

THE FIRST DARWINIAN LEFT: RADICAL AND SOCIALIST RESPONSES TO DARWIN, 1859–1914¹

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Abstract: Myths, misunderstanding and neglect have combined to obscure our understanding of the relationship between left-wing politics and Darwinian science. This article seeks to redress the balance by studying how radical and socialist thinkers of the late nineteenth and early twentieth centuries, desperate to legitimate their work with scientific authority, wrestled with the paradoxical challenges Darwinism posed for their politics. By studying eight leading radical and socialist thinkers — ranging from the co-founder of the theory of evolution by natural selection, Alfred Russel Wallace, through to Britain's first Labour Prime Minister, J. Ramsay MacDonald — this article analyses the often tortuous relationship between Darwinism and the left, as well as providing fresh insights into the historiographical debate over 'continuity' in radicalism and socialism. A strict definition of 'Darwinian' is adopted throughout, in order to help us delineate what was specifically 'Darwinian' from what merely reflected the general evolutionary ethos of the age, in left-wing thought, and to move us beyond the sensational and distorting focus on eugenics which has characterized previous studies.

I

Introduction

There is a widespread and persistent myth about the relationship between Darwin and the left which a profusion of scholarly articles since the mid-1970s have failed to shift from popular perceptions. The myth is that Marx offered to dedicate some volume or edition of *Capital* to Darwin. The documentary evidence for this claim was always slender. At some point, a letter to Edward Aveling — the partner of Marx's daughter Eleanor — got mixed in with a box of Marx's correspondence which Eleanor owned in the 1890s. The letter was from Darwin, politely declining Aveling's offer to dedicate an atheistic pamphlet to him. To one unwitting 1930s Moscow archivist it appeared that Darwin was declining Marx, and in the hands of the historical profession a legend was born.³ That legend flourished in a fertile soil. In the 1890s and early

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³ See, for example, I. Berlin, *Karl Marx* (London, 1963), pp. 247–8; S. Avineri, 'From Hoax to Dogma — a footnote on Marx and Darwin', *Encounter* (March 1967), pp. 30–2; B. Ollmann, *Alienation: Marx's Conception of Man in Capitalist Society* (Cambridge, 1971), p. 53; D. McLellan, *Karl Marx: His Life and Thought* (London, 1973), p. 424; V. Gerratana, 'Marx and Darwin', *New Left Review*, 35 (1974), pp. 60–82. For a flavour of how the myth was eventually disproved see L.S. Feuer, 'Is the "Darwin-Marx Correspondence" Authentic?', *Annals of Science*, 32 (1975), pp. 1–12;

1900s, in particular, there had been a welter of literature expounding the intellectual compatibility of Marxism and Darwinism. In Britain, Aveling had penned a piece for the *New Century Review* in 1897 entitled 'Charles Darwin and Karl Marx: A Comparison',⁴ which was subsequently translated and printed as a pamphlet all over Europe. In Italy, Enrico Ferri's *Socialism and Positive Science* — an ambitious attempt to unite the doctrines of Darwin, Spencer and Marx — had appeared in 1894, whilst in Germany, Ludwig Woltmann's *Darwinian Theory and Socialism* (1899) and Karl Kautsky's *Ethics and Historical Materialism* (1906) headed a host of publications linking Marxism and Darwinism. With the intellectual affinity apparently proved, it seemed perfectly natural that a letter should be found confirming Marx's personal regard for Darwin.

Much of the blame for this myth must also rest with Engels. The turn-of-the-century literature had taken its cue from Engels' graveside eulogy to Marx: 'Just as Darwin discovered the law of development of organic nature, so Marx discovered the law of development of human history.' Nor was this remark, reproduced in *Der Sozialdemokrat* for the digestion of socialists all over Europe, an aberration. In the Preface to the fortieth anniversary edition of the *Communist Manifesto*,⁵ and a number of his other later works, Engels explicitly encouraged socialists to regard Marx and Darwin as complementary. But significantly, and unlike his successors, Engels never sought to probe too deeply *how*. His purpose was purely polemical. Not only was Engels keen for Marxism to bask in the reflected glory of Darwinism but, perhaps more pertinently, he was keen to beat off putative socialist rivals in Germany, such as Ludwig Büchner and Friedrich A. Lange, who, as early as the 1860s and 1870s, had appropriated the term 'Darwinian' for their brands of socialism.⁶ Indeed, so well known was this German debate over socialism and Darwinism — which dramatically spilt over into a public spat between Germany's leading biologists in 1877 — that even the ostensibly apolitical Darwin commented on it.⁷ Engels' remarks are, therefore, best understood as both part of a

R. Colp, Jr, 'The Contacts of Charles Darwin with Edward Aveling and Karl Marx', *Annals of Science*, 33 (1976), pp. 387–94; M.A. Fay, 'Did Marx Offer to Dedicate *Capital* to Darwin? A Reassessment of the Evidence', *Journal of the History of Ideas*, 39 (1978), pp. 133–46; L.S. Feuer, 'The Case of the Marx–Darwin Letter', *Encounter* (October 1978), pp. 62–78.

⁴ *New Century Review* (March–April 1897), pp. 232–43.

⁵ K. Marx and F. Engels, *Collected Works*, Vol. 26 (London, 1990), p. 517.

⁶ See T. Benton, 'Social Darwinism and Socialist Darwinism in Germany: 1860–1900', *Rivista di filosofia*, 73 (1982), pp. 79–112.

⁷ 'What a foolish idea seems to prevail in Germany on the connection between Socialism and Evolution through Natural Selection.' Darwin to Dr Scherzer, 26 December 1879, in *The Life and Letters of Charles Darwin, Including an Autobiographical Chapter*, ed. F. Darwin (3 vols., London, 1887), Vol. 3, pp. 236–7. For the broader context of this debate see R. Weikart, 'The Origins of Social Darwinism in Germany, 1859–1895', *Journal of the History of Ideas*, 54 (1993), pp. 569–88.

general polemic to prevent Darwinism from being erected as a barrier against socialism, and part of a more parochial propagandist campaign to steal the Darwinian mantle, and any kudos which went with it, from rival brands of socialism. It was a tactic of which Marx fully approved, and which he initially helped to orchestrate.⁸

What Engels' remarks definitely did not represent was any meaningful or successful attempt to unite Marxist politics with Darwinian science. Darwinism was appealed to as a tactic; there was never any true integration. The term 'Darwinian' was sought as an honorific title, nothing more. What was true of Marxism was also true of the left more generally. The left needed Darwinism for both positive and negative reasons: positively, as an alternative to the traditional forms of authority they were busy disavowing; negatively, as a way of disarming those erecting biological barriers to socialism by lifting the Darwinian mantle for the socialist cause. Thus, in the period from the publication of the *Origin of Species* in 1859 through to the outbreak of war in 1914, there was a series of attempts, by turns ingenious and disingenuous, to reconcile radical and socialist politics with Darwinian science.

This attempted appropriation has generally been neglected by historians uneasy with the role of science in left-wing politics, and uncomfortable with cross-disciplinary studies.⁹ One exception is Mark Pittenger's study of the general relationship between American socialism and evolutionary thought, but in Britain interest in this area has tended to focus narrowly on the connections between Fabianism and eugenics.¹⁰ Whilst such work is undoubtedly valid in itself, there is a danger that focusing on the Fabians and eugenics will distort our understanding of the relationship between Darwinism and the left, on both sides. How typical the elitist and intellectualist Fabians were of the late nineteenth- and early twentieth-century left has long been open to debate.¹¹

⁸ See, for example, Marx to Engels, 7 December 1867, *Collected Works*, Vol. 42, p. 494.

⁹ Little has changed since Cooter described the study of science in radicalism as 'a veritable wasteland'. R. Cooter, *The Cultural Meaning of Popular Science* (Cambridge, 1985), p. 2.

¹⁰ M. Pittenger, *American Socialists and Evolutionary Thought, 1870–1920* (Madison, WI, 1993). For Britain, see C. Shaw, 'Eliminating the Yahoo: Eugenics, Social Darwinism and Five Fabians', *History of Political Thought*, VIII (1987), pp. 521–44; G. Jones, *Social Darwinism and English Thought: The Interaction between Biological and Social Theory* (Brighton, 1980). For the inter-war period see M. Freeden, 'Eugenics and Progressive Thought: A Study in Ideological Affinity', *Historical Journal*, 22 (1979), pp. 645–71; G. Jones, 'Eugenics and Social Policy between the Wars', *Historical Journal*, 25 (1982), pp. 717–28. A good example of the Fabian embrace of eugenics can be found in Bernard Shaw's 'Sixty Years of Fabianism Essay', in *Fabian Essays*, ed. G.B. Shaw, Jubilee Edition (London, 1948), pp. 207–31.

¹¹ See I. Britain, *Fabianism and Culture* (Cambridge, 1982); J.D. Young, 'Militancy, English Socialism and the Ragged Trousered Philanthropists', *Journal of Contemporary History*, 20 (1985), pp. 283–303.

