5-2022

The Evolution and Unraveling of the American Eugenics Movement

Anneka Walton
Utah State University

Follow this and additional works at: https://digitalcommons.usu.edu/honors

Part of the Nutrition Commons

Recommended Citation
https://digitalcommons.usu.edu/honors/943

This Thesis is brought to you for free and open access by the Honors Program at DigitalCommons@USU. It has been accepted for inclusion in Undergraduate Honors Capstone Projects by an authorized administrator of DigitalCommons@USU. For more information, please contact digitalcommons@usu.edu.
THE EVOLUTION AND UNRAVELING OF THE AMERICAN EUGENICS MOVEMENT

by

Anneka Walton

Capstone submitted in partial fulfillment of the requirements for graduation with University Honors

with a major in Nutrition Science

in the Department of Nutrition, Dietetics, and Food Science

Approved:

Capstone Mentor
Dr. Seth Archer

Departmental Honors Advisor
Dr. Rebecca Charlton

University Honors Program Executive Director
Dr. Kristine Miller

UTAH STATE UNIVERSITY
Logan, UT

Spring 2022
Abstract

While the evolution of American eugenics surrounding the time of Nazi Germany has been well-documented, the periods before the explosion of American eugenics and the result of the movement in the wake of the Holocaust are not so well known. Many historically-based works have described the path and growth of eugenics from the time the term was coined to the public acknowledgement of World War II and the point where Americans ended eugenic euthanasia and slowed eugenic sterilizations. There are also many works within the realm of disability history that document these events from the more common social viewpoint. This study provides an analysis of historical sources, primarily textbooks or medical references, from the earliest beginnings of eugenic ideas through to the 1970s where the term “eugenics” faded out of the public spotlight, with a particular aim to describe the early beginnings of the eugenics movement and additional details on how eugenics as a concept faded from its peak to where we are now. Surprisingly, it appears that eugenic ideals did in fact exist long before the term was coined, especially among the social elite and highly religious, who felt it was their duty to God to ensure they replenished the earth with healthy children. In studying textbooks published a few years after the holocaust came to public awareness as a moral atrocity, it also became clear that Americans still believed in their eugenics movement, yet sought to separate what was done here as a social and humanitarian movement from the acts of Hitler. Instead of the American eugenics movement suddenly blinking quickly in and out of existence, this study has found that the movement had deep roots before being named, and phased out very slowly, with a few of its roots remaining today without the “eugenics” label.
Acknowledgements

I would like to thank my mentor, Dr. Seth Archer, for providing so much support and encouragement over the last few years. From the first time I walked into his office with an idea he has helped me to feel confident in my ability to have ideas worth looking into and to discover information worth sharing. He has been so willing to help me in whatever ways he could, even if it was just a long chat in the midst of Covid-induced isolation. He has made my undergraduate career so much better than I’d imagined, and I cannot thank him enough!

I would also like to thank Dr. Matthew Wappett, whose class provided a lot of background information that I needed to understand this project, and who was just a wonderful teacher overall. In addition, I am grateful to almost every one of my professors here at Utah State University, who have provided so much enthusiasm and care, and made me feel important even if I was just one student in a class of 200. Similarly, I’d like to thank all of the support staff and administration here, whether it be academic advisors, the honors office, the Office of Research, or the people who have helped me in the registrars or financial aid offices, and the wonderful people at the student health center. I’m not sure where I would be without all the support they have given me.

And finally, I want to thank my family and friends. I truly feel I have the best Mom and Dad, who have done so much for me and have provided unconditional love and support. I’m also grateful for the support given by my siblings, my large extended family, and my cousin Stephen for being an awesome almost-big-brother to me while here in Logan. And last, but not least, I also want to acknowledge the support of all of my friends both those here who have made living here in Logan an absolute party, and those and the at home who have helped me become the person I am today.
# Table of Contents

Abstract ........................................................................................................................................... i

Acknowledgements .......................................................................................................................... ii

Introduction ....................................................................................................................................... 1

Early Works on Heritability in Humans (Pre-1871) ........................................................................... 4

The Arrival of “Eugenics” (1871-1900) ......................................................................................... 11

Sterilization Laws (1890-1920) ....................................................................................................... 16

American Eugenics Explosion (1920-1930) .................................................................................. 19

Eugenic Ideology in Europe (1930-1948) ....................................................................................... 22

Post-World War II Recovery (1948-1974) ..................................................................................... 26

Eugenics Since the 1970s .................................................................................................................. 31

Conclusion ......................................................................................................................................... 34

Reflective Writing ............................................................................................................................... 37

Bibliography ..................................................................................................................................... 40

Professional Author Bio .................................................................................................................... 47
Introduction

It was in a lesson in eugenics that I learned just how closely I had come to having many of my life choices made for me by eugenic policies. Had I been born just 50 years earlier, I would have been hailed as evidence for the importance of eugenic practices. I was born out of wedlock and placed for adoption, and while that alone would not have been enough to warrant eugenic measures, my biological father was also born out of wedlock, as was my oldest uncle on my biological mother’s side, with my father being adopted as well. I was a second-generation “bastard child”, and under eugenic ideologies I was destined to follow in the path of my forefathers. To make things worse, I come from a maternal line of epileptics and people with serious mental illness, and from my paternal line also have an autosomal dominant genetic condition. In short, I discovered that I was a eugenicist’s nightmare.

This led me to some interesting questions. Obviously, I was not a fan of the idea that people like me could be forcibly sterilized, but on the other hand, I realized that there could be some validity to the desire to keep children from suffering from the same ailments as their ancestors, and could understand how people would desire to make the world a better place through eugenic means. This was clearly an incredibly complex issue, and one that I wanted to learn more about.

As humans we have a very natural desire to progress and influence the world around us, controlling the variables that we know in the hope that we can create the future that we want. Eugenics is just one form of doing so. Meaning “good genes,” the concept of eugenics is a relatively simple one. Following known principles of heredity, we can encourage the new generations to come from parents with desirable traits and prevent the creation of children who may have futures that result in suffering. The hope is that in doing so we can create a happier,
healthier, and more successful society. That perhaps someday we could evolve into something that is hardly recognizable anymore, and in the best way possible.

However, there are many problems that can crop up when trying to control the reproduction of other humans, with ethical issues being one of the top concerns. The Nazi eugenics movement brought many of these concerns to light; with its roots being in the American eugenics movement, it is valuable and interesting to understand exactly how a seemingly simple and optimistic idea evolved into something so warped and immoral, and how we then got back to where we are now.

Much has been written on the development of the American eugenics movement, typically beginning with the earliest emergence of the idea with either Galton’s *Hereditary Genius* in 1863 or Darwin’s *Descent of Man* in 1871, though most only beginning the story with the creation and coining of the term “eugenics” in Galton’s 1883 *Inquiries into Human Faculty and its Development*. However, the concepts that create the foundations of the eugenics movement have been around for much longer than many would expect. Similarly, many assume that the eugenics movement ended abruptly after the country learned of the atrocities committed in the name of eugenics during the Holocaust. While a few facets such as euthanasia did end abruptly, most eugenic beliefs and practices took much longer to fade away.

