

Patrick Geddes and the politics of evolution

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Ever since they began to be widely discussed during the early nineteenth century, evolutionary ideas have played a controversial role in debates about politics and social reform. Understanding the political commitments of those who have sought to integrate politics and evolution is a complex challenge, though; not least because memories of mid-twentieth-century eugenic policies have frequently shaped how we talk about biosocial science. However, as the case of the Scottish biologist-turned-town-planner Patrick Geddes highlights, while we need to be aware of the broad appeal that biosocial science has historically held, we also need to recognise that current political categories can be misleading when thinking about those of who have put evolution and politics together.

Introduction

As the late twentieth-century controversies over sociobiology and evolutionary psychology showed, relating biology and society is hugely controversial. On one side of these debates, defenders of biosocial science ridicule what they see as the widely entertained but fundamentally misguided idea that humans are shaped by nurture alone. On the other side, critics rail against what they see as seductive but dangerous forms of biological reductionism. A crucial part of what makes these clashes so heated is that each side's position is weighed down with political baggage. For example, while the evolutionary psychologist Steven Pinker's attacks on the 'standard social science model' rest on the claim that liberal and left-leaning ideology has privileged culture over biology, his critics frequently evoke the memory of the biosocial policies pursued by the Nazis and others during the middle decades of the twentieth century. In this respect, what is often at stake in these controversies is a question with both political and historical resonance: who are the sociobiologists and evolutionary psychologists the intellectual descendents of?

When it comes to questions such as these, historians have always had great difficulty separating their own politics from those of the subjects they study. In fact, 'social Darwinism' – one of the most frequently used terms in discussions about evolution and society – was produced by just such a meeting of past and present. First popularised during the 1940s and 1950s, social Darwinism was the American historian and New Deal supporter Richard

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Hofstadter's label for what he saw as an intellectual tradition originating in the second half of the nineteenth century and culminating in opposition to Franklin D. Roosevelt's policies to tackle the Great Depression.² Yet far from being exceptional, these kinds of evaluations have been typical of writing on the subject ever since. For example, while in a study of evolutionary thought in late nineteenth- and early twentieth-century Germany, Richard Weikart has argued that Darwin's ideas were a significant part of what made the Nazis possible, Adrian Desmond and James Moore have argued that Darwin was driven by a belief in the common ancestry of all human races and a related commitment to the anti-slavery cause. Thus, on the one hand, Darwin is indicted as the unwitting architect of some of the worst atrocities of the twentieth century; on the other, we are assured that non-liberal uses of Darwinism are a corruption of its true spirit.

Intellectual divergences of this kind raise a number of questions about how we write the history of biosocial thought. One obvious question is whether any given history is more accurate than others but another issue that receives far less attention is whether historians of evolutionary thought conceptualise their subjects' politics in the right way. Or, to put the matter differently, when historians of science discuss whether or not someone from the late nineteenth or early twentieth century is a liberal, do they accurately capture for a twenty-first century audience the collection of beliefs that that person actually held? As Gregory Radick's recent *Endeavour* article highlighted, this question is demonstrably important when it comes to someone like Darwin whose broader attitudes towards race were not what everyone who emphasises his belief in common human ancestry would approve of.⁴

One figure I have always found particularly useful for thinking through these kinds of questions is the Scottish biologist-turned-town-planner Patrick Geddes (1854–1932). A protégée of 'Darwin's Bulldog', T.H. Huxley, Geddes was professor of botany at the University of Dundee for nearly 30 years but was also widely renowned as a social scientist who maintained a simultaneous commitment to social reform projects in the slums of his home city, Edinburgh. Indeed, as he developed his interests in what

Steven Pinker, The Blank Slate: The Modern Denial of Human Nature (London: Penguin, 2002)

² Richard Hofstadter, Social Darwinism and American Thought, 1860–1915 (Philadelphia: University of Pennsylvania Press, 1945). Revised editions of Hofstadter's classic text were published in the 1950s and frequently since.