Equally on the Darwinian side there have been persistent efforts to distinguish what was specifically 'Darwinian' from the more general medico-biological discourses, such as eugenics, which dominated turn-of-the-century thought. Following that lead, this article takes a narrow definition of 'Darwinian' — referring strictly to the theory of evolution by natural selection — and examines the extent to which this specifically Darwinian theory was reconciled with radical and socialist politics.¹²

This study has a threefold relevance for the history of radical and socialist thought. Firstly, it will help us understand whether or not there was anything specifically and definitely Darwinian in the general evolutionary views held by the political left. Secondly, this will help inform the historiographic debate about 'continuity' which dominates research into nineteenth-century radicalism.¹³ Intellectually such 'continuity' would be problematic if a 'Darwinian revolution' — so fundamental it changed man's perception of himself and his place in the universe — occurred in radical thought. Thirdly, enhancing our understanding of the 'first Darwinian left' may act as a salutary warning to those, such as Peter Singer, who would today attempt to give some scientific ballast to 'third way' politics by summoning up the authority of a new 'Darwinian left'.¹⁴

¹² Such a usage of 'Darwinian' is not anachronistic, as this narrow definition was constructed in the 1860s by the professionalizing elite around T.H. Huxley. This construction highlights the fact that 'Darwinian' is a loaded term, formed in contest and context, and open to shifting definitions. The meaning of 'Darwinian' could be far more broadly conceived. The Darwin of the sixth, heavily revised, edition of the *Origin* was, for example, far more Lamarckian than this definition allows, and many of the radicals and socialists who fell short of the narrow definition still considered themselves 'Darwinian'. The narrow definition, restricting 'Darwinian' to evolution by natural selection, is necessary, however, if we are to distinguish what was Darwinian from more general late nineteenth-century theories of evolution, progress, degeneration and eugenics — whether or not, that is, the radical and socialist left had a definite intellectual relationship with Charles Darwin, and what was (and still is) considered the essence of his theory. For the construction of the narrow definition of Darwinism see J. Moore, 'Deconstructing Darwinism: The Politics of Evolution in the 1860s', *Journal of the History of Biology*, 24 (1991), pp. 353–408.

The problem of distinguishing Darwinism from more general late nineteenth-century themes on the left was further confused by the eugenicists' attempted appropriation of the title 'socialist'. See K. Pearson, 'Socialism and Natural Selection', *The Fortnightly Review* (1 July 1894), pp. 1–21.

¹³ For an introduction to the debate over 'continuity' in British radicalism and socialism see R. McWilliam, *Popular Politics in Nineteenth-Century England* (London, 1998).

¹⁴ Peter Singer delivered 'The Darwinian Left', the Second Annual Darwin Public Lecture at the London School of Economics on 12 May 1998. P. Singer, *A Darwinian Left. Politics, Evolution and Cooperation* (London, 1999).

II Darwin's Challenge

Neither the 'apolitical' image Darwin was keen to project in his lifetime, nor the subsequent findings of historians of science, keen to 'unpack' the political and ideological context of Darwinism, would seem to offer much hope for a reconciliation of Darwinism and the left. Darwin's family background was Whig, utilitarian and *laissez-faire*. In 1877 he described his politics as 'Liberal or Radical'.¹⁵ But with the exception of joining J.S. Mill's Jamaica Committee, and despite occasionally letting his guard slip in personal correspondence, Darwin studiously avoided political pronouncements and activity.¹⁶ In particular, he remained silent on the issue where his work may have had its most immediate appeal for the left: materialism. Despite implying a purely positivistic account of human origins in the *Origin of Species*, Darwin deliberately chose to muddy the waters with passages about 'higher workmanship', and to eschew outright atheism.¹⁷ In this way, the initial furore over the *Origin* was dampened down, and Darwin's circumspection, combined with the efforts of friends such as the American biologist Asa Gray to reconcile evolution and Christianity, culminated in his posthumous assimilation into the Anglican establishment with a burial in Westminster Abbey.

From the late 1960s on, historians of science became less and less ready to accept the apolitical image Darwin had carved for himself. Inspired by Robert Young's war-cry that 'science is social', Darwin scholars began a drive to connect the discovery of evolution by natural selection with social structures and political thought.¹⁸ Adrian Desmond and James Moore, in particular, have demonstrated the extent to which Darwin's insight drew from the ethos of his Malthusian Poor Law culture. This new historiography has done an invaluable service, not least in pointing to the connections between the too often divergent fields of the history of science and the history of political thought. It does, however, leave an unresolved tension between two differing approaches as to how we might view the subsequent reception of Darwin's theory on the left. One approach would be to suggest that the identification of the Malthusian, Whig-Broughamite, utilitarian and *laissez-faire* elements in Darwinism forecloses any meaningful discussion of how that theory could have been

¹⁵ Darwin to Galton, 28 May 1873, in *Life and Letters*, Vol. 3, p. 178.

¹⁶ A. Desmond and J. Moore, *Darwin* (London, 1992), pp. 540–1; R. Weikart, 'A Recently Discovered Darwin Letter on Social Darwinism', *Isis*, 86 (1995), pp. 609–11.

¹⁷ On Darwin's religious views see M. Mandelbaum, 'Darwin's Religious Views', *Journal of the History of Ideas*, 19 (1958), pp. 363–78, and J. Moore, *The Darwin Legend* (London, 1994).

¹⁸ See especially R.M. Young, *Darwin's Metaphor* (Cambridge, 1985) and Desmond and Moore, *Darwin*. For an introductory survey to the changing parameters of Darwin studies see A. La Vergata, 'Images of Darwin: A Historiographic Overview', in *The Darwinian Heritage*, ed. D. Kohn (Princeton 1985), pp. 901–72.

received and utilized on the left. The context in which Darwinism was formed, that is, might be held to condition and limit the subsequent reception and use of the theory. The other, less deterministic approach, which can also be deduced from Desmond and Moore, would be to emphasize the profound political ambiguity in the formation of Darwin's evolutionary thought, and to stress that this ambiguity gave the left hope for reconciliation. The transmutationist did, after all, mix with the Malthusian in Darwin's heady concoction, and the former was so politically and religiously dangerous that Darwin described the admission of his position as being 'like confessing a murder'.¹⁹ The tale of Darwin's twenty-year travails to render his science politically safe, then, might forewarn us of an over-hasty dismissal, at the outset, of the project to reconcile Darwinism and radical or socialist politics as the work of misguided fools, doomed to failure.

Those grappling with this project did not proceed from ignorance or naivety. Radicals and socialists of the late nineteenth century were well aware of the Malthusian, Whig-Broughamite and utilitarian cauldron from which Darwin's theory had been served. Even so, suckered into accepting the late nineteenth-century conception of scientific truth, the left persisted in the belief that they could rescue a non-Malthusian essence from Darwinism. The *Origin* was a book that carried high authority in an age oozing with the positivist ethos; and with a professionalizing scientific elite, led by 'Darwin's bulldog', Thomas H. Huxley, promoting science as the royal road to truth, the desire for a secular scientific sanction for left-wing politics was overwhelming.²⁰ Whatever their qualms about a Malthusian strand, which made Darwinism deeply problematic for all radical and socialist thinkers, they were quick to perceive an ambiguity in the political implications of Darwinism, which encouraged their search for an accommodation.

On the positive side, Darwin had established the fact of evolution and, although he made only one opaque reference to man in the *Origin*,²¹ he clearly believed that man was as subject to evolution as the rest of nature. Politically, this was a potentially revolutionary doctrine. Evolutionary theory dissolved all rigidity in nature, and everything that had once been seen as eternal, including the human form, was made contingent and transitory. A static nature gave way to a nature in constant flux. Extended analogically to society, this gave tremendous hope to all who wanted to change existing arrangements.

¹⁹ Desmond and Moore, *Darwin*, p. xvi.

²⁰ On the power of the late nineteenth-century scientific elite in appropriating the concept of 'truth', see J.A. Paradis, *Thomas Huxley: Man's Place in Nature* (Lincoln, NE, 1978), p. 11; A.P. Barr, '“Common Sense Clarified” Thomas Henry Huxley's Faith in Truth', in *Thomas Henry Huxley's Place in Science and Letters*, ed. A.P. Barr (Athens and London, 1997).

²¹ 'Light will be thrown on the origin of man and his history.' C. Darwin, *The Origin of Species by means of Natural Selection, or the Preservation of favoured Races in the Struggle for Life* (London, 1985), p. 458.

Darwinian theory legitimated such a transference by making man as much a part of nature as the animals were. If not even the human frame was permanent and everlasting, then why should political arrangements be so? Indeed, if evolution was the rule of nature, and man was part of nature, then evolution must be the rule of human society. Not only *could* things be otherwise, but they should and would be so.

Powerful and liberating as such ideas were, they were immediately checked in Darwinian theory by the mechanism by which evolution was said to operate: 'natural selection'. By this mechanism, the breeding of animals and plants was said to outstrip the production of subsistence; this induced a 'struggle for existence'. Evolution by natural selection occurred because in this struggle some were better adapted to survive than others. This 'survival of the fittest' ensured that advantageous characteristics were passed on to later generations, and the less well-adapted were killed off. The key insight which prompted Darwin to hit upon this theory came from Malthus' *Essay on the Principle of Population* (1798). Malthus' argument that Enlightenment schemes of equality and perfectibility were doomed by the tendency of population to increase at a faster rate than subsistence led Darwin to observe a similar pattern in nature. In the animal and vegetable kingdoms, Darwin argued, there operated 'the doctrine of Malthus . . . with tenfold force'.²²

This was very uncomfortable for the left. An acceptance of evolution by natural selection seemed to involve an acceptance of the Malthusianism which early nineteenth-century radicalism had largely defined itself in opposition to.²³ In particular, three areas of agreement between Darwin and Malthus grated on the left. Firstly, Darwin had taken from Malthus the notion that nature was not benevolent and harmonious, but a malevolent 'struggle for existence'. While many radicals were ostensibly materialists, radicalism, as a discourse, had long rested on a providential account of nature, which allowed radicals to locate all evil and disharmony in political institutions.²⁴ Secondly, Darwin had taken from Malthus the notion of competition in the natural world, and this seemed to offer a cast-iron defence to the practices of *laissez faire*. This naturalization of free market capitalism seemed to follow automatically from Darwin's proposing 'one general law, leading to the advancement of all organic beings, namely, multiply, vary, let the strongest live and the

²² From the opening paragraph of Darwin's paper to the Linnean Society, 1 July 1858. Reproduced in J.L. Brooks, *Just Before the Origin: Alfred Russel Wallace's Theory of Evolution* (New York, 1984), p. 259. See R. Young, 'Malthus and the Evolutionists: The Common Context of Biological and Social Theory', *Past and Present*, 43 (1969), pp. 109–45.

²³ G. Stedman Jones, 'Rethinking Chartism', in his *Languages of Class: Studies in English Working-Class History, 1832–1982* (Cambridge, 1983), p. 105.

