Chapter 6

The Righteousness of Industrialism?
Analyzing the Legacy Behind 'The Present Moment' in Christian Technological Ethics

Jeremy Kidwell

Abstract

Several prominent moral theologians have suggested that the current environmental crisis is a consequence of disordered accounts of human work and labour. Though this has inspired abstract speculation about the modern transformation of labour, few analyses anchor such reflection in the concrete historical experience of Christian labourers or probe for theologically construed responses in context. In this paper, I will seek to identify a framework which can better represent the complex relation between Christian moral reflection and industrialisation as it developed in the nineteenth-century by offering brief but sustained analysis of two test cases: the Luddite revolts (1811-1812) and the Great Exhibition (1851). Contrary to the narrative which holds that the industrial transformation of labour emerged while theological reflection was increasingly marginalised by secularisation, I will seek to draw attention to the presence of theological reflection in two different means of historical response, the protest and promotion of industry.

Keywords: Industrialisation; Luddites; Great Exhibition (1851: London, England); Ethics, Christian; Great Britain, Church History, 19th Century; Labour History

Until recently, certain subsets within the study of modern British history have been strongly informed by the secularisation thesis, with the result that studies of labour history, technology, and the promotion of free-trade in international markets—especially in the Victorian era—tend to neglect or marginalise the subject of religion. For the contemporary theological ethicist seeking to attend to the conceptual legacies informing present-day religious reactions to moral issues surrounding technology and industrialisation, this lacuna in historical research leaves little material with which to work. Over the past two decades, historians such as Callum Brown, Sarah C. Williams, and Mark Smith have begun to undermine various aspects

Jeremy Kidwell

of the secularisation thesis, suggesting that secularisation of British society happens far later and less comprehensively than has previously been assumed.[1] In seeking to build on this new religious historiography and in seeking to provide useful resources for ethical reflection on the subject, I will examine two particular moments in British history which serve as landmarks in the history of industrialisation: the Luddite Revolts of 1811-1812 and the Great Exhibition of 1851. Aside from their significance in marking attitudes towards the industrial transformation of labour, both events are significant in that religious influences have been largely ignored or marginalised in historical studies. Study of these two events, which continue to be invoked in contemporary discourse, offers two case studies which commend the recovery of a historical narration of the composite heritage in technological ethics which our 'present moment' represents. This composite is suggested, more particularly, by sources which alternately offer a theologically construed promotion of and protest against the industrial transformation of labour.

As my reading of a 'composite heritage' may be suggestive (if not troubling) for many scholars in theological ethics, it is important to note at the outset that the scope of this study is necessarily circumscribed. My focus will be primarily empirical: drawing attention to theological themes in early nineteenth-century primary-source materials which have been neglected, and offering some suggestions as to the potential context and provenance for these themes (so as to demonstrate that they are more than superficially theological). Though I certainly hope that bringing these themes to light may enable fuller examination of this moral heritage from a theoretical perspective, space does not permit a full treatment of this kind in this paper. I do not mean to imply that an empirical study is somehow free from a normative stance, as this study *is* meant to be a sort of moral archaeology. Consequently, I will attempt to provide some cursory concluding analysis as to a moral framework in which to approach this 'composite heritage' where one finds the notion of Christian justice appropriated to such different ends.

1. The Luddites and the early modern roots of industrial social protest

In the popular contemporary conception the Luddites represent a sort of early Marxist radicalism which used machine-breaking to protest against the mechanisation of labour. Since the 1990s, there has arisen a new counter-cultural movement, describing itself as Neo-Luddite, which against the technological idolatry of the 1990s, openly eschews technology.[2] Setting aside

---

[1] For representative summaries, see Williams 1999, Chapter One and Smith 1994, 3.

[2] The route of rejection arguably begins in the modern tradition with Thoreau's Walden, and continues in the present with the self-proclaimed Neo-Luddite Theodore Roszak, and other authors including Kirkpatrick Sale, Sven Birkerts, David Noble, Clifford Stoll, Scott Savage, Neil Postman, and Wendell Berry; see Noble 1995. The contemporary contour

The Righteousness of Industrialism?

any criticisms one might have regarding contemporary protest against technology, the Luddite movement in Britain (primarily 1811-1812) remains iconic in two ways which are pertinent to this paper. First, it is seen as a movement of protest against machines and the industrial transformation of work. Second, it is rarely, if ever, characterised as a movement with religious features. Though the subject and its primary literature has been well-treated by historians, closer examination of Luddite primary texts in this study will validate my suggestion that theological reflection continues to inform nineteenth-century social response to industrialisation and validates my suggestion that mainstream protest involved Christian conviction. I do not mean to argue that radical protest against the industrialisation of work is an exclusively Christian domain, but a closer look at the terms of the Luddite protest reveals how and what sort of response to technology was intended.

