A History of the Impact of Darwinism on Bioethics

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In the time since Darwin published *On the Origin of Species* those who embrace evolutionary theory have vigorously debated the way that Darwinism should relate to ethics. Quite a few have exulted in the advent of Darwin's theory as one of the most important watersheds in human history, because, they alleged, it altered our whole understanding of humanity, including our knowledge about ethics and morality. Some have gone even further, wanting to base all morality on the evolutionary process itself; in their view whatever promotes evolution is morally justified, while whatever hinders evolution is evil.

Others have been more reserved, arguing that even though Darwinism is valid for biology, it has nothing to do with ethics. T. H. Huxley famously separated Darwinism from morality in his 1893 Romanes Lecture, stating, "Let us understand, once for all, that the ethical progress of society depends, not on imitating the cosmic process, still less in running away from it, but in combating it." The British philosopher G. E. Moore dismissively labeled all attempts to apply evolution to ethics the "naturalistic fallacy." Likewise, the nineteenth-century German neo-Kantian philosopher Wilhelm Dilthey argued that the natural sciences—including biological evolution—are in a totally separate category from the human sciences, which includes ethics. Religious leaders and institutions, such as the Catholic Church, that made their peace with Darwinism likewise generally rejected attempts to apply Darwinism to ethics.

Dilthey, Moore, and many other philosophers in the nineteenth and twentieth centuries were reacting against what they considered the overreaching conclusions being peddled by many scientists and social thinkers who believed that Darwinism not only could, but must, be applied to society and morality. In this essay I intend to examine the positions of those philosophers, scientists, and social thinkers who believed that Darwinism did have

¹ (Huxley, 1989, p. 83).

a contribution to make to moral philosophy. I acknowledge from the outset that many influential thinkers challenged and rejected the application of Darwinism to ethics—both historically and currently. However, if we want to know how Darwinism influenced and changed the way that some people think about bioethics, we should focus on those who believed that Darwinism did powerfully impact the way they regarded humans and morality.

I will especially focus on themes that currently fall in the realm of bioethics, especially issues emerging in the late nineteenth and early twentieth centuries, such as eugenics, abortion, infanticide, and assisted suicide. Bioethics as a field of study did not even exist until several decades ago, and even medical ethics was not a clearly defined field of study until the twentieth century. Because of this, I will focus on a variety of thinkers, including philosophers, jurists, scientists, and social scientists.

Darwin in *The Descent of Man* advanced six key ideas that would influence subsequent thinking about bioethics. First, he believed that humans had evolved gradually from non-human primates. In 1838 he inscribed in his notebook, "Man in his arrogance thinks himself a great work. [sic] worthy the interposition of a deity, more humble & I believe true to consider him created from animals." As we shall see, quite a few leading Darwinists later claimed that this alone resulted in a revolution in human self-understanding. Second, in order to convince his contemporaries of human evolution, Darwin argued that all human traits—including morality—were qualitatively the same as other animal traits. They differed only in quantity. It seems clear that Darwin rejected all forms of body-soul dualism.

Third, Darwin believed that his theory could explain the origin of morality. He claimed that morality was based on social instincts similar to those in other animals, though in humans it was augmented by our greater rational faculties. He believed that morality arose through natural selection, just as other physical traits had. The primitive tribe with the most loyalty, sympathy, and courage would outstrip the neighboring tribes lacking these qualities. Interestingly, Darwin admitted that warfare played a prominent role in this increase in human moral sentiments, since those "tribes of primeval man" with greater sympathy and faith-

² (Darwin, 1987, p. 300).

fulness would out-compete others. Thus, ironically one way that Darwin thought morality evolved was by the more moral groups of humans killing off the less moral ones.3

Seeing morality as the product of contingent evolutionary processes was in line with the dominant trend toward historicism that permeated nineteenth-century Western thought. However, it was a radical departure from pre-nineteenth century views about ethics as timeless and universal. Darwin clearly contributed to the historicization of ethics in the nineteenth century by portraying morality as changing and by denying its universality.

