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Honoring the Victims: How the Change in Ethics Ruined Science in the Third Reich and What to Do With the Remaining Medical Data

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Honoring the Victims: How the Change in Ethics Ruined Science in the Third Reich and What to

Do With the Remaining Medical Data

With the Russians advancing and ultimately bringing the defeat of the Third Reich, the Nazi government struggled to destroy all evidence of their horrors committed on humanity, from the documents detailing the number of victims executed in the "Euthanasia" Program to the concentration camps themselves. They were not totally successful in their concealment. On December 9, 1946, the American military tribunal used the procured evidence of Nazi human experimentation and general disregard for humanity to charge twenty-three former Nazi medical doctors and assistants for war crimes (Spitz 22). They faced four charges in the Nuremberg Doctors' Trial, including the charge of whether they had active participation in the country's genocide or in nonconsensual and/or unethical human experimentation (22-23). The twenty-three accused were previously reputable doctors and officials who chose to exploit the dehumanization of groups to satisfy their medical curiosities; they either had direct participation in or oversaw the procedures of the atrocities. While the basis of their experiments might have been promising, the unethical manner in which they were conducted violated their Hippocratic Oaths and the German Guidelines of Human Experimentation that had been published in 1931. Interestingly, these guidelines remained in effect through the duration of World War II, ultimately giving the tribunal judges presiding over the Doctors' Trial additional evidence to warrant criminal action against those alleged to be guilty (Reich). At the trial's conclusion on August 20, 1947, seven of the defendants were acquitted, seven received death sentences, and the remainder received prison sentences ranging from ten years to life (Spitz 264-265). From this trial, the Nuremberg Code of ethical human experimentation was created, further emphasizing the safety of all human subjects, and the idea of ethical conduct was brought to the forefront of all research expectations.

There remains the problem, however, of what to do with the remaining data from these inhumane experiments. The debate over documents that possibly hold valuable information, yet also contain the stories of several hundred tortured victims, resulted in strong debate about whether it is permissible to use the data for research purposes. After World War II, discussion emerged in favor of using the data, but it was not until Dr. Robert Pozos' research on hypothermia, which built off of the Dachau freezing experiments, that the idea of using the information for societal benefits became more popular. Explaining that using the data could "advance work in that it takes human subjects farther than we're willing," Pozos sparked a renewed interest in the scientific community over the possibility of using the unethicallyacquired data for good (Cohen). Naturally, there was opposition to this idea, particularly from several of those who were forced to undergo the experiments themselves. Eva Moses Kor and Sara Vigorito, both surviving victims, are the most notable individuals who openly opposed the use of the medical data. Likening the use of information to "building on top of Auschwitz," Vigorito demanded that the focus be brought back to the victims who personally suffered (Mostow 403). The debate over the ethics of using the medical data continues to be in a stalemate in contemporary discussions.

The difficulty of reaching a satisfactory decision has potentially become less arduous if the unethical human experiments throughout Nazi Germany are examined as a whole. This method of analysis follows the Doctors' Trial indictments, where the charges for "crimes against humanity" was defined as performing both harmful medical experiments and mass murder through the Euthanasia Program (Spitz 22-23). Implemented within and outside the concentration camps, the program allowed the ethical mindset of an already struggling country to waver by providing the German people with a nationalistic pride to serve as a distraction from

the thousands who were murdered. Those deemed as racially impure or morally reprehensible were dehumanized, and thus were stripped of their rights when experimented on. In the concentration camps, there was additional mental agony for the prisoner-doctors who were forced to aid in the experiments, having to sacrifice their moral responsibilities in order to survive. Lastly, regardless of their numerous advancements in warfare technology, the scientific community itself suffered for its gross indifference to preserving the ethical code in human experimentation. These facts must all be taken into consideration when broaching the debate of using the medical data. Despite the lack of ethics, the experiments were still "good science" because they followed the correct guidelines of experimentation. On the other hand, there is the possibility that the data is being viewed under "idealization and social benefit biases", thus ignoring the suffering that took place in favor for keeping the data. While it is possible to recognize that there is some use to the data collected from these experiments, it is essential to also recognize the human costs of obtaining this data. Therefore, one suggested compromise to the debate is to memorialize the atrocities—both through victim narratives and through physical or abstract memorials—and by giving the credit of any discoveries found from the data solely to the victims of the experiments. Ultimately, the question comes down to whether there can be a compromise, or does one side truly have to yield in order to find a clear resolution for this debate.

Part I: Setting the Parameters

In order to begin the debate about the use of the medical data, it is essential to first understand what is capable of being labeled as ethical or unethical. Ethics is officially defined as "the moral principles or system associated with a particular leader, thinker, school of thought or an area of enquiry, or with a particular historical group" ("ethics n.2.a."). From a philosophical

viewpoint, the term refers to the broad and often debated concept that is concerned with distinguishing between good and evil in the world ("ethics n.1.b."). Rules are established by the majority in a group that creates a clear divide between what is allowable and what is not. At its most basic form, ethics is intended to be incapable of gradability, meaning that an action or situation cannot be "somewhat unethical" or "mostly ethical." While a larger amount of abuses of the ethical code might equate to a larger crime, the number of violations does not also mean that the situation can be considered more unethical than another. Along the same lines, when an action is identified as unethical it does not necessarily need to correlate to being murderous or torturous. Even experiments yielding beneficial results can be unethical if the researcher did not obtain consent or hid any details of the program from the subject. Once one of the rules has been violated, an action or situation that had once been ethical is now strictly unethical.

