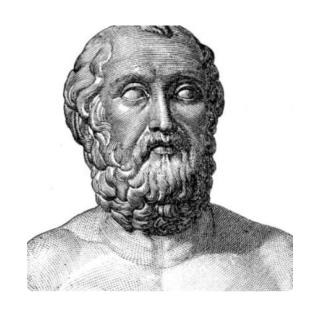
Eugenics: The History of a Bad Idea

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What is eugenics?

- A derived science that focuses on **manipulating** the human population so that "**favorable**" traits can be acquired and occur more frequently.
- While Francis Galton is considered credited to developing this concept; the original idea was developed by **Plato** in his text "**Republic**" (circa 368 BCE) where he talks of manipulating human reproduction to improve the species.

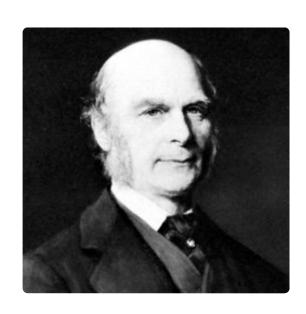


Positive and Negative Eugenics

- **Positive Eugenics:** when a population encourages individuals with favorable traits to reproduce.
 - Examples: strong, healthy, smart, and successful.
- Negative Eugenics: when a populations decides to eliminate those who are considered undesirable.
 - Examples: physically limited, the mentally challenged, certain cultural groups that are considered failures by others.
 - The process of elimination is usually conducted by **sterilization** (removal or killing of all forms of life) or **segregation** (separating a group from the main population).

Francis Galton (1822-1911)

- Cousin to Charles Darwin
- After his early years of education in medicine and chemistry, Galton devoted his older years to eugenics.
- Used the concept of evolution to develop eugenics.
- He created the famous book *Inquiries into Human Faculty and its Development* (1883), it consisted of 40 articles based on scientific papers between the years of 1869 and 1883.
- The text describes Galton's opinion on the **faculties of humankind**, it also tells the origin of the term eugenics.
- Eugenics is of Greek origin; derived from **eu**(true/noble) and **genos**(to give birth)

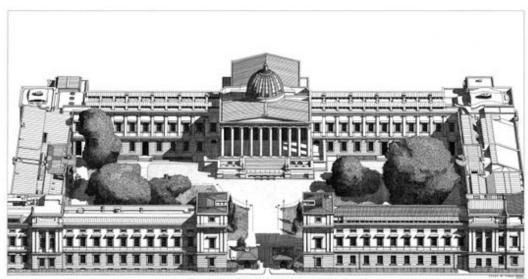


Rise in popularity of Eugenics

- With Galton's text, the concept of eugenics rose in popularity in the UK during the early 20th century.
- Eugenics Education Society
 - Established in 1907
 - This sociation has Politian's and scientist's alike
 - They attempted to control social wellness of England, to **improve** or **impair** the **racial qualities** of future generations
 - The society would endorse many lectures, courses, papers, publications, and libraries that would benefit eugenics
- In 1912, the annual International Conference was established
 - It attracted famous Politian's such as Winston Churchill and George Bernard Shaw

Rise in Popularity of Eugenics (Cont.)

- Francis Galton Died in 1911.
- In honor of his contributions, the University College of London decided to create a professorship for Galton Eugenics.
 - This professorship incumbents J B S Haldane and Lionel Penrose.
- Scott fitzgerald developed a song called *Love or Eugenics?* in 1914.















The "Dark Side" of Darwinism

- During the popularization of eugenics, Charles Darwin's book "On the Origin of Species" was beginning to bring worry.
- The Dark Side of Darwinism: the possibility that organisms will regress back to it's primitive form
 - o Created in the writings of H G Wells (an English author) and E Ray Lankster (a British zoologist)
 - o This started a fear that society could suffer a degeneration of civilization society
- In general people feared that if we, as a species did not continue to evolve, then there would be a risk that humans would return to a underdeveloped state.
- This fear mongering created a rise in popularity of Eugenics because it emphasized controlled evolution that would benefit the human race.

The Spread Eugenics throughout Europe

- The concept was becoming familiar throughout Europe.
- Many Countries where developing there own version of Eugenics.

