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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

7. Monkey-Man —The Bristol Lecture 1833

... one of the most impressive and interesting lectures that has ever been delivered in Bristol.

Carlile on Saull's outrageous evolutionary speculation.¹

Having offered to lecture to provincial co-operative branches, Saull found himself talking geology in Bristol in August 1833. He was either invited—probably by the First Bristol Co-operative Society, in Old Market Street²—or he was in Bristol on business and opportunistically speaking at the co-op. The Atlantic port, with its shipping ties to Bordeaux, Spain, Portugal, and Madeira, was at the centre of the wine trade. Here Saull would have come to pick up hogsheads of claret, sherry, and port, or rum from the West Indies. Perhaps that was what brought him here that summer; certainly “it was his custom to take every opportunity of delivering lectures on geology” while travelling on business.³ Now, finally, we have a transcript of one of his lectures, reports having been inserted into Carlile's *Gauntlet* and another published in the Owenite *Crisis* by its new editor.⁴

Most Saull lectures we know only by title. His talks in back-street London⁵ would be simply listed as “Geology”, or “Evidences of

1 *Gauntlet*, 29 Sept. 1833.

2 *Crisis* v1 (14 July 1832): 71–72.

3 *Monthly Notices of the Royal Astronomical Society*, 16 (1856): 90.

4 *Crisis* 3 (5 Oct. 1833): 36–39; *Gauntlet*, 29 Sept. 1833, 529–33.

5 Throughout the thirties, he would speak at the Western Co-Operative Institute off Oxford Street, at Owen's Institution 14 Charlotte Street, the Society for the Acquisition of Useful Knowledge in Bedford Square, the Great Tower Street Mutual Instruction Society, the Rational Institution in Curtain Road, the East London Branch of the Association of Rational Socialists in the Mechanics' Hall of

Geology", or, in one case, "Geology in reference to Human Nature". In another we have a bald strap line: his threepenny talk at Charlotte Street on 2 December 1834: "Lecture on the FORMATION of the EARTH, and the Real as well as Probable Revolutions it has undergone to produce the present state of Organic Nature".⁶ Only the Bristol lecture was ever apparently reported verbatim. So the sort of geology he was promoting in the co-operatives and in his museum has to be gleaned from this.

Standing back for the moment, we might consider how geology was used and received at the time in order to understand Saull's uniqueness. The socialists' geological punch in the 1830s largely came from their emphasis on the antiquity of the earth and the evidence of death before Adam. Both were seen, if not to de-legitimize scriptural literalists, then at least to make them uncomfortable. Hence the *Church of England Magazine's* innuendo about socialists outraging Revelation by starting their Sabbath sermonizing with a geology lecture.⁷ It was part of the reason that geology was considered necessary for a socialist education.⁸ The other part was their Enlightenment faith in the redeeming value of science: following nature's law would lead to moral elevation. Not merely moral, but social: materialist science was to be the immovable bedrock underpinning the new co-operative system of harmonious, class-less social relations. As so often, the "is" of nature was being made a justification for the "ought" of politics.⁹ The London Owenites would advise branch lecturers to teach geology, chemistry, and astronomy to demolish the props of the old immoral world, and to make geology one of the axioms of a rational school education.¹⁰ Undermining Genesis would undercut rival pulpit-power, which had a tenacious hold in a city with 400 churches.¹¹ By proving a far-distant "Age of Reptiles" (as Saull's friend Mantell was calling it), so contested in literalist Christian circles, and the primeval prevalence of death (so graphically displayed in fossils), socialists could argue that death was not due to the wages

Science in City Road, Finsbury, at the Social Institution, 23 John Street, Tottenham Court Road, as well as lecturing the Bristol and Leeds socialists.

6 NMW 1 (29 Nov. 1834): 40; 3 (12 Nov. 1836): 20.

7 *Church of England Magazine* 9 (1840): 120.

8 NMW 9 (13 Feb. 1841): 91.

9 Bloor 1983.

10 NMW 6 (24 Aug. 1839): 704; (5 Oct. 1839): 789–91.

11 *Cosmopolite*, 29 Sept. 1832, in HO 64/18, f. 652.

of sin. Animals died before Adam transgressed, the first appearance of death had nothing to do with a mythical fall of man. Such subversive claims made fossils particularly ticklish for many evangelicals and biblical literalists.¹²

Owenite organs featured a plethora of reports on the antiquity of the globe to expose the “errors” of the priests, on Mosaic “Days” twisted into thousands of years, on death entering the world with fossil carnivores, ultimately on the “false” notion of mankind’s Fall and the “true” geological base of socialism’s ever-perfecting world.¹³ This was becoming the stock stuff of socialist demagogues to counteract the placard-carrying Christian missionaries outside their halls. Geology was necessary for socialism to prove that perfectibility, not depravity, maketh man.

Geology was practically placed in opposition to the pulpit. Sometimes this was literally so, as for an Edinburgh social missionary who would later report:

We have just established a geological class, from which we anticipate good results, especially when we consider that we are surrounded by one of the most favourable geological localities in the kingdom. Will it not be delightful to march, en masse, with hammer in hand, to some favourable spot, and there read “sermons in stones,” &c., on some fine Sunday morning? what a difference to being pent up in one of your cold dissenting chapels.¹⁴

Geology was pushed as a propagandist tool. Could it not convert the faithful unaided?, it was asked, after an Irish Catholic-turned-socialist started sending museum specimens to Owen’s Institution.¹⁵ As a result of this multivalent justification, geology was invariably lashed to atheism in anti-blasphemy rags: here mosaical was pitted against mineralogical, and the “low-minded” were condemned for wresting false science to

12 Biddulph 1825, 123–39; *Christian Observer*, Feb. 1829, 91–96; June 1839, 345; NMW 6 (27 July 1839): 646. O’Connor 2008, 210, for the *Christian Observer*’s editorial angle on geology.