An open letter written by the 'Plain Silk Hands of Derby' (dated 20 December 1811), serves as a useful starting point as several theological themes combine in the letter.[3] At stake for the plain silk hands (and provoking their potential participation in Luddite protest) is the use in the early 1800s by unscrupulous capitalists of frames with gauges which produced inferior quality cloth. The open letter, printed in the Nottingham Review, opens with an epigraph from Luke 10:7, 'The Labourer is worthy of his Hire' (Binfield 2004, 80).[4] Building on this epigraph, the letter continues with regular references to an established economic order which is governed by moral principles, including references to the 'originally established order, that has, till now, stood inviolate for nearly two centuries,' 'our common interest as men,' (80) and the exhortation that 'justice demands that we should receive a remuneration for extra labour' (82). Discerning what to make of the admixture of recourse to law and theological notions of justice in these documents requires an excursion into medieval jurisprudence in order to get some hint of what sort of moral order the protesters may have been alluding to.

In this letter, the spokesman for the silk weavers seems to be appropriating an existing strategy by radicals using appeal to British common law to bypass unfavourable rulings by monarch and parliament. In legal theory, 'common law' stands somewhere in-between the primordial natural law and more contemporary statutory law. It represents the preservation of a locally established and communally fine-tuned body of precedents with ancient provenance. As Weston suggests, 'common law is usually defined in

---

of this movement is described in greater detail in Jones 2006. For examples of green neo-Luddites, see work by Chellis Glendenning and John Zerzan.

[3] For a helpful history of the introduction and subsequent transformation of the framework knitting industry in England, see Kerridge 1985, 143ff.

[4] For the primary texts in this analysis, I will be relying on this recently published critical edition of Luddite primary source documents by Binfield.

Jeremy Kidwell

terms of ancient customs and described as a customary or traditional law with deep medieval roots, not willed by a legislator but declared by royal judges in common law courts, and already ancient when declared' (Weston 1991, 376). J. G. A. Pocock unpacks the early modern use of this notion by radicals as follows: 'Belief in the antiquity of the common law... encouraged belief in the existence of an ancient constitution... which was constantly asserted to be in some way immune from the king's prerogative action' (Pocock 1987, 46). While appeal to the common law of St. Edward the Confessor (1042—66) was initially made under Henry III to buttress monarchial claims, he later 'served as the patron saint of dissidents who vigorously promoted the quintessential radical causes of the century, including rebellion, deposition, even regicide' (Greenberg 2001, 2). Radical appropriation of common law is becoming a well-developed discourse in modern history, and scholars such as Binfield have drawn attention to the nineteenth-century Luddite appropriation of radical language in their social protest.[5] What is (perhaps) unique about this appropriation in the Luddite literature is the association of common law with divine justice (i.e. natural law).

The attenuation of concern for religious themes in association with British radicalism was buttressed in part by the work of Marxist historian (and devotee of William Morris), E. P. Thompson. Reductionist tendencies aside, Thompson's insights are actually quite helpful in seeking to frame Luddite radicalism in a way that allows for the sort of theological sensibilities that I have proposed above. What earlier historians had labeled riotous mobs, Thompson suggests are far more: a 'moral economy.' Thompson goes on to suggest that in 'crowd action' a careful historian can detect 'some legitimizing notion... By the notion of legitimation I mean that the men and women in the crowd were informed by the belief that they were defending traditional rights or customs; and, in general, that they were supported by the wider consensus of the community' (Thompson 1971, 78). In Thompson's model, taking the food riot in eighteenth-century England in his example, the 'actual deprivation' (i.e. food shortages due to pricing) is only part of the drive towards popular protest. Because 'these grievances operated within a popular consensus as to what were legitimate and what were illegitimate practices in marketing, milling, baking, etc... An outrage to these moral assumptions, quite as much as actual deprivation, was the usual occasion for direct action' (79). Building on Thompson's approach, I would suggest that the Luddite moral concerns draw upon explicitly Christian jurisprudence. As the epigraph for the open letter described above hints, Luddite appeals to common law invokes a

---

[5] For more on common law and the ancient constitution, see the recognised introduction to the subject, Pocock 1987. Good summaries can be found in Weston 1991 and Greenberg 2001. See also Burgess 1993; Christianson 1984; Christianson 1996; Kidd 2006; Klein 1993; Sommerville 1989.

