THE ONES THAT GOT AWAY:
THE ROLE OF EUGENICISTS IN THE SUSTAINMENT OF MEDICAL ATROCITIES IN NAZI GERMANY

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For those who perished in the Holocaust
and were victims of Nazi medical experimentation

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FOREWORD

As a student of the Holocaust, I believe it is crucial to evaluate how physicians in Nazi Germany used their medical training to harm rather than to heal. This understanding is necessary to prevent future abuse of medical knowledge and inform medical decision-making as physicians straddle the lines of using their medical expertise ethically or as a means of forwarding their own agendas. I present information that will explore the consequences of scientific/medical knowledge produced at the expense of others. This research also serves as a warning of the potential for dehumanization in the realm of science and medicine, exemplified by the inhumane medical experiments conducted in Nazi Germany, which harmed many innocent victims.

INTRODUCTION

This thesis explores the role that eugenicists in America and Germany, specifically Charles Davenport and Eugen Fischer, played in propagating and scientifically backing the racist and antisemitic policies of the Nazi regime. Davenport and Fischer were knowingly complicit in scientific medicine that benefited the National Socialist (NS) party's efforts to discriminate against the non-Aryan population in Germany from 1933 to 1945.[1] Many eugenicists, including Davenport and Fischer, escaped repercussions for their collaboration with and support for the Nazis during the Holocaust. Although the Nuremberg Medical Trial (NMT) (1946-1947)[2] brought charges against 23 prominent German physicians and administrators for their medical crimes during the Holocaust, these proceedings were not sufficient in convicting all the figures who were instrumental in shaping medicine in Nazi Germany. These individuals, the ones who got away, remained unscathed.

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1. United States Holocaust Memorial Museum. "Introduction to the Holocaust." *Holocaust Encyclopedia*. March 17, 2004, https://encyclopedia.ushmm.org/content/en/article/introduction-to-the-holocaust.

2. Harvard Law School Library, Nuremberg Trials Project: A Digital Document Collection, 2003, http://nuremberg.law.harvard.edu.

Early Eugenics Movement in America

> *With criminality, … pauperism, degeneracy, idiocy, insanity, and the various forms of maladjustment apparently on the increase, it becomes incumbent upon the patriotic, and the strong, and intelligent, and especially those in position of trust, influence, and responsibility to use every means, to search every resource, to make any sacrifice, and to go to any reasonable extent to ameliorate, and if possible to eradicate, this human woe*[3]
> *—Harvey Jordan*[4]*, University, Virginia, May 1910*

Physicians and scientists who worked under Adolf Hitler and the Nazi party's initiative to aid in "cleansing undesirable" individuals from society justified their actions based on eugenics concepts and applications originating from the United States in the early 1900s. At the Nuremberg Medical Trial, physicians who practiced in Nazi Germany rationalized their practices, such as sterilization for eugenic purposes, on the basis that these procedures were performed in the United States before the Nazi party rose to power. While the actions of the scientists in Nazi Germany were reprehensible, they were indeed rooted in certain eugenics principles originating from the United States.

In the late nineteenth and early twentieth centuries, the eugenics scientific movement—premised on the notion that "human heredity is fixed and

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3. Alexander Cance et al. "First Report of the Committee on Immigration of the Eugenics Section." Journal of Heredity 3, no. 4 (1912): p 247. https://doi.org/10.1093/oxfordjournals.jhered.a105924.

4. Harvey Jordan was the Dean of College at the University of Virginia in 1907. He was active in the International Eugenics Movement and played a large role in researching and teaching eugenics at the University of Virginia.

immutable"[5] and therefore manipulable through breeding—was widely accepted by scientists throughout the world. Institutions such as the Eugenics Research Association advocated for "an increased birth rate among members of the upper classes and a curtailment of breeding in the lower social and economic strata."[6] American scientists believed that protecting the United States from "impure" individuals would benefit the greater good by ridding society of burdens that discredited the American ideal and taxed national resources, such as institutions for the insane, hospitals, asylums, and almshouses.

Dr. Harvey Jordan, Professor of Anatomy and Dean of the School of Medicine at the University of Virginia, was a nationally renowned eugenics leader. Dr. Jordan posited that human beings possess the capacity for population management by manipulating how "good" and "bad" traits are passed down from ancestor to offspring. Dr. Jordan wrote:

> All life is conditioned by the same fundamental laws of nature. It would seem, then, that the same methods that man now employs in producing a high-quality breed of dogs, or birds, or cattle, or horses, he must apply to himself.[7]

Dr. Jordan, and many other eugenicists of his time, proposed that Darwinian methods of population control applied to animals could likewise be

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5. United States Holocaust Memorial Museum. "Eugenics." *Holocaust Encyclopedia*, March 17, 2024, https://encyclopedia.ushmm.org/content/en/article/eugenics.

6. Charles C Alexander. "Prophet of American Racism: Madison Grant and the Nordic Myth." *Phylon* (1960-) 23, no. 1 (1962): 73-90. https://doi.org/10.2307/274146.

7. Cance. "First Report."

applied to humans.[8] In the early 1900s, Dr. Jordan and many of his contemporaries also discussed the role of environment versus heredity in influencing human disposition. Dr. Jordan emphasized that discussing heredity and environment in tandem was necessary, as both are essential to shaping an individual's development. It was commonly stressed, however, that there was a level of biological determinism that the environment could not supersede. For instance, Dr. Jordan argued that because both environmental and heredity-related factors are individually significant, they are not to be compared directly,[9] as "Figs do not grow on thistles nor grapes on thorns in any environment."[10] Dr. Jordan posited that a "defective" individual cannot become a "noble" individual even under the most ideal conditions. Equally accurate, an individual born with noble heritable traits would not reach his or her potential without certain conditions.

Other eugenicists around the world, including Professor Karl Pearson, a professor of mathematics at the University of London, took this argument further and stressed that heredity was much more critical than the environment. Pearson went so far as to assert that "heredity is what makes the environment,"[11] affirming that the environment cannot compensate for inherent heritable differences in individuals.

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8. Ibid.

9. Ibid, 251

10. Ibid, 251.

11. Prescott F. Hall, *Immigration and Other Interests of Prescott Farnsworth Hall* (Internet Archive. New York: Knickerbocker Press, 1922), https://ia801308.us.archive.org/21/items/cu31924064104254/cu31924064104254.pdf

Prescott Farnsworth Hall (1868-1921), American lawyer, author, and physical researcher and founder of the Immigration Restriction League, was an influential figure in promoting the eugenics movement in the United States in the early 20th century. Hall was also a respected member of the Immigration Restriction League which sought to restrict immigration based on eugenics theories to maintain the "integrity"[12] of the American population. Hall also felt that heredity was more significant than the environment in shaping outcomes and determining the "success" of an individual. Hall wrote:

> Science has aided the movement in another way by showing that, in the last century, too much emphasis was laid upon the environment and too little upon heredity.[13]

Hall felt that selecting individuals more "fit" for an environment would be more beneficial than altering the environment itself. While eugenicists debated the respective roles of environment and heredity, they generally agreed that heredity was the most effective and direct approach to controlling the population, thus improving society at large. Because the collective worth of the nation resided in every citizen, those in positions of power were trusted to determine which individuals would benefit the current and future state of the United States and, therefore, "deserve" to reproduce.

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12. Ibid, 111.

13. Ibid, 53.

Eugenicist Prescott Hall and Immigration Restriction in the United States

Hall's thoughts on the ideal future of the United States were compiled in the book *Immigration and Other Interests of Prescott Farnsworth Hall* (1922), which contains articles from Hall's published and unpublished work. Hall's central reasoning was rooted in the fear that the ideals and beliefs of the United States's founders would be diminished if mass immigration into the country persisted. He expressed fear that relaxed immigration policies in the United States would allow "impurity" in the form of "half breeds," [14]"delinquent classes,"[15] etc., to seep into the nation, lowering the value of America's founders' progeny, whom Hall believed were genetically "superior." Hall urged immigration laws to exclude mentally, physically, morally, and economically undesirable individuals because they were the "mothers and fathers of future citizens."[16] Therefore, Hall argued for strict immigration limitations as a mechanism for controlling the classes and lifestyles of current and future generations of Americans.

Hall's ideas aligned with those of his fellow members of the Immigration Restriction League which included "young scions of old New England families."[17]

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14. Ibid, 29.

15. Ibid, 26.

16. Ibid, 54.

17. "Harvard's Eugenics Era," Harvard Magazine, 2016, https://www.harvardmagazine.com/2016/02/harvards-eugenics-era.

The wealth possessed by its members gave the League a strong foothold to influence Congress to pass immigration laws it endorsed. The League also housed many Harvard graduates who utilized the university's alumni network to establish branches of the organization in other locations to heighten support for restrictive immigration laws.

Hall utilized many comparisons in his book, demonstrating his bitter feelings toward relaxed immigration standards. First, he requested readers to imagine immigrants coming to America as an "invading hostile army"[18] attempting to undermine existing power. This alarmist viewpoint contended that immigrants would disguise themselves as peaceful, but eventually their beliefs and values would prevail over those held by the existing American population. To strike fear in the current inhabitants of the United States, Hall portrayed immigration as lacking any positive benefit. Likewise, he quoted Professor Karl Pearson, who opined:

> You cannot change the leopard's spots, and you cannot change bad stock to good; you may dilute it, possibly spread it over a large area, spoiling good stock, but until it ceases to multiply it will not cease to be.19

These comparisons demonstrate Pearson's belief that "subaverage" individuals would weaken the nation. Further entry of "inferior" immigrants would not

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18. Hall, *Immigration."* 25.

19. Ibid, 33.

contribute to upholding the "democracy and liberty" of America; therefore, these individuals should not be welcomed. Hall's work was influential within the Immigration Restriction League, initially as a founding member in 1894 and later as the league's Executive Secretary. The Immigration Restriction League worked to enforce immigration laws more strictly. One of the League's greatest successes was the enactment of the Immigration Act of 1917, which required immigrants to pass a literacy test. Furthermore, the League distributed statistics and newspapers to Congress to encourage legislators to tighten laws on immigration.[20] The most striking analogy Hall used was comparing immigrants to a bacterial invasion that required containment, reducing immigrants to microbes. Integrating biological principles into eugenics tenets regarding immigration, Hall professed:

> Just as we isolate bacterial invasions and starve out the bacteria by limiting the area and amount of their food supply, so we can compel an inferior race to remain in its native habitat, where its multiplication in a limited area will, as with all organisms, eventually limit its numbers and therefore its influence.[21]

Relating immigrants—who are human beings—to bacteria was inherently dehumanizing, essentially reducing people to a mere microbe that could simply be eliminated in one fell swoop. In the context of immigration, keeping out people deemed as undesirable contradicts fundamental American values. The degrading

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20. Matteo N. Wong, "The Harvard Alumni Who Fought to Keep Immigrants out: Magazine," The Harvard Crimson, October 6, 2023. https://www.thecrimson.com/article/2018/10/18/immigration-restriction-league/.
21. Ibid, 71.

comparison of "inferior races" to bacteria paved the way for stricter immigration laws by lending scientific credence to the theory that these "undesirable" individuals should be contained and limited. While Hall prioritized restriction on immigration, other scientists were more focused on other means of population control.

Eugenicist Victor Vaughan and the Passage of Sterilization Laws in the United States

The ideas of "race betterment"[22] endured into the twentieth century, and eugenics became further intertwined with the encouragement of sterilization laws limiting who could reproduce. Forced sterilization was discussed as the solution to many social problems. Victor Vaughan, microbiologist and former dean of the medical school at the University of Michigan, advocated for sterilization as a means of "race betterment."[23] In one of Vaughan's lectures during the 1912-13 academic year on eugenics from the point of view of the physician, Vaughan declared, "The State will not permit the reproduction of the weak-minded, the insane, the alcoholic and the criminal, and will deny parenthood to those suffering from diseases which cripple offspring. This prohibition will be enforced by segregation or by sterilization, or by both."[24]

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22. Joel D Howell, Laura Hirshbein, and Alexandra Minna Stern, "Entanglements of Eugenics, Public Health, and Academic Medicine: Reckoning with the Life and Legacies of Victor C. Vaughan," *Bulletin of the History of Medicine* 96, no. 4 (2022), 517 https://doi.org/10.1353/bhm.2022.0049.
23. Ibid.
24. Ibid, 521.

Public health and politics fused to manifest the elimination of "defective" beings from society, evident by the creation of a commission on the Board of Health in Michigan in 1911 which sought to "establish the extent of feeblemindedness in the state."[25] Two years later, the state legislature explored the passage of an "act to authorize the sterilization of mentally defective persons."[26] Eventually, Michigan became the seventh state to mandate involuntary sterilization of the "mentally defective." The Michigan state law expanded to include the sterilization of "sexual deviants" and "people suffering from epilepsy."[27]

The Turn of Eugenics in America

Under Adolf Hitler's leadership, scientific racism penetrated the medicine field with the goal of sterilizing all German citizens judged to be "genetically inferior." Human experimentation performed during the Holocaust impacted "a minimum of 15,750 documented victims."[28] Forced sterilizations, abortions, and the "euthanasia" murder program are just some examples of how the Nazis used medicine to discriminate against and oppress certain members of society. Physicians and scientists in Nazi Germany, who were considered advanced from an intellectual standpoint, were the driving force behind these torturous experiments.

.25 Ibid, 517.

26.. Ibid, 525.

27. Ibid.

28. Paul Weindling et al., "The Victims of Unethical Human Experiments and Coerced Research under National Socialism," *Endeavour*, March 2016, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4822534/.

The reveal of the extent of the medical atrocities conducted under the Nazi regime shocked the United States and the rest of the world. Eugenics theories once thought to benefit public health and social hygiene were exposed as the reason for the infliction of horrific amounts of pain and utter disregard for human life. The conduct of scientists in Nazi Germany exemplified the dangerous consequences of strict eugenic ideology, which had become internationally accepted prior to the fall of Nazi Germany in the 1940s. In post-World War II America, more opposition was raised against using eugenics for racial and societal improvement. It became much more difficult for eugenicists and supporters of eugenics to defend their ideas, as the Nazis demonstrated this ideology's potential for dehumanization and destruction on a massive scale. The eugenics movement in the United States began to decline in popularity, becoming viewed as more problematic than beneficial. Although support for eugenics policies in the United States waned, the desire to study racial differences did not disappear. Rather, it changed. Scientists in the United States were able to point fingers at the doctors responsible for race science in World War II and were able to hide behind the covers of new fields such as "genetics" to continue studying human variation with less entanglement in politics.[29]

29. Angela Saini, *Superior: The Return of Race Science* (United States: Beacon Press, 2019), 50-52.

Overview of Chapters

The atrocities in Nazi Germany, and specifically the eugenics-inspired mistreatment of victims, exposed how easily scientific theories can be perverted for malintent. While scientists who worked under the Nazi regime should be held responsible for their actions, they are hardly the only ones whose hands are unclean. Before the Nazis' rise to power, scientists throughout the world widely accepted eugenics principles, and the conduct of scientists in Nazi Germany could easily have been replicated if political circumstances elsewhere had been permitted.

The rest of this thesis is organized as follows. Chapter One explores how eugenics principles contributed to the scientific support for Nazi policies that legitimized medical atrocities and experiments performed ostensibly to refine the German race. Chapter Two examines eugenicist Eugen Fischer and how his beliefs were perceived in Germany and the United States throughout the Holocaust. Chapter Three delves into the correspondence between Charles Davenport and Eugen Fischer, dating back to 1908, on critical eugenic matters and the accountability of Davenport and Fischer for their contributions to Nazi Socialist Party ideology and policy.

CHAPTER ONE: THE RISE OF THE NAZI EUGENICS MOVEMENT AND THE RESULTING ATROCITIES

Understanding the context that allowed the eugenics movement and ideas to run fervently, with little to no ethical or moral restraint, in Nazi Germany is critical in assessing circumstances when medicine can become a danger to society. While the social movement of racial hygiene preceded the founding of the Nazi party by more than two decades, the exploration of the field had been limited.[30]

Beginning in the 1920s, as the racial hygiene movement gained momentum, increased resources were invested into genetic research. From 1933 onward, genetic research experienced another sharp boost that coincided with the Nazis' rise to power at the beginning of the Holocaust.[31] Upon the Nazis' ascent to power, the pursuit of research on racial hygiene became unconstrained by ethical and legal regulations. The economic and social disarray in Germany prior to 1933[32] created a "perfect storm" of sorts, allowing Hitler and the Nazis to rise to power harmoniously. This turmoil further contributed to the unregulated environment in which professional doctors could perform unethical experiments on human subjects. Scientists grasped this opportunity to advance their genetic research without such constraints. The support and credibility of the German scientific

30. Volker, Roelcke, "Nazi Medicine and Research on Human Beings," The Lancet 364 (6-7), Special Issue. (2004). https://doi.org/10.1016/s0140-6736(04)17619-8.

31. Ibid.

32. United States Holocaust Memorial Museum, "Hitler Comes to Power", https://encyclopedia.ushmm.org/content/en/article/hitler-comes-to-power.

community, as well as the striking increase in genetic research, facilitated the widespread acceptance of antisemitic sentiment promulgated by the National Socialist (NS) Party.

Benno Müller-Hill, Professor of Genetics at the University of Cologne, and author of *Murderous Science*, summarized the point-blank nature of NS ideology:

> They claimed that there is a biological basis for the diversity of Mankind. What makes a Jew a Jew, a Gypsy a Gypsy, an asocial individual asocial, and the mentally abnormal mentally abnormal is in their blood, that is to say in their genes.[33]

Under the rule of the Party, professional scientists and/or physicians who were able to propose that their research would strengthen NS ideology and support the creation of the master race were encouraged to execute their studies. Many professionals were willing to engage and cooperate with the Nazi party to advance their research and, subsequently, their careers. In April 1933, Hitler implemented legislation restricting "Jewish activity" in medical and legal professions. Specific restrictions included the Bavarian Interior Ministry halting admission of Jewish students to medical school and the barring of Jewish doctors from treating non-Jewish patients in Munich.[34]

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33. Benno Müller-Hill, *Murderous Science* (United Kingdom: 1988), 22.

34.. United States Holocaust Memorial Museum, *"Antisemitic Legislation 1933–1939"*, *Holocaust Encyclopedia*, https://encyclopedia.ushmm.org/content/en/article/antisemitic-legislation-1933-1939.

These laws effectively stripped Jewish citizens of their rights and, consequently, created opportunities for non-Jewish doctors to fill roles their Jewish colleagues once held. This phenomenon transpired at the Kaiser-Wilhelm Society, known in German as the *Kaiser-Wilhelm-Gesellschaft* (KWG). At the KWG, Fritz Haber, the Jewish director of the Institute for Physical Chemistry and Electrochemistry and groundbreaking scientist in physical chemistry, resigned in 1933. Haber won the Nobel Prize for Chemistry in 1918 for solving the problem of directly combining atmospheric nitrogen with hydrogen, a contribution that improved "the standards of agriculture and the well-being of mankind."[35] This prize-winning research was just one of Haber's significant contributions to the field. He also worked on the Gold Project, a plan to extract and recover gold from seawater as a means of financing Germany's World War I reparations, and studied the kinetics of gas reactions and light emission in chemical reactions as well as photochemistry. On April 30, 1933, Haber devastatingly submitted his resignation and was replaced by Otto Hahn, a non-Jewish scientist who rose to prominence by virtue of his appointment in Haber's stead. The president of the KWG, Max Planck, continued to solidify the KWG's commitment to the German government. This is illustrated by a telegram Planck sent to Hitler on May 23, 1933, which remarked:

> The members of the Kaiser Wilhelm Society for the Advancement of the Sciences…. They solemnly vow that German science is ready to make every

35. Historical Review of the Fritz Haber Institute accessed March 7, 2024, https://www.fhi.mpg.de/history.

> possible effort to collaborate in the reconstruction of the new national state, which, in turn, has declared itself to be our protector and our patron.[36]

The Kaiser Wilhelm Society and other genetic researchers and institutes remained committed to serving the German national government.