³ Richard Weikart, From Darwin to Hitler: Evolutionary Ethics, Eugenics and Racism in Germany (New York: Palgrave Macmillan, 2004); Adrian Desmond and James Moore, Darwin's Sacred Cause: Race, Slavery, and the Quest for Human Origins (London: Allen Lane, 2009). For an account of late nineteenth-century socialism and evolutionary thought, see: David Stack, The First Darwinian Left: Socialism and Darwinism, 1859–1914 (Cheltenham: New Clarion, 2003).

⁴ Gregory Radick, "Did Darwin Change His Mind About the Fuegians?," Endeavour 34 (2009): 50–54.

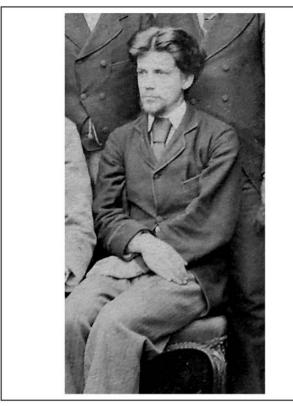


Figure 1. Patrick Geddes in 1876, aged 22. From Geddes Papers, National Library of Scotland, MS 10606, no. 11.

we would now call urban sociology, which led him to leave the UK for India in 1914, Geddes helped pioneer the regionalist approach to studying cities that proved widely popular during the twentieth century. Consequently, and no doubt partly because his most famous disciple was Lewis Mumford – the American sociologist and founding member of the Regional Planning Association of America – Geddes is now far more likely to be talked about as a pioneer of urban sociology and town planning. This fact is bourne out by Geddes' biographers, such as Helen Meller and Volker Welter, who approach their subject from backgrounds in urban history, architecture, and town planning.⁵

However, and like others who crossed the boundaries between biology and social theory in the name of social reform, Geddes has inspired wildly divergent interpretations. For some scholars, he was a Victorian biological determinist – albeit one with some admirable sounding qualities – who would have sympathised with the Nazis if he had lived long enough to see their political programme. For others, many of whom learned about him via Mumford, who was a popular thinker among Cold War radicals, Geddes is a hero of the environmentally conscious leftwing whose ideas about the relationship between nature, industrialisation, and society have much to offer the early twenty-first century. Yet as we will see from a high-

altitude survey of his work during the late 1880s and early 1890s – the period when he established his reputation as an evolutionary thinker and social reformer – the question of whose evaluation of Geddes is right and whose is wrong cannot be resolved easily. There is plenty of evidence to support each position and this only highlights the differences between the political reference points of the late nineteenth century and those of our own times.

Geddes' biosocial science in theory

Like so many of his generation, Patrick Geddes was deeply inspired by evolution. Indeed, after enrolling on a botany degree at the University of Edinburgh in 1874, he quit after only a week so that he could study under T.H. Huxley - the 'high priest of evolution' – in London. Also like so many of his generation, though, Geddes' enthusiasm for evolution did not mean he accepted Darwin's ideas about how and why evolutionary change took place. Thus, when he embarked on a career as a biologist in the late 1870s, Geddes was very much a man of his age when he doubted the importance of natural selection in the long run of evolutionary development and instead looked to mechanisms such as Lamarckian inheritance of acquired characteristics. Moreover, Geddes was also a man of his time when he wondered what those doubts might mean when it came to thinking about the origins and workings of human societies.

The clearest and most accessible of Geddes' early efforts to articulate his evolutionary ideas came in a series of encyclopaedia articles and a book, which were published in the late 1880s, after he had established a reputation as a skilled biological experimenter.8 Writing in the Encyclopaedia Britannica in 1889, Geddes described evolutionary development as being 'definitely associated with an increased measure of subordination of individual competition to reproductive or social ends, and of interspecific competition to co-operative adaptation'. For this reason, as he put it in another article entitled 'Evolution', which he co-wrote for Chambers' Encyclopaedia with his former student, the biologist J. Arthur Thomson, "the general scheme of evolution" had to be interpreted "as primarily a materialised ethical process underlying all appearance of 'a gladiator's show". 10 Indeed, Geddes wrote in the Encyclopaedia Britannica, "although competition can never be wholly eliminated, and progress must be asymptotic, it is much for our pure natural history to see no longer struggle, but love, as 'creation's final law". 11 As he and Thomson explained in Chambers' Encyclopaedia, Geddes thought that this conclusion was important not just because it was a truth about the natural world but also because he saw a 'fundamental unity' to evolution - one where the 'same principles' could be 'traced [from the simplest forms

 $^{^5}$ Helen Meller, Patrick Geddes: Social Evolutionist and City Planner (London: Routledge, 1990); Volker Welter, Biopolis: Patrick Geddes and the City of Life (Cambridge, MA: MIT Press, 2002).