13 NMW 1 (12 Sept. 1835): 364; 4 (20 Jan. 1838): 101; (16 June 1838): 268; (22 Sept. 1838): 389; 6 (27 July 1839): 646; (5 Oct. 1839): 788; 7 (16 May 1840): 1205; (6 June 1840): 1280; 9 (27 Feb. 1841): 128; (17 Apr. 1841): 247; 10 (14 Aug. 1841): 55; 11 (21 Jan. 1843) 243; 11 (18 Mar. 1843): 294.

14 NMW 11 (24 June 1843): 434.

15 NMW 10 (25 Sept. 1841): 95.

blasphemous ends.¹⁶ Infidels were known to be twisting geology to undermine scripture¹⁷ and to weaken the moral arm of the state. In the end, "Geology was suspect because it provided the easiest infidel ammunition for factory activists, as the shop floor testified."¹⁸ With the science so much the rage, and so "perverted to infidelity", it became essential for ordinands to master it in order to reassure their flocks.¹⁹ With radicals and co-operators trying to demolish the tithe system and disestablish the Church, breaking its "Adulterous Intercourse" with the state,²⁰ socialist lectures were expected to be subversive, irreligious, and concentrate on antiquity and death. Saull did not disappoint; he went much further.

Even if geology was a legitimate science, the fear for the faithful was always that some clever Voltaire would make great play of the successively recreated worlds, as an Oxford don told the *Times*.²¹ And focussing our microscope on Saull's stratum of society, we find plenty of noisy Voltaires. At one end was the extremist Julian Harney, the future Marat of Chartism, with his red cap of liberty, waving his dagger during public meetings to make a point, who started from first geological principles to claim his red republic.²² At the other was the mild moral-force Saull, for whom a self-progressing fossil life pointed to Owen's future perfect society. These activists mined out all the political ore they needed.

One other premise marked many socialist lectures: that some inherent power in nature underlay its self-propulsion. Primitive man was himself "generated by Nature". It was said time and again, and it made opponents shudder. Protagonists asked what it meant. To Benjamin Godwin, combatting Bradford's infidels in his *Lectures on the Atheistic Controversy* (1834), the assumption that "unintelligent matter" could rearrange itself to make a human was an "absurdity". Nor was the metaphysics any less gobbledygook. If, talking of "the necessary laws of

16 *The Age*, 8 Jan. 1837, 5.

17 *Atlas*, 2 July 1837, 424; *Albion and The Star*, 16 Sept, 1834, 3.

18 *Nonconformist*, 22 Nov. 1848, 888.

19 *Atlas*, 12 Nov. 1842, 730.

20 HO 64/12, f. 152.

21 *Times*, 26 June 1845, 5.

22 *Democratic Review* 1 (June 1849): 9–10. On Harney: Epstein 1994, 19–20; Lovett 1920, 1: 207; Holyoake 1905, 111.

nature", "Necessity" is defined as the "infallible connection of causes with their effects", then, reasoned Godwin, the effect, intelligent man, must require an Intelligent cause. Of course, many street atheists now reasoned that matter was not "unintelligent", and that thinking matter gave rise to thinking man. But, for Godwin, an "innate original tendency to a higher state of being" was an absurdity.²³ Others repeated it in the Literary and Scientific Institutes: there could be "no self-origination". "Nature herself cannot accomplish such a result".²⁴

The trouble was, neither Carlileans nor Owenites got nearer to an explanation of this self-development. The *Crisis* could only criticize religions

where man and woman are spoken of, not as what they really are, organized substances generated by nature, like all other substances, but as having been created as if apart from nature for the purpose of being condemned from birth to toil in want and misery, as responsible beings, mystically said to be composed of a body and of a soul...²⁵

But exactly *how* were they "generated by nature"? It was not good enough to moot an Owenite environmental cauldron, as in Logan Mitchell's *Christian Mythology Unveiled*, which posited that "Nature *always* produced the animals and plants that were proper for the climate and soil".²⁶ The demagogues invariably ended up where they started, looking at the extinctions and productions and invoking an "energy in nature, by which new species are brought into being".²⁷ What on earth was an "effort of Nature" anyway? asked the unconventional Universalist Rev. James Elishama Smith, the wild millenarian (and incoming *Crisis* editor), who now saw Christ's coming heralded by an earthly Owenite millennium of equality and justice. Here was a socialist preacher who hated Carlile's "effusions" and considered an "omni-active" God explanation enough of nature's geological "revolutions".²⁸

Even Mr. Saull [said Smith], who denies the existence of spirits, though he acknowledges the reality of liqueurs, uses this language, and tells

23 B. Godwin 1834, 175.

24 F. J. Francis 1839, 162–63.

25 *Crisis* 4 (14 June 1834): 78–90.

26 Mitchell n.d. (ca. 1842), 234–35.

27 *FTI* 1 (1842): 7.

28 *Shepherd* 1 (27 Sept. 1834): 40; 2 (15 Feb. 1837): 33–35; 4 (13 Jan. 1838): 94–95.

you most gravely, like an old man telling about a ghost, or a piece of witchcraft, that Nature made man by means of laws! Ask him if ever he saw Nature or her laws, and his eyes will look as round and startling as dozes [*sic*] of castor oil swimming in gin.²⁹

The trouble was, when Saull did proffer something more of an explanation, Smith loathed it. Saull's solution was simply too shocking for the more religious millenarian Owenites.