Fourth, Darwin's theory could only work if species varied, so Darwin stressed biological variation and inequality. Darwin not only insisted that Europeans were intellectually and morally superior to non-European races, but he also briefly discussed eugenics in Descent. He acknowledged that Galton had identified a real problem, but in the end he only favored voluntary eugenics, not compulsory measures.4

Fifth, Darwin believed that humans were locked in an inescapable struggle for existence caused by the tendency of organisms to reproduce faster than the food supply. This meant that large numbers of humans necessarily die before being able to reproduce. Sixth, unlike Malthus, Darwin put a positive spin on this mass death by theorizing that it would lead to evolutionary progress. For evolution to occur, myriads of organisms needed to reproduce, so there would be variations that could be selected. This notion that progress comes through mass death marked a huge shift in thinking about the sanctity of human life and thus had a profound impact on subsequent concerns with bioethics.5

One of the most prominent evolutionary biologists who applied Darwinism to bioethical concerns was Ernst Haeckel, whose influence rivaled Darwin in spreading evolutionary theory in the late nineteenth and early twentieth centuries. Haeckel strenuously objected to traditional Christian conceptions of humanity as special or sacred, which he castigated as anthropocentric. Darwinism, he thought, undermined the special status of hu-

³ (Darwin, 1981, 1, pp. 162-63).

⁴ (Darwin, 1981, 2, pp. 402-03).

⁵ I discuss the way that German scholars discussed all six of these points in greater depth in my work (Weikart, 2004).

manity. Haeckel was the first German scholar to promote eugenics, when he briefly discussed the need for artificial selection of humans in the 1870 edition of his Natural History of Creation, one of the most popular books on Darwinism in the late nineteenth century.6

The most profound influence of Darwinism on bioethics in the late nineteenth and early twentieth centuries was in the eugenics movement. Many historians recognize the strong influence of Darwinism or social Darwinism on the early eugenics movement, though a few deny it. However, when one examines the historical record, it is quite clear that most early eugenicists saw their project in overtly Darwinian terms. Francis Galton, the founding father of the eugenics movement, confessed that his ideas were born while reading his cousin's book, On the Origin of Species.

All the early leading figures in the eugenics movement were powerfully influenced by Darwinism, and most claimed that their ideas were simply applied Darwinism. The three founding figures of the German eugenics movement—the Swiss psychiatrist August Forel and the German physicians Alfred Ploetz and Wilhelm Schallmayer—all insisted that Darwinism was at the core of their ideology. Ploetz recruited the two leading German Darwinists—Ernst Haeckel and August Weismann—as honorary members of his eugenics organization, the Society for Race Hygiene, when he founded it in 1905. Schallmayer's most important book on eugenics, Heredity and Selection (1905), was the winning entry in a prize competition answering the question, "What do we learn from the principles of biological evolution in regard to domestic political developments and legislation of states?"

Most eugenicists agreed with Ploetz and Schallmayer that Darwinism was the basis for their views on ethics and eugenics. A placard at the Second Eugenics Congress in 1921 proclaimed, "Eugenics is the self-direction of human evolution." The leading institution promoting eugenics in the United States in the early twentieth century was the Station for Experimental Evolution in Cold Spring Harbor, directed by the prominent geneticist Charles Davenport. The Harvard University biologist Edward East in his 1924 book promoting eugenics called for the planned "direction of

⁶ (Haeckel, 1870, pp. 152-55).

⁷ (Weikart, 2004, pp. 15-16).

human evolution" in order to offset those aspects of contemporary society that "set at naught many of the important factors of natural evolution." He explained that biological evolution is "the greatest generalization of the human mind, a generalization which, taken with all its connotations, reaches every walk of life, modifies or justifies every custom, shows the reason for the past and points the way to the future."8 Most eugenicists shared East's view that their eugenics ideology was solidly based on the insights of evolutionary biology.

In what way, then, did these eugenicists claim that Darwinism influenced their vision of bioethics? First of all, many eugenicists argued explicitly that since humans evolved from other animals, Darwinism must be applied to society and ethics, just as it applied to the rest of the natural world. Schallmayer explained in the introduction to his book, "This view [Darwinism] had an especially powerful influence on ethics. It not only produced new views about the origin and evolution of ethical commands and thus to new foundations for them, but it also led to the call for a partial alteration of presently valid ethical views."9

The Darwinian stress on the inequality of organisms led many eugenicists to stress human biological inequality. They divided humans into the superior and the inferior, the fit and the unfit. Despite Darwin's definition of fitness as the ability to survive and reproduce, most eugenicists equated superiority and fitness with mental acuity and physical prowess. They favored these traits, because they saw them as advancing the human species in the evolutionary process.