²⁴ See D. Stack, *Nature and Artifice: The Life and Thought of Thomas Hodgskin, 1787–1869* (London, 1998), Ch. 1.

weakest die'.²⁵ Thirdly, Darwin's reading of Malthus reinforced the breaking down of the distinction between the human and the animal world which he had achieved in his notebooks:²⁶ both were subject to the same fixed laws of animal existence. Moreover, just as Malthus had challenged radical programmes for human perfectibility, so Darwin's emphasis on inheritance — nature rather than nurture — severely limited the power of social reform programmes. At best such programmes were useless, at worst a positive evil which frustrated 'natural selection'.²⁷ Nor did Darwin leave the left any solace in the notion of evolution as progress. Whereas a literal translation of the Latin *evolutio* is the unrolling of a preordained plan, Darwin was at pains to emphasize that evolution by natural selection implied only change, not necessarily progress.²⁸

This was decisively different to the pre-Darwinian evolutionary theories which had held sway on the left. Adrian Desmond has shown how Jean-Baptiste Lamarck's theory of evolution by the inheritance of acquired characteristics — in which animals transformed themselves by their own exertions and passed on their gains to their offspring — had been accepted by radicals and socialists in the first half of the nineteenth century. Desmond even went so far as to regard the 'Darwinian revolution' as a 'palace coup' against the radical appropriation of Lamarckian theories.²⁹ In truth, Darwin's triumph had paradoxical, rather than wholly negative, consequences for the left. Broadly speaking, evolutionary theory held strong attractions for the left, but the integration of a specifically Darwinian version of evolution was problematic, if not impossible. On the one hand, by ensuring the acceptance of evolution it opened up the possibility for change. On the other, by explaining evolution in terms of natural selection it seemed to simultaneously undercut radical and socialist politics, as the smooth teleological progress of Lamarckism gave way to Malthusian brutality and wastefulness. The first individual in whom the tensions between Darwin's mechanism of natural selection and socialist politics registered was the co-discoverer of natural selection, Alfred Russel Wallace.

²⁵ Darwin, *Origin*, p. 263.

²⁶ *Charles Darwin's Notebooks, 1836–1844*, ed. P.H. Barrett, P.J. Gastrey, S. Herbert, D. Kohn and S. Smith (Cambridge, 1987), shows clearly that the distinction had broken down before Darwin read Malthus in September 1838.

²⁷ C. Darwin, *The Descent of Man, and Selection in Relation to Sex* (2 vols., Princeton, 1981), Vol. 1, pp. 168–70.

²⁸ See P.J. Bowler, 'The Changing Meaning of "Evolution"', *Journal of the History of Ideas*, 36 (1975), pp. 95–114.

²⁹ See A. Desmond, 'Artisan Resistance and Evolution in Britain, 1819–1848', *Osiris*, 3 (1987), pp. 77–110; A. Desmond, *The Politics of Evolution: Morphology, Medicine, and Reform in Radical London* (Chicago, 1989), esp. pp. 398–414.

III

Alfred Russel Wallace

Wallace is the forgotten man in the history of evolutionary theory, but it was the receipt of his paper, 'On the Tendency of Varieties to Depart Indefinitely from the Original Type', in February 1858, which panicked Darwin into going public. In it Wallace independently hit upon the idea of evolution by natural selection, and Darwin feared his long-suppressed discovery was about to be usurped. Initially Darwin vacillated, at one point beginning a letter giving up his claim to priority. Recomposing himself, Darwin called upon his powerful friends in the scientific establishment — Joseph Hooker and Charles Lyell — to arrange for a joint presentation of his and Wallace's papers at the Linnean Society on 1 July 1858. Wallace was neither consulted over the arrangements nor able to be present at the paper reading, which Hooker and Lyell arranged to put Darwin in the most favourable light. Quite simply there was a closing of the scientific establishment's ranks in favour of their friend and against a young self-educated upstart. Lacking Darwin's preoccupation with priority, Wallace, a man of unflinching modesty, never complained about this and was happy to publicize his own discovery as 'Darwinism'.³⁰

If Wallace's fortitude was astonishing, so was the fact that two men from such different backgrounds should have hit upon the self-same theory. Whereas Darwin had enjoyed the privilege of a wealthy family background and a formal education at both Edinburgh and Cambridge, Wallace, fourteen years Darwin's junior, was lower middle class and completed his formal education at Hertford Grammar, at the age of 13, before being apprenticed as a surveyor in his brother's firm. Equally, whilst Darwin's background was politically respectable, and his education centred upon conservative thinkers such as the theologian William Paley, Wallace educated himself from Owenite socialist texts and George Combe's phrenologically inspired *The Constitution of Man* (1828).³¹ Wallace's one advantage was that he was unencumbered by the religious ties and scientific training which led Darwin to first fret and then dissemble about an initial reluctance to accept that man was evolved from lower forms.³² Wallace, by contrast, was immediately convinced of the truth of human evolution after reading Robert Chambers' *Vestiges of the Natural History of Creation* — a purely speculative account of evolution — in 1845, and merely spent the next thirteen years searching for a mechanism to prove it; first on 'an audacious field trip' up the Amazon between 1848 and 1852,

³⁰ See B.G. Beddall, 'Wallace, Darwin, and the Theory of Natural Selection: A Study in the Development of Ideas and Attitudes', *Journal of the History of Biology*, 1 (1968), pp. 261–323; H. Lewis McKinney, *Wallace and Natural Selection* (New Haven, 1972), pp. 131–46; Desmond and Moore, *Darwin*, pp. 466–70.

³¹ A.R. Wallace, *My Life. A Record of Events and Opinions* (London, 1905), Vol. 1, p. 234; McKinney, *Wallace*, pp. 1–12.

³² See H.C. Gruber, *Darwin on Man* (New York, 1974), esp. Part III.

and then on a Malay expedition in 1858, from which he sent his paper to Darwin.³³ Wallace later claimed he was prompted to the insight underlying this paper by a malarial fit-induced recollection of Malthus' *Essay*.³⁴ Although, as with Darwin's Malthus-prompted 'eureka moment', recent work has emphasized the long, cumulative process which led up to Wallace's realization of a theory of natural selection.³⁵ Whatever the proximate cause, as the malaria subsided, Wallace penned the paper which gave Darwin palpitations.

Ultimately, however, the ideas in the paper caused more difficulties for Wallace than they did for Darwin. There was a tension between his political rejection of Malthus — in the 1840s he had declared that 'the theory propounded by Malthus is the greatest of all delusions'³⁶ — and his scientific theory, which made an acceptance of Malthus central. Wallace's struggle to resolve this tension intensified as his political position hardened. In the mid-1860s he added a belief in spiritualism to his radical politics. In 1881 Henry George's *Progress and Poverty* turned Wallace into an active campaigner for land nationalization, and after reading Edward Bellamy's *Looking Backward* in 1889 he began to style himself a socialist.³⁷ Over the same period Wallace became increasingly insistent upon the need to abstract man from the operations of natural selection. The first sign of uneasiness came in his 1864 paper 'The Origin of Human Races and the Antiquity of Man Deduced from the Theory of "Natural Selection"',³⁸ which introduced the argument that the advent of the human mind represented a new stage in the evolutionary process which divorced man from the vegetable and animal kingdoms, and freed him from the laws of natural selection. This argument was expanded in Wallace's 1870 paper 'The Limits of Natural Selection as Applied to Man',³⁹ and the

³³ See B.G. Beddall, *Wallace and Bates in the Tropics: An Introduction to the Theory of Natural Selection* (London, 1969).

³⁴ Wallace, *My Life*, Vol. 1, pp. 240, 361.

³⁵ See J. Moore, 'Wallace's Malthusian Moment: The Common Context Revisited', in *Victorian Science in Context*, ed. B. Lightman (Chicago, 1997), pp. 290–311.

³⁶ McKinney, *Wallace*, p. 5.

³⁷ J.K. Durant, 'Scientific Naturalism and Social Reform in the Thought of Alfred Russel Wallace', *British Journal for the History of Science*, 12 (1979), pp. 31–58; M.J. Kottler, 'Alfred Russel Wallace, The Origin of Man, and Spiritualism', *Isis*, 65 (1974), pp. 145–92.

³⁸ Published in the *Journal of the Anthropological Society*, 2 (1864). A considerably revised version, entitled 'The Development of Human Races under the Law of Natural Selection', appeared in A.R. Wallace, *Contributions to the Theory of Natural Selection* (London, 1875), pp. 303–31. For the cultural politicking around this paper, see E. Richards, 'The "Moral Anatomy" of Robert Knox: The Interplay between Biological and Social Thought in Victorian Scientific Naturalism', *Journal of the History of Biology*, 22 (1989), pp. 373–436.

³⁹ Reproduced in Wallace, *Contributions*, pp. 332–71.

concluding chapter of his magnum opus, *Darwinism* (1890).⁴⁰ This is not, however, to suggest that as Wallace became first spiritualist and then socialist, he correspondingly became less of a scientist.

Although Darwin was concerned that Wallace had been able to reconcile his science with his politics only by murdering their child,⁴¹ Wallace felt his spiritualism, his politics and his science were mutually reinforcing.⁴² Wallace's case that man's mental characteristics were inexplicable in terms of Darwin's theory was built, paradoxically, on the purely scientific grounds of a severe and consistent application of the theory of natural selection.⁴³ Central to this theory was the notion of utility. In the 'survival of the fittest' those who survived were those with an advantage in the struggle for existence. Evolution occurred by these advantages being accentuated over generations. Thus evolution by natural selection produced only what was useful. Wallace asked, what possible use was there in a savage having the same mental capacity as a civilized man? From his phrenological training Wallace had imbued an idea of the mind as made up of irreducible units of analysis. This meant that any mental characteristics found in civilized men must be latent in all men.⁴⁴ Yet what utility in the savage state could possibly have accrued to man's ancestors from having mathematical ability, aesthetic appreciation or moral qualities? Such mental characteristics — which must have been present, if not developed, in man's ancestors — were not even fully utilized by civilized men. It was inconceivable that they were the product of the struggle for life. Failing to find an adaptationist explanation in terms of natural selection, Wallace felt scientifically justified in explaining man's mental characteristics by some 'unknown cause'. As man was equipped with more mental capacity than was necessary,

⁴⁰ A.R. Wallace, *Darwinism. An Exposition of the Theory of Natural Selection with Some of its Applications* (London, 1890).

