

“Monkey See – Monkey Do” – the Foundation of Darwinism

Much has been written about the extensive set of biological artifacts that Charles Darwin brought back to England from his nearly five year trip on the HMS Beagle, most notably, the largely apocryphal tale of Darwin’s finches which to this day continues to raise controversy regarding the meaning of ‘species’. A century before Darwin’s writings, naturalist Buffon had formalized the traditional understanding of species as a collection of organisms that can yield fertile progeny through sexual reproduction. Within each species, races/ variations/sub-species can arise which exhibit recognizable differences from the other sub-species. Yet, matings between these sub-species still yield fertile progeny. Such separation into distinct sub-species generally arises during either geographical or behavioral isolation between the two sub-populations. At the boundary between species and sub-species appears the sterile hybrid for which the non-reproductive physiology of the progeny can remain robust, while the reproductive physiology does not. Unfortunately, such scientific insights still had to compete with the classic Aristotelian doctrine which claimed that each species is defined by purportedly unique ‘essential’ characteristics.

As the field of racial science emerged in the mid-nineteenth century, controversy arose as to whether all of humanity should be regarded to be a single species based upon the criterion of fertile progeny or rather a set of parallel species based upon their essential racial differences. Both of these perspectives shared the common assumption that biological advance occurs through the generation of new species. In contrast, Darwin embraced the principle that biological evolution is driven by the generation of a superior race from within a species. Darwin ascribed little significance to the point at which such a new race progresses to where it is no longer cross-fertile with other races so as to form its own new species. Darwin expressed that perspective in the title of his famed book for which the now discreetly ignored subtitle defines the meaning of the main title - *On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life*. The superior race is to prosper while natural selection is to deal with the lesser races of its initial species. Since Darwin thought the Buffon concept of species conflicted with his vision of conquering races, he dismissed the significance of the race/species boundary as being merely a blur of attenuating levels of fertility.

Following the revelations of the racial science-driven genocide that occurred during World War II, neo-Darwinists felt compelled to purge the word ‘race’ from their writings and then began to invoke ‘species’ in a broader sense to help fill in the resultant gap. Ernst Mayr’s widely accepted redefinition replaced the Buffon species criterion of the intrinsic capacity to yield fertile progeny with a ‘species’ being merely the operational failure to generate fertile progeny between two related populations, most commonly due to geographical separation, although behavioral isolation can also prove to be effective. It cannot escape our attention that, by the Mayr criterion, the efficient inhibition of interracial sexual intercourse would directly transform the human races into distinct species. In illustration of this intellectually sloppy view of ‘species’, Rosemary and Peter Grant have reported that various ‘species’ of Darwin finches on the Galapagos Islands are cross-fertile. Yet rather than citing the Buffon criterion to reassign these ‘species’ to the more meaningful ‘race’ or ‘sub-species’, they claimed to have discovered inter-species hybridization giving rise to evolutionary change in speciation on a dramatically rapid timescale (Grant & Grant, 1992). In reality, this is little more than a linguistic sleight-of-hand in confounding ‘race/sub-species’ with ‘species’ and then claiming to have made a novel scientific discovery.

By far the most relevant ‘biological artifacts’ for Darwin’s formulation of his theory of biological evolution were those that were delivered by the HMS Beagle from England to the tip of South America (Tierra del Fuego). On the previous voyage of the HMS Beagle to South America, the ship commander Robert FitzRoy had taken a group of four young native Fuegians back with him to England and subjected them to a ‘Noble Savage’ experiment modeled upon the political philosophy of Jean Jacques Rousseau (Smith, 1990). During the following year until the HMS Beagle was ready to embark on its next trip to South America, the friends of the Church Missionary Society taught English and the basics of Christianity to these Fuegians along with practical training in the use of common tools (Desmond & Moore, 1992, p. 106). As newly trained cultural missionaries, they would then be ready to return home to civilize the other members of their tribe.