Most early eugenicists were troubled by some modern institutions that they thought interfered with natural selection. Hygiene and modern medical advances caused some people who would have perished in past ages to survive and reproduce. This was especially disconcerting to psychiatrists, who in the late nineteenth century were coming to conclude that most mental illnesses were hereditary. Eugenicists often referred to this process of the "unfit" reproducing more prolifically than the "fit" as contraselection, which they feared was leading to biological degeneration. They believed that natural selection was a beneficent process

^{8 (}East, 1924, vi, pp. 23, 36).

⁹ (Schallmayer, 1905, pp. ix-x); see also (Schallmayer, 1905, p. 124).

leading to biological progress, while contraselection would lead to biological decline.

Further, many eugenicists in the late nineteenth and early twentieth centuries argued that natural selection was not concerned with the individual, but only with the species. Thus, the advance of the entire species had precedence over individual rights. One early proponent of involuntary euthanasia in Germany, the psychiatrist Alfred Hoche, set forth this view of life in an autobiography, explaining that to nature,

the continued existence of the species is everything, the individual is nothing; she [nature] carries on an immense waste of seeds, but the individual, after she has given it-the mature one-opportunity to pass on its seed to the future, she heedlessly lets die; it is for her purposes without value.10

This view was widespread among eugenics proponents, and Robby Kossmann, a medical professor with a doctorate in zoology, explained this connection between Darwinism and the devaluing of individual humans clearly in an 1880 article in a popular periodical. He stated.

We see that the Darwinian world view must look upon the present sentimental conception of the value of the life of the human individual as an overestimate completely hindering the progress of humanity. The human state also, like every animal community of individuals, must reach an even higher state of perfection, if the possibility exists in it, through the destruction of the less well-endowed individual, for the more excellently endowed to win space for the expansion of its progeny. [...] The state only has an interest in preserving the more excellent life at the expense of the less excellent.11

Sacrificing individuals for the sake of improving the species was a common refrain among eugenicists. Forel expressed a similar view, stating that "the interests of the whole [species] must be placed above the interests of the individual. [...] In many cases the life of a single human is more important than that of several others."12

¹⁰ (Hoche, 1935, p. 22).

¹¹ (Kossmann, 1880, pp. 420-21) emphasis is mine. 12 (Forel, 1899, p. 584); see also (Forel, 1905, p. 439).

Darwinian theory also reinforced negative attitudes toward the disabled. In the 1860s the biologist and anthropologist Carl Vogt argued that those with mental disabilities were evidence supporting evolutionary theory, because they were atavisms. He called microcephalic individuals "missing links" who have brains the size of apes. He also bizarrely claimed that they have excellent tree-climbing skills, allegedly demonstrating their affinity with monkeys. Vogt's ideas were not considered ridiculous by his contemporaries; even Darwin expressed general approval of his position.13

While some leading eugenicists insisted that their program be limited to restricting reproduction, others were more radical, insisting that humans could help out natural selection even more if they killed the disabled, who in earlier ages would have perished in the struggle for existence. The biologist Ernst Haeckel was the first German thinker to propose seriously that disabled infants should be killed, when he advocated this in 1870 in The Natural History of Creation.14 Haeckel justified his position on infanticide and also supported abortion based on his view that all organisms repeat their evolutionary history in their embryological development. Thus, in his view human embryos and even young children were at a lower evolutionary stage than many adult animals.15 Forel, who once called the mentally disabled "little apes," likewise supported infanticide.16

As most scholars who have written on the history of the euthanasia movement have acknowledged, Darwinism had a profound impact on the euthanasia movement from its beginning in the late nineteenth century (after the advent of Darwinism) into the early twentieth century. Udo Benzenhöfer and Hans-Walter Schmuhl both stress the importance of social Darwinism and eugenics in mediating the shift toward acceptance of physicianassisted suicide in the nineteenth and twentieth centuries. 17 The leading historian of the American euthanasia movement, Ian Dowbiggin, explains, "The most pivotal turning point in the early his-

¹³ (Zimmerman, 2001, p. 75).

¹⁴ (Haeckel, 1870, p. 155).

^{15 (}Haeckel, 1904, pp. 22, 135-36); (Haeckel, 1917, pp. 33-34).

¹⁶ (Forel, 1905, pp. 399-400; Forel, 1910, pp. 26-27).

