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Medical Ethics in the 70 Years after the Nuremberg Code, 1947 to the Present

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Table of contents

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Summary Ethics has been an integral part of medicine since ancient times. However, the atrocities committed as part of Nazi medicine necessitated a novel approach, resulting in a framework of modern bioethical standards. Since World War II, we have witnessed a broad movement towards the introduction of normative regulations for medical research. This trend initially started with the Nuremberg Medical Trials and the "Nuremberg Code" of 1947, followed by the Helsinki Declaration of the World Medical Association of 1964, including later modifications and amendments. Furthermore there are relevant recommendations issued by the organs of the Council of Europe and by the World Health Organisation, the UNESCO Declarations and EU legislation, to name only the most important examples. Since the 1970s, the rapid and global development of the life sciences, with its unprecedented possibilities to interfere with basic aspects of human life, for example in reproductive medicine, has led to an even greater necessity to confront bioethical questions worldwide. The HIV pandemic burdening the Global South has required conducting research in different areas of the world and involving especially vulnerable populations. In view of these developments, the main topic of the conference was the influence of Nazi medical crimes, the Nuremberg Medical Trial and the resulting Nuremberg Code on the development of international bioethical norms, including the enduring impact of this legacy on today's medical research. In the 70 years since the promulgation of the Code, the world has changed: Research is based on the principles of exchange and cooperation, researchers are mobile, the internet provides a supporting framework removing national barriers. Although the European situation, with special attention to Austria, was part of the discussion, an important focus of the conference was on the role played by international organisations and their endeavours to establish normative standards for clinical research with a worldwide reach.

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Editorial: Medical ethics in the 70 years after the Nuremberg Code, 1947 to the present

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In March 2017, our university commemorated the 70th anniversary of the implementation of the Nuremberg Code with the international symposium *"Medical ethics in the 70 years after the Nuremberg Code, 1947 to the present"*. The Nuremberg Code constitutes one of the most important milestones in the history of medicine, providing for the first time a proper framework for research on human subjects. Sadly, this milestone was not a voluntary, precautionary measure resulting from enlightened humanity, it only came into existence in the aftermath of dreadful Nazi atrocities. Following its conception, the Nuremberg Code bore rich fruit in multiple legal regards, becoming a cornerstone of clinical research and bioethics [1].

For Austrian science in particular, the discourse on Nazi crimes and, thus, the Nuremberg Code became a special warning from history due to the involvement of prominent Austrian physicians in Nazi experiments [2]. Hitler's alleged statement to Max Planck "*If the dismissal of Jewish citizens means the annihilation of German science, then we shall do without science for a few years*" [3], proved to be self-fulfilling in two aspects: firstly, in a profound moral way, and secondly a long-lasting intellectual breakdown in the Austrian scientific community. The importance of the context of the Nuremberg Code cannot be overestimated and acts as a foundation for the very basis of the attitudes of a global medical profession, which today—in a world heavily focused on professional skills and practices—might sometimes be at risk of slipping out of focus.

In my inauguration speech as the newly elected rector, I drew attention to the fact that I consider the transfer of attitudes to the next generation to be more important for a university than the transfer of mere technical skills [4]. This idea is also exemplified by the Einstein quote "*It's not intellect that makes a great scientist, it is character*". Unfortunately, this very thinking disappeared in Austria with the annexation to Nazi Germany. It is to the particular credit of my predecessor, Wolfgang Schütz, and others of his generation like Wilfred Druml, former editor of the *"Wiener Klinische Wochenschrift"*—the once highly prestigious journal where Karl Landsteiner described his discovery of blood groups—that our university has focused on the dreadful time of 1938–1945 once more [5, 6]. In particular, the distressing fact was acknowledged that *"little was done after the war, following the collapse of the Third Reich, to correct the flagrant injustice and barbarism"* [5] and that many were allowed to continue their work, like Eduard Pernkopf, a former rector of the university, who continued work on his notorious anatomical atlas [7, 8]. The question on how to deal with human remains was also a focus of the symposium, as reflected

by Rabbi J. Polak's "Vienna Protocol for when Jewish or possibly-Jewish human remains are discovered" in this issue [9, 10] and a recent paper that originated from discussions during the symposium on transparency regarding the origin of human tissues in research [11].

On behalf of our University, I am deeply indebted to Christiane Druml, Herwig Czech and Paul Weindling who took on the planning and organisation of the symposium and who were also instrumental in helping commemorate the events of the dreadful year 1938 in March 2018.

From the Nuremberg „Doctors Trial" to the „Nuremberg Code"

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At the close of the Nuremberg Medical Trial (NMT) on 19 August 1947, the judges pronounced guidelines on permissible clinical experiments. From around 1963 these guidelines were called the "Nuremberg Code", thereby investing them with status as a fundamental document on research procedure [12]. Their status as part of a judgement at an international court set a precedent in judging landmark cases of murderous and maiming conduct arising from coercive research. The aim of this paper is to correct some misconceptions concerning the origins and implications of these guidelines. The first misconception is that the Guidelines/Code arose solely from courtroom proceedings. This overlooks an agenda which had existed since the liberation of concentration camps to secure a set of regulations to protect research subjects. In short, the victim had agency by protesting against, resisting and sabotaging the coerced experiments, and when it came to being witnesses at the NMT, a reflective voice. Victims of research and liberated prisoner doctors made a profound impression on Allied scientific intelligence officers, who then laid the knowledge-base for the NMT. Secondly, although the judges stressed the autonomy of the research subject and the obligation to inform about potential risks, the key term "informed consent" did not appear in the guidelines of 1947. Thirdly, it is a misapprehension that the principles promulgated by the judges received neither publicity nor recognition. The case against the Vienna internist Wilhelm Beiglböck illustrates salient aspects.

1. Contextualizing the Code

The declaration, "The Prisoner Doctors of Auschwitz to the International Public" issued on March 4, 1945 stated that prisoners had been treated as experimental animals, that the Allies and neutral states should bring to trial those responsible, and that the prosecution of perpetrators would prevent coerced human experiments and medical atrocities in the future [13]. There were comparable efforts by liberated prisoner doctors to document Nazi medical experiments at the camps of Buchenwald and Dachau.

Prisoner documentation came to the attention of Allied scientific intelligence officers, notably the neurophysiologists Leo Alexander (with the US military) and John Thompson (as head of the British branch of the FIAT scientific organisation) [14]. Thompson interrogated the Belsen doctor Fritz Klein, who had conducted experiments with mescaline and on the drug Rutenol in Auschwitz [15]. Concerned about the criminality of German wartime research, Thompson first identified the experiments as "Medical War Crimes" in November 1945. This specific form of medical criminality required that scientific intelligence and war crimes investigation teams collaborate. To attract attention to the problem of coerced experimentation, Thompson stated that 90% of German wartime medical research by leading scientists and clinicians was criminal [16: 115].

Thompson's contacts with the United States war crimes agencies led to meetings with Andrew Ivy (1893–1975), a Chicago-based physiologist who had conducted wartime research on desalination for the US Navy. Some servicemen had opted out during these experiments, and Ivy recognised their full autonomy. Ivy was nominated by the American Medical Association for an appointment as Special Consultant (on Nazi medical research) for the U. S. Secretary of War in 1946. Thompson organised a meeting on medical war crimes at the Pasteur Institute in Paris from July 31 to August 1, 1946, when Ivy outlined a set of principles on medical research.

Ivy's "Outline of principles and rules of experimentation on human subjects" stated that:
"I. Consent of the subject is required; i. e. only volunteers should be used.

(a) The volunteers before giving their consent, should be told of the hazards, if any.
(b) Insurance against an accident should be provided, if it is possible to secure it.

II. The experiment to be performed should be so designed and based on the results of animal experimentation, that the anticipated results will justify the performance of the experiment; that is, the experiment must be useful and be as such to yield results for the good of society.

III. The experiment should be conducted

a. so as to avoid unnecessary physical and mental suffering and injury, and
b. by scientifically qualified persons
c. The experiment should not be conducted if there is a prior reason to believe that death or disabling injury will occur." [17: 115, 261–5]

This long-overlooked draft code was drawn up a year before the Guidelines of August 1947. It was the basis for mounting the NMT as well as a series of revisions in the suggested code. Thompson's investigations of medical crimes provided a basis for prosecution. The decision

by Chief Prosecutor Telford Taylor to hold the NMT was made shortly after the Pasteur Institute meeting in August 1946 [17: 265].

Ivy was nominated by the American Medical Association to the U. S. Secretary of War, who appointed him expert witness to the court at the NMT. Ivy reflected, "I accepted the invitation to serve at the Nuernberg trials only because I had in mind the objective of placing how human beings may serve as subjects in a medical experiment [sic], so that these conditions would become the international common law on the subject" [18].

The relevance of the 1931 Reich circular on human experiments was to be an issue for the NMT defence and prosecution. That the Reich guidelines retained validity has been confirmed by Roelcke [19]. However, that all German research abided by the Reich directive was a misleading claim made by a defensive German medical establishment and defendants [20].

Ivy saw the matter in terms of violations of the Hippocratic Oath. On December 28, 1946 the Journal of the American Medical Association (JAMA) published recommendations for an abbreviated Code. This required the following:

"The voluntary consent of the individual on whom the experiment must be performed must be obtained. The danger of each experiment must be previously investigated by animal experimentation. The experiment must be performed under proper medical protection and management" [21].

During the NMT, Ivy assessed German/Austrian medical research: he astutely observed that the defendant Wilhelm Beiglböck altered records of the Dachau experiment on making seawater drinkable, so as to conceal the effects of the different types of desalinated seawater on victims. The judges consequently increased Beiglböck's sentence [22, 17: 287].

Ivy's main achievement was to drive forward the agenda of an ethical code. As Ivy reflected in 1964: "the judges and I were determined that something of a preventative nature had to come out of the 'Trial of the Medical Atrocities'" [23]. His special sense of mission is confirmed by a Special Press Release on January 22, 1945:

"Dr. Ivy ... left Nuremberg with the recommendation that an international legalised code of ethics should be published on the use of human beings as experimental subjects" [24]. Ivy provides a clear agenda for the NMT, recommending that it should conclude with a set of ethical principles.

2. The victims' voice

The Trial was distinctive in that victims had a key role as witnesses. The Medical Trial relied more on victim testimony than either the four-power International Military Tribunal or the later American military-administered trials. The prosecutors made radio appeals in German, Czech, and Polish for witnesses and victims of medical experiments. Letters from experiment and sterilisation victims provided significant testimony. Victims' organisations—such as *Opfer des Faschismus*, and the *Betreuungsstelle für Sonderfälle*—also sent evidence to the Nuremberg prosecution [23].

A victim of X-ray sterilization stated that he had come forward as a result of the radio call for witnesses. Leo Alexander, a US military expert in aviation medicine and originally a graduate of the University of Vienna, was appointed expert witness to the prosecution. He wrote about the aforementioned victim of X-ray sterilization experiments at Auschwitz:

"When he heard over the radio that the people responsible for the German medical atrocities are going to be tried, he decided that it was his duty to come here and to testify although he is afraid that, especially if his name is printed in newspapers, his sisters might find out about his condition that way. However, he feels that it is his duty to be helpful in bringing those responsible for the atrocities, to which he and others have been subjected, to justice.

It appears that he is one of 100 young Jewish boys who were castrated for no reason other than to confirm the fact that they had been sterilised by sufficient X-ray radiation, as if X-ray burns which resulted from a fifteen minute exposure were not enough to prove that point" [24].

Victims took the initiative in alerting the police about medical criminals. In February 1946, Dachau survivors alerted the Austrian state police that Wilhelm Beiglböck had conducted allegedly fatal experiments in Dachau. The investigations uncovered the involvement of the internist Hans Eppinger of the Vienna Medical Faculty, and led to the arrest of Beiglböck in Lienz, in the British zone of occupation. Beiglböck was transferred to Nuremberg by the British in September 1946. He was the one Austrian defendant at the Medical Trial [25]. Beiglböck was a member of the SA, and not one of the seven SS doctors on trial.

There were three non-medical defendants, all SS members: Viktor Brack of the Chancellery of the Führer, who was responsible for euthanasia killings and X-ray sterilization experiments; Rudolf Brandt, who, as Himmler's secretary, was involved in arrangements for experiments on concentration camp prisoners; and Wolfram Sievers, manager of the SS *Ahnenerbe* research organisation.

In the case against Beiglböck, the Sinto witness Karl Höllenrainer punched Beiglböck when asked to identify him in court. Höllenrainer's testimony stressed Beiglböck's role in mistreatment and coercion. Beiglböck was accused of drawing a pistol to force the Sinto Rudolf Taubmann, who had survived freezing water and malaria infection experiments at Dachau, to submit to the desalination experiment. However, the prosecution failed to prove any fatalities from the experiment (although one research subject died before liberation, the connection with the experiment is unclear) [21].

On July 17, 1947 the defence lawyer Gustav Steinbauer made an eloquent and revealing final plea for Beiglböck, pleading that deaths should be accepted the necessary price of medical progress:

"Over the entrance gate of the General Hospital in Vienna we read the words '*Saluti et solatio aegrorum*—Ded-

icated to the health and consolation of the sick.' These words not only demand the highest accomplishment of the doctor's duties but are the motive for the most successful work in the large field of medical research. Theory and practice joined together in order to become a piece of living humanity. I would go beyond the limits of my task if I mentioned all the names that spread the glory of the University of Vienna throughout the world. But their penetration into the world of the unknown was always a hazardous enterprise which demanded courage and sacrifice.

I want to quote the words of one of the great doctors, Professor Wagner-Jauregg, who says in his book 'Fever and Infection Therapy',

'The vaccination against malaria was certainly a risk, the outcome of which could not be foreseen. It was dangerous for the patient himself and this to a much higher degree than the treatment with tuberculin and other vaccines, and it also was a danger for the surroundings and even for the community.'

And, on page 136, it states 'Three patients died after having been vaccinated with blood infected with malaria tropica and not with malaria tertiana'; and 'The tragic outcome of this experiment was discouraging, and only a year later could the author decide to proceed with the malaria vaccinations ...'

Nobody talks of these victims today, but Wagner-Jauregg's revolutionary discovery is known and adopted throughout the world and has become the common property of all peoples for the benefit of suffering mankind ..." [26].

The judges' concluding principles sought to refute such dangerous arguments made by a series of defendants—that the injury and death of human subjects is necessary for medical progress.

With this aim in mind, US and British scientific intelligence officers (Leo Alexander, Keith Mant, John Thompson) collected evidence from victims. The Court proceedings ran on two levels: that of an international trial of the consequences of aggressive war resulting in crimes against humanity, and an ethics tribunal concerned with the medical validity of the research and consent of the research subject. The conduct of the trial involved frequent ethical discussions. The judges asked defendants for their opinions: Kurt Blome and Karl Brandt gave their opinions on clinical experiments. Blome's statement that that prisoners should always be volunteers and receive a reduction of sentence or an amnesty showed criticism of the concentration camp experiments. The defendants could cross-examine expert witnesses [27]. At one stage, Ivy was cross-examined by the defendants Ruff, Rose and Beiglböck. The Trial had a dual character as a criminal court and as an ethics debating chamber.

3. From ethical debate to the final declaration

On December 7, 1946, just after the commencement of the NMT, Alexander noted that he had "Completed ethical and non-ethical exp. on human beings." This text outlined the conditions for "permissible experimentation by a doctor" [28]. As in Ivy's draft guidelines of August 1, 1946, Alexander required the consent and voluntary participation of the experimental subject. While Ivy required the experiment to be useful, Alexander preferred a more generalised viewpoint, that the experiment should not be unnecessary; both concurred that results should be for the good of society. This overlap suggests that Alexander took Ivy's report as a basis for his views. Alexander amplified the concept of consent, as based on proven understanding of the exact nature and consequences of the experiment. A doctor or medical student was most likely to have the capacity for full understanding. The degree of risk was justified by the importance of the experiment, and the readiness of the experimenter to risk his own life. Overall, Alexander produced a more rigorous set of requirements than either Ivy or the minimalist AMA code.

Rather than informed consent, the expression of choice at the trial was "Voluntary Consent". This went with disclosure of risks. Alexander also noted the intention of the judges to rule on issues of experimentation at the end of the NMT: "As we have anticipated all along the defense is making a concerted effort to introduce a great deal of literature on human experimentation in other countries. So far we have been successful in keeping out most of the proof, but the Tribunal has stated that it will rule on this question at the conclusion of the case" [29]. The judges provided a distillation of the Alexander and Ivy drafts along with stress on the autonomy of the research subject. Voluntary consent meant that "the person involved should have legal capacity to give consent; should be so situated as to be able to exercise free power of choice, without the intervention of any element of force, fraud, deceit, duress, over-reaching, or other ulterior form of constraint or coercion; and should have sufficient knowledge and comprehension of the elements of the subject matter involved as to enable him to make an understanding and enlightened decision ..." [30: 267–8]

4. Publicising the Guidelines

The declaration on permissible experiments provided criteria for the judgment of the 23 defendants. It was intended to be circulated widely, thereby fulfilling Ivy's hope of entering the international common law on medical experiments. Telford Taylor had been meticulous in allowing press access and in inviting international jurists as observers. The presence of the German medical delegation throughout the trial was remarkable. The judgement was publicised in German by Alexander Mitscherlich and Fred Mielke in their NMT overview *Wissenschaft ohne Menschlichkeit* [30], and in French by François Bayle, the French military observer in his study of the Trial [31]. Importantly, in 1949 Telford Taylor published the guidelines on "Permissible Medical Experiments" in his contribution to *Doctors of Infamy*, which was based on the interim publication by Mitscherlich and Mielke with additional contributions by Taylor, Ivy and Alexander [32]. The volume included a draft apology which the Ger-

man delegation declined to make at the first World Medical Association (WMA) meeting, and a concise version of the WMA's revised version of the Hippocratic oath, oriented to practitioners. Commentators have suggested that the volume had an impact on various international conventions and agencies [33]. The WMA and WHO kept the issue of war crimes committed by the medical profession at the forefront with a preliminary report on "War Crimes and Medicine. The German Betrayal and a Restatement of the Ethics of Medicine," which was prepared in 1948 [34]. U. S. military and official agencies took note of the NMT judicial guidelines [35].

The judges' guidelines on permissible experiments were a distillation of a wider post-WWII discourse in which victims had a crucial role. Each version of the guidelines needs to be situated in context. The expert witness Ivy had a firm agenda which he impressed on the judges, prompting their guidelines on permissible experiments. These guidelines derived from Ivy's original principles of August 1946, which were then elaborated by Alexander and finally, the judges added the additional principle of the autonomy of the research subject. The guidelines were readily available as a reference document in English, French and German in the period after the NMT. This explains the adoption of these guidelines in medical jurisprudence in the early 1960s as a definitive "Nuremberg Code".

Post-war trials against perpetrators of Nazi medical crimes – the Austrian case

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After the defeat of Nazi Germany, there was a widely shared expectation that criminal proceedings could provide a measure of retributive justice, and that these would lay the groundwork for stronger ethical norms for the future. In the case of the Nazi medical crimes, the Nuremberg Medical Trial epitomises the link between criminal law and the hope to (re)establish binding ethical norms. In my paper, I will focus on how the courts after the war dealt with the medical crimes committed on present-day Austrian territory (or, as in the case of Wilhelm Beiglböck, by Austrian perpetrators), and what we can learn from this about Austrian post-war society.

In legal terms, Austria regained its independence as a country in 1945, however the occupation by the Allies meant that the power of the Austrian state was limited, at least in the immediate post-war period. Therefore, I would like to start my brief overview of the legal response to Nazi medical crimes in Austria at the top level: the Allied authorities.

The Mauthausen Concentration Camp Case

The first instance in which a perpetrator of Nazi medical crimes in Austria was indicted before an Allied military court was not the much more well-known Nuremberg Medical Trial (NMT), but the 'Mauthausen Concentration Camp Case' (or 'USA vs. Altfuldisch et al.'), tried by a US Military Court at the former concentration camp of Dachau, between March and May 1946. Among the 61 defendants, eight had a medical background: four SS camp doctors (Eduard Krebsbach, Waldemar Wolter, Friedrich Entress, Willi Jobst), two SS dental surgeons (Wilhelm Henkel, Walter Höhler), the Mauthausen pharmacist Erich Wasicky, and one paramedic (Gustav Kreindl). They all received death sentences for their participation in the murder of prisoners, using among other methods benzol injections or poison gas. The two dental surgeons had removed gold from prisoners' dead bodies. At Gusen, numerous unnecessary operations had been performed; human experiments with hormones and artificial nutrition were also mentioned during the proceedings [36: 35–6, 46, 49, 55, 58].