Medicine and the Third Reich

The role of medicine was critical in the Third Reich's mass extermination of over six million European Jews and at least five million other individuals. Under Hitler's rule, those who were previously healers transformed into killers. Michael Grodin, psychiatrist, bioethicist, and Holocaust scholar eloquently warned: "Medicine as a profession contains the rudiments of evil, and some of the most humane of medical acts are only small steps away from real evil."[37] The medicine practiced by Nazi doctors during the Holocaust demonstrates how dangerously close the gap dividing medicine's humanity and its cruelty truly is.

The Nazi Party's inclusion of respected physicians with impressive credentials legitimized racial hygiene and eugenics, which were means of eradicating anyone deemed unfit for the "master race." By 1945, approximately half

36. Benno Müller-Hill, Murderous Science (United Kingdom: 1988), 25.

37. Michael Grodin and George Annas, "Physicians and Torture: Lessons from the Nazi Doctors," Boston University School of Law, 867 (2007): 647. https://doi.org/10.1017/s1816383107001208.

of all doctors in Germany had joined the Nazi party, marking that many German physicians became complicit in scientific racism.[38]

Medical experimentation conducted by the Nazis was inhumane and torturous to the victims, with no regard for the humanity or morality of the subjects whom they deemed "biologically inferior" and treated as such. Without their consent, these subjects were readily available for use by any physician with an idea for an experiment that appealed to the Nazis in charge. This raises a significant question: Did doctors and researchers engage in this experimentation willingly, or did the strict rules of the NS force their hands? Prof. Dr. Roelcke explicates: "There is no indication that scientists were forced to do such research or to do it in the specific way outlined below"[39] (specifically in reference to the late experiments of Josef Mengele). If the scientists were not compelled to conduct these experiments, what underlying factors cultivated such cruelty? Müller-Hill presents his interpretation that "it was a stroke of genius on Hitler's part to provide others with the necessary environment, but not with detailed plans, for complete extermination."[40] Many physicians took advantage of what they saw as an "opportunity" to advance their scientific and career goals, as they could test their medical hypotheses on actual humans, which offered more practical benefits than testing on animals alone.

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38. United States Holocaust Memorial Museum. "The Role of Doctors and Nurses." Holocaust Encyclopedia., https://encyclopedia.ushmm.org/content/en/article/the-role-of-doctors-and-nurses.

39. Volker, "Nazi Medicine," 6-7.

40. Benno Müller-Hill, *Murderous Science* (United Kingdom: 1988), 23.

One of the most notorious Nazi physicians was Dr. Josef Mengele, who was designated the "angel of death."[41] Mengele was the leading force behind the deadly medical experiments conducted at Auschwitz-Birkenau concentration camp. Mengele failed to acknowledge his subjects as human beings he sought answers to genetic-related questions, such as the study of proteins that protect against infections. Most notably, Mengele was fascinated by studying twins to gain insight into "the hereditary basis for diseases."

Miklos Nyiszli, a Jewish inmate and doctor who served as one of Mengele's assistants, recounted a personal experience witnessing a terrifying occurrence between Mengele and his twin subjects:

> After the first twin was brought in … a fourteen-year-old girl … Dr. Mengele ordered me to undress the girl and put her head on the dissecting table. Then he injected the Evipal into her right arm intravenously. After the child had fallen asleep, he felt for the left ventricle of the heart and injected 10 cc of chloroform. After one little twitch the child was dead, whereupon Dr. Mengele had her taken into the corpse chamber. In this manner all fourteen twins were killed during the night.42

The account shared by Nyiszli demonstrates Mengele's alarming ease with which he sent individuals to their deaths. Michael Grodin and George Annas's account *Physicians and Torture: Lessons from the Nazi Doctors* describe Mengele as possessing an impressive "skill"; he could "dissociate the deaths he caused and

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41. United States Holocaust Memorial Museum. *"Josef Mengele." Holocaust Encyclopedia* accessed February 5, 2024, https://encyclopedia.ushmm.org/content/en/article/josef-mengele.

42. Grodin and Annas, Physicians and Torture 647.

the deaths that merely occurred 'by accident' in the camps."[43] It is critical to note that tissues from Mengele's dead victims were intentionally sent to the Kaiser Wilhelm Institute for Anthropology, Human Genetics, and Eugenics in Berlin to be analyzed. This action further incriminates the Kaiser Wilhelm Institute indicating its awareness of the origin of these samples from Auschwitz and knowledge of the medical experimentation occurring in Nazi Germany. While Mengele's actions were among the most extreme, he was just one of many physicians who murdered and abused innocent victims during the Holocaust.

The Nazi Regime and Acquisition of Scientific Knowledge

Nazi experiments further pushed the boundaries of medicine and science while leading to the acquisition of new medical knowledge. The Nazi physicians, who were considered advanced from an intellectual standpoint, derived intricate scientific and medical knowledge from the Nazi atrocities and experimentation. For example, the Austrian anatomist Eduard Pernkopf, Dean of the Vienna Medical Faculty and Director of the Institute of Anatomy, Vienna, as well as other Viennese medical illustrators who were Nazis or Nazi sympathizers published the Pernkopf Atlas in 1937. This detailed and accurate anatomy atlas has been helpful

43. Ibid, 648.

in formulating medical treatments for patients; however, many of the bodies used to create the Pernkopf drawings were victims of the Nazi regime.[44]

Nazi experimentation performed at the Dachau concentration camp in 1942 investigated the impact of high altitude on German pilots, hoping to enhance their military capabilities and improve aviation medicine. Dachau prisoners were placed in a low-pressure cabin, and afterward, the brains of the dead victims were studied for pathological changes. If the prisoners did not die from the harsh conditions to which they were subjected, they were killed. The results from these experiments extended beyond Nazi Aviation experimentation. The US Air Force received medical data and knowledge from the altitude experiments in Dachau and subsequently persisted in carrying out aviation experiments that likewise killed people in the process after the war. The US Army Air Forces recruited scientists involved in the original research and published research in conjunction with Nazi doctors involved in the high-altitude experiments.[45]

Another "scientific medical" question Nazi physicians sought to unveil was the impact of adding antibiotics and/or homeopathic drugs on improving wounded soldiers' chances of survival. To test this, previously healthy prisoners at the Dachau and Ravensbruck concentration camps were intentionally injured to

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44. Megan Woolhouse, "Should Doctors Learn from Nazi Medical Research on Holocaust Victims?" BU Today, Boston University, last modified June 20, 2019, https://www.bu.edu/articles/2019/learn-from-nazi-medical-research/.

45. Volker, "Nazi Medicine," 6-7; Herwig Czech, Sabine Hildebrandt, and Shmuel P Reis, "The Lancet Commission on Medicine, Nazism, and the Holocaust: Historical Evidence, Implications for Today, Teaching for Tomorrow," *The Lancet* 402 (2023):1896. doi.org/10.1016/s0140-6736(23)01845-7.

serve as the "wounded soldiers." Glass or small pieces of wood were then placed into their open wounds, or the subjects were injected with the tissues of other inmates with wound infections. Afterward, the infected prisoners either received homeopathic drugs, various forms of sulfonamides, or no therapy to determine which treatment method was most promising for chances of survival. The outcomes of this trial were devastating, with a third of the victims dying, and the survivors enduring permanent physical and psychological trauma.[46] While information acquired by physicians in Nazi Germany expedited scientific discovery, that knowledge was acquired through immoral means and at the expense of deeming a large percentage of the population expendable.

The Nuremberg Trials and Medical Experiments Conducted by Nazi Doctors

The Nuremberg Medical Trial (NMT) was one of 12 trials of war criminals held by the International Military Tribunal — formed by the United States, Great Britain, France, and the Soviet Union — off from 1946 to 1949 in Nuremberg, Germany. The 12 trials lasted over 1,200 days, resulting in over 330,000 transcript pages. [47]The NMT, which began on December 9, 1946, prosecuted 23 leading German physicians and administrators for their participation in war crimes and

46. Volker, "Nazi Medicine," 6-7.

47 Records of the United States/ Nuremberg War Crimes Trials United States of America v. Karl Brandt

experiments on humans with a lack of consent.[48.] A profound result and legacy of the medical trial was the formulation of The Nuremberg Code. The Nuremberg Code set the standard for informed consent in medical research internationally and established other ethical standards for future medical research. This code was set to ensure that the type of medicine practiced by the Nazi regime, which wholly abandoned consent, could never be practiced again.

Cruel experiments conducted using the utmost immoral methods were thoroughly examined at the NMT. These included experiments involving high altitude; low temperatures; seawater; typhus and epidemic jaundice experiments; sulfanilamide; bone transplantation; bone muscle and nerve regeneration; cellulitis; mustard gas; freezing; and malaria, just to name a few. Other medical crimes that were scrutinized involved the collection of Jewish skulls as well as the planning and carrying out of the Euthanasia Program. Many of the details of medical experimentation and Nazi treatment that surfaced at the Nuremberg trials originated from concentration camp victims who risked their lives to document what they endured. The details that emerged revealed medical training intended to promote healing and save lives was used for antithetical purposes.

Analyzing these experiments exposed the extent to which scientists were willing to pursue answers to scientific questions and/or act upon their antisemitic

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48. United States Holocaust Memorial Museum. "The Doctors Trial: The Medical Case of the Subsequent Nuremberg Proceedings". https://encyclopedia.ushmm.org/content/en/article/the-doctors-trial-the-medical-case-of-the-subsequent-nuremberg-proceedings.

beliefs. Wilhelm Beiglböck's execution of experiments at Dachau, which sought to render seawater drinkable, were profoundly disturbing. This experiment was assigned to Beiglböck by his supervisors Hans Eppinger and Hermann Becker. Beiglböck, who joined the Nazi Party in October 1932, was a standard physician of the Sturmabteilung (SA) Brigade 91 and had been a surgeon at Lutwaffe since 1940.[49] Beiglböck was initially hesitant to conduct the seawater experiment but soon forced prisoners to drink raw and untreated seawater.[50] The physical and psychological wounds the victims of the seawater experiments endured were savage and unimaginable. NOVA PBS reported, "The Gypsies became so dehydrated that they reportedly licked floors after they had been mopped just to get a drop of fresh water."[51]

The Nuremberg Trial Records of Beiglböck's prosecution reveals a commonly asserted justification made by Nazi physicians after the Holocaust, which was that their actions were beyond their control due to lack of free will. Therefore, they should not be held accountable for their actions under Hitler and the Nazi Socialist party rule. This argument was made by Beiglböck, who pleaded "not guilty" at his trial in 1947. Beiglböck contended that he tried to "withdraw" from the experiment but feared being punished for not following orders. This

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49. "Wilhelm Beiglböck," Deutsche Gesellschaft für Innere Medizin, accessed March 17, 2024, https://www.dgim-history.de/en/biography/Beiglb%C3%B6ck%3BWilhelm%3B1639.

50. Daan de Leeuw, "Physicians and torture: Lessons from the Nazi Doctors," International Review of the Red Cross 89, 867. (2007).

51. Peter Tyson, "NOVA Online | Holocaust on Trial | The Experiments," PBS.org, last modified October 2000, https://www.pbs.org/wgbh/nova/holocaust/experiside.html#seaw.

justification was declared "objectively unfounded"[52] and flawed at Nuremberg because there were no legal documents proving the Third Reich punished physicians for not following orders.[53] Furthermore, witness Karl Höllenreiner (assigned prisoner number Z10062 during his time in Dachau) was one of the 44 concentration camp prisoners victimized during the gruesome seawater experiments and testified in the closing brief for *the United States of America against Wilhelm Beiglboeck (1947)*. During this trial, Höllenreiner assaulted Beiglböck, punching him in the face,[54] as retribution for the suffering he endured, and declaring him a "murderer." In his testification, Höllenreiner proclaimed:

> Beiglboeck showed no concern for the experimental subjects, but, on the contrary, threatened to shoot them when they became excited. More specifically, one of the subjects tried to persuade the others to refuse to drink the sea water. Beiglboeck threatened to have him hanged for sabotage.[55]

Beiglböck's closing brief further reveals his nature; he detailed administering seawater to subjects via a stomach tube if the subject vomited from drinking the water, and he broke promises to prisoners that they would receive extra rations in return for cooperation. Höllenreiner also described Beiglböck as lacking pity when subjects became "delirious from thirst and hunger."[56] While

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52. de Leeuw, "Physicians and torture."

53. Ibid, 229.

54. "Wilhelm Beiglböck."

55. James McHaney, Alexander Hardy, Arnost Horlik- Hochwald, and Esther Johnson, ". Brief: Prosecution Closing Brief against Wilhelm Beiglboeck. NMT Prosecution," Nuremberg Military Tribunals (1947, ,22.

56. Ibid.

Beiglböck retroactively claimed he was hesitant to perform the seawater experiments and simply acted under orders, his behavior suggests otherwise. The witness testimony suggests that he did not resist "orders" or hesitate to assert his authoritative power through violence. Instead, he took advantage of the defenseless position of his victims, acting more aggressively than someone who was hesitantly obeying an order. Despite Beiglböck's "not guilty" plea, he was found guilty of counts II and III,[57] War Crimes and Crimes Against Humanity, respectively, and received 15 years in prison, which was later reduced to 10 years.[58]

It is questionable how a physician with initial hesitations and the internal instinct that his actions were wrong then acted so contradictorily. In his book *Murderous Science,* Müller-Hill explains that many physicians blinded themselves to the truth. He expounds, "These learned men wanted to know nothing, and so there came into being a remarkable community of self-blinding internal exiles coexisting with the annihilators, those who did go all the way to the final solution."[59] It is also noteworthy that while other physicians admitted to the experiments they engaged in, none of the Nuremberg defendants took ownership for their role in their merciless experimentation.[60] In Horst H. Freyhofer's book *The Nuremberg Medical Trial: The Holocaust and the Origin of the Nuremberg*

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57. Prof. Linder, "Indictments," The Nuremberg Trials, accessed March 23, 2024, http://law2.umkc.edu/faculty/projects/ftrials/nuremberg/NurembergDoctorTrial.html.

58. "Wilhelm Beiglböck."

59. Benno Müller-Hill, *Murderous Science* (United Kingdom: Oxford University Press, 1988), 23.

60. Arthur Leonard Caplan, *When Medicine Went Mad: Bioethics and the Holocaust* (Totowa, NJ: Humana Press, 1992), 70.

Medical Code, he asserted, "To some degree, every defendant placed the responsibility for his ghastly deeds with the state, in a legal and ethical sense." Furthermore, all the defendants "insisted that under ordinary circumstances he would not have performed these experiments and would have practiced medicine in accordance with the human principles characteristic of peacetime."

Furthermore, none of the defendants apologized for their wrongdoings.[61] This lack of remorse was exemplified by the trial of Carl Clauberg, a gynecologist who conducted experiments at Auschwitz aimed at developing a fast and efficient non-surgical mass sterilization procedure. Clauberg initiated his research by reaching out to senior Nazi official Heinrich Himmler, asking for access to female prisoners as subjects for studying reproduction.[62] Ultimately becoming titled "Final Solution," Clauberg's experiment, overseen by Himmler, involved injecting formalin into the wombs of over 600 prisoners at Auschwitz, most of whom were Jewish.[63]) His subjects experienced severe pain, infertility, and even death.[64]

Not only did Clauberg refuse to apologize for his actions, but he also professed he was actually helping his female subjects. He claimed he was protecting them from another disturbing fate they would have endured in the

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61. Ibid.

62. United States Holocaust Memorial Museum. "*Heinrich Himmler.*" Holocaust Encyclopedia. Accessed March 6, 2024. https://encyclopedia.ushmm.org/content/en/article/heinrich-himmler.

63. United States Holocaust Memorial Museum. "*Carl Clauberg*" Holocaust Encyclopedia. https://encyclopedia.ushmm.org/content/en/article/carl-clauberg.

64. de Leeuw, "Physicians and Torture."

concentration camps, confidently remarking: “the women on whom I experimented in Auschwitz should be grateful to me. I saved them from being burned.”[65] It did not appear as if Clauberg was regretful or remorseful for his actions which inflicted severe pain upon other human beings.

Numerous scholars have attempted to comprehend how medical professionals once deemed as “good” and “moral” were capable of abusing others and causing them unbearable pain. Scholar Robert Jay Lifton, renowned author of *The Nazi Doctors: Medical Killing and the Psychology of Genocide*, attributes this phenomenon to the psychological concept known as "doubling." The theory of “doubling” postulates that the human is a “divided self,” and in extreme circumstances, a version of one’s “opposing self” or “new self” can take over the self. This "opposing self," frequently referred to by Lifton as the "Auschwitz self," was numb and could disregard pre-existing moral standards to kill without feeling guilt or remorse.[66] Lifton argues that in the role of the other self, Nazi physicians believed they were acting as saviors, purifying the racial state of Germany.

In post-war trials, physicians declared their work honorable, showcasing both a superiority complex and a sense of righteousness. Claus Schilling, who administered malaria drugs in high and even lethal doses on over 1,000 prisoners,[67]

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65. Gerd Heidemann, “Der Fall Clauberg. Die Wunden werden aufgerissen,” Der Stern 10, no. 3 (1957), cited in: Weinberger, Fertility Experiments, 388.

66. de Leeuw, “Physicians and Torture.”

67. Gasiewicz, *Dr. Klaus Karl Schilling, a Physician Who Infected over One Thousand Prisoners with Malaria in his Experiments at the Dachau Camp, Defends Himself at the Trial of Former Camp Personnel and Prisoners from Dachau.*, 1945, photograph, 1945.

was interrogated during the Dachau camp trial (formally known as the *United States of America v. Martin Gottfried Weiss*), where he declared a report on his malaria experiments would be "an enormous profit for humanity."[68] He elaborated:

> I have worked out this great labor. It would be really a terrible loss if I could not finish this work. I don't ask you as a court, I ask you personally to do what you can; to do what you can to help me that I may finish this report. I need only a table and a chair and a typewriter.[69]

While it is impossible to prove whether Schilling was expressing his personal beliefs or those of his "other self," the concept of doubling provides some insight into the actions of Nazi physicians and how they were able to use their medical skills in such a destructive way. Yet, it does not serve as an excuse for their actions, nor does it negate the fact that doctors knew what they would be doing before the power was truly in their hands.

Furthermore, academic scholars have discounted doubling as an excuse for Nazi physicians' conduct. In his piece, *'In the Name of Humanity': Nazi Doctors and Human Experiments in German Concentration Camps,"* Daan de Leeuw refutes the notion of doubling because it would mean Nazi doctors faced ethical and moral quandaries about their conduct, and there was no indication of such. De Leeuw contends, "The doctors cared nothing for the well-being of the prisoners. Doubling does not explain their behavior, as these doctors supported Nazism,

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68. Interrogation of Professor Schilling, United States vs. Martin Gottfried Weiß et al., p. 432.

69. United States Holocaust Memorial Museum. *"US Army Trials in Postwar Germany," https://encyclopedia.ushmm.org/content/en/article/us-army-trials-in-postwar-germany*.

'racial hygiene,' and eugenics., they did not have to overcome any ethical and moral constraints."[70]

To What Extent Is Contemporary Medicine and Society Susceptible to the Occurrences That Transpired in Nazi Germany?