For this exploration of the American eugenics movement, I studied many books on the topics of heredity and health, including many on eugenics specifically, paying special attention to those on heredity before the concept of “eugenics” made its debut, and textbooks that included sections on eugenics after the world became aware of how it was used to justify the atrocities of the Holocaust. In this paper, I split my findings into eras determined by the different schools of thought surrounding eugenics and its related ideologies.
I begin with those published before 1871, where heredity was a known phenomenon, but the extent of its powers remained unknown. 1871 marked the publication of *The Descent of Man*, where the power of evolution became coined, and eugenics became a known concept. This was then followed by a period beginning in the 1900s, where eugenics truly entered the public sphere and many states enacted sterilization laws supported by its concepts. 1920 marked the beginning of what I call the “American Eugenics Explosion,” a period where eugenic discourse was common and public support was at its highest. I then describe a period from 1930-1948 where American Eugenics continued on a steadier, less exponential course, eugenic ideals made their way to Europe, and the Holocaust occurred. 1948 defined the point after World War II where Americans became aware of how their eugenics was used to justify the mass killing of Jews in addition to other “poor stock” and were forced to confront this distorted version of eugenic ideals.
Early Works on Heritability in Humans (Pre-1871)

The earliest references to patterns of inheritance are often attributed to philosophers such as Hippocrates and Galen, and later to Stahl in the early 1700s (Adams, 1814, p. 59; Steinau, 1843, p. 2). Some even attribute references of heredity to the Bible, in Exodus 20 and 34, Numbers 14, and Deuteronomy 5, where God says that he will visit the iniquities of fathers upon their children, even unto the third and fourth generation (Steinau, 1843, p. 2). Though society had a very poor understanding of how heritability worked, they understood it was something that happened in animals and in humans and had some sense of how traits passed down in a family. Though not known as dominant or recessive, or patterns with complete or incomplete penetrance, they were well aware that certain traits could skip generations, or that disease states could be more or less severe across family members. And with this knowledge came much desire to better understand how disease could be inherited so that it could be prevented.

While the term “eugenics” was not coined until 1883, people were aware of the patterns of heredity long before they sought to apply the principles to humans. One of the earliest books on the subject was published in 1814. At this time people knew that certain traits traveled in families and knew that they could be encouraged or discouraged through selective breeding in animals but did not fully understand how this happened. The theory at the beginning of the 19th century was that heredity involved each offspring inheriting a predisposition or susceptibility to each of their parent’s traits, but that various environmental factors resulted in the induction of the heritable trait (Adams, 1814, pp. 14, 16, 23–26). Following this line of thought, the hope was that “when the susceptibility amounts only to a predisposition, requiring the operation of some external cause to produce the disease, there is every reason to hope, that the action of the disease may be for the most part much lessened, if not prevented altogether” (Adams, 1814, p. 30).
Knowing that some conditions that ran in families were congenital, it was further believed that
decisions that a woman made in pregnancy or events in childbirth could trigger the onset of a
diseased state, and much focus was placed on “judicious caution” for maintaining peaceful and
healthy pregnancies in the hope that children would be born as healthy as possible (Adams,
1814, p. 28; Steinau, 1843, pp. 5, 11–13).

In addition to what was known about certain patterns of heredity in congenital
malformations and conditions such as gout and angina, many had also noticed patterns of
inheritance with mental disorders, and that there was an increase in disease among families that
intermarried. This treatise even went so far as to suggest that “any sexual intercourse between
near relations is forbidden, on pain of death” and that it was the moral obligation of those with
what we now know as mental health issues to remain celibate (Adams, 1814, p. 84).
Furthermore, it was suggested “that if an hereditary disposition is generated… it must
progressively increase… That no remedy, therefore, can be sufficient but the prevention of
propagation as soon as the disposition becomes hereditary,” and that as a “moral principle,
family peculiarities… should be accurately traced and faithfully recorded” to find and then
prevent the propagation of the hereditary predispositions (Adams, 1814, pp. 40–41).

By the 1840s, many desired to find the distinction between hereditary, innate, and family
diseases. Hereditary disease was considered to be communicated by parents to their children
before birth, innate diseases were those that were thought to be a result of environmental effects
in the uterus because neither parent appeared to be affected. Family diseases were those that
were seen in several members of the same family, but that did not appear to be hereditary
because the parents did not have them and did not appear to be congenital either (Steinau, 1843,
pp. 3–4). It was considered very important to find the differences between hereditary, innate, and
family disease in order to prevent it. It was thought that women who gave birth to children with innate disease could prevent it through a regimented pregnancy free of any frights, that family disease could be prevented by finding the environmental cause, and that if a disease truly was hereditary those who had it should be required to remain celibate (Steinau, 1843). Similarly, it was seen as important to determine whether a hereditary disease was one that occurred regardless or whether it gave decedents a predisposition to the disease that could remain latent unless triggered by an “external noxious influence” (Steinau, 1843, p. 5).

There was also the question of what caused this heredity: if a parent had a disease and it was cured before a child was born, why would the child still get the disease? At this point in time there were many stories of children born missing the same body parts as those their parents had lost in an accident, which led many to believe that children took after the present state of their parents, meaning that if a parent could keep themselves healthy, their children would be born healthy as well (Fowler, 1843, pp. 15–20; Steinau, 1843, pp. 19–20, 24–27). It was thought that the communication of a hereditary disease was either through the blood, nervous system, or some other “connexion, which exist between the mother and the foetus… not yet found” (Steinau, 1843, p. 17), and how children could inherit predispositions from their fathers, even in their features such as hair or eye color when carried by mothers was largely unknown (Steinau, 1843, pp. 24–27). The more physicians understood about illnesses, the better they felt they could be prevented.

It is interesting to see how much bringing forth healthy children was seen as a duty, but similarly how it was considered the moral obligation for parents to avoid creating unhealthy children. Unfortunately, much of this burden was placed upon women. With the leading thoughts of the day being that all heritable illnesses were predispositions triggered by environmental
conditions, it was believed that parents, but especially mothers were responsible if a baby was born unhealthy (Fowler, 1843, pp. 27–28). As time went on, the expansion from being a good parent beginning after a child was born to proper care and caution being taken in pregnancy spread further to include the choice of a partner. According to the author of *Hereditary Descent*, “If parents owe… moral duty to their children during infancy and childhood… how much greater that duty to these same children before birth… And if parents owe this duty to their children, both before birth as well as after, does not that duty extend still farther back, and embrace the CHOICE of a *joint* partner?” (Fowler, 1843, p. 28). The book then continues by listing many of the qualities that should be looked for in a partner to both prevent hereditary disease and for the improvement of humanity (Fowler, 1843, pp. 28–32).

*Hereditary Descent*—the full title is “*Hereditary descent: Its laws and facts, illustrated and applied to the improvement of mankind: with hints to woman; including directions for forming matrimonial alliances so as to produce, in offspring, whatever physical, mental, or moral qualities may be desired: together with preventives of hereditary tendencies*”—very suitably ends with concluding remarks on how mankind can be improved. It is interesting to see that because they thought at that time that children would inherit the present condition of their parents, many of these remarks were actually very progressive ideas. This meant it suggested ideas such as giving women more power to learn and do as she chooses and to improve the conditions of factory workers so they are in better physical health. However, it also includes statements that are surprisingly eugenic in theme, encouraging all to keep careful records of family history complete with “peculiarities of health and disease” so that those who are at high risk of having children with these heritable disease states can either choose to avoid reproduction, or encourage the mother to do all she can during pregnancy to avoid a
predisposition from taking root and causing disease. He further encourages those of good stock to reproduce as much as possible, and those of poor stock to do so very carefully and with fewer children. Then there is a bit of a deviation that warns parents that the Bible promises that the sins of the fathers can cause disease in children, so they have a responsibility to their children to be morally clean as well. But overall, this book suggests that parents have the moral and nationalistic responsibility to produce many of the healthiest children possible (Fowler, 1843, pp. 230–258).