The Origins of Mankind

A major debating point for the clergy remained the origin of man. It figured in those set-piece debates between rationalist Owenites and Christians in public theatres, which were a feature of the 1830s. Preachers raised human origins as a stumbling block for the "atheists". Protagonists goaded Owen: if humans are "a production peculiar to our globe", so that when the planetary orbit shifts, "the human species will change, or will be obliged to disappear", how to explain it? Owen was faced with an "absurdity", that somehow infant humans had been thrown up by the earth without parents.³⁰

In Saull's circle, the idea of man generated from nature was a given. But geology had overridden the old Enlightenment ideas of Holbach: no longer were the motion of atoms responsible for emergent life with its new qualities, as he had thought. Infidels now gave these atoms themselves immanent qualities—they were self-organizing and thinking. And Holbach's nature as a "dynamic chaos"³¹—balanced, eternal, and possibly coeval with mankind's origin—had become progressive, directional, and finite: a rising series of fossil species, each originating at a certain point in the rock strata.

Mankind's appearance was the burning issue. Saull, in his geology lectures, was to suggest that humans had not sprung from the ground readymade, like Milton's lion "pawing to get free" of its earthly cradle. This despite Volney's *Ruins*—that ubiquitous bible used as a warm-up act before Sabbath blasphemy lectures right into 1833³²—which had

29 PS, 1 Oct. 1842.

30 Owen and Campbell 1839 [1829], 77–78.

31 Bowler 1974, 164.

32 HO 64/15, f. 171, in this case at the Borough Chapel.

man “formed equally naked both as to body and mind,” and thrust “by chance upon a land confused and savage. An orphan, deserted by the unknown power that had produced him”.³³ Carlile had modified this a tad, suggesting that the first race of men must have been mute and uneducated, and possibly their bones might still be found on the unexplored ocean floor.³⁴ Both scenarios were lame and old-fashioned, and neither took account of a rising fossil life, producing a gradation of species, nor of its esoteric contemporary corollary, an ‘evolving’ lineage.³⁵

When Saull turned up in Bristol, on either 22 or 23 August 1833,³⁶ he found a riot-torn city, with the incendiary aftermath of the Reform riots visible in the burnt-out bishop’s palace. Workers and trades people were his usual audience, and not only men. Like the Rotundanists, he welcomed women and children. If his venue was the Bristol Co-operative Society, this alone would have made him obnoxious to the city fathers. The bruised Tory merchants deplored the workers’ halls springing up where “the operative classes are encouraged to turn literati”, when it was clear that the “covert design” of their demagogue leaders was to stir up “political agitation”. The anti-radical *Bristol Job Nott*, founded to emasculate the burgeoning pauper press, even viewed libraries with suspicion, and advised operatives to sit at home quietly studying their Bible.³⁷ With street vendors surreptitiously shifting unstamped papers, and the Bristol NUWC branch gaining traction,³⁸ the patrician press hysterically warned that “Hetherington and Carlile in their ‘poison shops’ offered that ‘black draught’ which brought down on its victim ‘discontent, sulkiness, sabbath-breaking, scoffing, hatred of the law, of kings, magistrates, and all superiors’.”³⁹ While the city fathers at the elite Bristol Institution screened their mechanic audiences and fed them a safe science based on miracles, wise design, and the creation of everything in its proper place—presenting this knowledge in patronizing form as a

33 Volney 1819, 17.

34 *Prompter* 1 (1 Oct. 1831): 820–22.

35 R. Phillips 1832a, 51.

36 The *Gauntlet*, 29 Sept. 1833, 529, placed his lecture on “Thursday, the 23d ult.”, but Thursday was 22 August and Friday the 23rd.

37 *Bristol Job Nott*, 24 Jan. 1833, 233; Klancher 1987, 184 n. 25; Murphy 1994, 146.

38 Rowe 1970b, document no. 27.

39 Hollis 1970, 143.

“boon, emanating from the superior to the inferior”⁴⁰—Saul’s intentions at the Co-operative was completely the reverse.

Addressing what Tories considered the violent underbelly, Saul provided a mentally liberating science for the marginal men. It was exactly as the *Job Nott* feared. He even kicked off his talk by assuming that “all present are decided reformers”. They would therefore appreciate his “enlarged views” of science, which were designed to “annihilate from amongst men the present extreme amount of ignorance, poverty, and consequent crime and misery”.

Saul started his two-hour lecture by attacking the religious myths legitimating aristocratic domination—those biblical fantasies taught (as Owen complained) from the cradle. These “blind guides” were “trammels” and “worse than useless”: they were “absolutely mischievous” socially-controlling devices. Not only did they not “produce sound morality, social happiness, or political elevation”, to the contrary, they have “invariably tended to uphold the powers of the ruling few, at the expense of the welfare and happiness of the oppressed and deeply-injured many”.⁴¹ In a year which saw radical clamouring for the removal of tithes, the de-funding of the “Government Clergy”,⁴² the disestablishment of the Church (which Saul would campaign for⁴³), and the removal of Anglican monopolies on the services surrounding births, marriages, and death, this would have chimed. But go further, Saul said: cast off all “systems of religion, which are nothing but phantasies of the fever-excited brains of the various religious enthusiasts” designed to intimidate the poor, dispossessed, and disenfranchised.