With the exception of Walter Höhler, whose sentence was commuted to life imprisonment (of which he served only a few years), the convicted perpetrators were executed in May 1947. This seemingly resolute prosecution of medical crimes in Mauthausen and its satellite camps has to be contrasted with the fact that the number of SS doctors linked to the Mauthausen/Gusen complex alone amounted to at least 50; despite a series of further trials, most of them never had to answer for their crimes [36: 36–7, 64–6].

The trial also established a link between the concentration camp system and the so-called 'Action T4', initiated in 1939 for the extermination of psychiatric patients. Between 1941 and 1945, up to 8,000 prisoners from Dachau and the Mauthausen/Gusen complex were sent

Fig. 1 Defendants during the 'Mauthausen Concentration Camp Case' (standing: former Ebensee concentration camp physician Willi Jobst) (United States Holocaust Memorial Museum/USHMM)

to the 'T4' killing centre at Hartheim near Linz to be murdered in the gas chamber [37: 63–4]. The only perpetrator from Hartheim whom the prosecution could secure for the trial, Vinzenz Nohel (1902–1947), stood out among the defendants. As a manual laborer responsible for the operation of the crematorium (court documents call him the '*fireman at Castle Hartheim*'), he represented the lowest rung of the hierachy. He was also the only defendant who spoke openly about his participation in the mass extermination. Ironically, the man who helped murder tens of thousands of psychiatric patients hoped to evade punishment by pretending to be mentally ill himself. The court, however, did not accept this line of defense and sentenced him to death. The harshest sentence thus fell on one of the least significant cogs in the Hartheim killing machine [36: 47, 50, 61].

The Nuremberg Medical Trial and its significance for Austrian medicine

Without a doubt, the Nuremberg Medical Trial had a much stronger influence on the subsequent international perception of Nazi medical crimes than any other event, including the Mauthausen Concentration Camp Case. For various reasons—chief among them the availability of defendants and the difficulty in prosecuting crimes committed by Germans against Germans before a military court—the extermination centre at Hartheim played only a marginal role; the vast majority of the accused had been involved in criminal human experiments, not in the 'euthanasia' murders [38]. This was the case for the only Austrian among the 23 defendants, Wilhelm Beiglböck (1905–1962), formerly an assistant at Vienna University's Clinic of Internal Medicine, who was indicted for his seawater drinking experiments on prisoners at Dachau concentration camp [most recently: 21]. Since Beiglböck was a relatively minor figure, the trial's impact on the medical public at the time was limited. The Österreichische Ärztezeitung, the official mouthpiece of the Austrian medical profession, did not mention the trial once in 1946 or 1947. The significance of the NMT for Austrian medical ethics, which today is not in doubt (see the chapter by Christiane Druml in this volume), must have emerged much later, via its international reception.

Beiglböck's superior at the Vienna University Clinic for Internal Medicine, Prof Hans Eppinger Jr. (1879–1946), given his international renown and his position in the Viennese medical community, would have made an interesting witness or even defendant. Despite having recommended his assistant for the Dachau experiments and having personally visited the camp on at least one occasion, he initially escaped scrutiny by Allied war crimes investigators [39, 40]. In September 1946, however, Eppinger killed himself after being summoned to Nuremberg as a witness, probably out of fear of being personally implicated [41]. With his suicide, he saved the university some embarrassment, which has not since been very eager to remember this dark chapter. Furthermore, there was also the suspicion that patients had been harmed in ruthless medical experiments at Eppinger's clinic, allegations which were never further investigated after his suicide [42: 139–40]. Beiglböck was originally sentenced to 15 years imprisonment, but had his sentence reduced to 10 years in 1949; in 1951, he was released and could continue his medical career in Germany. Repeated attempts to return to Austria failed [21: 159–62].

Fig. 2 The Viennese physician Wilhelm Beiglböck pleads 'not guilty' at the Nuremberg Medical Trial (United States Holocaust Memorial Museum/USHMM)

Erwin Jekelius, 'child euthanasia', 'Action T4' and the Soviets

Perhaps surprisingly, the only key perpetrator of the 'euthanasia' extermination programme on Austrian territory to be tried by Allied authorities was held to account not by the US or British, but the Soviets. A paediatrician trained at the Vienna Children's University Clinic under Franz Hamburger (1874–1954), Erwin Jekelius (1905–1952) was the founding director of the child 'euthanasia' clinic 'Am Spiegelgrund' from 1940 to 1942 (for details on this institution, see below). Much less well-known is his role as the secret representative of the 'T4' organisation in Vienna, tasked with coordinating the patient transports to the gas chamber at Hartheim. The main reason for the relatively late uncovering of Jekelius' role in the 'T4' programme was that he was arrested and tried by the Soviets. While the trials held in the British, French or American zones of occupation were widely publicised and served as a stage to teach the world about Nazi crimes, Erwin Jekelius was tried in secrecy in Moscow, where he died from cancer in prison in 1952. When transcripts of Jekelius' interrogations by the NKVD were obtained by German journalists from a Russian archive in 2005, they not only provided new details on the execution of 'T4' in and around Vienna, they also revealed that Jekelius had been relieved of his post at Spiegelgrund and drafted into the military in 1942 on personal orders from Hitler, who

disapproved of a romantic relationship between his sister Paula and Jekelius [43: 60].

Trials before the *Volksgerichte* against 'T4' perpetrators

Overall, the war crime trials held by the Allied powers represented only the tip of the iceberg of all criminal prosecutions of Nazi perpetrators. In Austria, the bulk of cases was dealt with by the so-called *Volksgerichte* ('People's Courts'), which were created in 1945 for this purpose. During the ten years of their existence, from 1945 to 1955, these courts opened proceedings against more than 130,000 individuals. In principle, they had the resources and the determination to deal with Nazi crimes on a systematic basis. In the reality of post-war Austria, however, the initial enthusiasm to deal with Nazi crimes quickly subsided, so that in the end relatively few convictions or even trials resulted [44: 46].

Under the code name 'T4', 70,000 patients were deported from psychiatric hospitals all over Germany (including Austria and other annexed territories) to one of six killing centres, to be murdered in gas chambers. The most important of these was the above-mentioned Hartheim Castle near Linz, were 18,000 psychiatric patients and at least 8,000 prisoners from the Dachau and Mauthausen concentration camps were killed [45]. From the prosecution's standpoint, these murders should have been clear-cut cases; even by the legal standards of Nazi Germany, there could be no doubt about their criminal nature according to the *Reichsstrafgesetzbuch* (the German criminal code), let alone the Austrian penal code. Murdering so many people required many participants, not just the personnel necessary to operating the killing centres, but also staff at the various hospitals who sent patients to their deaths, and not least the so-called 'experts' who decided who would be killed. Bringing the perpetrators to justice was complicated by a number of factors, however: Hartheim medical director Rudolf Lonauer (1907–1945) committed suicide with his family after Germany's defeat; his deputy, Georg Renno (1907–1997), went into hiding. He was put on trial in 1967 in West Germany, but the efforts to hold him responsible failed when he presented medical certificates claiming that he was unfit for trial [44: 52, 46: 95, 108–12]. Another of the main perpetrators at Hartheim, former administrative director Christian Wirth (1885–1944), was killed by partisans near Trieste [47]. His deputy and successor in Hartheim was Franz Stangl (1908–1971), who was later transferred to 'Aktion Reinhardt' (the code name for the extermination of three million Jews in occupied Poland) and a striking example for the failings of the Austrian authorities. In 1948, he managed to escape from pretrial detention in Linz, and, with the help of the Austrian bishop Alois Hudal (1885–1963) in Rome, could flee first to Syria, then to Brasil. Stangl was only held accountable for his crimes in 1970, when a West German court sentenced him to lifelong imprisonment. He died one year later [46: 156–8]. With the main Hartheim perpetrators out of the authorities' reach, the *Volksgericht* (in this case in Linz) was limited to adjudicating the responsibility of bus drivers, nurses and guards, handing down verdicts in November 1947, and July 1948. In a separate trial, the leading Nazi health functionary in the Tyrol, Hans Czermak (1892–1975), was sentenced to eight years imprisonment in connection with the 'T4' transports to Hartheim [44: 50].

'Decentralised euthanasia'

Prosecution was more successful in the case of three psychiatric hospitals, two in Lower Austria and one in Carinthia, where doctors had directly murdered hundreds of patients—clear-cut examples of how after the stop of 'T4' in August 1941, many psychiatric hospitals were turned into sites of 'decentralised euthanasia' [48]. In April 1946, the *Volksgericht* Graz (External Senate in Klagenfurt) handed down death sentences against the psychiatrist Franz Niedermoser (1901–1946) and three nurses at the Klagenfurt State Mental Hospital (*Siechenhaus und Irrenanstalt des Landeskrankenhauses*), Eduard Brandstätter, Antonie Pachner and Ottilie Schellander. Only the death penalty against Niedermoser was executed; Brandstätter committed suicide on the day of the verdict, and the two others saw their sentences commuted to prison terms. Five other nurses received prison terms of 10 or 15 years [49].

According to testimony given during the proceedings, seriously ill patients, starting as early as 1940, were killed at the Klagenfurt mental hospital through lethal drug dosages. After the deportations to the gas chambers at Hartheim were suspended—around 700 patients from the Carinthian institution were also among the victims—the killings in Klagenfurt were intensified. Between 1941 and 1945, under Niedermoser's direction, the nursing staff killed approximately three to four patients per week. While initially mainly patients with advanced stages of mental disorders were murdered, over time the death spiral absorbed ever more groups, among them elderly people, cardiac cases and cancer patients. The killing of incurable, care-dependent, or simply just troublesome patients turned into a normal routine for hospital staff. While the *Volksgericht* considered 400 murders as proven, an even higher number is probable [43: 66, 50: 42–62; 51, 52].

Another noteworthy trial dealt with the murder of hundreds of patients in the mental institutions of Gugging and Mauer Öhling in Lower Austria. Most of the victims were killed by drug overdoses, but the main perpetrator, Emil Gelny (1890–1961), also introduced a new killing method by repurposing an electric shock device. When the trial opened in June 1948, the main culprit was missing; Gelny had managed to escape to Syria and later Iraq, where he died in 1961. Instead, 23 doctors, nurses and administrative staff from the two institutions and two of Gelny's former superiors in the regional administration found themselves in the dock. Gelny's absence from the criminal proceedings meant that the other accused could downplay their own involvement and push

the blame onto him. An admission of guilt was the absolute exception. Marie Gutmann represented the attitude of the majority of the accused in her appeal to the president for clemency: 'I myself am a victim of the time and circumstances known as the Nazi dictatorship.' The highest sentences (12 to 10 years imprisonment) were handed down to the head of the Gau administration, Joseph Mayer (1890–?), and Gau physician leader, Richard Eisenmenger (1899–?). They were found guilty of high treason under the War Crimes Act, as well as being remote accomplices to the crime of 'hired assassination.' The court said it could not be proven that they had 'ordered' Gelny to murder, which would have incurred a much heavier penalty. Furthermore, the court handed down sentences of between two and four years to ten members of the hospitals' staff. Eight of the accused nurses were acquitted, and one case was classified as manslaughter and handed over to an ordinary court. The acquittals were due to a 'lack of convincing evidence of guilt,' whereas the court did not consider the serious suspicions against the accused as refuted. Although some of those convicted were sentenced to long prison terms, the sentences that they actually served were—in view of the fact that they were involved in hundreds of murders—ultimately relatively short. The defendant who originally had the highest punishment, Josef Mayer, was freed in July 1951, after less than six years in prison [53–55].

No other instances of 'decentralised euthanasia' on Austrian territory ever led to a trial, much less to a conviction. Thousands of deaths due to starvation and neglect (such as at the Vienna 'Steinhof' psychiatric hospital), and in some cases additionally by drug overdoses (such as at 'Feldhof' in Styria) remained unpunished.[1]

Trials against the 'Spiegelgrund' perpetrators

The Austrian courts' response to the 'child euthanasia' programme followed a similar widespread pattern of relatively harsh sentences immediately after the war, which gave way to a rapidly decreasing interest from prosecutors and courts to go after Nazi criminals. In Vienna, close to 800 children had died at 'Spiegelgrund,' one of the largest killing institutions within the 'child euthanasia' programme. Many of the children had been poisoned because they suffered from some kind of mental disability. The fate of the Spiegelgrund's first director Erwin Jekelius, who was arrested by the Soviets, has already been mentioned. His successor Ernst Illing (1904–1946) was sentenced to death in 1946 by the Vienna *Volksgericht*. The press widely reported on the case. Since Illing had come from Germany, his death sentence fit well into the Austrian narrative of victimhood at the hands of the


Die Kindermörder vom Steinhof auf der Anklagebank

Vor dem Wiener Volksgericht begann Montag die Verhandlung gegen drei Ärzte des Steinhof. Gegen Dr. Margarethe Hübsch (links), Dr. Marianne Türk (Mitte) und Doktor Ernst Illing (rechts), die beschuldigt werden, den Tod von Kindern, die ihrer Pflege anvertraut waren, durch Euthanasie herbeigeführt zu haben.

Fig. 3 Physicians from the 'Spiegelgrund' killing clinic in the dock (*Neues Österreich*, 16 July 1946)

Nazi German occupiers. Together with Illing, two other Spiegelgrund physicians were indicted. Marianne Türk (1914–2003) was sentenced to 10 years imprisonment, but released in 1948 on health grounds before being pardoned in 1952. Margarethe Hübsch (1903–1983) was acquitted [56–58]. In 1948, a further trial was held against a number of nurses from Spiegelgrund [44: 50].

Another former Spiegelgrund physician, Heinrich Gross (1915–2005), weathered the phase of relatively intense denazification as a prisoner of war. Although he was arrested and put on trial when he returned from the Soviet Union in 1948, he was acquitted in all but form in 1950, and could subsequently embark on a successful career as one of Austria's most prominent psychiatrists. After his release from pretrial detention, decades would have to pass before a perpetrator of Nazi medical crimes—or indeed, any Nazi criminal—could be put on trial in an Austrian court again. Tellingly, the first trial in Austria that dealt with Nazi medical crimes after a hiatus of more than 25 years was a civil law suit that Gross, in the meantime one of Austria's foremost forensic psychiatrists, filed against Werner Vogt, the protagonist of a group of progressive physicians who had publicly criticised him for his involvement in the Spiegelgrund crimes. Gross won in the first instance in 1979 but two years later lost the appeal process because the court considered his involvement a proven fact. Although this decision, which coincided with Gross reaching pension age, marked the end of his career, another two decades past before the prosecution initiated criminal proceedings, resulting in a highly publicised trial in 2000. This last attempt at seeking justice for the Spiegelgrund victims was thwarted by the claim that Gross was unfit to stand trial [59]. It is possible that a conviction even at this late point in time would have provided some sense of closure. However, the rather disappointing ending to the Heinrich Gross case certainly did not come as a surprise if we consider the mixed results of earlier attempts to provide justice for the victims.

[1] There were plans for a trial against seven Steinhof physicians for 'euthanasia' killings and other crimes, but the case was closed in 1949. More consequential was a trial against two doctors who had mistreated inmates at the 'Workhouse for Antisocial Women and Girls' founded in 1941 on the Steinhof premises that ended with prison sentences [44: 50, 55].

Conclusion

Trials dealing with medical crimes on Austrian territory (or by Austrian perpetrators) were, with few exceptions, limited to the first half decade after liberation. Memories of the atrocities were still fresh, and the Allied powers applied pressure on the Austrian authorities to investigate and adjudicate crimes committed under Nazi rule. At the same time, Allied war crimes trials—most importantly, the Mauthausen Camp Trial and the Nuremberg Medical Trial—were held to adjudicate crimes against Allied nationals, and lay the groundwork for further prosecutions before Austrian and German courts. Despite considerable efforts to bring the perpetrators to justice, the record of both the Allied powers and the Austrian authorities in this regard is mixed.

The Allies' efforts were hampered by difficulties in getting hold of many of the perpetrators. Some had committed suicide at the end of the war, others were dispersed over various zones of occupation, with cooperation between the four powers increasingly strained. The adjudication of the 'euthanasia' murders was further complicated by a focus on crimes against non-German nationals, which could be prosecuted as war crimes. In the end, only a tiny number of perpetrators were brought to justice this way.

The task of prosecuting the many doctors, nurses and other staff responsible for the implementation of the killing programmes—not to speak of other inhuman acts such as forced sterilisations and abortions—fell on the so-called People's Courts (*Volksgerichte*), which were specifically created in 1945 for the prosecution of Nazi crimes. Despite some undeniable achievements (e.g., trials concerning the Spiegelgrund child 'euthanasia' clinic in Vienna, and various psychiatric hospitals in Lower Austria and Carinthia), the People's Courts' overall record in dealing with medical crimes is also mixed. After an initial phase of active prosecutions that lasted until around 1950, the judiciary's willingness to pursue such cases quickly subsided, in keeping with Austria's overall increasingly lenient approach to Nazi criminals. When the anti-fascist consensus of the immediate post-war years broke up, denazification and prosecution gave way to the reintegration of the former National Socialists into Austrian post-war society. During the following decades, Nazi medical crimes were rarely ever mentioned in public; according to our current knowledge, nearly 50 years passed without a single criminal trial. This slowly began to change in the late 1970s, when Heinrich Gross came under increasing scrutiny for his past; the fact that it took another 20 years before a final attempt was made to bring Gross to justice demonstrates how slowly Austrian society came to terms with this part of the past.

The failure of the West German judicial system in serving justice: the case of Dr. Horst Schumann

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1. Introduction: the case against Dr. Schumann

On September 23rd, 1970, nineteen years after the first arrest warrant had been issued, Dr. Horst Schumann finally appeared before a German judge. Schumann, who at the time of the trial was a sixty-year-old trained physician, had been actively involved in providing expert opinions to hereditary courts [60], directing *T4 centres*, selecting ill prisoners in *14f13 action* and conducting coercive medical experiments in Auschwitz Concentration Camp. After the war, in June 1945, Schumann was captured by the Allies and placed in a detention centre for Nazi criminals in Southern Germany. The American Army authorities failed to identify him and Schumann left the camp a free man. It took another five years for the arrest warrant to be issued. By the time the authorities arrived at Schumann's door in Gladbeck, he had already fled the country. He then spent ten years living and working in Africa. In 1966, he was extradited to Frankfurt. The trial preparations took another four years. State prosecutor Johannes Warlo, who had previously been involved in the Frankfurt Auschwitz Trial and other euthanasia trails, prepared an indictment according to which Schumann was accused of "killing 15,314 people in the euthanasia centres in Berlin, Grafeneck, Sonnenstein, Buchenwald, and Auschwitz between 1939 and 1941" [61]. In addition, he was allegedly responsible for "conducting human experiments on hundreds of male and female inmates, but at minimum on 180 Jewish inmates, without their consent, to test a mass-scale sterilisation and castration method via x-rays" [62]. By March 1971, Schumann began self-inflicting stomach injuries and high blood pressure in order to delay the court proceedings [63]. As a result, he had to be hospitalised. On November 1st, 1971, a medical report was submitted to the court stating that:

> sometimes he suffers greatly from chest pain and irregular heartbeat [...] In addition, there is dizziness, and severe headache. At night he has to urinate twice. Sometimes he suffers from abdominal pain [62].

Consequently, Schumann was found not fit to continue the legal case. Despite the widespread knowledge of Schumann's crimes, international attention given to the Nazi atrocities following Eichmann and Auschwitz Frankfurt trials, the impressive experience and dedication of the prosecution team and considerable evidence, the proceedings were suspended in April 1971 [63]. The prosecution did not even have the opportunity to put any of the sterilisation victims on stand. On July 29th, 1972, after six years of detention, Schumann was quietly re-

leased from prison. He lived another thirteen years as a free man.

This article aims to emphasise how the issues related to the reconstruction of judicial system in post-war Germany, the public perception of Nazi crimes and German law impacted on the process of punishing former Nazis, taking the case of Dr. Schumann as an example.

2. The allied occupation: punishment and denazification

The silent acceptance of the constant breaching of the Versailles Treaty by the Third Reich indirectly led to the outbreak of the Second World War, which claimed the lives of millions and caused massive destruction to European cities. Thus, in 1945, there was a need for a tougher approach towards defeated Germany. Shortly after the war ended, the Allies began manifesting differences in their opinion regarding important issues, one of which was punishment of war criminals. After months-long deliberations, on December 20th, 1945, the decision was made that the Allied-controlled courts would prosecute Nazi crimes against the Allied citizens, and the crimes against Germans were given at disposal of the German judges. This became known as the Allied Control Council Law 10 [64–66]. Prior to allocating criminal cases to German courts, the Allies had to *clear* the German judicial system. In March 1945, the Allies created denazification boards that intended to investigate German public service sector staff. This led to an immediate dismissal of judges who had been actively involved in the creation and implementation of laws passed by the former Nazi government. The Control Commission's Law 4 of November 30th, 1945 stated:

> To effect the reorganization of the judicial system, all former members of the Nazi party who have been more than nominal participants in its activities and all other persons who directly followed the punitive practices of the Hitler regime must be dismissed from appointments as judges and prosecutors and will not be admitted to these appointments [67].