As an important aside, Fowler was fairly antisemitic. In his 1843 work he frequently referenced Jews as being obsessed with money, gold, gems, and power, saying that they inherited this from Abraham, Isaac, Jacob who “loved and acquired… gold, silver, precious stones, and flocks” and that “Jews of this day love and acquire [as well] except that instead of sheep, they deal in woolens” (Fowler, 1843, p. 42). Furthermore, he often used them as an example for why interbreeding was a problem, saying that they “insisted on marrying none but their own kin” and as a result suffer from the consequences of interbreeding (Fowler, 1843, p. 44). He also refers to them as incredibly cunning using examples of dishonesty from Rebecca, Esau, Laban, and Rachel from the Bible, saying that “Jews certainly come honestly by their instinctive talent for deceiving” and that they have a natural destructive propensity (Fowler, 1843, p. 45). That being said, he also had many good things to say about Jews, from their hospitable nature, excellent examples of faith, devotion to God, piety, superior talents, wonderfully retentive memories, and excellent literary taste (Fowler, 1843, pp. 44, 46). As I will discuss later, Hitler was inspired by and a devout reader of American books on eugenics, so it is possible that the attitudes found in this book played a role in inspiring the later events of the Holocaust.
More than 20 years after the publication of Fowler’s work, the understanding of what we now know to be genetic patterns of inheritance took a leap through statistical studies of what was being observed in families. In 1865, Francis Galton published a two-part article titled “Hereditary Character and Talent” that garnered a lot of attention and is considered to be one of the foundations of eugenic theory. The information provided in the article was nothing completely new, but was published in a way that got the attention of a much wider population than the works that came before (Dyrbye, n.d.-d; Galton, 1865). 1866 brought the publication of Mendel’s “Versuche über Pflanzenhybriden” (“Experiments on Plant Hybridization” in English), which contained his statistical findings on heredity in peas, proving that heredity information came in “distinct bits” passed down in a random but predictable way. His work further showed that these traits could be dominant or recessive, and that some were linked while others were not (Kurbegovic, n.d.; Mendel, 1866). This combined with a new understanding of “Zymotic disease”—the earliest form of germ theory—allowed for the scientists of the day to finally come to a better understanding of the patterns of inheritance. By understanding that some disease was due to the environmental presence of “zymotes” they could begin to understand which symptoms and conditions were a result of infectious disease and which were more likely heritable. This then allowed them to better differentiate inherited disease within a family from those diseases shared by a family but caused by factors within the shared environment (Winn, 1869, pp. 21–22, 28–31).

This now rapidly expanding understanding of heredity then allowed for the justification of some of the first “Ugly Laws” in 1867. These laws targeted various categories of the poor, from the homeless and vagrants to people with visible disabilities, allowing police to remove people who were begging, or “the appearance in public of certain persons” often referring to
these people as “disgusting objects” (Wilson, n.d.). These laws primarily served to discourage people with disabilities from spending time in public spaces, but are considered to be a sort of gateway legislation that made it easier for later sterilization laws to take root by setting a precedent that certain groups of people were inferior to and deserved less rights than others, for the good of the many (Burgdorf & Burgdorf, 1975; Schweik, 2011). Both types of laws were rooted in the emphasis that disability threatened public health and social order, and that the wanted future was one free of people who were disabled, diseased, or who otherwise did not fit into typical roles in society (Burgdorf & Burgdorf, 1975; Haslam & Loughnan, 2014).

1869 then brought Galton’s *Hereditary Genius*, published four years after his MacMillan’s Magazine article. This volume became the cornerstone for the American eugenics movement, and made its way further into some of the most influential circles of academia because it included vast amounts of statistically drawn information in Galton’s attempt to quantify human traits and heredity, and it is considered the first book to use quantitative differential psychology (Dyrbye, n.d.-f; Galton, 1869). *Hereditary Genius* not only showed that we could quantitatively and effectually predict the inheritance patterns of commonly known heritable traits, but that talent, character, and genius were heritable qualities that society should seek to encourage more of. In a way it signaled the end of the era where heritability was known but poorly understood, and began an era where Americans hoped to utilize what we knew about inheritance to create a new and greater race. However, as earthshaking as this transition alone was, it was not nearly as controversial as what was soon to come.
The Arrival of “Eugenics” (1871-1900)

February 1871 brought the publication of Darwin’s *The Descent of Man*. Darwin had made a name for himself as a result of his publishing of *On the Origin of Species* just over ten years earlier, and as a result of this combined with the controversy of the subject, this book sold far more quickly than his publisher had been expecting, and the information it contained spread rapidly across the academic and social elites. In this book he applied his earlier theories of evolution in animals to humans, discussing everything from racial theory to sexual differentiation. These topics were highly controversial on their own: the discussion of evolution in *On the Origin of the Species* was considered almost blasphemy, but to suggest that humans were a result of such a process in *The Descent of Man* was seen as absolutely heretical. The publication of this book served to cause a massive upheaval in society, especially when it came to topics where science and religious beliefs seemed to clash. While it was perfectly normal and acceptable to support scientific theories with selections from the Bible in some earlier books on heritability, the popularity of *The Descent of Man* began to allow for some divergence between the sciences and Christianity.

Furthermore, now that people could more easily visualize how evolution worked, and that it could apply to humanity, the hope became that we as humankind could lead ourselves to evolve into something better (Darwin, 1871, p. 497). However, Darwin went beyond that, demonstrating that evolution depended upon “survival of the fittest”, and expressing concern that humanity could not only not move forward if the weak continue to survive and reproduce, but that with modern medicine allowing for many who would have died to live on and reproduce we could actually slide backwards (Darwin, 1871, pp. 120–121).
It is important to clarify though that while The Descent of Man appears to support the eugenics movement, Darwin often cautions that reason should not replace sympathy. That being said, his ideas contradict themselves, largely because what Darwin saw as the logical and reasoned path towards a better humanity evolutionarily was at odds with the values we would hope a better humanity would have. In one instance, he says, "With savages, the weak in body or mind are soon eliminated. We civilized men, on the other hand, do our utmost to check the process of elimination. We build asylums for the imbecile, the maimed and the sick, thus the weak members of civilized societies propagate their kind" but follows with “No one who has attended to the breeding of domestic animals will doubt that this must be highly injurious to the race of man. Hardly anyone is so ignorant as to allow his worst animals to breed” (Darwin, 1871, p. 120). And alternatively, "The aid which we feel impelled to give to the helpless is mainly an incidental result of the instinct of sympathy, which was originally acquired as part of the social instincts, but subsequently rendered, in the manner previously indicated, more tender and more widely diffused” which is then followed by, “Nor could we check our sympathy, if so urged by hard reason, without deterioration in the noblest part of our nature." (Darwin, 1871, p. 120). He further cautions that if only the most wise and reasonable of men were to reproduce responsibly, those who were not wise would soon have much greater numbers, that much of evolutionary strength comes from diversity, and that one of man’s most admirable qualities is our kindness and sympathy for those who struggle, and that it would be a tragedy to lose that on the path to trying to control human evolution (Darwin, 1871, pp. 120–122).

*The Descent of Man* triggered the release of many new works involving the theories of “Darwinism”, both non-fiction and fiction. The following year, *Erewhon*, a novel that is considered a satire of *The Origin of Species* was published. This story is about a utopian land
brought about through eugenic practices that appeared to be heavenly. However, in the story the heroes find that hidden within the carefully crafted utopia is a incredibly sad place filled with those cast out, those who were ugly, diseased, or criminals, who are forced to work to serve the genetic elites (Dyrbye, n.d.-g). Francis Galton’s work also made a resurgence, with *Inquiries into Human Faculty and its Development* published in 1883 and *Natural Inheritance* in 1889.