Additionally, ethics is not concrete; the concept is capable of changing over time and differs through cultures. For example, Edward Jenner's famous experiment of injecting a boy with smallpox to determine whether his previous inoculation of cowpox would immunize the boy is often celebrated since he had discovered the vaccine for smallpox. However, only ten years after the end of the war, a similar method of experimentation was done in the Willowbrook Experiments in New York, where doctors infected mentally disabled children with the hepatitis virus to see whether gamma globulin antibodies could grant them immunity from the disease (Krugman). Overall, the experiment was a success. Despite both experiments being incredibly similar in their methods (both of the researchers received consent from the parents), only the Willowbrook Experiments is listed as an example of unethical research. This shows that as more research is done on acceptable ways to perform human experiments, the ethical code is updated to match the information and technology of the time to prevent the infringement of human rights.

The solidity of the ethical mindset of a group depends entirely on the strength of those who are ensuring that the moral code is being followed. It is unrealistic to believe that every individual will accept the group's rules of ethics, and thus to safeguard against the dissenter's disagreement from spreading, the powerful majority of the group must be capable of enforcing the rules so that no violations take place. Of course, in a world where an ethical code is usually decided on how to keep humanity from committing evil, there are cases where going against the norm has turned out to be an improvement for society. This in turn generates an update in the ethics when the shift results in the majority losing their power and other individuals are given the opportunity to usurp control. For this to occur, the individuals of one group overall need to have a shift in their ethical mindset. The shift can either be positive or negative, and leaves the group largely in a weakened state that is susceptible to either progress or corruption depending on the next majority who take control. This change in ethics is not a stand-alone event—it is continuous, even occurring in today's society. For example, the recent outbreak of measles in January of 2015 was caused by parents choosing to not vaccinate their children for fear that they would develop autism (McCoy). Citing a retracted medical study performed by a disgraced British doctor named Andrew Wakefield, the outbreak of a once-dormant disease "is disturbing" in that it shows that ill-informed people will follow those with the supposed answers to their misfortunes, even after the leaders have been publicly discredited (McCoy). Whether in small communities or in entire countries, due to the constant change in the powerful majority, the concept of fluctuating ethics uses the shift in a group's mindset to facilitate change.

For Germany after 1918, their weakened state allowed for a government that was capable of changing the country's ethical code to slowly gain power. The defeat in World War I and the signing of the Treaty of Versailles left Germany—then referred to as the Weimar Republic—

largely unstable as the country suffered the aftereffects of the war, such as a hyper-inflated economy and political extremism. Through careful legislation that restructured the country's debt, the Weimar Republic was successful in rebalancing their currency and largely eliminated many of the requirements for the Treaty of Versailles (Shirer 136). However, it was the Great Depression of 1930-1933 that caused the surge in unemployment, the fall in the country's morale, and the eventual ascension of the Nazi Party (136-137). In an effort to prevent a reversion in their progress, the President of the Weimar Republic, Paul von Hindenburg, granted emergency dictatorial powers to the government. On January 30, 1933, after intense pressure that his political party placed on the government, Adolf Hitler was appointed Chancellor of Germany (183–184). A year later, after Hindenburg's death, Hitler consolidated his dictatorial power by merging the powers and offices of the Chancellery and Presidency (184-185). The Nazi Party had now become the powerful majority over the German people.

Hitler's usurpation of rule had occurred quickly. He was an impressive and reassuring public figure for the German public, and his power only increased after he revived the shattered economy. Enlisting the help of Joseph Goebbels was also beneficial, as Goebbels promoted inspiring propaganda about a new and stronger Germany that did not have to be confined by the Treaty of Versailles (Kershaw 50–59). After years of living in the instability of the Weimar Republic, the country was redeveloping their sense of national pride and thus, whether aware of it or not, was susceptible to a change in its beliefs. Encouraged by Hitler and the Nazi Party, the racist ideology of human eugenics that promoted the purity of the German Aryan race gained popularity in Germany until it was eventually seen as a legitimate form of science. This form of pseudo-science was coupled with a barrage of propaganda that took advantage of the anti-Semitism already present in the country to blame the Jewish population for Germany's moral

weakening (50-59). With Germany finally prospering from Hitler's improvements in the government, the majority of the Germans did not fight this reasoning—most accepted it, leading them largely to become desensitized to the victims' plight. Finally, the dehumanization of Jews was complete with the establishment of the Nuremberg Laws of 1935 that stripped them of their basic rights (Shirer 230). The resulting increase in Jews and other "immoral" groups that were condemned and executed was unprecedented. For the medical and scientific communities, there was a sudden increase in "material" (i.e.: human bodies) they could use in their experiments without any legal or community-based ethical repercussions.

An amoral epidemic then spread throughout Germany; the prevalent "racial hygiene" mindset acted as protection for the doctors and scientists who took this unique opportunity to advance their careers. Already relieved of some of the competition when Jewish intellectuals were barred from practicing in their fields, German scientists could perform human experimentation with no restrictions since the undesirables were no longer thought of as fully human. Whether it was to actually practice science, to promote the theory of eugenics or to simply satisfy their morbid curiosity through scientific means, scientists who used the human subjects without consent or regard of their human rights, whether dead or alive, are guilty of unethical practice. This guilt extends beyond the gates of the concentration camps as well. Due to the Euthanasia Program, scientists and anatomists were regularly given bodies of political prisoners who were murdered to protect the longevity of the Reich government. While they might not have tortured or killed the prisoners themselves, the scientific community still benefited from the attitudes and daily routine of the Nazi thinking. Many did not question where their human "material" came from, chiefly because they did not want to know if they were working with executed political prisoners, and so they deluded themselves into thinking that they were only using bodies of the most criminal, such as murderers. While the use of cadavers has its own ethical standards separate from those for living subjects, the studies with these bodies still remain unethical due to the fact that they indirectly aided in supporting the Nazi government's view of "cleansing" the sick, immoral, and degenerate. Thus, they profited with little complaint so long as the government continued to execute prisoners and the bodies continued to be shipped to their facilities.