Before dealing directly with how Darwin’s beliefs in racial inequality fundamentally shaped his conception of natural selection, we must confront the conventional defense of Darwin’s alleged racial ‘tolerance’ – his argument with Robert FitzRoy, captain of the Beagle. The Beagle left England shortly after the extraordinarily heated election of 1831 in which the Whig Party displaced the long-ruling Tory Party, yet before the major Reform Act was enacted in 1832. One politically sensitive plank of the Whig Party was the banning of slavery in all British possessions at the considerable economic detriment to many Tory plantation owners. The Whig aristocracy, which had long profited from providing the shipping and slave trade infrastructure, had turned against the institution of slavery, in part due to a highly effective abolitionist

movement in England and in part due to the practical reality of reduced profits resulting from the banning of slave importation into the United States which had taken effect in 1808. In the much discussed dinnertime 'discussion' between the Whig Darwin and the Tory FitzRoy, FitzRoy told of listening to a slave-owner ask his slave if he wished to be free. Should not that slave's stated wish to remain as a slave be respected? When Darwin responded by questioning the meaningfulness of that slave's answer when given directly to his thoroughly dominant master, FitzRoy burst into rage and Darwin's tenure on the voyage briefly came into doubt (Desmond & Moore, 1992, p. 120). As that same line of defense for slavery had also become standard in the antebellum American South, the fortitude of Darwin in this politically challenging circumstance surely warrants acknowledgement. However, Darwin's statement did not represent any commitment to the concept of equality among the human races.

In fact, Charles Darwin had a well-defined belief in the inequality among the various races. As with a growing number of abolitionists at that time, Darwin believed that blacks were not at the bottom of the human scale because they made such good workers and had proven willing to adopt Christian morality (Desmond & Moore, 1992, p. 191). The same could not be said for the Native Americans who were then living on the Pampas grasslands of Argentina. At the time when the HMS Beagle was traveling along that coast, the European-derived leadership of Argentina had instituted a formal military policy to hunt down and slaughter the Pampas Indians including all men, women, and children. In one of his inland naturalist investigations, Charles Darwin came to accompany General Juan Manuel de Rosas whose army was then engaged in this extermination effort. In his notes, Charles Darwin expressed his appreciation of the "great benefits" that would result from General Rosas's "war of extermination". For landowners, it will "throw open four or 500 miles in length of fine country for the produce of cattle" (Desmond & Moore, 1992, pp. 140-141). However, despite their deserving immediate extermination, the Native Americans of the Pampas grasslands did not mark the bottom of Darwin's scale of human worth. That was an 'honor' reserved for the native population in Tierra del Fuego. As Darwin put it, "I believe if the world was searched, no lower grade of man could be found" (Gould, 1996, p. 417).

Similar to various other British naval voyages of that era, this voyage of the Beagle was being carried out to obtain detailed mapping of the South American coast while at the same time implicitly conveying to the local governments the advisability of maintaining favorable interactions with the British navy and with the British merchant class. This particular voyage had the secondary function of returning Captain FitzRoy's young Fuegian captives who were now to serve as Christian missionaries. While one of the four Fuegians had died during his stay in England, the 27 year old man renamed York Minster, 15 year old boy Jemmy Button, and a 14 year old girl Fuegia Basket were loaded onto the Beagle for their return. By Darwin's own description, these young native 'missionaries' had been successful at gaining a functional command of English, the ability to dress appropriately, and even to properly hold a fork (Desmond & Moore, 1992, p. 148). When the Beagle finally reached their homeland, the crew brought on shore and unloaded all the essential ingredients for the Fuegians to adopt a higher form of civilization: "wine glasses, butter-bolts, tea-trays, soup turins [sic], mahogany dressing case, fine white linen ... & an endless variety of similar things" (Desmond & Moore, 1992, p. 134). The crew then proceeded to build huts and plant gardens, while from a distance, scores of local Fuegians silently looked on. Later on in the voyage, the Beagle returned to the land of the Fuegians at a point fifty miles from where they had left their native 'missionaries'. Darwin recounted how these Fuegians were so unkempt with "their red skins filthy & greasy, their hair entangled, their voices discordant, their gesticulations violent & without any dignity?" (Desmond & Moore, 1992, pp. 146-147). Darwin immediately turned to the conventional arguments regarding the supposed sharp differentiation between man and beast. In contrast, Darwin saw that sharp dividing line being drawn within the human species itself. He had found himself placed "among aboriginals scarcely better than brutes", "one can hardly make oneself believe that they are fellow creatures placed in the same world". Referring back to Jemmy Button and his two companions, Darwin observed "Although essentially the same creature, how little must the mind of one of these beings resemble that of an educated man". The conventional view of the man vs. beast divide was comforting armchair philosophy. "Darwin was stuck face-to-face with the most degraded natives, and being forced to recognize a world of difference – a world of improvement – 'between the faculties of a Fuegian savage & a Sir Isaac Newton'" (Desmond & Moore, 1992, p. 147).