⁴¹ See Darwin to Wallace, 28 May 1864; Darwin to Wallace, 26 February 1867; Darwin to Wallace, 14 April 1869; Darwin to Wallace, 20 April 1870; in *Life and Letters*, Vol. 3, pp. 89–91, 94–5, 115–16, 121.

⁴² This is a point on which the historiography is divided. Kottler, Durant and Schwartz all saw Wallace's politics and spiritualism as exogenous forces undermining his science. M.J. Kottler, 'Charles Darwin and Alfred Russel Wallace: Two Decades of Debate over Natural Selection', in *The Darwinian Heritage*, ed. D. Kohn (Princeton, 1985), pp. 367–432; J.R. Durant, 'Scientific Naturalism and Social Reform in the Thought of Alfred Russel Wallace', *British Journal for the History of Science*, 12 (1979), pp. 31–58; J.R. Schwartz, 'Darwin, Wallace, and the *Descent of Man*', *Journal of the History of Biology*, 17 (1984), pp. 271–89. Smith, by contrast, emphasized the unity in Wallace's thought. R. Smith, 'Alfred Russel Wallace: Philosophy of Nature and Man', *The British Journal for the History of Science*, 6 (1972), pp. 177–99.

⁴³ Romanes characterized Wallace as a 'neo-Darwinian' for 'seeking to out-Darwin Darwin by assigning an exclusive prerogative to natural selection'. G.J. Romanes, *Darwin and After Darwin. Post-Darwinian Questions: Heredity and Utility* (Chicago, 1895), Vol. 2, pp. 12–13. See also Wallace, *Darwinism*, p. 444.

⁴⁴ Wallace, *Contributions*, p. 337; Wallace, *Darwinism*, pp. 461–72.

this bolstered a teleology that found man fitted for some future and higher purpose.⁴⁵

It was Wallace's conviction in the strength and uniqueness of man's mental characteristics which led him to argue that the human mind freed man from the necessity to physically adapt in the struggle for existence. His 1864 paper had made the case against the existence of distinct races by pointing to how remarkably similar were all the so-called races of men compared with, say, different breeds of dog. With different regions subject to wildly different conditions, from the Eskimo to the African, this could be explained only by supposing that man's body had stopped adapting at an early stage in human history. For Wallace the decisive moment had come with the advent of mind. The power of the human mind had raised man above all other animals, and exempted his body from evolutionary pressures. Man's body had reached its present form under the same laws of natural selection that shaped other animals, but once mind came into operation even the lowest savages were able to act upon and modify the forces of nature in such a way as to bypass bodily adaptations to the dictates of the 'struggle for existence'. Man did not have to grow hair to live in a cold environment, or develop speed and strength to catch his prey; rather, he applied his intelligence to make a coat and fashion bows and arrows.⁴⁶

Thus Wallace argued for a radical dichotomy between man and animals, which suited his spiritualism and politics but was also consistent with his evolutionary science. The rupture between animal and human mental characteristics and faculties was of a kind with two other stages in the development of the organic world: the distinction between inorganic and organic matter, and the distinction between the vegetable and animal kingdoms. Just as the birth of life in the first vegetable cell denoted more than an increased complexity of inorganic matter, and just as the flickering of sensation and consciousness in the first animal was a qualitative, rather than mere quantitative, advance over vegetable life, so the birth of mind, with its higher powers, in man represented more than a mere accentuation of the mental characteristics of animals.⁴⁷ Each was a distinctively new phase which had its origin in an 'unseen universe of Spirit'.⁴⁸ This dichotomy between animals and humans was as useful politically as it was for spiritualism. It allowed Wallace to rescue man from the Malthusian curse without compromising the mechanism of natural selection in the rest of nature. For this reason the dichotomy was to become a staple feature of the left's attempts to grapple with Darwinism. It was suggested to

⁴⁵ Wallace, *Contributions*, pp. 355–9; Wallace, *Darwinism*, pp. 476–7.

⁴⁶ Wallace, *Contributions*, pp. 324–5; A.R. Wallace, *Social Environment and Moral Progress* (London, 1913), pp. 93–102.

⁴⁷ Wallace, *Darwinism*, pp. 474–6.

⁴⁸ *Ibid.*, p. 478.

many by Henry George's *Progress and Poverty* (1879), a book Wallace tried, but failed, to interest Darwin in.⁴⁹

IV

Man and the Animals 1: Henry George and David Ritchie

For George, what separated man from the animals was not some 'unknown cause', but history. Man was 'only a more highly developed animal',⁵⁰ but 'by whatever bridge he may have crossed the wide chasm that now separates him from the brutes, there remains of it no vestiges'.⁵¹ The key feature, which in George's opinion put 'an irreconcilable difference' between even the lowest savages and the highest animals, was man's ability to progress. Whereas the animal kingdom engaged in an endless cycle of satisfying its fixed desires for food, shelter and reproduction, at some long-distant point man had begun to use the fulfilment of these desires as a base from which to strive for improvement and progress. George, who had no direct interest in science, beyond being imbued with the general evolutionary ethos of the age, did not deny that man had evolved directly from the animal kingdom. His point was that in doing so a qualitative change — 'not merely of degree but of kind' — had occurred. Human history had begun when man crossed the Rubicon of progress. Progress was 'a progression away from and above the beast' into the uniquely human sphere of culture.⁵² Human history, therefore, was taking man out of nature and into culture.

In this way the immensely influential *Progress and Poverty* represented a new stage in the discourse of radicalism and a limited accommodation with Darwinian science. Certainly George echoed early nineteenth-century critics of Malthus and appealed to a benevolent model of nature stained only by 'social maladjustment'.⁵³ But by radically dichotomizing the human and animal worlds, both George and Wallace were implicitly abandoning the deistic or providential account of nature that underlay early nineteenth-century radicalism. In its place they ceded nature, in terms of the animal and vegetable kingdoms, to the internecine warfare of the Malthusian struggle and the 'survival of the fittest', but at the same time built man a separate sphere of history and culture. This allowed them to continue to argue that evil was the product of political institutions, but with an awareness of the role of culture rather than nature. The argument that evil arose from political institutions was maintained consistently across the century, but the basis on which that argument was made changed. It was no longer the case because nature was conceived of

⁴⁹ Wallace, *My Life*, Vol. 2, p. 14.

⁵⁰ H. George, *Progress and Poverty* (London, 1953), p. 55.

⁵¹ *Ibid.*, p. 184.

⁵² *Ibid.*, p. 56.

⁵³ *Ibid.*, pp. 57–8.

as deistically benevolent; rather it was because man was the master of his own space: culture.

Of course a strict Darwinian could retort that whatever progress man had made away from a simple bestial existence of food, shelter and reproduction, he was still a slave to his nature in terms of inheritance. Here George fell back on a position which combined a traditional defence of the Lockean *tabula rasa* with an added sociological twist of cultural inheritance. Rejecting crude but popular racial theories about progress, like the evolution of the species, that were guided by fixed laws carried by inheritance from one generation to another, George pointed out that the most advanced civilizations of previous ages had tended to putrefy and degenerate.⁵⁴ Yet even during the decline of ancient Greece and Rome their populations had consistently produced babies that were as physically fresh and biologically healthy as their ancestors. Indeed, biologically, human beings were unchanged since the time of Plato and Aristotle. What had putrefied, and held subsequent generations in check, was not any 'natural' hereditary material, but the culture of these states. It was traditions, beliefs, customs, laws and habits — 'the matrix in which mind unfolds and from which it takes its stamp' — which had atrophied and turned progress into decline.⁵⁵ The path of progress had then been taken up by societies which a few generations previously had been regarded as barbarians, but whose supposedly inferior biological inheritance was set to nought by a healthy culture. Similarly, the superiority of nineteenth-century men over their ancestors was a product of social and cultural, not biological, inheritance. A set of European babies left to fend for themselves on a desert island would be back to stage one.⁵⁶ The differences that existed between men over generations arose 'because we stand on a pyramid, not that we are taller. What the centuries have done for us is not to increase our stature, but to build up a structure on which we may plant our feet.'⁵⁷

This argument, that progress arose not from improvements in human nature, but from improvements in the constitution of society, was taken up by David Ritchie, a fellow of Jesus College Oxford and future Fabian, in his essay *Darwinism and Politics* (1889). Ritchie did not seek to exempt man from the operation of natural selection, but he did argue that history had effected a radical distinction in the way natural selection operated between the human and animal worlds. The advent of consciousness originated a clean break which freed man from the tyranny of nature, and cut him off from the plant and animal kingdoms. Subsequently, natural selection, in terms of the

⁵⁴ *Ibid.*, pp. 186, 188.

⁵⁵ *Ibid.*, pp. 189–90, 194.

⁵⁶ *Ibid.*, p. 191.

⁵⁷ *Ibid.*, p. 193.

‘survival of the fittest’, did not operate among men.⁵⁸ Following Walter Bagehot, Ritchie argued that the age of conflict had been succeeded by an ‘age of discussion’ in which ideas competed.⁵⁹ This was very different from other species, and made cultural, not natural, inheritance, the key to evolution.⁶⁰ For humans, intellectual and moral inheritance was far more important than what was in the blood.⁶¹ Like George, Ritchie did not share Wallace’s desire to deny the continuum between man and animal: language was the key to cultural inheritance, and language was an advance only on the communication of lower animals.⁶² But, as with George, once consciousness had kicked in, a decisive and irreversible break had occurred.