⁶ Indeed, Geddes is often wrongly cited as the originator of the phrase "think global, act local." For example, see: Walter Stephen (Ed.), Think Global, Act Local: The Life and Legacy of Patrick Geddes (Edinburgh: Luath Press, 2004).

 $^{^{7}}$ Adrian Desmond, Huxley: Evolution's High Priest (London: Michael Joseph, 1997).

⁸ Chris Renwick, "The Practice of Spencerian Science: Patrick Geddes' Biosocial Programme, 1876–1889," Isis 100 (2009): 36–57.

⁹ Geddes, "Variation and Selection," in T.S. Baynes and William Robertson Smith (Eds.), Encyclopaedia Britannica, 24 Vols, 9th Edition, vol. xxiv (Edinburgh: A. & C. Black, 1885): 76–85, quotation on p. 85.

 $^{^{10}}$ Geddes and J. Arthur Thomson, "Evolution," in Chambers' Encyclopaedia, 10 Vols., vol. iv (London and Edinburgh: W. & R. Chambers, 1889): 477–484, quotation on p. 484

p. 484.
¹¹ Geddes, "Variation and Selection": 85.

of life] into the highest 'superorganic' phenomena of mind and society'. 12

It was this belief in the unifying power of evolutionary explanations, which was only briefly explored in Geddes' encyclopaedia articles, that provided the starting point and major intellectual thread of Geddes' first book: The Evolution of Sex (1889), which was again co-authored with Thomson and published in the Contemporary Science series edited by the sexologist Havelock Ellis. 13 Aiming to invite 'the criticism of the biological student', but intending to address 'primarily... the general reader or beginner', The Evolution of Sex was primarily an argument about the origins and development of sex in the organic world, which was then, as it still is now, a profound explanatory problem for biologists. However, in analysing scientific ideas about the role of sex in biological evolution, Geddes and Thomson deployed the same explanatory framework to discuss what we would now call gender: the social dimension of sex.

According to Geddes and Thomson, sex was the result of a 'constant antithesis' between two evolutionary forces: a constructive state that conserves energy, known as 'anabolic', and a diametrically opposed course of disruption that dissipates energy, known as 'katabolic'. 14 In the evolutionary process, 'male reproduction' was 'associated with preponderating katabolism, and the female with relative anabolism', and it was therefore these two forces that explained every physical, emotional, and social manifestation of sex. 15 For example, while the apparent activity of the sperm and passivity of the egg in reproduction could be seen as an expression of anabolic and katabolic characteristics so could a whole range of perceived social and behavioural differences between men and women. 16 The dynamics of anabolism and katabolism were therefore to be understood as 'the fundamental characteristic of living matter' (Figure 2).

Although this alleged unity in biological and social processers enabled Geddes and Thomson to build an evolutionary theory of elegant simplicity and explanatory power, it also served another purpose. According to Geddes and Thomson, the dynamic tension between anabolic and katabolic forces they had described needed to be understood as something that could be 'a new ethic of the sexes; and this not merely, or even mainly, as an intellectual construction, but as a discipline of life. 17 To illustrate this point, The Evolution of Sex contained an extended and focused discussion of contraception, which was a cause célèbre among social reformers of the late nineteenth century. Aligning themselves with the position taken by many late Victorian radicals, Geddes and Thomson saw reproductive control as essential if women were to enjoy the benefits that evolutionary development promised. 18



Figure 2. An opossum carrying her young – an act of altruistic love that Geddes and Thomson saw as characteristic of higher evolutionary development. From *The Evolution of Sex* (1889), p. 312.

