

Eugenics Reevaluated

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Eugenics is a term that was coined in the 19th century by British eugenicist, Sir Francis Galton and greatly impacted the direction of science in the early twentieth century. The aim of eugenics was to encourage, “the improvement of the inborn qualities, or stock, of some one human population” wrote Galton¹. This rational approach to improving society by selecting for those who would contribute positively society quickly gained popularity. Following World War I, the American people experienced cycles of unrelenting depression, and it soon became evident that current initiatives were not meeting the needs of its citizens. Concurrent to this movement was progressivism, which sought to “increase the role of government planning in both the economic and social sphere².” Eugenics was the ideal economic solution because it sought to remove society’s economic burden, those that were feeble-minded. This led to the abuses seen in Germany, and eugenics quickly lost its credibility. Prior to genetics, this was eugenics, but with genetic advances modern eugenics is now capable of positively influencing an individual’s quality of life. Modern eugenics should be given the opportunity to prevent debilitating diseases through genetic screenings, but its history should be remembered so as not to be repeated.

Eugenics quickly diverged into two separate branches and it was this divergence that caused problems. The two different branches of eugenics are positive eugenics and

¹ Francis Galton, *EUGENICS: ITS DEFINITION, SCOPE, AND AIMS*; The American Journal of Sociology. Volume X; July, 1904; Number 1

² Cold Spring Harbor Laboratory [Image Archive on the American Eugenics Movement](http://www.eugenicsarchive.org/eugenics/list3.pl)
<<http://www.eugenicsarchive.org/eugenics/list3.pl>>

negative eugenics. Positive eugenics is the belief that humanity possesses the techniques and moral judgement to take control of its own evolution and affect the health of future generations positively³. Negative eugenics instead promoted the prevention of unwanted traits by removing persons with these traits by inhibiting their ability to reproduce⁴. Unfortunately like Germany, the United States chose negative eugenics, and began a campaign to relieve the burden that “invalids” placed on society. Unlike Social Darwinism which encouraged a commitment to unrestricted laissez-faire and emphasis on individual choice, eugenics left the concerns of reproduction to the state to regulate and encourage as it saw fit⁵. This concentration of power without any means of checks or balances began to take a life of its own, and eugenics became the popular science of the early twentieth century.

Previous humanitarian ideas of social improvement were replaced with a rational control of human society by the government based on explanations provided by genetics. In the wake of Mendelian genetics, and the demonstrated ease with which desired traits could be selected for in pea plants, it was believed that the same could be done for humans. Eugenicists claimed that since unemployment and crime originated from those persons genetically inadequate, the easiest solution would be to prevent them from being born before they could become a burden on society, also known as negative eugenics⁶. In order to standardize the criteria qualifying a person to be considered genetically inadequate, a classification system was developed. This binary system classified individuals as either normal or feeble-minded, with the term feeble-minded referring to

³ Elof Carlson, *The Unfit: A History of a Bad Idea*, 2001; CSHL Press, p.2

⁴ Carlson, p.2

⁵ Diane Paul, *Eugenics and the Left*; *Journal of the History of Ideas*, Vol. 45 No.4 (1984)

⁶ Cold Spring Harbor

all deviance resulting from an inferior intellectual capacity, including thievery, sexual deviation, and other undesirable traits⁷. The legitimization of this classification system came from ongoing research by eugenics of the time, but their data and its interpretations were more subjective than objective.

Research was pursued by American eugenicists on the inheritance of physical, mental, and personal traits however implemented methods of data collection were not ideal. In most instances family-pedigree charts were used and all data was collected from family members, meaning the study lacked standardization by which different family-pedigree charts could be compared⁸. Eugenists believed that each trait was determined by inheriting one or two pairs of Mendelian genes, no thought was given to factors other than genetics⁹. Researchers were not content with studying basic characteristics but instead attempted to show that complex traits such as musical ability could be inherited¹⁰. This research was also used politically to halt the massive immigration of individuals from Eastern and Southern Europe, by providing scientific data indicating that they were contributing to society's unwanted burden¹¹.

