Reign of the Beast

The Atheist World of W. D. Saull and his Museum of Evolution

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Cover illustration: A spoof of the "Devil's Chaplain", the Rev. Robert Taylor (left, on the podium). His patron, the atheist Richard Carlile, is seen on the right, landing a punch. The wine merchant W. D. Saull funded both men and grounded his evolutionary talks in their dissident sciences. Such pastiches reinforced the prejudices of pious readers, by depicting the moral rot caused by irreligion. The wall posters on the left advertize contraception manuals and licentious memoirs, and a lecture by "Miss Sharples", Carlile's common-law "wife". Taylor's character is being impugned by portraying the mayhem caused by his infidel oratory. Beyond the brawling and debauchery, thieves are shown in the audience (bottom right) and a dagger-wielding agitator (centre). In reality, Taylor's congregations were respectable and attentive.
Etching, in the author's possession, entitled "The Triumph of Free Discussion" (the motto of Carlile's Fleet Street shop selling subversive prints). The caption reads, "A Sketch taken in the Westminster Cock Pit on Wednesday the 24th. of September 1834. Subject A Lecture by the Revd R. Taylor, A.B.M.R.C.S. 'On the importance of Character'."
Cover design by Jeevanjot Kaur Nagpal

Preface

Was he joking? asked a co-operator in 1833, on learning that a founder of London's first labour exchange had lectured on men emerging from monkeys. Madness, surely, to think that such ribaldry could smooth our path to the socialist millennium. But the lecturer had been serious, and that is not the strangest part. The man had for the previous two years been running a museum of evolution. Imagine such a museum on a central London street in Darwin's younger day, almost three decades before the *Origin of Species* appeared. Impossible? After all, of the hundreds of Darwin biographies and histories of evolution, not one mentions it.

More intriguingly, this museum bucked the Victorian trend. It was free to men and women of all ranks, but artisans were especially invited, no embarrassing letter of introduction required. Just step in to understand how the present world had been produced and what promise fossil life held out for the future. Nor were these any old fossils. The museum held priceless treasures, expensive originals or 'type' specimens, some of which would become famous. Odder still, for a place expunged from the collective memory, it was lauded at the time as the biggest private geology museum in London, perhaps, some said, the country.

In its day the museum was difficult to miss. The two-storey, purpose-built edifice stood on Aldersgate Street, within view of London's magnificent new General Post Office. It was run by a proprietor who argued that life had 'evolved', and, more outrageously, that humans had ape origins. So how have historians and palaeontologists missed it?

True, it is easy for a myopic history to favour the scientific swells. They left their stories in expensive books and bequeathed a brilliant, accessible science to be reworked through the generations. The trouble is, switching the spotlight from the cut-glass crystal of the wealthy drawing room onto cut-price dives requires exhaustive work, even if the

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results are enriching. It could be argued that the blinkered emphasis on the mannered Charles Darwin and his urbane mentor Sir Charles Lyell, who now repose together in Westminster Abbey, actually acts to impoverish our cultural understanding. Not for our museum proprietor such a shrine. To find him you would have to search out an unconsecrated corner of Kensal Green Cemetery, a pilgrimage site where he is surrounded by radical heroes.

His name was William Devonshire Saull. Neither historians nor palaeontologists know much about him. And what image we do have of Saull was skewed by detractors, who thought him a misguided fool draped in satanic robes. Saull was a proselytizing socialist, atheist, and republican—a man who once outraged *Times* readers by reminding the monarch of the fate of Charles I. Saull was denigrated by decent society, which subsequently buried him with indecently obscurantist obituaries.

Saull's museum shared the same ignominious fate. It was destroyed and lost to posterity. But was it *really* of any consequence? Well, let us focus on the cultural impact of just one of its twenty thousand exhibits. The 'dinosaur', famously concocted by the upright Richard Owen in 1842, was based primarily on fossils from Saull's collection.[1] And this monstrous reptilian creature emerged from its furiously radical age to become one of the most iconic images of the media-obsessed twentieth century.

