
Research On Human Subjects In Germany And In The United States Based On The Philosophy Of Eugenics And Social Darwinism

When in 1883 Sir Francis Galton, the mathematician and naturalist from Great Britain and Charles Darwin's cousin, coined the term eugenics, he might have hardly predicted that the interest in eugenics would drive the humanity to the point of transgressing all moral boundaries. At the same time, Galton's formulation of the new study as "the study of the agencies under social control that may improve or impair the racial qualities of future generations, either physically or mentally" pointed out his fascination with Social Darwinism, the social theory that justified social inequalities by people's hereditary deviance from the evolutionary norm – a healthy individual with above average intelligence (Allen 225). Moreover, Galton's emphasis on race and exceptionality of qualities within a certain race signified that he thought some races to be stronger and fitter than others and thus more likely to flourish. What followed Galton's introduction of the term eugenics was the enormous popularity of the concept in Europe, the United States, and Canada. Fascinated by the racially and socially biased concept, Adolf Hitler implemented his aggressive eugenics program in the Third Reich and used it to justify the extermination of "defective" humans as well as to support horrible human experiments on "inferior" men (Baader, Lederer, Low, Schmaltz, & Schwerin 206). Likewise, the scholarly community in the U.S., a country where racial bias was flourishing at the time through the enforcement of Jim Crow laws, greeted the eugenics movement and engaged in the studies conducted on racially and socially "inferior" human subjects and provided vigorous support for adoption of sterilization laws. Japan's commitment to eugenics was powered more by their desire to develop ultra-destructive biological weapon and use it against its enemies in World War 2, most importantly the U.S. military in the Pacific (Kaufman 645). **MAIN CLAIM:** While all three states transgressed the moral boundaries of medical research, there were differences between the purposes of human experimentation and the mode of its delivery as well as between the scale of the human research programs, with Germany and Japan demonstrating greater atrocities than the United States.

Germany had the strongest commitment and the largest scale of human experimentation, which spanned over a half of the century, since the end of the 19th century and till the end of World War 2. Unlike and the French, who not only exploited the population and natural resources of their African colonies but also built railways, health centers, and mission schools, Germans perceived their colonization as an experiment to test the racial theory (Class Reading 176). They considered Africans to be inherently superior, based on the theory of Social Darwinism, and treated the population of South-West Africa as an uncomfortable obstacle to Africa advancement by superior white "Aryans" (Class Reading 176). Today's Namibia was used by Germans as their racial biology laboratory. Despite the fact that the racial theory clearly did not work with regard to the Nama and the Herero, who were not "childlike creatures" but "tough herdsmen," Germans set up concentration camps and exterminated in genocide 65, 000 out of 80,000 Herero and 10,000 out of 20,000 Nama over the first decade of the 20th century. The experiments were justified by the need to carry out "racial hygiene" and advance racial research as well as find treatments from certain diseases (by trying new drugs on the natives). By 1906, 778 autopsies had been carried out in German prisons in Africa and at least one

doctor was engaged in conducting experiments on human subjects (Class Reading 180) Dr. Fischer did research applying to humans Mendel's principles of genetic inheritance (180).

Following several decades of Germans' atrocities in South-West Africa, the crime was replicated on a much larger scale. Hitler's state quickly militarized medical research and supplied limitless "human material" to the Kaiser Wilhelm Institute of Anthropology, Human Heredity, and Eugenics and other research organizations. The KWI became the leading research organization associated with human experimentation during the World War 2, when it completely abandoned its research of "comparative and experimental hereditary pathologies" on rabbits and started using foreigners, Jews, Gypsies, and prisoners as readily available research materials which produced more rapid results (Baader et al. 2006).