When reflecting on this history, it is "comfortable" to try to view the medicine practiced during the Holocaust as an extreme, something that surely would not happen today. It is easier to presume that the Nazi physicians who conducted these cruel experiments were psychopaths and outliers. Yet, this is not true. Examining the medical crimes committed during the Holocaust unveils German health practices preceding the Holocaust that share common roots and patterns with contemporary health in society today. As a matter of fact, the German medical field was highly regarded as a world leader in public health and science. Germany contributed many remarkable advancements to science, such as inventing the electron microscope used to establish the asbestos-lung cancer link. Nazi medical professionals were the first to document tobacco's carcinogenic effects. Germany implemented breast cancer screening programs decades before other Western countries.

70. Ibid, 240.

Furthermore, by publishing the Flexner Report in 1910, the German medical system became a model for American medical education.[71] The Flexner Report was funded by the Carnegie Foundation and written by Abraham Flexner, who hailed from a German-Jewish émigré family and was fascinated by the German style of medical education.[72] His report discussed the principles of modern medical education,[73] relating them to those of public education. Many of Flexner's recommendations were derived from the German education model.[74] Notably, as explored in the forthcoming chapters, various levels of collaboration existed among individuals in the German and American scientific communities. Notably, collaboration between American and German geneticists advanced the International Eugenics Movement and eugenics thinking.

Having established that German medicine was not inherently flawed at its core, but rather remarkably advanced both scientifically and ethically, the question arises: How did Nazi doctors and medicine go awry? The medical torture that occurred in Nazi Germany during the Holocaust is often overlooked as the exception, the byproduct of an environment in political turmoil. Moreover, the

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71. Matthew Wynia and Alan Wells, "Light from the Flames of Hell: Remembrance and Lessons of the Holocaust for Today's Medical Profession," Pubmed 9 (3): 186-188, https://pubmed.ncbi.nlm.nih.gov/17402335/

72. Charles E. McClelland, "The German Model for American Medical Reform," Digital Repository University of New Mexico (2012), https://digitalrepository.unm.edu/hist_fsp/.

73. Kenneth Ludmerer, "*Learning to Heal: The Development of American Medical Education,"* (New York: Basic Books, 1985), 168-190.

74. Thomas Duffy, "The Flexner Report – 100 Years Later", The Yale Journal of Biology and Medicine 84 (3): 269–76, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3178858/.

scientific beliefs that Nazi policies relied upon were being circulated and propagated internationally, especially in America. Many American eugenicists agreed with Nazi doctors and wanted to collaborate with them. Indeed, American eugenicists may have pursued similar research if presented with an equally receptive environment.

Robert N. Proctor, historian, and author of the renowned book *Racial Hygiene: Medicine Under the Nazis,* wrote:

> The Nazi phenomenon cannot simply be dismissed by saying the science was 'flawed' or doctors were 'politicized'; nor can it even be said that the Nazis simply abandoned ethics. There is an ethic of Nazi medical practice—often explicit, sometimes not; often cruel, but sometimes not. This is important to understand. If the Nazi phenomenon is demonized as absolutely alien and otherworldly, with no connection to the present, our ability to understand the origins of these medical crimes is forfeited. [75]

While stricter ethical guidelines have been established and enforced since the abuse of medicine during the Holocaust, the underlying hatred and severe racism that culminated in the misuse of medical knowledge during the Holocaust could rear their ugly heads again.

Additionally, the Holocaust is not the first or last genocide in history where physicians have played a critical role in inflicting pain on others. Viewing Nazi medicine as an isolated event ignores the reality that those held to the highest

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75 Robert Proctor, "Nazi Medical Ethics: Ordinary Doctors?", in *Military Medical Ethics*, ed part of the series *Textbooks of Military Medicine* (Washington, DC: Office of the U.S. Surgeon General, 2004).

standards in society are capable of perpetuating pure hatred and murder. Such a narrow perspective not only injures our collective consciousness but also harms the future of humanity.

CHAPTER TWO: EUGEN FISCHER

Who Was Eugen Fischer?

Eugen Fischer (July 1874 - July 9, 1967) was an infamous leading Nazi anthropologist and geneticist.[76] Fischer pioneered his method of "anthropo-biology,"[77] exploring patterns of human hereditary transmission. His work was based on ideas of Mendelian Genetics, specifically, how genetic traits are passed from generation to generation.[78] In 1921, Fischer co-authored the textbook *Principles of Human Heredity and Race Hygiene* ("*Human Heredity"*) along with Erwin Baur and Fritz Lenz. One of Fischer's foremost achievements, this book became recognized as the "standard textbook on racial hygiene in the Weimar Republic"[79] and the "scientific basis"[80] for many eugenic programs implemented by the Nazis. In fact, Hitler read this textbook while in prison at Landsberg and was inspired by the eugenic framework and concepts described.

Earlier in Fischer's career, he authored influential publications, including *The Rehoboth Basters (Bastards) and The Problem of Miscegenation Among Humans: Anthropological and Ethnographic Studies on Rehoboth Bastards in*

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76. Sabine Hildebrandt, *The Anatomy of Murder: Ethical Transgressions and Anatomical Science During the Third Reich* (Oxford, New York: Berghahn Books, 2016), 155-161.

77. Eugen (Leopold Franz) Fischer "Complete Dictionary of Scientific Biography," Encyclopedia.com, last modified March 18, 2024, https://www.encyclopedia.com/science/dictionaries-thesauruses-pictures-and-press-releases/fischer-leopold-franz-eugen.

78. Ilona Miko, "Gregor Mendel and the Principles of Inheritance," Natured Education 1, no 1 (2008): 134, https://www.nature.com/scitable/topicpage/gregor-mendel-and-the-principles-of-inheritance-593/.

79. H Fangerau and I Müller, "Das Standardwerk Der Rassenhygiene von Erwin Baur, Eugen Fischer Und Fritz Lenz Im Urteil Der Psychiatrie Und Neurologie 1921–1940," Nervenarzt 73 (2002): 1039–46, doi: 10.1007/s00115-002-1421-1.

80. Ibid.

German Southwest Africa (1913).[81] This publication resulted from the research Fischer performed in today's Namibia on the Rehoboth people (Dutch male settlers, Khoikhoi women, and their children)[82] in the early years of the twentieth century to assess the "whiteness" of mixed-race individuals.[83] Fischer's research embodied the German colonial mindset, most extreme toward African territories, which spanned roughly from 1884 to 1918 and permitted scientific researchers to use indigenous African citizens as a rich source for genetic research. The aim of Fischer's research also aligned with the outlook of Theodor Leutwein, the appointed Governor of German Southwest Africa in 1895, who viewed colonization as a business operation to bring economic success to the colonial empire.[84] Fischer traveled to Southwest Africa to confirm the German belief that the Rehoboth people were inferior. His study demonstrated the consequences of "racial mixing" and concluded that racial characteristics are inherited.[85] This research furthered Fischer's career at Freiburg University, where he became a full anatomy professor and director of the Anatomical Institute in 1918.[86]

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81. Eugen Fischer, "Die Rehobother Bastards und das Bastardierungsproblem beim Menschen," *The Journal of Race Development*, 5, no. 3 (1915).

82. Thiago Pinto Barbosa, et al., "Remembering the Anthropological Making of Race in Today's University: An Analysis of a Students' Memorial Project in Berlin," *Etnofood* 30, no 2 (2018): 34.

83. University College London, "Eugen Fischer's Hair Colour Gauge," *University College London*, accessed January 10, 2024, https://www.ucl.ac.uk/culture/ucl-science-collections/eugen-fischers-hair-colour-gauge.

84. Barbosa et al., "Remembering the Anthropological," 33.

85. Eugen Fischer, *Racial Origin and Earliest Racial History of the Hebrews*, (United States: Liberty Bell Publications, 1984), i.

86. "Prof. Dr. Eugen Fischer," Städtische Museen Freiburg, accessed March 19, 2024, https://onlinesammlung.freiburg.de/en/person/3656966B4034FD9AC6E6FB05342F2160

As his career progressed, Fischer was appointed the founding director of the Kaiser Wilhelm Institute (KWI) for Anthropology, Eugenics, and Human Heredity in Berlin, where he served from 1927 to 1942.[87] In 1933, Fischer was also elected as *Rektor* (president) of the University of Berlin,[88] a world-renowned teaching and research university founded in 1809-10.[89] During Fischer's time at the KWI for Anthropology, Eugenics, and Human Heredity, he contributed significantly to the Nazi Socialist movement by training and lecturing Schutzstaffel (SS)[90] physicians and serving as a judge on Berlin's Hereditary Health Court,[91] on which he provided opinions concerning the "racial purity" of individuals.[92] Hereditary Health Courts were established to evaluate an individual's racial and genetic heritage to determine whether an individual should or should not be forcibly sterilized. Fischer supported "racial hygiene," defined as "the idea that a race of people can be kept pure by not allowing people who are considered inferior (of less value) to have children."[93]

Racial hygiene was a foundational aspect of Hitler and the Nazi Socialist policies. Nevertheless, the implementation of the concept of "racial hygiene"

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87. Hildebrandt, *The Anatomy of Murder,* 157.

88. Ibid, 158.

89. Editors of Encyclopaedia Britannica, "Humboldt University of Berlin," Britannica, accessed February 18, 2024, https://www.britannica.com/topic/Humboldt-University-of-Berlin.

90 The Schutzstaffel (SS) originally formed as Adolf Hitler's personal protection squad, later evolving to become the premier guard of the Nazi Reich and Hitler's principal executive power.

91. Alvin Powell, *"*Evolution of 'Final Solution*,'" Harvard Gazette*, April 21, 2011, https://news.harvard.edu/gazette/story/2011/04/evolution-of-final-solution/.

92. Ibid.

93. *Cambridge English Dictionary,* "racial hygiene," accessed March 28, 2024, https://dictionary.cambridge.org/us/dictionary/english/racial-hygiene.

constituted just one facet of a broader narrative; it operated in unison with pervasive antisemitism both within Germany and on a global scale, predating the rise of Hitler.

Franz Weidenreich, a Jewish German anatomist, and physical anthropologist who resigned as a professor of anthropology at the University of Frankfurt in 1933 and escaped Germany in 1934, holds Eugen Fischer accountable for many of the Third Reich's undertakings. While other scientists and professors were making similar points as Fischer, Weidenreich declared: "If anyone, he is the man who should be put on the list of war criminals."[94] This chapter explores the man this bold statement references and how his eugenic ideology was perceived in Germany and the United States and the repercussions of his view.

Eugen Fischer and National Socialism

Fischer was not a blatant antisemite from the start. Instead, his antisemitic views grew as he became more closely affiliated with National Socialist German science during World War II.[95] His eugenic ideas substantiated Hitler and the National Socialist Party's policies and provoked their subsequent actions, which discriminated against groups they deemed "inferior" and "impure." Fischer showcased his views on heredity and the splitting of racial groups in a lecture he

94. Franz Weidenreich, "Letter to the Editor: On Eugen Fischer," *Science* 104 (1946): 399.

95. Hildebrandt, The Anatomy of Murder, 157-159.

gave in 1938 on *the Racial Origin and Earliest Racial History of the Hebrews* at a series on "The Jewish Question" in Munich.[96] The United States Holocaust Memorial Museum defines the Jewish Question as "the status of European Jews… When they were gradually being granted civil rights and equality,"[97] therefore, framing the "European Jews" as a "question." This line of thought essentially reduced this people group to a "problem" that needed to be "solved" and became a mask disguising unapologetic prevalent antisemitism.

By lecturing at a conference that was designed to assess the status of Jews in Germany, Fischer inserted his scientific and academic beliefs into the political realm. Fischer's lecture discussed the racial origin of the Jewish people and other races within the context of national socialism, but not exclusively as a feature of National Socialism, by explicitly differentiating between northern Europeans and Jews as separate races. Fischer was determined to trace the origins of races and to prove that "human genetics has furnished us the absolute proof that all human racial characteristics are genetic characteristics and only such characteristics."[98] Therefore, Jews are an immutable separate race. The claim of Jews being a separate race allowed the Nazi party to capitalize on the "otherness" of the Jews in Germany and further discriminate against them. The Nuremberg Race Laws, enacted by the

96. Eugen Fischer, *Racial Origin and Earliest Racial History of the Hebrews*, trans. Charles E Weber, (Boring, Oregon: CPA Books Inc, 2000), ii.
97. United States Holocaust Memorial Museum, "The Nuremberg Race Laws," Holocaust Encyclopedia, date accessed, https://encyclopedia.ushmm.org/content/en/article/the-nuremberg-race-laws.
98. Fischer, *Racial Origin*, 2.

Nazi party on September 15, 1935, declared "only racially pure Germans would be allowed to hold German citizenship."[99] While Fischer did not write the Nuremberg Race Laws, he outlined methods for tracing the racial origins of Germany's inhabitants. Thus, Fischer's assurance that an individual's "racial origins" could be determined gave credence to this law. Undoubtedly, Fischer's scientific assertions complemented the primary goal of the Nazi party, to sustain discrimination against the declared "Jewish race." Likewise, the Nazi party's endorsement of Fischer's theories bolstered his status as a distinguished racial hygienist.

Beliefs and Precursors for the Holocaust Presented by Eugen Fischer in *Human Heredity*

Eugen Fischer composed Section Two, titled *Racial Differences in Mankind,* of the *Human Heredity* textbook.[100] His section of the textbook includes Variable Characters in Human Beings (Chapter V), Racial Origins and Racial Biology (Chapter VI), and the Description of the Races of Man (Chapter VII). Many of Fischer's remarks were imbued with Darwinian theory, drawing upon the heritability of "racial characteristics" and the observed patterns of certain characteristics prevailing while other traits are eliminated. Fischer proclaimed nature is constantly modifying race to improve it.

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99. "The Nuremberg Race Laws."

100. Erwin Baur, Eugen Fischer, and Fritz Lenz, *Human Heredity* trans. Eden and Cedar Paul, (New York: Macmillan, 1931).

He contends:

> Under natural conditions, however, a fair skin is dangerous to dwellers in the tropics, so that in those regions' persons exhibiting such variation are eliminated by natural selection.[101]

Fischer specified that the "blonde inhabitants of Europe" exhibiting fair skin demonstrate how certain characteristics that would typically be eliminated via natural selection in tropical climates can be more prevalent in temperate climates. He asserts, "Nature, therefore, perpetually sees to it that the race shall remain at the acme of efficiency."[102] That is, nature essentially rewards traits properly adapted to specific environments and/or circumstances. Yet, as Fischer subscribed to a popular belief among racial hygienists of his time, he unwittingly outlined a problem — while natural selection was essential to survival in primitive cultures, "as civilization progresses and becomes more advanced, the rigour of natural selection [is] diminished."[103] In other words, progress in medicine, science, and other fields enables survival in modern society through means other than natural selection.[104] Therefore, nature did not play as large of a role in selecting the most "well-suited" individuals in World War II Germany as Fischer and his contemporaries wanted to believe. While Fischer did not suggest an explicit

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101. Ibid, 175.

102. Ibid, 174

103. Ibid.

104. Sheila Faith Weiss, "Race and Class in Fritz Lenz's Eugenics," *Medizinhistorisches Journal* 27, (1992): 5.

solution to uphold the "rigour of natural selection,"[105] Hitler and the Nazi party were able to formulate a plan to "preserve" German culture from infiltration by Western civilization.

Fischer argues heritable traits as features that could either be perpetuated or terminated, which suggests that a racial utopia is within grasp. By outlining natural selection's diminishing role in an advanced society, Fischer evokes fear that society could transition to preserve a savage type. This foreshadowed Hitler's adaptation of the concept of "natural selection." If nature is no longer doing its proper job by selecting the most valuable beings (in his eyes), he could take on that role himself.

Furthermore, Fischer claimed physical characteristics are reflective of an individual's race. Essentially, he suggests one can determine an individual's race by appearance. He drew upon the Hindus being traced to an Indo-Germanic origin due to their physical characteristics, including the shape of their cranium and the tint of their skin.[106] When describing the Brahmans, the upper classes of Indo-Germanic Hindus in the first half of the second millennium before Christ, Fischer emphasizes, "It has been said, and with good reason, that in Hindustan an individual's social position is in inverse ratio to the breadth of his nose."[107] Fischer indicates that if an individual originated from and shares traits with those of the

105. Ibid.

106. Baur, Fischer, and Lenz *Human Heredity,* 199.

107. Ibid.

Nordic race (blond, tall, long-skulled, etc.), the person is recognized as a member of the "master race." A common theme in Fischer's work is adding meaning to the term "race" by classifying a "racial type" by its defining physical and mental characteristics.

The Nazi party classified individuals by "race" to separate Jews from the rest of the population for the purpose of eliminating the Jewish race in its entirety. To solidify the biological differences between the "inferior" Jewish race and the "superior" Aryan race in Germany, the Nazis made Jews wear a badge, such as a yellow star of David, on their clothing. The identification badge requirement was implemented around 1941-42.[108] Jews who presented some of the defining physical features of the Aryan race, such as lighter hair or blue eyes, were not always classified as Jewish.[109] This allowed some to survive the Holocaust by masking their Jewish identity. Ironically, the little girl who was the face of the "perfect Aryan child" in many forms of Nazi propaganda (postcards, storefronts, etc.) was Jewish.[110]

The "perfect Aryan child," Hessey Taft, had her photo taken by a Berlin photographer named Hans Ballin. In 1935, Ballin submitted Taft's portrait to the Nazi party, where it was selected by Joseph Goebbels, Hitler's Minister for Public

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108. United States Holocaust Memorial Museum, "Jewish Badge: During the Nazi Era," *Holocaust Encyclopedia*, accessed March 20, 2024, https://encyclopedia.ushmm.org/content/en/article/jewish-badge-during-the-nazi-era.

109. United States Holocaust Memorial Museum, "Frequently Asked Questions about the Holocaust for Educators," *Holocaust* Encyclopedia, accessed March 29, 2024, https://encyclopedia.ushmm.org/content/en/article/jewish-badge-during-the-nazi-era.

110. Hans Ballin," picture of Hessy Taft used in Nazi propaganda digital image," *Washington Post*, July 7, 2014, https://www.washingtonpost.com/news/morning-mix/wp/2014/07/07/the-perfect-aryan-child-the-nazis-used-in-propaganda-was-actually-jewish/.

Enlightenment and Propaganda, also referred to as the "mastermind" of propaganda.[111] Allegedly, Ballin knew the Taft's were Jewish when he submitted Hessey's photo. In reference to the photo today, Taft declares, "I feel a little revenge. Something like satisfaction"[112] because the Nazis were not practicing what they preached, unknowingly using a beautiful Jewish child as the face of the idealistic German appearance. The use of Taft as a symbol of Aryan purity underscores that physical characteristics were an unreliable basis for racial categorization.

Figure 2.1: This photo was taken of Hessy Levinsons Taft as an infant

Although Taft was Jewish, Joseph Goebbels and the Nazi Party exploited this photo for Nazi propaganda as a representation of a 'perfect Aryan child.

Source: Image excerpted from video testimony of Hessy Taft (courtesy of the USC Shoah Foundation- The Institute for Visual History and Education.) The original photograph was taken by German photographer Hans Ballin. In 1935.