Some of the data from these experiments have proved valuable. For example, anatomist Hermann Stieve took advantage of female prisoners awaiting execution to analyze their menstrual cycles, and his work is still cited to this day in reproductive studies. In large part, however, the seduction of academic honor that the pseudoscientific branch of eugenics promised resulted in much of the research conclusions in that field to be unfounded. Nazi researchers felt the pressure to produce results that supported the theory of human eugenics, leaving many to either fabricate or alter the data to come up with original conclusions. If any of the information that came from these experiments was found to be valuable, it was often an accidental discovery.

When confronting the ethics of using the medical data from human experimentation, the focus is often restricted to the data that was collected in the concentration camps. With all of the known examples of unethical experiments taking place outside these compounds, why is this the case? In part, the Doctors' Trial brought to light information about unethical practices of which the world was previously unaware, and the resulting Nuremberg Code set new standards for the global medical community. Additionally, it is common practice for a population to focus on the largest group of victims when an atrocity occurs. In this case, those who suffered from experimentation in the concentration camps were the first to receive attention and fight for compensation once the war was over. However, as more information is being recovered, and the

atrocities of previously unknown human experimentation outside the camps are being unearthed, there comes the question of whether it is time to finally involve all of the victims of unethical human experimentation in the debate.

The idea of including other examples of unethical experimentation does come with its own difficulties. It is possible that its inclusion will not bring the debate any closer to a satisfactory conclusion. Rather, the additional data can potentially benefit both sides of the argument, keeping the stalemate in place. Perhaps there are factors that are capable of preventing its inclusion; the idea that these experiments were not on the same level of severity as those in the camps may be one of them. However, this type of thinking will quickly derail the discussion. The number of those harmed and killed, or the severity of the experiments does not prove one event was more unethical than another, only that more crimes were committed. There is no hierarchy when determining the ethics of a situation—as previously mentioned, once an ethical rule is broken, the entire action is unethical. Another reason is that, due to the Nazis' need to record everything and the evidence that was compiled for the Doctors' Trial, it is far easier to demand justice for the victims in the concentration camps since the experiments happened in specific areas rather than in locations throughout Germany. As such, people remember the images of the naked, dead bodies thrown in piles more than they would the execution of a lone political prisoner, but that does not make one death worse than another's. Finally, a reason why the other examples could not be included in the debate is the simple truth that several of the research projects performed outside the camps actually produced beneficial results. In Stieve's case, his research using women facing a death sentence concluded that stress affected the reproductive system and the rhythm method did not prevent pregnancies (Bazelon). His method of research was never contested, and his conclusions aided in further studies of the female genital system. However, to ignore the fact that Stieve was benefiting from the Nazi justice system means distorting the truth of how he was able to accomplish his research. Those who practiced unethical human experimentation in Nazi Germany and remained largely unpunished, like Stieve, is why it is necessary to include the data outside of the concentration camps. A discussion that is meant to provoke some type of change demands that all possibilities and examples be present. Thus, when determining the future of the data, it is essential to analyze all of the examples of unethical human experimentation during the Third Reich.

Part II: Personal Narrative and the Case Against Using the Data

Eva Mozes Kor was ten when she stepped off of the packed cattle car in front of the gates of Auschwitz. She remembers going nearly four days without food or water, watching as her parents, her protectors, turned powerless in front of her. She also remembers the matching burgundy dresses she wore with her identical twin sister, Miriam—the only pieces of home that they were ultimately allowed to keep (Kor 22-25). She was told that her and Miriam would receive special privileges as twins, but as their long hair was cut and large red crosses were painted on the backs of their dresses for easy identification, Eva did not feel very privileged (30). In Auschwitz, twins were sought after; they were used in Dr. Mengele's research to find the secret to twinning so that the information could help rapidly increase the Aryan population. Chosen as Mengele's twins, Eva and Miriam were subject to three days in the labs for intensive studies and then three days in the blood labs in neighboring Birkenau (44). Two attendants worked on the sets of twins at a time, taking blood from the left arm and injecting up to five needles full of unknown substances into the right arm (44-45). The twin girls did not talk about the tests nor about the possibility of death; they knew that by giving them "our blood, our bodies, our pride, [and] our dignity...in turn, they let us live one more day" (45). It was not until after

the war ended did they find out that they were injected with various types of diseases followed by inoculations of experimental vaccines to test their curative abilities.

In July, one of the viruses Eva received made her intensely ill and put her in the infirmary. While she was unaware of what she was suffering from, Mengele knew what disease she was given and how it would progress—she remembers him stating that she was only expected to live for two more weeks (65). Miriam was put into confinement to wait until Eva's death, where she would then be killed and the both of them would be autopsied to compare the effects of diseases on the sick and healthy bodies that were nearly identical (68-69). Fortunately—nearly miraculously—Eva survived, primarily because she knew that she "could not think of [herself] as a victim, or [she] knew [she] would perish" (48). By dragging her body to a faucet to drink water every night and manipulating the thermometer by putting it underneath her armpit, Eva's fever broke, and the twins endured life in the camp until the liberation by the forces of the Soviet Union in 1945. Reflecting back, Eva views her survival with a sense of triumph for she, "a ten-year-old girl, triumphed over Mengele by surviving his experiment" (69). However, Eva and Miriam's afflictions did not end once the war was over. Like many of the human experimentation victims, Eva is unaware of the virus she was given that nearly killed her; she has only been able to narrow it down to spotted fever or beriberi (65). Additionally, some of the injections Miriam was given had stunted the growth of her kidneys to a ten-year-old's, causing her continued medical problems until her death in 1993 (130-131). Another survivor of Mengele's twin experiments, Sara Vigorito, suffered similarly: after the constant injections, she remained ill up to seven years after the Auschwitz liberation (Mostow).