Consequently and controversially, they depicted contraception as a tool that protected anabolic forces and went on to describe a range of contraceptive methods.¹⁹

However, and despite the fact that they were cited approvingly by Mona Caird - the Victorian critic of marriage and leading figure of the late nineteenth-century 'new woman' movement - Geddes and Thomson were adamant that gender was determined largely by biology.²⁰ In fact, as they put it in one of their most famous phrases, they believed that 'what was decided among the prehistoric Protozoa cannot be annulled by Act of Parliament'. 21 Unsurprisingly, and quite rightly, this claim has led many historians to describe Geddes and Thomson as conservative thinkers.²² Yet while such conclusions communicate something important and true - then and now - about the politics of Geddes' evolutionary ideas, they do not account for the seemingly radical credentials they also possessed. Indeed, to describe Geddes as a conservative would not explain the apparent inconsistency between his claims that society cannot escape nature but that it can change the course of what might have been. As we will see in turning to consider the social reform projects that Geddes also pursued during this period, this apparent inconsistency highlights the complexity of categorising figures like Geddes in political terms.

From sex to the city: Geddes' biosocial science in practice

The geographical focus for Geddes' involvement in social reform during the final two decades of the nineteenth century was Edinburgh, where he had relocated during the early 1880s after finishing his scientific apprenticeship with Huxley in London. While he sought employment as a

¹² Geddes and Thomson, "Evolution": 479.

¹³ As I discuss in greater detail in Renwick, "The Practice of Spencerian Science," Geddes was very much the senior partner in the writing of The Evolution of Sex. Thomson's role was to help summarise existing scientific knowledge and improve the clarity of writing when expressing Geddes's theories.

¹⁴ Geddes and J. Arthur Thomson, The Evolution of Sex (London: Walter Scott, 1889): 26.

¹⁵ Geddes and Thomson, The Evolution of Sex: 27.

 $^{^{16}}$ Geddes and Thomson, The Evolution of Sex: 97–134.

 $^{^{\}rm 17}$ Geddes and Thomson, The Evolution of Sex: 297.

¹⁸ For more on the relationship between contraception, eugenics and the "woman question," see: Angelique Richardson, Love and Eugenics in the Late Nineteenth Century: Rational Reproduction and the New Woman (Oxford: Oxford University Press, 2003).

¹⁹ Geddes and Thomson, The Evolution of Sex: 293–298.

 $^{^{20}\,}$ Mona Caird, "A Defence of the So-Called Wild Women," Nineteenth Century, 31 (1892): 827.

²¹ Geddes and Thomson, The Evolution of Sex: 267.

²² Thomas Dixon, The Invention of Altruism: Making Moral Meanings in Victorian Britain (Oxford: Oxford University Press for the British Academy, 2007): chapter 7; Jill Conway "Stereotypes of Femininity in a Theory of Sexual Evolution," in Martha Vicinus (Ed.), Suffer and Be Still: Women in the Victorian Age (Bloomington: Indiana University Press 1973), pp. 140–154.

lecturer, Geddes' attention had been captured by one of the biggest talking points amongst the Scottish capital's social reformers: the dilapidated state of Edinburgh's Old Town, which had been in steady decline since the middle and upper classes had begun leaving for the much-celebrated New Town during the eighteenth century. Although Edinburgh city council had demolished parts of the Old Town slums, Geddes believed that these once proud areas of the city could and should be improved. Indeed, he believed that his evolutionary ideas were the key to initiating this process of rejuvenation for both the physical environment and the people who lived there.

Geddes' first efforts to contribute to the problems of Edinburgh's Old Town came when he attended the meetings of a group who initially called themselves the Environment Society but in 1885 had become the Edinburgh Social Union. Inspired by the 'five percent philanthropy' model of social housing, the Edinburgh Social Union had resolved to raise funds to buy buildings in slum areas and renovate them.²³ Their aim was to create a socially conscious property management company that leased homes to poor tenants on strict but favourable terms – a strategy that was meant to provide a structure within which residents could tackle problems such as vice, crime, and unemployment. Indeed, as 5% philanthropy projects such as the one operated by Octavia Hill in London had shown, there was evidence to suggest that this kind of approach, though requiring a great deal effort, could help improve the physical appearance of slum areas while also bringing about a corresponding improvement in the residents' lifestyles.