111. PBS, "Joseph Goebbels (1897-1945)," PBS, accessed February 19, 2024, https://www.pbs.org/wgbh/americanexperience/features/goebbels-biography/

112. Ballin, "Hessy Taft."

In *Human Heredity* and other texts, Fischer utilized images and portraits to illuminate the physical disparities between individuals of different races. Specifically, Fischer used photos taken by his assistants at the Lodz, also referred to as Litzmannstadt, ghetto and repurposed ancient panel portraits from the Fayum region in Egypt (taken during the Roman Period). In *The Antike Weltjudentum* (written in 1942) or *The Ancient World Jewry* co-authored by Fischer and Gerhard Kittel, a renowned contemporary German geneticist, photos of Jews reflecting physical characteristics of the "Jewish race" are strategically positioned next to photos of Africans to "emphasize the 'negroid' features of ancient and contemporary Jews."[113] Fischer's use of the "negroes" as a prime example of a race that should be viewed with lower regard reveals his racist convictions. He explicitly references "negroes in America" and describes them as a group isolated from the rest of society. He goes on to say they have "relapsed into states of primitive culture (fetishism, voodoo, etc.)."[114] The terms "relapse" and "primitive" imply that "negroes" are uncivilized and less than human.

In the 19th century, George Ebers, a German-Jewish Egyptologist, identified the Fayum Panel portraits' subjects as Jews. He used the pictures as evidence of the high social status of Jews in antiquity, but these images were integrated into the scientific field to depict the Jewish "racial type," based on specific physical

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113. Amos Morris-Reich, "Curatorial Interpretation: Portrait of a Youth (09.181.4) and Inserted Panel Portrait (11.139)," The Metropolitan Museum of Art, December 31, 2021, https://www.metmuseum.org/about-the-met/collection-areas/egyptian-art/object-pages/youth-with-surgical-cut.
114. Baur, Fischer, and Lenz, *Human Heredity,* 206.

characteristics. For instance, Amos Morris-Reich, Director of The Stephen Roth Institute for the Study of Contemporary Antisemitism and Racism at Tel Aviv University, reveals that throughout the 1900s, the portraits "Ebers and Petrie initially identified as Jewish, were seen instead as illustrating 'pure Greek' or 'pure Roman,' and, similarly, portraits that were previously considered 'pure Greek' or 'pure Roman' were identified as 'Jewish.'"[115] Ironically, the portraits that had initially been reflective of the Jewish people's high status in ancient times were strategically manipulated to support antisemitic biases based on tropes about Jewish characteristics. These photographs, presented in vastly different contexts from their origins, began serving as a tool to promote the eugenic cause in the 1930s and 1940s.

Another compelling point Fischer disputes in *Human Heredity* is the "problem" of racial crossing[116] and its consequences for society. He asserts that racial crossing will do more harm than good, stating, "Perhaps, instead of 'luxuriation' being the result of such a crossing, 'pauperization' may ensue!"[117] He emphasizes that the product of "mixed breeding" will be weaker progeny than either parental race. Fischer cites the Jews as an example of such crossbreeding. He

115. Ibid.

116. Where individuals of different races produce offspring

117. Baur, Fischer, and Lenz, *Human Heredity,* 178.

explains that Ashkenazi Jews are a byproduct of Alpine and Mongolian blood,[118] which explains their inferiority.

As a final point, Fischer points out the impact that laws of heredity have on history. He begins by distinguishing between a nation and a 'race.' Nations are united by elements of common civilization (i.e., speech), whereas 'races' are united by sharing "like hereditary equipment."[119] Fischer argued that in a nation with more than one race, there will be a "struggle for existence between the two peoples."[120] Therefore, in a country like Germany, where multiple races exist, the German race was in harm's way—specifically, the gifted leaders of the country, whose exemplary characteristics were at risk of being eliminated through natural selection. Eugen Fischer and his esteemed eugenicist colleague and coauthor of *Human Heredity,* Fritz Lenz, went as far as to construct a racial map of Europe[121] illustrating its racial composition in hopes that their racial teachings be applied to strengthen the German race and people. The prescriptive nature of the map implies that Fischer and Lens hoped their ideas would not simply be confined to the pages of a textbook.

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118. Ibid, 202.

119. Ibid, 169.

120. Ibid, 178-179.

121 Ibid, 187.

How Ideas Presented by Eugen Fischer Laid the Foundation for Nazi Eugenic Policies

At the center of the biological destruction conducted by the Nazis was Eugen Fischer, who was willing to present—and even enrich—his racist views to reap the benefits for his career, specifically to acquire funding, and to please Hitler and the National Socialists. Fischer's status as a racial hygienist and an "expert on racial genetics"[122] lent credence to the National Socialist Party's ethnic cleansing agenda. The ideas presented in *Human Heredity* supported and justified the discriminatory Nazi policies crafted to support the "master race." To design the "master race," the physicians working under Nazi policies forcibly sterilized between 310-350,000 German citizens,[123] euthanized at least 230,000 German children[124] and adults, and created gas chambers to be used for mass killing in concentration camps.

However, the Nazi Party did not always approve of Fischer's eugenic stances. On February 1, 1933, Fischer presented a speech on "modern races" that had originated via crossbreeding and their influence on intellectual abilities; however, his ideas were not well-received by the NS audience members, who considered his policy too lenient. Instead, the NS audience members thought

122. Hildebrandt, *The Anatomy of Murder, 157.*

123. Herwig Czech, Sabine Hildebrandt, and Shmuel Reis, "Medicine, Nazism, and the Holocaust: Essential Lessons for Health Professionals". *Medpage* Today, January 26, 2024, https://www.medpagetoday.com/opinion/second-opinions/108438.

124. Ibid.

Fischer was arguing that individuals resulting from crossbreeding, including the Jews, were "more capable and intelligent than the 'pure races', especially the 'Nordic Race.'"[125] Fischer, keenly aware that losing the backing of the Nazi party would damage his career, aligned himself with NS policy. This "revision of stance" was evident in the next speech he gave in June of 1933. Speaking to the Ministry of the Interior, Fischer left no doubt that he was willing to "purify" the German race on a large scale through any means necessary. In this address, Fischer declared:

> It is the essence of the nationalist idea of the state to emphasize the unity and common bloodline of the entire people and to create laws and administrative rules based on these to exclude foreign elements [...] Regardless if they are good or bad, if bloodlines are different or foreign, they have to be rejected.[126]

Fischer's speech provides insight into the tension that existed between appearance and bloodlines. While some racial distinctions were made based on appearances, Fischer emphasized bloodlines as integral in identifying Jews and others who did not share the bloodline of the "master race." While Fischer asserted that his principles and statements were grounded in the "pure science of biology," upon scrutiny of his actions, it is apparent that some of his claims were not motivated strictly by science but served political purposes as well.

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125. Hildebrandt, *The Anatomy of Murder, 157.*

126. Ibid, 158.

Fischer's speech to the Ministry of the Interior was not the first time he had attempted to present his ideas to influential political leaders. Fischer was part of the International Union for the Scientific Investigation of Population Problems (IUSIPP). As part of his involvement with this organization, he met with Benito Mussolini, founder and leader of the National Fascist Party in Rome, Italy, in 1929. Fischer attempted to persuade Mussolini to carry out eugenic measures in his population policy. Fischer presented Il Duce, an address he wrote with Fritz Lenz, which argued:

> May it be granted what was denied to previous cultures, to grasp the wheel of fate, to face up to it and reverse it! Quality in addition to quantity! And it is high time, the danger is formidable. Videat consul![127]

In this speech, Fischer alludes to the idea of positive eugenics, which encouraged "superior elements in the population"[128] to reproduce often and build extended families. Positive eugenics became increasingly popular post-World War I, when high death rates, including wartime casualties, paralleled the declining birth rate—especially low among elite groups—alarmed geneticists. While positive eugenics had existed since 1880-90, the movement gained momentum around 1912. Scholar Paul Weindling describes the shift: "researchers interested in genetics

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127. Hans-Walter Schmuhl, *The Kaiser Wilhelm Institute for Anthropology, Human Heredity and Eugenics, 1927-1945: Crossing Boundaries,* (Dordrecht, the Netherlands: Springer, 2008), 116.

128. Ibid.

became active eugenicists in order to promote social reconstruction."[129] Fischer's encouragement of Mussolini to "grasp the wheel of fate"[130] insinuates the population's quality could increase if society's upper echelons of would take the initiative and reproduce in higher frequencies. While Fischer was less successful in convincing Mussolini of the importance of the "hierarchization of race,"[131] Fischer preached to the highly receptive Nazi Socialist party that they were able to play a role in crafting the genetic makeup of the German race. Hitler and the Nazi party embraced Fischer's ideas and applied these ideas to the German population.

Reception of Eugen Fischer and *Human Heredity* Textbook in Germany

The textbook *Human Heredity* was significant in promoting and legitimizing the concept of "racial hygiene." Distinguished historian Bentley Glass describes this textbook as the "cornerstone of Nazi eugenics."[132] In 1924, while Hitler was imprisoned in Landsberg, Julius Lehmann, the publisher of the *Human Heredity*, sent Hitler the second edition. Hitler incorporated the ideas presented in *Human Heredity* into his manifesto *Mein Kampf (My Struggle)*. The United States Holocaust Memorial Museum explained that the textbook "promoted the key

129. Paul Weindling, "The 'Sonderweg' of German Eugenics: Nationalism and Scientific Internationalism," *The British Journal for the History of Science,* 22, no. 3 (1989): 325.

130. Schmuhl, *The Kaiser Wilhelm Institute*, 116.

131. Schmuhl, *The Kaiser Wilhelm Institute*, 114.

132. Bentley Glass, "A Hidden Chapter of German Eugenics between the Two World Wars." *Proceedings of the American Philosophical Society* 125, no. 5 (1981): 1.

components of Nazism: rabid antisemitism, a racist worldview, an aggressive foreign policy geared to gaining Lebensraum (living space) in eastern Europe."[133] In fact, Lenz took pride in Hitler's appreciation of the textbook's contents, leveraging it to promote the textbook. Heiner Fangerau, a German historian of medicine and medical ethicist at Heinrich Heine University of Dusseldorf,[134] revealed that "Lenz himself, for example, claimed that his book had influenced Hitler when he was writing 'Mein Kampf'[135]

The publication of this textbook aligned with the pinnacle of the eugenics movement by making its ideals more accessible. Peter Weingart, Jürgen Kroll, and Kurt Bayertz, authors of *Rasse, Blut und Gene: Geschichte der Eugenik und Rassenhygiene in Deutschland* (1988), declared that the publication of *Human Heredity* enabled the German racial hygiene movement to acquire its own "Charter of Heredity."[136] The term "Charter of Heredity" legitimized the German racial hygiene movement as a valid scientific discipline.

The impact of *Human Heredity* was tangible; Fangerau gauged the impact *Human Heredity* had on the growth and popularity of eugenic thinking in Germany and worldwide by quantitatively analyzing contemporary reviews of the

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133. United States Holocaust Memorial Museum. "Mein Kampf" *Holocaust Encyclopedia*, accessed. March 20, 204, https://encyclopedia.ushmm.org/content/en/article/mein-kampf.

134. "Fangerau," *Universitätsklinikum Düsseldorf*, accessed March 20, 2024, https://www.uniklinik-duesseldorf.de/en/department-of-the-history-philosophy-and-ethics-of-medicine/team/fangerau.

135. Fritz Lenz, "Die Stellung des Nationalsozialismus zur Rassenhygiene.," The Opinion of National Socialism on Racial Hygiene, Archiv für Rassen- und Gesell- schaftsbiologie 25 (1931): 300-308

136. Fangerau, "Making Eugenics," 47.

textbook. Fangerau looked at the "International Bibliography of Periodical Literature," a comprehensive bibliography of the leading German and foreign journals of "various fields of knowledge and science,"[137] which had expanded and become more comprehensive since its initial 1896 publication. Part of this expansion sought to include more foreign publications, encompassing works listed in the "Total Catalogue of Foreign Journals" (*Gesamt- verzeichnis der ausländischen Zeit- schriften*).[138] From the International Bibliography of Periodical Literature, Fangerau was able to access 325 book reviews of the textbook's publications between 1921 and 1940.[139]

He discovered that *Human Heredity* became widely studied, praised, influential, and used as a go-to resource to study genetics. Fangerau found that many of the reviews drew attention to the eminence of the authors Baur, Lenz, and Fischer, acclaimed geneticists deemed knowledgeable and trustworthy in this evolving field. In fact, some reviews deemed the textbook as "a masterpiece"[140] and "the one and only standard work."[141] Furthermore, many other influential German eugenicists and scholars, such as psychiatrist Ernst Rüden and Austrian anthropologist Viktor Lebzelter, praised the textbook. Rüden described it as "a thorough piece of work,"[142] and Lebzelter, regarding the fourth edition, says that

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137. Fangerau, "Making Eugenics," 47.
138. Ibid, 51.
139. Ibid.
140. Ibid, 59.
141. Ibid.
142. Ibid, 58.

the book "… almost has an official character in Germany…".[143] Clearly, Hitler was just one of the many German citizens who spent more time learning and thinking about the ideas of racial hygiene laid out in the textbook.

Fangerau found that *Human Heredity* was widely cited, and the textbook reviews were positive, strengthening its influence on German and international eugenics thinking. Based on his research, Fangerau cites:

> 325 contemporary reviews of the book were analysed. More than 80% of the reviewers evaluated the book positively recommending it to a variety of readers. Most of the reviewers were Medical Doctors concentrating on the eugenic aspects of the book.[144]

Fangerau's review indicates *Human Heredity* reached its target audience of individuals in science-related fields, such as medical doctors, anthropologists, pedagogues, chemists, zoologists, biologists, etc. The overwhelming number of positive reviews of the textbook likely played a pivotal role in its success, enabling the publication of *Human Heredity*'s five further textbook editions, which were published to expound on the ideas in the first edition. Moreover, in 1931, Macmillan published the textbook *Human Heredity* translated into English reflecting the international reach of its influence. Ultimately, Fangerau justified

143. Ibid.

144. Ibid, 46.

that the publication of the *Human Heredity* textbook as an "important step in the process of professionalizing racial hygiene as a scientific discipline."[145]

Impact

As Hitler seized more political power in 1933, anthropologists' role in shaping policy became even more prominent. L.C Dunn, a significant developmental geneticist at Columbia University in the twentieth century, attributed the robustness of the creation of the antisemitic sterilization laws in Nazi Germany in 1933 to the "committee of experts which drafted them."[146] This committee included Alfred Ploetz, Ernst Rüdin, Fritz Lenz, and other eugenicists. Ultimately, Dunn argued that the discriminatory eugenics laws of 1933, "Law for the Prevention of Offspring with Hereditary Diseases"[147] could not have been implemented as rapidly and successfully without the help of those working in the intersection of both a science and a social movement who were familiar with the science of eugenics.

While the intentions of Baur, Fischer, and Lenz in the writing, publishing, and promoting the textbook are uncertain, it is evident that the National Socialist Party, whose ideology relied on profound convictions about Jews and other groups

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145. Heiner M. Fangerau, "Making Eugenics a Public Issue," *Science & Technology Studies*, 18 (2005): 48.

146. L. C. Dunn, "Cross Currents in the History of Human Genetics," *American Journal of Human Genetics,* 14 (March 1962): 8.

147. United States Holocaust Memorial Museum. "The Biological State: Nazi Racial Hygiene, 1933-1939," *Holocaust Encyclopedia*, accessed February 13, 2024, https://encyclopedia.ushmm.org/content/en/article/the-biological-state-nazi-racial-hygiene-1933-1939.

not deemed part of the German race, being considered as distinct, found support in the fundamental principles outlined in the textbook. Inherent antisemitism in synchrony with an emphasis on the determination of the hereditary character to categorize individuals via race catalyzed the advancement of Nazi laws intended to eradicate any individuals who did not preserve the German Kultur [culture].

CHAPTER THREE:

The Close Connection Between Eugen Fischer and Charles Davenport

Who is Charles Davenport?

Charles Davenport was an influential leading force in the progression of the eugenics movement in the United States. Davenport was a protégé of Francis Galton, a British naturalist and mathematician who introduced the term eugenics to science for the first time.[148] Davenport, who was acknowledged as the leader in human genetics in the United States, harnessed much support for the eugenics movement in the United States following the rediscovery of Mendelian principles in the early 1900s. While Mendel focused on pea plants and flowers, scientists rediscovered his principles and applied them to the human body. The resurgence of Mendelian thinking influenced Davenport and Fischer.[149]

Professor Garland Allen, a notable historian of history and philosophy of biology, specifically their associations between 1880 and 1950, at Washington University, explained: "By 1910, most American biologists, except for a stalwart few, agreed that Mendel's theory could be applied to all sexually reproducing forms." Therefore, Davenport was hardly alone in his views on genetic traits and inheritance as applied to humans. Many regarded Davenport as strictly adherent to Mendelian law, which viewed inheritance as unifactorial, dominated by

148. Garland E. Allen, "The Eugenics Record Office at Cold Spring Harbor, 1910-1940: An Essay in Institutional History," *Osiris* 2, (1986): 225-64.
149. Hildebrandt, *The Anatomy of Murder*, 156-157.

dominant or recessive traits; however, he did not extend Mendelian principles to encompass characteristics such as intelligence and temperament.[150] Additionally, Davenport condemned miscegenation (a mixture of races), thinking this would result in deficient combinations. Specifically, Davenport focused on the concept of the "harmony of the genotype"[151] and how interbreeding fostered "disharmony."[152]

The combination of the widespread support for Mendelian principles, along with the fiscal backing of The Carnegie Institution of Washington and wealthy individuals such as John D. Rockefeller and John H. Kellogg, paved the way for Davenport to kickstart the Experimental Study of Evolution and the Eugenics Record Office (ERO) in 1910 at Cold Spring Harbor Laboratory in Cold Springs Harbor, Long Island. Davenport ran this institution alongside the distinguished American geneticist Harry Hamilton Laughlin. The ERO, closely associated with the Station for Experimental Evolution (SEE), was a hub for eugenics thinking in the United States. The ERO sought to develop the biological and social principles that fostered applications of eugenic ideas in the United States. Professor Allen explained, "The ERO became a meeting place for eugenicists, a repository for eugenics records, a clearinghouse for eugenics information and propaganda, a

150. Ibid.

151. Bentley Glass, "Geneticists Embattled: Their Stand against Rampant Eugenics and Racism in America during the 1920s and 1930s," *Proceedings of the American Philosophical Society* 130, no. 1. (1986): 132.

152. Ibid.

platform from which popular eugenic campaigns could be launched, and a home for several eugenical publications."[153]

The Eugenics Records Office (ERO)

The ERO strove to extend its impact in the same way German eugenicists did, providing scientific support for eugenics campaigns. Harry Laughlin was particularly invested in the German race hygiene movement and attempted to collaborate with German racial hygienists, including Eugen Fischer, throughout the 1920s. Moreover, Laughlin was the chief editor of *Eugenical News*, a leading American eugenic journal from 1916 to 1953, which served as a conduit between American and German eugenics news. *Eugenical News* published articles supporting Nazi racial hygiene in Germany, which Professor Allen declared spread "propaganda" for "the German eugenic cause."[154]

Laughlin and Davenport were able to support the German eugenics movement for a long time, while advancing their own goals through the ERO at Cold Springs Harbor Laboratory; however, in the 1930s attitudes[155], toward "old-style"[156] eugenics shifted as new biological evidence contradicted entrenched thinking. As a result, the president of the Carnegie Institution in Washington sent

153. Allen, "The Eugenics Record Office," 226.

154. Ibid, 253.

155. "Immigration Act of 1924 (Johnson-Reed Act)." Immigration History, February 1, 2020. https://immigrationhistory.org/item/1924-immigration-act-johnson-reed-act/.

156. Allen describes the peak of "old style" eugenics as coinciding with immigration debates, specifically The Immigration Act of 1924 which limited the entry of immigrants into the United States.

a visiting committee to assess the ERO on February 19, 1929, to decide on its continuance.[157] Amongst the committee members and academic geneticists, doubts were raised regarding vague science being used to support the "old-style" genetic claims made by the ERO.