The Righteousness of Industrialism?

theological conception of natural law which ultimately relies on the divine ordering of the creation. Along these lines, Joan Lockwood O'Donovan affirms an earlier 'Thomist natural-law tradition of English constitutionalism...' which I would argue is on display here in the Luddite literature (O'Donovan 1991, 3).[6] This suggestion is reinforced by the way in which the two concerns of the silk framework knitters are tied together by the biblical epigraph. First, they are concerned by the literal reference of the biblical passage, that of the social justice of fair compensation. Second, they are concerned about the potential decline of status in their trade. At stake here is craftsmanship, and these knitters have a long enough history in an export industry to possess a sophisticated understanding of the reciprocal impact of reputation on market pricing.

Several other examples of this language invoking British Constitutionalism and common law alongside religious conviction serve to demonstrate my point further. For example, in the 'address to cotton weavers...' the author, writing in the same vein as the silk frame knitters, relies on even more explicit theological language. They suggest, 'It is a duty you owe to yourself & to the rising Generation, to put a stop to the unjust & lawless wheels of Tyranny-It is in yr power and the immutable & unalterable laws of nature require it from your hands...' (Binfield 2004, 235). A '27 April 1812: Letter from 'A.B.' to Joseph Radcliffe...' also contains what Binfield describes as an intermingling of 'legal language with religious notions of divine judgement' (221-222). The writer begins with the threat of protest by machine destruction, and closes with an invocation of Christian justice by divine judgement:

> If this machinery and the Spirit of the People appears so resolute in the Cause, that if some measures be not adopted and immediately, it will be attended with great Distruction, and particular those who are our greatest Persecutors... you are bringing upon your Tenants, and other Occupiers of Lands, and all for the sake of two Individuals in this District... who will soon be number'd with the dead, and summoned before the awfull Tribunal, and that God who will Judge every Man according to the Deeds done in the Body. And Jesus knew their thoughts and said unto them, every Kingdom divided against itself is brought to desolation; and every city or house divided against itself, shall not stand. (222)

Clearly theological conceptions of judgement and justice pervade the writer's radical critique. Noteworthy also is the biblical quote contained in the end of the passage from the Gospel of Matthew 12:25. The writer cleverly

---

[6] See also Berman 2003 and Tierney 1997.

Jeremy Kidwell

undermines his opponent by inverting the appeal to civil order and subtly referring to satanic evil, of which the passage in context refers. In context, verse 29 (which is uncited) echoes a similar sentiment, asking 'how can one enter a strong man's house and plunder his property, without first tying up the strong man?' The theological tone of the language here is so strong that Binfield suggests that the letter may show some evidence of Methodist or evangelical influence. Further validating the presence of doctrinally particular (Methodist) piety in the Luddite literature, one finds letters by John Amos, convicted and executed for Midlands Luddite violence, which include a hymn bearing significant resemblance to one by Charles Wesley.[7]

While I have affirmed that there is a distinctively Christian voice amidst the radical protest to industrialism, there is another piece left to address in seeking to understand this heritage of protest. This involves a closer reading of the exact nature of what is being protested in the frame breaking of 1811-1812. In fact, I will argue that a more subtle reading of the Luddite literature (or really any reading at all) undermines the contemporary Neo-Luddite approach which claims that frame-breaking represents a protest driven by fear of the machine. This narrative, popularized in our time by writers such as Jeremy Rifkin and David Noble, contends that the phenomenon being protested is the replacement of human producers with machines.[8] A closer look at the Luddite context and literature reveals, however, that their concern is not exactly parallel to the contemporary one.

The iconic 'framer's bill' raised penalty of death against those who were convicted of frame-breaking in early 1812. Poems were a regular feature in the *Nottingham Review* and in the 6 March 1812, one appeared, anonymously submitted by Lord Byron, which protested this bill. A brief citation serves to make the point:

> Those villains, the Weavers, are all grown refractory, / Asking some succour for charity's sake; / So hang them in clusters, round each Manufactory, / That will at once put an end to mistake.

> The rascals, perhaps, may betake them to robbing, / The dogs to be sure have got nothing to eat- / So if we can hang them for breaking a bobbin, / 'Twill save all the Government's money and meat.

> *Men are more easily made than Machinery*, / Stockings will fetch higher than lives; / Gibbets on Sherwood will heighten the scenery, / Shewing how Commerce, how Liberty thrives.[9] (Binfield 2004, 115)

While Byron's poem eloquently criticizes the introduction of capital

---

[7] See Binfield 2004, 162-165.
[8] See Noble 1995; Rifkin 2004.
[9] Italics mine. For relevant extended commentary on this poem, see Mole 2003.