Yet despite his enthusiasm for these aims, Geddes did not involve himself with the Edinburgh Social Union for long. In late 1886, he purchased a flat in James' Court – a tenement block on the city's Royal Mile that had once been home to the philosopher David Hume – and moved in with his wife, Anna, whom he had met at a meeting of the Edinburgh Social Union and married 6 months earlier. As his friend James Mayor explained, when the Geddeses arrived at James' Court it was 'a spot where unredeemed squalor had reigned for at least half a century'. 24 But, like the other members of the Edinburgh Social Union, Geddes was convinced that this situation could be changed and, along with his wife and other supporters, many of whom were former or current students of his, he pursued a comprehensive programme of renewal around James' Court, which involved painting walls, putting up window boxes, and creating garden areas (Figure 3).

Geddes and his supporters did not stop there, though. They wanted to understand Edinburgh as an evolving entity and by engaging in social surveys they set about identifying further parts of the Old Town that might benefit from their efforts. While Geddes purchased more property around Edinburgh, he also invested £1500 in the building of a block of cooperative flats called Ramsey Gardens, which became his family's home in 1893 and also

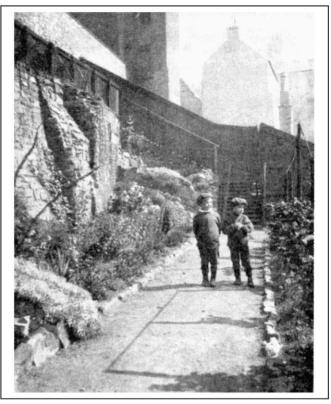


Figure 3. Two children enjoying one of the gardens created by Geddes and his collaborators. This garden, located near James's Court, is still there today. Furthermore, the steps leading to the garden have been named in Geddes' honour. From Cities in Evolution (1915). p. 103.

an extension of University Hall – the UK's first self-governing student residence – which he had established in 1887. On account of successes such as these, progressively minded people, including the infamous Russian émigré, anarchist, and author of *Mutual Aid*, Prince Peter Kropotkin, travelled to the Scottish capital to consult with the Geddeses and see what they had achieved.

In essence, the self-governing operation of University Hall was symbolic of what Geddes aimed to achieve in the Old Town. As the James' Court example showed, having surveyed an area and decided what needed to be done to improve it, Geddes and his supporters would set about showing local residents what could be achieve by repairing particular buildings or creating garden areas for children to play in. However, having started this process, Geddes would then gradually withdraw his assistance. The reason was his belief that a genuine, long-term transformation of the Old Town could not be imposed on the people who lived there but was something that had to be achieved through more organic means. Improvement and social progress would only come about, he argued, if the local residents took on the responsibility to change themselves and their home environments.

Yet, for Geddes, following someone's virtuous example was not quite enough. What was needed, he thought, was a

 $^{^{23}}$ "Five percent philanthropy" was a method of securing money for social projects by running them not as hand-to-mouth charities but – in theory at least – prudent organizations. In this sense, funds were sought by guaranteeing investors a modest return of five percent on their money.

²⁴ James Mavor, My Windows on the Street of the World, 2 vols. (London: J.M. Dent and Sons Ltd., 1923); i. 215.

²⁵ The funds for Geddes' rapidly expanding property portfolio often came from money Anna had inherited from her father. Geddes' enthusiasm for buying property for his social reform projects was somewhat outstretching his means by the mid-1890s, though, which forced his friend and collaborator Victor Branford – a trained accountant – to take control of Geddes' financial affairs.

way of enabling people to educate themselves and, through the knowledge they acquired, seize control of the forces shaping their lives. This point was made clear in 1892 when he purchased what he called the 'Outlook Tower': an observatory with a roof-top camera obscura, which was located between James' Court and Ramsey Gardens. As well as housing a publishing firm and offices that handled his property portfolio, the Outlook Tower served as a museum and events venue that Charles Zueblin - a University of Chicago sociologist - called the 'world's first sociological laboratory'. Utilising the panoramic views of Edinburgh that were on offer from the top of the building, Geddes developed a series of interlinked exhibitions over the tower's five floors, which introduced people to his evolutionary outlook on the city. As he explained to the geography branch of the British Association for the Advancement of Science at its meeting in Bristol in 1898, this effort had 'arisen from the attempt... to prepare an encyclopaedia, but... in rational order, exhibiting things in their mutual relations'. For this reason, he told the audience at the BAAS,