Furthermore, donors worried about the associations between Cold Springs Harbor and the practice of racial hygiene in Nazi Germany. This comparison was not a complete surprise to ERO leadership; Davenport had foreseen the possible risk that collaboration and support for Nazi racial hygiene posed to the ERO. Professor Allen called attention to Davenport's warnings to Laughlin about making public statements on "politically inflammatory issues"[158] but noted that Laughlin disregarded this advice. Public confidence continued to wither for harsh eugenic policies, such as stricter immigration laws and forced sterilization, being pushed forth by the ERO, which echoed those preached by the Nazi party.

The ERO did not have enough political or financial support to continue running and was forced to shut down in December 1939. Because the ERO was the engine of American "old-style eugenics", its closing symbolically represented the end of the heavy push for eugenics in America; however, scientific racism and eugenics thinking persisted.[159] Professor Allen summarized the influential effect closing the ERO had on eugenics in the United States, explaining, "When it closed

157. Ibid, 250.

158. Ibid, 251.

159. Angela Saini, *Superior: The Return of Race Science*, (Boston: Beacon Press, 2019), 52.

its doors on 31 December 1939, it was clear that the movement as such no longer existed."[160] Despite the ERO's downfall, Davenport remained loyal to his standpoint that social problems resulted from biological problems, and he maintained this belief until his death in 1944.[161]

Correspondence between Charles Davenport and Eugen Fischer

The American Philosophical Society houses the Charles Benedict Davenport Papers, spanning from 1874 to 1946. These archives contain correspondence between Charles Davenport and Eugen Fischer dating back to 1908.[162] Letters between the two are documented until 1933 and reveal that these genetics experts communicated closely with each other on critical eugenic matters, strikingly at a time when the Nazis were ascending to power in Germany.

Communication via mail enabled Davenport and Fischer to collaborate more frequently, overcoming the geographical barrier between New York and Berlin. The correspondence between Davenport and Fischer reveals various trends. Many of these letters were sent from the *Anatomisches Institut der Universität Freiburg* or the *Kaiser- Wilhelm-Institut für Anthropologie* (KWI) in Germany to *Cold Springs Harbor Laboratory* in the United States and vice versa, institutes that were internationally recognized in the scientific community for their high stature

160. Allen, "The Eugenics Record Office," 226.

161. Charles E. Rosenberg, "Charles Benedict Davenport and the Beginning of Human Genetics," *Bulletin of the History of Medicine* 35, no. 3. (1961): 269.

162 Professional Correspondence Between Charles Davenport as Director of the Biological Laboratory at Cold Spring Harbor and Eugen Fischer, (1908-1933), Mss.B. D27, Box 37, Charles Benedict Davenport Papers, American Philosophical Society Library.

in scientific research. The records show a notable increase in communication between Davenport and Fischer from 1929-30, which coincided with the beginning of the Nazi party's rise to power as well as the passage of eugenic sterilization laws in many American states;[163] However, it must be acknowledged that other correspondence might not be recorded and/or preserved.

Davenport's goal in promoting eugenics was similar to Fischer's goal in promoting racial hygiene (a term used more commonly in Nazi Germany to describe eugenic policies and practices)—to favor the reproduction of individuals with desirable traits and repress the reproduction of individuals with undesirable ones. Throughout the early 1900s, Davenport and Fischer's work complemented each other's nicely, as indicated by their collaboration on multiple levels on matters relating to institutions, research findings, memberships to various federations and congresses, and on a personal level.

Fischer and Davenport shared their research findings to communicate valuable scientific findings that would assist their personal research objectives and serve to promote eugenics internationally. For example, in the earliest letter recorded between Fischer and Davenport, dated August 15, 1908, Davenport introduced his current work on "heredity data upon hair color" and avowed that Fischer's previous work, *Anthropologische Gesellschaft,* would significantly assist him in his project.[164] Likewise, in a letter dated December 22, 1924, Davenport

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163. Daniel J. Kelves, "Eugenics and Human Rights," *BMJ*, 319, (1999): 7207.

164 Charles Davenport, Letter to Eugen Fischer, August 15, 1908, Charles Benedict Davenport Papers, Box #37, American Philosophical Society Library

thanked Fischer for sending him a paper by Dr. S. Ruf, which discussed family anthropology.[165]

In addition to exchanging papers, the scientists exchanged samples relevant to the other's research interests. In a letter dated August 15, 1908, Davenport revealed he ordered "one plate of colored hair" from "Herr (Mister) Rossett,"[166] a colleague of Fischer's. This date is significant because it followed the genocide committed by Germany against the people of the Narma and Hetero tribes in what is now Namibia.[167] Also, in 1908, Fischer was researching persons of mixed racial descent in Rehoboth (a town in present-day Namibia) to assess the subjects' relative "whiteness" by examining hair color and texture. The hair color gauge designed by Dr. Eugen Fischer in 1905, containing thirty samples of synthetic hair arranged by color and texture, has been preserved;[168] this image is shown below.[169]

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165 Davenport, Letter to Eugen Fischer, December 22. 1924, Charles Benedict Davenport Papers, Box #37, American Philosophical Society Library

166 Davenport, Letter to Eugen Fischer, August 15, 1908, Charles Benedict Davenport Papers, Box #37, American Philosophical Society Library

167. The Editors of Encyclopædia Britannica, "German-Herero Conflict of 1904–07," Encyclopædia Britannica, accessed March 15, 2024, https://www.britannica.com/topic/German-Herero-conflict-of-1904-1907.

168. University College London, "Eugen Fischer's Hair Colour Gauge," University College London, October 24, 2016, https://www.ucl.ac.uk/culture/ucl-science-collections/eugen-fischers-hair-colour-gauge.

169. Ibid.

Figure 3.1: Hair Colour Gauge designed by Eugen Fischer in 1905.

This photo shows thirty samples of synthetic hair arranged by colour and texture in a tin box.

Source: University College London Science Collection, https://www.ucl.ac.uk/culture/sites/culture/files/styles/xl_image/public/galt_040_03.jpg?itok=ikMWyeix

While it is unknown whether the hair sample ordered by Davenport in August 1908 came from this specific sample, it is clear that Davenport benefitted from Fischer's research in Namibia, rooted in German colonialism and dominated by white racial superiority, for his research on heredity and hair color. Rather than rejecting Fischer's findings based on the means through which they were acquired, Davenport wholeheartedly embraced his colleague's research without regard to its racist and colonialist origins. His complicity is belied by the fact that he eagerly utilized Fischer's research to inform his own work on heredity and hair color.

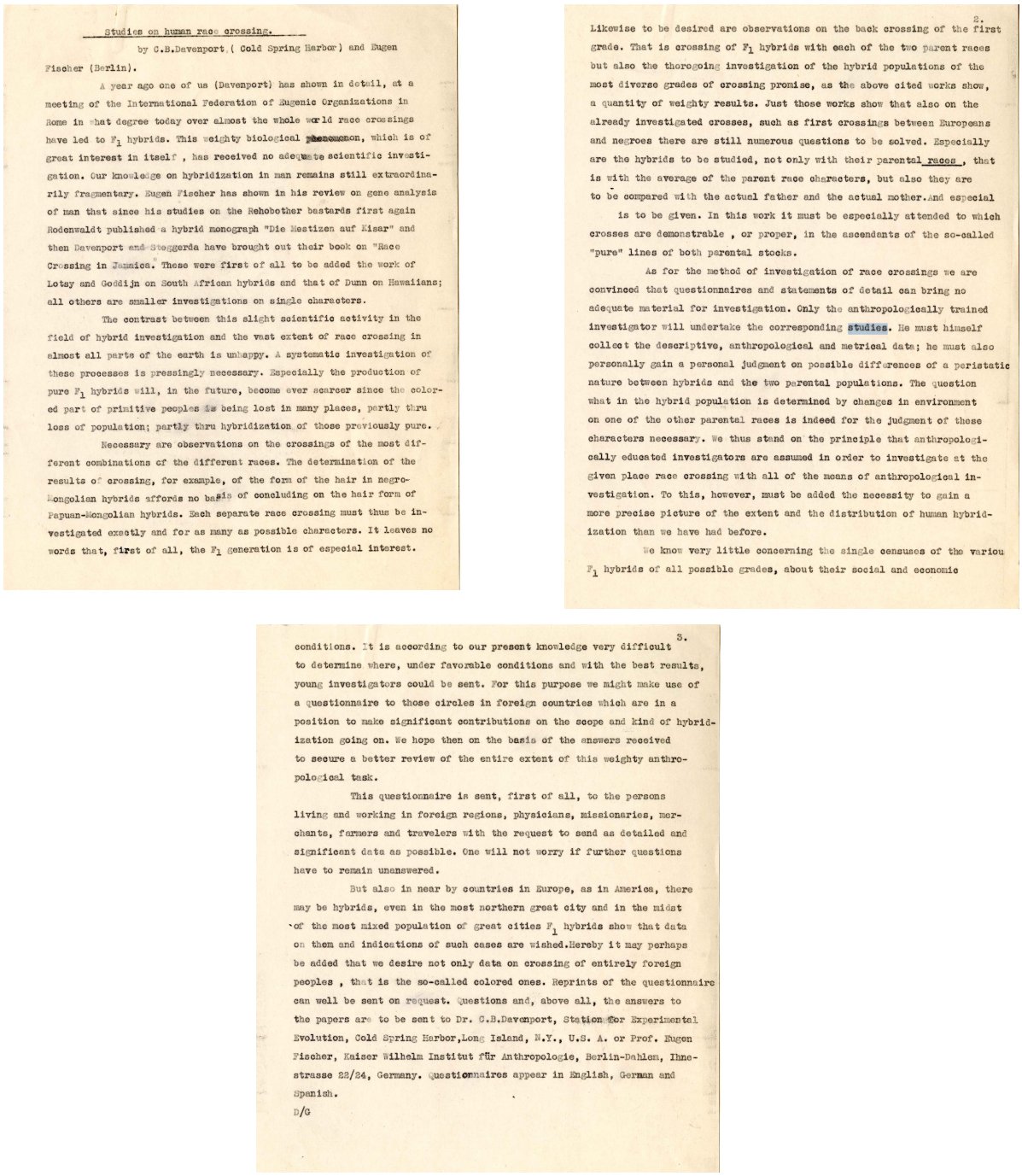
Davenport and Fischer also co-authored a paper titled "Studies on Human Race Crossing," [170] and an accompanying questionnaire[171] for the study of racial

170C.B Davenport (Cold Springs Harbor) and Eugen Fischer (Berlin), Studies on Human Race Crossing, Charles Benedict Davenport Papers, Box #37, American Philosophical Society Library.

171 Fragebogen zur Untersuchung der Rassenkreuzung, Charles Benedict Davenport Papers, Box #37, American Philosophical Society Library

crossbreeding. This significant paper explains the necessity of studying "hybrid populations." Specifically, Davenport and Fischer sought to study separate race-crossing individuals and hybrids in conjunction with their parental races. Fischer and Davenport stress the urgency of this investigation, as the production of pure F1 hybrid populations will become "scarcer" in the future since "the colored part of primitive peoples is being lost in many places, partly thru the loss of population; partly thru hybridization of those previously pure." Furthermore, they agreed that "scientific activity in the field of hybrid investigation and the vast extent of race crossing" was an important question confronting the eugenics movement, and there was a knowledge gap yet to be explored.[172]

172 C.B Davenport (Cold Springs Harbor) and Eugen Fischer (Berlin), Studies on Human Race Crossing, Charles Benedict Davenport Papers, Box #37, American Philosophical Society Library.



Studies on human race crossing.

by C.B.Davenport (Cold Spring Harbor) and Eugen Fischer (Berlin).

A year ago one of us (Davenport) has shown in detail, at a meeting of the International Federation of Eugenic Organizations in Rome in what degree today over almost the whole world race crossings have led to F_1 hybrids. This weighty biological phenomenon, which is of great interest in itself , has received no adequate scientific investigation. Our knowledge on hybridization in man remains still extraordinarily fragmentary. Eugen Fischer has shown in his review on gene analysis of man that since his studies on the Rehobother bastards first again Rodenwaldt published a hybrid monograph "Die Mestizen auf Kisar" and then Davenport and Steggerda have brought out their book on "Race Crossing in Jamaica. These were first of all to be added the work of Lotsy and Goddijn on South African hybrids and that of Dunn on Hawaiians; all others are smaller investigations on single characters.

The contrast between this slight scientific activity in the field of hybrid investigation and the vast extent of race crossing in almost all parts of the earth is unhappy. A systematic investigation of these processes is pressingly necessary. Especially the production of pure F_1 hybrids will, in the future, become ever scarcer since the colored part of primitive peoples is being lost in many places, partly thru loss of population; partly thru hybridization of those previously pure.

Necessary are observations on the crossings of the most different combinations of the different races. The determination of the results of crossing, for example, of the form of the hair in negro-Mongolian hybrids affords no basis of concluding on the hair form of Papuan-Mongolian hybrids. Each separate race crossing must thus be investigated exactly and for as many as possible characters. It leaves no words that, first of all, the F_1 generation is of especial interest.

2.

Likewise to be desired are observations on the back crossing of the first grade. That is crossing of F_1 hybrids with each of the two parent races but also the thorogoing investigation of the hybrid populations of the most diverse grades of crossing promise, as the above cited works show, a quantity of weighty results. Just those works show that also on the already investigated crosses, such as first crossings between Europeans and negroes there are still numerous questions to be solved. Especially are the hybrids to be studied, not only with their parental races , that is with the average of the parent race characters, but also they are to be compared with the actual father and the actual mother.And especial is to be given. In this work it must be especially attended to which crosses are demonstrable , or proper, in the ascendents of the so-called "pure" lines of both parental stocks.

As for the method of investigation of race crossings we are convinced that questionnaires and statements of detail can bring no adequate material for investigation. Only the anthropologically trained investigator will undertake the corresponding studies. He must himself collect the descriptive, anthropological and metrical data; he must also personally gain a personal judgment on possible differences of a peristatic nature between hybrids and the two perental populations. The question what in the hybrid population is determined by changes in environment on one of the other parental races is indeed for the judgment of these characters necessary. We thus stand on the principle that anthropologically educated investigators are assumed in order to investigate at the given place race crossing with all of the means of anthropological investigation. To this, however, must be added the necessity to gain a more precise picture of the extent and the distribution of human hybridization than we have had before.

We know very little concerning the single censuses of the variou F_1 hybrids of all possible grades, about their social and economic

3.

conditions. It is according to our present knowledge very difficult to determine where, under favorable conditions and with the best results, young investigators could be sent. For this purpose we might make use of a questionnaire to those circles in foreign countries which are in a position to make significant contributions on the scope and kind of hybridization going on. We hope then on the basis of the answers received to secure a better review of the entire extent of this weighty anthropological task.

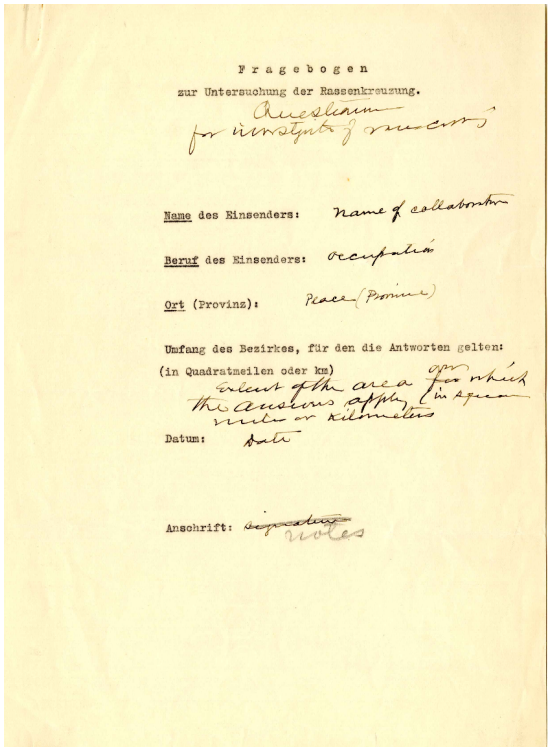
This questionnaire is sent, first of all, to the persons living and working in foreign regions, physicians, missionaries, merchants, farmers and travelers with the request to send as detailed and significant data as possible. One will not worry if further questions have to remain unanswered.

But also in near by countries in Europe, as in America, there may be hybrids, even in the most northern great city and in the midst of the most mixed population of great cities F_1 hybrids show that data on them and indications of such cases are wished.Hereby it may perhaps be added that we desire not only data on crossing of entirely foreign peoples , that is the so-called colored ones. Reprints of the questionnaire can well be sent on request. Questions and, above all, the answers to the papers are to be sent to Dr. C.B.Davenport, Station for Experimental Evolution, Cold Spring Harbor,Long Island, N.Y., U.S. A. or Prof. Eugen Fischer, Kaiser Wilhelm Institut für Anthropologie, Berlin-Dahlem, Ihnestrasse 22/24, Germany. Questionnaires appear in English, German and Spanish.

D/G

Figure 3.2: The Studies of Human Race Crossing: Collaborative paper authored by Charles Davenport (Cold Springs Harbor) and Eugen Fischer (Berlin).

Source: Charles Benedict Davenport Papers, Box #37, American Philosophical Society Library.



Fragebogen

zur Untersuchung der Rassenkreuzung.

Questionn
for investigation of racial

Name des Einsenders: Name of collaborator

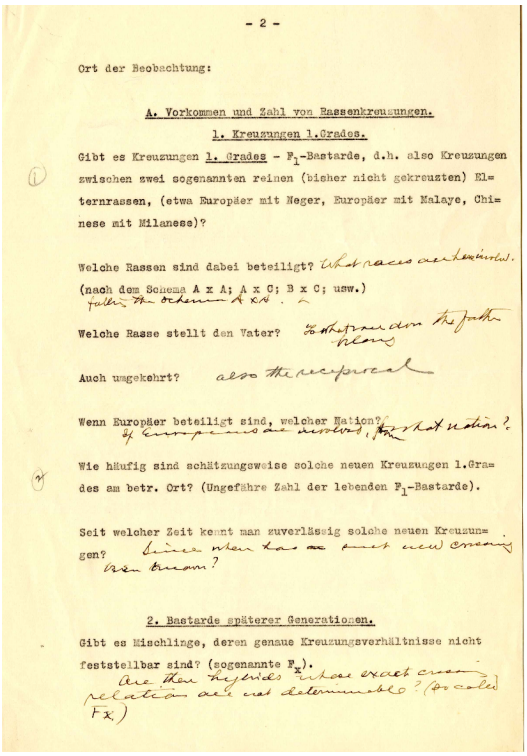
Beruf des Einsenders: occupation

Ort (Provinz): Place (Province)

Umfang des Bezirkes, für den die Antworten gelten:
(in Quadratmeilen oder km)
extent of the area for which
the answers apply
(in square
miles or kilometers)

Datum: Date

Anschrift: ~~Separation~~
Notes



- 2 -

Ort der Beobachtung:

A. Vorkommen und Zahl von Rassenkreuzungen.

1. Kreuzungen 1.Grades.

(1) Gibt es Kreuzungen 1. Grades - F_1-Bastarde, d.h. also Kreuzungen zwischen zwei sogenannten reinen (bisher nicht gekreuzten) Elternrassen, (etwa Europäer mit Neger, Europäer mit Malaye, Chinese mit Milanese)?