A year after the Beagle had left behind the three native 'missionaries', the ship returned to the site. Darwin could only recognize Jemmy, but even with him, Darwin had never seen "so complete & grievous a change". Captain FitzRoy was overwhelmed by the sight and had Jemmy quickly bundled back on board where he was properly dressed and seated at the Captain's table for dinner. Jemmy proceeded to handle his cutlery properly and speak "as much English as ever" (Desmond & Moore, 1992, p. 148). After staying on board overnight, Jemmy announced that he had "not the least wish to return to England" ... he was "happy and contented" to remain in his homeland. As Darwin concluded, "no civilizing influence could erase his deep-seated instincts".

It was in this intensely visceral experience that Darwin became convinced that the crucial boundary line which dictates the progress of biological evolution must lie not between species but rather within each species. This experience with the Fuegians was Darwin's 'Eureka' moment. The 'experiment' on the three Fuegians had dramatically demonstrated the "Monkey see – Monkey do" ability of the human *Cattle* to mimic the *Best*. Among the *Cattle* this ability to mimic is combined with an inability to improve. Evolutionary improvement can only arise from among the *Best*. This phenomenon had been most dramatically driven home by the example provided by the physically distinctive Fuegians, but Darwin was convinced that this basic principle must similarly apply within the white race as well, despite the comparative lack of obvious visual clues for recognizing who is intrinsically *Best* and who is not. The role of racial science would be to identify where that line is drawn within the species and to analyze the mechanisms by which success is assured for those of the *Best* who alone are capable of driving forward the evolutionary progress of the species. It must be noted that, despite Darwin's continued dedication to this central principle of his doctrine, over the course of the remaining fifty years of his life he never wrote of another species for which he was so readily able to identify the dividing line between the *Best* and the *Cattle*.

Over time, Darwin became increasingly distressed by the issue of how he could market his new formula for justifying the *Best* to a British cultural elite that still remained psychologically tied to the traditional man-seed doctrine which holds that the superior man gives rise to the superior son. This concern could only have been heightened by the fact that nearly five years after leaving England, the HMS Beagle returned to a political world in which the earlier victorious Whig Party had sharply turned against its earlier democratic allies. The Whigs had joined with the Tory Party to create the repressive society of Charles Dickens' *Oliver Twist* with its state-sponsored private industrial workhouses into which those men, women, and children of London who were unable to prove their own gainful employment would be forcibly incarcerated. In a political climate where 'evolution' was still seen to be a synonym for 'revolution', Darwin largely held his thoughts on evolution to himself for the next two decades.

At the beginning of the 1850s, the political world of Britain markedly shifted. While in many senses the transformation of the Whig Party into the Liberal Party and the Tory Party into the Conservative Party might have seemed politically superficial, it represented a generational changing of the guard to a new leadership that was ready to justify its own claim to authority from a different point of view. This was now the era of the 'self-made Man' who in his role of guiding the Industrial Revolution was defining 'Progress' for all of humanity. The political stage was set for Darwinism. *Origin of Species* (1859) was a literary smash. In the matter of a few years, Darwin's allies had captured the levers of power throughout the halls of British science. While in practical terms, he remained hidden away as the distant oracle at his mansion/laboratory outside of London, in spirit, Darwin was the toast of the town.

Yet, in the face of all this adulation, Darwin became increasingly frustrated as he felt that his closest allies were failing him. Darwin had made the very conscious decision to exclude any relevant consideration of the human species in his *Origin of Species*. The political logic for that omission was straightforward. His seminal publication was to prove that his presentation of natural selection is the basic truth of Nature. Presumed to be applicable to every other species, the unstated implication for the human species was to be seen as obvious. If Darwin had instead begun his *Origin of Species* with his analysis of the lowly Fuegians, then many readers would surely have reached the correct conclusion that Darwin was simply projecting his racial bigotries onto all other forms of life. Yet if the implications for humanity were so self-evident, why weren't his allies proclaiming the obvious? For Darwin to belatedly declare his own intentional omission would defeat the whole point of the deceit. Yet, it would be an entire decade before the first of his British allies would finally publish an application of Darwinism to the human species.