the exhibition of the ground-floor centres round a globe with an outline survey of the main concepts of World-geography – e.g. an incipient collection of maps and illustrative landscapes, an outline of the progress of geographical discovery and of map-making, &c. The first floor is devoted to the geography and history of Europe in correspondingly fuller treatment; the second is set apart for an outline geography and history of the English-speaking world... On the third storey is... a corresponding survey of Scotland, viewed at once as an historic and social entity and as an element of greater nationality; while the fourth storey... is a museum of Edinburgh, though again not without comparison with Scottish and other cities.

To make the links between these exhibitions more powerful, Geddes would encourage visitors to begin their tour at the top of the Outlook Tower, where they could see Edinburgh from a new perspective. Then, by 'descending from the roof to the uppermost storey, [the] succession and unity of the physical, organic, and the social conditions [throughout the city would be] better understood'. In this sense, Geddes' intention was for visitors to leave the Outlook Tower with a deeper and more profound knowledge of the forces that had produced the city around them (Figure 4).

Yet as the clear views of buildings such as the neighbouring James' Court and Ramsey Gardens demonstrated, Geddes' also wanted visitors to leave with the Outlook Tower with the belief that they were not complete prisoners of those forces. On the contrary, as he told the BAAS, 'on each level' of the Outlook Tower 'the view of Nature as determining man [was] complemented by that of man as more or less re-determining Nature'. And it was this belief in the power of individuals to understand and then

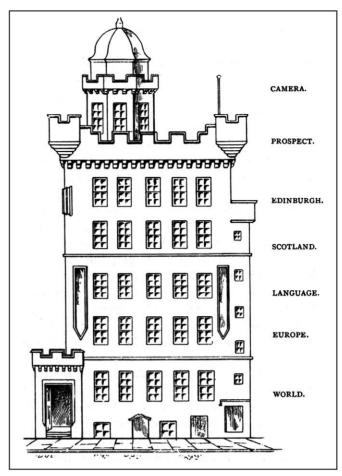


Figure 4. A diagram of the interlinking exhibits at the Outlook Tower. From Cities in Evolution (1915), p. 324.

guide the forces that shaped them that provided the meeting point for Geddes' ideas about biology, evolution, and society. Indeed, it is only once we grasp the importance of evolution as the structure for human agency that we can begin to comprehend the relationship between Geddes' ideas and actions during the 1880s and 1890s.

Conclusion

At first sight, the window on Geddes' late nineteenthcentury work we have just peered through presents a confusing view. On the one hand, in The Evolution of Sex, we saw someone we can comfortably describe as a biological determinist. On the other hand, we also saw someone who extolled the virtues of love, cooperation, and altruism, rather than competition and brute force, when it came to evolutionary development. Furthermore, while we saw Geddes reject the suggestion that state intervention could change what biology had decided, we also saw someone who threw a great deal of time, money, and effort into projects that aimed to rejuvenate the decaying slums of Edinburgh. As a consequence of these different intellectual and practical commitments, it is difficult to get handle on both where Geddes was coming from and where we should position him in the greater scheme of things.

These interpretative difficulties have been highlighted recently by the clash between the sociologists Steve Fuller, on the one hand, and Maggie Studholme, John Scott, and Christopher Husbands, on the other. According to Stud-

²⁶ Charles Zueblin, "The World's First Sociological Laboratory," American Journal of Sociology, 4 (1899): 577–592.

²⁷ Geddes, "The Edinburgh Outlook Tower," Report of the Sixty-Eighth Meeting of the British Association for the Advancement of Science Held at Bristol in September 1898, Section E – Geography (1899): 945–946. Original emphasis.

holme, as well as Scott and Husbands, whose work focuses on Geddes' collaborator, Victor Branford, we should see Geddes in the tradition of environmental sociology: that is, as someone whose projects in Edinburgh's slums and subsequent writings, such as Cities in Evolution, reveal him to be something of a socially and environmentally conscious left-winger. 28 Writing in response to this assessment, however, Fuller argues that such perceptions of Geddes are compromised by the needs of late twentiethand early twenty-first century political correctness.²⁹ Indeed, according to Fuller, Geddes wanted to connect biology and society in such a way that he would likely have been comfortable - in the early stages, at least - with the Nazi party's ideas about particular types of places being suitable for particular types of people.