The analysis of Wallace, George and Ritchie reveals the limited impact of the Darwinian revolution on radical discourse. In terms of continuity, the left was still able to argue that political institutions and ‘the organization of society’, rather than human nature, were the roots of evil. What was discontinuous was that this argument no longer rested on providential assumptions about the beneficence of nature. Man’s institutions were made to hold the key to human improvement or suffering not because nature was assumed to be beneficent — indeed with an acceptance of natural selection in the animal and plant kingdoms this could not be asserted — but because man was radically distinct from ‘lower’ nature and operated in a uniquely human sphere. One effect of Darwinism was thus to encourage the secularization of radicalism. Whilst some early nineteenth-century extremist elements and individuals — such as Hewett Cottrell Watson, William Chilton and Robert Knox — had been militantly atheistic, prior to 1859 mainstream radicalism had determinedly retained providential assumptions about the beneficence of nature.⁶³ Of course, as we shall see, metaphysical and providential assumptions retained some grip on the left even after 1859, but in the history of radicalism it is fair to see the works of Wallace, George and Ritchie as an important turn towards cultural, and hence secular, argument. Ritchie explicitly condemned those who

⁵⁸ D. Ritchie, *Darwinism and Politics, 2nd Edition, With Two Additional Essays on Evolution* (London, 1891), p. 24.

⁵⁹ *Ibid.*, p. 22.

⁶⁰ *Ibid.*, p. 67.

⁶¹ *Ibid.*, pp. 47–8.

⁶² Ritchie considered Wallace’s arguments at length in ‘Natural Selection and the Spiritual World’, in *ibid.*, pp. 85–115.

⁶³ This is a point of divergence between historians of political thought and historians of science. Whereas the former have concentrated on the mainstream providentialism of radicals, historians of science, especially Desmond, have been drawn to the atheistic fringe. Compare, for example, Stedman Jones, *Rethinking Chartism*, with Desmond, *Politics of Evolution*. For an attempt to bridge the gap see D. Stack, ‘William Lovett and the National Association for the Political and Social Improvement of the People’, *The Historical Journal*, 42 (1999), pp. 1027–50.

conceptualized a beneficent or metaphysical nature;⁶⁴ and whilst Wallace appealed to an unseen Spirit universe, and George complained that it was Malthus who had made Darwinism atheistic,⁶⁵ there was nothing in their version of radicalism which was essentially metaphysical. Their continuity with early nineteenth-century radicalism was that they were able to make the traditional radical case that evil inhered in political institutions. But this same argument was now made on different grounds, by maintaining that man, freed from nature in the distant past, lived in a self-created cultural space. His sufferings were man-made, and by man therefore remediable.

V

Man and the Animals 2: Kropotkin and Aveling

The only left-wing thinkers of any note who did not respond to Darwinism by radically dichotomizing man and the animals were Prince Petr Kropotkin (1842–1921) and Edward Aveling (1851–98). Both were trained scientists: Kropotkin a Russian prince turned anarchist was a naturalist, and Aveling, after gaining his doctorate in 1876, became a Fellow of The Linnean Society, a Fellow at University College London, and a Lecturer in Comparative Anatomy at the London Hospital.⁶⁶ Kropotkin's exotic origins and anarchism made the aristocratic émigré an outsider on the English left. Aveling, by contrast, was active both in the Secular movement in the 1870s and 1880s, and the socialist movement in the 1880s and 1890s, serving on the founding committee of the Independent Labour Party.⁶⁷ Yet, whereas Kropotkin's reputation has been carefully preserved and cultivated by generations of anarchists,⁶⁸ Aveling's reputation has fallen victim to the philandering and money filching which blighted his personal life — to such an extent that the brilliant scientist and enthusiastic popularizer of Darwin is now chiefly remembered for his repeated betrayals of the revered Eleanor Marx,⁶⁹ and Bernard Shaw's caustic comment that 'if it came to giving one's life for a cause one could rely on Aveling, even if he carried all our purses with him to the scaffold'.⁷⁰

⁶⁴ 'Here, as elsewhere, human beings must raise themselves above unthinking animals and not trust to a kind Providence in which they take no part.' Ritchie, *Darwinism*, p. 77.

⁶⁵ George, *Progress*, pp. 215–16.

⁶⁶ C. Tsuzuki, *The Life of Eleanor Marx. A Socialist Tragedy* (Oxford, 1967), pp. 77–8.

⁶⁷ See J. Callaghan, *Socialism in Britain since 1884* (Oxford, 1990), p. 55.

⁶⁸ With the latest reprint of *Mutual Aid* being in 1993. Peter Kropotkin, *Mutual Aid. A Factor in Evolution*, with an Introductory Essay 'Mutual Aid and the Social Significance of Darwinism' (London, 1993).

⁶⁹ See, for example, Lewis S. Feuer, 'Marxian Tragedians. A Death in the Family', *Encounter* 5, XIX (1962), pp. 23–32.

⁷⁰ E. Royle, *Radicals, Secularists and Republicans. Popular Freethought in Britain, 1866–1915* (Manchester, 1980), p. 105. The best short account of Aveling's relationship with Darwin is in J. Moore, 'Freethought, Secularism, Agnosticism: The Case of Charles

Kropotkin's response to the challenge Darwinism posed for the left rested not on abstracting man from nature but in recasting the mechanisms by which evolution operated. His main work, *Mutual Aid* (1902), opened with an account of his youthful travels in Eastern Siberia and Northern Manchuria between 1862 and 1867. Fresh from reading Darwin's *Origin*, the young naturalist had been immediately impressed by the struggle for existence of the animal species 'against an inclement Nature', but, search as he did, he failed to find the other feature of Darwin's theory of natural selection. Nowhere across the wasted plains could Kropotkin spot keen competition for the means of subsistence among animals belonging to the same species. Indeed, in contrast to the Malthusian struggle for existence that Darwin had found on his *Beagle* journey to the tropics, Kropotkin's rites of passage found only mutual aid and mutual support among the creatures of the tundra, as they struggled to maintain their life and preserve their species.⁷¹ Cooperation, rather than competition, characterized the lower species in their 'struggle for existence'. This was the key insight which those on the left who did not wish to follow Wallace, George and Ritchie in dichotomizing the human and animal kingdoms had to utilize. Instead of abstracting man from nature, Kropotkin firmly placed man within nature, but in a nature which was characterized by social cooperation rather than the individualist competition suggested by Darwin's theory of natural selection.

To legitimate this analysis with the authority conferred by the epithet 'Darwinian', Kropotkin eschewed the *Origin* and looked instead to Darwin's later anthropological work *The Descent of Man* (1871). Partly prompted by Wallace's sharp differentiation of man from the animals, the *Descent* argued that man's mental and moral characteristics were merely a quantitative augmentation of the behavioural patterns found among the lower species. Of special interest to the political left were Chapters III, IV, and V of Volume One, which outlined instances of sociability rather than struggle amongst animal species, and suggested that man's social qualities were the chief factor in his evolution. Kropotkin recognized the potential in these passages, not only for dismissing individualistic interpretations of evolution but also for suggesting that evolution necessitated man's becoming ever more cooperative, and concomitantly less competitive.⁷² Humans must be social, because animals are social and humans are animals. Indeed humans had to be more social, and eventually socialist, because the *Descent of Man* had shown that sociability

Darwin', in *Religion in Victorian Britain: Volume 1, Traditions*, ed. G. Parsons (Manchester, 1988), pp. 274–319, especially pp. 309–12.

⁷¹ Kropotkin, *Mutual Aid*, pp. 12–13.

⁷² *Ibid.*, pp. 21–2.

was an advantage in evolution. This was an argument which proved popular on the left.⁷³

Mutual Aid appealed because it was neat and superficially scientific. As Daniel Todes has shown, the idea of mutual aid was common among naturalists of all political persuasions in Russia. It was only when brought into contact with a quite different tradition — the individualistic account of Darwinism expounded by Huxley in a series of articles in the *Nineteenth Century* — that Kropotkin felt compelled to elaborate what he had regarded as simple common sense,⁷⁴ and thus challenge Huxley's bio-social law of competition with his own bio-social law of cooperation. While an effective rhetorical strategy, the problems with this approach were threefold. Firstly, despite its subtitle, *A Factor in Evolution*, Kropotkin's book had very little to say about mutual aid as a factor in the evolution of the physical characteristics of species. *Mutual Aid* demonstrated the advantages of cooperation, and the necessary relationship between cooperation and intelligence and ethics, but said little about how this contributed to speciation. Secondly, it lacked popular resonance, resting as it did upon the less well known and less accessible of Darwin's two major works. At least those on the left who sought to dichotomize humans and animals did so without compromising their acceptance of the most famous scientific work of the century.⁷⁵ Thirdly, it made the left dependent upon naturalizing human relations. With the case for socialism made naturalistically, human beings were reduced to little more than upright apes, determined by their 'nature'. Thus, in Kropotkin, concepts of animal nature and human nature loomed large, but the power of the previous seven thousand years of culture in shaping man was more or less absent. Not only did this encourage a tendency to arbitrarily laud as 'natural' any evidence of sociability, and dismiss as 'artificial' any instances of individualism, it also led Kropotkin to minimize the cultural space humanity had carved for itself. In contrast to Wallace, George and Ritchie, who had eliminated nature from the radical case, Kropotkin represented a step back: reviving a cooperative nature as the criteria on which human society should be judged, and suggesting a teleological progress to ever more natural cooperation.

⁷³ See, for example, Laurence Small, *Darwinism and Socialism* (London, 1908). In Small's judgment 'Chapters III, IV, and V, of the Descent should be carefully studied by all interested in social welfare. They emphatically negative the position that darwinism is anti-Socialistic.' *Ibid.*, p. 11.

⁷⁴ See D.P. Todes, *Darwin without Malthus: The Struggle for Existence in Russian Evolutionary Thought* (Oxford 1989), esp. pp. 123–42; and D.P. Todes, 'Darwin's Malthusian Metaphor and Russian Evolutionary Thought, 1859–1917', *Isis*, 78 (1987), pp. 537–51. Huxley's 'The Struggle for Existence: A Programme', *The Nineteenth Century*, 23 (1888), pp. 161–80, was supplemented by his second Romanes lecture in May 1893, published as T.H. Huxley, *Evolution and Ethics* (London, 1893).