Examples

- o Romania: **Orthodox Clergy** was used in the association with Eugenics in association with eugenics in order to diffuse the use of sterilization
- o Croatia: Yeomen's focuses on Catholic doctrines influences creating a more nationalistic approach
- While various communities had a general idea on what eugenics is, the definition was still unclear

Saxon Eugenics

- Pioneered by Dr. Heinrich Sigmund.
 - There was a concern that slow population growth would leave the German community poorly equipped to recover from a catastrophe.
- While most **eugenicists** were focused on **improving the population**, **Sigmund** dedicated his work to **increasing the size of population that had the highest fitness**.
- Sigmund believed that the Nordic race was superior in comparison to other European races
- The quality of Saxon racial stocks was threatened by three fronts:
 - o middle class reproducing fewer children
 - o reduced influence of Nordic blood on Saxon community
 - o intermarriage with racially inferior people was considered as "Diluting" the quality of Saxon genetic inheritance
- This led to extreme prejudice in the Saxon Community for mixed marriages and individuals that had undesirable traits for the next generation (I.e. excessive use of alcohol and drugs,, the mentally challenged, and physically challenged).

Russian Eugenics

- The introduction of Eugenics didn't gain the attention of Russia for the better part of a quarter of a century.
- In 1874, the first Russian translation of Francis Galton's *Hereditary Genius* was created and published.
- The interest of Eugenics didn't start until the end of the Bolshevik revolutions of 1917.
- First institutions associated with eugenics appeared in Russia during the early 1920's, they were roughly 20 years behind the world in the development of Eugenics.
- When it was introduced, scientists were more involved than anyone else.
- As Eugenics developed in Russia, many public health doctors and psychiatrists became interested. However, no society was established. This could have been a result of Eugenics lacking any cohesiveness.

Nikolai Gamaleia (1858-1949)

- Born into a wealthy family, youngest of 12
- Studied at the University of Novorossiikii and University of Strasbourg, worked under the wing of zoologist Elie Metchnikoff.
- Education
 - Study at the University of Novorossiikii
 - Spend several months at the university of Strasbourg
 - Worked under the wing of zoologist Elie Metchnikoff
- Was one of the first Russians to look at Roux & Pastur's lab after the development of the rabies vaccine.
- Became a bacteriologist
- In 1910, he developed the book *Hygiene and Sanitation* (*Gigiena i sanitariia*). It was the first journal published in Russia that talked of various eugenic issues
- He believed that Russia was incapable of generating a strong eugenic movement, but the country needs to understand the problems that troubled other cultures.



Eugenics and the Nazi Regime

- Prior to 1939, German medicine was producer of **8 Nobel laureates**.
- Many doctors **lost there title** as a result of **Jewish heritage** and development of **racial hygiene** in Nazi Germany.
- In 1933, Germany declared the **Nazi sterilization law**. This law allowed sterilization and human experiments on those who were deemed **'lesser in Human quality''**.
- Of those individuals, 80-96% of cases were "congenital feeblemindedness".
 - Many of had cases of bipolar disorder, Huntington disease, major brain malformations, congenital blindness, congenital severe hearing loss, chronic alcoholism, pre-senile and senile dementia, encephalitis, poliomyelitis, "therapy-resistant paralysis," multiple sclerosis, and Parkinson's disease.
- Roughly 400,000 were sterilized under this law

Eugenics and the Nazi Regime

- During the second world war, the Euthanasia program was established
 - It was brought up that this would be more economically beneficial than sterilization
 - This program would allow more beds to be free for injured soldiers that are fought in the war
- When discussing the Euthanasia program, Hitler considered it proper that the 'life unworthy of life' of those who are considered mentally ill to be killed.
- Between 1939-1941, the **children euthanasia** program was developed
 - Thousands of children were killed by gas, starvation, or lethal injection
- The official euthanasia program ended in 1941. However, the program continued under secret; possibly **275,000** were killed by 1945.

Infamous Nazi Neuroscientists

Julius Hallervorden

- Was a neuropathologist who studied the brains of the victims of the euthanasia program.
- o 2097 brains were collected by various Nazi research institutes,
- o 697 brains were collected by him alone.
- o Only 194 were studied.

Carl Schneider

- o Became a Nazi party member in 1932 and leader of the Racial political office in Baden.
- o Pushed the idea to "empathically" end his patients suffering to strengthen the race.
- o In 1942 he wrote that brains that were sent from Eichberg were examined and now wanted the "brains of idiots and feeble minded".

Hans Nachtsheim

- o Studied at Rockefeller university, head of anthropology, human hereditary & eugenics in Berlin.
- o Conducted several human experiments on children to gain a better understanding about seizures.
- Led to euthanasian of at least 100,000.

The punishment for inhuman science.