Having established his credentials, Saul now proffered a solution. “What, then, is the course we should pursue, to counteract these direful effects?” The structures he put in their place were the “immutable truths” of nature, now seen as the progressing and perfecting march of life and mind. Here, Saul’s geological infidelity manifested on multiple counts. Not only in his belief in the “immense distances of time”, the aeons to lay down the thousands of feet of strata from ancient sediments—all gentlemen geologists now accepted such a ‘deep’ time. Nor only the idea

40 Neve 1983, 188.

41 Saul 1833a, b.

42 HO 64/19, f. 158; *The “Destructive,” and Poor Man’s Conservative*, 2 Feb. 1833, 2.

43 TS, 28 Apr. 1835, 2.

of a “regular advancement in the production of animal and vegetable life” shown in the rocks—and he illustrated it by pointing to the ancient ferns comprising Britain’s “great coal-fields”, and the rise of huge saurians, some reaching “the enormous length of eighty feet”. Rather, the “enlarged” views from which to draw new social conclusions, and the real ‘infidelity’ to make even gentlemen geologists blanch, came next.

The fossil ferns from the coal districts were the prize exhibits in Saull’s cabinet, so he might have brought some with him to Bristol. Since these ferns only flourished “in the very hottest climates”, Britain must then have been a tropical country. The same was true of the corals in Jurassic rocks; because corals now only grow in warm atolls, these conditions must have prevailed in Jurassic times in Britain, “namely, shallow salt water and a very hot climate”.⁴⁴ He was suggesting that changing local conditions had “produced” these creatures as needed—in line with Owenite environmental thinking. And what caused these changing conditions? Given that Saull had just (June 1832) republished his mentor Sir Richard Phillips’s *Essay on the Physico-Astronomical Causes of the Geological Changes on the Earth’s Surface*, we know that he had in mind a shift in planetary axes.

When, in this Saull-edited work, Phillips said “the strata prove the gradual evolution of all things”, we must beware of treating him as a modern. His mooted of the “origin of Species” and “progressive evolutions” of life reflected an older Enlightenment mindset. And he had a distinct mechanism to explain them. Phillips’s theory predicted that, with the long-term swinging of the earth’s axis, the sea would rush in to submerge the northern lands as it drained from the south, or vice versa—hence the strata alternated every 10,465 years between sediments of marine and continental origin. This immersion, in his view, was the means “of restoring an exhausted world and improving it”. Each immersion flushed in vivifying erosional material. And the more immersions, the more finely ground the erosional material became, releasing ever more nutrients. The result was that this ever-refining “pabulum” “may have resulted [in] the improvements and refined complications of animals”. He seems to have imagined the whole

44 Saull 1833a, b.

hemisphere's fauna and flora being regenerated at a stroke, each time in more "improved" form. There is no sense of ancestry here, no lineage; like so many Enlightenment thinkers he accepted a sort of spontaneous re-emergence, but now of the entire ecosystem. These revivifying fluids "must evolve, *at once*, every thing that is possible" (my emphasis), producing at each turn a "wonderful gradation of being". And because there was no necessary lineal progression through the strata—just improvements and changes—he believed that human fossils might still be unearthed in older rocks among the tropical animals.⁴⁵

Phillips's impact on his protégé was profound. One facilitating factor in Saull's solution to human origins might have been Phillips's compassion, which extended from the poor to all suffering life. Pain, disease, distress, being "common to entire animal nature", left Phillips the vegetarian seeking the freedom of all animals from subjugation. He pushed humans and animals into the same category and integrated the liberation of brutes into a search for mutual justice on earth,⁴⁶ which could have been a valuable heuristic to Saull's search for life's relationship. But for all that, Saull had outgrown Phillips's Enlightenment spontaneity, the 'all-at-once' productions. We only appreciate Saull's difference as he moved in his 1833 talk to the emergence of "hot-blooded animals", which appeared after the colossal saurians and culminated in the appearance of cave bears and hyaenas in Britain. And here he envisaged another giant, "the fossil elephant, which, by the teeth or grinders, and bones, we know was at least twice the size of the largest elephant of the present day".⁴⁷ (Gigantism introduced a sense of awe in these talks, as if to reinforce the immensity and difference of the past. It served the same function in his museum, where the grinders were on display, as well as the remains of "immense rhinoceroses". He was to exhibit some fossil hippo grinders at the British Association for the Advancement of Science the following year.⁴⁸) With the great beasts' passing came the last

45 R. Phillips 1832a, 47–48, 51–53, 70; Rupke 2005 on this 'autochthonous' emergence. Rarely was any attempt made to plumb this 'spontaneous' origination of species. One exception, discussed by Topham 2022, 364–65, was a Manchester Owenite, Robert Whalley, who invoked a crystallization-based explanation in 1835.

46 Duthie 2019, 86–91.

47 Saull 1833a, b.

48 *Literary Gazette* 922 (Sept. 1834): 637; *Athenaeum*, 27 Sept. 1834, 715.

and “most singular of animals, ‘man’.”⁴⁹ That “man” was an “animal” should have set orthodox tongues wagging. How he arrived on the earth certainly did.

Saull envisaged man “emerging or advancing, perhaps, from some of the simian, the ape or monkey tribe, educed by circumstances over which neither they nor he could have the least control”.⁵⁰ That was his clearest materialist statement on the external agencies generating man from a monkey. No longer were humans generated directly from the earth. He seemed to be invoking some sort of bloodline, as the monkeys moved ‘up’ to become men.⁵¹ Mankind was the monkey perfected, in line with Owen’s perfectibility doctrine. Saull had said as much in his 1832 *Letter from a Student in the Sciences to a Student of Theology*, that the “strange animal called man made his appearance, emerging many steps in advance of the race of the Simians, who had unconsciously been his precursors.”⁵² But that letter was anonymous. Out in the open now, this belief was to land him continually in hot water for years to come.