¹⁷ (Benzenhöfer, 1999, ch. 4); (Schmuhl, 1987, pp. 18-19, 106).

tory of the euthanasia movement was the coming of Darwinism to America."18

Nick Kemp in his work on the British euthanasia movement argues similarly. He explains that the first British proponent of physician-assisted suicide, Samuel D. Williams, relied heavily on evolutionary rhetoric in his seminal 1870 essay. Kemp continues, "While we should be wary of depicting Darwin as the man responsible for ushering in a secular age we should be similarly cautious of underestimating the importance of evolutionary thought in relation to the questioning of the sanctity of human life." Williams portrayed humans as locked in a "universal struggle for mastery" that brought about the destruction of the weak. Eugenics and social Darwinism were powerful influences on the first British physician to favor euthanasia, C. E. Goddard, who expressed support for both voluntary and involuntary euthanasia in 1901. Kemp notes that "the rhetoric of the early supporters of euthanasia was heavilv suffused with social Darwinian ideas about the counterselectivity of modern society."19

The mentality behind this Darwinian sanctioning of killing the weak or disabled is very pronounced in an 1894 essay by the British philosopher F. H. Bradley. In this essay he admitted that Darwinism cannot help us determine our highest ethical goal, which he identified as the welfare of the community. Nonetheless, he claimed that Darwinism is revolutionary, overthrowing traditional Christian ethics, because it shows us the means to achieve this end. In his essay Bradley argued forthrightly against the idea that human life is sacred, that individuals have inherent rights, and that humans are equal. He stated, "But when justice (as it must be) is dethroned, and when Darwinism (as it will be) is listened to, there will be a favorable hearing for the claims of ethical surgery." By "ethical surgery" and other synonyms-"social surgery," "moral surgery," and "social amputation"-Bradley meant getting rid of those deemed unfit. He insisted this was based squarely on Darwinian science, which "urged on us that a condition of welfare is the selection of the more fit, and it added emphatically that selection means that rejection of worse varieties." He continued, "The removal of diseased growths, of worse varieties, Darwinism

¹⁸ (Dowbiggin, 2003, p. 8).

^{19 (}Kemp, 2002) quotes at pp. 19, 36.

insisted was obligatory." Bradley clearly invoked Darwinian sanction for killing those he deemed unfit, those whom he judged a "noxious lunatic," "dangerous specimens," and those whose lives are a "useless burden."20

Bradley's derogatory language for the disabled was commonplace among eugenicists, including many psychiatrists, who stressed the inequality between the "fit" and "unfit." In his book on Heredity, Disease and Human Evolution, the German pathology professor Hugo Ribbert expressed a common sentiment of eugenicists, declaring,

The care for individuals who from birth onwards are useless mentally and physically, who for themselves and for their fellow-creatures are a burden merely, persons of negative value, is a function altogether useless to humanity, and indeed positively injurious.21

As the title and many passages in his book make clear, Ribbert considered eugenics a way to advance human evolution.

Social Darwinism and eugenics also exerted a powerful influence on bioethics in legal thought in the late nineteenth and early twentieth centuries. The Supreme Court Justice Oliver Wendell Holmes, Jr., delivered the famous Buck v. Bell decision in 1927 that gave legal sanction to compulsory sterilization laws, which many states had enacted to promote eugenics. Holmes was a passionate supporter of eugenics, so much so that he wrote to a friend shortly after Buck v. Bell that he thought compulsory sterilization "was getting near to the first principle of real reform."22

Many scholars have noted the centrality of the Darwinian struggle for existence in Holmes' worldview. Albert Alschuler argues that Darwinism played a pivotal role not only in the development of Holmes' "brutal worldview" and "celebration of power," but also in the receptivity of other Americans to the glorification of struggle and competition-to-the-death in the late nineteenth and early twentieth centuries.23 Another Holmes scholar, Mark DeWolfe Howe, after detailing Holmes' belief in the human

²⁰ (Bradley, 1894, pp. 269-84) quotes at pp. 276, 278.

²¹ (Ribbert, 1918, p. 57).

²² (Holmes, 1953, 2, p. 942).

²³ (Alschuler, 2000, pp. 6-12, 20).

struggle for existence, states, "To the extent that Holmes was tying the laws of man to the Darwinian law of nature one may fairly assert that he made tooth and claw more significant than heart and soul." In an 1873 essay Holmes expressed his view rather starkly,

The struggle for life, undoubtedly, is constantly putting the interests of men at variance with those of the lower animals. And the struggle does not stop in the ascending scale with the monkeys, but is equally the law of human existence. Outside of legislation this is undeniable. It is mitigated by sympathy, prudence, and all the social and moral qualities. But in the last resort a man rightly prefers his own interest to that of his neighbors. [...] The more powerful interests must be more or less reflected in legislation; which, like every other device of man or beast, must tend in the long run to aid the survival of the fittest.²⁵

The struggle for existence is thus an ever-present reality that society must take into account in its legislation and jurisprudence.