The term eugenics was coined by Galton in *Inquiries into Human Faculty and its Development*, and was defined as “the conditions under which men of a high type are produced,” with the prediction “that human eugenics will become recognized before long as a study of the highest practical importance, it seems to me that no time ought to be lost” (Galton, 1883, p. 30). This work followed the path set by *Hereditary Genius* very closely, but with a new vigor from the many scientific and statistical advancements from the years between, with Galton stating “It has been the privilege of this generation to have had fresh fields of research pointed out to them by Darwin, and to have undergone a new intellectual birth under the inspiration of his fertile genius” (Galton, 1883, p. 129). He referred to these advances as notable changes that could bring the nation past the dark ages into a new Renaissance, and many others seemed to take his lead in the hopes of being leaders in this new age of human advancement.

One of the concerns held by Galton was that the human nature to help the weak among us would lead to our evolutionary downfall. To create the “conditions under which men of a high type are produced” would require defining high and low races, and the lower races would need to be rigorously selected out, and only those of the highest race allowed to become parents. In his words, “The most merciful form of what I ventured to call “eugenics” would consist in watching for the indications of superior strains or races, and in so favoring them that their progeny shall outnumber and gradually replace that of the old one” (Galton, 1883, p. 199). He further
foreshadowed the future in his statement that “There exists a sentiment, for the most part quite unreasonable, against the gradual extinction of an inferior race. It rests on some confusion between the race and the individual, as if the destruction of a race was equivalent to the destruction of a large number of men. It is nothing of the kind when the process of extinction works silently and slowly” (Galton, 1883, p. 200).

While sentiments such as these may seem incredibly extreme today, the argument that while “the members of an inferior class should dislike being elbowed out of the way is another matter; but it may be somewhat brutally argued that whenever two individuals struggle for a single place, one must yield” that “the world will be permanently enriched by the success of the superior” was an incredibly successful one. This paired with Galton’s application of statistics to the science showing that superior intelligence and abilities were inherited with an efficiency of 20%, then allowed for calculations showing it only would take a few generations for society to reach the promised utopia. This was persuasive enough to persuade many others that “no time ought to be lost”, and the amount of study and literature on the subject quickly multiplied.

In addition to providing hope for the future, Galton added much certainty that mental illnesses, intellectual disabilities, and antisocial behaviors were highly heritable. In 1888 the “Report on the Defective, Dependent and Delinquent Classes of the Population of the United States” was published with data from the 1880 census (Dyrbye, n.d.-e). This report made a strong argument that the presence of the defective, dependent, and delinquent in society was an issue of public policy, and many more cities implemented “Ugly Laws” following its release (Haslam & Loughnan, 2014; Schweik, 2011; Wilson, n.d.). Similarly, this caused many to begin evaluating the institutions in place in the US for these individuals (Burgdorf & Burgdorf, 1975).

Dr. August Weismann’s Essays Upon Heredity and Kindred Biological Problems was also
published in 1889, containing a cohesive medical account of all that was known about heritable diseases at the time, including an explanation of new discoveries of cells, and an understanding that heritable material could be found in the “germ plasms” of these cells (Weismann et al., 1889, pp. 84–96). In 1889, Galton published *Natural Inheritance*, a book written for general audiences that drove home the idea that even if a child’s parents were healthy and successful, any amount of poor ancestry could result in a child that regresses below the health and success of its parents (Galton, 1889, p. 2). It similarly served to tell the general population that in a way it was their duty to participate in the creation of a better future through eugenic choices of their own, such as choosing worthy spouses, producing as many healthy and talented children as possible, and limiting reproduction in the case of heritable disease (Galton, 1889, pp. 7, 28).

The suggestions of Galton became implemented on a political level likely far earlier than expected. Politicians seemed to be highly drawn to the idea that feeblemindedness and antisocial behaviors could be eradicated using eugenic theories. Soon, many sterilization programs began to be implemented in prisons and asylums for the feebleminded across the US, and some sterilization programs even became mandated through law.
Sterilization Laws (1890-1920)

The period of time between 1890 and 1920 marked the rise of institutionalization and sterilization programs for those deemed feebleminded. In 1892, Dr. Isaac Kerlin gave a presentation to the Association of Medical Officers of American Institutions for Idiotic and Feeble-Minded Persons, asking the audience to consider the good they could do to relieve and cure “radical depravity” through the sterilization of institutionalized persons (Dyrbye, n.d.-c). Soon many states began to jump on the sterilization train. 1993 saw the beginning of the first mass sterilization program, with implementation of the castration program at the Kansas state asylum, and many other states and mental institutions followed suit (Dyrbye, n.d.-b). In 1897 Michigan became the first state to introduce a compulsory sterilization bill, proposing mandatory castration of criminals and “degenerates.” This law did not pass but set a precedent for other laws like it to be proposed and accepted.

In 1904, Alfred Ploetz, considered to be the father of the concept of racial hygiene, founded the periodical in Germany titled “Archiv für Rassen - und Gesellschaftsbiology” or “Journal of Racial and Social Biology”. It was the first journal created to focus primarily on eugenics, and had the goal of discovering “the principles of the optimal conditions for the maintenance and development of the race” (Leung, n.d.-a). This journal was considered highly credible across Europe and America and proved especially influential in the German and Soviet eugenics movements. 1904 also brought the opening of the Carnegie Institution's “Station for Experimental Evolution” which became the main research center for American eugenics (Dyrbye, n.d.-a).

1905 brought the passing of a bill in Pennsylvania permitting eugenic sterilization; however, it was vetoed by the governor who determined it to be unjust because it targeted some
of the most vulnerable members of society (Kersten, n.d.). That same year the British Parliament passed the Aliens Act, a law that prevented anyone deemed unstable or suffering from mental illness from immigrating to Great Britain (Kersten, n.d.-a). In 1906 Ontario Canada appointed an “inspector of the feebleminded” whose role was to find people who suffered from feeblemindedness and institutionalize them. She chose to focus on unwed mothers, often getting them institutionalized and removing their children, and her reports caused a lot of concern to Canadian officials, convincing them that mental defects were increasing (Leung, n.d.-b).

Many eugenics organizations were founded during this time, with the American Breeders’ Association (ABA) forming a Committee on Eugenics in 1906, followed by the British Eugenics Education Society and the Galton Laboratory for National Eugenics in 1907. Indiana also became the first state to actually pass a eugenic sterilization statute in 1907, making sterilization mandatory for all “criminals, idiots, rapists, and imbeciles in state custody.” The precedent for this law came from another in 1905 that prohibited marriage licenses for “imbeciles, epileptics, and those of unsound minds.” 1908 brought the first “Better Babies” contest in Louisiana. While this first contest was not eugenic in nature, and instead served as a campaign to reduce infant mortality, later contests were highly eugenic in nature.