⁷⁵ The *Origin*, remember, did not explicitly include man.

Similar problems bedevilled Edward Aveling's attempts to unite socialist politics with Darwinian science. Aveling was almost unique on the left in his ostensibly unqualified acceptance of Darwin. This had much to do with his subscription to J.W. Draper's thesis that science and religion were engaged in an 'irreconcilable' mortal combat. Throughout history the scientist had stood on the side of atheism and, in the late nineteenth century, men had a straight choice between the Bible and Darwin.⁷⁶ Aveling chose the latter, and with an almost religious zeal dedicated himself to explaining and popularizing Darwin's work⁷⁷ while at the same time promoting secularism and socialism. His greatest achievement was the series of pamphlets and regular articles in the *National Reformer* and *Progress*, through which he brought Darwinism to a British secularist movement which had been slow to realize its importance. Even after Aveling, however, the use of Darwinism among secularists remained strictly limited to adding a greater sophistication to an argument about the material nature of mind which they had been making for nearly thirty years anyway.⁷⁸

As with Kropotkin, but unlike Wallace, George and Ritchie, Aveling denied any dichotomy between humans and animals. As the title of his pamphlet *Monkeys, Apes, Men* (1884) indicated, for Aveling there was nothing special about man — either biologically or historically. All things, in strictly Darwinian terms, were part of one huge continuum from inorganic to organic, and from plants to animals, including humans. There were no special interventions and no distinct breaks in nature.⁷⁹ Aveling maintained that man had evolved from, and was still part of, the animal world. The idea that man was infinitely superior to the animals was a fallacy which resulted from studying only Europeans. A brief survey of the savage races showed that the interval between the highest and lowest men was greater than that between the lowest man and the highest ape. Some men, that is, were closer to apes than they were to other men. To prove his point, in *The Origin of Man* (1884), Aveling cited examples of tools, fire, dress, houses, property and language among the 'lower animals', demonstrating that human practices were nothing more than the development of animal practices. Even progress, which George had found to be uniquely human, was little in evidence among aborigines, but was clearly practised by birds, which adjusted their flight to take account of telegraph wires. Mind, Aveling

⁷⁶ E.B. Aveling, *A Godless Life the Happiest and Most Useful* (London, n/d), p. 7; E.B. Aveling, *The Irreligion of Science* (London, 1881), p. 3. For the context of Aveling's remarks see J.W. Draper, *History of the Conflict between Religion and Science* (New York, 1974); O. Chadwick, *The Secularization of the European Mind in the Nineteenth Century* (Cambridge, 1975), Ch. 7.

⁷⁷ E.B. Aveling, *The Student's Darwin* (London, 1881); E.B. Aveling, *The Religious Views of Charles Darwin* (London, 1883).

⁷⁸ Royle, *Radicals, Secularists and Republicans*, pp. 171–2.

⁷⁹ See E.B. Aveling, *The Darwinian Theory. Its Meaning, Difficulties, Evidence, History* (London, 1884).

recognized, was the main battleground, and in his view Wallace was as bad as the special creationists.⁸⁰ Moral and mental practices did not mark off men. They too had evolved from the practices of ‘non-human animals’. Indeed, some groups of animals were even more moral than the aborigines.⁸¹

After he had placed man so firmly and so unforgivingly in nature, the only strategy by which Aveling could hope to escape a blighting of his socialist agenda by the operation of natural selection was to render nature benevolent. Despite his professed atheism and devotion to Darwin, Aveling revived the very romantic deification of nature which less strict left-wing Darwinians, such as Wallace, George and Ritchie, had implicitly or explicitly abandoned. As with Kropotkin, if man were to be put into nature with the animals, then that nature had to be benevolent, harmonious and cooperative. Even Aveling’s atheism was justified in terms of rescuing nature from the aspersions that a God-ruled universe would cast on it.⁸² Thus in *The Gospel of Evolution* (1884) and *God Dies: Nature Remains* (1881), Aveling both confirmed secularist suspicions that science was being erected into a new superstition, and placed himself firmly in the traditional radical discourse of erecting a benevolent nature as the standard by which to judge social arrangements. The unworldly pretensions of Christianity were criticized for casting a shadow over man’s relation to nature (always significantly with a capital N), and Aveling recommended man turn back to the study of nature — where the ‘gospel of evolution’ was revealing a new loveliness.⁸³ Significantly, in these pamphlets the influence of his beloved Shelley⁸⁴ was more to the fore than that of Darwin, and Aveling adopted a poetical tone to describe man’s rediscovery of nature. Paradoxically, it was Wallace, George and Ritchie who could not fully accept Darwinism, who represented a new historical and cultural element in the radical critique. The ostensibly scientific Aveling and Kropotkin represented a regression to a benevolent and deistic concept of nature.

VI Marx and Engels

Aveling was one of the first authors — the most important was Karl Kautsky — who attempted to provide Marxism with a scientific basis by building out from the theory of sociability found in Darwin’s *Descent of Man*.

⁸⁰ E.B. Aveling, *Monkeys, Apes, Men* (London, 1884), p. 47; ‘Mind as a function of the nervous system — iv’, *The National Reformer and Free Thought Advocate*, 2, XL (9 July 1882); ‘Mental Evolution in Animals’, *The National Reformer and Free Thought Advocate*, 14, XLIII (30 March 1884).

⁸¹ E.B. Aveling, *The Origin of Man* (London, 1884), pp. 32–9.

⁸² Aveling, *A Godless Life*, p. 1.

⁸³ E.B. Aveling, *God Dies: Nature Remains* (London, 1881), p. 7.

⁸⁴ See E.B. Aveling and E. Marx, *Shelley’s Socialism: Two Lectures* (Manchester, 1947).

This was a superficially compelling argument, and one which Kautsky felt provided Marxism with a much needed ethical base,⁸⁵ but it would have been both alien and unacceptable to Marx and Engels. The fundamental premise for any analysis built upon the observation of sociability amongst animals was that it was possible to draw lessons about human society from the animal kingdom. Marx and Engels' starting point, by contrast, recalled by Engels even in the 1880s, was Feuerbach's dictum: 'Man as he sprang originally from Nature was only a mere creature of nature, not man. Man is a product of man, of culture, of history.'⁸⁶ Even Engels — supposedly the more Darwinian of the two — found animal societies of strictly negative value in drawing conclusions about human societies. Specifically, there could be no transfer of the concept of struggle in nature to the concept of class struggle in history.⁸⁷

Marx was undoubtedly keen on *aspects* of Darwin. He first read the *Origin* in December 1860, re-read it in 1862, and may have attended lectures by Huxley in the same year. Wilhelm Liebknecht claimed Marx's circle spoke of little else when the *Origin* was first published,⁸⁸ and, in a rush of enthusiasm, Marx told Engels the book 'contains the basis in natural history for our view'.⁸⁹ In more considered comments, however, he was impressed only with the blow that Darwin dealt to teleology, and this is probably what he had in mind when he described the *Origin* as 'epoch-making'. This comment was made in *Capital*, which contains Marx's only published comments on Darwin — two footnotes.⁹⁰ Of course, Marx did send Darwin a copy of *Capital* in 1873, which to this day famously remains uncut in Down House, but one should not read too much into this: he also sent a copy to Herbert Spencer on the same day.⁹¹ Equally, although Marx was deeply interested in the natural sciences, this does not prove he was especially taken with Darwin. Indeed in 1866 he told Engels he preferred the French naturalist Trémaux.⁹² There is no

⁸⁵ See also Ludwig Woltmann, *Die Darwinische Theorie und Sozialismus: Ein Beitrag zur Naturgeschichte der Menschlichen Gesellschaft* (Düsseldorf, 1899); Antonio Labriola, *Saggi sul Materialismo Storic* (Rome, 1895); A. Pannokoek, *Marxism and Darwinism* (Chicago, 1912).

⁸⁶ F. Engels, 'Ludwig Feuerbach and the End of Classical German Philosophy', in Marx and Engels, *Collected Works*, 26, p. 379.

⁸⁷ F. Engels, *The Origin of the Family, Private Property, and the State* (Harmondsworth, 1985), p. 64; F. Engels, *Dialectics of Nature* (London, 1955), pp. 402–5.

⁸⁸ W. Liebknecht, *Karl Marx. Biographical Memoirs* (London 1975), pp. 91–2.

⁸⁹ Marx to Engels, 19 December 1860, in Marx and Engels, *Collected Works*, Vol. 41 (London, 1985), p. 232. See also Marx to F. Lasalle, December 1860, in *ibid.*, p. 246.

⁹⁰ K. Marx, *Capital. A Critique of Political Economy* (London, 1990), Vol. 1, p. 461 n, pp. 493–4 n.

⁹¹ R. Colp, Jr, 'The Myth of the Darwin–Marx Letter', *History of Political Economy*, 14 (1982), p. 462.

⁹² Marx to Engels, 7 August 1866, *Collected Works*, Vol. 42 (London, 1987), pp. 304–5. See also Marx to Engels, 3 October 1866, in *ibid.*, p. 322; and Engels to Marx, 5 October 1866, in *ibid.*, p. 323.

evidence that Marx read the *Descent of Man*, and the only personal contact of any note between Marx and Darwin was Edwin Ray Lankester who acted as personal physician to Marx through his terminal illness and whose father had been a friend of Darwin's.⁹³

Engels' comments on Darwin have sometimes been used to drive a wedge between him and Marx.⁹⁴ In fact, on all major points of interpretation Marx and Engels were at one in their attitude to Darwin. Both admired the blow Darwin had dealt 'the metaphysical conception of Nature', and picked this out as his principal achievement in *Capital* and *Socialism: Utopian and Scientific*, respectively.⁹⁵ Equally, both were unhappy with the Malthusianism that underlay Darwin's theory of evolution by natural selection, and mocked Darwin's 'bitter satire' 'when he showed that free competition, the struggle for existence, which the economists celebrate as the highest historical achievement, is the normal state of the *animal kingdom*'.⁹⁶ Marx and Engels, by contrast, were confident that history had separated man from that animal kingdom, and given man the power to change even nature itself.⁹⁷

Like Wallace, George and Ritchie, Marx and Engels denied the validity of any simple transference of the laws governing animal societies to the distinctly human sphere of existence. The grounds, however, on which Marx and Engels made this claim differed in two important ways. Firstly, whereas Wallace, George and Ritchie conceived the transition from animals to humans idealistically — in terms of the birth of human consciousness — Marx and Engels understood the transition in materialistic terms. For Marx and Engels the key lay in the labour process. Labour in 'an exclusively human characteristic' was distinguished from labour at 'the animal level', both by the use of tools and by the fact that man, with a conscious purpose, could realize himself through labour. This had no parallel in even the most intricate labour of animals such as the bee or spider.⁹⁸ Secondly, the positing of a distinctly human sphere of existence in Marx and Engels rested on a historical, rather than a theoretical, dichotomy between a human and a natural existence. That is, they denied the existence of any independent criteria of nature, above and beyond man.