The survivors did not only suffer from the lasting physical afflictions; emotional trauma also plagued them. For Eva, her "childhood experiences" continued to haunt her well into

adulthood (Kor 129). This use of the phrase of 'childhood experiences' when describing her past is interesting. The connotation for the term 'childhood' is often positive, since it usually describes a period of innocence and relative safety as the child grows and adapts in the world. In Eva's case, she never had a true stage of childhood. Forced into captivity and experimentation, Eva's childhood was marred by death and fear—she had no choice but to mature quickly or else perish if she continued to act like a helpless child. By their eleventh birthday, Eva and Miriam have already stepped into adulthood due to their passionate need to survive. Within the concentration camp, even after liberation, they had to fend for themselves—a mentality that all of the surviving adult prisoners held, and thus was also expected of the younger prisoners. However, while they had reached adulthood within the camp, they were reverted to children once they left the gates of Auschwitz, causing a dizzying effect on their emotional states. While staying at an orphanage, Eva remembers feeling angry at the toys in their room: "Toys were for children. I was eleven years old, but I no longer knew how to play" (98). This, coupled with the fact that the nuns refused to let children be released if they had no parents, was unsettling for Eva. Within the camp, she had to find food and shelter herself without the aid of an adult, yet here in this orphanage—and even later, when they were finally moved to live with an aunt—she was expected to relinquish control of her safety back to the adults.

Eva had only found this acceptable if the rest of her family also survived and were there to care for them, but the twins soon had to face the reality that they were the only surviving members of the Mozes family. Having lost her parents and two older sisters caused additional emotional duress for Eva, and she frequently had nightmares. After hearing that the Nazis made soap out of Jewish fat, she dreamed that the soap bars spoke to her in the voices of her parents and sisters, "asking [her], "Why are you washing with us?"" (118). Polish novelist Zofia

Nalkowska, a civilian survivor who felt the need to write about her own experiences in the Warsaw ghetto, also refers to the Nazis' attempt to make soap from Jewish fat. Concentrating on the trial of a laboratory assistant who aided in soap production, Nalkowska uses the assistant's statements to allude to the complicity of the German people and the hunger for academic acclaim of the doctors. The assistant dutifully explains his part, even stating with complete frankness that he did not know that making soap from human fat was a crime (Nalkowska 9). He also explains that his superior, Dr. Spanner, kept the soap production for the possibility that he was either a pioneer in this soap-making method and thus would include it in his research findings, or he did not have authorization to perform the procedure (9). What is most revealing about the assistant's testimony is his own experience with using the soap: "I used to get the creeps thinking about washing myself with it...I got used to it because it was good..." (9). Despite being personally involved with the production and thus knowing the contents of the soap, he still continued to use it. While cleaning himself with human fat was initially disgusting, he soon was able to overlook this fact due to the benefits of the soap. Nalkowska goes on to further her point when she ends the story with one of Spanner's colleagues testifying how it could be possible that, since Germany was experiencing a shortage of fat, Spanner might have felt inclined to produce additional fat for the "good of the nation" (10). For the Germans producing and using the soap, it was portrayed as an inventive way of "building something from nothing" (9). For the Jewish survivors, however, the idea that they could be washing with innocent victims of the Reich regime was just another method of emotional abuse that plagued them even after their liberation.

There was a similar occurrence for those who were forced to aid the German doctors with the experiments in the concentration camps. Many took this advantage as their only method of survival, hoping that if they continued to be useful then they would not be executed. Having been previously barred from practice in Germany, being a prisoner-doctor allowed them to once again work in their field. Without the need to pay or give credit to them, prisoner-doctors received more benefits than the standard camp inmate to act as positive reinforcement, such as receiving better rations and often being allowed to wear civilian clothing while working (Nyiszli 19). However, the decision was not without moral anguish, much like what Dr. Miklós Nyiszli underwent as Mengele's forensic pathologist. Though he was able to live in relative comfort due to his elevated status and could practice his skills, Nyiszli faced much mental turmoil over the fact that he had to perform autopsies on prisoners. The only way to cope was by forcing a change in his own ethical mindset. The sole goal within the concentration camps was survival, and Nyiszli adapted so that his pride in his profession triumphed over his other concerns (19, 35). However, his former ethical code still surfaced at times, typically whenever he would refuse to administer poison to assist in a prisoner's suicide so that they could avoid a more gruesome death (71). While he would have been following correct procedure as a medical professional, for a prisoner-doctor it was not ethical. As someone who had the power to allow another prisoner to die with an amount of dignity, by refusing to help Nyiszli took away even this last bit of control from the prisoners. It was not until after his liberation was he finally able to reestablish his former ethical code, but by then the forced change in his personal morals ruined his dignity as a doctor. The trauma of working on the bodies of victims who died needlessly and having his skills misused caused Nyiszli to swear that he would never lift a scalpel again (222). Only through telling his story had Nyiszli managed to achieve some form of closure, but even then his dignity as a doctor had been shattered. Using the data then ignores the mental trauma prisoner-doctors underwent and the fact that they were essentially forced to practice unethically.