Holmes only saw one way out of this pitiless struggle for existence: artificial selection or eugenics, including killing those deemed less fit. He stated this position numerous times in his private correspondence. In September 1921 he wrote to Felix Frankfurter that he advocated "restricting propagation by the undesirables and putting to death infants that didn't pass the examination." He had already publicly articulated this position in 1895, stating,

For my own part, I believe that the struggle for life is the order of the world, at which it is vain to repine. I can imagine the burden changed in the way in which it is to be borne, but I cannot imagine that it ever will be lifted from men's backs. I can imagine a future in which science shall have passed from the combative to the dogmatic stage, and shall have gained such catholic acceptance that it shall take control of life, and

²⁵ Holmes, "The Gas-Stokers' Strike," (1873), in (Holmes, 1995, 1, p. 325).

²⁶ (Alschuler, 2000, p. 28).

²⁴ (DeWolfe, 1957-63, 2, pp. 46); for further analysis of the Darwinian underpinnings of Holmes' worldview, see (Boller, 1969, pp. 154-73).

condemn at once with instant execution what now is left for nature to destroy.²⁷

Holmes completely rejected natural rights philosophy in favor of a conflict model for determining rights. He explicitly denied that anyone has the "right to life," stating, "The most fundamental of the supposed pre-existing rights—the right to life—is sacrificed without a scruple not only in war, but whenever the interest of society, that is, of the predominant power in the community, is thought to demand it." In private correspondence he overtly dismissed the "sanctity of human life" and the "sacredness of human life," and he advocated "substitut[ing] artificial selection for natural by putting to death the inadequate." Holmes understood his rejection of the sanctity of human life in overtly evolutionary terms, stating to Harold Laski in 1926, "Nor do I see how a believer in any kind of evolution can get a higher formula than organic fitness at the given moment." On the sanctival of the sanctival properties of the sanctival properties and the given moment." Holmes understood his rejection of the sanctity of human life in overtly evolutionary terms, stating to Harold Laski in 1926, "Nor do I see how a believer in any kind of evolution can get a higher formula than organic fitness at the given moment."

Nowhere did evolutionary ethics and eugenics exert a more profound influence than in Germany, where in the 1930s the Nazi regime rejected humanitarianism in favor of an ethic grounded on the Darwinian struggle for existence. While wanting to sharpen competition in the human struggle for existence, the Nazis simultaneously wanted to practice artificial selection to drive human evolution forward. They introduced compulsory sterilization in 1933, and though other countries had preceded them, none was as fanatical in applying sterilization to their populations. Hitler's regime sterilized approximately 400,000 people, which was about one out of 200 people in the population. Then, when World War II broke out in 1939, Hitler ordered physicians to organize a program to kill the disabled. Under this program, about 200,000 disabled Germans were murdered. The intention behind the sterilization

²⁷ Oliver Wendell Holmes, "The Soldier's Faith" (30 May 1895), in (Holmes, 1995, 3, p. 487).

²⁸ Oliver Wendell Holmes, "Natural Law," (1918), in (Lerner, 1943, p. 397).

²⁹ Oliver Wendell Holmes to Frederick Pollock, February 1, 1920, and April 11, 1920, in (Holmes, 1942, 2, pp. 36, 39); final quotation is from (Alschuler, 2000, p. 27).

³⁰ Holmes to Harold Laski, May 13, 1926, in (Holmes, 1953, 2, p. 837).

and "euthanasia" campaigns was to improve the human species in the evolutionary process. $^{\scriptscriptstyle 31}$

As much scholarship on Nazi physicians and eugenics in Germany has shown, large segments of the medical profession were enthusiastic supporters of Nazi eugenics and also killing the disabled. Recent work on the history of medical ethics in Germany before and during the Nazi period has demonstrated that medical ethics was permeated with social Darwinism and eugenics. Schmuhl argued that eugenics constituted an attempt to promote a new ethics based on Darwinian science. He then perceptively explained, "By giving up the conception of the divine image of humans under the influence of the Darwinian theory, human life became a piece of property, which-in contrast to the idea of a natural right to life-could be weighed against other pieces of property."32 Other German scholars, such as Andreas Frewer and Florian Bruns, have demonstrated that Nazi physicians and scientists were intensely interested in medical ethics, and the Nazi regime even reformed medical education to require courses on medical ethics. Far from hindering atrocities, medical ethics in Nazi Germany aided and abetted Nazi policies, such as compulsory sterilization and killing the disabled. This was because Nazi medical ethics, most of which had been developed by physicians and scientists before the Nazi period, was based largely on social Darwinism and eugenics.33