Soon after, the Allies realised that the number of dismissed judges was greater than anticipated. Effectively, the activity of the German courts was suspended. To solve this issue, judges who had been dismissed by the Nazis or had retired prior to 1933 were called back into service. This solution was insufficient. The strict implementation of denazification was unrealistic regarding the justice system staff. Towards the end of 1945, the majority of Germans, who had been investigated by the denazification courts, were placed within 4th category, i. e. *followers* or 5th category—*exonerated* [68]. As a result, most of judges who had been dismissed by the Allies now had the possibility to apply to be reinstalled. This process effectively introduced a *renazification*. Taking the British zone as an example, in 1948 80% of the judges were former Nazis, who in the Third Reich blindly adapted existing law to racial orders [69, 70]. After the war, a number of those judges kept their positions or were reinstalled and maintained the same pro-Nazi attitude. As years followed, their students, who were educated in a similar trend, took over the benches and maintained the same order [69]. As a result, crimes committed by the Nazis during the war were often *justifiable* and *advisable* in the eyes of jurists, and thus the wartime activity of those responsible for the deaths of thousands of people—such as euthanasia centre staff—was viewed as implementing orders rather than killing innocent people.

3. Collective guilt v. collective innocence

At the time when the International Military Tribunal was being created, collective guilt as a form of judgement was not intended. The aim was to put the decision-making Nazi officials on trial, while the rest of the nation was undergoing democratic transformation. Unlike the Soviets, who managed to maintain a *collective guilt-free* attitude towards defeated Germans, the Americans struggled with it, most likely due to the influence of German Jews and gentiles who were admitted to the US after they had been forced out by the Nazis in the 1930s. Imposing collective guilt awakened a strong defensive reaction among Germans; their resistance was manifested by labelling verdicts of the Allied courts as *victor's justice*. Moreover, the crushing defeat of the Wehrmacht and the Allied bombings that devastated German cities resulted in the development of feelings similar to victimhood within German society [71, 68]. While Jewish survivors belonged to the *victors club*, German gentiles were viewed as the defeated perpetrators and were judged collectively by the rest of the world. Eugen Kogon, opponent of the Nazis and a survivor of Buchenwald, once said:

> Bystanders were an effect of 'a political error' and should not be compared to actual perpetrators. 'A political error' does not belong to the court [71].

Opposing collective guilt was effectively denying collective responsibility. While a large portion of the German population had not enthusiastically supported Nazi policies, they had not condemned them either. Thus, one could assume that *silence implied acceptance*. Germans reacted with a great degree of reluctance to those accusations.

German post-war society showed signs of a mentality familiar to perpetrators—i. e. the public felt burdened with the conscience and thus was eager to *forget the past and move forward* as soon as possible. The triggered *defence mechanism* of the German society resulted in replacing *collective guilt* with *collective innocence*. The general belief implied that citizens of the Third Reich had put their faith and loyalty in the Nazi government and the ruler by whom they were misled and betrayed [71]. This rhetoric treats the whole nation as vulnerable, incapable of thinking or distinguishing between right and wrong, which in legal terms would make them unfit to stand trial. As Frank Buscher claims, "Germans were not interested in digging into crimes of the past because they were too afraid that it would be like opening a Pandora's box".

Deeply implicated in the crimes of the Nazi regime were not only high-ranking officials in the different ministries, leading industrialists, and the officer corps of the armed forces, but also ordinary people who sought employment in camps and ghettos [72].

4. Adenauer's Federal Republic: the state and the public

Over the years, the supposedly strong Allied coalition proved unsustainable. In 1947, the differences in opinion between the United States and Soviet Russia led to a geopolitical conflict known as the Cold War, which resulted in the creation of two separate German states. The German Federal Republic, with Konrad Adenauer as the Chancellor, was covered by the Marshall Plan—financial and political support from the United States. The general policy of West Germany in the 1950s was avoiding any confrontation with the Nazi past. Adenauer's cabinet was not only uninterested in chasing Nazi criminals, but also openly criticised the Allied efforts to bring criminals to justice by demanding an amnesty for convicted former Nazis. Thanks to Adenauer's intervention, approximately 1500 Germans, who had been convicted and imprisoned in the Soviet Union, were granted amnesty and returned to Germany. Among them was Prof Carl Clauberg, who was responsible for sterilisation experiments on Jewish female prisoners at Auschwitz concentration camp [72, 65]. Adenauer's politics were a reflection of a general trend manifested by the German public, i. e. forgetting the past and focusing on building a new democratic Germany. Hence, a *double integration* was proposed, which allowed former Hitler's *middle men*, including physicians, lawyers, journalists, etc., back into their professions. During Konrad Adenauer's tenure, Nazi criminals could avoid any punishment as long as no charges had been filed under their names for a period of twenty years [72].

The efforts of the Allies to bring Nazi criminals to justice were abandoned after the Cold War had intensified. Most of convicted criminals, even those who had been charged with mass murder, were freed. In 1955, the *Transition Agreement* was signed between the US, Great Britain, France and West Germany according to which those who had already been prosecuted by the occupying powers could not be prosecuted again for the same crimes [73]. The number of prosecutions of Nazi criminals decreased drastically from 871 between 1945 and 1950 to 76 between 1951 and 1960 [72, 68].

5. International law v. the German Penal Code

In the 1940s, after the German justice system had been reactivated, German judges had the choice of whether they wanted to apply international law or the German Penal Code of 1871 when putting Nazi criminals on trial [66]. Although the international law that derived from the Nuremberg Trials was designed to prosecute offences such as *crimes against humanity* and *genocide*, the majority of German jurists decided to stick with the German law ignoring the fact that it was unsuitable given the severity of crimes committed in the Third Reich. Thus, the German Penal Code effectively worked to the accused's advantage, since: 1) there was a strict ban on retroactivity—an act that was not considered criminal between 1933 and 1945 could not be treated as such in the post-war period; 2) internationally recognised crimes against humanity and genocide were not defined in the German Penal Code, and thus were classified as common murder; 3) the *statute of limitation*—20 years for a murder—allowed thousands of Nazi criminals to go unpunished for their crimes [73].

Another serious concern was the way the law was defined. According to the German law, a murderer was a person who committed the crime on his own initiative, and the murder was performed out of base motives. Thus, the euthanasia killings that had been supposedly performed as a duty were not considered as acts of cruelty by the court. The deciding factor between *perpetrating* and *aiding and abetting* was an individual's *initiative* rather than the act itself. The German public was in favour of using the German Penal Code when prosecuting Nazi criminals. Such court proceedings were more palatable for the public if the accused of murder was presented as a psychopath rather than as an average German citizen following orders. In the 1960s, television and press reports influenced public awareness worldwide. However, press coverage of Nazi criminals' trials in West Germany was far from objective. It focused on the most gruesome crimes and those individuals who had committed those offences were presented as outcasts. The majority of the accused, however, were portrayed as *reluctant participants* [74]. That way, only malicious individuals were targeted by the judicial system, and the rest of the society perceived themselves detached from the Nazi past and Nazi criminals [74].

6. Conclusion

In 1966, when Schumann was being extradited to the Federal Republic of Germany, the international Jewish community, and victims in particular, hoped for a smoothly-run trial and an adequate verdict. Their expectations were not entirely unsubstantiated, given the high level of public awareness regarding Nazi crimes, a strong prosecution team led by the renowned Fritz Bauer and, after his death in 1968, by the experienced Johannes Worle, and a considerable number of witnesses who were willing to testify. All those efforts were insufficient due to two factors. Firstly, the lack of interest in prosecuting Nazi criminals. Years of Allied occupation, imposing *victors' justice*, enforced denazification and a broadly applied *collective guilt* reinforced the reluctance of the public, the government and the judicial system to deal with the Nazi past. A survey conducted shortly after the Auschwitz Trial revealed that 40% of Germans said "they haven't heard of the trial" when asked about the Auschwitz court proceedings. Of the remaining 60%, 40% were keen to "let the grass grow over the past." About 70% of the German population wished for the trials to be stopped and were against an extension of the *statute of limitation* [74]. Secondly,

the insufficiency of the German Penal Code to prosecute Nazi Criminals. By 1992, approximately 103,823 Germans had been investigated; of them only 6,487 were prosecuted and 5,513 were convicted, most for non-lethal crimes. About 7% of those convictions were for crimes against Jews [73, 66]. In the German Federal Republic, putting those on trial who had been active in the euthanasia programme proved difficult. Karl Brandt, for example, was indicted and sentenced to death in Nuremberg because his conduct had been classified as a crime against humanity as defined in Control Council Law No. 10. The West German judiciary, the government and the public rejected the possibility of applying the international law when trying former Nazis. Thus, Schumann was tried according to the traditional definition of murder as stipulated by the German Penal Code [69]. Therefore, one could assume that, had he maintained good health during the trial, he would most likely have received a maximum of six years imprisonment for *aiding and abetting*, rather than a life sentence for murder.

Fig. 1 Dr. Adina Blady-Szwajger worked in the Berson and Bauman Children's Hospital in the Warsaw Ghetto. Ghetto Fighters' House Archive, 1824

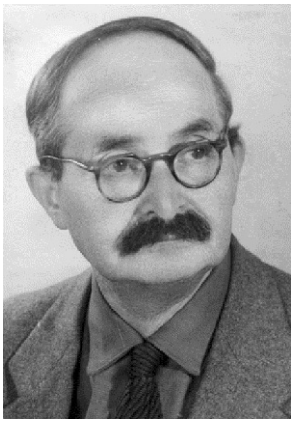

Fig. 2 Dr. Mordechai Lensky, a physician at the Czyste Jewish Hospital in the Warsaw Ghetto and in the ghetto clinics. Courtesy of his son, Prof. Yaakov Lensky

Jewish medical ethics during the Holocaust: the unwritten ethical code

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The Nuremberg Code and ethical questions pertaining to the history of medicine during the Holocaust

The Nuremberg Medical Trial, from October 1946 to August 1947, aroused far less global interest than the previous trial of the Nazi leaders before the International Military Tribunal. Its practical benefit, besides bringing a handful of physicians to justice, was the formulation of the Nuremberg Code—the first internationally authorised document outlining ethical principles for human experimentation. Despite subsequent changes (manifest in the Declaration of Helsinki, the Declaration of Tokyo, and others), the Code is a fundamental landmark in the discussion of the binding bioethical principles from after WWII to the present day. It was an attempt to react to the inhuman criminality of the Nazi experiments, and to prevent such atrocities in the future [75].

Nevertheless, a re-reading of the Code brings us back to basic questions regarding the history of medicine during the Holocaust. Even though the Code refers specifically to human experimentation, its ten principles constitute a kind of "Ten Commandments" of medical ethics, notwithstanding disagreements on its different aspects. These principles, in the spirit of human dignity and human rights, of physicians' moral obligations toward patients—already clear in ancient culture—already pervaded the Hippocratic Oath and other texts. The apparent need to reword the clearest principles of universal humanistic thought in the second half of the twentieth century, more than anything else, raises the cardinal question about which so much ink has been spilled: How come physicians, medical institutions and scientific organisations trampled the most basic principles of humanity in such an extreme and sweeping manner?

Fig. 3 Sabina Gürfinkel-Glocer, a nurse at the Czyste Hospital in the ghetto. Yad Vashem Photo Archive, 3526/4

A look at the ethical dilemmas confronting the Jewish physicians and nurses in the ghettos shows the complexity of the bioethical issues facing the medical staff and leadership as persecuted victims. It shows also that the nature of these moral dilemmas and decisions was greatly influenced by the medical workers' ethics education. Moral considerations were expressed in extreme situations that confronted different groups of medical staff, both the "perpetrators" and the "victims" under the Nazi regime. A humane ethical system seemingly led to medical ethical dilemmas and (albeit tragic) humane decisions, and a racist ethical system led to cruel acts by physicians, even while "wearing the cloak" of pseudoscience.

In its historical context, the Nuremberg Code inspires readers to deepen the study of the history of medicine during the Nazi period. This field of research offers an important observation of the personal and institutional moral lows of some medical practitioners and scientists, manifested during this period, and the strengths of other individuals and groups among medical and healthcare staff, put to the test and forced to deal with tragic dilemmas according to outstanding ethical principles. The

study of both sides is paramount to the global bioethical discussion "after Auschwitz."

The next section describes some of the ethical dilemmas that confronted the medical staff in the Warsaw Ghetto—the largest ghetto. These and other dilemmas arose in nearly all the ghettos.

Characteristics of ethical dilemmas in the ghettos

The cruel reality enforced on Jews during the Holocaust led to terrible moral dilemmas. In the *moral luck* terms of philosopher Thomas Nagel, these dilemmas were a clear case of *bad circumstantial luck*, when any mode of action comes at a heavy moral price [76]. Ghetto physicians faced the most difficult dilemmas. Some of these are encountered daily by medical staff in normal times and certainly in emergency medicine or in mass-casualty incidents. However, ghetto physicians faced dilemmas of incomparable severity: from fitness assessments before deporting men to forced labour, which amounted to collaboration in their almost certain death; to fulfilling German orders to make direct life and death selections from among their colleagues and patients, between extermination in Treblinka and work in the ghetto. Physicians in normal life circumstances are not faced with such dilemmas [77: 53–61, 127–43, 465–8, 481–580].

In his book, *Moral Dilemmas*, Daniel Statman explores the concept of *tragic dilemmas* as referring to a moral choice which comes at the cost of either destroying the decision-maker, or strongly undermining his life [78]. Such choices were not unusual for the ghetto physicians, especially during selections. In the tragic situations described, even though some medical staff worked according to the "*lesser of two evils*" principle, the sources provide evidence of their continued torment over whether their decisions were correct. These were difficult, tragic dilemmas in the full sense of the word. Although many office-holders in the ghettos, rabbis, and especially *Judenrat* members, faced some of these ethical problems, they were most prominent in the day-to-day lives of the medical staff.

The dilemma pertaining to active killing was theirs alone, such as when people begged the physicians to put their old, hospitalised parents "to sleep" to spare them from brutal murder by the Germans, who entered the hospital and shot anyone who was unable to walk to the Umschlagplatz.

Alongside heroic and courageous acts was poor moral behaviour such as the abandoning of professional duties, shirking obligations and corruption. A physician's individual behaviour did not apparently differ from that of many other ghetto office-holders: all faced impossible moral tests. Some withstood them and others failed. Collectively, however, the situation was different. Jewish physicians made a professional, ethical, moral, and humane choice: to establish medical services under genocide conditions that had led to epidemics and mortality. The Jewish medical staff and leaders in the ghetto established these systems under their own steam, as persecuted victims, motivated by ethical and moral imperatives that saw the saving of life as a supreme value. The obligation to heal the sick is so central to Jewish perception, that even under impossible conditions, they succeeded in setting up medical services based on modern professional conceptions [77], including preventive medicine[2] [77], hospitalisation[3] [77, 79], medical research[4] [80, 81], academic study, and training [82, 83].

The strategies of coping with the ethical dilemmas employed by the ghetto medical staff must be discussed in the broader context of the medical systems collectively established by the Jewish physicians. Notwithstanding these tragic dilemmas, as described below, they did not shirk their collective responsibility, preventing the collapse of the medical services. Quite the opposite; despite coping with dilemmas in the tragic reality, with reinforced ethical and professional commitment to the Jewish cultural tradition, they attempted to "bring healing to a drifted leaf"[5] while suffering from the same torment and diseases as their patients, and as the rest of their brothers and sisters imprisoned in the ghettos [80].

I suggest distinguishing between two types of dilemma, even though the differences between them are not always absolutely clear. One type includes dilemmas in which, on the one hand, the medical staff were required or expected to help patients in distress while risking their own lives. Here the general question is: To what extent should medical workers endanger themselves to save the needy? Another type of dilemma does not involve personal risk, but a conflict between values or moral norms. These are moral dilemmas, as accepted in contemporary philosophical discourse. In this sense, dilemmas are situations in which one faces two conflicting obligations, which cannot both be fulfilled [78]. The philosophical literature has debated the question of whether these dilemmas exist; is it possible to have two conflicting obligations, from which there is no way out, because either option will leave the person morally deficient [84, 85, 78]? A study of the medical staff's difficult dilemmas casts doubt on the validity of the philosophical stance that denies the authenticity of these dilemmas. The problematic ethical nature of the situations is not derived from back-

[2] The Jewish health organisation, TOZ (Zdrowia Ludności Żydowskiej), which operated within the Jewish communities in Poland during the interwar period was particularly well-known for its advancement of preventive medicine and social medicine for the weaker sectors of society.

[3] Czyste, the large Jewish hospital which served the Jewish and non-Jewish population in Warsaw, was not located within the ghetto boundary. The Jews established a replacement institution in buildings scattered throughout the ghetto, to serve the ghetto's patients. In addition, the Bersohn and Bauman children's hospital, which operated in Warsaw during the interwar period, continued to operate in the ghetto.

[4] The Jewish physicians in the Warsaw Ghetto, while suffering from hunger along with the rest of the Warsaw Ghetto inmates, conducted a study of the effects of hunger on the human body among adults and children. Most of the findings were documented and were smuggled to the Aryan side.

[5] From a liturgical prayer recited on the eve of the Day of Atonement, the holiest day in the Jewish calendar.

casting, but was recognised as such at the time. I distinguish between "self-endangerment dilemmas" and moral dilemmas in the other sense[6] [86, 87].

Dilemmas involving personal risk

Abandon patients to save oneself? When the military front advanced towards Warsaw in 1939, the medical workers faced the dilemma of whether to continue to care for their patients and thus put their own survival at risk. Many respected professionals tried to save themselves. When the Germans invaded Warsaw, fear gripped the hospital workers. At that time, Dr Amsterdamski and Nurse Sabina Gürfinkel-Glocer were working at the Czyste Hospital: "Now hell will gape before us," said Sabina, to which he answered: "Do not despair—Not all the Jews will be destroyed … the Jewish people will not be destroyed … and therefore we must be strong and save whoever we can …" He worked tirelessly throughout the period. "It was a question of honour for us to help the doctors and together save those that could still be saved," wrote Sabina [88].

This dilemma was especially prominent immediately before and during the Warsaw *Grossaktion* of 1942, when, like everyone else, the medical staff wanted to save themselves.

Dilemmas in which medical workers are required to treat patients while risking their own lives are also discussed today. For example, the Ethics Board of the Israel Medical Association has formulated its stance on endangering medical staff. In an emergency, when physicians are forced into life-threatening situations by caring for patients, "then the physician, together with other safety authorities, will evaluate the risk of entering the scene of the incident versus the obligatory need to save lives" [89]. In other words, the Medical Association does not take an absolute stance regarding the most appropriate response in such a case.

The historian Emanuel Ringelblum expressed his appreciation of medical staff and described their altruistic behaviour in the ghetto: "Earlier we mentioned the … heroic stand of the educators and primarily of Dr Korczak … The conduct of the doctors and nurses at the Jewish hospital was similar … a few dozen doctors and nurses stood guard and did not abandon the patients until the very last moment. When … more than 1000 patients were loaded onto the train cars, a small number of doctors and nurses went with them. Such was the behaviour of the people who were viewed as subhuman by the Nazis" [90].

Risk infection by patients or stop working with them?

The work of physicians and nurses in the ghetto carried the risk of contracting very serious illnesses to which they would not normally be exposed. The medical staff were faced with the dilemma as to whether or not to continue their medical duties. When typhus raged through the ghetto, about 30 percent of the 800 physicians working there contracted it. The disease claimed the lives of about eight percent of those who were working in the Czyste Hospital emergency room, who were especially at risk. In his memoirs, the renowned scientist, Prof Ludwik Hirszfeld, described widespread infection among physicians and nurses working at the ghetto refugee centres, many of whom died. The living quarters of the masses of refugees who flocked to the Warsaw Ghetto were a hotbed of morbidity and mortality. Dr Lensky's descriptions are a window into the dilemmas facing the physicians; aware of the refugee centre's terrible conditions, his response to the offer of a post there was ambivalent. His wife tried and succeeded in dissuading him from taking the position, but he was wracked with pangs of conscience:

"Mixed feelings raged in me, my love for my family was at odds with my conscience … I was obliged to be with the refugees … help make them less bitter, rekindle their hopes, relieve their desperation. I couldn't fall asleep that night …" [91].

The Israeli Medical Association's paper on the physicians' risk of exposure while treating infectious patients, reads as follows: "Should the system be unable or unwilling to provide the means … the doctor is not obliged to endanger himself beyond the limits he shall voluntarily set upon himself along with his colleagues and other experts" [89].

Moral dilemmas: conflicting values

Moral dilemmas in the second sense include cases of several conflicting moral requirements, which each involved a bad choice.