- 50% of all German physicians were members of the Nazi party.
- Many decided to be loyal to the Nazi party in order to gain more research grants and job opportunities.
- Heavily influenced by racial eugenics.
- The Nazi experiments were in violation of the Nuremburg Ethics code of 1931.
 - 350 doctors behaved criminally,
 - 23 were tried at the Nuremburg medical crimes trial in 1946-1947.

The Degeneracy Theory

- The Degeneracy Theory: A theory based on the premise that lower social classes and races were predisposed to neurological and mental illness due to heredity.
- Can be distinguished from theories such as Mendelsism or Natural Selection because it attributes general conditions such as poor health and mental instability to having a certain type of behaviour, such as an "**immoral lifestyle.**"

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Birth Of The Eugenics Movement in the United States

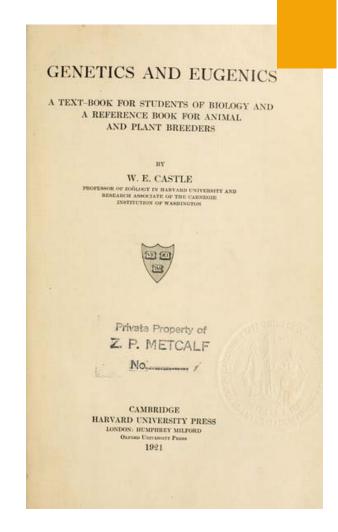
- By the 1830s most middle class taxpayers were persuaded that "degenerates" such as criminals, prostitutes, alcoholics, and the mentally ill were not the result of social or economic problems, but rather medical problems.
- Isolating or deporting the unfit was a "solution" to this.
- These ideas about fitness began to rise in popularity in the U.S after the civil war (1865).
- It wasn't long after this that eugenic driven laws were beginning to be introduced in the U.S.

The First Eugenic Driven Law

- Indiana was the first state to implement a law driven by the idea of eugenics and the degeneracy theory in 1907.
- The law stated that institutions containing targeted individuals (prisons, asylums, etc.) would have surgeons to investigate candidates for **sterilization**.
 - If it was deemed that society would benefit from the individuals not having children, then they would be sterilized.
- This started a movement of eugenic-driven laws in the United States, with more than 30 states passing sterilization laws.
 - The last forced sterilization was performed in Oregon in 1981.

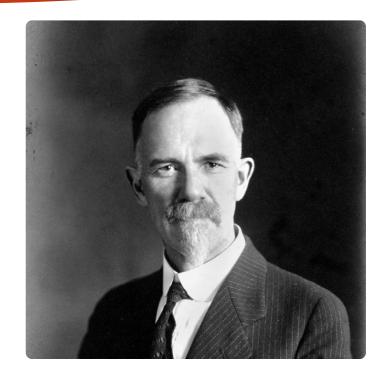
Academic Eugenics

- As eugenics began to spread across America, it was starting to be taught in academics.
- By 1928, there were over 350 separate university courses across the U.S.
 - More than 20,000 students were enrolled in these classes.
 - Top universities such as Harvard, University of California, Berkeley and Columbia taught eugenics as a science.
- These courses were very popular. In 1920, a zoology professor from the University of Idaho stated "Heredity & Eugenics and Social Hygiene are the two most popular courses in the University."
- In a textbook used in a course taught at Washington Sate University called *Genetics and Eugenics*, famous American eugenicist Charles Davenport wrote about the genetics of human traits such as wanderlust, suicide and eccentricity.



Charles Davenport(1866-1944)

- Studied at Harvard and earned a doctorate in biology in 1892.
- Joined the Cole Spring Harbour Laboratory in 1904 as the director of the genetics department until 1934.
 - Focused his studies on heredity and eugenics.
- Founded the **Eugenics Record Office** in 1910, which aimed to collect information on the ancestry of American people, and to produce propaganda that supported the eugenics movement.



Charles Davenport(cont.)

- Published the book *Heredity in Relation to Eugenics* in 1910 where he argued that the application of genetic principles could improve the human race.
- Perhaps best known for his studies in attempting to quantify the **heritability** of **social traits** as they varied by groups and race.
- Attempted to link problems associated with heredity to immigration.
- Many viewed his findings as racially biased and considered them scientifically invalid.
- Was a key member in founding the **International Federation of Eugenics Organizations** (**IFEO**) in 1925, and was elected president in 1927.