Welche Rassen sind dabei beteiligt? What races are involved.
(nach dem Schema A x A; A x C; B x C; usw.)
follow the scheme A x A

Welche Rasse stellt den Vater? Is the race of the father given

Auch umgekehrt? also the reciprocal

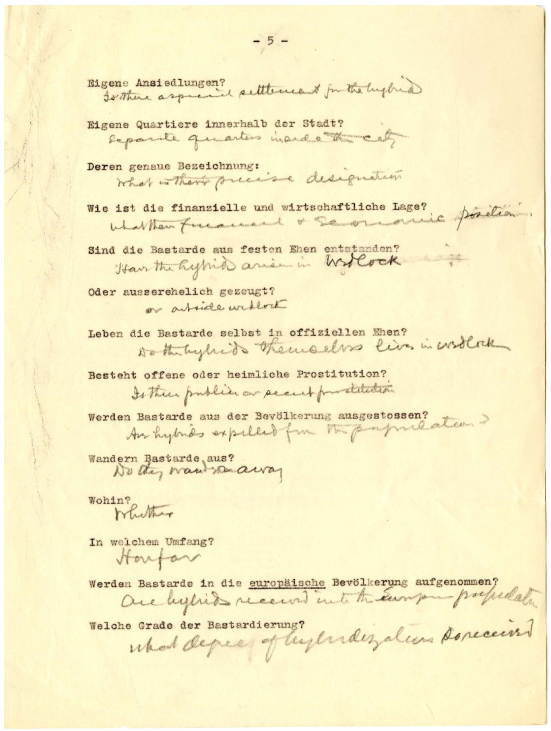
Wenn Europäer beteiligt sind, welcher Nation? If Europeans are involved, what nation?

(2) Wie häufig sind schätzungsweise solche neuen Kreuzungen 1.Grades am betr. Ort? (Ungefähre Zahl der lebenden F_1-Bastarde).

Seit welcher Zeit kennt man zuverlässig solche neuen Kreuzungen? Since when has one exact knowledge of new crossings been known?

2. Bastarde späterer Generationen.

Gibt es Mischlinge, deren genaue Kreuzungsverhältnisse nicht feststellbar sind? (sogenannte F_x).
Are there hybrids whose exact crossing relation are not determinable? (so called F_x)



- 5 -

Eigene Ansiedlungen?
Is there separate settlement for the hybrid

Eigene Quartiere innerhalb der Stadt?
Separate quarters inside the city

Deren genaue Bezeichnung:
What is their precise designation

Wie ist die finanzielle und wirtschaftliche Lage?
What is financial & economic position

Sind die Bastarde aus festen Ehen entstanden?
Have the hybrids arisen in wedlock

Oder ausserehelich gezeugt?
or outside wedlock

Leben die Bastarde selbst in offiziellen Ehen?
Do the hybrids themselves live in wedlock

Besteht offene oder heimliche Prostitution?
Is there public or secret prostitution

Werden Bastarde aus der Bevölkerung ausgestossen?
Are hybrids expelled from the population

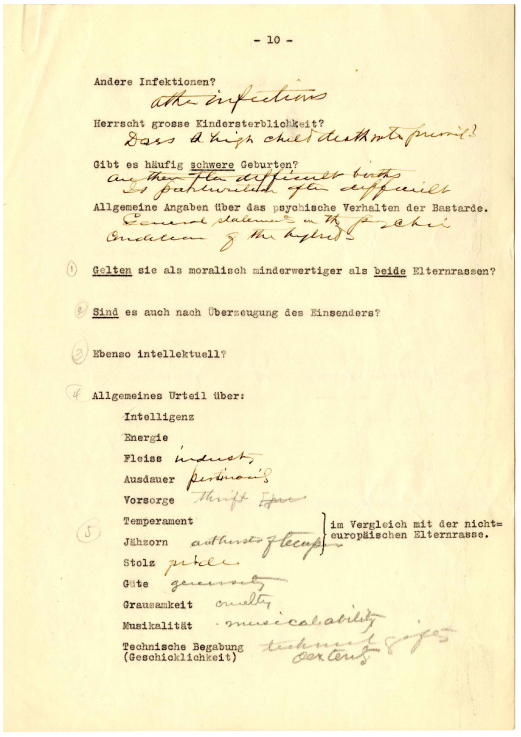
Wandern Bastarde aus?
Do they wander away

Wohin?
Whither

In welchem Umfang?
How far

Werden Bastarde in die europäische Bevölkerung aufgenommen?
Are hybrids received into the European population

Welche Grade der Bastardierung?
What degree of hybridization is received



- 10 -

Andere Infektionen?
other infections

Herrscht grosse Kindersterblichkeit?
Does a high child death prevail

Gibt es häufig schwere Geburten?
are there difficult births
Is parturition often difficult

Allgemeine Angaben über das psychische Verhalten der Bastarde.
General data on the psychic
behavior of the hybrids

(1) Gelten sie als moralisch minderwertiger als beide Elternrassen?

(2) Sind es auch nach Überzeugung des Einsenders?

(3) Ebenso intellektuell?

(4) Allgemeines Urteil über:

Intelligenz
Energie
Fleiss industry
Ausdauer perseverance
Vorsorge thrift
(5) Temperament
Jähzorn authority of temper
Stolz pride
Güte goodness
Grausamkeit cruelty
Musikalität musicality
Technische Begabung (Geschicklichkeit) technical gifts dexterity

} im Vergleich mit der nicht-europäischen Elternrasse.

Figure 3.3: Questionnaire created by Charles Davenport and Eugen Fischer titled "Fragebogen zur Untersuchung der Rassenkreuzung" translating to "Questionnaire for the Study of Racial Interbreeding."

Source: Charles Benedict Davenport Papers, Box #37, American Philosophical Society Library

Documented discussion on this study on racial crossing began as early as March 31, 1930, when Fischer offered to send Davenport a draft of a questionnaire Fischer created on racial mixture. Fischer explained that he hoped to publish an article about the questionnaire in multiple countries and requested that Davenport translate the article into English and publish it in an American journal of his choice. [173]

In a letter dated July 23, 1930, Fischer informed Davenport, he made them coauthors of the questionnaire on racial crossing and emphasized his request for Davenport to translate and publish the article about the questionnaire in English. Fischer assured Davenport he would publish the article in either the *Journal of Morphology and Anthropology* or "even better" in *Anthropos*.[174] On August 28, 1930, Davenport responded to Fischer, writing that his questionnaire was "admirable and exhaustive" and providing further feedback to increase participation.[175]

Davenport upheld his contribution, writing to Fischer on September 2, 1930, proposing to print the questionnaire at Cold Springs Harbor and for the Kaiser Wilhelm Institution to pay for postage. In addition, Davenport offered to

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173 Eugen Fischer, Letter to Charles Davenport, March 31, 1930, Charles Benedict Davenport Papers, Box #37, American Philosophical Society Library.
174 Fischer, Letter to Charles Davenport, July 23, 1930, Charles Benedict Davenport Papers, Box #37, American Philosophical Society Library.
175 Davenport, Letter to Eugen Fischer, August 28, 1930, Charles Benedict Davenport Papers, Box #37, American Philosophical Society Library.

distribute the survey to missionaries in the United States. [176]On January 28, 1932, Davenport assured Fischer that he would work on getting their joint paper, which he claimed Fischer has given him too much credit for, translated into English and published in the *American Journal of Physical Anthropology*.[177] Shortly afterward, on February 29, 1932, Fischer expressed his gratitude toward Davenport for his efforts to publish their shared work. [178]

Despite Davenport's claim that Fischer gave him far too much credit for the joint paper, Fischer wanted Davenport to have equal ownership of the paper. Publishing a paper showcasing both their names demonstrated their solidarity regarding their eugenics beliefs. Given the intertwining of eugenics with social aims, linking their work suggests a substantial likelihood of shared societal objectives concerning shaping population makeup. Also, Fischer decided that combining his and Davenport's expertise would enhance the work's integrity and potentially further both of their careers.

Fischer's decision to give Davenport equal credit for publishing "Studies on Human Race Crossing" also reflects their deep mutual respect, which extended beyond their decision to work closely together, demonstrating their profound appreciation for each other's accomplishments. Notably, in an October 5, 1926, letter, Davenport congratulated Fischer for being designated as the founder of the

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176 Davenport, Letter to Eugen Fischer, September 2, 1930, Charles Benedict Davenport Papers, Box #37, American Philosophical Society Library.

177 Davenport, Letter to Eugen Fischer, January 28, 1933, Charles Benedict Davenport Papers, Box #37, American Philosophical Society Library.

178 Fischer, Letter to Charles Davenport, February 29, 1932, Charles Benedict Davenport Papers, Box #37, American Philosophical Society Library.

Kaiser Wilhelm Institute. He expressed his desire to see the Institute and learn about its work.[179]

Likewise, on February 17, 1927, Davenport said he was "delighted" that Fischer would attend the International Federation of Eugenic Organizations (IFEO) meeting. Davenport proclaimed that one of the discussions at the conference would be on race crossing and acknowledged Fischer's expertise in the field, declaring, "no one has had greater practical experience in the field than you and we shall, of course, want to get the benefit of that experience in an address from you for the conference."[180] Davenport's admiration of Fischer is further solidified by the letter he sent on March 20, 1928, asking Fischer to serve on the committee of race crossing of the IFEO alongside other German hygienists and eugenicists such as Ernst Rodenwaldt, a well-respected scientist. [181]Davenport must have been impressed with Fischer's contributions to the IFEO because, in a December 2, 1929, letter, Davenport asked him to take over his position as the committee chairman on racial crossing.[182]

Likewise, the positive tone of Fischer's letters reflected his fondness for Davenport. In a letter dated October 24, 1932, Fischer informed Davenport with "great pleasure" that, as chairman of the Berlin Society for Anthropology,

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179 Davenport, Letter to Eugen Fischer, October 5, 1926, Charles Benedict Davenport Papers, Box #37, American Philosophical Society Library.
180 Davenport, Letter to Eugen Fischer, February 17, 1927, Charles Benedict Davenport Papers, Box #37, American Philosophical Society Library.
181 Davenport, Letter to Eugen Fischer, March 20, 1928, Charles Benedict Davenport Papers, Box #37, American Philosophical Society Library.
182 Davenport, Letter to Eugen Fischer, December 2, 1929, Charles Benedict Davenport Papers, Box #37, American Philosophical Society Library.

Davenport had been chosen as a corresponding member during the organization's meeting two days prior. Fischer declared, "The society particularly wanted to highlight your huge contributions to anthropology, human biology, and eugenics" and that he was immensely "pleased that this has strengthened the friendship between you and us in Berlin."[183]

Not only was there personal collaboration between Davenport and Fischer but their collusion also extended to an institutional level. The institutional relations between Cold Springs Harbor and the Kaiser Wilhelm Institute are apparent in a letter Davenport wrote to Fischer on November 4, 1932. Davenport thanked Fischer for informing him he was elected as a corresponding member of the Berliner Gesellschaft für Anthropologie, Ethnologie, and Urgeschichte. He gladly accepted this opportunity and looked forward to working closely with Fischer and his "anthropological colleagues."[184] Davenport's enthusiasm demonstrates his desire to work with Fischer and his colleagues to explore the possibilities of the progression of eugenics through collective effort. Davenport envisioned a close-working relationship among the colleagues of both prominent institutions.

The institutional collaboration between Cold Springs Harbor and the Kaiser Wilhelm Institute, facilitated by Davenport and Fischer, was part of a more considerable effort to garner international support for the eugenics movement,

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183 Fischer, Letter to Charles Davenport, October 24, 1932, Charles Benedict Davenport Papers, Box #37, American Philosophical Society Library.
184 Davenport, Letter to Eugen Fischer, November 4, 1932, Charles Benedict Davenport Papers, Box #37, American Philosophical Society Library.

especially in the late 1920s. The International Congress of Eugenics brought together the most advanced eugenic thinkers from around the world. Davenport worked persistently to recruit Fischer to the International Congress of Eugenics. In an undated letter from 1927, Fischer accepted Davenport's invitation to the IFEO and said he looked forward to "com[ing] and get[ting] to know a number of the most respected eugenicists and heritage theorists." [185]Furthermore, on January 8, 1927, Davenport wrote to Fischer that he believed there would be "a good representation of geneticists from the United States at the Congress in Berlin."[186]

Davenport and Fischer desired the International Congress of Eugenics to expand beyond Germany and the United States. Davenport's asked Fischer on May 15, 1931, whether a society dedicated to eugenics or genetics existed in Poland that could be admitted into the IFEO.[187] The tangible expansion of the eugenics organization is evident in a letter dated May 26, 1931, when Davenport sent Fischer potential nominations from countries including Belgium, Denmark, and the Dutch East Indies, for membership in the IFEO.[188]

Davenport and Fischer engaged in political advocacy as part of their efforts to further the eugenics movement internationally. Specifically, Fischer and Davenport weaved politics into their attempt to establish eugenic ideals in Rome at the International Eugenics Congress in 1929. In a December 4, 1928, letter,

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185 Fischer, Letter to Charles Davenport, undated 1927, Charles Benedict Davenport Papers, Box #37, American Philosophical Society Library.
186 Davenport, Letter to Eugen Fischer, January 8, 1927, Charles Benedict Davenport Papers, Box #37, American Philosophical Society Library
187 Davenport, Letter to Eugen Fischer, May 15, 1931, Charles Benedict Davenport Papers, Box #37, American Philosophical Society Library
188 Davenport, Letter to Eugen Fischer, May 26, 1931, Charles Benedict Davenport Papers, Box #37, American Philosophical Society Library

Davenport invited Fischer to attend the IFEO's next meeting in Rome[189]. In a letter dated April 29, 1929, Davenport further addressed the IFEO's upcoming meeting, stating that he hoped Fischer would contribute to the report presented by the committee on race crossing on "any outline of work that should be carried out, whether in the line of anthropometry strictly, the study of blood groups, or other observations."[190]

Leading up to the gathering, Davenport wrote to Fischer on August 3, 1929, urging him to stand united with the Federation in Rome to establish positive eugenics ideas, precisely the "high birth rate of the intellectually and physically better bloodlines." with "special reference to securing the adhesion of Mussolini to our point of view." Davenport viewed Mussolini as a "promising target" for implementing eugenics measures into Rome's population policies.[191] As referenced in Chapter Two, Fischer did attend the meeting and later presented a memo to Mussolini in 1929 urging the Italian dictator to push a eugenics agenda at "maximum speed."[192] The importance of getting Rome on board for the International Eugenics Movement was further highlighted in a letter dated December 2, 1929, where Davenport thanked Fischer for preparing Italian and

189 Davenport, Letter to Eugen Fischer, December 4, 1928, Charles Benedict Davenport Papers, Box #37, American Philosophical Society Library
190 Davenport, Letter to Eugen Fischer, April 28, 1929, Charles Benedict Davenport Papers, Box #37, American Philosophical Society Library
191 Davenport, Letter to Eugen Fischer, August 3, 1929, Charles Benedict Davenport Papers, Box #37, American Philosophical Society Library
192. "Kaiser Wilhelm Institute and Plaque, Still Image with Detail: CSHL DNA Learning Center," Cold Spring Harbor Laboratory DNA Learning Center, accessed March 29, 2024, https://dnalc.cshl.edu/view/15819-Kaiser-Wilhelm-Institute-and-plaque-still-image-with-detail.html.

German transcripts of his "memorandum for Mussolini."[193] Nearly a decade later, the seeds planted by Fischer came to fruition under Mussolini's leadership in Italy. In 1938, the Italian Fascist Party created race laws declaring Italians to be descendants of the Aryan race. The laws targeted Jews by abolishing marriages between Italians and Jews, banning Jews from positions in bank, government, and education industries, and confiscating properties of Jews. The laws also targeted African races.[194]

Throughout the documented communication period between Davenport and Fischer, eugenics research became well integrated into the international scientific community. Eugenics research received enough support to sustain prominent scientific institutes such as the Kaiser Wilhelm Institute and Cold Springs Harbor Laboratory. Eugenic ideas were openly discussed not only between practitioners in the United States and Germany but also worldwide, including in Japan, China, and India.[195]

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193. As Discussed in Chapter Two, at Fischer's meeting with Benito Mussolini in Rome in 1929, Fischer attempted to persuade Mussolini to carry out eugenic measures in his population policy by presenting Il Duce.

194. "Guido Mazzoni Pamphlet Collection," The Digital Scriptorium, Special Collections Library, Duke University, last modified December 1996, https://library.duke.edu/rubenstein/scriptorium/mazzoni/exhibit/wwii/C929.html

195. Saini, *Superior,* 48.

Criticism of Davenport and Fischer

Davenport and Fischer have been subject to criticism for their involvement in eugenics by their own contemporaries as well as more modern historians. One contemporary critic, Dr. Alexander Weinstein, affiliated with the Department of Zoology at Johns Hopkins University, had been involved in many debates over the controversies of the "handling of human genetic problems"[196] when racial hygiene in Nazi Germany was beginning to peak. Weinstein vocalized his thoughts in his speech at the American Society of Naturalists symposium conference on December 30, 1932,[197] where he stated: "The advance of science, which formerly inspired mankind with confidence, has in recent years resulted in diffidence and even despair."[198] The utilization of scientific medical knowledge to harm, rather than heal, during the Holocaust, forces a reexamination of the subjectivity of scientists like Eugen Fischer and Charles Davenport and its effect on their research and conclusions.

Geneticist and historian Bentley Glass (1906-2005) assessed contemporary critics of Davenport in his 1986 publication *Geneticists Embattled: Their Stand against Rampant Eugenics and Racism in America During The 1920s and 1930s*. Glass offered a unique perspective on the eugenics discourse of the twentieth

196. Burton E. Livingston, "The Atlantic City Meeting of the American Association for the Advancement of Science and Associated Societies," *Scienc*e 77 (1933): 123- 145.
197. Ibid.

198. Bentley Glass, "Geneticists Embattled: Their Stand against Rampant Eugenics and Racism in America during the 1920s and 1930s," *Proceedings of the American Philosophical Society* 130, no. 1 (1986): 146.

century because he experienced the evolution of the eugenics movement firsthand. Glass earned his master's degree from Baylor University in 1929. In the early 1930s, Glass worked on his postdoctoral genetics research under the mentorship of Hermann Joseph Muller, a practicing geneticist at the University of Texas and a contemporary of Davenport and Fischer. Glass continued his postdoctoral genetics research at the Kaiser Wilhelm Institute in Berlin on a National Research Council Fellowship. While performing research, Glass directly observed the spread of Nazi ideology and its implications for German society at the onset of the Holocaust, which led him to engage in a lifelong journey of studying and questioning the "frontiers between social and biological sciences."[199] Glass's experiences served as a framework for his study of the Holocaust. Through this lens, he addressed why scientists, specifically American eugenicists who noticed inconsistencies in arguments made by Davenport and his American colleague Edward M. East, did not speak out. Glass lays out three reasons American eugenicists remained somewhat "silent"[200] in the face of what is referred to as "eugenics propaganda."[201]

First, much less was known about human inheritance and genetics at the time. Second, scientists were more focused on their work than on the intersection of science with political and social issues. Finally, there were already some strong voices in the scientific field who were trying to "urge caution"[202] and "reject

199. "Dr. H. Bentley Glass: Ground-Breaking Geneticist – and Baylor Grad." *BaylorProud,* September 6, 2017. https://www2.baylor.edu/baylorproud/2017/09/dr-h-bentley-glass-ground-breaking-geneticist-and-baylor-grad/.

200. Glass, "Geneticists Embattled," 130.

201. Ibid.

202. Ibid, 131.

racism"[203] in eugenics. One of these voices was Hermann Joseph Muller, Glass's mentor, who spoke out against American eugenics in the 1930s.