It was Owen's visit to the museum that piqued my original interest in Saull. The book might have begun in the 1990s, when Hugh Torrens allowed me to rewrite the "Saull" entry for the *Oxford Dictionary of National Biography*. But it had a much lengthier gestation. In mid-1970s, I became intrigued by the idea of the pious comparative anatomist Richard Owen finding an *Iguanodon* sacrum in a *socialist*'s museum, of all places. Why would a socialist have a fossil museum? What function did it serve in the 1830s and 1840s?—those violent decades of newly-established class warfare driven by Saull's friend Henry Hetherington in his illegal *Poor Man's Guardian*. (And who was the first man buried in Saull's funeral plot? Henry Hetherington himself.) How did the respectable Anglican Owen, the pet of the Tory nobility, a man who excoriated materialist transmutation as a moral and social poison, negotiate Saull

1 Torrens 1997. The name "dinosaur" gained little vernacular traction to start (O'Connor 2012), and by the time it did Saull was dead.

and his radical and co-operative infidels? It was the question that led to *Reign of the Beast*.

Equally, the book could not have reached fruition without the vast digitization projects of the 2010s, especially of London's umpteen newspapers. It is only by getting back to these first drafts of history that we can make sense of Saull in his micro-context. They allow us to pin his activities down, almost to street level. And by this time a socially embedded history of science had become commonplace, which left formerly neglected actors—especially among the querulous working classes and their allies—crying out for study.

By far the greatest surprise to come out of this study was to find that, in Darwin's younger day, there *was* an open palaeontological museum, set up specifically to inform the great unwashed of their monkey ancestry and evolutionary destiny. That destiny was to realize the morally perfect man and woman, socialist of course (something Darwin would have abhorred). That Saull's artisan-friendly evolutionary warehouse had lain undetected under the noses of historians and palaeontologists has an explanation. The museum was shattered and fragmented on Saull's death, then lost as the traces were scattered to the four corners. In the same way, the evidence for Saull's evolutionary teaching was itself spread through hundreds of newspaper shards, which had to be pieced laboriously together. It was a gigantic job of cultural reclamation. My digitised database for Saull alone has over two thousand entries, mostly press snippets. And this is on top of six thousand cuttings of related street prints. Stitching it back together took decades.

My purpose, therefore, is not to discuss the history of evolution at the Victorian outset, or any of its bourgeois cultural cradles. This despite the popular appetite for such synoptic approaches, as shown by the wealth of books. Tellingly, most of these have the trigger word "Darwin" in the title, even if they now "try to avoid the tendency to see 1859 as 'year zero'".[2] By contrast, *Reign of the Beast* remains far removed from Darwin's gentrified world—our curious haunts are a dark Hades that would have horrified Darwin, not that he would have dreamed of

2 Conlin 2014, 5; Stott 2012; Quammen 2006. The "de-centring of Darwin" (E. Richards 2020, 9) encourages serious studies of alternative social and political contexts of Victorian evolution.

entering them.[3] Nor does *Reign* make much contact with my *Politics of Evolution*. That dealt with the shabby-genteel bourgeois radicals and their deployment of the anatomies of self-development. These medical dissidents were looking first and foremost to career enhancements, and using materialistic sciences to attain that end. They were fighting a dirty war against the monopolistic medical baronets running the hospitals in the 1830s, and campaigning on behalf of the new order of lowly General Practitioners who ministered to the poor. The present study sinks a mine shaft much deeper into the social strata. There *were* points of contact between these medical democrats and Saull's street republicans—the fiery Thomas Wakley, founder of the *Lancet*, being one (he even teamed up with Saull to bring back the transported Tolpuddle Martyrs, Chapter 15)—but they were minimal. Some reforming physicians were known to frequent radical dives, John Epps being another case in point. But Epps, in his Quaker's hat, was a Christian who shared the democratic bent of the urban insurgents, not their vulgar atheism. Focusing on Saull allowed me to pursue the new sciences of palaeontology and evolution to a 'lower' level, right down to the socialist bedrock. *Reign* looks to the 'masses', not the 'classes'. It seeks to resurrect the street activists demanding complete emancipatory reform and to take seriously a previously-ignored ideological context. In this way, we can reassess the working-class threat that infidel 'evolution' (defined the old socialist way) could pose during the political upheavals of the 1830s. Not only was it a class threat to the conservative squirearchy; but Saull's monkey-stained materialism—and this is another theme of the book—equally frightened the wilder young millenarians inside the labour movement itself.

The real effrontery to them was that monkey. Saull was possibly the only lecturer in Britain in the 1830s to declare publicly that humans had ape forebears. And, arguably, it was his Grub Street milieu—infidel and socialist—that nurtured such a shocking view and sustained his public bravado.

3 Although Darwin did know of the "Devil's Chaplain", the indicted blasphemer (the Rev. Robert Taylor), who took his infidel mission to Cambridge and was hounded out of town by the students. Darwin also owned a cheap copy of *Lectures on Man* pirated by the notorious William Benbow, although I suspect in ignorance of its pornographic provenance: Desmond and Moore 1991, 81–84, 260.