There was no Creation here. Nor was “man” *sui generis*, conjured up by animating fluids with the rest of nature. He issued naturally from monkeys or apes—he had a primate pedigree. But like Phillips and the ideologues before him, Saull was adamant in denying any miraculous intervention in the production of man, the sort taken for granted in gentlemanly society—an intervention which reinforced the authority of the Church over the souls so created. Notice, too, the congruence of his wording about man’s evolution by natural agencies outside his control, with the Owenite dictum (run on the masthead of the *Crisis*): “IT IS OF ALL TRUTHS MOST IMPORTANT, THAT THE CHARACTER OF MAN IS FORMED FOR—NOT BY HIMSELF”. Environmental and cultural forces shaped ‘evolution’ as much as human character. This showed the need for correct co-operative

49 Saull 1833a, b.

50 Saull 1833a, b.

51 This might, as Hodge 1972, and 2005, 112, portrayed it, be envisaged as multiple parallel lineages. As the monkey line advances to become human, so an independent lineage with lower primates at the top moves up, and these become monkeys. The lineages all had separate starting and end points. There was no common ancestry, that is, no branching tree. Bowler 1984, 80, for a diagrammatic representation.

52 [Saull] 1832a, 6; Saull 1833a, b. Saull’s ape hypothesis was long recalled in socialist histories (M. Beer 1921, 330).

conditioning to continue the process for the moral regeneration of mankind.

The frisson between radicals and co-operators played out in Saull's evolving nature. Here sovereign, self-reliant, and self-transforming life-forms (the radical component) still needed the external progressive push from changing ecosystems (the Owenite environmental component), itself driven by large-scale planetary wobbles.

Mankind's lowly ancestry and rise from savagery was seen to justify the drive to the social millennium. "From the gradual progress in nature towards perfection", it followed that the animal man, "as a part and parcel of that nature", should be advancing too. But people were being held back by the old "barbarous" doctrines which "crafty" religious teachers "force ... into the mind of youth": of humans as a sinful species sunk in depravity, requiring salvation, the degenerate relicts of once blessed beings. Men of the cloth remained blind to the real material beauty around them. "While these practices continue, and while we pay those the most money who continue to propagate them"—the obligatory hit at the lord bishops who blocked reform and the tithe payments angering non-Anglicans—"we may look in vain for any great advance in moral or social improvement." The answer lay in the rational school initiatives being launched by the London Owenites. In these, nature and practical science were cherished, religions were seen as culturally relative, and mores were contingent developments. Had the populace been educated rationally, and properly empowered, the social transformation would already have been complete. People would be responsible and ready to vote. Thus Saull planted his infidel, co-operative, and radical colours on the sedimentary strata. As a rich merchant, he was no real communitarian but a great respecter of property, with faith in continuing parliamentary reform and eventual working-class suffrage. And here he pointed his finger at the Bristolians, still smarting after the Reform Bill conflagration. The arsonists who fired their Town Hall and city centre during the riots were

so ill-informed, that they know not how to enjoy freedom and liberty, and the proof of it is as clear as the sun at noon-day; for had the minds of the people been prepared [by a secular socialist schooling] ... you would

not have had the afflicting prospect you now behold, namely, that of seeing part of your beautiful city in ashes!⁵³

The Bristol riots had stunned the nation and were a talking point for years. They generated the same sort of shudder that his monkey parentage did: both were assaults on a civilized Christian nation. On the other hand, Saull's thorough-going materialism was effusively received by an audience bombarded by such infidelism, who saw it as one of the best lectures ever delivered in the city.⁵⁴

This talk was probably his stock lecture, one he had been delivering for a couple of years. That might explain why there is no mention of the French transformist Jean-Baptiste Lamarck: the lecture was possibly being read unmodified, despite recent developments. Saull knew of the wealthy barrister-turned-geologist Charles Lyell's influential *Principles of Geology*. This had exhumed the poor Frenchman from his pauper's grave the previous year (1832) in order to unceremoniously re-inter him. The British were made painfully aware of Lamarck's shameful science from reading the second volume of Lyell's *Principles*. Nothing really prepared a genteel nation for Lyell's evocation of Lamarck's "force of external circumstances" causing chimpanzees to stand erect to be counted savage men, and then his "tendency to perfection" to ensure their intelligence grew to civilized standards.⁵⁵ Lyell set teeth chattering. His long refutation acted like a red rag to the religious bull—hysterical reactions in sober papers became the norm. England might have been backwards in its natural theology (and rather laughed at in Europe), but it was not only traditionalist passions that were inflamed. Even the *Atlas*, that huge (and hugely expensive at 1s) Sunday paper aimed at well-to-do liberals, was beside itself. The popular rag had its rough edges, and occasionally transgressed "the rules of courtesy" in its reviews,⁵⁶ but this time it went over the top. It railed against the "absurd creed of those grovelling idolaters who desecrate the temple of Heaven, and tear thence the Deity; who profane the altar of earth, and banish then the pure incense of creation...". "Ridicule is wasted on such egregious absurdity...", it said of the French *enfant terrible*.

53 Saull 1833a, b.

54 *Gauntlet*, 29 Sept. 1833, 529, 532–33.