⁹³ Colp, 'The Myth', pp. 469–70.

⁹⁴ See, for example, S. Avineri, *The Social and Political Thought of Karl Marx* (Cambridge, 1969), p. 70.

⁹⁵ Marx, *Capital*, p. 461 n; F. Engels, *Socialism: Utopian and Scientific* (Moscow, 1978), p. 53.

⁹⁶ Engels, *Dialectics*, p. 49. Marx agreed. Finding competition in nature, social Darwinism 'conversely considers this a conclusive reason for human society never to emancipate itself from its bestiality'. Marx to Paul and Laura Lafargue, Marx and Engels, *Collected Works*, Vol. 43 (London, 1988), p. 217.

⁹⁷ K. Marx, *Early Writings* (Harmondsworth, 1984), pp. 328–9.

⁹⁸ Marx, *Capital*, pp. 283–6; F. Engels, 'The Part Played by labour in the Transition from Ape to Man', in Engels, *Dialectics*, pp. 230, 240, *passim*.

Marx's Hegelian heritage made him unwilling to countenance any theoretical division between natural science and the science of man: there could be only one science. But this did not mean that man was simply subsumed in natural science any more than natural science could be simply subsumed in the science of man. Rather, human history — built upon distinctly human labour processes — had inaugurated a new historical phase, which changed even natural history. With human attempts to transform nature, 'natural history' was becoming 'human history'. Any transference of so-called 'natural laws' to society underestimated the extent to which human purposes were to be found in the 'natural'. The operations of 'nature' were no more 'natural' than the operations of the free market.⁹⁹

Thus, far from endorsing Darwinism as a guide to social questions, Marx and Engels felt that history had rendered any transference of the laws ruling animal societies to human societies meaningless. Human history was not natural history: 'History', Marx wrote, 'is the true natural history of man.'¹⁰⁰ Social Darwinists were contemptible, and socialist Darwinists such as Büchner wrote 'shallow nonsense',¹⁰¹ because they misunderstood this and sought to view civil society in terms of nature. This was the point Marx made when he referred to Darwin in *Capital*.¹⁰² That Engels accepted it too can be seen in his *Origin of the Family, Private Property, and the State* (1884), with its very non-Darwinian explanation of female oppression as a product of history rather than of biology. The province of natural science was animals in nature, but humans were not simply animals; they had created their own historical space. So powerful was man that he had distorted nature itself, as an independent criteria, beyond all recognition. Natural science could provide only a pre-history of man as an animal; it could say nothing about his human and historical existence. Social history was more important than biology in shaping man. Even the senses of social man — his musical ear and eye for aesthetic beauty — were superior to those of non-social man, the product of his history rather than his nature.¹⁰³ Marx made these points in his 'Paris Manuscripts' of 1844 and consistently maintained them in *Capital*. There is absolutely no evidence that the *Origin* prompted any change in his views on the relationship between natural science and the study of man.

⁹⁹ Marx, *Early Writings*, pp. 279–360.

¹⁰⁰ *Ibid.*, p. 391.

¹⁰¹ Marx to Engels, 14 November 1868. On Lange, Marx to Kugelmann, 27 June 1870.

¹⁰² He even quoted Vico: 'human history differs from natural history in that we have made the former'. Marx, *Capital*, pp. 493–4 n.

¹⁰³ Marx, *Early Writings*, p. 353; 'Natural science will in time subsume the science of man just as the science of man will subsume natural science; there will be *one* science.' *Ibid.*, p. 355.

VII

Evolutionary Socialism and Evolutionary Theory

One critic of Marx's and Engels' failure to unite socialism and Darwinian science was J. Ramsay MacDonald. In many ways MacDonald represents the culmination of the efforts to integrate Darwinism and socialism, and arguably the first genuine attempt to apply Darwinism to practical politics. Taking its lead from the continent, MacDonald's *Socialism and Society* (1905) was English socialism's only book-length attempt to explicitly unite socialism with Darwinian science. Nor was the project a mere passing fancy. All of MacDonald's major practical works were suffused with evolutionary imagery and language.¹⁰⁴ As an early Fabian, MacDonald also represents an instructive intersection for the left's flirtation with eugenics. From the study of this crucial figure we can draw three main conclusions about the relationship between Darwinism and the left. Firstly, MacDonald's works show how, even into the twentieth century, there was a continuing failure to reconcile socialism and radicalism with a narrowly defined Darwinism. Secondly, the fact that MacDonald came from a scientific background and was personally and politically close to the Fabians, but was still unwilling to wholeheartedly endorse eugenics, leads us to doubt how widespread the acceptance of eugenics was on the left. Thirdly, MacDonald demonstrates that whilst neither a narrowly defined Darwinism nor a strict eugenics meant very much to the left, a more general and progressive evolutionary framework was absolutely crucial to socialist thought at the turn of the century.

Despite his best efforts, MacDonald's attempts to reconcile Darwinism and socialism fell at some familiar hurdles. He was no more prepared to accept the Malthusian aspect of Darwinism than was any other radical or socialist, as his first public lecture, in 1885, entitled 'Malthusianism versus Socialism', made clear.¹⁰⁵ Instead, he abstracted man from the operation of natural selection by radically dichotomizing the relation between human and animal society. The continuum between humans and animals, he argued, had been broken by the historical process taking mankind on to a higher stage, beyond the forces of natural evolution and 'under the sway of the comparatively rapidly moving and acting human will'.¹⁰⁶ 'Savage man', like the animals, 'was subject to nature', but 'civilised man' to the powers 'which he himself has created'.¹⁰⁷ The historical creation of this cultural space resolved any difficulties which the naturalizing tendencies in social Darwinism might pose, by rooting human

¹⁰⁴ This was true even of MacDonald's final theoretical work, penned just three years before he became Britain's first Labour prime minister. See J. Ramsay MacDonald, *Socialism: Critical and Constructive* (London, 1921).

¹⁰⁵ Lord Elton, *The Life of James Ramsay MacDonald (1866–1919)* (London, 1939), pp. 225–6.

¹⁰⁶ J. Ramsay MacDonald, *Socialism and Society* (London, 1905), pp. 88–9.

¹⁰⁷ MacDonald, *Socialism: Critical and Constructive* (London, 1921), p. 7.

progress in cooperation and intelligence, rather than the 'survival of the fittest' and death. Rejecting Darwin's 'one general law', MacDonald followed Wallace in dichotomizing humans and animals, by according human intelligence a unique power — 'first of all to defy nature and then to exploit her' — to defy natural selection by the power of mind. For example, whereas the partridge was coloured khaki only after a process of adaptation in which nature had killed generations of its kith and kin, men donned khaki to avoid any deaths.¹⁰⁸ Such intelligence, for MacDonald as much as for George, was the product of a social rather than biological inheritance.¹⁰⁹ MacDonald further compromised his ostensible Darwinism by embracing a teleology which was diametrically opposed to Darwin's contention that evolution brought change, but not necessarily progress. Without a blush, MacDonald even criticized Marx for failing to guarantee that change equalled progress and contrasted this with the 'biological view' in which evolution led inexorably to a higher society.¹¹⁰ Given this, it is difficult not to have sympathy with the Edwardian critic of socialism who concluded: 'When a socialist takes any notice of Darwinian principles, he admits apparently, that the human race has gained its present character, physical, moral and intellectual, through natural selection. But the time for such inhuman methods, he imagines, is over.'¹¹¹

Yet MacDonald, it must be emphasized, was serious about science. His earliest self-taught efforts were not in politics, but in geology and biology. Only a breakdown, brought on by excessive study, robbed him of a cherished science scholarship at the South Kensington Museum,¹¹² and he consistently upheld his belief in the unity of scientific and social thought. Just as Darwin's insights in biology were built upon advances in geology, MacDonald believed the political insights of socialism were possible only after Darwin's biological advances.¹¹³ This course of development, which conveniently mirrored MacDonald's own intellectual trajectory from geology to biology to socialism, led MacDonald genuinely to see science and social theory as inextricably intertwined. Marxism was a poor guide precisely because it was pre-Darwinian, and had been formulated too early along the path from geology to socialism.¹¹⁴ Yet, although deeply impressed with Darwinism and positing this

¹⁰⁸ J. Ramsay MacDonald, *The Socialist Movement* (London, 1909), p. 246.

¹⁰⁹ MacDonald, *Socialism and Society*, p. 25.

¹¹⁰ MacDonald was referring to the Preface to the Second Edition of *Capital*. *Ibid.*, p. 102.

¹¹¹ F.W. Headly, *Darwinism and Modern Socialism* (London, 1909), pp. 16–17.

¹¹² Elton, *Life*, pp. 48–9, 56–7; D. Marquand, *Ramsay MacDonald* (London, 1977), pp. 12, 21–2, 53.

¹¹³ MacDonald, *Socialist Movement*, pp. 90, 115.

¹¹⁴ Marx and Engels 'were handicapped by having been guided by the metaphysics of Hegelianism rather than the science of Darwinism'. MacDonald, *Socialist Movement*, p. 113.

interrelationship between science and socialism, MacDonald, nonetheless, consistently shied away from embracing eugenics.