How heinous was such a belief outside of the "blasphemy chapels" (dissenting chapels taken over by deists, atheists and co-operators in the later 1820s and early 1830s for their lectures, liturgical skits and political meetings[4])? Why was evolution so threatening in the 1830s? Two centuries later, it is hard to grasp how even the seemingly innocuous suggestion of one animal being able to turn into another could have caused such consternation. Yet it did. Evolution was abominated by many and left some hysterical: the Cambridge divine who saw total social collapse in its train; the British Museum grandee reduced to vulgarity in calling it vomit; the evangelical Christian who thought it heralded Satan's coming. The revolting prospect clearly raised deep social fears in an undemocratic, pious, conservative country. The fact that Cambridge catered to wealthy Anglicans, the British Museum feared admitting the uncouth classes, and that evangelical magazines were obsessed with artisan infidelity only reinforces the conclusion. The evolutionary spectre was a social threat, and *Reign of the Beast* looks to the weaponizing of such science by street deists, socialists, and radicals to underscore the roots of this dread.

We might look at Darwin, too, to understand his social fears. Saull and Darwin stood at opposite ends of the social spectrum and their diametric attitudes to evolution's social upshot are revealing. The wealthy, land-owning, would-be magistrate Darwin later confided that admitting that species could mutate was "like confessing a murder".[5] But for Saull, publicly advocating something far worse—that man was a transmuted ape—held no terror. He felt no qualms, no shame, in committing what Darwin feared would be seen as a capital offence by society. He even taunted young theology students on the subject. But then, for Saull, that society was a repressive, Anglican-dominated state, shielding massive inequalities. Undermining it was no crime at all, but morally justified and politically expedient.

Saull's question, 'What promise did fossils hold for the development of socialist man?' would have been unintelligible to Darwin. As the

4 The main ones we discuss were the former Congregationalist Salter's Hall Chapel on Cannon Street (taken over in 1826 by the Rev. Robert Taylor), the chapel in Grub Street, Cripplegate (set up for the Rev. Josiah Fitch in 1828), and the Optimist Chapel in Windmill Street (1829–31), re-branded the Philadelphian in 1831. Saull helped set up the former two, and lectured in the latter two.

5 Burkhardt et al. 3:2. Hodge 2009 on Darwin's landed-capitalist context.

literary historians would have it, Saull was imposing his own narrative 'plot' on fossil history. But where Darwin's evolutionary story privileged neither man nor his place,[6] millenarian co-operators gave their narrative real meaning for humanity. The fossils in Saull's emporium portrayed an evolution that was bursting with promise for the socialist New Jerusalem just over the horizon.

As a piece of idiosyncratic history of science, far from the mainstream, the book traipses along dark streets in the radical thirties and hungry forties to assess how even esoteric science could end up in disreputable rags. That it did so appalled Evangelical Christians. Such an unholy union of grubby atheism and abominations about the earth's long history and mankind's bestial ancestry proved Revelation's prophecy: Satan was abroad spreading his "filthy slime over Christendom" and the Second Coming was nigh.[7] The '*Beast*' of the title, in one aspect, was the levelling atheist's ancestor, the 'evolutionist's' monkey; but, to the outraged defender of tradition, it was the devil within, driving such blasphemous insanity. A biblical exegete investigating "evil" recalled in 1843 that the great Sir Isaac Newton considered "the reign of the beast to be the open avowal of infidelity".[8] That year, 1843, ten years after Saull went public, schismatic street atheists, sick of socialist quietism, were streaking past him and promoting mankind's bestial ancestry with a still greater vengeance as a stick to bloody the parson's nose.

This scenario—consciousness-raising working-class warriors using home-brewed astro-geologies to thrash the hated tithe-extracting Anglicans—is a world removed from the hackneyed 'warfare of science and theology' paradigm. That referred to *elite* gentlemanly thought, seemingly at war with itself as it tried to exclude an 'obscurantist' religion. For a century and a half, screeds have been written on how proper science ejected every tainting theological vestige. What started as polemical tirades by professionalizing scientists pushing out their boundaries to colonise new cosmological realms ended as a popular platitude.[9] *Reign of the Beast* adopts neither this military metaphor,