55 Lyell 1830–33, 2: 14–16.

56 [James Grant] 1837, 2: 128; Bourne 1887, 2: 45.

"We came from nothing," is the doctrine of LAMARCK ... Our journey is long, our progress uncertain; but, guided by the '*tendency to perfection*,' struggling with our other deity, '*the force of external circumstances*,' we shall become gods from men, as we became men out of monkeys, and monkeys out of the monad...

"How long", it asked, like a terrier thrashing a rat, "would the priests of transmutation require to convert the blue-faced ape of the zoological garden into a BROUGHAM"? Ultimately Lyell's dishing of Lamarck was applauded, by using the squash-and-bash slang of the day: the "absurd doctrines of the LAMARCKIANS are absolutely squabashed".⁵⁷ Because of Lyell's over-exposure, "Lamarck" became a pejorative word. The critics got carried away. The *Belfast News-Letter*'s use of screamers said it all: "Pro-di-gi-ous!!" and "rank nonsense!". None doubted that such transformist views were "Atheistical" (in the *Patriot*'s headline),⁵⁸ because so much contemporary natural theology rested on the wisdom of Creative action in designing and introducing consecutive species. They were introduced, not by "a transmutation of species", which was a "phrenzied dream", but "by a provident contriving power".⁵⁹ Critics insisted there could be no innate, "original tendency to a higher state of being". "Nature herself cannot accomplish such a result". There could be "no self-origination", no self-empowering emergent life, no drive from below. Any claim to the contrary was subversive to conservative society and, given the state of natural religion, sacrilegious as well.⁶⁰

Theological critics stood indebted to Lyell (perhaps more than he wanted or expected). The Regius Professor of Modern History at the University of Oxford, the Rev. Edward Nares, in his *Man, as known to us Theologically and Geologically* (1834), shuddered at the thought of "man as a mere development"

and therefore feel myself, as others should do, greatly indebted to Mr. Lyell, for taking our part against Lamark [*sic*], who would have made ... nothing but apes, and monkeys, and ourang-outangs of us; or even worse, a mere expansion of organic particles. Dr. Macculloch, speaking

57 *Atlas*, 12 Feb. 1832, 107–08.

58 *Patriot*, 18 Apr. 1832, 8; *Belfast News-Letter*, 10 Apr. 1832.

59 *DPMC*, 18 Jan. 1834, 402, reporting the Rev. Adam Sedgwick's discourse at Cambridge. Hilton 2000 for an analysis of Anglican Providentialism.

60 F. J. Francis 1839, 162–63; B. Godwin 1834, 175ff.

of Lamarck's system, is puzzled to say whether it were the effect of Epicurism, disease, or imbecility.⁶¹

The critical adulation of Lyell—and the fact that he had flatly denied a systematic and continual progression in the fossil record in order to undercut Lamarck⁶²—might have made Saull reluctant to modify his talk. In his museum lectures a few months later, Saull countered that

whatever Mr. Lyell may say or write to the contrary, there appears to be an uniform law, proceeding from the more simple to the more complex, from lower to higher gradations of intellect, from the zoophite to

“The diapason closing full in man.”

It is a singular fact, that the order of creation, as we find it in the different strata, from the transition to the tertiary formation, should be the same as in the development of the human foetus.⁶³

Saull clearly knew Lyell's book. He even knew Lyell himself, or, at least, Saull was attending Lyell's *soirées* by 1835 with the Geological Society elite.⁶⁴ But even if the Bristol talk (which was simply the first geological lecture reported in full) came twenty months after Lyell's book, all of this suggests that it was not about to be modified to take in Lyell. The thesis would remain 'as is'. Recall the *Crisis* editor's claim that “Our friend [Saull] has an unconquerable tendency ... to trace the genealogy of his own species up to the monkey tribe”, which sounds as if these heresies had been expressed for some time prior to Lyell's fingering of Lamarck.⁶⁵

Even though Saull's perfecting fossil series and ape ancestry were not based on Lamarck, and Saull was evidently reluctant to namecheck Lyell's work, the Gallic reprobate Lamarck became better known even in the underworld because of Lyell. The ultra-radical *True Sun* set off squibs shortly after Lyell's book was published in 1832:

Oh! marvellous Sage! oh! wonderful Lamarck!
Prover of every thing—and more besides;

61 Nares 1834, 165–66.

62 Bartholomew 1973, on Lyell's aesthetic revulsion of a bestializing ape ancestry; J. A. Secord 1997, on the meaning of Lyell's *Principles of Geology*.

63 *National Standard* 3 (18 Jan. 1834): 44–45.

64 Morrell 2005, 137.

65 *Crisis* 3 (5 Oct. 1833): 36.

Describer of each creature in the ark,
 Discloser of all truths that nature hides!—
 ...
 That prodigy of beasts, the camelopard,
 was born, at first, in nature's *medias res*;
 Its neck grew long—because the brute strained hard
 To crop the foliage of the lofty trees!
 There's not a thing but habit alters quite;
 None wear the shapes in which they first began;
 Then say, Lamarck, thou star in Nature's night—
 May not your theory extend to Man?
 ...
 For what were Lords invented? Do you think
 That Nature made them for no other uses
 Than just to talk about "destruction's brink,"
 To plead for tithes, and to resist abuses?
 Were Bishops sent us for this simple reason—
 To eat of turbot, and to drink their fill?
 Or to commit, against the people, treason—
 To scoff at millions, and to "trip" the Bill?⁶⁶