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Putting counterfactual questions about potential sympathies for Nazi party aside for one moment, we have seen that there is much evidence to support either of these seemingly mutually exclusive interpretations. While we have to take Geddes' activities as a social reformer in Edinburgh's slums as serious progressive credentials, we also have to accept that there were substantial connections between those activities and his training as a biologist. Indeed, looking forward to the final part of his career, we can see those connections never went away. Although he was increasingly known for his work on town planning, both in the UK and the rest of the world, particularly India where he was professor of sociology and civics at the University of Bombay in the early 1920s, Geddes continued to publish on the life sciences during the twentieth century. In fact, his last book, which was co-authored with J. Arthur Thomson, was a massive two-volume treatise entitled Life: Outlines of General Biology (1931). Because it was the field in which he trained, Geddes took biology seriously and, as Lewis Mumford put it in the mid-twentieth century, Geddes conducted his work on cities not as 'a bold innovator in urban planning, but as an ecologist, the patient investigator of historic filiations and dynamic biological and social interrelationships'. 30 Thus, while Geddes was interested in social improvement and prepared to engage in admirable efforts to achieve it, he still connected biology and society in a way that is uncomfortable for anyone wanting to talk up his progressive credentials. After all, how many scholars who see themselves as twenty-first-century progressives would also want to identify themselves as admirers of someone who saw eugenics as an essential and inevitably part of the future?³¹

Yet to approach history in this way is wrong for a number of reasons. Most obviously, it is a backwards looking way of doing history that evaluates people's ideas in terms of events that they were neither aware of nor likely to have been able to imagine. While this approach poses obvious problems when it comes to answering a question such as whether Geddes would have approved of parts of the Nazi party's programme before the Holocaust, it also distorts the realignments that have taken place between evolutionary thought and particular political positions. For instance, history of this type tends to obscure the extent to which late nineteenth- and early twentieth-century biosocial science, in particular eugenics, was part of progressive politics; in particular, politics of what we can call a broadly leftwing kind. Consequently, as Fuller has argued, a great deal of airbrushing goes on when it comes to the biological interests of thinkers whom historians like to see as fellow travellers in the progressive cause.

But this airbrushing is bourn of the unreasonable expectation that political programmes should consist of predetermined and unchanging patterns of ideas that will all be palatable both at the time and afterwards. Yet where the heart of leftwing politics once was once the smoking chimney tops of factory production, it is now increasingly environmentalism. The biology question is therefore just one of many that have been shunted around over time and, in returning to the point at which this article began, it is important to recognise that this process continues to produce thinkers who connect biology and progressive politics in ways that are uncomfortable. The controversial philosopher Peter Singer, for example, is someone who, in looking to learn the lessons of Darwinism, combines a passionate defence of animal rights and charitable giving with a range of challenging arguments justifying abortion and infant euthanasia. In this sense, when it comes to thinking about the intellectual origins of those who currently seek to bring biology and society closer together, it is important that we do not lose sight of the fact that such thinkers cannot automatically be described as conservatives or Nazis because they may be the products of other - and often unexpected – traditions.

²⁸ Maggie Studholme, "Patrick Geddes: Founder of Environmental Sociology," Sociological Review, 55 (2007): 441-459; John Scott and Christopher T. Husbands, Victor Branford and the Building of British Sociology," Sociological Review, 55 (2007): 460-484

Steve Fuller, "A Path Better Not to Have Been Taken," Sociological Review, 55

³⁰ Lewis Mumford, "Patrick Geddes," in Lewis Mumford, The Human Prospect, ed. H.T. Moore and K.W. Deutsch (Boston, MA: Beacon Press 1955): 99-114, quotation on

 $^{^{\}rm 31}$ See Geddes, Cities in Evolution, chapters 4 and 5.