6 G. Beer 1985, 21–22; Zimmerman 2008, 2–3; A. Buckland, 2013, ch. 1. Throughout the text, the terminology of the day is used, which included non-inclusive gender language. 'Man' is taken to mean the whole of mankind.
7 Bickersteth 1843, 8–22; *Revelation* chs. 13, 16.
8 Bosanquet 1843, 115.
9 F. M. Turner 1978.

demolished in the 1970s,[10] nor does it engage with C. C. Gillispie's *Genesis and Geology*, whose problematic was also theology tainting high-blown theories of the earth.[11]

While most of these studies take a 'lateral' view, territorial essentially, looking to the frisson as middle-class professional boundaries jostled to-and-fro, here I add a missing dimension, the 'vertical', or class aspect. I look at a novel knowledge fashioned in situ to suit emerging socialist and infidel interests in an Anglican-privileged age. Our scurrilous social environment, back-alley dives and blasphemy chapels, and its grubby actors—anti-clerical deists, radicals, and co-operators—stand out of view of the 'higher' scientific echelons dealt with in today's demilitarised studies. These have demonstrated how religious affiliations affected scientists' attitudes, yet they avoid the 'lower' orders,[12] and how their views might have encouraged religious realignments in the dominant scientific class itself. Then again, when the grandees *are* seen to face threats, these are too often traced to the preceding century. True, the dons and divines were still "alarmed by the way that the Enlightenment of Diderot and Voltaire led to the French Revolution of 1789, the Reign of Terror, world war and Napoleon's military dictatorship".[13] But track this insurgent scourge forty years forwards, as Enlightenment ideas went 'underground', worming their way into insurgent 'pauper' Britain, and the more immediate threat becomes clear. How else to explain the often hysterical rejection of materialist evolution by don and divine? It was a *living* menace, shaking the ground under their feet. The grandees closed ranks against the rookery infidels for fear that their edifice-shaking sciences would topple the tiers of privilege.

Such a characterization also shows that *Reign* is not shaped by the old 'popularization of science' mould. That *noblesse oblige* model saw

10 J. R. Moore 1979, 19–122; J. H. Brooke 1991; P. Harrison 2015; Knight and Eddy 2016; Hardin, Numbers, and Binzley. 2018.

11 Rupke 1994b. The relations of Christianity and geology with its time and origins motif are understandably perennially interesting: Kölbl-Ebert 2009.

12 Using the terminology of the day. We have to be careful using this disparaging social-stratification language, for fear that it perpetuates rather than exposes the Victorian caste system stretching from royal 'highnesses' to 'low'-life. Conservative rags sneered at the latter, those who lived in some "filthy low street", and they execrated radicals for spreading their moral pestilence among "the low and ignorant": *The Age*, 28 Aug. 1842, 4; *Argus*, 28 Jan. 1843, 9.

13 D. Knight 2004, 53.

high-brow science being simplified and drip-fed to docile marginal audiences, a top-down activity with all the condescension that implied. Looking at the unexplored socialist and blasphemous forums actually exposes the poverty of this antiquated concept. But then this old diffusionist model has been heavily deconstructed by science historians recently.[14] *Reign of the Beast* is more an exercise in reclamation, in recovering an indigenous infidel science. Here, cannibalized scraps of subversive Enlightenment tomes were fused with upturned geological works to produce a blunderbuss science that was original, useful, and totally unacceptable to the establishment.

What we have in Saull's case was a dissident geology and astronomy, re-factored as munitions for new class interests, and shared with actively engaging audiences. These anti-clerical flocks were themselves of a new type. Their literacy was evidently not low; in fact, quite the opposite. Whether they bought into this subversive science at blasphemy chapels or socialist Halls of Science—which attracted the more "reflecting of the handicraftsmen"[15]—or in Saull's museum, they were obviously "periodical literate",[16] able to devour the co-operators' house journal, the *Crisis*, or the radical *Poor Man's Guardian*, and equally able to take in Saull's monkeying endeavours.

To sum up, *Reign of the Beast* focuses on illicit geology in infidel contexts. To say this is an unplumbed area would be an understatement. In 1990, Steven Shapin conceded that we knew pathetically little about the scientific beliefs of "lay members" of our own society.[17] If that is true of people today, imagine our ignorance of "lay" cultures in the 1830s. Agreed, the past few decades have seen an effort to amass Victorian plebeian autobiographies. But while these texts have been exploited, it is largely to illustrate hoi-polloi interest in literature, not science.[18]

If for Shapin's "laity" we read upstart urban groups, from fastidiously literate compositors to semi-literate but politically-articulate coalmen—the chaps, their wives and children, who haunted London's blasphemy chapels and socialist halls—then this area has remained the "cultural