Whilst sharing the degenerationist fears current in Fabianism,¹¹⁵ and echoing Darwin's worry that humanitarianism prevented the elimination of the weak without making alternative provision,¹¹⁶ MacDonald did not allow apocalyptic concerns about the disappearance of society to lead him into advocating the science of the well-born. Instead, he ruled out any return to natural selection — 'the red in tooth and claw processes' as he called them — and discounted any form of artificial selection¹¹⁷ beyond suggesting the state could help reinvigorate sexual selection by directing personal taste in beauty.¹¹⁸ On the whole MacDonald's dichotomization of human and animal life left him unenthusiastic for biological solutions to what he conceived to be primarily social problems. Society was a product of human history, rather than of nature, and this meant the key to progress and decay lay not in the blood, but in the social organization: 'Whilst the individualist and the reformer offer changed systems of Poor Law administration, segregation of the unfit, the lethal chamber, and similar things as preventives, the Socialist regards race deterioration as a social phenomenon, the result of general ill-health, an organic disease undermining the system.'¹¹⁹ This led MacDonald to the very Lamarckian, but very un-Darwinian and non-eugenic, conclusion that the solution lay in environmental reform, principally the elimination of poverty.

MacDonald's 'biological view' was not, therefore, in any meaningful sense Darwinian. Darwin's work, he explained, did not lead to a detailed political programme, only to 'a more commanding standpoint from which to judge our Socialist proposals, a more accurate way of carrying them into effect, and a more scientific phraseology in which to express them'.¹²⁰ Nor was Darwin the exclusive source of this 'commanding standpoint'. Wallace and Spencer were accorded equal billing as the founders of evolutionary theory,¹²¹ and MacDonald used 'Darwinian', 'biological' and 'evolutionary' as interchangeable titles rather than serious analytical terms. 'Darwinian', in MacDonald's lexicon, was a loose term indicating nothing more than an incoherent hotch-potch of Comtean positivism and Herbert Spencer's organicism. In this, as John Laurent has shown,¹²² MacDonald was typical of the left's embrace of an

¹¹⁵ 'There are signs of degeneration all around us.' *Ibid.*, p. 244.

¹¹⁶ Darwin, *Descent*, pp. 168–70; J. Ramsay MacDonald, *Socialism and Government* (2 vols., London, 1909), Vol. 1, pp. 18, 21.

¹¹⁷ MacDonald, *Socialism and Government*, Vol. 1, p. 19.

¹¹⁸ *Ibid.*, pp. 14–15.

¹¹⁹ *Ibid.*, p. 21.

¹²⁰ MacDonald, *Socialism and Society*, pp. 98–9.

¹²¹ MacDonald, *Socialism and Government*, Vol. 1, p. 87.

¹²² See J. Laurent, 'Science, Society and Politics in Late Nineteenth Century England: A Further Look at Mechanics' Institutes', *Social Studies in Science*, 14 (1984), pp. 585–619.

ill-defined general, but progressive, evolutionary framework. Perhaps surprisingly, Spencer was more important in promoting this evolutionary outlook in Fabian circles than Darwin was. Sidney Webb cited the trinity of Comte, Darwin and Spencer,¹²³ but the ‘inevitability of gradualness’ which underlay the *Fabian Essays* (1889) was an anodyne and unproblematic progress of the social organism, derived from Spencer, not Darwin’s non-teleological evolution by natural selection.¹²⁴ Equally, MacDonald derived from Spencer a quasi-biological language of organicism, and a progressive historical schema in which each new, and higher, social stage was guaranteed as ‘the unfolding of life . . . from the bud to the fruit’.¹²⁵ In this way the Spencerian approach offered an evolution which was progressive, teleological and optimistic, precisely the characteristics which marked off MacDonald from his self-proclaimed ‘Darwinian method’.

What this suggests — with important implications for the historiographical debate about ‘continuity’ in radicalism — was how limited the impact of the ‘Darwinian revolution’ was on radicalism and socialism. Its influence was not negligible, because it led to a strong emphasis on the general idea of progressive evolution, but it entailed little which could be described as specifically Darwinian. Indeed, the organicism and historical sense of the late nineteenth- and early twentieth-century political left had pre-Darwinian roots. The left was not exceptional in this. Peter Bowler has shown that even in mainstream thought the ‘Darwinian revolution’ is a misnomer for the post-1859 prospering of early nineteenth-century progressive and teleological views of evolution.¹²⁶ This also accords with John Burrow’s argument that evolutionary social theory pre-dated Darwinism, and was a product of the tension between English positivism and a more profound reading of history, rather than of specifically biological theories.¹²⁷ Although Webb claimed it was Comte, Darwin and Spencer who taught the left not to look for ‘anything but the gradual evolution of the new order from the old, without breach of continuity or abrupt change’,¹²⁸ Burrow implied it was appreciated long before this trinity, the earliest forces being Burke and the romantic reaction to the French Revolution.¹²⁹ So powerful were these legacies that whatever else they disagreed on, Marx

¹²³ S. Webb, *Socialism in England* (London, 1890), pp. 4, 82.

¹²⁴ Laurent, ‘Science, Society and Politics’, *passim*.

¹²⁵ MacDonald, *Socialism and Society*, p. 36.

¹²⁶ P.J. Bowler, *The Non-Darwinian Revolution: Reinterpreting a Historical Myth* (Baltimore, 1988).

¹²⁷ Leading to the comment that ‘[w]hen the cradle of evolutionary social theory was being prepared Darwin was in his hammock and three thousand miles away’. I.W. Burrow, *Evolution and Society: A Study in Victorian Social Theory* (Cambridge, 1966), p. 100.

¹²⁸ S. Webb, ‘Socialism Historic’, in *Fabian Essays in Socialism* (London, 1889), p. 29.

¹²⁹ Burrow, *Evolution*, pp. 261, 265.

and Engels, the Webbs and MacDonald were at one in explicitly eschewing the mechanistic year-zero strategies of Jacobinism in favour of emphasizing socialism as the next stage of an organic social growth in which the past shaped both the present and the future.¹³⁰ Although there were attempts to dress it up in Darwinian terms, this insight was essentially Burkean and historical rather than Darwinian and biological.

VIII Conclusion

The consistent failure of radicals and socialists to reconcile their politics with Darwinian science, in the period 1859 to 1914, tells us as much about Darwinian science as it does about left-wing politics. It does not mean — as right-wing critics might like to imply — that radicalism and socialism depended upon a denial of scientific truth. No science, least of all Darwinism, is a precise, unproblematic and unquestionable set of facts simply read from nature. Darwinism especially was, rather, an imprecise, highly contentious theory, constructed out of social and ideological influences. It was not a politically neutral science, pure and simple, as open to appropriation by the left as by the right. This is why the literature on the political use of Darwinism needs to go beyond merely noting that the epithet ‘Darwinian’ was appropriated by thinkers across the political spectrum. Darwinism, as Darwin’s most thoroughgoing biographers emphasized, was forged in a social and ideological ferment, and drew heavily upon a political doctrine, Malthusianism, which was designed as an antidote to left-wing politics.¹³¹ The left, in the period up to 1914, were never able to overcome the ideological import of Darwinism. That was why, despite the left’s enthusiasm for scientific legitimation and the right’s relative indifference to positivism and science, it was the right who were most successfully to don the mantle of Darwinism.

Quite simply, in the late nineteenth and early twentieth centuries there was an irreconcilable tension between Darwinian science and radical or socialist politics. Not only did Darwin’s theory of evolution by natural selection undermine a discourse of radicalism premised upon the concept of a benevolent Nature, but his emphasis on inheritance minimized the potential for social and political reform to bring improvement. Whereas the right were comfortable with emphasizing ‘human nature’ over the power of nurture, and with naturalizing existing social arrangements, radical and socialist politics was premised upon the possibility of fundamental change. This led them to minimize the relevance of natural science for understanding social life. They did not go to Godwin’s Enlightenment extreme of empowering human reason to suspend

¹³⁰ Engels, *Socialism: Utopian and Scientific*, pp. 48–9; Webb, *Socialism in England*, p. 5; MacDonald, *Socialism*, p. 117.

¹³¹ Desmond and Moore, *Darwin, passim*.

organic laws,¹³² but they did emphasize how much of human life was a social and cultural creation, made by man and therefore by man remediable. All the thinkers we have looked at, with the exception of Aveling and Kropotkin, took to dichotomizing Darwinism, separating man from the animals, the mind from the body, the social from the natural, human history from natural history, or some combination of all of these.

It is a caricature of those who would create a contemporary 'Darwinian left' to say this involved the left in a denial either of 'human nature' or of nature itself.¹³³ None of the writers we have studied denied the concept of 'human nature' — not even Marx, whose theory of alienation (the centrepiece of his critique of capitalism) depended upon man's being alienated from his species-being.¹³⁴ They never claimed that man could be free of his basic organic drives, nor of nature in a more broadly defined sense. They did not deny that man would starve if he did not eat, and could die in a hurricane. What they all did, however, was emphasize how much of man's existence was a cultural creation, and hence open to change and improvement. Mankind may be constrained by 'human nature' but the past century of change in the so-called 'nature' of women shows how little of our character that 'nature' constitutes. What the late nineteenth- and early twentieth-century left argued was that changes in the economic and social structure were capable of precipitating fundamental changes in what we regard as 'human nature', radically changing patterns of social behaviour, removing the main economic root of social conflict, and radically reducing inequality. They offered a counsel of hope, in which man could shape and re-shape the cultural space in which he lived. It is precisely this hope which those who seek to create a 'Darwinian left' today would deny us.

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¹³² W. Godwin, *Enquiry Concerning Political Justice and its Influence on Modern Morals and Happiness*, ed. I. Kramnick (Harmondsworth, 1976), pp. 770–4.

¹³³ As Singer does. See P. Singer 'A Darwinian Left', *Prospect* (June 1998), pp. 26–30.

¹³⁴ N. Geras, *Marx and Human Nature: Refutation of a Legend* (London, 1983).