The Righteousness of Industrialism?

punishment to protect the capital investment represented by machines, it is important to situate this critique in context. The frames which were being destroyed still required skillful human operation, and represented not mechanised human replacement, but rather the augmentation of skillful human labour which rendered it more productive. Thus the concern of the protesting silk framework knitters is not about the use of machinery per se, but rather against the use of machinery in a way that produces an inferior product for short-term profit. Binfield notes:

> It has become a commonplace that the Nottinghamshire Luddites were less concerned with the utilization of machines themselves (which had become part of the trade in Elizabethan times and which had displaced the hand-knitting trade) than with particular practices associated with wide-frame machines and inferior knitting techniques. These objectionable practices included the employment of "colts," that is, unapprenticed workers, and the manufacture of "cut ups," hose that were knit on wide frames... cut, then sewn into stockings. These practices led to an abatement of wages, but just as important to the Nottinghamshire framework knitters was the damage to the reputation of their trade. (94)

Along these lines, the method of protest which sought the destruction of machines did not draw from an anti-mechanical impulse, but was rather about disabling capitalists who threatened the long-term viability of a trade already mechanised, but not yet consolidated into factories. In this way, Luddite appeals, including religiously rooted ones, to social justice are hardly so radical that they called into question some of the more basic structures of industrialisation, namely labour by machine. We are left with a complicated history regarding industrial protest which—in being superficially appropriated in the present context—has mischaracterised the nature of popular industrial protest in the early nineteenth-century and suppressed theological themes.

2. Progress and the virtues of industrialisation at the 1851 Great Exhibition

As I recount above, there are precedents in the early-modern period of movements of protest against industrialism which have organised along theological lines. However, as suggested at the outset, I do not intend to suggest that this is the only Christian response. In fact, as I will continue to argue here, there has been an equally enthusiastic and equally theologically construed *promotion* of the industrial transformation of labour. Against those approaches which seek to treat Christian theology reductively, and conclude that Christian industrial protest has been either nonexistent or marginalised by 'chiliastic' theology, I wish to offer this competing narrative as an alternative

Jeremy Kidwell

way by which to read the complicated Christian interaction with technology over the past two centuries of industrialisation. If this analytical paradigm fits, it necessitates a different sort of response by the contemporary Christian ethicist seeking to respond to the problems of work and technology. They are not writing into a conceptual vaccuum but rather stepping into a social space of competing narratives which form a highly developed and polarized discussion conducted along theological lines. In order to provide a useful contrast, in this concluding section I will provide analysis of theological themes in the literature surrounding the Great Exhibition of 1851.

In 1961 the General Electric company launched a major marketing campaign promoting the products of their industrial manufacture with the line: 'progress is our most important product.' Pitched by actor Ronald Reagan, this slogan rang out on TV screens across the US for nearly a decade. While this optimistic appropriation of 'progress' might have seemed ubiquitously modern (and perhaps American) in the 1960s and perhaps less inherently theological, our analysis here of the promotion of the Great Exhibition of 1851 will enable a glance at the provenance of this now globally dispersed paradigm and will enable us to better understand how Christian virtues and the promotion of industry became entangled under the banner of progress.

Over the past century, historians have narrated various ways in which the Great Exhibition served as a manifesto for industrial manufacture and a globalised economic system. More recent accounts have problematised the universal appeal or success of this promotion, but most have nonetheless failed to attend to the relation between this message and the theology of the day.[10] Such an omission is striking, especially given Prince Albert's insistence that Psalm 24 stand as the motto for the event which was 'printed widely throughout Exhibition literature' (Young 2009, 47). Recently, Paul Young has brought some scholarship to bear in probing theological themes in Exhibition literature. In a brief survey of the theological debate over the event he supports the approach which I am commending here. He concludes, 'it would be quite wrong to characterise the resultant debate in polarized terms, with the idea of material enrichment via scientific endeavour set against religious piety' (48). In this brief study, I will focus on the theological content of two primary sources, one written before the event and the other surveying it afterwards. As both documents reveal, promotion of the event, both before and after, had no trouble drawing on contemporary theology, and in many ways the event offered an opportunity to provide theologically explicit promotion of industrial manufacture.

Our first source, *The Great Exhibition Prize Essay* was written for the express purpose 'whereby the Union of all Nations at the Great Exhibition

---

[10] See Auerbach 1999; Davis 1999; Young 2009; Purbrick 2001.