Physicians required to perform selections: One of the most difficult dilemmas was having to decide who would be sent to the extermination camps. Directors of Jewish hospitals, senior physicians, and other medical professionals in the ghetto were sometimes required to perform selections from the hundreds of medical workers and their families employed in the medical institutions, as well as from among the hospital patients. This meant implementing the Nazi decrees, and physicians' direct and personal involvement in sealing the fate of their colleagues. Dr Marek Balin wrote:

"The Jews themselves are obliged to hand their brothers over to death … three prominent physicians had to make the judgments. They had … a list of patients' names. Alongside each name, a (+) sign meant deportation or death, while a (-) sign meant to remain in the hospital. The doctors stopped at each bed for a longer time than usual. They whispered quietly, with anguished voices … Dr. Szenicer was … holding a handkerchief in front of his face. He not only evaded the staring of patients but he seemed also ashamed before his colleagues. He walked through the rooms with his head lowered and the handkerchief covering part of his face … Terrified, Chana Rosenfeld … grasped the situation as she started crying at

[6] I have written widely about the ethical dilemmas facing the medical staff in the Warsaw Ghetto and the Šiauliai Ghetto.

the moment the (+) sign was being marked alongside her name. The doctors kept … wiping their own tears …"[7] [92].

In the final stages of the *Grossaktion* to deport the Warsaw Ghetto's Jews to Treblinka, every *Judenrat* department received a quota of people exempt from deportation, those recognised as workers needed by the Germans. Under these circumstances, senior physicians had to decide who would receive a "life number." The exemption selection criteria were different in each department. For instance, senior physicians were left to serve as department heads; another criterion was saving entire families rather than individuals. When it was decided to spare the department heads, their wives and children were given "life numbers" as well. This made sense, but the general workers and some of the ordinary doctors paid the price. Some felt that as many workers as possible should be saved, specifically individuals without children, but apparently no principle was adhered to absolutely. Dr Polisiuk, a gynaecologist in the Czyste Hospital, writes that the quota for the hospital wards, which held some 800 people, was only 200. According to Dr. Polisiuk, the view of the general public was that the council and the department heads should not have undertaken this task. They should have left it to the Germans, even at the cost of a larger number of victims. Polisiuk also wrote that it was known that when the lists were compiled, the power of personal connections would override the value of rights and the workers' devoted labour of many years; the majority were certainly doomed to suffer. It is clear that the ability to leave such a limited number of people in the ghetto could not offer a just solution to such a tragic problem.

Since none of the members of the *Judenrat* wished to read out the list, and as many of the workers had requested Polisiuk's assistance with the task, he agreed with a heavy heart:

"It was the most tragic moment in my life. While reading out the list, I handed out a death sentence to 600 innocent people: close friends, colleagues … I was obliged to read through the list several times! They did not believe they had not been included …"[8] [93].

Euthanasia by physicians and nurses during the *Aktions*

When the Germans penetrated the hospital and all hope was lost, some physicians and nurses performed "euthanasia" on their family members, as well as on old people and children who lay in the hospital.

Blady-Szwajger described the *Aktion* in the hospital in her memoirs:

"… Doctor, please give my mother an injection. I can't do it. I beg you, please. I don't want them to shoot her in bed, and she can't walk." So I asked her what was in the syringe and she told me it was morphine … When I left the room … we took a spoon and went to the infants' room. And just as, during those two years of real work in the hospital, I had bent down over the little beds, so now I poured this last medicine into those tiny mouths … told them that this medicine was going to make their pain disappear. They believed us and drank the required amount from the glass …" [92].

"This is very problematic behaviour," argues Prof Steinberg. "Any action of killing a person, even if the motivation to do so is humane, is still an act of murder".

The American physician Ralph Yodaiken disagrees: "I believe that Dr. Blady-Szwajger, who gazed into the wells of life and death and knowing what was expected, chose the only option for her beloved patients and allowed them to die with dignity. Her action should be seen as an act of resistance par excellence …" [93].

In conclusion

In his memoirs, Dr. Lensky wrote: "Of the 830 physicians, very few did not measure up morally … But such cases were rare, and the number of doctors whose deeds would have been condemned by any society was negligible" [91: 86].

The ethical question was never far from the minds of health workers, and moral challenges were apparently one of the dominant experiences of their unique work under ghetto conditions. Despite the difficult and tragic ethical dilemmas facing each individual worker, the ghetto medical staff, as a collective, strove to establish a professional, ethical and humane medical system under unimaginable conditions. In many ways, this system, with all its dilemmas, was unique and unprecedented in the history of humanity and of medicine.

In the historical context of the Nazi era, as a "Ten Commandments" for medical experimentation, the Nuremberg Code is a beacon, for both practitioners and patients, against scientists' and physicians' abuse of power. Adherence to its principles, such as enforcing voluntary informed consent, preventing harm and human suffering, and preserving the subjects' freedom to stop the experiment at any stage, is an attempt to ensure against the repetitious violation of human rights, as perpetrated in the Nazi medical experiments. In this sense, it can be said, in retrospect, that the activities of the Jewish medical staff in the ghettos proves the possibility of upholding these fundamental principles, even under extreme conditions. This case study reinforces the spirit of the Nuremberg Code, which does not lose its validity, even under the most difficult enforced conditions of mass atrocities, ethnic cleansing and genocide.

It is also important to note that, in addition to the medical treatment, hospitalisation and the study of medicine, physicians and scientists in the ghettos conducted valuable research on the inmates' morbidity. As the diseases that spread throughout the ghettos were typical to genocide conditions but rare during normal times, the staff lacked knowledge of how to treat these phenome-

[7] Balin M. Testimony of a physician (Polish). Yad Vashem Archive, 03–441.

[8] Notebooks of Dr. Polisiuk, 06.09.1942–07.09.1942, Meruba [Square], memoires of the Czyste hospital. Ghetto Fighters House Archive. File 3182.

na. Research was, therefore, necessary to improve treatment methods as well as to document the Nazis' crimes for posterity. Prominent research examples are the studies of hunger and of typhus conducted in the Warsaw Ghetto. The researchers, who were suffering from the same troubles themselves, did not exercise coercion, did not cause additional suffering, did not worsen the subjects' state of health, and showed sensitivity toward the patients and their conditions—thus adhering to the later Nuremberg Code criteria. Needless to say, the fate of these medical workers was no better than that of the rest of the Jews in the ghetto. After their long, exhausting, and dangerous service to the community, most were deported to the camps.

One of the thousands of physicians who worked in the ghettos was Dr Julius Moses, who had been a general practitioner in Berlin from 1920 to 1932 and a member of the Social Democratic Party in the Reichstag. In 1930, when about 75 children died in Lübeck, after receiving an inadequately tested tuberculosis vaccine, Dr Moses harshly criticised this appalling medical disaster. In his role as physician and legislator, with the aim of preventing a recurrence of such cases, he formulated a series of guidelines for experimentation on new vaccines and for medical experiments in general. They included inter alia full explanations and informed consent requirements for clinical trial subjects or their guardians. His recommendations were promulgated by the Reich Health Council in 1931, but the legislation procedure was aborted with the Nazis' rise to power. In the summer of 1942, Dr Moses was deported to Theresienstadt and died there. However, his fight to uphold these ethical principles was not in vain. During the Medical Trial, his recommendations were discussed, alongside other documents, as ethical standards for performing medical experiments, and appear to have had great influence on the formulation of the Nuremberg Code. [94, 95: 2, 120].

The complicated legacy of the Nuremberg Code in the United States

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> "*The defendants [most …trained physicians and some … distinguished scientists]…are charged with murders, tortures, and other atrocities committed in the name of medical science … The victims of these crimes …for the most part are [the] nameless dead … The charges against these defendants are brought in the name of the United States of America. They are being tried by a court of American judges …and … [it is …important … that] this Court, as the agent of the United States and as the voice of humanity, stamp these acts, and the ideas which engendered them, as barbarous and criminal … It is our deep obligation to all peoples of the world to show why and how these things happened …*" -Edited excerpt from Telford Taylor's Opening Statement of the Prosecution in the "Medical Trial," Nuremberg, Germany, 1946 [96]

American roots of the Nuremberg Code

In 1945, the International Military Tribunal (IMT) conducted by the Allied powers including the United States (US), France, the United Kingdom and the Soviet Union tried high-level Nazi war criminals for "war crimes" and "crimes against humanity" [96]. After the IMT, the Allied Control Council gave authority to the US to conduct twelve additional trials. The first case was the Medical Trial conducted with US judges by US prosecutors based on "landmarks in international law which [were] erected in Nuremberg [and] rest[ed] on a foundation of legal procedure which …satisfied the traditional safeguards of … American law" [97]. Thus, although the Medical Trial was considered an international tribunal not "bound" by US law and only nominally conducted by the US, it was nonetheless permeated by American jurisprudence and could be viewed as singularly American [98].

The physician defendants were on trial for murder committed under the guise of human experimentation, among other criminal activities. At the close of this criminal tribunal, one would expect an adjudication of guilt or innocence. However, the judges included in the final decision a nuanced code of ethics of human experimentation subsequently known as the Nuremberg Code. During the trial, US judges heard evidence of unethical human experimentation conducted on subjects where death was the end result. The Nazi doctors, in their defense, presented evidence of internationally-sponsored unethical research exploiting the vulnerable, particularly prisoners. US judges sitting at Nuremberg were disturbed by what they heard during the tribunal. Apparently, there were no universally-accepted international ethical guidelines for the protection of human subjects until the Nuremberg Code. Though the Code was not relevant to the murder carried out by the Nazi doctors, it sought to prevent future unethical human experimentation through the protection of human subjects.

The Code has two important principles, the first of which is the protection of the rights of the human subject and the second is the focus on the welfare of the human subject. Informed consent (Principle 1) and the right to refuse to participate or terminate participation as human subjects at any time (Principle 9) underscore the individual's rights in human experimentation [99]. The other eight principles of the Code focus on the welfare of human subjects and include the necessity of a comprehensive research design, the assessment of risk to the sub-

ject, and the investigator's assurance that no imminent harm or death may befall the subject [99]. The Nuremberg Code was to apply to normal, healthy volunteers. The Code ultimately focuses on voluntary, informed, and understanding consent as the hallmark to protect the rights and welfare of the human subject.

Although emerging from the context of the Medical Trial, the Code itself provides a proscriptive ethical and legal framework for the future of human experimentation [100, 101]. The inclusion of "voluntary consent" is a crucial indicator that the Code was indeed intended to be proscriptive. This is based on the premise that the lack of informed consent from concentration camp prisoners was an irrelevant charge to bring against the Nazi doctor-murderers, given that the victims of these camps had no chance of self-determination or autonomy, as they were destined for death. Rather, this principle indicates the American judges' intention to safeguard against future human experimentation abuses [101, 102].

The Code's emphasis on both informed consent as absolute and the right of the human subject to end an experiment at any time exemplify how its principles are focused on protecting the individual's autonomy [103]. The foundational tenet of voluntary informed consent parallels the US Constitution. Such examples are found in the Constitution's Preamble, 4th Amendment, and 14th Amendment, which protect against infringement of the individual's inviolability including "unreasonable searches and seizures" as well as prohibiting any state from "[depriving] any person of life, liberty, or property, without due process of law" [104, 105]. Clearly, the American judges "being … steeped in the self-determinism ideal, so much celebrated in [US] political tradition … wanted their first principle to safeguard human dignity and inviolability, in research and civilized life" [101]. Initially in the US, the Nuremberg Code's emphasis on safeguarding future medical experimentation for the most part was felt to be unnecessary in the US research context [96, 106].

Reaction to the Code in the US

Renowned Holocaust survivor, Elie Wiesel, hypothesized that the doctor-murderers of the Nuremberg trial viewed human beings as abstractions. He astutely captured the danger in the subjugation of an individual's humanity, which is often a risk in conducting human experimentation. Wiesel believed that the legacy of the Nuremberg Code was to act as a force against scientific hubris and that "respect for human rights in human experimentation demands that we see persons as unique, as ends in themselves" [96, 107].

In the US, medical experimentation had consistently challenged the ideal of treating human beings as "ends in themselves," when human subjects were used solely for the purpose of creating new knowledge [107]. Another factor limiting the Code's influence in the US was medicine's long-established reliance on the physician as the sole arbiter of the patient's/subject's care and protection. While there has been a modern progression toward a more fiduciary doctor-patient partnership, at the time of the Code's promulgation there was widespread consensus among American physicians that the patient's compliance was essential to appropriate care. In essence, physicians had historically relied on a personal moral adherence to *primum non nocere*, "first, do no harm." Additionally, physicians had used the ethical principle of beneficence to guide them, but tended to "submerge the patient's authority" even when augmented with informed consent [108]. The inherent paternalism in physician decision-making inevitably compromised the individual's autonomy even amidst attempts to observe the Code's principles. Ultimately, this contributed to the dilution of the strength of the Nuremberg Code.

Moreover, because the Code was formed in response to the barbarous acts of the Nazis, many in the US medical and research community avoided the guidelines, believing the Code was intended for only those perpetrating violations akin to the defendants in the Medical Trial. "Human subjects" were brutally tortured, maimed, and killed at the hands of the Nazi doctors in the name of scientific progress while "…respect for human dignity [was] totally abrogated" [101]. The revelation of these unspeakable acts prompted the US medical and research community to distance itself from the Code, despite the fact that the Code's general principles were intended to curb exploitation in all human experimentation. Historically, medical research in the US was often conducted on the most vulnerable, including children, terminally ill individuals, women, and the impoverished [101]. The fact that researchers used these socially disenfranchised populations as research subjects provides evidence that Wiesel's hypothesis of the human being's abstraction existed even within the medical community in the US [107]. In essence, the researchers dehumanized these individuals due to their social status as a means to an end, rather than seeing them as "unique" ends in themselves [107].

Contributing to the Code's dismissive reception in the US was the belief that the Code's safeguards applied only to non-therapeutic research on "healthy" subjects. As human experimentation extended beyond "healthy" individuals into the realm of therapeutic research, where individual subjects with diseases might derive a benefit from the results of or even from participation in research, the distinction between treatment and research became obscured. Physicians regarded their research as part of a treatment plan for a patient-subject, not requiring informed consent. Additionally, as the Code originated within the context of a criminal trial, it was often viewed as too "legalistic"; and therefore deemed irrelevant by US researchers [103]. At the same time, physicians and researchers believed that its principles were a threat to medical progress [109]. Nonetheless, ignoring the Code and its precept of informed, voluntary consent placed individual human rights in peril. Consequently, significant abuses have been perpetrated in the name of medicine and research throughout post-Nuremberg US history.

Application of the Code in US federal regulations

Since the time of the Code's promulgation, medical research has proliferated worldwide, amplifying the potential for research abuses. The increase in US medical research activity precipitated the necessity for the increased protection of human subjects in biomedical and behavioral research. The Code's initial inconsistent incorporation into US statutes, regulatory requirements and policy-making bodies at the federal level demonstrate that the Code was either applied as if its principles were "enduring ethical statements," or were dismissed as irrelevant because the Code was seen as "narrowly focused on assessing the activities of specific defendants" of the Medical Trial [96, 110].

The Code's principles have largely been adopted into US federal regulations. The National Institutes of Health (NIH) adopted ethical, but not legal, guidelines beginning in the mid-1950s that referred to the Nuremberg Code as the 'ten commandments of human medical research.' Subsequently, in 1961, the NIH handbook cited the Code as a central guiding principle [96, 110]. In 1962, the Food and Drug Administration (FDA) became involved in regulating research with the introduction of the Drug Amendment Acts. Thus, another federal body began regulating human experimentation, but only within its purview to regulate FDA-related research. Notable guidelines that the FDA and NIH enacted at this time included the requirement for research subjects' consent and the assignment of experimentation responsibility to the institution, respectively. These guidelines "set the tone for future federal involvement regulating research. Both sets of rules view research in a positive light and try to protect subjects, but not at the expense of hindering research" [96, 110]. Building upon the National Research Act of 1974, federal governmental bodies subsequently established an extensive set of regulations for government-sponsored research by mid-1975 [96, 110]. Within these regulations were special stipulations on research with fetuses, pregnant women, and in vitro fertilization. In 1981, the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research included prisoners and children as special protected research classes [96, 110]. Both of these sets of regulations go a step beyond the Nuremberg Code, which does not stipulate specific principles for special populations. However, significant gaps remained in the US regulatory framework for other vulnerable populations, such as the mentally ill.

In a stark departure from the Code that makes protecting human subjects the obligation of researchers alone, the federal regulations place responsibility for the protection of the human subject's rights and welfare on the institutions that receive federal funding. For example, Institutional Review Boards (IRBs), who review ethics and compliance with federal regulations, may allow researchers to waive consent in certain situations at the discretion of an IRB. These changes make it "seem that non-beneficial research could be conducted on a non-consenting subject, precisely the behavior the Nuremberg Code explicitly prohibits" [96, 110]. Other citations of the Code in the US include the 1995 Advisory Committee on Human Radiation Experiments (ACHRE) report, the 2001 reports by the National Bioethics Advisory Commission (NBAC), and the 2011 Presidential Bioethics Commission which published a report entitled, *Moral Science: Protecting Participants in Human Subjects Research* [111]. However, the Code was not and has not been completely observed by those conducting research with human subjects. While the Code's principles have been robustly adopted into the contemporary regulatory framework in the US, the failure to apply the "spirit" of the Code in clinical applications has resulted in "insufficient guidance" to protect the inviolability of all human research subjects [112].

Application of the Code in US courts of law

Considered "the most complete and authoritative statement of law" on informed consent in human research, the Nuremberg Code could also potentially be applied in US courts in both criminal and civil cases [96, 113]. However, the Code has rarely been utilized in the US legal system—a paradox given that it is the most authoritative statement on voluntary, informed consent [114]. In fact, no criminal cases have cited the Code since its inception. Furthermore, in the few civil cases in which the Code has been cited, there have been no damages awarded for injuries to subjects, nor punishments prescribed by law for researchers who have violated the Code [114].

Nonetheless there exist some notable examples when the Code has been cited in US courts. A case that raised the question of whether an involuntarily committed individual could consent to psychosurgery to treat aggressive behavior (*Kaimowitz v. Michigan Dept Mental Health, 1973)* referred to the Code. The court cited the entire Nuremberg Code in its decision and ultimately ruled that the individual could not give "voluntary, competent, informed or understanding consent" [114]. This could be viewed as the court enforcing the Code's hallmark feature of informed consent at the state level. In contrast, in a suit filed by a former US soldier who was injured during Cold War experiments, the US Court of Appeals stated that "The majority neither endorses nor sanctions a concentration camp mentality ... what we are called upon to decide is simply whether the plaintiffs are entitled to money damages" [114]. Years later, a federal district court judge further discounted the Nuremberg Code as a "discussion document without legal force in the United States" [114].

The US Supreme Court has decided only one case which referred to the Nuremberg Code. *United States v. Stanley* involved an attempt to retrieve records on the CIA's program that administered LSD and other agents to "uninformed human subjects" beginning in 1953 [114]. This was the Supreme Court's opportunity to determine whether or not the Nuremberg Code, which was originally formulated by a US military tribunal, at least applied to the US Army [114]. US courts have consistently ruled that national security matters supersede the precepts of the Code [115], despite the fact that the Armed Forc-

es Medical Policy Council (AFMPC), a division of the US Pentagon, recommended to the Department of Defense in 1953 that the Code's principles be entirely adopted in national security matters regulating human experimentation [115]. The US Supreme Court's decision to side with the CIA in *United States v. Stanley,* in which the CIA had administered hallucinogens to unsuspecting subjects, again demonstrated that the Code was secondary to national security. Four justices dissented to the decision. In her dissent, Justice Sandra Day O'Connor cited the Nuremberg Code, and stated "…the standards that the Nuremberg Military Tribunals developed to judge the behavior of defendants stated that the 'voluntary consent of the human subject is absolutely essential'…our Constiution's guarantee of due process of law guarantees this much" [114]. The Code has been relegated to a legal gray area by the courts. In turn, American courts have interpreted the Code's application in contradictory ways, thereby complicating its role in protecting the rights of human subjects.

The Code in the US research context

There are several concerns associated with the implementation of the Code in the US research context. By leading with informed consent, the authors of the Code were arguably emphasizing its importance. This is its strength; however, while voluntary, understanding and informed consent is necessary to protect the subject's autonomy and inviolability when conducting human experimentation, consent alone is necessary but not sufficient. Informed consent is the grounding principle of the Code, but the welfare of the human subject is equally important and arguably certain parameters and research protocols must be in place prior to ascertaining informed consent. Subsequent principles of the Code outline other crucial, prerequisite safeguards, such as a competent investigator, adequate facilities to prevent harm to the subject, and a proportional risk-benefit analysis which must be in place before the human subject can be approached to participate and give consent in human experimentation. Unfortunately, physicians and researchers often pay attention to the Code's leading principle, operating under the false assumption that informed consent alone is both necessary *and* sufficient to conduct human experimentation. Therefore, while this first principle is indeed an essential safeguard, it should not overshadow other ethical requirements of the Nuremberg Code.