From giraffes to bishops, it was grist to the radical mill. The political appropriation continued, with "Monsieur Lamarck" made to serve up some fine farces on pernicious habits perverting the lordly species.⁶⁷ Did Saull read the *True Sun*? Of course he did—it was the ultras' own evening paper.⁶⁸ It had a talented and fearless staff, including the editor John Bell, a hack whose "whole heart and soul was anti Church and State",⁶⁹ and John Thelwall, whose trial for high treason in 1794 had given him his radical cachet. But it is best remembered for its Parliamentary reporter in 1832: Charles Dickens started his newspaper career here. It had a good circulation during the Reform Bill furore, but it fell off sharply after the bill's passing.⁷⁰ In difficulty by October 1832, the paper was kept afloat by a massive subscription drive, organized by Saull, Watson,

66 TS, 9 Apr. 1832, 3.

67 TS, 11 Apr. 1832, 4.

68 HO 64/12, f. 163 (2 Nov. 1832). The spy was reporting on it as the only stamped paper supporting the ultra's ideals.

69 PS, 23 July 1842.

70 The paper never ran adverts, which were pointless when its clientele could not afford the goods, so advertising revenues provided no fall back ([James Grant] 1837, 2: 110–11).

Cleave, Lovett, and Hetherington, that is, the usual suspects.⁷¹ So, yes, the *True Sun* was Saull's paper, with its Lamarckian squibs.

Robert Owen himself knew devotees of the heretical Frenchman. In America, he had set up the New Harmony colony with William Maclure,⁷² a proficient geologist who had travelled widely in Europe. Although he was later dubbed "The Father of American Geology", Maclure actually published little on the subject. What he did publish showed his other side. He was a communitarian whose pamphlets on social matters were collected up into three volumes. One contained a speculative piece on the meaning of geology, whose import was to show that the creature-entombing rocks attested to a universal progressive flux and that the rise of life from its spontaneous origins supported "the anti-christian suppositions of the naturalist Lamark [*sic*]"'.⁷³

In blasphemy circles, the idea of monkey origins was suitably cynical and nihilistic but far from shocking. Saull could have been primed by any number of notions floating around in disreputable places. For example, the pirated Lawrence, having shown in *Lectures on Man* that a peculiar larynx prevents the ape from talking, left it open for Carlile to suggest therefore that "*Man* was a mere *ouran-outang* before he began to speak".⁷⁴ Since, in polite society, apes were met with expressions of disgust, as a grotesque mockery of the divine countenance, what better than to squash such arrogance than with this hideous ancestry? It was the anthropological equivalent of Carlile's cynical line, that the human body rots to a dunghill.⁷⁵ And Carlile's imprisoned shop assistants saw apes and humans present "every progressive step" towards the intelligent summit and outrageously asked why souls, having been granted to

71 *TS*, 25 Oct. 1832, 1; *PMG*, 27 Oct. 1832; *Examiner*, 28 Oct. 1832. The paper rose and fell with radicalism itself, so that, by the late thirties, it was among largest circulating London evening papers, selling over a quarter of a million copies (*American Almanac and Repository of Useful Knowledge for the Year 1839* [Bowen, Boston], 71).

72 Armytage 1951; J. P. Moore 1947. On the more recent revisionism arising from the publication of Maclure's travel journals: D. R. Dean 1989; Torrens 2000. Maclure knew Volney; they had independently explored the same regions of North America and Maclure's geological map was actually superimposed on Volney's near-identical one: G. W. White 1977.

73 Maclure 1838, 3: 175–78.

74 *Republican* 7 (27 June 1823): 829–30.

75 Carlile 1821, 98, 132.

black peoples, were denied to apes.⁷⁶ In this, they should have known better.⁷⁷ But the orang's closeness to man was their polemical point.

Respectable commentators with their ears to the ground knew of Dr Darwin's and Lamarck's "numerous living followers", and how even some sound naturalists were flirting with this "atheistical school".⁷⁸ But the real "atheistical school" was several strata lower in the social column, where Saull's infidel sympathies made acceptance of a self-developing nature easier. And despite the possible sources of nature's transformism applauded by the pauper press and panned by anti-infidels—the lampooned Lamarck, "monstrous" *Tellamed*, or "mass of trash" uttered by Lord Monboddoo about men once having had tails⁷⁹—we do not really know where Saull's monkey came from. But for subsequent events, mankind's rise from ape-like savagery, Saull's immediate inspiration, it seems, came from a dream.

Sir Humphry Davy's dream, to be exact—for it was his posthumous *Consolations in Travel, or, The Last days of A Philosopher* (1830) that most struck Saull. The fashionable chemical philosopher had been fêted by high society, showing how far he had come from his humble Cornish origins. Davy had long abjured all sceptical notions. Indeed, his was the view from the other side of the prison bars. Where Davy, the rising chemist, the discoverer of potassium and sodium, had been called in to disinfect Newgate gaol, Saull would be visiting the recidivists within. Davy's brother and biographer recorded how Davy the swell grew hostile to a "repulsive" materialism, which would make "mind ... the result of organisation". Sir Humphry, the President of the prestigious Royal Society and immortalized even in his own age by his Davy lamp to protect coal miners, finished the *Consolations* on his deathbed in Rome in 1829. He was only fifty. The dying man, bequeathing the manuscript to his wife, trusted that it would "give encouragement to timid minds not to yield to the irony and scoffs of the gross materialist and atheist".

76 *Newgate Monthly Magazine*, 1 (1 Nov. 1824): 99.

