

Eugenics

Eugenics is the science and social movement which promotes practices that improve the frequency of genetic traits perceived as beneficial in future generations of a human population.¹ Eugenics came from the social Darwinism of the 19th century, with the ideals of fitness and competition; in fact, the term was coined by Francis Galton, a scientist and a cousin of Charles Darwin. Many social problems, including crime, prostitution, and alcoholism, were considered to be caused by genetic reasons and thus, eugenics was seen as a possible solution to eliminate them; the goal of eugenics was the improvement of human society and the freedom of man from these genetic limitations.²

There are two directions to approach the goal of eugenics: one is to attempt to increase the frequency of traits seen as beneficial, by encouraging the reproduction of those with them or introducing them (“positive eugenics”), and the other is to attempt to lower the frequency of traits seen as detrimental by eliminating those possessing them or excluding them from reproduction (“negative eugenics”).³

Both types were seen in the United States as early as the 1920s, in the competitions for “fitter families” which used measures such as IQ as well as in the sterilization laws passed that were to affect the mentally handicapped/ill. Even then, such policies often disproportionately affected the poor and minorities, since people in private care could escape them. In 1927, the US Supreme Court case *Buck versus Bell* ruled in an 8-1 decision to uphold Virginia’s sterilization law, with the majority argument written by Justice Oliver Wendell Holmes painting mandatory sterilization as a lesser version of the sacrifice of the lives of citizens in war for the good of the state. These policies clearly had support, despite the fact that today they are almost

¹ Genetics Home Reference, <http://ghr.nlm.nih.gov/glossary=eugenics>

² Daniel J Kevles, Eugenics and Human Rights, <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1127045/>

³ Daniel J Kevles, Eugenics and Human Rights, <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1127045/>

inconceivable. Rates of sterilization increased with the worldwide depression in 1929, when economic reasoning, such as reducing the cost of poor relief, provided justification. Eugenics also seemed to offer a social benefit in that children would not be born to parents who could not take care of them.⁴

Eugenics was initially implemented with similar goals and methods in Nazi Germany, where it was used to justify the sterilization of those that were deemed unfit as well as the genocide in “euthanasia” programs. One initial policy was the Law for the Protection of Hereditary Health, which stated that “anyone who suffers from an inheritable disease may be surgically sterilized if, in the judgment of medical science, it could be expected that his descendants will suffer from serious inherited mental or physical defects”, which was similar to US laws except on a much larger scale. However, this eventually moved to include sterilizing based on race, and finally the euthanizing of people considered as burdens to the state. Himmler compared this “Final Solution” to a delousing, a necessity to attain cleanliness. Both these examples are of government-imposed eugenics, where the decisions about reproduction are made by society, not the individual, albeit the latter is on a level that creates public outcry. The example of Nazi Germany illustrates the difficulty in drawing a line between perceived genetic diseases and simply traits, in the leap made from screening out the former from the population to using eugenics to justify racism.⁵

Eugenics also began to lose merit as people began to discover that many mental problems have no basis in genes, and those that do have a basis are often also at least partially shaped by environment. This called the scientific basis of eugenics into question, since this implied that much of this “undesirability” was not inheritable. The Roman Catholic group began to oppose

⁴ Daniel J Kevles, Eugenics and Human Rights, <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1127045/>

⁵ François Haas, German science and black racism—roots of the Nazi Holocaust, <http://www.fasebj.org/cgi/content/full/22/2/332>

sterilization for religious reasons but also because many of them were affected by it. The movement for women's rights and reproductive freedom also changed public opinion about eugenics. After the war, eugenics largely fell out of favor.⁶

Although the application and enforcement of eugenics during this era can be seen as racist, the arguments used in favor of negative eugenics were not. Supporters emphasized the economic savings due to having a smaller dependent population, as well as arguing that improvement of medicine had allowed people who should have died of genetic problems to live until puberty. If people were free of this responsibility, the more fit could have more children (this illustrates the connection between the two directions of eugenics, and how one leads to the other), and humanity would be better off as a whole as the standard rose; the goal of eugenics was to provide a better future for new generations, and supporting it was almost a civic duty to society itself.⁷