US research abuses

Despite the Code's promulgation in 1947, research abuses have persisted in the US. In his seminal 1966 paper, *Ethics and Clinical Research*, Henry Beecher compiled 50 studies that were unethical and in direct violation of the Nuremberg Code. He detailed 22 studies of the 50 that included instances of treatment withheld, lack of informed consent and even death [116]. Beecher insists, "An experiment is ethical or not at its inception; it does not become ethical *post hoc*—ends do not justify means. There is no ethical distinction between ends and means" [116].

In 1972, it was revealed that the US Public Health Service (USPHS) was exploiting 400 poor black men in the "Tuskegee Study of Untreated Syphilis in the Negro Male." USPHS investigators followed these men from 1932 to 1972 to study the natural progression of untreated syphilis. Despite treatment in the form of penicillin, which was considered the standard of care and widely used as early as the 1950s, the USPHS left these men untreated for the duration of the experiment [117–119].

Another example of research abuse occurred at Willowbrook State School, an institution for intellectually disabled children on Staten Island, New York. From the mid-1950s until the 1970s, investigators infected children with live hepatitis virus to study the potential for development of a hepatitis vaccine. In both Tuskegee and Willowbrook, the researchers maintained that they were merely conducting observational studies. In reality, they were taking advantage of a socially vulnerable population under the guise of scientific progress [117].

In 1963, another case of research abuse occurred at the Jewish Chronic Disease Hospital in Brooklyn, New York where live cancer cells were injected into 22 patients without written consent. The researchers claimed that oral consent was obtained, but this did not constitute informed consent, as the researchers did not disclose that they were injecting the subjects with live cancer cells. In this case, researchers believed that full disclosure "might agitate [patients] unnecessarily" and some did not even have capacity to consent [120]. Although the responsible researchers were found guilty of unprofessional conduct, deceit and fraud, they attempted to defend themselves by claiming that they acted according to research customs practiced at the time, where consent was often not documented [120].

A more recent example of the citation of the Code surfaced in the Maryland US Court of Appeals' August 2001 decision in *Grimes v. Kennedy Krieger Institute* (KKI). KKI of the Johns Hopkins University was charged with exposing poor black children to lead paint in order to test economical abatement options during its study, *Lead-Based Paint Repair and Maintenance Interventions*, conducted during the 1990s [121]. In delivering its opinion, the Court stated, "Of special interest to this Court, the Nuremberg Code, at least in significant part, was the result of legal thought and legal principles, as opposed to medical or scientific principles, and thus should be the preferred standard for assessing the legality of scientific research on human subjects. Under it, duties to research subjects arise" [121]. According to the Court, healthy children should not become participants in "non-therapeutic research" where there is no direct benefit to the child, even with consent from a parent or guardian [121]. This is a valid concern in research involving children, as they are a special protected research class. As such, consent from a parent or guardian does not necessarily constitute voluntary, informed, and understanding consent. Moreover, the court recognized that children involved in this study were especially vulnerable as they were also economically disadvantaged. With

comparisons to Tuskegee, the Jewish Chronic Disease Hospital, and Nazi human experimentation, the Court insisted: "These programs were somewhat alike in the vulnerability of the subjects; uneducated African American men, debilitated patients in a charity hospital, prisoners of war, inmates of concentration camps and others falling within the custody and control of the agencies conducting or approving the experiments. In the present case, children, especially young children, living in lower economic circumstances, albeit not as vulnerable as the other examples, are nonetheless, vulnerable as well" [121, 122].

The legacy of the Nuremberg Code in the US

The Nuremberg Code emphasizes the protection of the individual's rights and welfare through autonomy, human dignity and self-determination. These concepts are firmly rooted in the international human rights movement, but are also values fundamental to the US, as espoused in the US Bill of Rights of the US Constitution.

By embracing the Nuremberg Code's view of the individual's inviolability as sacrosanct, physicians and researchers serve the interests of the individual human subject as well as the overall goals of society. An antidote to a mechanistic and atomized view of science and medicine is to put the human rights agenda at the forefront, as the US judges attempted to do in Nuremberg. If US medicine and its authoritarian roots were to embrace human rights as superseding scientific discovery, it would serve as a bulwark against the scientific thrust of depersonalization–a thrust that contributed to the egregious torture and murder perpetrated by Nazi physician-researchers. Unfortunately, US history has provided evidence time and time again that abuses can occur when scientific inquiry and breakthroughs come at the expense of the individual.

On this 70th anniversary of the Nuremberg Code and The Medical Trial, we remember the words of Elie Wiesel: "We must not see *any* person as an abstraction. Instead, we must see in every person a universe with its own secrets, with its own treasures, with its own sources of anguish, and with some measure of triumph" [96].

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Medical ethics in Post-War Germany: reconsidering some basic assumptions

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In international debates on medical ethics, it is frequently assumed that due to the Nazi past, there are specific, restrictive positions regarding euthanasia, human subject research, and human reproduction in Germany. For example, the author of an essay on "The Dilemmas of German Bioethics" in the US-American political journal *The New Atlantis* wrote about the "burden of history" responsible for the hesitancy to accept new biotechnologies in relation to medicine and human reproduction. Supposedly, "Germany has enacted some of the strictest bioethics policies in the world" on euthanasia, experimentation with human subjects, and "manipulation of nascent human life" [123]. Others speak of the public discussion in Germany as being "haunted" by its past [124–126]. Thus, the impact of the Nazi past on present-day German debates in medical ethics is widely taken for granted. It appears almost self-evident, and beyond the need for any further investigation into whether this impact is the same for all the fields of medical ethics named above, or whether the references to and consequences drawn from the past might potentially change over time [123, 126].

It is certainly true that the legal trials of the immediate post-war years and the public knowledge about medical atrocities had profound repercussions on the field of medical ethics in Germany. However, recent historical work has amply documented that ethical positions and legal regulations in post-war Germany were not at all homogeneous and static, but changed considerably over time. In addition, ethical positions during the post-war period may not simply be characterised as restrictive for all the issues mentioned. Rather, the dynamics of change, and the factors influencing this change, were quite different for the various issues at stake, be it questions of human subject research, end of life-decisions, or human reproduction [127]. One of the aims of this contribution is to illustrate that the story is much more complex than assumed in the stereotypic image of generally restrictive post-war German medical ethics, and that in order to more adequately understand the intricacies and dynamics of the core bioethical issues, actors in the field should be aware of this complexity.

Overall, a historical account of post-war medical ethics in Germany is far from being accomplished. It would have to look at five spheres of activities:

1. Debates in the public sphere
2. Strategies and statements of professional functionaries
3. Informal "behind the scenes" activities of medical representatives, health officials, and "moral authorities" (e. g. theologians, philosophers)
4. Developments in the emerging sphere of institutionalised medical ethics
5. Developments in the legal sphere.

Until now, historical accounts have mainly focused on the second and the fourth sphere [127, 128]. The following will go a step beyond this limited scope by addressing two aspects:

First, the focus is on the attempts of the profession in post-war Germany to construct a historical narrative which accounts for the medical atrocities, and at the same time exonerates the majority of physicians and the medical profession. It will be argued that medical repre-

sentatives to a certain extent succeeded in constructing such a narrative, and that this enabled the profession to sustain its comparably strong position in public debates and health policies.

Second, ethical and legal issues around human subject research will be addressed by sketching the link between one of the Nuremberg trials and a significant "behind the scenes" discussion on the regulation and ethics of clinical trials at the end of the 1940s. This informal discussion, I argue, may have had a strong impact on the late enactment and quite liberal content of the German Pharmaceuticals Act of the 1960s.

An exonerating narrative of Nazi medical atrocities

In the immediate post-war years, representatives of German physicians were deeply concerned about the impact of the atrocities committed during the Nazi period on the reputation of the medical profession. Already during the Nuremberg Medical Trial, in June 1947, the delegates of the West German Chambers of Physicians convened and discussed potential consequences and outlines for a future code of conduct. They passed a pledge, the so called *Bad Nauheimer Gelöbnis* (Vow of Bad Nauheim), named after the location of the meeting. The pledge combined elements of the Hippocratic Oath with very explicit and restrictive statements on abortion, sterilisation, euthanasia, and human subject research [129]. These norms quite clearly referred to the historical facts exposed during the Trial. The Vow in fact preceded the Declaration of Geneva of the World Medical Association by more than a year. It lacked, however, the core sentence of the Geneva Declaration which proclaimed that the health of the patient is the supreme value to be pursued by the physician. In practice, the Vow was superseded by the later Declaration.

This remarkable pledge of 1947 has to be understood as a reaction of the representatives of the profession to the ongoing Nuremberg Medical Trial. The Trial and the parallel de-Nazification procedures of the Allies had a broader cultural dimension—beyond the sentences for a few individual physicians and functionaries; it seemed possible to quite clearly judge who was a guilty person, who had only been opportunistic, and who had been a victim. Thus, the process of confronting and analysing the past was primarily perceived as a legal problem, and therefore left to the courts. In the courtroom, complex and interrelated conditions and ramifications from the medical, the political, and the economic spheres were reduced to the singular question of individual culpability. Such concentration on individual behaviour caused, or at least consolidated, an attitude according to which Nazi atrocities in general, and medical crimes in particular were the result of isolated, ideologically minded or even perverted fanatics. By prosecuting these individuals in court, it was implied that the burden of the past could be decreased little-by-little, and finally lifted [130, 131].

In this context of individualising responsibility, and identifying "real" Nazis, the organised medical profession succeeded in establishing a specific interpretation of the past which integrated three features: an explanation for the atrocities, an exoneration of the profession, and a kind of condensed historical narrative. This interpretation may be summarised as follows: With the Nazi takeover in 1933, medicine and healthcare fell victim to the new regime. Nazi ideology was imposed from outside—namely the realm of politics—onto the profession and led to the atrocities of forced sterilisation, systematic patient killings and forced human subject research. Those physicians who were actively involved were few, and they were fanatic Nazis. In sum, following this interpretation, medicine was instrumentalised and abused for the ideological agenda of the regime [130, 132].

The implicit message of this historical narrative and explanatory model was that medicine itself was intrinsically apolitical, imbued with a clearly-defined, pre-existing and supposedly universal medical ethos which was contaminated by the intrusion of outside political forces. One of the supposed lessons was that in the future, physicians should defend their autonomy against infringements from external political instances.

This historical narrative served obvious purposes. However, already during its emergence in the late 1940s, it was not consistent with available historical knowledge [132]. Nevertheless, it met with strong resonance in the public sphere. In the next decades, medical functionaries, such as the successive presidents of the German Chamber of Physicians (*Bundesärztekammer*), used this narrative when they were confronted with medicine's Nazi past, or in contexts where they sought to avert policies which appeared to threaten the supposed autonomy of the profession [132]. Only in 2012 did the German Medical Assembly (*Deutscher Ärztetag*) formulate an official statement, based on up-to-date historical evidence, acknowledging the responsibility of physicians for medical atrocities, and urging for continuous self-reflection on the frailties of and temptations for physicians [132, 133].

Regulating human subject research

The period immediately following the Nuremberg Trials was marked by attempts to "normalise" medical activities in the realm of both clinical services and research. In this context, medical researchers were not only concerned with their public image regarding the ethics of their activities; they were also eager to safeguard their scope of action and to prevent the state from insisting on—as they perceived it—too narrow limitations of human subject research. The Guidelines for Human Subject Research (*Richtlinien für neuartige Heilbehandlung und die für Vornahme wissenschaftlicher Versuche am Menschen*) were an important document in this context. These Guidelines had already been proclaimed by the Reich Ministry of the Interior in 1931, and they were in force throughout the Nazi period as well as in post-war Germany until the early 1960s [19]. They did not constitute direct legal rules for medical research activities, but rather specified existing legal norms regarding the behaviour of physicians, thus setting standards for carrying out human subject re-

search, similar to the formula "the state of science and technology" used in the context of technology law [19].

As documented by a significant "behind-the scenes" discussion, these Guidelines were seen as an obstacle for proper research in the immediate post-war years. The discussion is documented in the correspondence between Heinrich Hörlein, representative of the pharmaceutical company IG Farben/Bayer Leverkusen, and Paul Martini, professor of internal medicine at Bonn University Medical School [134: 139–46].

Hörlein was not only the director of pharmaceutical research at IG Farben/Bayer Leverkusen, a member of the managing board of the IG Farben enterprise and member of the Reich Health Council during the Nazi period; he had also been one of the defendants at the Nuremberg IG Farben Trial in 1947/48 (which followed the Medical Trial) where he was accused of involvement in human experimentation in concentration camps and responsibility for the development and production of war chemicals. In 1948, he was acquitted due to lack of evidence that he had been aware of the production of Zyklon B or the atrocious experiments [19].

Martini, on the other hand, had kept some distance from the more active party members on the academic staff at Bonn University Medical School during the Nazi period. In the immediate post-war, he was the first president of the German Association of Internal Medicine. Martini was also the author of the reference work on the methodology of clinical trials, the second edition of which had been published in 1947 [134, 135].

In a letter to Martini, dated 17th May 1949, Hörlein wrote:

> "[…] on page 10 of your *Methodenlehre* I read that for a [methodologically sound] trial of new drugs, to exclude psychological factors it is essential that the setting include a 'blind' application, that is, an intake by research subjects without their knowledge" (quoted in [19: 43].

This, Hörlein argued, was in contrast with paragraph five of the Guidelines from 1931 (the paragraph referring to informed consent). Hörlein went on:

> "This discrepancy played a role in the IG Farben Trial in which I […] was to be branded a war criminal. […] It took two expert witnesses […] to clarify to the Court the difference between an experiment and a clinical trial [which entailed a potential benefit for the research subject, but where, for reasons of methodology, consent was not obtained]. Fortunately, the Court did not know the *Richtlinien*, otherwise my situation would have been even more difficult. Resulting from this experience, I see in the *Richtlinien* a certain risk for clinicians involved in trials of new drugs that should be eliminated" [19: 43].

In his response to Hörlein, Martini wrote:

> "You are certainly right that article five represents such a trap [*Fussangel*]. It contradicts our present *modus procedendi*, and if one would adhere to this rule, this would imply a severe hindrance for clinical therapeutic research. I have considered what should and could be done to solve this problem. The present situation is perhaps not yet well suited to attack article five. Certainly, a step in this direction would not be helpful and would meet with critical resonance in the public. But in general I am aware that something has to be done, and I shall approach the Ministry of Social Affairs […] Since this is an issue regarding research, I shall put this on the agenda of the German Research Council (*Deutscher Forschungsrat*)" ([19: 44].

For this kind of activity, Martini was in a privileged position; the new German federal government was established in Bonn in 1949, and as full professor and director of the University Department of Internal Medicine, he had both official and private access to members of the new political establishment. In particular, he was the personal physician of Konrad Adenauer, the first chancellor of the Federal Republic. Like the Nobel laureates Werner Heisenberg and Adolf Butenandt, Martini was also a member of the newly established German Research Council, where he represented clinical medicine [19]. In a further letter, a few weeks later, Martini wrote:

> "[…] I am […] convinced that it will become necessary to correct the *Richtlinien*. They are really not compatible with clinical research, and for everybody who takes the *Richtlinien* seriously, such research is undermined. However, I am of the opinion that the present time is not suitable—for two reasons: On the one hand, as a result of the experiences during the Nazi period, the minds are still so unfavourably sensitised that it would be easy for anybody, be it in government, or the parliament […] to impede a change to the regulations. On the other hand, I am convinced that it will become ever more obvious in the near future in Germany that any unjustified restriction of research will also have most serious economic consequences […]" [19: 45].

Thus, with this exchange, we have two protagonists in the field of clinical research in the early post-war period who—in spite of Nazi medical atrocities—agreed that the existing regulations for human subject research should be liberalised. Further research is needed to analyse the exact impact of this discussion between Hörlein and Martini.

There is additional evidence for similar reservations towards the Guidelines amongst clinical researchers. This is documented in an unpublished survey amongst university professors of paediatrics regarding their evaluation of the Guidelines in the mid-1950s. It shows that an overwhelming majority of these professors considered the Guidelines to be a hindrance for clinical research and that they were in favour of revising them.

In view of this very critical attitude of leading physicians to the existing restrictive regulations of clinical trials in the 1940s and 50s, it is perhaps not surprising that

the Federal Republic was the last member state of the European Economic Community (later to become the EU) to introduce a national law regulating the admission of new pharmaceuticals to the market. The Treaty of Rome from 1957 had made it a requirement that all member states introduce such a law, which happened for example in the Netherlands already one year later, in 1958. In contrast, in Germany, the national Pharmaceuticals Act (*Arzneimittelgesetz*) was passed only in 1961, and as regards the conditions for the admission of new drugs, it was exceptionally liberal. It only required that the pharmaceutical company registered the new compound with the responsible state agency, without any necessity of preceding clinical trials on the efficacy, efficiency, or side-effects of the drugs—a requirement which was essential at the time, for example, according to the regulations of the US Food and Drug Administration, and also according to the Dutch pharmaceuticals Act [136, 137: 247–51]. In stark contrast, the producer of a new compound in Germany was only expected to submit a report of experiences (*Erfahrungsbericht*) on problematic side-effects, compiled by physicians employed by the company. Since, according to the law, human subject research to test new drugs was not required, the *Richtlinien* with their strict rules regarding informed consent were in effect bypassed.

Conclusion

In the preceding, I have argued that since the early post-war period, the German medical profession has managed to establish an interpretation of Nazi medical atrocities that combined a specific kind of historical narrative with an exoneration of physicians and the profession in general. This interpretation of the past shifted the responsibility for the atrocities to forces external to medicine, in particular to the sphere of politics. Allegedly, only a few fanatic Nazi doctors violated the alleged eternal medical ethos, whereas the majority had suffered from the supposed political intrusion.

This exculpatory narrative was widely accepted in public and helped the profession to continue its role as a central player in matters of healthcare policies and research regulation—much more so than in the United States, for example [136]. The strong public status of the profession, its proclamation of physicians' autonomy, combined with state support and an openness to the interests of the pharmaceutical industry resulted in comparatively late and liberal legal norms regarding the admission of new drugs which sidestepped the existing restrictive rules for human subject research.

Thus, it has been demonstrated that the image of generally restrictive bioethical positions in post-war Germany as a consequence of the Nazi past is a significant oversimplification. The situation is much more complex, and in order to more adequately understand the intricacies and dynamics of the core bioethical issues, actors in the field should be aware of this complexity. This knowledge may also help to increase public understanding of and engagement in an informed and nuanced bioethical debate today.

The shadow of the Holocaust and the emergence of bioethics in Israel

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Introduction: The focus of this article is the influence of Nazi medical crimes, especially euthanasia killings and human experiments, on the medical practice and discourse in Palestine and later the state of Israel. I argue that the Nuremberg Medical Trial and Nazi medical crimes had and still have very little impact on Israel and its medical establishment. In the 1950s and the 1960s, only a small group of physicians—mainly Holocaust survivors—were interested in the trial and tried to promote a local discussion about Nazi medical crimes. Moreover, even today, Israel does not have a specific law regarding medical experiments on human beings and all regulations on the subject are based on ordinances related to public health matters [138]. This is surprising given that Jews were one of the main victims of Nazi ideology and one of the groups subject to Nazi medical experiments. I will first describe historical developments leading to this state of affairs and then offer possible explanations.

First Attempts: News of medical crimes carried out by German doctors against helpless individuals reached doctors in Palestine almost as the crimes were committed. For many doctors from the Jewish local community, who received their medical education in German institutions, this terrible phenomenon was felt on a personal and professional level. In autumn 1942 the Hebrew Medical Association asked publicly: "What is the worth of our achievements in the medical field, if the grandchildren of Virchow and Loch and their students are part of these horrors? Where is the hope if in the 20th century the beast takes over and controls human actions?" [139: 349].

The central objective of doctors' organizations in Palestine following the end of WWII was to ensure that Nazi doctors guilty of medical crimes would stand trial, and that post-war German medical professionals would not be welcome in international medical forums. As early as 1946, doctors in Palestine were already demanding that German doctors not be granted membership into the recently formed World Medical Association (WMA) [140]. The rationale behind this demand was that even if only a few German doctors had actually committed crimes, the others had been aware of them, and had kept quiet. Since the German medical establishment did not express any regret over its involvement in Nazi crimes, demands persisted to prevent German doctors from joining international medical associations until the arrival of a new generation of doctors that had no connection to the crimes perpetrated during the Second World War.

In 1945 the Hebrew Medical Association called to "punish the Nazi physicians, who violated the profession of medicine, who were active in the various death camps and concentration camps. […] for not alleviating the suffering of the victims and to their disgrace, they assisted perpetrators, the rulers of the camps, and exploited the disaster to 'expand their medical experience'" [141: 1025].