The unethical practices of the Third Reich were not isolated events that were void of consequences or damaging aftereffects. In fact, the strongest arguments against using the medical data from human experimentations appears when one considers the aftermath of these experiments. Though they received financial compensation for their torment, the lives of the surviving subjects after the experiments seem to have been largely forgotten once the debate of using the medical data began. Often pushed out of the discussion for their "emotional bias," survivors against the use of the information fear that their torture will be overlooked because of the possible benefits of the medical data (Crane). Viewing the medical data separately from the stories of torture can be dangerous because it gives the impression that the conclusions were the only things to have come from the experiments. This completely neglects the victims that suffered even after the war, who all felt that they lost both their dignity and humanity by being forcibly experimented on. If the human subjects' rights are the most important when conducting an experiment, then the use of data from any unethical experiment should be prohibited. This type of thinking follows the idea that any human experiments that can cause harm to the subject are forbidden, as was explained in the German Guidelines of Human Experimentation. Published in 1931, German scientists were expected to follow this reasoning, and guidelines for human experimentation was published in a Circular of the Reich Minister of the Interior in 1931 (Reich). The article first established two types of experimentation—innovative therapy and scientific experimentation—before listing requirements to ensure that the research was done ethically. Scientific experimentation is defined as "interventions and treatment methods that involve humans and are undertaken for research purposes without serving a therapeutic purpose in an individual case" (Reich). The first and arguably the most important requirement for ethical experimentation is that the researcher must have consent from the participants. By not getting

consent from the victims (among other ethical abuses), the researchers violated their rights as individuals, denying their freedom and control over their own bodies. Once the experiments were over, the stories of their torture were all the victims had left. The survivors—not the data—must be allowed to be the ones in control by telling their stories. These stories not only act as a form of closure for them, but it also gives them back their dignity that was stolen. To deny these people their voice in the debate means once again taking advantage of them.

Additionally, allowing the use of the data could suggest to some degree the scientific community's complicity in the Nazi experiments. Regardless of how vocal the scientific community is about denouncing the ethics of the research, the data cannot be used without justifying, at least to some extent, the entire Nazi justice system (Winkelmann and Schagen 168). By focusing more on the data from the unethical research instead of on the humans who suffered, it might be thought that the scientific community is pardoning the guilty researchers again and ignoring the needs of the victims. This tendency to excuse doctors and scientists is not uncommon, for medical researchers are routinely under-criminalized, even when there is evidence that they have breached the ethical code of proper human experimentation. In the article "When Human Experimentation is Criminal," L. Song Richardson argues why the "idealization bias" and the "social benefit bias" habitually protect researchers even when their experiments turn unethical. Due to their heightened social status as care-givers or protectors, it can be difficult for individuals to view medical researchers as "criminals deserving of punishment" (Richardson 92). People have trouble distinguishing the guilty person from his or her role as a doctor and the expectations that come with the title. Additionally, the belief that their research can have potential societal value allows many people to ignore or even forgive the violated ethics in the research (92). Not only are the victims harmed by these viewpoints, but it

also continues to give the scientific community a warped point of view when it comes to human experimentation. The lack of criminalization for those who do not follow the ethics of proper human experimentation perpetrates the belief that unethical research can occur as long as the researcher has good intentions and valuable data is produced.

About half of the twenty-three former Nazi doctors tried at the Nuremberg Doctors' Trial used the "idealization bias" and the "social benefit bias" as their defense. Dr. Karl Brandt, Adolf Hitler's high-ranking attending physician, sums it up the best in his final statement: "It is immaterial for the experiment whether it was done with or against the will of the person concerned...The meaning is the motive—[the] devotion to the community...Ethics of every form are decided by an order or obedience..." (Spitz 258). While many were found guilty of war crimes, thus disproving to an extent the "idealization bias," the fight from the scientific community to use the medical data actually reaffirms both the "idealization bias" and the "social benefit bias." They argue for the scientific validity of the experiments and are also willing to ignore the violation of ethics in the research, primarily so that they can obtain what can possibly be valuable data. Unlike Brandt and the twenty-two other accused doctors, the researchers who were not tried in the Nuremberg Trials had an even easier time avoiding being condemned and their work disgraced. Stieve was one of the scientists whose work was not critically analyzed until well after his death in 1952. After the war, Stieve was questioned by the Soviet military authorities and the Berlin University administration for further detail about the bodies he used in his research. Interestingly, Stieve's reflection on his research echoes Brandt's final statement: "in no way do I need to be ashamed of the fact that I was able to reveal new data from the bodies of the executed, facts that were unknown before and are now recognized by the whole world" (Bazelon). However, the authorities and administration quickly abandoned any suspicions about

the unethical conduct in Stieve's research, possibly because the "suspicions did not outweigh Stieve's importance for the re-establishment of the Berlin University" where he continued as the director of the Anatomical Institute (Winkelmann and Schagen 167). With research that was methodologically correct and contributing significantly to scientific debates, Stieve was able to circumvent criticism for his unethical practices, once again proving that the "idealization bias" and "social benefit bias" can cause complications in criminalizing the researcher.