The Righteousness of Industrialism?

might be made most conducive to the Glory of God in promoting the moral and religious welfare of Mankind' (Whish 1852, viii). During the planning stage, commissioners became concerned that without proper promotion, the event might be avoided by indifferent Christians and so they decided to run an essay contest in order to appeal specifically to Christians. Its benefactor, Rev. J. A. Emerton suggests:

> It has always appeared to me that public opinion, more especially that of the religious portion of the public, should be more directed to the moral advantages to be derived form the Union of all Nations at the Great Exhibition... There are hundreds, perhaps thousands of the community, comparatively indifferent to the thing in a commercial point of view; but once convince them the moral welfare of their fellow creatures, and more especially the glory of God is to be promoted, all their best feelings will be at once aroused, and their most strenuous exertions secured. (xiii-xiv)

Following this suggestion, and with the sanction of Prince Albert, Emerton advertised his essay contest to ask 'In what respect is the Union of all Nations at the Great Exhibition of 1851 calculated to further the Moral and Religious Welfare of Mankind, and thus conduce to the Glory of God; and in what manner may we, as individuals and as a nation, most effectually promote this object?' (xvii) The chosen essay, written by John Charles Whish, provides a thoroughgoing theological promotion of industry, not exclusive to the event. Emerton, in his preface to the published version of the essay, demonstrates the allegiance of Christian theology and the promotion of industry:

> The Great Exhibition is now numbered among the things that are past: the moral and religious effects have however but commenced, and in future time, when universal peace shall prevail upon Earth, when 'nations shall not learn war any more, but shall beat their swords into ploughshares, and their spears into pruning hooks'... the Great Exhibition of 1851 will doubtless be found to have been one of the most influential means of bringing about this happy result. (vi)[11]

As Emerton makes clear, the essay serves not to superficially theologize an existing agenda, but to demonstrate how industrial forces and their promotion are an ideal tool for pious Christians.

This conclusion is further supported in the text of the prize-winning

---

[11] Notably, the essayist is not quite so enthusiastic as the essay's commissioner, see his suggestion, 'We do not mean to say that the impulse... will be sufficient in itself to introduce the era of universal peace... it would shew an utter ignorance of the extreme depravity of man's nature in its fallen state to imagine this' (49-50).

Jeremy Kidwell

essay, for which a central trope is the reversal of the curse of Babel. Appealing to Paul's speech in Acts 17:26, Whish commends the universal brotherhood of mankind, 'God hath made of one blood all nations of men for to dwell on all the face of the earth....' (44).[12] He concludes that the event of the Great Exhibition which brings together the works of many nations, might be reasonably expected to 'bring glory to God... and if that be granted, this marvellous edifice shall prove to our race, a kind of compensation for the Tower of Babel, and become the means of promoting the brotherly union, the peace and prosperity of mankind!' (Whish 1852, 7-8). Whish is not short on praise of the technological agenda as inevitably promoting Christian civilisation. To this end, Whish quotes and comments on Hab. 3:3-4, 'The whole earth is a treasure-house,—a mine; from which we may obtain inexhaustible evidences of the goodness of our Creator… Or are we bound to recognize the fact, that each fresh discovery is, as it were, an enlargement of the mirror in which we see reflected the various attributes of the Creator?' (15). This notion of discovering God in scientific study bears strong resonances to Francis Bacon's promotion of the scientific task, albeit in a more imaginative mode, two centuries earlier, and a brief aside will serve to justify the conclusion that this humanitarian vision of progress has a long theological heritage.

Perez Zagorin describes Francis Bacon's quest as a 'Faustian pursuit of knowledge and limitless investigation of nature' (Zagorin 1998, 48). This now common reading of Bacon tends to obscure the explicitly humanitarian and theological character to his project. Bacon's quest was to re-discipline human intellectual inquiry so that it might serve the needs of humanity. The primary concern that drove Bacon to reformulate science was driven by his conclusion that the abstract medieval systems did not produce results, including social justice. He critiques the Aristotelian science being practiced in the *Novum Organum* and presents his own Scientific Method: 'it must be plainly avowed that the wisdom which we have derived principally from the Greeks is but like the boyhood of knowledge, and has the characteristic property of boys: it can talk but it cannot generate; for it is fruitful of controversies but barren of works' (Bacon 1905, 243). As Bacon's modern interpreters often fail to note his vision of science comes with a uniquely millennial shape: that God would work God's redemptive purposes through human ingenuity. This vision is presented at length in Bacon's work of utopian fiction, the *New Atlantis*, which follows several sea-travelers who accidentally stumble upon an imaginary culture, sophisticated beyond their wildest imaginings. As the narrator tours the lands of the King Salomon, they are shocked to behold innovations brought about by human ingenuity that reverse the consequences

---

[12] For more recent commentary on the 'myth of the human "community"' see Young 2009, 19-20.

The Righteousness of Industrialism?

of the fall, to the betterment of humankind. The wonders beheld have clear correspondence to maladies experienced in sixteenth-century England. Regarding agriculture: 'we make (by art) in the same orchards and gardens, trees and flowers to come earlier or later than their seasons; and to come up and bear more speedily than by their natural course they do' (Bacon 1955, 575). In contrast to their dismal medical situation, they have produced 'new artificial metals… for curing of some diseases' (575). Overall, Bacon presents a society in which humans prosper and coexist peacefully, as the very real threats of disease and scarcity are overcome by human ingenuity.