The International Federation of Eugenics Organizations (IFEO)

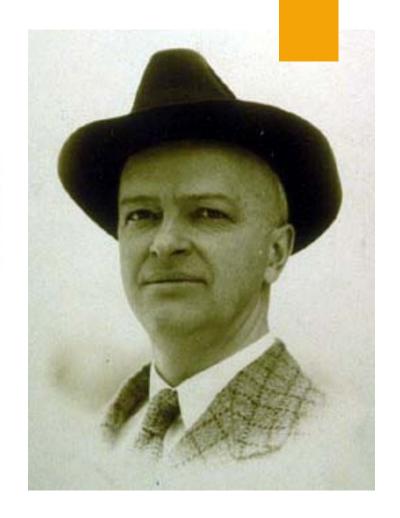
- Was created to organize national eugenic societies across the world, so that ideas and information could be shared between them.
- Under Davenports leadership, **racial mixing** and **psychological differences between races** became prioritised fields of study.
- The IFEO was aimed towards **negative eugenics**, and had suggested ideas such as sterilization and laws against reproduction and immigration.
 - In 1929, Davenport wrote a letter to Italian prime minister Benito Mussolini, suggesting that Italy needs to implement a eugenics program, in order to avoid undesirable reproduction.

Immigration Restriction Act

- Due to Davenport's influence, many eugenicists became worried about immigration.
- In 1924 an immigration act was established to protect the "ethnic homogeneity" of Americans.
- Eugenics was used as justification for restrictions of certain ethnicities and races from entering the United States.
- The act defined what an "immigrant" was, and prevented immigration from Asia, and set quotas on the amount of immigrants from the Eastern Hemisphere.
- Eugenicist **Harry H.Laughlin** was a key member in testifying to congress for the law.

Harry H.Laughlin(1880-1943)

- Studied cytology at the University of Princeton, earning a doctorate in 1917.
 - Worked as a high school teacher until he began to study eugenics.
 - In 1910, Laughlin moved to New York to work at the Eugenics Record Office with Charles Davenport.
- Laughlin drafted a Modern Eugenical Sterilization Law in 1922, in which he stated that feeble mined individuals should be sterilized. This included alcoholics, criminals, blind people, deaf people and indigent people.
- This reform caused 18 more states to pass sterilization laws.



Influence on Nazi Eugenics

- In 1933, the Nazi party implemented a Law for the Prevention of Progeny from Hereditary diseases.
- The law is closely based off of Laughlin's Modern Eugenical Sterilization Law.
- In 1936, Heidelberg University (under Nazi control) gave Laughlin an honorary M.D. for being a "successful pioneer of practical eugenics and the far-seeing representative of racial policy in America."
- Laughlin accepted the degree.

Eugenics in Canada

- Much like in the United States, eugenics became widely popular in the early 20th century.
- Two provinces passed sterilization laws, Alberta in 1928 and British Colombia in 1933.
 - The laws focused on sterilizing people with mental disorders.
 - Over 2800 Albertans and 200 British Colombians became sterilized under these acts.
- Ontario, Manitoba and Saskatchewan all drafted sterilization laws in the 1930's, but were all defeated.
- Alberta and British Colombia repealed their laws in the 1970's.

Decline of Eugenics in Canada and The United States

- The scientific reputation of eugenics began to decline in the 1930's when the Nazi's used it as justification for their racial policies.
- By the end of World War II, many eugenic laws were abolished due to their association with Nazi Germany.
- Societies such as the Eugenics Record Office and the International Federation of Eugenics Organizations (IFEO) were shutdown due to lack of support and funding.

Modern Eugenics

- Despite the destruction of most eugenic laws due to World War II, many countries still had eugenic driven laws in place in the 21rst century.
 - In Peru, 2,000 people were involuntary sterilized between 1990 and 2000.
 - Uzbekistan was reported by the United Nations in 2007 for performing sterilizations and hysterectomies.
 - China carried a one-child policy until 2015, as well as having other eugenically driven laws to manage population size.
- In terms of eugenics as a study of science, ethical dilemmas forces eugenics as a hard topic to study and implement properly.

Conclusion

- While the concept of Eugenics seems to be a excellent idea on paper, the execution and biased opinons is what allowed it to fail.
- Eugenics was too broad of an idea, there was no clear definition of what it is. This meant institutes could not proper work together, because they had different viewpoints.
- The morality was certainly tested with the history of Eugenics. Many researchers forgot about the humanistic side of science and decided to view an individual based on race and culture.
- The silver lining to eugenics is it's importance to development of health politics.

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