Studies supporting this claim were carried out by Henry Goddard, a psychologist, who subjected immigrants to IQ testing immediately upon arrival to Ellis Island, and the test was only in one language, English¹². Data collection under such stressed conditions allowed Goddard to claim that 80-90% of Italian, Russian, Hungarian, and Jewish

⁷ Anne Kerr & Sarah Cunningham-Burley, *On Ambivalence and risk: Reflexive Modernity and the New Human Genetics*, May 2000; *Sociology*, Volume34, Issue 02

⁸ Cold Spring Harbor

⁹ Cold Spring Harbor

¹⁰ Cold Spring Harbor

¹¹ Robert G. Resta, *The Twisted Helix: An Essay on Genetic Counselors, Eugenics, and Social Responsibility*; *Journal of Genetic Counseling*, Vol 1. No. 3, 1992

¹² Resta p.5

immigrants were feeble-minded based on their performance on the IQ test. Equipped with this data, Henry Laughlin went before Congress and provided extensive testimony supporting Goddard's results and consequently impacted immigration legislation. The Johnson Act was passed in 1924, and restricted any region to only 2 percent of the number of residents originating from that region currently living in the United States as indicated by the 1890 census¹³. Limiting immigration was only one of many techniques, such as compulsory sterilization, institutionalization, anti-miscegenation laws, and segregation, implemented to reduce the burden placed on society by "invalids." However these practices were cast under a different light when in the wake of World War II, the Nazis defended their actions with the doctrine of eugenics.

The science that was eugenics began to crumble as its credibility and reproducibility were questioned, and its benefit to society began to diminish in comparison to the rights of the individual. The Nazi abuses associated with eugenics were racial hygiene, human experimentation, and the removal of unwanted population groups. This response resulted in a convergence of science and ethics in which an individual's rights as a human were considered as opposed to the benefits of the collective. Currently eugenics has reemerged in response to the mapping of the human genome and other scientific advances. Modern eugenics, enabled by advances in genetics, now has the means to provide a new set of services for humans.

Modern eugenics was enabled by the completion of the Human Genome Project, which finally provided eugenics with a solid foundation from which it could work from. The power to choose no longer resides with the government, but instead has been transferred back to the individual. In many cases, the individual is in fact the parents who

¹³ Resta

can now be given the opportunity to influence their quality of life their child will experience. Modern eugenics itself has also branched into many fields though there are two fields more closely related to genetics, one of which is gene therapy, involving an existing person, already born, attempting to alleviate a malady through manipulation of their genome. The second field which will be emphasized in this paper is screening programs in which fetuses are screened for identifiable medical diseases¹⁴. This genetic testing is done usually when there exists a family history of a genetic condition that may negatively impact the child and/or family¹⁵. The purpose of this test is to inform the parents so that they can prepare themselves, but their decision to terminate or maintain the pregnancy is relative.

The power placed in the hands of the parents is not to be taken lightly and genetic testing is often coupled with counseling so that parents can make the decision that is best for them. Unlike its earlier form, modern eugenics affords the individual the opportunity to engage in voluntary action and possible disease prevention¹⁶. This is characterized as eugenics alteration and it is the intentional manipulation of genes to produce a desired offspring, as opposed to selecting from available embryos, a synthetic embryo is developed¹⁷. Modern eugenics now seeks to facilitate individual choice and personal responsibility through expert counseling and risk estimation. Even in the wake of readily available information, there are still those who choose not to participate in this voluntary testing or invitro fertilization.

¹⁴ John Gillot, Screening for disability: a eugenic pursuit?, *J. Med. Ethics*, 2001

¹⁵ Gillot

¹⁶ Kerr

¹⁷ <<http://www.eugenicsonline.net/firms.com/issues.htm>> Eugenics Online

Eugenics and genetics alike have based the breadth of their findings by focusing on those that are disabled, by examining the mechanics behind a loss or gain of function. This search for abnormalities and their cause is shared, but it is through genetics that they can be evaluated and possibly effectively remedied. Modern eugenics offers parents capable of affording such prenatal tests as amniocentesis or preimplantation genetic diagnosis, the opportunity to have offspring capable of leading a life absent of severely limiting or debilitating health issues or complications. These potential benefits associated with eugenics should not be withheld because there now exist a system of checks and balances that should prevent its misuse. However it should be cautiously pursued so that the follies of the past are not repeated. Modern eugenics could provide the best treatment for some of the most debilitating diseases, prevention.