This pre-industrial entanglement of technology and eschatological bliss only imagined by Bacon is anticipated much more concretely in Whish's promotion of the exhibition. He suggests, with clear Baconian resonances, 'For, what is each new discovery of science?… It is only that he has dived deeper than others had done before him, into the benevolence of the Creator, as hidden in His works. It is only that he has traced out and laid open some fresh instance of the Divine power and wisdom, by which that benevolence was enshrined' (Whish 1852, 14). According to the essay, one cannot but seek to enhance the material output of workers by the use of machines, as to avoid this sort of material increase would be unfaithful:

> He who can prove that there need not, and ought not, to be any such thing as unsatisfied hunger, or shivering nakedness, that even though we should work but little, yet if we would all work wisely, there would be no lack of necessary comforts... yet his highest praise would be, that he had performed a religious action, that he had justified the ways of God towards man, and helped to clear away the mists which prevented their seeing the extent of that Divine benevolence which has actually exercised towards them. (36)

In seeking to emphasize the relation between material comfort and providence, Whish draws attention to the numerous texts in the Hebrew Bible which suggest that the prosperity of God's people is evidence of God's benevolence (40-41). A tract by the Reverend P. Macfarlane, *The Crystal Palace Viewed in Some of its Moral and Religious Aspects*, reinforces many of the suggestions made by Emerton and Whish that scientific progress, as applied in the industrial transformation of work, directly serves God's will, 'Science and art, in their proper sphere, are handmaids of religion... [and] the deeper you penetrate into the secrets of nature, the closer do you approach the God of nature' (MacFarlane 1851, 12).[13] Young aptly summarizes how this vision mobilized the Christian imagination: 'For Macfarlane what sanctioned the "use" of earthly resources was not only the fact that free trade

---

[13] Cited in Young 2009, 48.

93

Jeremy Kidwell

systematized via interdependency humankind's relationship with its environment, but also that it did so in such a way as to ensure familial recognition and harmony' (49).

In seeking to affirm that these sentiments persist after the event as well as in its imagining, it is useful to examine William Whewell's invited 'Inaugural Lecture for the Society of Arts,' given to the Royal Society several months after the exhibition. Whewell, one of the Exhibition's commissioners, was a mathematician and polymath. His invited lecture was intended to draw out what lessons might be drawn from the exhibition. Of note is Whewell's similar allegiance to the Baconian programme, having previously written a two volume 'Philosophy of the Inductive Sciences' in which he states his intention to offer 'an application of the plan of Bacon's *Novum Organon* to the present condition of Physical Science' (Whewell 1847, v). Whewell's lecture is essentially a reflection on the relation between art and science: 'Art was the mother of science: the vigorous and comely mother of a daughter of far loftier and serener beauty' (Whewell 1852, 354). Mapping this relation between art and science provides him with the basis for his critical appraisal of the products of industrial manufacture on show at the exhibition. 'Material art' as Whewell calls it, is to be judged as to how productively it is able to 'produce beauty, utility, and power' (354). Much like the discussions presented above, Whewell roots his appeal in nature, 'man is naturally… not only an artificier, but an artist' (359). Lest the theological backdrop of this appeal to nature be missed by his hearers, Whewell makes this explicit: 'So wonderfully and effectually has Providence planted in man the impulse which urges him on to his destination,—his destination, which is, to mould the bounty of nature into such forms as utility demands, and to show at every step that with mere utility he cannot be content' (359-360).

One feature of this lecture which bears special attention is his discussion of the apparent inferiority of British products on display at the exhibition which are not nearly so beautiful as many of the products from other nations. Even though there is much to admire in terms of both utility and beauty in those works on display by 'nations long civilized, though inferior to ourselves,' Whewell surmises that they lack 'progressive civilization and mechanical power' (360). Indeed, upon asking 'wherein is our superiority… that more advanced stage of art which we conceive ourselves to have attained?' Whewell concludes by noting the positive impact of mechanized industrialisation:

> In those countries the arts are mainly exercised to gratify the tastes of the few; with us, to supply the wants of the many. There, the wealth of a province is absorbed in the dress of a mighty warrior; here, the gigantic weapons of the peaceful potentate are used to provide clothing for the world. For that which makes it suitable that

machinery, constructed on a vast scale, and embodying enormous capital, should be used in manufacture, is that the wares produced should be very great in quantity, so that the smallest advantage in the power of working being multiplied a million fold, shall turn the scale of profit. And thus such machinery is applied when wares are manufactured for a vast population;—when millions upon millions have to be clothed, or fed, or ornamented, or pleased, with the things produced. (360-361)

Whewell's conclusion is striking in that he combines the pseudo-eschatological language of technological progress with the good of democracy and distributive social justice. As with Whish's essay, we find an enthusiastic entanglement of the doctrines of providence and creation with the industrial transformation of work. The final trajectory of all these writers is the suggestion that to halt or even slow the industrial 'machine' is to deny both justice and the providential care of the creator.