There were also ongoing debates in the United States on the extent to which so-called racial traits were hereditary in the twentieth century. German American Anthropologist Franz Boas was pivotal in refuting the idea that racial traits were hereditary, an idea being used to fuel scientific racism. Boas disproved this notion by presenting data from his anthropological studies of Native American tribes in the Pacific Northwest, which exposed no fixed set of biologically determined physical characteristics associated with a specific "racial type."[204] He made his findings known to the government, specifically the United States Immigration Commission, and the general public via literature and pamphlets published in the early 1900s. This included his book *The Question of Race: Aryans and Non-Aryans* (1934), which challenged foundational Nazi ideology involving racial typing, racial heredity, and the "purity" of certain racial groups.[205] So, despite Glass's observation of "silence" on the part of some American eugenicists, he points to other strong voices were beginning to blur the boundary between science and politics in the United States.

In addition to voicing his objections regarding American eugenics research, in the 1930s, Muller began to criticize principles promulgated by German

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203. Ibid.

204 Photo Lot R97-19, Copies of Franz Boas photographs of Kwakiutl Indians, National Anthropological Archives, Smithsonian Institution.

205. Anne Maxwell, "Modern Anthropology and the Problem of the Racial type: the Photographs of Franz Boas," *Visual Communication* 12 no. 1,123-142.

geneticists a decade earlier. Muller wrote an extended review of *Human Heredity*, which emphasized the lack of scientific evidence used to back statements made in the textbook. In Muller's review, he critiques:

> Fischer and Lenz rapidly become less and less scientific, and we soon find them acting as mouthpieces for the crassest kind of popular prejudice. Throwing overboard their previously admitted principle that environment, as well as heredity, is of immense importance in the development of human characteristics, particularly those of a mental nature, they readily accept all the superficially apparent differences between human groups as indicative of corresponding genetic distinction.[206]

Glass highlighted that his mentor's review was written in 1933 before Hitler seized power, indicating there was some awareness in the United States that the science backing the Nazi racial theory was faulty. In doing so, Glass recognized Muller's prescience and trailblazing awareness of the catastrophic threat associated with abuse of scientific knowledge.

As the years progressed, apprehensions surrounding Nazi medicine resonated with increasing urgency within the American consciousness. William B. Provine, a distinguished professor of the Department of History and Division of Biological Sciences at Cornell University, explained that eugenicists in the United States and around the world became aware, and began to speak out against, the simplistic nature of the Nazi race doctrines and theories. Provine referenced what

206. Bentley Glass, "A Hidden Chapter of German Eugenics between the Two World Wars," *Proceedings of the American Philosophical Society* 125, no. 5 (1981): 357.

he believed was one of the most significant examples of critique against Nazi race theory at the time of the Holocaust, *We Europeans (1936)* by Julian Huxley. Huxley an English evolutionary biologist, humanist, and internationalist, firmly believed that the Nazi racial theory was flawed, and he not only published his beliefs but also vocalized them.[207] In a Galton lecture in England in 1936, Huxley declared, "The Nazi racial theory is a mere rationalization of Germanic nationalism on the one hand and anti-Semitism on the other."[208]

Not only were Fischer and Davenport's ideas seen as profoundly flawed by certain critics of their time, but scholars have also retrospectively analyzed and critiqued the science they promoted. Bentley Glass offers a unique perspective as someone who was both a contemporary and retrospective critic. He was a scientist and teacher who experienced the rising antisemitism in Germany while studying there in the 1930s. As he faced other ethical dilemmas throughout his career, Glass continued to study the unchecked eugenics and racism that prevailed in the United States and Germany during World Wars I and II.[209] Glass wrote the book, *Progress or Catastrophe: The Nature of Biological Science and its Impact on Human Society* in 1985, to explore how science is a microcosm of society and is, in a way, a testament to ethical values. Of course, he also emphasized how science has the potential to be catastrophic. Glass was inspired to write this book based on his

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207. Paul Weindling, "Julian Huxley and the Continuity of Eugenics in Twentieth Century Britain." *Journal of Modern European History / Zeitschrift Für Moderne Europäische Geschichte / Revue d'histoire Européenne Contemporaine* 10, no. 4 (2012): 485.

208. J.S. Huxley, Eugenics and Society. *Eugenical Review* 28 (1938): :11-31.

209. Douglas Martin, "H. Bentley Glass, Provocative Science Theorist, Dies at 98," The New York Times, January 20, 2005, https://www.nytimes.com/2005/01/20/science/h-bentley-glass-provocative-science-theorist-dies-at-98.html.

observations of and engagement in scientific concerns and uncertainties throughout his career. These issues included the discussion of the risk of genetic damage caused by radiation in the 1930s and 40s in the United States; the conflict between science and politics in Nazi Germany and Marxist countries; concern about testing nuclear warfare and the atomic bomb in the United States in the 1950s; and the implications of a rapidly increasing world population. As science continued to progress, questions about its ethical responsibilities and potential consequences for society grew as well.[210]

In chapter five of *Progress and Catastrophe*, titled The Genetic Basis of Racial Differences, Glass evaluated the unsoundness of the Nazis' justification for the persecution of Jews and other "inferior races" based on the concept of genetic racial differences. Glass underscored the ability of racial "hybrids" to adapt to their environment. As many geneticists and anthropologists have declared, adaptability to new environments would be impossible if humankind were divided into different species. Also, Glass disputed that certain racial traits were "detrimental." If a gene was "detrimental," the force of selection to eliminate the gene would be heightened, becoming stronger than mutation. Therefore, Glass contended, "since they [racial traits] are common, they cannot be very detrimental."

In his piece *Geneticists Embattled*, Glass delved further into the differing opinions on eugenic matters among geneticists in the United States in the 1920s

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210. Bentley Glass, *Progress or Catastrophe: The Nature of Biological Science and Its Impact on Human Society*, (New York: Praeger, 1985): xxvi- xxix.

and 1930s. Glass highlights the steadfast commitment of Davenport and Fischer to their viewpoints, particularly their belief that interracial hybrids were inherently less robust. Davenport and Fischer were fascinated by the perceived "inferiority" of "hybrids," a fascination evident in the questionnaire they developed to assess various aspects of "bastard populations," including temperament, intelligence, intellect, talent, cruelty, and musicality.[211] In retrospect, Glass explained, "to a human geneticist of 1985" that it is clear a "valid eugenic program, one that would go beyond the effort to eliminate or reduce in frequency those few inherited genetic disorders that still remain beyond the powers of environmental amelioration, including medical and biochemical therapy, remains premature-perhaps unattainable."[212]

Additionally, Glass scrutinized Davenport and Edward M. East for inconsistencies in their arguments in which they downplayed the environment's role in developing human characteristics. These inconsistencies were particularly alarming in East's case. He had studied plant inbreeding and outbreeding, which revealed that human heredity is far from a straightforward process and instead involves complexities beyond a mere correlation of genes and resulting traits. Yet, East disregarded this notion and used simple Mendelian principles to make racist and binary statements. For example, in his book *Mankind at the Crossroads* (1923), East's racist thinking reveals itself when he declared:

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211 Fragebogen zur Untersuchung der Rassenkreuzung, Charles Benedict Davenport Papers, Box #37, American Philosophical Society Library

212. Glass, "Geneticists Embattled," 153.

> the negro race as a whole is possessed of undesirable transmissible qualities both physical and mental, which seem to justify not only a line but a wide gulf to be fixed permanently between it and the white race.[213]

Because this logic was scientifically tenuous, this statement was most likely a result of racism and subjectivity creeping into East's work. Glass consistently described and emphasized how, through science, an individual can do good and evil to others.[214] Therefore, the statement made by East in *Mankind at the Crossroads,* and remarks made by other like-minded geneticists in the early 1900s, demonstrate that some scientists used their training and knowledge to propagate racism.

Accountability

> *"Science is ineluctably involved in questions of values, is inescapably committed to standards of right and wrong and unavoidably moves in the large toward social aims."*[215]

Scientific knowledge is a powerful and incredible tool that can solve problems (social, environmental, etc.) as society progresses. Unfortunately, scientific knowledge can also be abused to further a social agenda. Adolf Hitler expressly acknowledged the power of science in serving his "material wants."[216]

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213. Edward M. East, *Mankind at the Crossroads*, (New York; London, Charles Scribner: 1923), 133.

.214 Glass, *Progress or Catastrophe*, 135.

215. Ibid, 115.

216. Ibid, 127.

Hitler proclaimed, "Science is a social phenomenon, and like every other social phenomenon, is limited by the injury or benefit it confers on the community."[217] While Hitler and the Nazi party harnessed scientific backing to their advantage, they were hardly the only ones.[218]

Hitler's commandeering of science as a social phenomenon was made possible by the collaborative efforts of scientists such as Eugen Fischer and Charles Davenport. The two fueled each other's theories by claiming they were engaged in "real" and "valid" science backed up by scientific evidence. Their close communication throughout the early 20th century legitimized their respective eugenics agendas, regardless of the destructive societal implications of their work.

Davenport and Fischer's mutual admiration for each other's research illustrates the "inescapably subjective"[219] nature of science noted by Bentley Glass. Glass observed that science does not take place in a vacuum but is rather susceptible to the same calamities as humans. Despite the desire for objectivity, each scientist brings different values and perspectives, inserting inevitable subjectivity into the scientific process. In reality, the "objective" aspects of science are determined by agreed-upon "truths," which is why communication among scientists critically contributes to the vulnerability of science.[220] As evidenced by the correspondence between Davenport and Fischer, which validated the

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217. Ibid, 127.

218. Ibid, 127.

219. Ibid, 118.

220. Glass, *Progress or Catastrophe*, 118-122.

inhumane medicine practiced during the Holocaust, subjectivity in science has real dangers and consequences. By justifying and perpetuating the beliefs of their peers, scientists can submit unsubstantiated work as established concrete evidence.

The notion that Nazi medicine was supported by science raises the question of who was actually responsible for contributing to the progression of the Holocaust. Revisiting Franz Weidenreich's declaration about Eugen Fischer is illustrative of this point. Weidenreich stated, “If anyone, he [Fischer] is the man who should be put on the list of war criminals.” Fischer’s work played an integral role in legitimizing the Nazi Party’s use of science to serve their “material want”—the creation of the “master race”—which tragically involved the most unfathomable cruelty, horror, abuse, and even murder.

While Fischer and his German counterparts should undoubtedly be held accountable for their involvement in perpetuating the Holocaust, the hands of their American counterparts, most notably Charles Davenport, are not clean either. Davenport not only agreed with the scientific claims made by Fischer but also worked with Fischer to further solidify these claims, which were later used to substantiate the Nazi racial theory. Beyond Charles Davenport and Eugen Fischer, many eugenicists around the world remained unscathed for their respective roles in promoting race science and eugenics leading up to and during World War II.

CONCLUSION

When reflecting on human-created atrocities, it is natural to place blame on the obvious perpetrators. In the case of the Holocaust, the "face" of evil was Adolf Hitler and other members of the Nazi Party. Germany rightfully took the brunt of the culpability for the Holocaust. Gavin Schaffer, a professor of British history at the University of Birmingham and the author of *Racial Science and British Society, 1930-1962,* elaborates: "It was much easier to point the finger at the horrible Nazis, and the same went for the scientists. This absence of introspection was rooted in the ability to point fingers at other people for being responsible for the perversion of science."[221] However, assigning a scapegoat without deeper analysis overlooks the historical, scientific construction of race that provided support for the Holocaust's atrocities.

The Nuremberg Trials, which began in 1945, attempted to bring "Nazi war criminals to justice."[222] While the Nuremberg Trials were an indispensable "milestone" in setting the precedent for serving justice in instances of genocide and crimes against humanity, the trials were insufficient so far as they failed to bring down everyone involved with perpetuating the rampant Nazi regime. While some, not all, physicians on the front lines of the experiments were put on trial at Nuremberg, many scientists who paved the way for Nazi atrocities escaped

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221221. Angela Saini, *Superior: The Return of Race Science*, (Boston: Beacon Press, 2019), 52.

222. "Nuremberg Trials - Definition, Dates & Purpose." History.com. Accessed March 29, 2024. https://www.history.com/topics/world-war-ii/nuremberg-trials.

scrutiny at Nuremberg and in other post-war reckonings. As Angela Saini queries in her book *Superior: The Return of Race Science*, "Were the rest of the scientists in the world so blameless?"[223] Certainly not. Saini's question highlights the necessity of assessing science's role in facilitating the Holocaust and challenges society to learn lessons from Nazi science and medicine to avoid similar abuses.

Eugen Fischer and Charles Davenport were among the scientists whose liability for their contributions to the Nazi actions has not been fully acknowledged. Both men were heavily involved in the distortion of scientific principles leading up to and during World War II. Their eugenics-based rationale established the Jews as a separate and "inferior" race subject to "racial hygiene" measures. Fischer is an obvious target for his contribution to the Holocaust due to his physical presence in Germany and leading role at the Kaiser Wilhelm Institute (KWI). He was awarded the "Alderscild des Dritten Reiches" (eagle shield of the Third Reich) in 1943,[224] which was "Hitler's substitute for the Nobel Prize,"[225] demonstrating his devotion to the Nazi party cause. Further, the KWI was renamed to the Eugen Fischer-Institut after he retired from his position as Director in 1942. Nevertheless, the close communication between Davenport and Fischer throughout the early 1900s reveals that Davenport was by no means blameless. Moreover, other eugenicists propagating similar ideas internationally

223. Saini, Superior, 41.

224. Hildebrandt, Anatomy of Murder, 159.

225. Ibid.

also further legitimized dangerous ideas that the Nazis adopted to support their actions.

Not only did Fischer and Davenport escape full accountability, but they also enjoyed successful careers following World War II. In 1947, Fischer received a denazification verdict as a "fellow traveler."[226] As early as 1948, Fischer continued to publish his work, including anthropological articles for *Zeitschriftfar Morphologie und Anthropologie*, a journal of which he was editor, until 1964.[227] He also maintained his relationships with colleagues and students such as Otmar von Verschuer and Fritz Lenz. By helping his former students acquire teaching positions in "genetics" at universities,[228] Fischer further bolstered his legacy in the teaching of postwar German human genetics.[229] As Dr. Sabine Hildebrandt reveals in *Anatomy of Murder*: "Of the nine institutes of human genetics or genetics-oriented anthropology existing in the FRG after the war, four were led by students of Fischer."[230] In 1954, Fischer received legal status as a professor of emeritus at the University of Freiberg.[231] On July 9, 1967, Eugen Fischer died at the age of 93.

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226. Hildebrandt, *Anatomy of Murder*, 160.

227. Bentley Glass, "A Hidden Chapter of German Eugenics between the Two World Wars," *Proceedings of the American Philosophical Society* 125, no. 5 (1981): 360.

228. United States Holocaust Memorial Museum. "Deadly Medicine: Creating the Master Race." United States Holocaust Memorial Museum. accessed February 18, 2024. https://www.ushmm.org/exhibition/deadly-medicine/profiles/.

229. Sabine Hildebrandt, "Anatomy in the Third Reich: an outline, Part 2. Bodies for Anatomy and Related Medical Disciplines," *Clinical Anatomy* 22, no. 8 (2009): 160.

230. Hildebrandt, The Anatomy of Murder, 160.

231. Ibid.

For his part, Charles Davenport enjoyed a successful career in the United States, working in the field that was recast as "human genetics," a more palatable term than "eugenics" due to the post-World War II "fear of guilt by scientific association with genocide."[232] Edwin Black, author of the award-winning chronicle *War Against the Weak* refers to the rebranding as "newgenics."[233] While Davenport continued to advocate for strict biological order, these ideas were generally not well-received in the United States[234] by the mid-1930s. As the specter of the Holocaust loomed in Europe, eugenicists in the United States began to reflect on whether their own beliefs were distinguishable from Nazi-affiliated eugenicists. Black hypothesizes, "Within the smoke of Nazi eugenics, many saw a frightful image. Perhaps they saw themselves."[235]

Davenport retired from his three directorship positions at Cold Spring Harbor in 1934[236] and became an associate of the Carnegie Institute.[237] In the last ten years of his career, he authored many papers, a book, and another edition of *Statistical Methods: With Special Reference to Biological Variation*.[238] Davenport served as curator and director of the Whaling Museum at Cold Spring Harbor,

232. Edwin Black, *War against the Weak: Eugenics and America's Campaign to Create a Master Race,* (Washington, D.C.: Dialog Press, 2012), 411.
233. Ibid, 421.
234. Ibid, 412-413.
235. Ibid, 417.
236. Cera R. Lawrence, "Charles Benedict Davenport (1866-1944) | The Embryo Project Encyclopedia," Arizona State University, May 10, 2011, https://embryo.asu.edu/pages/charles-benedict-davenport-1866-1944.
237. Oscar Riddle, Biographical Memoir of Charles Benedict Davenport, 1866-1944 (United States: National Academy of Sciences, 1948), 91.
238. Ibid.

which he established in 1942.[239] His attempt to personally secure the skull of a killer beached whale for the museum proved fatal.[240] Davenport caught pneumonia while on this mission and died on February 8, 1944.[241] By the year of Davenport's death, eugenics ideas had fallen even further out of favor in the United States.

While Davenport and Fischer successfully continued their careers, their direct influence within the eugenics movement waned, but their legacy persisted. While the scientists hardly faced retribution, their role in the Holocaust cannot be glossed over. Fischer understood his role in utilizing his scientific expertise to align with the Nazi agenda. Davenport knowingly engaged with Fischer and the German scientific theories that underlaid Hitler's seizure of power. Ultimately, the trifecta of medical science, racist thinking, and blatant antisemitism fused to enable the Nazi Socialist Party and physicians in Nazi Germany to experiment and inflict pain upon their victims. The respective roles played by Davenport and Fischer illuminated important questions about the subjectivity of scientists and how scientific findings can be manipulated to further political convictions and social biases. While science represents progress and the potential for tremendous good, its inherently manipulable nature can result in humanity's downfall.

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239. Cold Spring Harbor Laboratory Scientific Profiles, "Charles B. Davenport (1866-1944) Biography," Cold Spring Harbor Laboratory, date accessed, https://library.cshl.edu/sp/scientists/charles_davenport/davenport_biography.html.

240. Riddle, "Biographical Memoir," 91.

241. Ibid.

BIBLIOGRAPHY

Archival/Manuscript Collections

"Guido Mazzoni Pamphlet Collection." The Digital Scriptorium, Special Collections Library, Duke University, Last modified December 1996. https://library.duke.edu/rubenstein/scriptorium/mazzoni/exhibit/wwii/C929.html.

Professional Correspondence Between Charles Davenport as Director of the Biological Laboratory at Cold Spring Harbor and Eugen Fischer. Mss.B. D27, Box 37. Charles Benedict Davenport Papers. American Philosophical Society Library. 1908-1933.

Government Documents

Harvard Law School Library. Nuremberg Trials Project a Digital Document Collection. Harvard Law School Library. December 18, 2003. https://lccn.loc.gov/2003557854.

Interrogation of Professor Schilling. United States vs. Martin Gottfried Weiß et al.. p. 432.

Linder, Prof. "Indictments." The Nuremberg Trials. Accessed March 23, 2024. http://law2.umkc.edu/faculty/projects/ftrials/nuremberg/NurembergDoctorTrial.html.

Photo Lot R97-19, Copies of Franz Boas photographs of Kwakiutl Indians, National Anthropological Archives, Smithsonian Institution.

Records of the United States Nuernberg War Crimes Trials United States of America v. Karl Brandt et. al. Case I. November 21, 1945 - August 20, 1946.