Genetic researchers and clinicians today often attempt to distance their work from eugenics and its bad reputation from that era. The arguments they use to do so include that eugenics was a pseudoscience, the kinds of eugenic human engineering that are feared are not technically feasible or realistic; scientists cannot really design and produce people from scratch, eugenics involved coercive reproductive policies in totalitarian regimes, whereas contemporary selection decisions are made by private individuals and families (state-sponsored versus private), in the eugenic past, the work of geneticists was simply abused by eugenicists, and that the eugenic policies of the past focused on altering the human gene pool or some nationally or racially defined subset, whereas the focus of human genetics now is on addressing individual conditions. However, the previously mentioned attempts to avoid "inherited mental or physical

⁶ Daniel J Kevles, *Eugenics and Human Rights*, <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1127045/>

⁷ Ladelle McWhorter, *Governmentality, Biopower, and the Debate over Genetic Enhancement*, <http://jmp.oxfordjournals.org/cgi/content/full/34/4/409>

defects”, both in Nazi Germany and in the United States, show that the movement did not simply favor race. Their goals of relieving suffering and reducing taxes also provide a counterpoint to that argument. The fact that many eugenicists were also geneticists casts doubt on the claim that eugenics was a pseudoscience and that genetics was simply twisted.⁸

However, one of the arguments is certainly correct: today the focus has shifted away to liberal eugenics due to the legacy of state-sponsored eugenics. These private methods include technologies were originally developed to help treat disease, yet also provide methods that can be used to enhance or grant more choice to people that are not sick, as well as to their offspring. For example, amniocentesis and ultrasound were developed to help diagnose genetic abnormalities, yet they can also be used to screen for the sex of the child. Acting a step before, in vitro fertilization allows for the fertilization of several eggs, and the implantation of only those with the desired sex, removing the moral issue of abortion. Yet another technology, called MicroSort, allows for the choosing of sex at a step before fertilization, removing the complaint that these methods are equivalent to infanticide due to discarded embryos. Although it might be easy to point out the moral issues with state-sponsored eugenics, these private methods are more difficult to denounce. Not only are they becoming more accurate over time, but the moral complications that previously were tangled into the problem due to the nature of the process are being rendered unnecessary, such as the discarding of human cells, which some people consider to be a human life. In the future, methods like these might be able to select for other traits, raising moral questions about the core issue of the rectitude of choosing the genetic makeup of one’s offspring.⁹

⁸ Ladelles McWhorter, *Governmentality, Biopower, and the Debate over Genetic Enhancement*, <http://jmp.oxfordjournals.org/cgi/content/full/34/4/409>

⁹ Michael J. Sandel, *The Case Against Perfection*, <http://www.theatlantic.com/doc/200404/sandel>

One argument made by Harvard political theorist Michael Sandel against this new type of eugenics is that it will have a corrupting effect on some critical values in our society. By removing the randomness in the “genetic lottery”, it turns what was previously a gift of chance into an achievement of the individual, something that one or one’s parents are directly responsible for. Previously, those with genetic disadvantages could not be blamed for having them, but now they can be and those without owe no debt to them. If parents gain the ability to choose the traits of their children, the role of parenthood is also tainted; children are no longer accepted for the way they are and our openness to the unexpected is in some ways lost as is our humility. Eugenics is an expression of the hubris of humanity, with definite consequences. Thus, although eugenics is not cast as morally bad in itself, its results on the society we currently have are.^{10 11}

There is also concern with the trial and error process necessary to advance technology to this stage, where human lives become test subjects. There are many chances for outright failure, but there is also the chance of creating a human being that is not healthy with the desired genetic alterations. The possibility of such a result is a limitation of science that is not fundamentally related to the idea of eugenics but is one possible consequence that an implementation would lead to.¹²

As technology advances, the implications of what we become able to accomplish need to be considered. Although we might have good intentions with the way we improve ourselves, our children, and our society, similar intentions have ended in disaster in the past, and not simply

¹⁰ Michael J. Sandel, The Case Against Perfection, <http://www.theatlantic.com/doc/200404/sandel>

¹¹ Ladelle McWhorter, Governmentality, Biopower, and the Debate over Genetic Enhancement, <http://jmp.oxfordjournals.org/cgi/content/full/34/4/409>

¹² Ladelle McWhorter, Governmentality, Biopower, and the Debate over Genetic Enhancement, <http://jmp.oxfordjournals.org/cgi/content/full/34/4/409>

because of the lack of individual choice. While the goal of eugenics in general is encouraging, its possible repercussions make it less than the ideal science to pursue.