Closing

Moral theologians are often quick to suggest that there has been a transformation in the shape of human labour which necessitates new theological reflection. This study suggests that far from silence or neglect, there is a complicated legacy of theological reflection on the industrial transformation of work which calls for careful analysis. Moral theological treatment of this subject has been confounded by the dominance of neo-Marxist historical paradigms and a reductive approach to religion. This has led to a general lack of templates for treating the subject of religion and industrialisation seriously. In seeking to address this lacuna, this study has sought to deploy and test a potential framework for the historical study of theological response to the transformation of work. Rather than marginalise theology, I would argue that it is more fitting to look for two (sometimes competing, often overlapping) responses, both of which have roots in explicitly Christian theological reflection. These are: (1) Christian *protest* and (2) Christian *promotion* of the industrial transformation of work. My brief analysis of these two test cases also commends further research of other similar historical phenomena to further test this framework.

As promised at the outset of this study, some preliminary comments are also in order regarding how one might respond to the composite heritage that I have detailed here. This issue is perhaps most acute with regards to the notion of justice, which is deployed with theological intent in both the historical 'protest' and 'promotion' responses featured above. To put the question forcefully: does the alternate (and potentially conflicting) deployment of 'justice' in the language of each of these two communities (i.e.

Jeremy Kidwell

Luddites and Great Exhibition promoters) ultimately relativise the notion of justice for those seeking it in the present moment? This is a particularly live issue in moral theory, as prominent philosophers like Alasdair MacIntyre speak about 'different and incompatible conceptions of justice' (MacIntyre 1988, ix) and of 'conflicting conceptions of justice' (1). In response, Nicholas Wolterstorff has recently argued that it is more proper to describe these situations as 'conflicting understandings of the contours of justice' (Wolterstorff 2008, 21). There is hardly space here to narrate this complex disagreement, but I draw attention to this parallel conflict in moral theory because it can inform expectations of the historical task. When one finds theological notions deployed unevenly or in conflicting ways across history, the proper response is not to discard those categories or to seek a harmonised account. Rather what is called for is the exercise of practical public reason, what Oliver O'Donovan describes as acts of judgement: 'an act of moral discrimination that pronounces upon a preceding act or existing state of affairs to establish a new public context' (O'Donovan 2005, 7). However, judgement *relies* in part upon an accurate understanding of the shape of moral deliberation which has been passed on by tradition. Societies do not come to moral issues with a *tabula rasa*. Consequently, presumption that the novel shape of modern work renders irrelevant the study of historically embedded moral deliberation promotes an emotivist re-appropriation of former patterns. As I have hinted in this paper, synthetic moral/theological paradigms are remarkably persistent. In the case of the subject of this study, the doctrinal inflection of these movements of protest and promotion finds fresh but inaccurate appropriation (in the case of the Neo-Luddites) or a continued persistence from the 19th century through the atomic age (in the case of the progress paradigms being promoted in the Great Exhibition). The examples that I have provided above (GE marketing campaigns, Neo-Luddism) do not provide an exhaustive survey of this continued appropriation; they only scratch the surface. There is much more work to be done in examining the nature of theological responses to the transformation of work, and in seeking to understand the continued persistence of these paradigms. The point that I wish to make in closing is that the moral philosopher relies upon the work of the historian. Rigorous and concrete assessment of theological legacies is necessary so that, in the present moment, we can first *take notice* and then disentangle industrial ideologies from their theological roots in order to assess a proper theological response.

The Righteousness of Industrialism?

Bibliography

1. Primary Sources

Bacon, Francis. 1905. *The Philosophical Works of Francis Bacon.* Edited by James Spedding, Robert Leslie Ellis, and J M Robertson. London: Routledge.

_____. 1955. *Selected Writings of Francis Bacon.* Edited by Hugh G Dick. New York: Modern Library.

Binfield, Kevin. 2004. *Writings of the Luddites.* Baltimore: Johns Hopkins University Press.

MacFarlane, P. 1851. *The Crystal Palace, Viewed in Some of Its Moral and Religious Aspects.* D. C. Budge: Lanark.

Whewell, William. 1847. *The Philosophy of the Inductive Sciences.* 2nd ed. London: John W. Parker.

_____. 1852. "Inaugural Lecture, The General Bearing of the Great Exhibition on the Progress of Art and Science." *American Journal of Science and Arts* 13 (39): 352-370.