Darwin's frustrations with his British colleagues were strongly exacerbated by the dramatically different response that was unfolding in Germany where the German Darwinists were outperforming the British Darwinists back at home (Desmond & Moore, 1992, pp. 561-562). Central to this process was Professor Ernst Haeckel. Now [incorrectly] referred to as the originator of the theory of biological recapitulation, Haeckel's fame in the English-speaking world comes from his phrase "ontogeny [embryonic development] recapitulates phylogeny [the tree of life]". In reality, the historical significance of Ernst Haeckel lies in his role as Darwin's German 'Bulldog'. With regards to advancing a deeper understanding of Darwin's writings, Haeckel initiated an aggressive and highly successful campaign to convert the academic circles of Germany. The political success of Haeckel's efforts was undoubtedly facilitated by the major revamping of the German universities which Chancellor Bismarck was then instituting across the newly formed German state. Within the German intellectual context, there was not the slightest ambiguity regarding the perceived role of Darwin in placing the 'modern' concept of racialism on a firm scientific ground. As for Darwin himself, he prophetically proclaimed

that Germany was the “chief ground for hoping that our views will ultimately prevail” (Desmond & Moore, 1992, p. 539).

While racism itself obviously long predated the nineteenth century, William Jones’ proposal in 1786 that the Sanskrit, Latin, and Greek languages share a common origin gave tremendous impetus to the belief that the dominance of the West in modern times was a reenactment of an earlier era of Aryan domination. While much of the first half of the nineteenth century focused upon the empirical rediscovery of that earlier Aryan era, during the second half of that century intellectual attention shifted to explaining the ‘scientific’ basis of that racial superiority and the theories of Darwin played a central role in that process. When the Haeckel-inspired racial science literature in Germany failed to leak back into England, Darwin decided to take action. First Darwin had to confront the problem of identifying a suitable German text to get translated into English when he was unable to read those books himself. Unfortunately for Darwin, Haeckel’s own principal treatise *Generelle Morphologie* was written to capture the halls of the German universities rather than a broader public and was targeted toward the current politically charged debates of Germany rather than those of Britain (Desmond & Moore, 1992, pp. 541-543). Fortunately for Darwin, his more broadly literate wife Emma was able to give him a rough translation of naturalist Fritz Müller’s more popularly oriented defense of Darwinism (Desmond & Moore, 1992, p. 529). It was clearly a great benefit to Darwin that he could call upon his own wife to help identify the appropriate German text since Darwin was insistent that his own fingerprints not be left at the scene when the translation of that text was later perpetrated on the English populace. Unfortunately, the later stages of this political charade could not be so easily finessed. Darwin’s longstanding publisher John Murray was only willing to accept this book if Darwin paid for the publishing costs. Darwin was also stuck with the obligation of arranging a translator, overseeing the operation, paying for advertising, and organizing the review of the book and the presentation of copies to politically relevant readers (Desmond & Moore, 1992, p. 554), all of this while trying to hide his own personal involvement in the scheme. The challenges that Darwin faced in this enterprise are well illustrated by the hired translator who presented as the translated title the sarcastic *A Lift for Darwin* (Desmond & Moore, 1992, p. 554). Despite altering that initial title, the publication of the English translation of Fritz Müller’s book made relatively few political waves.

The application of Darwinism to the human species raises a crucial political issue. On one hand, the intrinsic superiority of the *Best* would seem to necessitate the ultimate elimination of the human *Cattle*. Yet, given the “Monkey see – Monkey do” capability of the *Cattle* to perpetuate the institutions of society that the *Best* design and guide, should practical focus be placed upon exploiting that capability, or are the evolutionary demands of the *Best* better served by the prompt elimination of the *Cattle*? Charles Darwin would lay the philosophical groundwork for both of these approaches. As examined below, the first of these options was more aggressively pursued in Britain. The second option is the subject of *Darwin’s Germ Theory of Heredity*.