1909 was a busy year for sterilization laws, with California, Washington, and Connecticut all passing laws that allowed for sterilization of criminals or those with mental defects. 1910 brought the creation of the Binet-Simon intelligence test that was thereafter often used in determining whether or not a person was a candidate for sterilization. From 1910-1920 fifteen more states created and enacted sterilization laws. This also influenced the creation of many books exploring the ethics of eugenic laws and principles, including Daddy-Long-Legs in

While no particularly remarkable books were published during this period, those that were published continued to reinforce the values of Galton, showing that mental issues were highly heritable, and reinforcing the fears many felt towards those who were “imbeciles”, had mental illness, or who demonstrated criminal behavior (Pearson, 1909; Reid, 1905). This period was largely defined by the popularization of the eugenics movement paired with the normalization of institutionalizing and sterilizing people with atypical behavior.
American Eugenics Explosion (1920-1930)

The American eugenics movement became truly mainstream beginning in the 1920s. It also marked the publishing of *Die Freigabe der Vernichtung Lebensunwerten Lebens*, which translates to "Permission to Destroy Life Devoid of Value," a eugenic book that was integrated into Nazi ideology. The 1920s also saw several more states successfully enact sterilization laws that allowed state institutions to sterilize those who were “idiotic, imbecile, epileptic, feeble-minded or insane and "at risk" of having children with similar conditions,” with more than half of the US states passing sterilization laws by 1925. The first Eugenics Congresses began to be held, and eugenics became truly integrated with mainstream media, from being featured in periodicals like *Science Today*, to being the theme of books of the day. The science of genetics had truly arrived, allowing further justification of eugenic ideals, which could be found in nearly any medical book of the day.

As these ideas became popularized, especially among the upper classes, concern grew that those who were best suited to create high-born children would also be the most likely to avoid reproducing in order to prevent the birth of dysgenic children. In response to this, the Second International Congress of Eugenics asserted that “here a possible racial danger must be noted; for an injudicious pursuit of the policy here suggested might make the high minded become too particular and therefore less likely to marry than their more ordinary companions, with obvious dysgenic consequences. Pure love between the sexes should be proclaimed as the noblest thing on earth, and the bearing and rearing of children as amongst the highest of all human duties. Some risks ought to be run in order to secure these joys and to fulfil these duties; and Cupid may well remain a little blind to all minor defects. To promote these ways of regarding sexual problems and to show how often the moralist unknown to himself is in effect
striving to better the racial qualities of future generations come well within the scope of our endeavors” (International Congress of Eugenics, 1923, p. 12). Another interesting comment of note was that as concerns were brought up that the government had been embracing the ideals of eugenics more rapidly than expected, the response was that “there is not the slightest chance of eugenic reform moving forward with too rapid strides” and that no one was better to lead this movement than eugenicists because they had the best science and interests of the US at heart (International Congress of Eugenics, 1923, p. 15), and further stating that “every fertile human mating is an experiment in genetics, and it is for us to record the result of the experiment. Someday, we may hope, human matings will be carried beyond the stage of experiment” (International Congress of Eugenics, 1923, p. 21).

1922 brought a 500-page publication titled *Eugenical Sterilization in the United States* created by the HH Laughlin for Psychopathic Laboratory of Chicago, detailing models for how the United States could most effectively implement eugenical sterilization laws. The report had surveyed more than 160 institutions in the US and detailed the procedures and legal aspects of sterilization for each. Following this publication, 18 more US states enacted sterilization laws. It also serves as one of the first documents to define negative vs positive eugenics, with positive eugenics serving to increase the number of children born to high-born individuals and negative eugenics being defined as the “denial of parenthood” (Laughlin, 1922, p. 369). Most significantly though this report was said to be the report Germany used to form its eugenic laws in 1933.

In 1923, *Heredity and Child Culture* by Henry Dwight Chapin was published. This book served as a very feminist and child-centric view of eugenics that had a target audience of parents, teachers, and physicians. In addition to providing an argument for eugenics that especially
appealed to an audience of mothers, the book defined eugenics as “being born well” and compared it with term euthenics “which has to do with being nurtured and educated well.” This distinction was seen as important to address because many children needed adoptive families as a result of eugenic laws in the United States, and well-off families were justifiably concerned to bring these “low-born” children into their homes when so much eugenic literature had these children written off as lost causes. This book sought to help parents and teachers raise all children according to eugenic ideals, in a way that they hoped would continue in helping America become the utopia sought after by eugenicists.

Interestingly, this period also served to promote awareness and adjustments in the medical field regarding birth control and access to abortions. Though both were still very taboo and illegal, they were surprisingly accessible to women who had hereditary conditions. By this point most, if not all, physicians in the US played a role in educating the public and supporting the government in its eugenic goals. Significant change did occur in 1927 though, with the US Supreme Court ruling in the case of Buck vs Bell, which upheld the state of Virginia’s right to sterilize persons assessed to be inadequate, even though it was shown that Carrie, the woman in question was not as “inadequate” as she was judged to be. This case was considered to be responsible for smoothing the way for states to continue to perform coerced and nonconsensual sterilizations for whoever they deemed “inadequate” (Baker, n.d.). By 1930, the vast majority of US states had sterilization laws, and Eugenic ideals began to affect European countries.
Eugenic Ideology in Europe (1930-1948)

The 1930s saw the publication of so many significant articles in the field of eugenics that it would be nearly impossible to list them all. While Canada had been fairly hesitant to enact sterilization laws for fear of harming vulnerable groups, they began to embrace eugenics, forming the Eugenics Society of Canada in 1930. In 1931, German Federation for Population Betterment and Heredity merged with German Society for Racial Hygiene, gaining a great amount of power within Germany’s now National Socialist majority party. Eugenics also continued to play an important role in popular media, with novels such as Huxley’s *Brave New World* being published. In 1933, Germany enacted “The Law for the Prevention of Hereditarily Diseased Offspring” which allowed the country to sterilize any individual who was determined to have a high probability of a child with a "serious physical or mental defects of a hereditary nature.” Surprisingly this law was more restrictive than the laws in several US states, with greater restrictions on which individuals could be considered candidates for sterilization and requiring a court be held for individuals who did not consent to sterilization. That being said, these courts were not just, and were more of a formality that kept the law from appearing compulsory. Only about 37% of the sterilizations performed in Germany between 1933 and 1939 were counted as voluntary, and it appeared that Jews and Gypsies (Roma people) were the primary targets of these sterilizations.

Back in the Americas, a graduate student named Tommy Douglas published a masters thesis in 1993 titled *The Problems of the Subnormal Family*. His project studied many lower-class families, with special interest in twelve women who were unwed mothers. During his time studying this population he documented the mental and physical traits of more than 200 people, in the end proposing that many of these “subnormal” families had higher rates of disease, mental
illness, and criminality, but also had higher birthrates than their counterparts (Douglas, 1933, p. 5). His proposal was that the government step in to require a certification of fitness in order for members of these lower-class communities to marry, and also suggested that children born to unwed mothers in these communities be rehomed to environments where they could be raised by families of a higher order (Douglas, 1933, p. 22). He did not recommend eugenic sterilization because he felt that these families still played an important role as members of the working class. This thesis served an important role in continuing the justification of eugenic practices in lower-class communities (de Bruin, 2019), and interestingly Tommy Douglas went on to become the Premier of Saskatchewan from 1944 to 1961, and is credited with introducing Canada's socialist health care system (Dyrbye, n.d.-h).

1934 brought the publication of Helen MacMurchy’s Sterilization? Birth Control? A Book for Family Welfare and Safety, which explored the issues surrounding sterilization, and continued to advocate for sterilization of those who were deemed social risks (MacMurchy, 1934). While not completely influential in the eugenics movement and among many other books with eugenic themes published at the time (Mohr, 1934), her book became the first to make it through bans on books that spoke on the topic of birth control.