In 1943, Hans Nahtsheim subjected 6 epileptic children from Brandeburg-Gorden "euthanasia" sanatorium to a partial vacuum in Air Force chambers. He hypothesized that people with hereditary epilepsy were likely to experience epileptic seizures sooner than people who suffered from the non-genetic disease form. Although the children left the experiment unharmed, it was performed without consent. As Baader et al. observe, "The experiments demonstrated how the dynamics of experimental research can lead investigators to undertake significant risks following a line of inquiry" (208). The cruelty of well-known crimes at Auschwitz committed by Dr. Josef Mengele, who was known to have himself killed at least four pairs of twins for his eye research, considerably exceeded the cruelty of human experimentation within the "gray zone," where acceptable research merged with unacceptable scientific practice (Baader et al. 2006). The purposes of research conducted by the Nazi included discovering the mechanisms behind genetic pathologies, research aimed at racial hygiene, as well as control over racial reproduction.

To compare, the Japanese engaged in much similar practices of human experimentation during the World War 2. The criminal research practices included but were not limited to "vivisections, dissections, weapons testing, starvation, dehydration, poisoning, extreme temperature and pressure testing, and deliberate infection with numerous deadly diseases." Unit 731 and Unit 100 were two major centers of research. Lt. General Ishii Shiro's network of research into the development of biological weapons was situated in China and Manchuria. Unit 731 featured the senior members of the Japanese research community and had between 13,000 and 15,000 humans involved in research. Their purposes were to develop new biological weapons based on plague, cholera, epidemic hemorrhagic fever, and frostbite and test on humans as well as protecting the Japanese troops from the outbreaks of these diseases. Locals and "bandits" who resisted the new rule were sent to Unit 731 by the Army, where they were used as human material, infecting them with plague and other diseases and then administering new drugs/killing them. Over 3,000 people were killed in those experiments at Unit 731. Many were severely tortured, such as, for example, those individuals who were exposed to cold and then had their limbs immersed in water. Hundreds of thousands of the Chinese faced deaths from the epidemic of plague, distributed by the Japanese Air force through infected fleas. Just as in Germany, many scientists were officers of the Japanese army.

In comparison with Japan and Germany, the nature of eugenics-driven research in the United States was different and this research was conducted without the atrocities that took place in Unit 731 or Auschwitz. On the one hand, U.S. researchers, especially Laughlin, Davenport, and those involved in Eugenics Record Office, pursued the aim to apply Mendel's theory of inheritance to humans in order to prevent the spread of physical, mental, and moral deficiencies

across the American nation as a means of serving the interests of the state. On the other hand, their work aimed at maximizing the potential of the human resources for the capitalist society rather than at establishing race hygiene for ideological reasons. At the same time, the practices were similar in many cases, including infecting prisoners with malaria in order to find treatment from this disease in 1945, observing the progression of syphilis as the human subjects slowly died without treatment in the Tuskegee experiment, and sterilizing those people who could potentially produce genetically inferior offsprings. Sterilization was one large-scale case of experimentation in the U.S. At the same time, the U.S. government did not merge science and military, did not use human subjects to test biological weapons, and did not engage in killing human subjects. However, one should mention that after the war ended, the U.S. government offered a variety of incentives and immunity to more than 3,600 Japanese involved in human research experiments because they wanted to use their valuable data to advance their own program of weapon development (Kaufman 647).

Overall, in Germany and in the United States, research on human subjects was based on the philosophy of eugenics and Social Darwinism and aimed at constructing a society consisting only of individuals with superior physical, mental, and moral characteristics. In Japan, however, the primary focus was to develop biological weapons and find treatments from certain diseases. Likewise, U.S. scientists and Germans engaged in human subject research to find treatments from the diseases. Germans conducted their experiments aiming for race hygiene. Both Germans and Japanese used tortures and murders to obtain research findings. In the U.S., data was collected by fieldwork and observation of untreated subjects. Whereas in the U.S. military and science were not merged as in Japan and Germany, the state garnered support to the scientists, used their data to pass sterilization laws, and used Japanese data to develop their own weapons following the end of World War 2.