However, the Nuremberg Medical Trial (NMT) received rather scarce media coverage in Palestine. The Hebrew Physician's Union's newsletter published part of the indictment issued by Chief Counsel Telford Taylor at the NMT on October 25, 1946. In July of 1947, the Israel Medical Association (IMA) published the charges against the doctors on trial in the periodical Letter to a Friend, providing details on the experiments carried out by the accused, which included malaria, mustard gas, sterilization, typhoid-fever, phosphorus, toxins, and simulations of high altitudes and low temperatures. The piece was published six months after it was presented in court in Nuremberg.

The first occasion on which the Hebrew association attempted to bring Nazi physicians to trial and to prevent German medical participation in international professional forums was the World Medical Association's first international conference in September 1947 in Paris. Mark Dvorjetski, a physician and Holocaust survivor [142, 143: 126–32], asked his fellow medical professionals to "show courage and investigate the crimes conducted in the name of medical science and to use all means it has to prevent its reoccurrence, and to declare a boycott against the murderous physicians" [144: 1538]. The Jewish delegation demanded that German physicians be denied membership in the new organization for a period of a whole generation; this effort was, ultimately, unsuccessful.

Despite these attempts, public awareness of the NMT and other related trials was minimal and limited to the symbolic level. The medical community in Palestine and later Israel paid very little attention, if any, to the trials. For example, in 1945 a proposed ethics codex of the Hebrew Medical Association in Palestine included traditional topics of medical ethics, such as physicians etiquette and self-advertisement, but nothing on euthanasia and medical experimentation on humans. Another example is a special issue on the health and sanitary situation of Jews in the ghettos, published a few months before the NMT in *Dapim Refuiyim*, the professional journal of the General Sick Fund of the Hebrew Workers in the Land of Israel [145]. The publication was based on firsthand testimony from Jewish physicians. However, there was not a single reference to Nazi medical crimes in the whole issue. Instead, it underlined the courage and activity of Jewish physicians under inhumane conditions in the ghettos.

After the foundation of the state of Israel in 1948, it was still the involvement of a few engaged physicians—and not collective action—that brought Nazi medical crimes to the public's attention. The second time that the Israeli Medical Association made a statement on Nazi medical crimes was a declaration issued during the second World Congress of Jewish Physicians in August 1952. The so-called "Jerusalem Declaration" was again the outcome of Dvorjetski's efforts to discuss Nazi medical experiments at the conference [146].

The declaration included references to 'euthanasia', compulsory sterilization, the moral and physical degeneration of humans by terror and deprivation, and criminal medical experiments. The declaration stated that "no one is granted the right to sacrifice any human being for scientific ends" calling to "consolidate anew the foundation of medical consciousness: no physician is permitted, under any circumstances to utilize scientific ends for the destruction and damaging of human beings" [146].

Comparing the Nuremberg Code to the "Jerusalem Declaration" reveals a number of crucial differences. In general, the declaration addresses Nazi medical crimes in a much broader and more inclusive way than the Nuremberg Code. It prioritizes 'euthanasia', which is fully absent from the Nuremberg Code. Second, it refers to eugenics and compulsory mass sterilization. And third, it distinguishes between physiological experiments for the sake of science and therapeutic trials. On the other hand, the principle of informed consent, which is central to the Nuremberg Code, is not mentioned at all. Thus, whereas the Nuremberg Code focused on physicians' attitudes towards their patients in order to quickly legitimize and regulate contemporary medical experiments, the "Jerusalem Declaration" aimed to awaken the ethical consciousness of Jewish physicians.

During the first twenty years of Israel's existence, medical discourse on Nazi medical crimes was characterized by two main points. First, the recognition of the medical crimes as universal; they were considered crimes against all of humanity, not just against Jews. Thus, the crimes had left a stain on medical science and had to be studied to serve as a warning for future generations. Second, a consensus that the Nazi medical experiments had lacked a sound scientific base, and were therefore completely worthless to medical science. In this context, Israeli doctors prepared for the day a German doctor might attempt to present findings from Nazi medical experiments as if they were the results of legitimate medical studies [147: 102; 148].

New Tendencies: Despite the large number of Holocaust survivors in Israel and the centrality of the Holocaust in the Israeli collective memory [149–151], the influence of ethical questions stemming from Nazi medical crimes on medical discourse in Israel was minimal. The Nuremberg Medical Trial, and the resulting Nuremberg Code had no immediate impact, and the majority of Israeli doctors remained indifferent to the topic. Fewer than 30 articles on the subject of medicine and the Holocaust were published in local medical journals between 1946 and 1986, and there was no attempt to examine the influence of Nazi medical crimes on Israeli medical practice [152]. The topic was kept alive by a few figures, who eventually failed to awaken a more general discussion on the implications and consequences of Nazi medical

crimes on post-war medical practice within the Israeli medical community [153].

During the 1980s there was growing interest in both medicine during the Holocaust and in bioethics. However, these interests did not develop in relation to each other. Bioethics began to be included in curricula at Israeli medical schools, although much of the focus was on the legal aspects of the field. Medicine and law, or law and bioethics, were taught at all medical schools, mostly as elective courses. Simultaneously, official bioethics bodies were established: The Ministry of Health founded a supreme ethics committee, primarily focusing on studies conducted on humans. The Israel Medical Association (IMA) transformed its ethics board, which had previously focused on doctors' misleading the public or engaging in prohibited advertising practices, into an organization dealing with bioethical principles, and issued position papers on a variety of related subjects.

In addition to the official entities already mentioned, other Israeli organizations were created to deal with bioethical issues. The Unit for Genetic Policy and Bioethics at the Gertner Institute of the Sheba Medical Centre is one of several departments of bioethical studies established at various universities, either within the respective medical schools, as at Ben Gurion University, or as part of the law department, as at Haifa University.

In 2008, the IMA published a book that focused on medicine and the Holocaust, originally initiated by Tomi Spenser. The work consolidated all publications in IMA medical journals on the subject [154]. Spenser's work, however, did not address modern ethical questions, or discuss possible implications of Nazi medicine for present-day medical practice.

Interestingly, the introduction of a medical ethics textbook published in 2010 by the Israel Medical Association contains an explicit reference to the Holocaust: "The Declaration of Helsinki … which constitutes one of the central pillars of medicine's ethical code, determines the basic ethical guidelines for experiments on human beings … as a reaction to the horrific actions of Nazi doctors that conducted experiments on humans" [155]. There is, however, no further mention of the Holocaust in the book.

The explanations: How does the shadow of the Holocaust affect bioethical discourse in Israel? How have Israeli medical professionals and bioethicists related to Nazi medical crimes, in terms of possible implications for modern medicine?

As our short examination of medical discourse in Israel between the 1940s and the 1990s reveals, Nazi medical crimes (including the 'euthanasia' killings), hardly played a role in discussions on issues of medical ethics in Israel. Only a small group of doctors, comprised mostly of Holocaust survivors, tried to promote the discussion of Nazi medical crimes in the context of moral and ethical questions in medicine. However, they only dealt with a specific aspect of the subject, mainly focusing their efforts on documenting Nazi medical crimes and ensuring the pursuit of justice. Questions regarding the possible influence of the Nazi crimes on Israeli medicine were largely ignored.

How can we explain this marginality, especially since the Holocaust plays such an important role in Israeli culture and history? The obvious answer is that Israeli doctors were among the victims of the crimes, and not the perpetrators. As victims, they did not feel the need to ask themselves uncomfortable questions about their own practices. This answer is, however, too simple.

It is possible that the almost all-encompassing disregard of Nazi medical crimes stemmed from the emergency situation that the Israeli health system was forced to deal with during the first decade of its existence–primarily the massive wave of immigrants to Israel from Europe and Arab nations, many of whom were in need of medical treatment [156]. It is possible that under such circumstances discussions of bioethics were viewed as unnecessary.

It is also possible that the disregard stemmed from the fact that Israeli medicine, which was originally strongly influenced by German medical practice, gradually shifted to be more in line with the American medical community, particularly in the field of medical study. On this basis, Israeli doctors perhaps viewed these issues as something in the past, and not something they had a responsibility to consider.

Another possible explanation is that in Israel, bioethical discussions began relatively late, despite the fact that it is one of the most advanced nations in terms of medical technology [157, 158]. By the end of the 1980s and beginning of the 1990s, however, Nazi medicine began to figure more prominently in Israeli medical discourse, as a result of changes at a local and international level. Israeli doctors began to understand that the events that occurred during the Holocaust had ramifications for the present [152]. Between 1986 and 2006, roughly 30 articles on medicine and the Holocaust were published in Israeli professional medical journals–the same number of articles that had been published during the first four decades following the Second World War. Another 11 articles on topics related to medicine and the Holocaust have been published in the IMA journal since 2007, and these include themes such as Jewish medicine in Poland during the Holocaust, the liberation of the Bergen-Belsen concentration camp and the absorption of medical refuges in Israel after the war.

Today, awareness of the subject is more widespread due to the efforts of a small, dedicated cadre of doctors that initiated conferences, compiled anthologies, and lectured on the subject at Israeli medical schools. Thanks to their work, the topic of medicine and the Holocaust began to enter the curricula of various medical schools in Israel. The Rappaport Faculty of Medicine at the Technion in Haifa now offers a course entitled *The Holocaust and Medicine—A Medical Education Agenda*, which was originated by the late Tomi Spenser. The ethics and Holocaust program at the International Centre for Health, Law and Ethics at the University of Haifa is another example, as are the courses on humanism and the Holo-

caust, which are taught at Tel Aviv University's medical school [159].

A course on medicine and the Holocaust developed by the historian Daniel Nadav was broadcast on Israel's national Army Radio, and also led to a book [160]. Recently, the Israeli Defence Forces' Medical Corps has begun sending doctors, both those serving in compulsory and in reserve capacities, on tours of death camps in Poland to engage in bioethical discussions. According to an article published in the *Journal of Medical Ethics* in December 2010, discussions during the tours addressed subjects such as the wellbeing of the individual in the face of the common good, questions of how best to allocate limited medical resources, and the problematic aspects of experimentation on human beings.

In contrast to the prevailing discussion in the field of medicine in the United States, the connections drawn in Israel between medicine and the Holocaust generally do not refer to bioethics. In the event that ethical questions do arise, they are generally presented dichotomously—the Nazi doctors, who lost their humanity, as opposed to the Jewish doctors, who continued to perform their duties under the most extreme circumstances in ghettos and camps—, and the discussion generally does not touch upon possible connections between Nazi medicine and "normal" medicine. Also left out of the discussion are current, relevant bioethical issues of the 21st century in Israel, such as bioethics during wartime, the bioethical aspects of medical research on humans, including soldiers, and the bioethical aspects of public health during emergency situations.

The tainted eponym: transgression and memory in medical science

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The Nuremberg Medical Trial (NMT) was a singularly important event in the history of medicine. Despite the fact that the trial included only a small number of accused, the resultant Nuremberg Code has had an enduring impact that will continue for generations to come. The seven decades since the NMT have revealed many secrets that were purposely withheld, secrets involving the transgressions of university professors and senior and internationally respected researchers, many associated with the prestigious Kaiser Wilhelm Research Society (KWG). A notable example of this was in 1989 with reports from Germany that uncovered the exploitation of the brains of murdered victims of the Nazi 'euthanasia' programmes by scientists associated with two of the world's foremost neurological/psychiatric research institutions: the Max Planck institutes of Brain Research in Frankfurt a Main (MPIBR) and the renowned Munich-based Institute of Psychiatry (MPIP). The historian Götz Aly, in a paper published in German in 1986, showed that scientists at the two institutes—originally known as Kaiser Wilhelm institutes—were well aware of the killing programme and actively pursued the acquisition of brain specimens which remained in the collections of the respective institutions for decades after the war [161–164]. Despite a widely publicised memorial service in 1990, the Max Planck Society (MPS), which is the successor to the Kaiser Wilhelm Society (KWS), revealed in April 2015, that specimens thought to have been buried in 1990 had been recently discovered in the archives of the Munich psychiatric institute and the main archives of the MPS in Berlin [165, 166].

Aly's original research, and the subsequent reports and commentary [163, 164], focused on two individuals; professors Julius Hallervorden and Hugo Spatz, both internationally renowned neuroscientists and leaders of the Kaiser Wilhelm Institute for Brain Research (KWIBR) during the Nazi period who were linked with the exploitation of the brain specimens from the murdered 'euthanasia' victims. Hallervorden and Spatz's names are honoured by an eponym that marks their discovery of a rare neurological disorder identified through their collaborative research at the German Psychiatric Research Institute (DFA) and published in 1922.

Due to the 1989 reports, along with documentation on Hallervorden and Spatz's role in the crimes of the Third Reich, increasing efforts were made to remove their names from the honorific designation and to substitute it with a neutral clinical/scientific term. The ensuing controversy led to revelations involving other physicians and scientists associated with nefarious activities during the Third Reich whose names are similarly honoured. The discussion also provoked a questioning of the value of eponymous designations in general, including alternative approaches to the problem [7, 167–176]. Some, including this author, believe that such "tainted" eponyms should continue in their original form [177, 178].

Building on the views of Whitworth, Zaller and Hildebrandt, this paper argues that "medical" eponyms represent a complex intellectual and historical construct within the culture of medicine that should continue, irrespective of the reputation or malfeasance of those they honour. The construct of the eponym references not only the names of the honouree(s), but also the context of their work; the impact of the discovery; the historical circumstance of the research, including the history of the institution or organisation in which the designated discovery occurred; and the life career path of the honourees. It is the thesis of this paper—and something which has also been considered by others—that irrespective of evidence of malfeasance, the eponym should not be changed, but its continued use includes an obligation to document the history of malfeasance as evidence of an historical truth that must not be forgotten. It is proposed that this be done through the required use of a footnote that documents the scientific discovery and the misdeeds of the honourees, including the responsible research bodies,

sponsors and funders and a dedicated tribute to the suffering of the victims.

The tainted eponym: Hallervorden-Spatz disease

While Hallervorden-Spatz disease may be a rare and obscure disorder, it represents an important example of the effort to change a well-established eponym because of the malfeasance of the individuals after whom it is named. An important consideration is the role played by two world-renowned scientific institutions: the Munich-based German Research Institute for Psychiatry (*Deutsche Forschungsanstalt für Psychiatrie*, DFA), and the Institute for Brain Research in Berlin. Established in 1917, the DFA became part of the Kaiser Wilhelm organisation (KWG) in 1924 and became the Kaiser Wilhelm Institute of Psychiatry (KWIP) [179]. The roles of the Munich and Berlin research institutions, including the parent organisation (KWG), were pivotal, not only in the careers of these two scientists, but also for the critical part they played in the Nazi programmes of eugenics, racial hygiene, 'euthanasia', human exploitation for pre-mortem experimentation and post-mortem research, and mass extermination.

The nexus begins with Alois Alzheimer, includes the Nazi period, and extends up until today. In 1903, Alzheimer relocated from Frankfurt to join Professor Emil Kraepelin at the Department of Psychiatry at the University of Munich where he directed the *Anatomisches Laboratorium der Psychiatrischen und Nervenklinik*. Kraepelin and his colleagues in Munich represented the foremost psychiatric research team in the world [180].

The research that brought distinction to Julius Hallervorden and Hugo Spatz took place in the same clinical and research tradition founded by Prof Emil Kraepelin. It was also in the multidisciplinary research environment established by Kraepelin at the University of Munich that Alzheimer completed his histopathological studies on the brain of his former patient from Frankfurt, August D., in investigations that formed the basis of his first reports on dementia. It was Kraepelin who, unbeknownst to his colleague Alzheimer, coined the eponym "Alzheimer disease" or "Morbus Alzheimer," by incorporating it in a new section of the 1910 edition of his textbook of psychiatry [181].

Whereas the Hallervorden-Spatz eponym, almost a century after its discovery and designation and despite its rarity, is immersed in controversy, the designation "Alzheimer's disease" has become an immutable universal eponym embedded within the language and discourse of human society.

When Alzheimer left Munich in 1912, he was succeeded by his colleague, the neuropathologist Walther Spielmeyer, who had recently moved to Munich from the University of Freiburg. In 1917/18, Spielmeyer shifted to Kraepelin's newly founded DFA, where he was joined by Franz Nissl, who had given up the Chair in Psychiatry in Heidelberg to join Kraepelin and colleagues in Munich [182]. Alzheimer and Spielmeyer's "Laboratorium" had been the functional antecedent to the "Laboratorium" of the DFA at the time of Hallervorden and Spatz.

The DFA was a relatively independent and well-funded research institute. Like Alzheimer before him, Spielmeyer attracted a number of researchers who joined him in Munich [183]. In 1919, Hugo Spatz joined the DFA, where he would remain for eighteen years. His interest in neuropathology arose from his student days in Heidelberg, where he had worked in the laboratory of Franz Nissl. In 1921, Spatz collaborated with Julius Hallervorden, who had come to Munich on a research fellowship at the invitation of Spielmeyer [184]. Hallervorden brought with him the brains of two patients who had died of a severe disabling neurological disorder. A pathological examination of the patients' brains identified previously unknown findings, specifically iron deposits in the corpus pallidum and reticulate zone of the substantia nigra. Hallervorden and Spatz reported their results in 1922 [179]. There is nothing to suggest that Hallervorden and Spatz's research which resulted in the eponym was unethical [168]. Rather, the attempt to retroactively remove their names is because of events that took place after their appointments in 1937 to the leadership of the KWIPBR in Berlin-Buch.

After completing his research fellowship at the DFA, Hallervorden returned to his position as a physician at the Landsberg/Warthe Hospital and Sanatorium. In 1929, Hallervorden assumed the directorship of the Central Pathological Department of the Psychiatric Institutions for the state of Brandenburg. Hugo Spatz remained at the Munich institute until 1937, when he accepted the appointment as successor to Prof Oskar Vogt as the director of the renowned KWIBR. Soon after, he invited Julius Hallervorden to join him as director of the Histopathological Department and deputy director of the KW institute. The conditions for Hallervorden's appointment included the transfer of the administrative responsibility from his previous position to the KWIBR. In 1938, the laboratory of the Brandenburg State Institution was moved from Potsdam to the state hospital at Brandenburg-Görden, where it became a critical link between the killing of patients and the study of their brains by the KWIBR [185].

The KWIBR had its origins in a small neurological research institute in Berlin that had been established in 1898 by Oskar Vogt, together with his French-born neuropathologist wife, Cecile. Then known as the *Zentralstation*, in 1902 the Vogts' institute was incorporated into the University of Berlin under the name *Neurobiologisches Laboratorium der Universität Berlin*. In 1914, the "Laboratorium" became part of the prestigious Kaiser Wilhelm organisation. In 1931, an expanded KWIBR, the largest and most preeminent of its kind in the world, was opened in the Berlin suburb of Buch. The expanded KWIBR received support from the Krupp family, the German Reich, the State of Prussia, the City of Berlin and the Rockefeller Foundation (RF). The RF funded the construction costs of the new institute [186, 187].

According to Sachse, the KW institute's structures were modelled on the Rockefeller Institute for Medical Research. The RF provided a majority of the funding

for five KW institute's, including the Munich KWIP and four Berlin based KWI's: Brain Research, Cell Physiology, Physics and Foreign and International Private Law. The RF funded a "Genetic Index of the German People" coordinated by Prof Eugen Fischer, the director of the KWI for Anthropology, Human Genetics and Eugenics. RF funding for projects in Nazi Germany was suspended in 1935 following public criticism in the United States [188, 189].

Due to a prolonged conflict over leadership style and differing political views following the rise of the Nazi regime, Oskar Vogt was forced into retirement. Oskar and Cecile Vogt's successors, Hugo Spatz and Julius Hallervorden, were more accommodating towards the Nazi regime. Hugo Spatz was an officer in the *Luftwaffe* and directed a satellite department of the KWIBR that focused on brain injuries in the air force. A total of 3335 brains of Luftwaffe personnel who had died from brain injuries were sent to the satellite unit. The KWIBR, Spatz in particular, was the probable recipient of the brains of victims of low-pressure experiments performed on prisoners at the Dachau concentration camp [185].

The KWIBR formed the link in a network of neuropathologists, who exploited the Nazi 'euthanasia' killing programmes to acquire brain specimens for the institute [190]. Hallervorden attended the actual killing centre where victims of the Aktion T-4 'euthanasia' killings were murdered in gas chambers disguised as shower stalls [191] and had a neuropathology laboratory at the large psychiatric hospital of Brandenburg-Görden where the brains of 'euthanasia' victims were processed.