In the middle of the twentieth century, both eugenics and evolutionary ethics fell out of favor with most intellectuals. Critics of applying Darwinism to morality and society clearly had the upper hand for several decades after 1945. ³⁴ Partly this was the result of the decline of biological determinism and a growing emphasis on environmental determinism in academe, reflected in such fields as behaviorist psychology and cultural anthropology. ³⁵ It was also a reaction against the horrors of the Nazi experiment with eugenics and "euthanasia." Also, eugenics, especially the drive for compulsory sterilization, did not comport well with the rise of leftist

³¹ See my recent book, (Wiekert, 2009).

^{32 (}Schmuhl, 1987, pp. 18-19) quote at p. 106.

³³ (Bruns, 2009); (Frewer, 2000); see also (Mattulat, 2007).

³⁴ A good account of this is in (Farber, 1994).

³⁵ See (Degler, 1991).

politics and the push for reproductive freedom that characterized the sixties.

Nonetheless, beginning in the 1970s and increasing markedly in the past twenty years, applications of Darwinism to morality have reemerged and influenced bioethics. Some bioethicists forthrightly argue that Darwinism undermines the Judeo-Christian sanctity-of-life ethic. The scholar promoting this most vigorously is James Rachels in *Created from Animals: The Moral Implications of Darwinism*, where Rachels argues for the permissibility of abortion, voluntary euthanasia, and infanticide for disabled babies. Rachels does not base his ethics on evolution, but he does insist that evolution makes the sanctity-of-life position untenable.³⁶

Peter Singer, one of the most famous bioethicists in the world, agrees completely with Rachels' position. Darwinism plays a key role in Singer's philosophy, underpinning his views on life and death. Singer claims that Darwin "undermined the foundations of the entire Western way of thinking on the place of our species in the universe." It stripped humanity of the special status that Judeo-Christian thought had conferred upon it. Singer complains that even though Darwin "gave what ought to have been its final blow" to the "human-centred view of the universe," the view that humans are special and sacred has not yet vanished. Singer is now laboring to give the sanctity-of-life ethic its deathblow.³⁷

Not all Darwinian biologists think Singer and Rachels are on the wrong track. In 2001 Richard Dawkins, probably the most famous Darwinian biologist in the world today, made an impassioned plea for genetically engineering an Australopithecine. Producing such a "missing link" would, according to Dawkins, provide "positive ethical benefits," since it would demolish the "double standard" of those guilty of "speciesism." Dawkins specifically claims that producing such an organism would demonstrate the poverty of the pro-life position, because it would show that humans are not different from animals. In the midst of this acerbic attack on the sanctity of human life, Dawkins expresses the hope that he will be euthanized if he is ever "past it," whatever that means. More recently Dawkins has claimed that creating a half-

³⁶ (Rachels, 1990).

³⁷ (Singer, 2000, pp. 77-78, 220-21), and (Singer, 2004) where Singer discussed the Darwinian underpinnings of his philosophy.

human, half-chimp hybrid would be helpful in demolishing the "deeply unevolutionary" essentialism that pro-life advocates embrace.³⁸

Sociobiologists and evolutionary psychologists, who try to explain human behavior as arising from Darwinian processes, have been in the forefront in normalizing infanticide in the past few decades. The anthropologist Sarah Blaffer Hrdy aroused considerable controversy when she suggested that langur monkeys committed infanticide. Since then, she has become the leading figure arguing that infanticide favors evolutionary adaptation, not only in primates, but also in humans. In 1984 she co-edited a book on *Infanticide: Comparative and Evolutionary Perspectives*, which uses sociobiology to explain infanticide. In the introduction she and her co-author argue that infanticidal behavior in primates and humans arose through natural selection and is hereditary.³⁹ Other authors in that volume reinforce this point.⁴⁰