1935 is when things really began to escalate in Germany. By this point Germany was under Nazi control and passed the Nuremberg Race Laws, which made official distinctions between Germans and Jews, forbidding marriage and sexual relations between the groups, and stripping German Jews of their citizenship. These laws were highly motivated by Nazi eugenic racial hygiene ideologies and were grounded in “scientific racism” that suggested that intermarriage between Nordic Germans and inferior races of Jews and Gypsies would be detrimental to the racial health of the Nordic German “master race”.
This alone did not appear to have a strong impact on the eugenic trajectories of the rest of the world. In 1937 Georgia became the last US state to enact sterilization legislation, and the US entered a period of relative stability in the amount and types of eugenic practices that occurred. In 1939, the German government issued a decree requiring physicians and nurses to register all retarded or deformed children under the age of three, and midwives to report all newborns with severe disabilities, and those with severe disabilities were targeted for euthanasia. This then led to the enactment of the Nazi T-4 program, authorizing a program of euthanasia “to kill the incurable, physically or mentally disabled, emotionally distraught, and the elderly”. This did come to the awareness of some non-German eugenicists, with mixed reactions. This program was officially discontinued in 1941, but continued covertly with the beginning of the Holocaust (Berenbaum, 2014).

Changes in legislation and publications on eugenics died down with the advent of World War II. In the US, Genetics really began to be seen as an important aspect of public health, and alongside the forced sterilization programs of those in mental institutions or prisons, completely voluntary genetics clinics began to pop up. One of the first of these clinics was the Wake Forest Medical Genetics clinic in 1940, which was said to “draw no sharp line between advising an educated woman about her chances of having a baby with peroneal atrophy or cataracts and sterilizing the defectives” of the county (Comfort, 2012, p. 121). These programs served to prevent disease, and it only made sense that with genetic disease that could really only be done at the root. Many similar clinics followed suit, each with their own view of eugenics, genetics, and public health. In 1941, one of the most comprehensive clinics formed at the University of Michigan, including specialists from nearly every field of medicine who were determined to find the genetic causes of the diseases they so often saw, and referrals came in from all over the
northeast. While this clinic did a lot of research with Galtonian biometry, or the measuring of body proportions, skin and eye tones, and other features such as reflects “habits,” or olfactory abilities that often led straight to racist ideologies, they also collected data and found inheritance patterns on diseases that still hold valid with what we can understand with modern medical science.

Surprisingly, all this took place before 1944 when DNA was proven to be genetic material. These scientists and physicians had so far only been working with patterns that could be observed and calculated statistically and operating off of theories based on that information. 1945 signaled the surrender of Germany and later end of World War II. Following the atrocities committed during the Holocaust, the United Nations created the “Universal Declaration of Human rights”. Forced sterilization violated at least four articles of this declaration, however it did not serve to immediately halt eugenic sterilization in the US. However, the end of World War II did serve to slow the eugenic movement in the US, and also forced a reframing of the movement to show that it was different from the atrocities that happened in Germany.

In his book *The Science of Human Perfection*, Nathaniel Comfort sums up the contrasts of this period in a very elegant and impartial way. “Cover one eye when looking at the hereditary clinics and you think you are looking at an old-fashioned eugenics office. Cover the other, and you see something very like a medical genetics clinic of the “modern” period… Stereoscopically the images blend, gaining texture and depth… among those interested in human health, eugenics remained a noble, intelligent, compassionate goal.”
Post-World War II Recovery (1948-1974)

One of the best illustrations of the post-WWII eugenic transition can be found in the 1951 genetics textbook my grandmother used in her time training as a nurse at Utah State Agricultural College. The final chapter in this book is titled “Eugenics,” and is very supportive of the concept of eugenics, defining it as the “study of agencies under social control that may improve or impair the racial qualities of future generations, either physically or mentally” and declaring that “Most agencies concerned with the improvement of mankind are dedicated to social welfare which is designed to improve the condition of the present generation” (Winchester, 1951, p. 345). It portrays eugenic organizations as primarily organizations that aid in social welfare, providing help to those in need and reducing the needs of future generations. It continues on many of the older ideals, such as encouraging all well-born individuals to have many children to improve the differential birth rate. It addresses the atrocities of the Holocaust and is clear to define the difference between negative and positive eugenics, and to clarify that while negative eugenics was still seen as important in the US, we do the humane thing and use sterilization, rather than just killing people. Negative eugenics was presented as a humanitarian act, that served to prevent suffering by putting a halt to the cycle of passing on genes that led to “mental defects.”

Photo is captioned with the following in the book:

Fig. 230  These unfortunate women, inmates of a mental institution, are daughters of patients who were treated at the same institution in past years. The propagation of genes for such mental defects is a major eugenic problems.
The book goes on to explain the controls put in place for American eugenic programs to prevent them from resulting in the issues of Nazi Germany. In fact, the book even lists the numbers of sterilizations performed as too small in comparison to the number of feebleminded individuals in the US as proof that there are possibly even too many safeguards in place. The book also dives into the importance of positive eugenics, explaining the joys of motherhood and the creation of healthy children, even providing some pictures of adorable children to make its point:

Figure captioned:

**Fig. 231** A sound mind in a sound body is the birthright of every child. A combination of good heredity and good environment is necessary to produce such bright-eyed children as these
My grandmother’s textbook was written and published in the immediate aftermath of World War II, making it interesting to see how later publications addressed the issues of eugenics differently. With the improved understanding of DNA and the presence of genes as heritable features, medical texts continued to be published that sought to determine the absolute cause of hereditary diseases (Eriksson, 1954). 1955 brought the publication of Counseling in Medical Genetics, seen as the first textbook for training what we now know as genetic counselors.

In the 1950s eugenics programs were still very common, and nearly inseparable from the geneticists of the time (Stillwell, 2016). Eugenicists promoted “mate selection,” a practice that encouraged couples to consider the health of their children when choosing a spouse. This sentiment produced ten hereditary counseling clinics staffed by the most prominent geneticists (and eugenicists) by 1951. Because the peak of this movement happened at the end of World War II and in the wake of the atrocities committed by the Nazis in the name of eugenics, these geneticists wanted to distance themselves from the “ethical pitfalls” of their predecessors (Resta, 1997a). These clinics sought to improve the lives of families, and soon took on the medical model of disability: by preventing medical disease in families instead of seeking to improve the genes of society, these clinics effectively distanced themselves from eugenic ideas of the time (Resta, 1997b). Physicians also began nondirective counseling, with clinics insisting that physicians never tell families what should be done, but rather give them every option and allow the family to decide (Resta, 1997a). This was especially difficult because geneticists began to realize that finding the cause of a genetic disease did not allow for a cure, meaning that “reduction of morbidity becomes mainly an exercise in eugenics” (Stanbury et al., 1960, p. 17).
From this point, one such physician and geneticist, Sheldon Reed, recognized that families “had little interest in eugenics, but instead were concerned about the effects of genetic disease on their lives, their children, and their reproductive plans” and decided to create a term that would depict the process of assisting families as they navigated these ideas and the associated psychological consequences: genetic counseling. Reed describes the role of genetic counseling as "genetic social work without eugenic connotations," shifting from “the financial and racial benefits for society to the medical and psychological benefits for families” (Resta, 1997a, 1997b). This being said, Reed and his colleagues continued to promote eugenics outside of the clinic, including the institutionalization and sterilization of those with disabilities, and as part of their nondirective information told couples that “having a “normal” family was the key to marital happiness” (Reed, 1955, 1964). Another interesting feature of this particular movement was that genetic counselors were advised against discouraging families of otherwise “good stock” with genetic conditions from having children, arguing that more good could be done from them having as many healthy children as possible to outweigh the masses of “poor stock”, than from preventing those successful individuals from having healthy children alongside the sick ones (Reed, 1955, 1964).