Evidence of this activity was provided by Prof Hallervorden himself shortly after the end of the war [192, 193]. It is unlikely that Hugo Spatz, as the overall director of the KWIBR, would have been unaware of the KWIBR's involvement in the exploitation of the victims of the 'euthanasia' killings. Whereas the vast majority of victims were non-Jewish, the neuropathologist and documentarian of neuropathology in Nazi Germany, Prof Jürgen Peiffer, in a personal note to the author dated April 2nd, 1998, reported:

"I found in old correspondence of the Hallervorden-Institute in Frankfurt a list of nearly 200 names of Yewish (sic) people, mostly from the Warschau Ghetto [sic], some from Lublin, all with the clinical diagnosis of 'Fleckfieber' (epidemic louse-borne typhus). The brains were examined by Hallervorden, but all protocols and other notices are failing [sic], probably destroyed after the war. I sent the list to Prof. Tych in Warschau, but did not get any answer til now. ... In the files of the Max Planck Institute of Psychiatry in Munich I found one Yewish name among the victims of euthanasia (Leo 'Israel' Seligsberger, 21 years old, coming from the Schönbrunn institution to Eglfing-Haar, the killing place)" [194].

Despite the bombing of Berlin, Hallervorden and Spatz were able to save the collection of brain specimens as well as some of the equipment, which were moved to the Western Sector of Germany. In 1947, Hallervorden relocated his department and its collection to Dillenburg. According to Wässle "... in 1949 the departments of Spatz and Hallervorden were transferred then to the Max Planck Society as the Max Planck Institute for Brain Research (MPIBR) and moved to the University of Giessen Physiological Institute". The MPIBR remained at the University of Giessen until 1959, with both scientists being granted academic appointments by the university's medical faculty. The brain specimens eventually found a permanent home in a newly constructed MPIBR in Frankfurt am Main.

Professors Hallervorden and Spatz were never prosecuted. They were able to continue their careers after the war in association with the MPS, the University of Giessen Faculty of Medicine and the new MPIBR in Frankfurt am Main as emeriti [184]. Hallervorden died in 1965, and Spatz in 1969.

Fig. 1 Burial site of brain specimens from "euthanasia" victims from Max Planck Institute for Brain Research. Waldfriedhof Munich, special section for victims of Kaiser Wilhelm research

Kaiser Wilhelm (Kraepelin) Institute of Psychiatry

The institute that would become the world's foremost centre for academic psychiatric research arose out of a cauldron of activity at the beginning of the 20th century involving leading German psychiatrists and universities and the German Psychiatric Association. The new institute would be based in Munich in association with the Department of Psychiatry of the University of Munich which had been chaired by Prof Emil Kraepelin since 1903. Kraepelin had achieved fame as the author of a major textbook of psychiatry, which incorporated his new classification of psychiatric disorders. He assembled an internationally renowned team of researchers from multiple disciplines including psychiatry, neurology, neuropathology, physiological chemistry, serology, genetics and genealogy.

In 1915, Kraepelin developed a proposal for a psychiatric research unit and was successful in obtaining private financial support from two wealthy patrons, the industrialist Gustav Krupp von Bohlen und Halbach, and the expatriate American-Jewish philanthropist, James

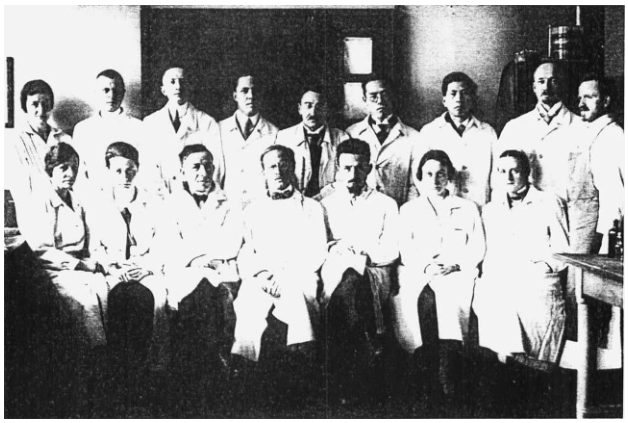

Fig. 2 Spielmeyer "Laboratorium" (ca. 1927): German Research Institute for Psychiatry. Walther Spielmeyer: bottom row in center. Julius Hallervorden: top row 2nd from right. Hugo Spatz (with goatee): bottom row 3rd from left

Loeb who had been a patient of Kraepelin [195]. He established the DFA, the foremost psychiatric research institute in the world, which served as a model for the future Institute of Psychiatry in London and the National Institutes of Mental Health in the United States. The DFA included the first ever research institute for psychiatric genetics, headed by the Swiss-born psychiatrist Ernst Rüdin. In 1924, the DFA became part of the prestigious Kaiser Wilhelm organisation and was subsequently known as the Kaiser Wilhelm Institute of Psychiatry (KWIP). From 1933 until 1939, the RF provided funding specifically for the study of the methodology of psychiatric genetics in Munich by young researchers from outside Germany [187].

Upon Kraepelin's death in 1926, Walther Spielmeyer and Felix Plaut assumed the directorship of the Munich institute. Five years later, in 1931, the directorship passed to Prof Ernst Rüdin, who remained in the position until the end of the war. Rüdin was an active supporter of the Nazi regime and was known amongst his colleagues by the nickname "*Reichsführer* for Sterilisation" [196]. He was an important influence on the Nazi programme of enforced eugenic sterilisation and a contributor to both the implementation of the 'euthanasia' killing of psychiatric patients and the inhumane and deadly experimentation on children at the University of Heidelberg [187]. Rüdin was made responsible for the psychiatry and neurology professional associations, which were merged under the new regime. During Rüdin's tenure the Munich psychiatric institute received specimens from the brains of children murdered in the child 'euthanasia' programme. These misbegotten specimens were received by the neuropathology division headed by Willibald Scholz. Scholz is known to have published two papers after the war which were based on research conducted on the brains of 'euthanasia' victims [190].

Rüdin and the Munich institute were the beneficiaries of significant financial support from the RF and the estate of James Loeb; funding which began before the rise of the Nazi regime and continued after 1933. Major support from the RF ended in 1935, while that from the Loeb estate continued until 1940 [195, 197]. With the discontinuance of support from the American funders, Rüdin turned to state organisations, including Hitler's Reich Chancellery, the Reich Ministry of Interior, and the SS terror organisation, for funding [187, 198, 179]. Thus, the world's foremost institute of psychiatric research, the prototype for internationally renowned psychiatric research institutes in the United Kingdom and the United States, the one-time home of Emil Kraepelin and Alois Alzheimer, and the institution where 1921–1922 Julius Hallervorden and Hugo Spatz completed their research and began their lifelong partnership, became the most influential psychiatric institution in the Third Reich, possibly the world. The authority of the KWIP extended to every aspect of psychiatry in Nazi Germany including government policy, university curricula, academic appointments, research funding priorities and professional publications [187].

The influence of the KWIP extended to the Department of Psychiatry at the University of Heidelberg where a research unit was established under Dr Julius Deussen, a member of the KWIP and Rüdin's team. Deussen's research, which was sponsored and supported by Rüdin and done in collaboration with the Heidelberg professor Carl Schneider, included inhuman experiments on at least 21 disabled children prior to their murder and studies of the victims' brains after deaths [187].

Ernst Rüdin's directorship of the Munich institute ended in 1945 with the collapse of the Nazi state. He was incarcerated and investigated by the authorities, but never prosecuted. In a tribute to Rüdin after his death in 1952, the Max Planck Society wrote that he "was one of the most prominent founders of genetic research in psychiatry." In 1996, the *American Journal of Genetics* published a special issue on the subject of Rüdin's "Munich School" of psychiatric genetics [198–202]. The KWIP continued on its original site in Munich as a much expanded MPIP.

At the time of the revelations involving brain specimens in the 1980s, the parent organisation MPS—despite its scientific mission of research and discovery—did not undertake any investigations into the origins of the specimens, the identity of the victims or the role played by institutes and staff of the antecedent KWS. It would appear that the focus of the MPS was on the burial of the specimens.

In March of 1991, during a visit to Germany under the auspices of the Foreign Office, I visited the gravesite of the brain specimens of the "euthanasia" victims from the MPG collections at the Forest Cemetery (Waldfriedhof) in Munich. During this visit, I was informed that the Munich cemetery was chosen because Munich is the home of the parent MPS. The gravesite is in a location reserved for the remains of victims of Kaiser Wilhelm/Max Planck scientists from the Nazi period.

In 1997, the then President of the MPS, the late Professor Hubert Markl, formed a Presidential Commission entitled "History of the Kaiser Wilhelm Society in the Na-

tional Socialist Era." This was a five-year research programme that commenced in March 1999 [203]. On June 7th, 2001, Professor Markl addressed a special symposium entitled "Life Sciences and Human Experimentation at Kaiser Wilhelm Institutes—The Auschwitz Connection". In his symposium address, Markl acknowledged the continuity between the former KWS and the MPS and the acceptance of responsibility for everything, positive and negative, including the admission of guilt. He recognised "... scientific evidence historically proving beyond the shadow of a doubt that directors and employees at Kaiser Wilhelm Institutes co-masterminded and sometimes even actively participated in the crimes of the Nazi regime, thus allowing—indeed demanding—clear recognition of these facts". Regarding the brains specimens of the "euthanasia" victims, Markl stated:

> "Involvement in criminal euthanasia based on eugenics and 'racial hygiene' or even the mere use of murdered victims for scientific experiments by Kaiser Wilhelm scientists such as Hugo Spatz or Julius Hallervorden was a clear and indubitable violation of the boundaries of ethically responsible research" [204].

The research and published reports of the Presidential Commission provide stark evidence of the role played by the Kaiser Wilhelm institutes and scientists during the National Socialist regime. Prof Markl's statement of June 2001 represents a profound juncture in the history of science, in which one of the world's foremost scientific research organisations explicitly acknowledges its culpability in some of the most egregious abuses of human beings in the history of mankind.

The challenge of memory

The removal of the Hallervorden-Spatz eponym, in this author's opinion, would constitute an act of historical revisionism by medical science that would erase the historical context, not only of the careers of professors Hallervorden and Spatz, but also the history of psychiatry and neuropathology at its height of achievement and depth of evil.

Paradoxically, scientific organisations that contributed so much to the elucidation of human memory and its pathology have themselves manifested a form of intellectual dementia that may impair medicine's ongoing memory of critical events of the past. While the campaign to remove the Hallervorden-Spatz eponym has met with some success [205], efforts to substitute a new name for the clinical syndrome also include bracketed reference to the original name. The names of the two scientists have also resurfaced due to the recent discovery of specimens of brains of victims of the Nazi "euthanasia" in the archives of the Munich psychiatric institute as well as the main archives of the MPS in the Berlin suburb of Dahlem [206]. Given this discovery, and the implications of malfeasance in both the retention of the specimens and falsification of evidence, the MPS has established a new formal commission to examine the evidence including

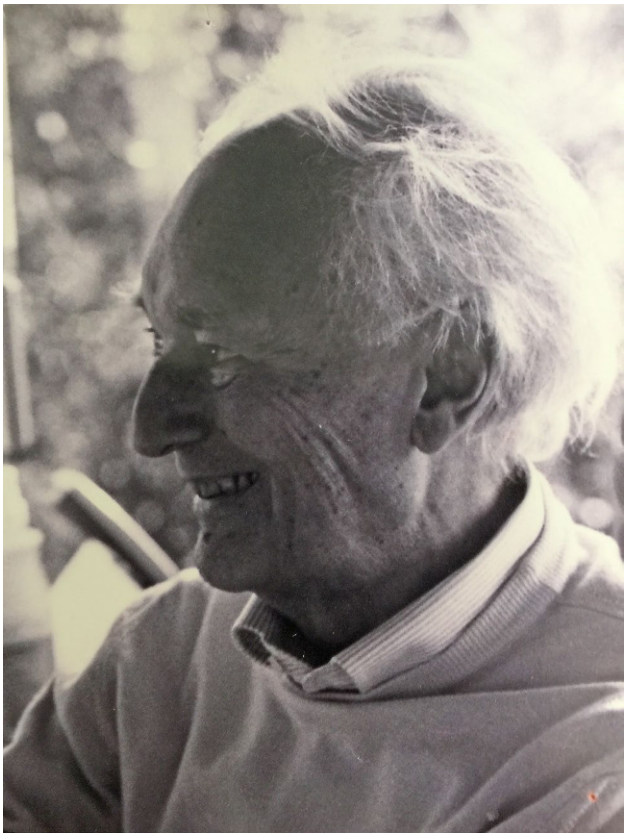

Fig. 3 Professor Jürgen Peiffer: 1922–2006

the provenance of *all* the discovered specimens and to attempt to identity the victims. The recent troubling discoveries and controversy has resulted in the revival of the names of the two neuroscientists involved in the original misdeed; professors Julius Hallervorden and Hugo Spatz. The designation of the eponym may have changed for some, but the memory, and the evidence, of their transgression continues to haunt the Max Planck Society, the MP institutes of Psychiatry and Brain Research and the world of neurology.

The recent discoveries emphasise the importance of continuing to document historic truths, bad and good, including the continued use of eponyms that honour scientists, or others, with well-documented histories of malfeasance. The Hallervorden-Spatz eponym conveys not only the role of the two scientists, but also that of the institutions they were part of. The recent revelations and planned investigations reinforce the historical context and memory of the transgression as well as the suffering of the victims [165]. Consequently, it is hereby proposed that any future use of the term "Hallervorden-Spatz disease" in peer-reviewed, scientific, scholarly publications include the following footnote:

"Hallervorden-Spatz disease*"

* "Hallervorden-Spatz disease" is named after two German physician/scientists, professors Julius Haller-

vorden and Hugo Spatz who, in 1922, published a report on the pathological findings on the brain of a young woman who died of an unusual neurological condition. The research and discovery occurred under the auspices of the world's foremost research institute, the German Psychiatric Research Institute in Munich, which became part of the renowned Kaiser Wilhelm research organization. Profs Spatz and Hallervorden became leaders of the world's foremost brain research organization in Berlin, the Kaiser Wilhelm Institute for Brain Research (KWIBR). It is well-known and well-documented that after 1939 the KWIBR under Spatz and Hallervorden intentionally exploited the Nazi 'euthanasia' killing programmes to acquire the brains of hundreds of innocent institutionalized men, women and children who were murdered by the Nazi state."

"We continue to use the name "Hallervorden-Spatz Disease," not only to commemorate a scientific discovery, but to remember the victims of professors Hallervorden and Spatz's immoral research. We must never forget what can happen when science supersedes humanity."

Acknowledgements: This paper had its origins in 2001 at the Baycrest Center for Geriatric Care in Toronto, Canada, in a collaboration with Dr. Nachum Berlat, the then Chaplain of Baycrest. The current iteration had its first formal presentation in September 2011, at the Center for Bioethics of the Univ. of Pennsylvania, then chaired by Prof. Arthur Caplan. I wish to express my appreciation to the following colleagues for their criticisms and suggestions: Prof. Volker Roelcke of the University of Giessen, Dr. Sabine Hildebrandt of Harvard Medical School and the Boston Children's Hospital, Dr. Matthew Fox of Jerusalem, Israel, Steven Dickman (former journalist with Nature), Prof. Heinz Wässle (Emeritus Director of Max Planck Institute for Brain Research), Dr. Götz Aly (Historian, journalist: Berlin), and Prof. Mark Clarfield (Ben-Gurion Univ. of the Negev).

During my visit to Germany in March 1991, I had the honour of meeting the late Prof. Jürgen Peiffer who became an important source of information and encouragement in my work. I dedicate this paper to Prof. Jürgen Peiffer's memory and that of the unidentified victims, who may one day regain their identity and receive formal acknowledgement of their, and their families suffering due to Peiffer's couragous and diligent work.

West and East German euthanasia trials since 1945

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Legal basics

While both the International Military Tribunal of Nuremberg and various Allied Military Trials have been scrutinized in many articles and books, German legal proceedings have attracted much less scholarly attention. In fact, even text books often omit the early judicial activities of German courts in the immediate post-war era [207–211]. The deterrent for a closer look at the legal situation in the occupation years in Germany was probably the confusing and unclear picture they presented. Furthermore, many relevant documents describing the situation of the German courts are in American, British, French or Russian archives.

German courts in both East and West Germany reopened in the summer of 1945 (some even as early as spring 1945), and by 1946 most local, district and also high courts in all German *Länder* were functioning again [212]. Initially, these courts used the German penal code only, which had to be purged of Nazi influence. This was by no means an easy undertaking as not even the legal profession entirely agreed on what exactly constituted a Nazi law.

From 1946 onwards, Control Council Law No. 10 (which defined crimes against humanity) was applied in German courts in the British, French and Soviet Zone of Occupation. However, Control Council Law No. 10 was not used in German courts in the American Zone, with the only exception of the American Sector of Berlin. In East Germany, from August 1947 onwards Control Council Directives 24 and 38 were put in use: these were initially guidelines for denazification and the political purge, but were applied as penal laws in East Germany only. So although the structure of the German legal authorities was overall unchanged, the application of laws differed from Zone to zone as did denazification of legal personnel.

While German legal personnel had to deal with new Allied authorities and their regulations, the basic principles of legal groundwork continued to be applied. This meant that state prosecutors investigated according to what in German is called the "*Tatortprinzip*", i. e. the jurisdiction of the court is decided according to the site of crime. Less frequently the "*Wohnortprinzip*" applies, wherein the place of residence of a defendant is the criterion.

What was the line of demarcation between Allied and German courts? The Allies decided according to a simple guideline: if the victims were of Allied nationality, Allied courts were in charge. If the victims were Germans or

stateless, then German courts were responsible for adjudicating the case.

Investigating the so-called Euthanasia crimes was clearly a task for German state prosecutors: the victims were of German nationality and many of the so-called euthanasia institutions were located in Germany proper. For reasons of brevity I will concentrate in my paper on court proceedings dealing with the first phase of mercy killings which took place in six institutions under the code 'T4'. Two of these were located in West Germany (Grafeneck and Hadamar), three in East Germany (Sonnenstein, Bernburg, Brandenburg) and one in Austria (Hartheim near Linz).

The 'euthanasia' killing program was one of the most striking Nazi crimes German legal authorities had to deal with after 1945. Unlike the Holocaust, the number of perpetrators was quite limited, which made trials manageable. Each institution had had a couple of doctors, several dozens of nurses, clerical staff and personnel handling the cremation of the bodies. As those experts in killing were detached in 1941 to the "*Aktion Reinhard*" in the Government General and later assigned to the fight against the partisans in the region of Triest, a number of perpetrators were killed in action during the war. Furthermore, others committed suicide immediately after the war, for example doctors Rudolf Lonauer (Hartheim) and Irmfried Eberl (Brandenburg, Bernburg).

Grafeneck and Hadamar trials in West Germany

The two most important trials concerned the two killing centres in West Germany, namely Grafeneck and Hadamar [213]. Investigating the crimes in Grafeneck fell into the responsibility of the state prosecutor of Tübingen (according to the *Tatortprinzip*, as Grafeneck was located in the circuit of Tübingen, in the French Zone of occupation) [214]. The task proved difficult: many documents on the national, *Länder* and local level had been destroyed. Doctors and adminstrative staff had used pseudonyms. Personnel had been recruited mostly from outside the region of Württemberg and thus stemmed from all parts of Germany. Many of those still alive had returned to their home towns; this proved a nearly insurmountable obstacle in the early post-war era as communication between different state attorneys was difficult. Letters would take weeks, and requests for interrogations or arrest warrants in different zones were nearly impossible to obtain.

By the beginning of March 1948, only half of 24 suspects who had formely belonged to the killing centre Grafeneck were arrested, only four of which had been found near Münsingen. Two others were in the American zone, one in the American sector in Berlin, another in the British Zone and four in the Soviet Zone. The state attorney in Tübingen decided against an extradition of suspects from the Soviet Zone, and transferred the material to the East German state attorneys of East Berlin and Weimar instead.

A further issue was the "rivalry" to the trials in the American Zone of occupation. Hadamar had been Grafeneck's successor institution, thus "inheriting" many of the perpetrators who had been involved in the killing of patients before. This caused the problem that suspects were either imprisoned for the atrocities committed in Hadamar or Grafeneck. This was true for example for the nurses sentenced in the second Frankfurt Hadamar trial, who had all been in Grafeneck before. A further challenge was the fact that other main culprits were no longer available, for example Viktor Brack, who had been sentenced to death in the Nuremberg Medical Trial and was executed in June 1948. Before his death, he gave evidence on Grafeneck twice. The Grafeneck killing doctors Dr. Horst Schumann, Dr. Ernst Baumhard and Dr. Günther Hennecke, who all happened to be from Halle an der Saale, were also unavailable: Baumhard and Hennecke had fallen in action in 1943. Schumann was considered unidentifiable—in fact he had been released unchallenged from an American POW camp. He practiced as a doctor in the British Zone until he fled the Federal Republic of Germany in 1951. He was extradited from Ghana in 1966.

