

# Darwin's theory of evolution and its links to eugenics

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Eugenics was born out an interpretation of the theory of evolution. Francis Galton, who was a half-cousin to Charles Darwin, desired to apply Darwin's theory that explained the development of plants and animals to humans. Darwin's work showed that evolution takes place through natural selection, and operates on a variety of traits and characteristics that influence ones survival and propagation of their species. Eugenics was not a new idea, but properly defined by Galton. The roots of eugenics could be shown to go back to Ancient Greece, Plato, Alexander Graham, and many more individuals.

Galton found the idea of questioning natural selection and variability in humans intriguing and in particular he was mostly interested in differences between individuals in their mental traits. He was interested in examining variation in mental traits, and mental ability or as Galton saw it their "genius". Galton evaluated his hypothesis of mental abilities being inherited in his book Hereditary Genius, which provided evidence by looking at frequencies of "genius" in families and concluded that mental abilities did in fact run in families. Darwin also had strong views on superior and inferior races as he mentioned in the Voyage of the Beagle, and also in his later books. It can be inferred that these superior and inferior races had different levels of intelligence, and this fact doesn't particularly link to the idea that "genius" is passed down through inheritance, but it gives the idea some merit. A inferior race would have less intelligent people who would pass down the same level of intelligence to their offspring while a superior race would have more intelligent

people who would do the same.

In his introductory paper, *Inquiries into Human Faculty*, he defines eugenics in a footnote as the “science of improving stock, which is by no means confined to questions of judicious mating, but which, especially in the case of man, takes cognisance of all influences that tend in however remote a degree to give to the more suitable races or strains of blood a better chance of prevailing speedily over the less suitable than they otherwise would have had” (“*Inquiries Into Human Faculty and Its Development*”, 24-25). In essence, Galton was interested in trying to improve the quality of our society by applying the principles of Darwinism to the human population.

Darwin’s theory of evolution explains that species are altered by natural selection and it can be suggested that the same principles are applied to artificial selection, for example farmers select the best plants and the best animals to breed to get the best yield in the future. The natural thought leading that principle that Galton had is if artificial selection in plants and animals is being done then the same principles can be applied to humans. Eugenics in its purest form is improving the genetic quality of the human population by strictly allowing only a select portion of humans with the best traits to breed.

A couple passages from *The Descent of Man* can be interpreted as Darwin’s acknowledgement of concepts similar to eugenics. Darwin suggests that “weak members of civilized societies propagate their kind” (“*Descent of Man*”, 159), and it establishes that Darwin does believe in a society where the weaker members create weaker offspring. He follows with the idea that “hardly any one is so ignorant as to allow his worst animals to breed” (“*Descent of Man*”, 159), which amplify the view that selection is important and it’s our responsibility to always improve traits of our animals and plants and by extension our own race. In addition, in my opinion the most relevant opinion that Darwin expresses is “if we were intentionally to neglect the weak and helpless, it could only be for a contingent

benefit, with a certain and great present evil” (“Descent of Man”, 159). This resonates with eugenics in a sense that the weak are neglected, and left childless in order to not pass on their genetic material, and there is opposition that occurs because of this decision which presents itself as the evil as well as the act of leaving someone to die. Additionally, Darwin could be referring to the human population when he makes this statement as previously he refers to a surgeon operating on a patient right before the quotation. I don’t think that he’s particularly referring to selectively breeding individuals in this statement, but he’s referring to intentionally neglecting people who are diseased or are prisoned. People who are diseased (quarantine) or prisoned (prison) are generally removed from society until they fit into society again, which temporarily or permanently does not allow them to pass on their genetic material or if they have had children then further pass on their genetic material.

Moreover, the three quotations above do not particularly suggest Darwin’s opinions on eugenics itself, but the ideas he suggested could have been used to inspire the idea or could have been used to initially spark the eugenics mentality. There is a likelihood that this along with *The Origin of Species* inspired Galton, and the timeline also reflects that Galton would have read both works before he published his paper. Darwin’s tone in the *Origin of Species* implies this sense of competition, and that competition is necessary in order for the human race to improve. It’s a competition in a sense that there is a struggle to survive, and over time species that aren’t able to adapt become extinct. One of the key takeaways from Darwin’s theory in relation to eugenics is that man is still evolving, and there isn’t an end to his evolution. In the *Origin of Species* he writes that “[he is] fully convinced that species are not immutable” (“On the Origin of Species”, 15). This is important in relation to competition as it implies that we are able to mould and adapt our species, and that we as a race are able to make these changes ourselves rather than

leaving them to natural selection. Linking this to eugenics, it's clear from Galton's essay on Eugenics in 1904 that his views on eugenics were to speed up the process, and he writes "[what] nature does blindly, slowly, and ruthlessly, man may do providently, quickly, and kindly" ("Inquiries Into Human Faculty and Its Development", 24-25).

My opinion is that Galton could have thought about speeding up this process to improve the chances of survival, and he saw eugenics as a way that the human population could maximize its chances of survival. Referencing back, Galton strongly believed that human characteristics and traits were inherited and passed down, characteristics and traits such as the mental strength, physical strength, and sense of morality.

In addition, we should also note that Galton was not a biologist, but a statistician and so he looked at this idea or this problem from a mathematical point of view. His approach was different to Darwin's, Galton perceived things in a more mathematical sense and this is seen in his study of genius, and greatness and his passion to try and quantify these results. If we think about the idea of humanity's survival or improvement in terms of probabilities or numerical values then it's easy to derive to a concept such as eugenics as mathematicians and statisticians usually want to figure out the optimal way of improving the human genes. In my opinion, Darwin viewed it as a natural law that these things occurred rather than something we can modify, but at the same time he did mention artificial selection.