Primary Sources

Baur, Erwin, Eugen Fischer, and Fritz Lenz. *Human Heredity*, 3rd ed. Translated by Eden & Cedar Paul. 3rd ed. New York: Macmillan, 1931.

Cance, Alexander E., James A. Field, Robert De C. Ward, and Prescott F. Hall. "First Report of the Committee on Immigration of the Eugenics Section," *Journal of Heredity* 3, no. 4 (1912): 249-55. doi: 10.1093/oxfordjournals.jhered.a105924.

East, Edward M. *Mankind at the Crossroads*. New York; London: Charles Scribner, 1923.

Fischer, Eugen. *Racial Origin and Earliest Racial History of the Hebrews*. Boring, Oregon: CPA Books, Inc., 1992.

Glass, Bentley. "A Hidden Chapter of German Eugenics between the Two World Wars." *Proceedings of the American Philosophical Society* 125, no. 5 (1981): 357–67. http://www.jstor.org/stable/986198.

———"Geneticists Embattled: Their Stand against Rampant Eugenics and Racism in America during the 1920s and 1930s." *Proceedings of the American Philosophical Society* 130, no. 1 (1986): 130–54. http://www.jstor.org/stable/987094.

———*Progress or Catastrophe: The Nature of Biological Science and Its Impact on Human Society*. New York: Praeger, 1985.

Hall, Prescott F. (Prescott Farnsworth), and Cornell University Library. Immigration and Other Interests of Prescott Farnsworth Hall. Internet Archive. New York: Knickerbocker Press, 1922. https://archive.org/details/cu31924064104254/page/n25/mode/2up.

Livingston, Burton E. "The Atlantic City Meeting of the American Association for the Advancement of Science and Associated Societies." *Science* 77, no. 1988 (1933): 123–54. http://www.jstor.org/stable/1658402.

Weidenreich, Franz. "Letter to the Editor: On Eugen Fischer." *Science*, 104 (1946): 399.

Secondary Sources

Alexander, Charles C. "Prophet of American Racism: Madison Grant and the Nordic Myth." *Phylon (1960-)* 23, no. 1 (1962): 73–90. doi: 10.2307/274146.

Allen, Garland E. "The Eugenics Record Office at Cold Spring Harbor, 1910-1940: An Essay in Institutional History." *Osiris* 2 (1986): 225–64. http://www.jstor.org/stable/301835.

Ballin, Hans. "Picture of Hessy Taft used in Nazi propaganda digital image." Washington Post, July 7, 2014. https://www.washingtonpost.com/news/morning-mix/wp/2014/07/07/the-perfect-aryan-child-the-nazis-used-in-propaganda-was-actually-jewish/.

Barbosa, Thiago Pinto, Owen Brown, Julia Kirchner, and Julia Scheurer. "Remembering the Anthropological Making of Race in Today's University: An Analysis of a Students' Memorial Project in Berlin." *Etnofoor* 30, no. 2 (2018): 29–48. https://www.jstor.org/stable/26543127.

"Beiglböck, Wilhelm - Biography ° Gedenken Und Erinnern, DGIM." n.d. Www.dgim-History.de. Accessed March 17, 2024, https://www.dgimhistory.de/en/biography/Beiglb%C3%B6ck%3BWilhelm%3B1639.

Black, Edwin. *War Against the Weak: Eugenics and America's Campaign to Create a Master Race.* Washington, D.C.: Dialog Press, 2021.

Caplan, Arthur Leonard. *When Medicine Went Mad: Bioethics and the Holocaust*. Totowa, NJ: Humana Press, 1992.

Cold Spring Harbor Laboratory Scientific Profiles. "Charles B. Davenport (1866-1944) Biography." Cold Spring Harbor Laboratory. Accessed March 29, 2024. https://library.cshl.edu/sp/scientists/charles_davenport/davenport_biography.html.

Czech, Herwig, Sabine Hildebrandt, Shmuel Reis, Tessa Chelouche, Mary Frank Fox, Esteban, González-López, Étienne Lepicard, et al. "The Lancet Commission on Medicine, Nazism, and the Holocaust: Historical Evidence, Implications for Today, Teaching for Tomorrow." *The Lancet* 402, no. 10415 (2023): 1867-1940. doi: 10.1016/s0140-6736(23)01845-7.

"Dr. H. Bentley Glass: Ground-Breaking Geneticist -- and Baylor Grad." BaylorProud. September 6, 2017. https://www2.baylor.edu/baylorproud/2017/09/dr-h-bentley-glass-ground-breaking-geneticist-and-baylor-grad/.

Duffy, Thomas P. 2011. "The Flexner Report--100 Years Later." *The Yale Journal of Biology and Medicine* 84, no.3 (2011): 269–76. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3178858/.

Dunn, L. C. "Cross Currents in the History of Human Genetics." *American Journal of Human Genetics* 14, no. 1 (1962.): 1–13. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1932193/.

The Editors of Encyclopaedia Britannica. "Humboldt University of Berlin." Encyclopaedia Britannica. April 24, 2020. https://www.britannica.com/topic/Humboldt-University-of-Berlin.

Erichsen, C. "German-Herero conflict of 1904–07." Encyclopaedia Britannica. Accessed March 15, 2024. https://www.britannica.com/topic/German-Herero-conflict-of-1904-1907.

Fangerau, Heiner M. "Making Eugenics a Public Issue." *Science & Technology Studies* 18, no. 2 (2005): 46–66. doi: 10.23987/sts.55179.

Fangerau, Heiner, and I. Müller. "[the Standard Textbook on Racial Hygiene by Erwin Baur, Eugen Fischer, and Fritz Lenz as Viewed by the Psychiatric and Neurological Communities from 1921 to 1940]." *Der Nervenarzt* 73, no. 11 (2002): 1039–46. doi: 10.1007/s00115-002-1421-1.

"Fangerau." *Universitätsklinikum Düsseldorf*. Accessed March 20, 2024. https://www.uniklinik-duesseldorf.de/en/department-of-the-history-philosophy-and-ethics-of-medicine/team/fangerau.

"Fischer, (Leopold Franz) Eugen." Complete Dictionary of Scientific Biography. Encyclopedia.com. Accessed March 18, 2024. https://www.encyclopedia.com/science/dictionaries-thesauruses-pictures-and-press-releases/fischer-leopold-franz-eugen.

Fritz-Haber-Institut. "Historical Review of the Fritz Haber Institute." Fritz-Haber-Institut. Accessed March 7, 2024. https://www.fhi.mpg.de/history.

Gasiewicz. *Dr. Klaus Karl Schilling, a physician who infected over one thousand. prisoners with malaria in his experiments at the Dachau camp, defends himself at the trial of former camp personnel and prisoners from Dachau.* 1945.

Gerd Heidemann. "Der Fall Clauberg. Die Wunden Werden Aufgerissen." *Der Stern* 10, no. 3 (1957), cited in: Weinberger, Fertility Experiments, 388.

Glass, Bentley. "A Hidden Chapter of German Eugenics between the Two World Wars." *Proceedings of the American Philosophical Society* 125, no. 5 (1981): 357–67. http://www.jstor.org/stable/986198.

Grodin, Michael, and George Annas. “Physicians and Torture: Lessons from the Nazi Doctors.” *International Review of the Red Cross* 89 (867): 635–54. doi: 10.1017/s1816383107001208.

"Harvard’s Eugenics Era." Harvard Magazine. Last modified April 2016. https://www.harvardmagazine.com/2016/02/harvards-eugenics-era.

Hildebrandt, Sabine. *The Anatomy of Murder*. Oxford, New York: Berghahn Books, 2016.

——— “Medicine, Nazism, and the Holocaust: Essential Lessons for Health Professionals.” MedpageToday. January 26, 2024. https://www.medpagetoday.com/opinion/second-opinions/108438.

——— “Anatomy in the Third Reich: An Outline, Part 2. Bodies for Anatomy and Related Medical Disciplines.” *Clinical Anatomy* 22, no. 8(2009): 894–905. doi: 10.1002/ca.20873.

History.com. “Nuremberg Trials.” History. A&E Television Networks. January 29, 2010. https://www.history.com/topics/world-war-ii/nuremberg-trials.

Howell, Joel D., Laura Hirshbein, and Alexandra Minna Stern. "Entanglements of Eugenics, Public Health, and Academic Medicine: Reckoning with the Life and Legacies of Victor C. Vaughan." *Bulletin of the History of Medicine* 96, no. 4 (2022): 516-544. doi: 10.1353/bhm.2022.0049.

“Immigration Act of 1924 (Johnson-Reed Act).” Immigration History, Last modified February 1, 2020. https://immigrationhistory.org/item/1924-immigration-act-johnson-reed-act/.

“Kaiser Wilhelm Institute and Plaque, Still Image with Detail: CSHL DNA Learning Center.” Cold Spring Harbor Laboratory DNA Learning Center. Accessed March 29, 2024. https://dnalc.cshl.edu/view/15819-Kaiser-Wilhelm-Institute-and-plaque-still-image-with-detail.html.

Kevles, Daniel J. “Eugenics and Human Rights.” *BMJ* 319 (7207): 435–38. doi 10.1136/bmj.319.7207.435.

Lawrence, Cera R. “Charles Benedict Davenport (1866-1944) | the Embryo Project Encyclopedia.” Arizona State University. May 10, 2011. https://embryo.asu.edu/pages/charles-benedict-davenport-1866-1944.

Leeuw, Daan de. “‘In the Name of Humanity’: Nazi Doctors and Human Experiments in German Concentration Camps.” *Holocaust and Genocide Studies* 34, no. 2 (2020). doi: 10.1093/hgs/dcaa025.

Ludmerer, Kenneth M. *Learning to Heal*. New York: Basic Books, 1988.

Martin, Douglas. “H. Bentley Glass, Provocative Science Theorist, Dies at 98.” The New York Times, January 20, 2005. https://www.nytimes.com/2005/01/20/science/h-bentley-glass-provocative-science- theorist-dies-at-98.html.

Maxwell, Anne. "Modern Anthropology and the Problem of the Racial Type: The Photographs of Franz Boas." *Visual Communication* 12, no. 1 (2013): 123–42. https://doi.org/10.1177/1470357212462782.

McClelland, Charles E. "The German Model for American Medical Reform." Isabella Löhr, Matthias Middell and Hannes Siegrist (eds.). *Kultur und Beruf in Europa* [Europäische Geschichte in Quellenund Essays, Vol. 2]. (2012): 189-96. https://digitalrepository.unm.edu/hist_fsp/2

McHaney, James, Alexander Hardy, Arnost Horlik-Hochwald, and Esther Johnson. Brief: Prosecution Closing Brief against Wilhelm Beiglboeck. NMT Prosecution (Nuremberg Military Tribunals). 1947.

Miko, Ilona. "Gregor Mendel and the Principles of Inheritance." *Nature Education* 1, no. 1 (2008): 134. https://www.nature.com/scitable/topicpage/gregor-mendel-and-the-principles-of-inheritance-593/.

Morris-Reich, Amos. "Curatorial Interpretation: Portrait of a Youth (09.181.4) and Inserted Panel Portrait (11.139)." Portrait. *The Metropolitan Museum of Art*. December 31, 2021. https://www.metmuseum.org/about-the-met/collection-areas/egyptian-art/object-pages/youth-with-surgical-cut.

Müller-Hill, Benno. 1988. *Murderous Science: Elimination by Scientific Selection of Jews, Gypsies, and Others in Germany.* United Kingdom: Cold Spring Harbor Laboratory Press: Oxford University Press, 1933-1945.

PBS. "Joseph Goebbels (1897-1945)". PBS. Accessed February 19, 2024. https://www.pbs.org/wgbh/americanexperience/features/goebbels-biography/.

Powell, Alvin. "Evolution of 'Final Solution.'" *Harvard Gazette*. April 21, 2011. https://news.harvard.edu/gazette/story/2011/04/evolution-of-final-solution/.

"Prof. Dr. Eugen Fischer | Städtische Museen Freiburg." n.d. Onlinesammlung.freiburg.de. Accessed March 19, 2024. https://onlinesammlung.freiburg.de/en/person/3656966B4034FD9AC6E6FB05342F2160.

Proctor, Robert. "Nazi Medical Ethics: Ordinary Doctors?" in *Military Medical Ethics*, ed. Thomas E. Beam, Edmund D. Pellegrino, Anthony E. Hartle, Edmund G. Howe, and Linette R. Sparacino, 2 vols. Part of the series *Textbooks of Military Medicine*. Washington, DC: Office of the U.S. Surgeon General, 2004.

Provine, William B., and Elizabeth S. Russell. "Geneticists and Race." *American Zoologist* 26, no. 3 (1986): 857–87. http://www.jstor.org/stable/3883010.

Riddle, Oscar. *Biographical Memoir of Charles Benedict Davenport, 1866-1944*. United States: National Academy of Sciences, 1948.

Roelcke, Volker. "Nazi Medicine and Research on Human Beings." *The Lancet* 364 (2004): 6-7. doi: 10.1016/s0140- 6736(04)17619-8.

Rosenberg, Charles E. “Charles Benedict Davenport and the Beginning of Human Genetics.” *Bulletin of the History of Medicine* 35, no. 3 (1961): 266–76. https://www.jstor.org/stable/44446804.

Rosengarten, Andrea. “‘A Most Gruesome Sight’: Colonial Warfare, Racial Thought, and the Question of ‘Radicalization’ during the First World War in German South-West Africa (Namibia).” *History* 101, no. 346 (2016): 425–47.doi: 10.1111/1468-229x.12239.

Saini, Angela. *Superior: The Return of Race Science*. United States: Beacon Press, 2019.

Schmuhl, Hans-Walter. *The Kaiser Wilhelm Institute for Anthropology, Human Heredity and Eugenics, 1927- 1945: Crossing Boundaries*. Dordrecht, the Netherlands: Springer, 2008.

Tyson, Peter. “NOVA Online | Holocaust on Trial | the Experiments.” Pbs.org. Last modified October 2020. https://www.pbs.org/wgbh/nova/holocaust/experiside.html#seaw.

United States Holocaust Memorial Museum. “Introduction to the Holocaust.” Holocaust Encyclopedia. Accessed on March 17, 2024. https://encyclopedia.ushmm.org/content/en/article/introduction-to-the- holocaust.

——— “Eugenics.” Encyclopedia.ushmm.org. United States Holocaust Memorial Museum. October 23, 2020. https://encyclopedia.ushmm.org/content/en/article/eugenics.

——— “Josef Mengele.” Ushmm.org. United States Holocaust Memorial Museum. April 2, 2009. https://encyclopedia.ushmm.org/content/en/article/josef-mengele.

——— “Carl Clauberg.” Ushmm.org. Last modified 2019. https://encyclopedia.ushmm.org/content/en/article/carl-clauberg.

——— “Heinrich Himmler.” Ushmm.org. United States Holocaust Memorial Museum. Last modified 2019. https://encyclopedia.ushmm.org/content/en/article/heinrich-himmler.

——— “The Doctors Trial: The Medical Case of the Subsequent Nuremberg Proceedings.” Ushmm.org. Last modified 2019. https://encyclopedia.ushmm.org/content/en/article/the-doctors-trial-the-medical-case-of-the-subsequent-nuremberg-proceedings.

——— “Antisemitic Legislation 1933–1939.” Ushmm.org. Last modified 2022. https://encyclopedia.ushmm.org/content/en/article/antisemitic-legislation-1933-1939.

——— “Hitler Comes to Power.” United States Holocaust Memorial Museum. February 23, 2022. https://encyclopedia.ushmm.org/content/en/article/hitler-comes-to-power.

——— “US Army Trials in Postwar Germany.” Accessed March 17, 2024. Encyclopedia.ushmm.org. https://encyclopedia.ushmm.org/content/en/article/us-army-trials-in-postwar-germany.

——— "United States Holocaust Memorial Museum. "Mein Kampf." United States Holocaust Memorial Museum. Last modified 2015. https://encyclopedia.ushmm.org/content/en/article/mein-kampf.

——— "The Biological State: Nazi Racial Hygiene, 1933–1939." United States Holocaust Memorial Museum. Last modified 2019. https://encyclopedia.ushmm.org/content/en/article/the-biological-state-nazi-racial-hygiene-1933-1939.

——— "The Nuremberg Race Laws." United States Holocaust Memorial Museum. July 2, 2021. https://encyclopedia.ushmm.org/content/en/article/the-nuremberg-race-laws.

———. "Jewish Badge: During the Nazi Era." United States Holocaust Memorial Museum. Accessed March 20, 2024. https://encyclopedia.ushmm.org/content/en/article/jewish-badge-during-the-nazi-era.

_____ "Frequently Asked Questions about the Holocaust." United States Holocaust Memorial Museum. Last modified 2022. https://www.ushmm.org/teach/fundamentals/holocaust-questions.

——— "The 'Jewish Question.'" United States Holocaust Memorial Museum. November 26, 2019. https://encyclopedia.ushmm.org/content/en/article/the-jewish-question.

_____ "Deadly Medicine: Creating the Master Race." United States Holocaust Memorial Museum. Accessed February 18, 2024. https://www.ushmm.org/exhibition/deadly-medicine/profiles/.

University College London. "Eugen Fischer's Hair Colour Gauge." University College London. October 24, 2016. https://www.ucl.ac.uk/culture/ucl-science-collections/eugen-fischers-hair-colour-gauge.

"Volk." Encyclopædia Britannica. Accessed November 6, 2023. https://www.britannica.com/topic/Volk.

Weindling, Paul. "The 'Sonderweg' of German Eugenics: Nationalism and Scientific Internationalism." *The British Journal for the History of Science* 22, no. 3 (1989): 321–33. http://www.jstor.org/stable/4026899.

Weindling, Paul. *Victims and Survivors of Nazi Human Experiments: Science and Suffering in the Holocaust.* Germany: Bloomsbury Academic, 2015.

Weindling P, von Villiez A, Loewenau A, Farron N. The victims of unethical human experiments and coerced research under National Socialism. *Endeavour* 40, no. 1 *2016): 1-6. doi: 10.1016/j.endeavour.2015.10.005.

Weindling, Paul. "Julian Huxley and the Continuity of Eugenics in Twentieth Century Britain." *Journal of Modern European History / Zeitschrift Für Moderne Europäische Geschichte / Revue d'histoire Européenne Contemporaine* 10, no. 4 (2012): 480–99. https://www.jstor.org/stable/26266045.

Weiss, Sheila Faith. "Race and Class in Fritz Lenz's Eugenics." *Medizinhistorisches Journal* 27, no. 1/2 (1992): 5–25. http://www.jstor.org/stable/25805018.

"Wilhelm Beiglböck." Beiglböck, Wilhelm - Biography ° Gedenken und Erinnern, Deutsche Gesellschaft für Innere Medizin. Accessed March 17, 2024. https://www.dgim history.de/en/biography/Beiglb%C3%B6ck%3BWilhelm%3B1639.

Woolhouse, Megan. "Should Doctors Learn from Nazi Medical Research on Holocaust Victims?" Boston University. June 20, 2019. https://www.bu.edu/articles/2019/learn-from- nazi- medical-research/.

Wong, Matteo N. "The Harvard Alumni Who Fought to Keep Immigrants out: Magazine." The Harvard Crimson. Accessed October 6, 2023. https://www.thecrimson.com/article/2018/10/18/immigration-restriction-league/

Wynia, Matthew K, and Alan L Wells. "Light from the Flames of Hell: Remembrance and Lessons of the Holocaust for Today's Medical Profession." *PubMed* 9, no 3 (2007): 186–88. doi: 10.1001/amajethics.2021.59.