Whish, John Charles. 1852. *The Great Exhibition Prize Essay.* London: Longman, Brown, Green, and Longmans.

2. Secondary Sources

Auerbach, Jeffrey A. 1999. *The Great Exhibition of 1851: A Nation on Display.* New Haven, CT: Yale University Press.

Berman, Harold J. 2003. *The Impact of the Protestant Reformations on the Western Legal Tradition.* Law and revolution. Cambridge, Mass.: Belknap Press of Harvard University Press.

Burgess, Glenn. 1993. *The Politics of the Ancient Constitution: An Introduction to English Political Thought, 1603-1642.* University Park, Pa.: Pennsylvania State University Press.

Christianson, Paul. 1984. "Young John Selden and the Ancient Constitution, ca. 1610-18." *Proceedings of the American Philosophical Society* 128.4: 271-315.

_____. 1996. *Discourse on History, Law, and Governance in the Public Career of John Selden, 1610-1635.* Toronto; Buffalo: University of Toronto Press.

Davis, John R. 1999. *The Great Exhibition.* Stroud: Sutton.

Greenberg, Janelle Renfrow. 2001. *The Radical Face of the Ancient Constitution: St. Edward's "Laws" in Early Modern Political Thought.* Cambridge: Cambridge University Press.

Jeremy Kidwell

Jones, Steven E. 2006. *Against Technology: From Luddites to Neo-Luddism.* New York: Routledge.

Kerridge, Eric. 1985. *Textile Manufactures in Early Modern England.* Manchester, UK; Dover, N.H.: Manchester University Press.

Kidd, Colin. 2006. *British Identities Before Nationalism: Ethnicity and Nationhood in the Atlantic World 1600-1800.* Cambridge: Cambridge University Press.

Klein, William. 1993. "The Ancient Constitution Revisited." In *Political Discourse in Early Modern Britain.* Ed. N T Phillipson and Quentin Skinner. Ideas in Context. Cambridge: Cambridge University Press.

MacIntyre, Alasdair C. 1988. *Whose Justice? Which Rationality?* Notre Dame, Ind.: University of Notre Dame Press.

Mole, Tom. 2003. "Byron's 'ode to the framers of the frame bill': The Embarrassment of Industrial Culture." *Keats-Shelley Journal* 52: 111-129.

Noble, David F. 1995. *Progress Without People: New Technology, Unemployment, and the Message of Resistance.* Toronto, Ont.: Between the Lines.

O'Donovan, Joan Lockwood. 1991. *Theology of Law and Authority in the English Reformation.* Emory University Studies in Law and Religion. Atlanta, Ga.: Scholars Press.

O'Donovan, Oliver. 2005. *The Ways of Judgment.* Grand Rapids, Mich: William B. Eerdmans.

Pocock, John G A. 1987. *The Ancient Constitution and the Feudal Law: A Study of English Historical Thought in the 17. Century.* Cambridge: Cambridge University Press.

Purbrick, Louise. 2001. *The Great Exhibition of 1851: New Interdisciplinary Essays Texts in Culture.* Manchester: Manchester University Press.

Rifkin, Jeremy. 2004. *The End of Work: The Decline of the Global Labor Force and the Dawn of the Post-Market Era.* New York: Penguin.

Smith, Mark A. 1994. *Religion in Industrial Society: Oldham and Saddleworth, 1740-1865.* Oxford Historical Monographs. Oxford: Oxford University Press.

Sommerville, J P. 1989. *Politics and Ideology in England 1603 - 1640.* London: Longman.

Thompson, Edward Palmer. 1971. "The Moral Economy of the English Crowd in the Eighteenth Century." *Past & Present* 50: 76-136.

Tierney, Brian. 1997. *The Idea of Natural Rights: Studies on Natural Rights, Natural Law, and Church Law, 1150-1625.* Emory University Studies in Law and Religion. Atlanta, Ga.: Scholars Press.

Weston, Corinne C. 1991. "England: Ancient Constitution and Common Law." In *The Cambridge History of Political Thought, 1450-1700.* Ed.

The Righteousness of Industrialism?

Mark Goldie and J H Burns. Cambridge: Cambridge University Press.

Williams, Sarah C. 1999. *Religious Belief and Popular Culture in Southwark, C.1880-1939.* Oxford Historical Monographs. Oxford; New York: Oxford University Press.

Wolterstorff, Nicholas. 2008. *Justice: Rights and Wrongs.* Princeton: Princeton University Press.

Young, Paul. 2009. *Globalization and the Great Exhibition: The Victorian New World Order.* New York: Palgrave Macmillan.

Zagorin, Perez. 1998. *Francis Bacon.* Princeton, NJ: Princeton University Press.