Shortly after his publication of the English translation of Fritz Müller’s book, Darwin’s half-cousin Francis Galton published his *Hereditary Genius* (1869). The application of Darwinism to human society had officially commenced in Britain. The favorable reception of Galton’s *Hereditary Genius* prompted Charles Darwin to state that “I do not think that I ever in all my life read anything more interesting and original” (Galton, 1962, pp. 5,32). In this book, Galton analyzed a substantial set of ‘eminent’ Englishmen to determine how frequently eminence descends through family lines. Based on his statistical analysis of kinship relations, Galton concluded that at least 70% of the genetic inheritance of eminence passes through the male line. For only a few of the family trees that he presented in his book did Galton even bother to include the female family members. The purported irrelevance of that fact is explained by the “inherent incapacity in the female line for transmitting the peculiar forms of ability we are now discussing” (Galton, 1962, p. 384). That said, Galton went on to state that smart men marry ‘above mediocre’ women which presumably helped explain why was ‘only’ 70% of eminence is inherited through the male line. Francis Galton’s greater fame is based upon his central role in initiating the establishment of the modern field of statistics as a mathematical tool for analyzing ‘eugenics’, a term which Galton coined in 1883. As examined in Chapter 7 of the reference text, to an extraordinary degree, the further development of modern statistical analysis remained intimately tied to the topic of eugenics. Galton made quite clear the political significance of his new word (Galton, 1883, p. 44):

“The investigation of human eugenics, that is, of the conditions under which men of high type are produced”

Accompanying this statistical approach to quantifying the qualitative superiority of the *Best* was the need to promote the legitimacy of this ‘science’ in order to politically justify the impositions of its mandates upon an otherwise unreceptive *Cattle*. To assert the moral superiority of Darwinism, Darwin proposed to transform *The Science of Sympathy* (Boddice, 2016). The nineteenth century Anglo-American intellectual understanding of sympathy was initially shaped by the eighteenth century philosophical writings of David Hume and Adam Smith. The ability to respond to the perceived feelings of others was understood to provide the operational basis for the formation and development of human society and was held to define the moral basis of that

society (Boddice, 2016, pp. 43-44). On the other hand, it was recognized that sympathy depends only upon the individual's understanding of the other person's feelings. When misunderstandings occurred, they were decried as sympathy out of place or 'sentimentality'. The political edge to that distinction was drawn into focus by the general identification of sentimentality as being 'feminine' and readily dismissed as weak, impulsive, and irrational.

"The ovum itself was, throughout the nineteenth century, considered to be a conservative element in the process of human reproduction, storing the emotional and moral history of the race, but incapable of adding intellectual activity, innovation, or vigor to offspring. These qualities were provided by the male seed, and by extension became male qualities enshrined in nature" (Boddice, 2016, p. 44).

It took little imagination to extend this analysis to distinguishing the 'sympathy' shared within the superior white race in contrast to the 'sentimentality' among the savages of the other lower races. However, drawing upon his earlier 'insight' into the mental character of the Fuegians and its implication that evolutionary advance can only come through the actions of the *Best*, Darwin recognized that he could provide a more concrete understanding of the evolution of sympathy (Boddice, 2016, pp. 26-52). The formation of increasingly sophisticated political structures from tribes, to confederations, to nations was to be understood as the evolving process of sympathy. As a ruler saw the advantage of combining with/subsuming potential allies, he created the call among his people to extend their sense of sympathy to their new-found brethren. As reflected in Darwin's Fuegian paradigm, while the *Cattle* might be intrinsically incapable of initiating the formation of such a broadened political structure, their "Monkey see – Monkey do" aptitude enabled them to imitate the behavior of their leader in culturally solidifying that enlarged society. Seemingly at odds with the conventional tale of Darwinism, in his *The Descent of Man* Charles Darwin pointedly discussed the crucial role that organized religion has played in expanding the sense of sympathy within the ever-larger political structures of the modern world. The intrinsic weaknesses of this "Monkey see – Monkey do" sympathy were self-evident to Darwin. From the Darwinian perspective, it was out of the question that the *Cattle* could be elevated to a true scientific understanding of evolving human society. The most promising alternative would be to redefine 'morality' in terms of the evolutionary progress of scientific sympathy that embodies the 'objectively' calculated future benefits for human society. The scientists who are capable of reliably assessing those future benefits must assume the role of defining that sympathetic morality. That "great scheme of perfect happiness, taking no account of incidental suffering, exterminate such sections of mankind as stand in their way", as described by Herbert Spencer, could only be protested by those whose sense of morality must be dismissed as 'sentimentalist'. In 1864, Spencer had crystallized the public understanding of *Origin of Species* by introducing his infamous expression "survival of the fittest". Much of the initial political resistance to Darwinian doctrine had focused upon condemning its alleged amorality. By introducing his new theory of scientific sympathy, Darwin claimed to not only explain the biological evolution of morality as understood at that time but to also have defined the pathway by which morality would evolve in the future.