77 Their racism is the more surprising as another incarcerated in Dorchester gaol with Carlile was his friend, the black revolutionary and anti-slavery campaigner Robert Wedderburn. He was the son of a black slave and Scottish slave owner. He was also another blasphemy-chapel owner and a powerful speaker who fired up sympathy for enslaved people: Wedderburn *ODNB*; Prothero 1979, 110; *Republican* 4 (8 Sept. 1820): 40.

78 Rennie 1834, 73, 84–86.

79 Good 1826, 2: 89–90; Murray 1831, 23.

How ironic that Saull should extract such a contrary message. But even sympathizers worried about some of Davy's dreams about the ancient world. In Davy's dreamscape, the whole of human history was telescoped into a series of dioramas. His images were like a "display of fire-works, which dazzle and confound without enlightening the senses", said another, "and leave the spectator in still more profound darkness."⁸⁰ Not so Saull. The book's impact was enlightening in quite another way, and the emotional appeal of Davy's vision of mankind's rise from savagery might have influenced Saull's subsequent career swing to ancient archaeology in the 1840s.

Davy's reverie saw him imagining the successive creations of life. For Saull to imagine *actual* transformations, a bloodline, was far bolder. And, needless to say, there was no monkey ancestry in *Consolations*. That was Saull's blasphemous interpolation in the gaps. Sir Humphry was being co-opted and desecrated. In his 1833 talk, Saull paraphrased Davy's dreamscape. After the rise of life through untold geological aeons, finally

Man appeared as a naked savage, feeding upon wild fruits, or devouring shell-fish, or fighting with clubs for the remains of a whale which had been thrown upon the shore ... In the next epoch, imagine a country, partly wild and partly cultivated, when men were covered with the skins of animals, and secured their cattle in enclosed pastures. Some were employed in tilling and reaping corn, and others were making it into bread. Huts and cottages were erected for shelter, and some were furnished with the mere rude and humble conveniences of life ... they owed their career of improvement to the influence of a few superior minds amongst them: one taught them to build cottages, another to domesticate cattle, and another to collect and sow corn and seeds of fruits.⁸¹

Such a notion, startling to a genteel readership, was almost commonplace in the Rotunda. As the cynical Eliza Sharples said here in 1832:

To suppose man made perfect, and endowed with superior intelligence in the garden of Eden, is to suppose that which is contrary to the principles

80 Paris 1831, 2: 371; Davy 1836, 1: 149–150, 385; 2: 88, 92, 385, 400. Even Lyell was influenced by the *Consolations*. Secord speculates that Davy's blast at an "absurd" transformism could have caused Lyell to add the anti-Lamarckian volume to his *Principles* at the eleventh hour: J. A. Secord 1997, xxxi; 2014, ch. 1.

81 *Crisis* 3 (5 Oct. 1833): 36–39; *Gauntlet*, 29 Sept. 1833, 529–33, paraphrasing Davy 1830, 18–30, 143–51.

of natural history. All infancy is in its nature alike animal, and devoid of idea or mind. The human infant of a year old has no more, nor perhaps as much mind, as any other domestic animal of that age. The human infant, nursed by any other animal, and deprived of human society, would be near akin to the animals from which it associated; so that an idea of perfection in the first man, is as unreasonable as the idea of perfection in an infant, not nursed and educated in human society. If there ever were a first man, we may seek the nearest picture of him among the wildest and least associated people; and he must have been much more like a monkey, than like the shaven, and shorn, and washed, and educated man of the present day, with all his defects.⁸²

Thus, for a dedicated Rotundanist such as Saull, jumping up to slate Church and state after many a Sharples talk,⁸³ pre-fixing a monkey parentage to Davy's dream might have seemed obvious. Perhaps, too, he recalled the much-maligned Scots jurist Lord Monboddo, who imagined humans in different states of language acquisition across the globe today. Judge Monboddo's contemporary judicial methods of weighing evidence about tailed humans are only now being reappraised seriously, so he can be fairly relocated back into his age, rather than being dismissed as a crank.⁸⁴ Many dissidents certainly took him seriously at the time, and Saull might even have heard George Birkbeck talk on Monboddo in his lectures at the London Mechanics' Institution.⁸⁵ So little was known of the world's monkeys or apes that it was easy to joke, as the essayist and poet Leigh Hunt did, that men with tails would differ no more from us than a savage would from a philosopher.⁸⁶ Whatever, Saull's similar bit of bestiality would have had Davy turning in his grave.

The *Crisis* published Saull's talk. But its new millenarian editor, the Rev. J. E. Smith, was clearly troubled by it. He could agree on mankind's original barbarity.

When man came from the hands of God he was a mere savage, a naked ignorant savage; and so ignorant that he did not know that he was naked. He neither knew good nor evil; saw no difference between virtue and vice, the Lord had made him so ignorant.

82 *Isis* 1 (14 Apr. 1832): 145–46.

83 HO 64/12, f. 47.

84 Sebastiani 2022.

85 *MM* 7 (16 June 1827): 374.

86 *Leigh Hunt's London Journal* 2 (8 Apr. 1835): 106; Good 1826, 2: 89–90.

The two co-operators, Saull and Smith, materialist and millenarian, worked together in the shared belief that mankind's progress was hindered by those "advocates of oppression and ignorance, who find it to their advantage to keep the poor in subjection".⁸⁷ Social redemption would be achieved once the unholy grip of tyrants and priests had been broken. But the fellow-travellers would not travel very far together. The real problem for Smith was that monkey.

⁸⁷ J. E. Smith 1833, 100, 102.