My thesis is that the eugenics theory is very much an application of the theory of evolution, and somewhat an extension of Darwin's writing. Galton had similar ideologies as Darwin and was influenced in his theories as shown by the links between their work, but eugenics was also heavily influenced by Galton's own personal views. The relationship works one way where the eugenics theory is an extension of Darwin's writing. This derives to my definition of eugenics as a self direction or self guidance of human evolution. Since the word eugenics roughly translates to "well-born, of good stock, of noble race" ("Eugenics",

Origin and History) it suggests that Galton's view was to improve humanity to a point where each child born was up to his standard of genius.

Moreover, Darwin's influence on the elite shaped the way research, development, and progress was made in major nations such as the United States. The majority of individuals in the United States rejected Darwinism, however some of the leaders, intellectuals, scientists, and biologists believed in the theory and so it was applied in many scientific, economic, and intellectual discussions and proposals in the United States. In his book on 'Evolution' Larson writes that "Eugenics and Social Darwinism lost favor almost as quickly as they gained it. In reality, they never attracted a widespread public following" ("Evolution: The Remarkable History of a Scientific Theory", 196). Although this quote is true a few intellectuals who were driven by understanding human behavior and were interested in the biological advancements of humanity read Galton's work on eugenics and were taken by it.

Charles Davenport was an avid Darwinist, and later a huge supporter and had one of the leading roles in eugenics. Like Galton, Davenport also looked at eugenics from a mathematical perspective. In his chapter on Geography of Man in Relation to Eugenics he writes that "the cost of caring for those who cannot care for themselves because of their bad breeding is very heavy-perhaps two hundred million or more a year" ("Heredity in Relation to Eugenics", 309). Through this statement he has written we can say that eugenics was born out of a aim or a goal that has to be reached in contrast to the theory of natural selection, which depicts that you adapt to your environment. One of the key differences can be said to be differences in the aim as Darwin's theory has no aim, and Galton's eugenics theory has an aim. In his essay it's clear that his aim is to improve the "blood of the nation" ("Heredity in Relation to Eugenics", 309), and use his work and the results of his study to "set forth ...[and] become a part of our social idealism [and serve] to

a point the way to useful legislation” (“Heredity in Relation to Eugenics”, 309).

In addition, he writes that “a Harvard class does not reproduce itself and at the present rate, one thousand graduates of today will have only fifty descendants two hundred years hence” (“Heredity in Relation to Eugenics”, 309). Darwin’s theory of evolution was self-guiding in a sense that we would adapt to our natural surroundings, however Davenport’s aim seen to be specifically guided towards having a higher intellect in the community. In my opinion, it’s obvious that he believes this way because he compares them to recent immigrations, and quotes them as “less effective descendants” (“Heredity in Relation to Eugenics”, 309). The less effective is something Galton would say as they weren’t, in his opinion, up to the intelligence level of everyone else. It doesn’t seem like he appreciates culture, or personalities in his arguments, and only concentrates on the spread of intellect. He also seems very aggressive about his mission as “such facts as these have awakened the people to a sense of the omnipotence of human breeding” (“Heredity in Relation to Eugenics”, 309).

Moreover, it seems like there was a sense of country and patriotism attached to Davenport’s view of eugenics. In his book on Heredity and Eugenics he writes he hopes his Eugenics Record Office “[plays] an important part in creating a sentiment and a knowledge that shall lead to the improvement of the blood of the American people” (“Heredity in Relation to Eugenics”, 310). This was an explicit tone when compared to Galton’s or Darwin’s who weren’t very specific about their aims in terms of races and moving one race forward. It’s particularly interesting that he includes this, and it seems like he was mentioning it to try and win over American people and show his nationalistic pride. I personally believe that this sense of country was a primary reason in introducing sterilization as his work makes it seem patriotic for individuals to go through this process. A major factor in the eugenics movement seems to be trying to improve the society that the authors,

respectively, are in. There is an uncomfortable reaction that is natural after examining the theory of natural selection as it reduces mans power and his sense of control. I believe that the eugenics theory was born to regain this control and to direct the society in their own way rather than leave it to natural selection. The government and institutions on top of it have a vision of the world and its citizen and the best way to move towards that goal is to also shape the individuals within it as you shape the infrastructure.

Both Galton and Davenport seem very focused on the traits they think are important to improve society, and the human gene. Referencing Galápagos it's uncertain how the human genetics will evolve. Davenport and Galton are fixated on the human population having a high intellectual ability and I see that as a fundamental difference in their theories. I believe that eugenics would have been much popular if people understood Darwin's theory of evolution well and understood what it represented. I believe this because if individuals read and understood Darwin's theory from a perspective of Galápagos then there would be a sense of fear and willingness to take control.

In conclusion, I believe that eugenics was an application of the theory of evolution, and Galton was inspired from Darwin's work. There are key differences between Galton's and Darwin's ideologies, and eugenics is also heavily inspired by Galton's work on genius, and greatness. Galton took Darwin's eugenics-based ideas and advanced them intensively, and concluded that human selection or artificial selection could speed up, and allow us to take control of natural selection. There's also a sense of fear in natural selection that could have resulted in an adoption of eugenics by a select group of individuals.

## References

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