In turn, Darwin's *The Descent of Man* would become a major inspiration for Francis Galton's long career (Boddice, 2016, pp. 116-117). Galton would insist that the ideas of eugenics ought to be "introduced into the national conscience, like a new religion". He hoped for "a sort of scientific priesthood – whose high duties would have reference to the health and well-being of the nation in its broadest sense" (Galton, 1874, p. 260). "When the desired fullness of information shall have been acquired then, and not till then, will be the fit moment to proclaim 'Jehad' or Holy War against customs and prejudices that impair the physical and moral qualities of our race" (Forrest, 1974, pp. 272-273). Those who passed the strictest tests of physical, mental, and ancestral health would be issued a "eugenics certificate" to reinforce "a sentiment of caste among those who are naturally gifted" (Boddice, 2016, p. 123).

In the more immediate timeframe, Darwin's composing of *The Descent of Man* and its theory of *Scientific Sympathy* would catapult him into a highly contentious debate of the day. From the start of the nineteenth century, Edward Jenner's use of the comparatively harmless cowpox to create immunity to the far more deadly smallpox came to be widely used among the upper class of England through their well-established network of private family physicians. As no comparable form of advanced health care was available to the general populace, such individuals continued to rely upon the typically female lay caregivers to provide the more dangerous older smallpox inoculation procedure or else forego preventative treatment altogether. The net result was a stark class-based disparity regarding smallpox infections that was exacerbated by the high population density of London's urban slums. In 1840, the British Parliament introduced free voluntary vaccination programs for smallpox that targeted the poor. A year later, the government criminalized the use of the older smallpox inoculation procedure (Durbach, 2005, pp. 21-22). This voluntary vaccination program was a resounding failure. While government officials attributed this failure to the "indolence and indifference" on the

part of the lower class, it is hard to overlook the psychological reality that this vaccination program was quite explicitly motivated by the desire to reduce the threat that the lower and middle classes posed against the *Best*.

In 1853, this class-based controversy caught fire when Parliament enacted the Compulsory Vaccination Act mandating universal infant vaccinations. The punitive measures that were applied to enforce this compulsory vaccination program were enhanced in 1867 and again in 1871 such that parents who were found to be in violation could face not only fines but imprisonment (Durbach, 2005, pp. 7-9). To pour salt on the wound, all parents with unvaccinated infants were ordered to appear at a nearby workhouse where Poor Law 'Guardians' would administer the vaccination (Boddice, 2016, pp. 103-104). It is hard to overstate the crassness of this protocol. This was still the era of Charles Dickens and the government-sponsored 'private' workhouses. Although the large majority of Londoners were not condemned to the workhouse system, that very visible imprisonment system served to remind those free laborers and artisans of the threat that they faced if they lost their source of income. By this mandated vaccination program, the free population of London was forced to stand in line with the workhouse convicts to have their child receive a vaccination under medically cavalier conditions that were reported to result in many otherwise avoidable deaths due, in large part, to cross-contamination that spread other diseases such as syphilis and erysipelas (Boddice, 2016, pp. 103-104).

From a legal/conceptual perspective, the smallpox vaccination issue revolved around the question of whether the medical establishment's specialized knowledge of health outcomes justifies imposing their proposed policies upon society for its own good, irrespective of the expressed concerns of those citizens. Charles Darwin clearly saw his emerging eugenics movement in quite the same terms. By his specialized knowledge of what makes an individual evolutionarily 'fit', the Darwinian eugenicist could claim to offer the unique capability for charting the path to a future superior race. Given the obvious political sensitivities involved in determining who will or won't be allowed to produce offspring, governmental compulsion for such a eugenics program would be absolutely essential. As subsequent history would substantiate, Darwin correctly surmised that the political failure of Britain's compulsory smallpox vaccination program would spell the doom for a similar British program for eugenic selection. To that end, in 1871 Darwin spoke forcefully to Parliament's Select Committee of the House of Commons in support of mandated vaccination. His formal testimony helped carry the day for the government in its public defense of the Vaccination Act it had enacted earlier that year (Boddice, 2016, p. 105). This controversy would drag on until 1907 when the Parliament's compulsory vaccination program finally completely imploded. Over the first two decades of the twentieth century, the eugenics movement in Britain would reach its peak. Although various approaches to enforcing sterilization or celibacy upon the targeted subpopulations of Britain were considered, as Darwin clearly surmised, the political failure of the smallpox vaccination program had helped spell the doom for the eugenics program as well.

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