To simply remove the unethical researcher from the data cannot be enough. There must be a sense of closure for the victims in knowing that they were not expendable, and the fact that some survivors do not consent to having the information used should be enough for researchers to reject the use of the data. By ignoring the wishes of those who did not originally give consent to experimentation simply continues to taint the data. Even contemporary researchers with the best intentions and practice ethically will have their work dirtied by data that was produced from the benefits of the Nazi government. Therefore, the only solution is to not use the data but instead memorialize the documents as a way to honor the victims. Only then can they feel safe in knowing that their torture cannot be forgotten. In the article ""Like Building on top of Auschwitz": On the Symbolic Meaning of Using Data from the Nazi Experiments, and on Non-Use as a Form of Memorial," Peter Mostow argues that using the data does not honor the victims; its use would be more like a reminder that the scientific community is willing to ignore their torture in order to gain potentially beneficial research. Mostow believes that not using the data specifically because of what the victims of unethical experimentation endured is necessary, much like the Dachau and Auschwitz memorials were necessary to honor the victims of the concentration camps (411).

There is then the question of whether the memorial should be a physical one or an abstract one. Eva Mozes Kor suggested that the original Nazi medical notes be shredded and "placed in a glass case for all to see" at a camp like Auschwitz, but never to be used (Mostow 415). However, the visceral reaction to the insignificance of shredded medical data might not be an effective memorial for all who view it. Additionally, keeping the memorial in a concentration camp does not adequately honor all victims of unethical human experimentation in Nazi Germany. A more abstract memorial where the data is forbidden to be used would be a more suitable memorial in this case. While non-use does mean that the scientific community loses potentially valuable data, it is a necessary sacrifice when the memorial signifies the lowest ethical point of scientific research. To keep the data of unethical research and the experiences of the victims separate is both an impossible and dangerous task because, if attempted, it can deny the survivors their right to regain their sense of humanity back by being in control of their own stories. Ensuring that the victims are able to engage in the debate is then essential. Ultimately, the only ethical response to the medical data is for it to not be used but instead memorialized, either by giving the victims the power to tell their stories or with an actual memorial. Whether it is through an abstract or physical memorial, the purpose is to both honor the victims and convey the perilous downward shift in ethics that leads to inhumane atrocities.

Part III: The Lingering Effects of the Data

After Dr. Robert Pozos was the first to publically debate (and condone) the use of the information, an interest sprouted within the scientific community to study whether the human experimentation data had any benefit for society. As a hypothermia specialist, Pozos' research consisted of finding methods to rewarm chilled humans. At the time, the researchers in this field were only able to discover methods by trial-and-error since the majority of their information

came from studies done on animals (Cohen). While Pozos did run experiments with consenting human subjects, he refused to let their temperature drop below 36 degrees Celsius—a safe temperature, since the Nazi experiments proved that humans lose consciousness at 32 degrees Celsius (Spitz 89). He was forced to speculate how long the body can endure the cold and still be successfully rewarmed (Cohen). However, his answers could be found in the Nazi research. The head scientist of the freezing experiments in Dachau, Dr. Sigmund Rascher, would submerge victims in ice-cold vats for extended periods of time, often allowing the body temperature to drop well below 36 degrees Celsius. The experiment's main goal was initially not extermination—Rascher was also concerned with the fastest possible way to rewarm human bodies so that the information could better aid the German soldiers fighting in freezing temperatures (Spitz 85). From his research, Rascher came to the conclusion that rapid-active rewarming with the use of blankets and heaters was more successful than gradual rewarming done with body contact, which had previously been believed (100). Rascher's experiment was highly unethical—none of the victims consented to the procedure and many were left to die in the freezing vats—yet Pozos still saw potential in the medical data that could help complete his own research and be useful for society. His intent to use the Nazi information was met with great criticism, and he was denied the right to publish the Nazi data with his own notes in the New England Journal of Medicine by the journal's editor, Dr. Arnold Relman (Cohen). However, Pozos' idea to use the medical data for societal good allowed the scientific community to view the Nazi data for its potential and not just for its lack of ethics.

Those arguing for the use of the data say that the German scientists did not entirely forget themselves—the period of the eugenics theory did not suddenly make them incapable of adhering to the proper protocols for performing an experiment. World War II historian Richard

Evans upholds that Nazi science was not bad science; in fact, when the Third Reich scientific field as a whole is analyzed, he states how disturbingly simple "the reality was, how similar in form, if not content, their work was to the research of today" (Evans). Both the research facilities in Germany and in the concentration camps operated under normal conditions. Scientists were still subject to peer review in conferences and journals, and still had to get their research approved before being granted any funds to perform their experiments (Evans). Even the infamous Dr. Mengele still reported regularly to his mentor, Otmar von Verschuer, director of the Kaiser Wilhelm Institute of Anthropology, on his progress in his research projects (Evans). The difference of the concentration camp facilities was that the Nazi scientists were able to use the skills of prisoner-doctors to aid them in their experiments, much like Dr. Miklós Nyiszli, the Jewish forensic pathologist that worked directly under Mengele. Understanding the chance for survival, Nyiszli worked to the best of his ability on all autopsies, eventually earning him respect from the Nazi doctors, several of whom would routinely come to him for personal treatment or additional training in pathology (Nyiszli 34-35). The doctors' pride in their work was a strong theme inside and outside the concentration camps. A dictatorial government alone would not be enough to dismantle the correct way of practicing science, even if the ethical mindset of the country had been compromised. For science to be "good," the methodology of the experiment must be correct and the steps of the research must be documented clearly enough so that the experiment is capable of being repeated. A correctly-performed experiment does not mean that it must also be ethical. Thus, there is the argument that since the experiments were performed scientifically, then the data has the potential of being valuable. Of course, the research done to support the eugenics theory would be considered scientifically insignificant, and the data from these experiments could not be included in this discussion. Regardless, the mere possibility that

some of the data can be beneficial for society is why the option to use it should be open to the scientific community.