Even with all of these changes, some strongly eugenic ideas persisted within the medical field that we would not see as politically correct today, such as calling children born with chromosomal abnormalities “genetic mistakes” (Valentine, 1966), or the statement that “modern ethical practices, those of the Nazi era notwithstanding, prohibit the drastic eugenic measures taken throughout history to remove genetic mistakes” (Reisman & Matheny, 1969, p. 5). Negative (or preventive) eugenics was defined to involve the improvement of the species by discouraging reproduction by those individuals who are genetically undesirable. Despite the
enthusiasm for the latter concept by Adolf Hitler and other historical personages, such efforts also seem doomed to failure because of the great difficulty in detecting the heterozygotes or carriers for mutant genes” (Reisman & Matheny, 1969, p. 204).
Eugenics Since the 1970s

Today there remains a very complicated perspective on eugenics in America. It seems that most Americans are unaware of the definitions and implications of eugenics, but in the disability community there persists a complicated relationship in prenatal genetic counseling, which is arguably the last and closest link that exists between the American eugenics movement and what we know of as the medical field today.

Genetic counseling was born as a profession in 1969 with the first graduating class of genetic counselors from Sarah Lawrence College. These early genetic counselors singularly served to provide psychological counseling to families, helping them process and learn to communicate their emotions. Today genetic counselors are “defined primarily as communicators responsible for interpreting family histories, educating people about various conditions, and counseling “to promote informed choices and adaption” to their new health status” (Stillwell 2016). Prenatal genetic counselors are a subset, meeting with families that have family histories of genetic conditions or those with pregnancies that have positive or abnormal test results for congenital deformities or genetic conditions. These genetic counselors still interpret family histories and serve as educators and psychosocial counselors, but among the options that must be provided are termination of affected pregnancies and technologies such as preimplantation genetic testing (PGT) during in vitro fertilization (IVF).

Prenatal genetic testing and diagnosis began in 1956, though it was not widely available until 1990 (Valentine, 1966). In 1957, abortion was made illegal with one exception being “the child resulting from pregnancy being born with grave physical or mental defect.” Abortion was legalized in 1971, and even as its legalities have changed, this exception has stayed in place. While prenatal diagnosis and termination was available as an option at the beginning of the
genetic counseling profession, to continue to distance the idea of and role of genetic counselors from the connotations and implications of negative eugenics, genetic counselors did not serve in any capacity that counseled on termination until much later, leaving that to physicians (Bergsma, 1974; McKusick, 1970; Reisman & Matheny, 1969). In its beginnings prenatal diagnosis and subsequent abortion was allowed only when the condition made the fetus “incompatible with a reasonable quality of life” (Evolution of Prenatal Testing, n.d.; Peterson, 2012).

One prominent paper in the genetic counseling community is titled “Genetic Dilemmas and the Child's Right to an Open Future” the primary argument being that any decision made for a child should allow for a future of unlimited possibilities. An argument in this paper is that any medical or genetic condition can limit the choices and abilities of a child, and this should always be kept in mind regardless of “quality of life.” Davis advocates against the birth of any with disabilities for this reason, but also advocates against sex selection because of predetermined notions the parents may have about why they want that particular sex. This is an especially interesting viewpoint because it disregards the question of “Who should exist in the world?” and the arguments of the social vs. medical models of disability and instead focuses on the future lives and happiness of the individuals brought into the world (Davis, 1997). This has certainly caused some uproar among the disability advocacy community which would argue that their life choices remain unlimited with their disability, and especially with the implication that some authority figures should have control over whether a disabled individual should be born or even exist at all.

To those with disabilities, and perhaps to some without, a perfect world would be one where the societal model of disability is eliminated. Those whose identities are a result of what is
now a disability would maintain their identity, and would be accepted, understood, and respected by all and allowed to live as they choose. There would be no suffering, and all are equal, happy, and at peace. Perhaps in an imperfect, but ideal world disability that caused children to rely on their families indefinitely would still exist, but families would have every support to give that individual an equally happy, free, and accepted life. The social model of disability would be lessened, if not gone, and eugenics with it. This is an interesting ideal to compare and contrast with the ideal hoped for by eugenicists.
Conclusion

We live in such a morally gray world. The conflicts between the hope to create a better future for our children and stomping on the rights, values, or freedoms of individuals in the process are not ones that we would expect, but ones that exist nonetheless, and it is somehow our responsibility to accept and hold both. Some questions began in eugenics, but continue today, such as the legality to sterilize repeat rapists, or the right of a fertility clinic to refuse care to a couple who have extensive histories of domestic abuse. No child deserves to be born to parents like that, but do individuals have the right to parenthood? And the old adage that those who shouldn’t have children are often the ones who have the most often seems to be supported by the number of massive sibling groups in foster care. As was also said by Sir Terry Pratchett, “That's Nature for you in a nutshell. Always dealing off the bottom of the pack… No wonder they called her a mother ...” While it sounds reasonable to prevent some from having children, finding where that line is drawn is an issue that we already dealt with, and not in a way that should be repeated. Allowing a fertility clinic the discretion to refuse to serve the couple with a history of domestic violence may allow another to refuse to help a gay couple. Sterilizing repeat rapists could once again result in the sterilization of anyone determined “criminal enough” whatever that may be.

One of the benefits of history is that it allows us to find the patterns in our behavior, and this study provided further information on how the American eugenics movement was first conceived, how it developed, and exactly how it faded into the background of the world we know today. In my research I not only was able to learn more about this evolution, but also learned a few new things along the way that I have not found represented in modern literature on the subject. I found evidence that eugenic ideas existed long before we had a label for them, that
humans new about the patterns of heredity and sought to apply them to themselves, suggesting many “eugenic” measures be taken to ensure those having the most children are the fittest to do so. I discovered that the inability to recognize that the factors of heredity were persistent and not something that could be changed by circumstance led to the belief that any congenital disabilities were a result of poor care of the pregnant mother, and suggestions that those with acquired disabilities like an amputated limb refrain from reproduction.

Similarly, I learned that following the fallout of the Holocaust the American eugenics movement did not just quickly phase out, but that while the euthanasia of people and babies with serious disabilities or intellectual disabilities quickly ended, other practices took much longer to phase out, with some even persisting to form a sort of background in the modern medical field. I found that instead many textbooks on the subject made it clear to specify the difference between “positive” and “negative” eugenics, and that they were supporting the idea that healthy individuals produce many children, rather than killing off those who they did not want to reproduce, and that only extreme situations warranted sterilization.

Part of what has made this research so interesting is the complexities that eugenics presents to ethics and our moral beliefs. Once again, Sir Terry Pratchett has a quote that I found incredibly fitting: “Most species do their own evolving, making it up as they go along, which is the way Nature intended. And this is all very natural and organic and in tune with mysterious cycles of the cosmos, which believes that there’s nothing like millions of years of really frustrating trial and error to give a species moral fibre and, in some cases, backbone. This is probably fine from the species’ point of view, but from the perspective of the actual individuals involved it can be a real pig.”
The advances we have made as a society have caused us to be much more aware and responsible about preventing injustice. As Darwin once said, we “could not check our sympathy, if so urged by hard reason” in the pursuit of any societal ideals “without deterioration in the noblest part of our nature”, and if we are to choose to help our children become the type of people we want to see more of in this world, I would hope that we as a society chose to preserve and propagate attributes such as kindness and empathy in our children above all others.
Reflective Writing

The process of creating this capstone was quite literally years in the making. I knew that I wanted to do my capstone on Eugenics beginning the spring of my sophomore year, and some of the values and materials that I brought into this project came about as early as my junior year of high school, when I became passionate about public health, especially in caring for those who are especially vulnerable. I initially became interested in this project as a topic for my capstone during the honors course “Health, Society, and Culture: Past and Present”. We had a mini-unit on Eugenics and covered Buck vs Bell, during which the discussion was focused on how it was unfair that Buck was sterilized when she wasn’t actually an imbecile. I asked the question of how it would have been right or fair even if she was; no one really responded and then someone else asked a different question to change the subject. Dr. Archer brought this question up again in our next class, and the consensus seemed to be that the water in this area is very muddy, with no real right answers because it would depend on whether we had the responsibility to defend the bodily autonomy of someone who may not even fully comprehend what that means, or if we had the responsibility to keep those people from being forced to deal with parenthood and their children to deal with them. It was then that I realized that eugenics isn’t really a discussion nowadays, but we still grapple with the ethical difficulties and ramifications of what really amount to decisions with eugenic roots.