14 Cooter and Pumfrey 1994; J. A. Secord 2004b; Topham 2009a, 2009b.
15 T. Coates to H. Brougham, 27 Sept. 1839, Brougham Correspondence 95, University College London; Coates 1841, 29.
16 Murphy 1994, 8.
17 Shapin 1990, 994.
18 Rose 2002.

wasteland" that Roger Cooter saw in 1984.[19] Only by filling in this missing class dimension will we achieve the necessary perspective on elite scientific authority. Traversing this formerly terra incognita will reveal the sciences of these subversive groups as locally-relevant constructions born of political necessity. Rejecting capitalist or anti-democratic authority, in society and science, the dissidents manufactured their own transformative knowledge on site, an indigenous production that they proclaimed as *really* useful.

Until we understand such a "contest between, rather than within, classes", say Roger Cooter and Stephen Pumfrey, and see how "ordinary men and women" tackled their own big scientific issues, we will not fully grasp how the grandees of science propped up the world of their paymasters by way of responding to the democratic threat.[20]

By focusing on a fashionable science, geology, utilized by the autodidacts among the "productive classes" (the co-operators' broader alternative to the radicals' emergent concept of the "working classes"), we can break up the old notion of a "common context" for all Victorian science. This idea of a "common context" has been prevalent since the 1970s.[21] Today, however, historians of science are no longer concentrating solely on the gentlemanly "intelligentsia", their shared ideas and ideals. Yet we still need to dig deeper, to further undercut the old paradigm by exposing the class bases of the rival 'pauper' sciences. In short, we need to get down to street level and ask really tricky questions: how did the science of the anti-union, capitalist 'blasphemers' differ from that of the anti-Malthusian co-operators or the democratic radicals? Only then will we understand how even the "scum"—as angry readers of the *Poor Man's Guardian* were branded[22]—made their own knowledges fit for purpose.

The resulting book probably takes too literally Jim Secord's injunction to view "science as a form of communicative action".[23] In *Reign of the Beast*, we see it as sloganeering shouts from behind the barricades. Nowhere better do we sense how political reform shaped the *elite* scientific culture

19 Cooter 1984, 2.
20 Cooter and Pumfrey 1994, 245, 249.
21 J. A. Secord 2021, 56–58.
22 *PMG*, 5 Nov. 1831.
23 J. A. Secord 2004b, 663.

of the 1830s than in Secord's *Visions of Science*. But his urban gentry with their expensive avocations producing ever-more pricey tomes were a far cry from our gutter-press infidels. Now we need to understand how political agitation shaped a responding working-class science, an important facet without which the whole cannot be understood.

The infidels and socialists left little in leather-bound form, nothing for the literary reviews even to sneer at. Their bleeding-edge politics created a much more jagged science. What artisans lapped up in Saull's museum was destined to serve distinct republican, democratic, and socialist ends. But penetrating this subterranean world through ephemeral squibs, illicit penny trash, and police informers' reports was a time-consuming labour of love, explaining why, as I say, the book was so long in the coming.

In truth, so many years have passed that many colleagues and correspondents are no longer with us to be thanked in person. In particular I am thinking of the late Mick Cooper and John Thackray, both of whom were encouraging and ever ready with information. Nellie Flexner read the manuscript many times over and suggested so many improvements. Bernie Lightman, too, acted beyond the call of duty and gave me his thoughts on the finished book. For fine reading of the text and stylistic suggestions I would also like to thank two anonymous referees. My heartfelt thanks also go to Hugh Torrens, Iain McCalman, Jim Moore, Roger Cooter, Jim and Anne Secord, Evelleen Richards, Ruth Barton, Steven Plunkett, and Frank James for plying me with offprints and coming to my aid over the years. I am also indebted to Angela Darwin for allowing me to read the T. H. Huxley family papers. Two of the greatest resources for radical literature are the Bishopsgate Institute, London, where David Webb was always enthusiastic and helpful in his searches; and the Co-Operative Heritage Trust Archive in Manchester, and here I must thank Jane Donaldson, Sophie Stewart, and Gillian Lonergan who have answered so many queries. At the Central Archive of the British Museum, Stephanie Clarke helped with the Trustees Minutes and Original Papers. I also received assistance from Valerie Hart at the Guildhall Library, Beverley Emery at the Royal Anthropological Institute, Rosie Jones, the Special Collections Librarian at the Natural History Museum, London, and, at the Geological Society of London Library, Caroline Lam and Wendy Cawthorne. To all these

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