Additionally, there is the defense that once the information has been collected, it is illadvised to dismiss it. In his article "The Ethics of Using Nazi Medical Data," Mark Weitzman, director of the Simon Wiesenthal Center's Museum of Tolerance, in Manhattan, states that "every part of civilization is built upon past knowledge, whether it is positive or negative" (Second Opinion). The malleability of ethics is the reason behind this; as a group takes into consideration the knowledge of their predecessors when making their own discoveries, they are able to update their moral code so that it better fits their society. Civilizations do not develop from only positive events; it takes an action or viewpoint that the population as a whole finds reprehensible to cause the change in the thinking. For a society to truly benefit from the change, the aberrant action should not be erased but kept documented so that there is no chance of it being repeated in the future. Thus, to ignore any corrupted medical data is like removing a critical piece of information from scientific history, which can not only lessen the horror of the atrocities committed but can also hide how quickly the scientific community can forget its morals. It is clear that the experiments done in Nazi Germany were unethical, but this alone should not determine the fate of the data. Data cannot be ethical or unethical. The path to retrieving the information may be so, but the data collected is incapable of following the standard of ethics; the results from an experiment are detached from the researcher's intent and the subjects' experiences. The scientific community is adamant in wishing to determine whether any good can come from the experiments because of the community's emphasis on the potentiality of the data itself.

However, if the data is accepted, then there needs to be a set of regulations for its use. Above all else, the intent behind the Nazi experiments should never be separated from the data. Within the concentration camps, scientists conducted experiments largely with the objective to humiliate and torture prisoners. Often, the discoveries made from these experiments were accidental and not the true purpose of the research. The scientific community outside the camps may have had some form of extra restraint over their research practices, but they still benefited from the Nazi regime that murdered people for political reasons and gave the bodies to these researchers. The human subjects they often experimented with were those who were deemed immoral by the government so scientists did not have to follow the guidelines for human experimentation as stringently because they knew there would be no outcry from the German population—they would side with the doctors, not those they did not even consider human. It is for this reason that the only ethical way to use the data is if the victims are given the credit for any discoveries instead of the researchers. This is not to say that the scientific community should collectively forget about the evils of the doctors; their names and the horrors they committed must be never be forgotten to avoid absolving them. When referencing the data, though, only the victims of the experiments and what rules of ethical human experimentation were broken should be mentioned. It is because of these victims that the experiments were even conducted in the first place, and they are the reason for the new discoveries to have occurred. By listing the lack of ethics in the research (such examples can be the absence of consent from the participants or the unnecessary and often fatal results), the focus is taken away from the scientists and instead given to those who suffered needlessly.

While commemorating the victims individually for each experiment may be a difficult task—particularly since the Nazis were intent on destroying any incriminating data, so much of

the information on the victims was lost—there are still other ways of giving credit to them. With the remaining evidence, it can be possible to at least determine the religion, nationality, and possibly even hometown of the subjects, and this information should be included when giving credit to the victims. To do this can take away some of the anonymity of the human subjects, bringing the focus back on the individuals instead of only seeing them as numbers. An excellent example of this being put into practice is with Stieve and his research. As the head of the University of Berlin's Institute of Anatomy, Stieve was a staunch supporter of Hitler's practices, welcoming the idea of creating a strong, unified Germany. Like others in the medical community, he did not protest when the government began expelling Jewish doctors from universities in 1933 (Bazelon). Rather, he used the changing government to his advantage. After the fall of the Weimar Republic the Third Reich employed the death sentence more liberally which granted Stieve an "unprecedented number of women" for his research (Bazelon). Stieve's interest throughout his career was the effect of stress and other environmental conditions on the female reproductive system. Studying first with hens and newts, Stieve was restricted in the research subjects he was able to use, usually only being able to get the uterus itself from donations by gynecology doctors (Bazelon). However, as more women were given the death sentence in Third Reich Germany, the supply of female subjects surged. Along with the body, he was able to obtain the medical histories before they died from prison records or interviews done by his assistants, including "information about their menstrual cycles, their reactions to the prison environment, and the impact of receiving a death sentence" (Bazelon). From this data and the harvested organs of the deceased, Stieve published 230 anatomical papers on the subject of the female reproductive system. The menstrual cycles of the women facing a death sentence became irregular, where the stress and anxiety either caused them to experience "shock

bleedings" or not menstruate at all (Hildebrandt). Additionally, their ovulation could no longer be accurately tracked. Stieve was able to draw two conclusions that are still accepted today. First, that the rhythm method—avoiding conception by only having intercourse during the times when the woman is less likely to be ovulating—could not effectively prevent pregnancies, and that chronic stress affects the female reproductive system (Bazelon).

It is important to note that this was not a simple case of taking advantage of the sudden increase in cadavers. Stieve's research required that he be able to study the women from the time of their sentencing to the day of their execution before he harvested their organs. Often, if the women were not immediately executed, Stieve had a long time period to chart the variances in the sentenced women's reproductive systems. For example, he included in one of his books an illustration of a woman's left ovary that showed signs of not menstruating for "157 days due to nervous agitation" (Bazelon). Was Stieve merely seeing a window of opportunity to advance his research and taking it? After all, these were women under a death sentence—they were condemned to die and Stieve would not have been capable of solving that, even if he had wished to. If successful, his work could be beneficial to the medical community and the opportunity to discover more about the reproductive system could be fulfilled. However, out of the 174 women Stieve studied, none of them volunteered for dissection (Hildebrandt).