Following that semester, I began my project on the relationship between illness and sin beginning in the early 19th century. Through the course of this project, I found that nutrition was already seen as an important contributor to health, but poor nutrition was also often blamed for what we now know are communicable diseases or congenital conditions that nutrition played no part in. This helped me to see that not only would a project on eugenics make for an interesting
project, but it could also serve to tie together all of the aspects of my undergraduate career. I have had a hodge-podge of experiences that I have used to prepare me to be a well-rounded individual in the field of genetic counseling. With my major in nutrition science, minors in public health and chemistry, many disability studies related courses, and research in medical history it can be difficult to explain how it all ties together to people unfamiliar with the field of genetic counseling, and I really wanted a capstone that could tie it all together and lead in to my future profession. Each of these fields has certainly played a role in the eugenics movement. Healthy nutrition during pregnancy was seen as essential for the creation of healthy babies, and poor nutrition often blamed for allowing hereditary conditions to present congenitally. Eugenics was seen as one of the most important facets of public health for a time, and chemistry was essential as medical science caught up with what had been known about heredity through observation. Then of course, disability advocacy later played an important role in helping our society get back to where we are today in recognizing the validity and importance of disabled lives. And then last but not least, I wanted to prove to myself that I could be well-rounded and successfully do research in the humanities in addition to the sciences.

As for how the project actually went, I will say doing historical research was a struggle, largely because I chose to forgo all my history classes in high school and college for science courses, and breeze through online courses to the get history credits I needed. So it took a TON of time and research just to get caught up on the timelines for what was going on in history during the time periods I researched. This took a lot more effort than I had expected, but I discovered that many people had created timelines of the events of the eugenics movement or World War II that really helped me to visualize what was happening when. Another challenge I ran into was that I could not go down every rabbit hole I wanted to go down. Had I done so, this
paper would be three times longer and I may have failed a class or two. There was so much I wanted to write about that I just didn’t have the time or scope for. For instance, the eugenics movement and the institutionalization and loss of rights of many disabled individuals were practically inseparable, but had I dove into the history of the disability rights movement from there I would have lost sight of the purpose of this paper. I also really wanted to write more about the correct and incorrect scientific explanations for so many of the genetic conditions described long before genetic testing and molecular diagnosis existed, because it was fascinating to see just how close these people got, or sometimes hilarious to see how far away they were from the truth.

Overall, I would say that this project served as an awesome capstone for what I have learned and done as an undergrad. Even if I couldn’t write about it, each piece of research I did reminded me of coursework I have covered, whether in nutrition, public health, disability studies, or even some others, and it was fun to use that to see just how much I actually have learned, because so often it feels like I’ve just learned there’s so much more I don’t know. Dr. Archer has also been such an incredibly support to me both through this capstone, as I applied to grad schools, and as I tried to make decisions that could impact my future for years to come. This capstone also served for some interesting discussions during my graduate school interviews, and who knows, I may even end up doing my master’s thesis on something like whether parents of children with genetic conditions feel eugenic ideals still exist today, and how that influences their lives, emotions, and family planning decisions. My hope is that if nothing else, this capstone can serve to remind humanity of how easy it is to fall down the wrong path, even with the best intentions, but that we can always recover and do better.
Bibliography
Adams, J. (1814). A treatise on the supposed hereditary properties of diseases, containing
remarks on the unfounded terrors and ill-judged cautions consequent on such erroneous
opinions; with notes, illustrative of the subject, particularly in madness and scrofula. J.
Callow. https://wellcomecollection.org/works/wqkvtyr2

http://eugenicsarchive.ca/discover/timeline/525f76dce6813a5469000018

Britannica. https://www.britannica.com/event/T4-Program

Disease. Stratton Intercontinenta Mledica Book Corporation.
https://wellcomecollection.org/works/aevp4u9c

Handicapped Persons as a ‘Suspect Class’ under the Equal Protection Clause. Santa Clara

medicine. Yale University Press. https://jhu.pure.elsevier.com/en/publications/the-
science-of-human-perfection-how-genes-became-the-heart-of-ame-3

Darwin, C. (1871). The Descent of Man, and Selection in Relation to Sex. John Murray,
Albemarle Street. https://www.gutenberg.org/files/2300/2300-h/2300-h.htm

Davis, D. S. (1997). Genetic dilemmas and the child’s right to an open future. The Hastings
Center Report, 27(2), 7–15.


Fowler, O. S. (1843). Hereditary descent: Its laws and facts, illustrated and applied to the improvement of mankind: with hints to woman; including directions for forming matrimonial alliances so as to produce, in offspring, whatever physical, mental, or moral qualities may be desired: together with preventives of hereditary tendencies. O.S. & L.N. Fowler. https://wellcomecollection.org/works/eqv5garm


https://wellcomecollection.org/works/ugd55y4w


http://eugenicsarchive.ca/discover/timeline/53234357132156674b00024a


http://eugenicsarchive.ca/discover/timeline/517140b2eed5c600000000002


http://eugenicsarchive.ca/discover/timeline/5233a7b05c2ec500000005c


https://repository.library.georgetown.edu/bitstream/handle/10822/556984/EugenicalSterilizationInTheUS.pdf


https://iiif.wellcomecollection.org/pdf/b29809575


https://doi.org/10.5962/bhl.title.61004


https://wellcomecollection.org/works/v69ccewc


https://wellcomecollection.org/works/pe2s8c7d


https://doi.org/10.1007/s10897-011-9412-7


https://wellcomecollection.org/works/g4m8n9zy


https://wellcomecollection.org/works/hubhge8b


https://wellcomecollection.org/works/s7tazyxr
Anneka Walton was born in Albuquerque, NM and had the wonderful opportunity to live in 3 different states before settling in Richland, WA at the age of nine. Growing up, she loved science and learning and was encouraged by her parents to follow that passion wherever it went. With two incredibly wonderful and influential internships, and the help of many wonderful mentors and one especially exceptional manager, she found and successfully made her way to a career in Genetic Counseling. She is graduating with honors in Nutrition Science, minors in Chemistry and Public health, and an undergraduate research distinction. During her time at Utah State University, she served on the undergraduate research and honors advisory boards and was also an ambassador for both programs. In addition, she enjoyed her time as a student in the IDASL course serving the local community and as an intern through the Genetic Counseling PURE Internship through the Medical College of Wisconsin. The true highlight of her undergraduate experience was her time serving as a REACH Peer mentor for CAPS this year, where she got to spend hours meeting and helping many different students. She is excited to continue her career and will be attending Bay Path University to earn her Masters in Genetic Counseling this fall!