In most of her writings, Hrdy does not directly promote or condone infanticide. However, she argues forcefully that it is a normal part of human behavior that provides reproductive advantage. It is not pathological or irrational, but makes sense in the Darwinian struggle for existence, where survival and reproduction determine biological traits, including behavior. In her 1999 book, Mother Nature: A History of Mothers, Infants, and Natural Selection, however, Hrdy does seem to condone infanticide. After arguing that infanticide is one element of a mother's strategy to control her reproduction, she states, "These consistencies [in mothers' behaviors throughout history] remind us that we descend from creatures for whom the timing of reproduction has always made an enormous difference, and that the physiological and motivational underpinnings of a quintessentially 'pro-choice' mammal are not new."41 Thus, Hrdy's implicit "normalization" of infanticide in her earlier works becomes more manifest, as she explicitly dubs humans (and their ancestors) "quintessentially 'pro-choice."

Hrdy's Darwinian explanation for infanticide has become rather commonplace in the past two decades. When news broke

^{38 (}Dawkins, 2009).

^{39 (}Hausfater and Hrdy, 1984, pp. xiii-xxxv).

⁴⁰ (Daly and Wilson, 1984, p. 502).

⁴¹ (Hrdy 1999, pp. 316-17).

about two shocking infanticides by teenage mothers in 1997, the prominent evolutionary psychologist Stephen Pinker assured the American public that infanticide was a hereditary behavior conferring selective reproductive advantage, at least for our forebears. Pinker did not suggest legalizing infanticide, but he did think we should show understanding for women who are only responding according to their "emotional circuitry" that developed through natural selection.⁴²

The sociobiologist Marc Hauser in Moral Minds: How Nature Designed Our Universal Sense of Right and Wrong (2006) also promotes Hrdy's position. "Some animals, in some conditions, are no different than some humans in some conditions: infanticide, siblicide, and even suicide are all options, supported by none other than Mother Nature." Hauser's main argument is that humans have a moral instinct that "was designed by the blind hand of Darwinian selection." In the evolutionary process, reproductive success determines biological traits, including behaviors. Hauser confesses that his own moral sensibilities (which he considers instinctual) favor euthanasia, and later in the book he provides an evolutionary argument for it:

Do people ever have the moral obligation to die, to cause themselves harm, in effect? Though it may be hard to see how natural selection could ever result in a suicide instinct, further reflection suggests that this sacrifice might pay off in the service of preserving valuable resources for kin. Self-sacrifice may have been selected in certain circumstances. Such selection may, in turn, have generated a psychology of moral obligation. Once we open the door to such moral maneuvers for euthanasia, admittedly abhorrent to many, parallel issues arise for abortion and infanticide, and for notions of harming others more generally. What appear to be different moral cases on the surface may reduce to the same set of principles with small, yet significant changes in parametric settings. This is where the idea of a universal moral grammar may have its most significant impact, highlighting how an understanding of descriptive,

⁴² (Pinker, 1997).

⁴³ (Hauser, 2006, p. 361).

⁴⁴ (Hauser, 2006, p. xvii).

and possibly universal, moral principles bears on our approach to the prescriptive principles of what ought to be. 45

Hauser, thus, argues that natural selection not only can make suicide and infanticide intelligible and even rational, but can generate moral obligations to kill ourselves or others.

How influential are these current attempts to apply Darwinism to bioethics? Admittedly, many bioethicists do not grapple directly with evolutionary theory in their philosophizing. However, in the past decade it seems that more ethicists are discussing and debating the significance of Darwinism for bioethics. A spate of recent books deals with the interaction of evolution and bioethics.46 One recent example published by the American Bar Association decried the lack of attention bioethicists have given to evolutionary theory. The author, W. Noel Keyes, then tries to redress this problem by spending considerable time discussing evolution, which he considers an essential background for understanding human nature and thus bioethics. Nonetheless, despite his extensive treatment of evolution, Keyes never really explains how it applies to bioethics. He seems generally sympathetic with Singer's and Rachel's position, but he never explicitly endorses it. He certainly approves of abortion and assisted suicide (Keyes 2007). If Keyes' and other recent books are any indication, the importance of Darwinism for bioethics is growing. Many sociobiologists, evolutionary psychologists, and bioethicists are using it to buttress their arguments supporting infanticide and euthanasia. It seems to me that we have been down this intellectual path once before.

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^{45 (}Hauser, 2006, p. xix), quote at p. 425.

⁴⁶ Some examples are (Kimball, 2007); (Mataré, 1999).

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