Only by crediting the victims instead of the researchers can the debate over the ethics of using the medical data come any closer to a conclusion. With the information already collected, it is senseless to dismiss it for being corrupt, especially if the data has any value for society. In Stieve's case, his conclusions are still widely and uncritically used, particularly since he was one of the first researchers to find the correlation between stress and the absence of bleeding during the menstrual cycle. The fact that the information from his unethical research still contributes to

reproductive studies shows that the scientific community is willing to utilize any data that is productive. Simply, if the data can be useful, then it should be used. The next step in continuing to work with Stieve's data must be to transfer the credit to the female victims of this research. Fortunately, there has already been progress made in identifying these women. Sabine Hildebrandt published her article "The Women on Stieve's List: Victims of National Socialism Whose Bodies were Used for Anatomical Research" in December of 2012, where she was successful in not only naming 170 of the 174 victims, but also finding out their biographies and the reason they received a death sentence. Many of the women were political prisoners—a few being prominent resistance fighters, such as Bronisława Czubakowska, Herta Lindner, and Libertas Schulze-Boysen, who were all denied their last wish of having their bodies be returned to their mothers after their execution (Hildebrandt). Some of the women were also standard criminals, guilty of murder or arson. One of the women in particular, a young Polish woman who has yet to be identified, was six months pregnant after being raped by a farmer for whom she worked as a forced laborer (Hildebrandt). She had killed this man and was awaiting her execution (Hildebrandt). It was with these women's bodies that Stieve had been able to draw his conclusions; the women never consented to being a part of his research. Thus, the credit for the discoveries should be given to the 174 women, not the unethical researcher.

The somber reality is that, despite the measures taken to prevent it, unethical human experimentation cannot be completely eradicated. While the majority of the world may function on one agreed-upon code of ethics, it does not mean that every individual will adhere to the guidelines. The world is then placed in a moral battle over what to do with the information that was collected unethically. The simplest answer to this problem is to never forget the atrocities that occurred. Do not dismiss the research and data for being corrupted, but instead use the

experiments as a reminder through personal narrative and a physical reminder for why the scientific community must have a code of ethics. When using the data in new research, additional steps should be taken so that the victims are the ones who get the credit. This way, the researchers cannot be absolved of their crimes and the data can still be used to possibly aid in new discoveries.

In the debate over using the Nazi medical data, there appears to be two different interpretations on protecting human rights: aggressive and defensive action. While using the data can provide the scientific community information that can bring about societal potential—and thus salvaging some good out of the evil—are the survivors' sentiments on the subject truly being heard? The idea that the victims are once again being abused by using the information without their consent is not a matter to be taken lightly. On the other hand, if the data is valuable, it can be detrimental to scientific experimentation to deny access or even destroy the data. There is also another part of this argument: the fear that either denying or accepting the use of the data might be considered historically revisionist. To not use the data could mean that the infamous doctors in charge might eventually no longer be blamed for their committed horrors. On the other hand, its use could suggest that the experiments were conducted ethically enough to merit the use of their findings. After World War II and the Nuremberg Trials, there were a large amount of Holocaust deniers who adamantly protested that the genocide either did not actually occur or was not on such a large-scale as people were thought to believe. This type of denial was prevalent in Germany, particularly in the medical community; it was not until 2012—over sixty years after the war—that the German Medical Association finally acknowledged the accountability of Germany's medical community during the Nazi regime (Sharav). The refusal to recognize such

crimes of humanity in their own country can be understandable, since it was a dark period in medical history when the focus was not on the care of the individual. But having the German Medical Association take responsibility for its past reaffirms the truth of the unethical human experimentation, and allows for a more open discussion on the fate of the data. Moreover, this admission may help in bringing the debate closer to a resolution.

Though one side of the argument may not get full control over the fate of the medical data, it is possible that there can be compromises suggested that might satisfy both sides of the debate. A possible compromise is to combine the idea of crediting the victims and memorializing the data. Using the data without crediting the researchers acknowledges the moral low point in human experimentation history, and also allows the scientific community use the contributions without absolving the researchers. Doing so can show how the scientific community manages to function when it comes to confronting the possible ramifications of human experimentation, and how they are able to continue doing good for society. It is already apparent how quickly an ethical mindset can change so that the majority of the group believes that they are in the right. Learning from past errors in judgment is the only way newer societies can improve their own ethical codes, and this is exactly how the scientific community functions. While it should never be forgotten that the Nazi period was a blight on scientific ethics, the possibility to find some good in all the evil should not be overlooked. Even unethically-obtained data can prove prosperous and necessary despite its origins so long as the credit is only given to the victims in order to honor them. Since the experiments can never be replicated ethically, to eliminate the data would be akin to denying possible future discoveries in the scientific community. However, while crediting the victims instead of the researchers may be sufficient for the scientific community, this alone cannot be enough to commemorate the victims of the experiments. It is

equally important to memorialize the data, whether in a physical or abstract manner, so that those outside the scientific community cannot forget what happened to all victims of human experimentation in Nazi Germany. The dignity that was stolen from them must be returned in some form, and thus giving the victims the power to tell their personal stories is essential when discussing the future of the medical data. Simply crediting the victims does not fully illustrate the pain and humiliation these people underwent; it turns individual experiences into impersonal data. To diminish the importance of the survivors' personal narratives runs the risk that once the overall population begins to forget about the atrocities, the scientific community over time may feel it is no longer necessary to mention the victims. When it comes to unethical human experimentation, it is essential for the victims to be remembered always. Regardless of the resolution chosen, the outcome of this debate might be one that changes contemporary medical ethics.

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