showed its heritage in the Owenites' policy of engaging Christians in public debate. These familiar spectacles gave the *Oracle* series its structure and dialectical value. Hence Chilton's conclusion:

If atheists can show that matter may make a man ... theists will waive all other objects to materialism. The object of this series of articles ... was to show the reasonableness of the belief that matter can make men

115 As envisaged by Hodge 1972.

116 Chilton, *OR* 1 (2 July 1842): 229.

117 Chilton, *OR* 2 (22 July 1843): 253.

118 Chilton, *OR* 2 (12 Aug. 1843) 279, and subsequent issues.

119 Chilton, *OR* 1 (26 Feb. 1842): 83.

120 Southwell, *OR* 1 (13 Nov. 1841): 5.

and women, and every other natural phenomena [*sic*] —unassisted, undirected, and uncontrolled.¹²¹

The militants, like their Enlightenment heroes, had faith that the “Augean stable of religion, fouled and polluted by human blood and misery, will yet be swept with the flood of science.”¹²² Nor did they doubt transmutation’s serviceability, and the unaided progression of life became a cornerstone of their strategy for social and political betterment. With this enormous “Theory of Regular Gradation” series stretching across two years, rambling and fragmented though it was, Chilton had provided a major asset which redefined the science of emergent organic change for the republican, deist, and socialist market.

Saull’s geology lecturing—pale by comparison—was effectively rendered redundant, and the furore surrounding the *Oracle of Reason* put his merchant position even further in jeopardy. Whether as a consequence or not, in the 1840s he would switch to a study of the last stage of the human ascent, local British aborigines. This too was more suitable given his growing involvement in the London archaeological community.

121 Chilton, *OR* 2 (11 Nov. 1843): 379–80.

122 Chilton, *OR* 1 (9 Apr. 1842): 135.