This left a poor turn-out for the Grafeneck trial in Tübingen. Two administrators—the head and a member of the public health department in the Württemberg ministry of the Interior—were investigated as early as summer 1945. The head of the public health department, Dr. Stähle, who had picked Grafeneck from a number of other mental institutions and was clearly aware of the purpose of the transfer of patients, died in 1948 in pre-trial detention. His subordinate, Dr. Otto Mauthe, was sentenced to 5 years imprisonment for abetment of crimes against humanity. Two other defendants also received verdicts as they had transferred patients from a mental institution (Zwiefalten) to Grafeneck and Hadamar. Five others, among them nurses, clerical staff, and a doctor were acquitted. The Grafeneck trial with three verdicts and five acquittals remained singular: apart from the second Frankfurt trials on Hadamar (which also concerns Grafeneck) there was never another trial or legally binding verdict concerning Grafeneck–neither in the occupation years nor since 1949.

As is well known, the state prosecutor's offices in Frankfurt am Main were a focal point for investigations regarding so-called euthanasia. This was due to the fact that the province Hesse-Nassau played a key-role for the operation: apart from the Hadamar killing centre, there were three so-called *Zwischenanstalten* (mental hospitals used to hold patients on their way to the gas chamber). The three Zwischenanstalten were Herborn, Weilmünster and Eichberg. As in the previous case, the prosecutor at Frankfurt had trouble locating several suspects who were not residents of Frankfurt or Hesse. Proceedings against several suspects were thus split off the main case.

As already described for Grafeneck, the search for the murderous doctors proved mostly futile. Baumhard and Hennecke, who had also been in Hadamar, had died as soldiers; Dr. Friedrich Berner had suffered the same fate. Another doctor, Dr. Kurt Schmalenbach, had lost his life

in 1944. This left only one doctor to stand trial: Bodo Gorgaß. 27 individuals were indicted at the Hadamar trial. This was less than one fifth of the complete staff, which allegedly had numbered about 140 employees.

The Hadamar trial dealt with perpetrators who had been active in both the gassing of patients in the first phase (until August 1941), and the lethal injections of the second phase (since September 1941) [215]. Two doctors stood trial: one was the aforementioned Dr. Gorgaß, who was indicted for the gassing of approximately 2000 patients, and Dr. Wahlmann, who had participated in the killings by medication. Gorgaß and Wahlmann were found guilty of murder in one thousand—respectively 900—cases, and sentenced to death in March 1947. After the enacting of the West German constitution, the Basic Law, both sentences were commuted to life imprisonment. Nurses were found guilty of abetment to murder with verdicts between eight and two-and-a-half years of imprisonment. Others were acquitted.

A second Hadamar trial in 1948 dealt exclusively with nurses employed in Hadamar, Grafeneck, Eichberg, Bernburg or Irsee. Four nurses were found guilty in 1948 as accessories to murder, they went to jail for a duration of three to four years [216].

Although of the sentences concerning Hadamar and Grafeneck one was reached in the American, the other in the French Zone, and in one case (Frankfurt) applied the German Penal code, and the Control Council Law No. 10 in the other (in Tübingen), they did not differ substantially. The more severe penalties meted out in Frankfurt (two death penalties) are owed to the fact that the state prosecutor in Frankfurt had succeeded in calling to account a larger circle of perpetrators and actual killers (whereas Tübingen had had to center its indictment on the ministerial bureaucracy). Besides, Frankfurt began its trial ahead of Tübingen. Moreover, the Frankfurt investigating team could draw on American preliminary work concerning the Nuremberg Medical Trial and the Hadamar trial, which dealt with the murder of Soviet and Polish foreign workers towards the end of the war.

Trials concerning the Reich level ('T4') and *Zwischenanstalten* in West Germany

It was far more complicated to reconstruct the sequence of events on the national level of 'Action T4'. The position of individual perpetrators, their responsibilities and guilt incurred within the killing network, proved difficult to establish. In 1949, both the local courts of Frankfurt and Hadamar refused to issue a warrant of arrest for one of the main culprits of 'T4', Dietrich Allers (director of the *Reichsarbeitsgemeinschaft Heil- und Pflegeanstalten*), as he was then living in Lower Saxony while the scene of the crime had been in Berlin. It would take until 1968 for a verdict against Allers (he received eight years for accessory to murder)—to be reached of all places in Frankfurt, which nearly 20 years before had refused to deal with the case on procedural grounds.

The search for culprits on the national level was particularly difficult. Many were dead, either by their own hand (Dr. Herbert Linden, *Obergutachter/Reichsbeauftragter für die Heil- und Pflegeanstalten*; Philipp Bouhler, *Kanzlei des Führers*) or had been executed after trials (Viktor Brack, Karl Brandt at the Nuremberg Medical Trial).

Only few trials took place against the so-called 'experts' (*Gutachter*). Proof of abetment of murder was particularly difficult here, as for each victim three expert opinions were gathered, and only the 'chief experts' (Werner Heyde, Hermann Paul Nitsche or Herbert Linden) took the final decision on life or death. About 40 of these experts are known, 7 of them stood trial (Artur Schreck, Hermann Pfannmüller, Fritz Mennecke, Friedrich Panse, Kurt Pohlisch, Walter Schmidt and Valentin Faltlhauser), but they were mainly indicted for their activities in the mental institutions as such rather than their expert opinions on the registration forms (*Meldebogen*). Trials were also initiated against ministerial bureaucracy (the ministries of the interior of the Länder and provincial administrations) in Düsseldorf, Freiburg, Hannover, Münster and Munich, but most of them were acquitted or investigations were dropped, but the head of public health in the ministry of the interior in Baden was sentenced to 11 years.

Trials referring to the *Zwischenanstalten* always revolved around the cardinal question whether the staff in these asylums knew the purpose of the transfers. As is well known, in some institutions even the patients were in the know of their intended fate. In Andernach patients insulted each other during quarrels with the words: "Du wirst auch verbrannt." ("You will also be burned.") Two patients who had fled the killing asylum Meseritz-Obrawalde and returned to their institution in Hamburg-Langenhorn told the doctors about the killings, who in turn informed the public health department in Hamburg. Still, most of the trials against the staff of *Zwischenanstalten* ended in acquittals as the defendants insisted irrefutably on not having been aware of the purpose of the transports. Others referred to their belief in a valid legal basis for the killings. In 1949, the head of the asylum in Lübeck referred to a conversation he had had with the mayor of Lübeck in 1941, who asked him how much room there would be in the asylum when all the many insane patients had been killed. This points to the fact that knowledge on the killings was widespread in larger parts of the population.

The killings in 'euthanasia' institutions during the second phase (i. e. with lethal injections) led to three death sentences in 1946 before a court in Berlin and in Frankfurt: two against a female doctor and nurse for murders (with base motifs) committed in Meseritz-Obrawalde, who were executed, and one against the head of the Eichberg asylum and 'expert' Dr. Fritz Mennecke, who died before the execution.

In the 1960s, the state prosecutor at Frankfurt am Main took the trouble to systematically search for all former staff members at the killing centres. This led to several new trials against former doctors of Bernburg, Brandenburg, Sonnenstein, and Hartheim. Two of them were

sentenced for abetment of murder (Ullrich, Bunke), others acquitted (Kurt Borm) or the trials aborted because of ill health of the defendant (Renno, Endruweit, Schumann). A former 'expert' who had filled out the registration forms died before the trial started (Viktor Ratka). Legal proceedings against the administrative level of 'T4' were more successful: Reinhold Vorberg, responsible for transport (*Leiter Gekrat*), and Dietrich Allers, manager of the mental institutions (*Geschäftsführer der Gemeinnützigen Stiftung für Anstaltspflege*) were sentenced to 10 and 8 years imprisonment; the head of the clearing house (*Leiter der Zentralverrechnungsstelle*) Hans-Joachim Becker to 10 years, the 'T4' economic manager (*Hauptwirtschaftsleiter*) Friedrich Lorent to 7 years. Again, legal proceedings came to a halt due to suicides (head of department of 'T4', Friedrich Tillmann, as well as Prof. Heyde) and due to ill-health of the defendants (Dr. Gerhard Bohne, Hans Hefelmann) [217].

"Euthanasia" trials in East Germany

Three of the killing centres of the first phase were located in East Germany: Brandenburg, Bernburg and Sonnenstein. As in West Germany, investigations started almost immediately after the end of the war, often initiated by victims' relatives. The best-known trial is the doctors' trial in Dresden [218]. The first suspects were arrested in autumn 1945 by Soviet Security. In 1946, investigations were handed over to German legal authorities. The trial intended to cover all 'euthanasia' crimes committed in the Land Saxony, thus not only concerning itself with the killing center Sonnenstein near Pirna, but also with asylums such as Arnsdorf, Großschweidnitz and Leipzig. The main defendant was Hermann Paul Nitsche, who had been director of Sonnenstein before he transferred to T4 to become 'chief expert' (*Obergutachter*) and medical head of 'T4'. The trial received enormous press coverage in East Germany not least because it was scheduled to take place at the same time as the American Medical Trial in Nuremberg. In July 1947, the court case based on Control Council Law No. 10 ended with four death sentences. Nitsche and a male nurse were executed in March 1948, two others (a doctor and another male nurse), who had been sentenced to death, committed suicide in prison. Others received severe sentences, too, and three were acquitted.

While this trial and an even earlier trial of the year 1946 at Schwerin (concerning the second phase of 'euthanasia' killings) seem to point to an effective dealing with 'euthanasia' crimes in East Germany, the whole picture is somewhat less convincing. First of all, the three doctors responsible for the gassings in Sonnenstein had not been investigated, much less put on trial (Schumann, Endruweit, Borm). Furthermore, there is a striking and rather conspicuous absence of major trials concerning the two other killing centers Brandenburg and Bernburg. In 1948, a janitor and a female nurse were indicted and sentenced for killings in Bernburg. However, the Brandenburg and Bernburg doctors remained unpunished until investigations started in West Germany in the 1960s.

Second, a substantial amount of cases in East Germany were initiated by West German investigations. No less than 6 of the East German 'euthanasia' trials were the result of West German investigations transferred to East German judicial authorities: The former administrative head of Hadamar, Hans Raeder-Grossmann, and his wife were tried in Meiningen in the Soviet Zone. The head of the Hadamar institutions's registry, *Kriminalobersekretär* Walter Bünger, was sentenced to 10 years imprisonment in East Berlin. Four days later he committed suicide. The Hadamar nurses Käthe Hackbarth, Emma Bellin and Hedwig Michael were sentenced in Magdeburg, East Berlin and Weimar. Hackbarth received a verdict of 15 years, Emma Bellin 7 years, Hedwig Michael two-and-a-half years imprisonment.

Third, unlike investigators in West Germany, police and state attorneys in East Germany failed to understand the connection between 'euthanasia' murders and 'Aktion Reinhard' killings in the Lublin district. In Magdeburg, Josef Kaspar Oberhauser, who had worked in the crematorium in Grafeneck, Brandenburg and Bernburg, was sentenced to 15 years imprisonment, but his participation in mass murder in the Government General went unmentioned. So several years later Oberhauser would again stand trial, this time in the Federal Republic of Germany for his crimes in Belzec.

Fourth, contrary to common opinion, the German Democratic Republic (GDR) did not always mete out more severe verdicts. In 1952, Richard von Hegener, a member of the *Kanzlei des Führers*, was sentenced to life imprisonment. However, he was released after a mere four years, as were several other 'euthanasia' perpetrators, due to an amnesty in 1956. Nor was the GDR more successful in preventing break-outs. As is well known, the chief expert and head of 'T4', Prof. Dr. Werner Heyde, managed to escape in Würzburg from an American prisoner transport from Nuremberg to Frankfurt in 1947. In East Germany, it was the male nurse Fritz Erich Schmidt, who had worked in Sonnenstein and Bernburg as well as Treblinka, who absconded from East German custody in 1949 and thus escaped all judicial reckoning. When investigations in West Germany concerning Treblinka were initiated, Schmidt had long died.

Conclusion

The law professor Friedrich Dencker characterized the courts' record with regards to the 'euthanasia' killings as a 'Skandalgeschichte', a 'scandal', not least due to the discrepancy between severe sentences in the immediate post-war period, and very lenient verdicts in later years [219].

However, prosecution of the 'euthanasia' killings was was not without success, especially when compared to the prosecution of Holocaust perpetrators. The bulk of legal proceedings in West and East took place during the occupation period. While the importance of the Central

Ageny in Ludwigsburg (founded in 1958) cannot be overstated for investigations into the Holocaust, it played a much lesser role in the prosecution of the 'euthanasia' killings.

The early West German trials of Grafeneck and Hadamar remained outstanding examples of judicial coping with the criminal legacy of the Third Reich. They were so thoroughly researched that in later years no further trials against forgotten, omitted or escaped suspects had to be initiated. If it was established that a suspect was living in East Germany, proceedings were transferred to East German legal authorities to pursue the cases. In East Germany, where the majority of 'euthanasia' killing centres was located, judicial proceedings petered out quickly after the much publicized Dresden trial. Later East German trials against 'euthanasia' personnel were often just follow-up cases handed over by West German state attorneys. East German trials also missed the link between 'euthanasia' killings and 'Aktion Reinhard'. Thus, when the attorney general in Frankfurt am Main opened investigations again in the 1960s, he had to deal with both the neglected 'euthanasia' institutions of Brandenburg, Bernburg, Sonnenstein and Hartheim and the national level of T4.

The Sewering Affair[9]

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Introduction

Hans Joachim Sewering was one of the most influential public figures in the German medical establishment from the 1950s to the 1990s [220]. Despite his National Socialist past, he was president of the Bavarian Medical Association from 1955 to 1991, president of the German Medical Association from 1973 to 1978, and directed the *Kassenärztliche Vereinigung* (Association of Health Insurance Physicians) in Bavaria for decades. When he died in June 2010, former presidents of the German Medical Association Prof. Dr. Jörg-Dietrich Hoppe and Prof. Dr. Karsten Vilmar wrote an obituary in the *German Medical Journal* which had a quasi-official character. The authors described his life's work for the improvement of medical education for physicians and students, for the implementation of quality management in medicine, and for the freedom of the physician in the health care system. They concluded with the statement that Sewering had rendered outstanding services to the preservation of ethical norms in the work of the physician [221]. The authors excluded the National Socialist era from their short biography of Sewering and mentioned neither his membership in the SS and the National Socialist Party nor his involvement in National Socialist "euthanasia" measures. This obituary provoked critical letters to the editor of the *German Medical Journal* and a letter of protest signed by about 80 medical historians, physicians and psychotherapists. In this letter, it was argued that the obituary does not satisfy the duty of the German medical profession to accept historical responsibility for its National Socialist past [222]. The dispute about the Sewering's obituary shows that, even in 2010, the German medical profession had not fully come to terms with its National Socialist past.

In 2008, the Professional Association of German Specialists in Internal Medicine honored the then 92-year-old Hans Joachim Sewering with its highest decoration for his merits in the field of professional independence and freedom of the physician. In defence of Sewering's Nazi past, it was argued that public prosecution had been suspended and that Sewering's statements were fully credible. Outside of Germany—especially in the US—Sewering is regarded as an example of the inability of the German medical establishment to critically examine the role of the German medical profession in National Socialism [223, 224]. The Sewering affair in 1992/1993 created a much greater stir internationally than in Germany itself [225, 226].

The Sewering Affair 1992/1993

What was the Sewering affair about? Hans Joachim Sewering was active not only in national professional politics but was also a member of the executive board of the World Medical Association (WMA) as treasurer since 1971 and was nominated "President elect" at the WMA assembly of delegates in Marbella in September 1992. Before he could take up office as President of the WMA, accusations were made at the turn of the year 1992/1993 that he had been a member of the SS since 1933 and of the NSDAP since 1934[10] and was responsible for the death by "euthanasia" of at least one child, the 14-year-old Babette Fröwis in 1943, when Sewering worked as a consulting physician at the Catholic institution of Schönbrunn. These accusations had already been public knowledge since 1978, when the German weekly news magazine *Der Spiegel* reported critically about Sewering's rise to power after the Second World War. *Der Spiegel* published excerpts from Babette Fröwis' patient files, including nude photographs of Babette and the medical order for admission to the Eglfing-Haar asylum, signed by Dr. Sewer-

[9] This paper was already published in a more detailed version in: Roelcke V, Topp S, Lepicard E, editors. Silence, Scapegoats, Self-Reflection: The Shadow of Nazi Medical Crimes on Medicine and Bioethics. Göttingen: V&R unipress; 2012; pp. 131–46.

[10] Bundesarchiv Berlin (Berlin Document Center) R 9345, Reichsärztekartei, film no. 60, Sewering, Hans; SSEM film 62xx R 59: Sewering entered the "SS-Sturm 2/I/31" on 1 November 1933 as "SS-Mann". PK film C 242 picture 1236–1238 Gaupersonalamt München-Oberbayern, Reference of the *Kreispersonalleiter* from 13 August 1942: Sewering entered the NSDAP on 1 August 1934.

ing [227, 228: 264]. *Der Spiegel* already asked the crucial question here: Did Sewering really not know at that time what such a transfer to Eglfing-Haar meant?

The protest against Sewering's nomination as President of the WMA was initiated in Germany by the Göttingen professor for general medicine, Michael Kochen [229]; in North America, William Seidelman [230], Michael Kater [228: 3–4], Michael Grodin, and Michael Franzblau were active, as was Michael Weingarten in Tel Aviv. In January 1993, the American Medical Association finally intervened and drew up a resolution of protest under its chairperson Raymond Scalettar. The World Jewish Congress declared a former Nazi as unacceptable for president of the WMA and threatened to call the national medical associations to withdraw from the WMA.[11] The German Medical Association, however, stood by Sewering and announced in the *German Medical Journal*: "Prof. Dr. Dr. h. c. Hans J. Sewering … is the target of a smear campaign." According to the journal, the accusations raised against him of being involved in Nazi "euthanasia" had never been proven. In defence of Sewering, the German Medical Association mentioned that Sewering was supported by the Catholic Church and received the German Order of Merit [231]. After the U. S. Justice Department stated on 21 January 1993 that it wanted to put Sewering on the "Watch List" with the consequence of being denied entry into the U. S., and the Munich Archbishop's Ordinariate abandoned its unreserved support of Sewering on 22 January 1993, Sewering declared his resignation from the office of President elect on 23 January 1993. He stated that he wanted to avert great damage to the World Medical Association because of the impending boycott of the "World Jewish Congress" [232].

The Sewering affair led to some trouble in the relationship between the German Medical Association, the American Medical Association and the WMA; the AMA representatives claimed that they had not been properly informed by the the German Medical Association about Sewering's Nazi past when he was elected as incoming president of the WMA in Marbella in 1992 [233, 234]. As a counterpoint, the president of the German Medical Association, Karsten Vilmar, argued that the "claims were already raised against Professor Sewering many years ago. He was previously exonerated by a ruling of the 1st Court Division in Dachau on September 7, 1946, on the basis of factual investigations and testimonies in a due process of law as part of Allied denazification process instigated by the allied military government" [235]. His main argument was that, according to the German constitution, Sewering must be considered as innocent as long as there is no conviction by a court of law. Thus, the German Medical Association was neither obliged nor had the possibility to prove the accusations against him, which were mainly based on conjecture.

Nevertheless, the World Medical Association was interested in coming to terms with the Sewering affair after Sewering's resignation and declared that such a situation should never occur again [234].[12] Despite his vigorous support of Sewering, Karsten Vilmar was elected treasurer of the WMA in 1993.

The German Medical Association consequently made an effort to limit the damage and the 96th German *Ärztetag* (an annual medical conference) in Dresden issued a statement, in which events surrounding Sewering's candidacy were described as unfortunate and his resignation was welcomed: "With this, the *Ärztetag* sees the matter as settled." [236, 237] The matter was not settled for the dermatologist Dr. Franzblau in California, who founded a "Committee to bring Dr. Hans Joachim Sewering to Justice", and appealed to the German and the Bavarian state governments [238].[13] In July 1996, a full page advertisement was published in the New York Times with the following question: "Why is the German State of Bavaria harbouring an accused war criminal?" The public prosecutor's office of Munich I actually conducted several preliminary inquiries, inspected all surviving records of patients from Schönbrunn who were transferred to Eglfing-Haar, and questioned the last four remaining witnesses, who were nuns at Schönbrunn. However, as of 2003, the office did not see any grounds for opening formal preliminary proceedings against Sewering. The main argument of the Munich public prosecutor was that the National Socialist "euthanasia" program, especially the "euthanasia" of children, was a secret affair of the *Reich,* about which an outsider, like Sewering, knew nothing and could not have known anything [239: 241–54].

The unresolved shadows of the past as well as Hans Joachim Sewering's political influence in Bavaria to this day are reasons for the existence of three different, contradictory stories about one and the same historical event. These stories are able to coexist, unconnected next to each other, because there are still blank spaces in the landscape of memory about National Socialist medicine and "euthanasia", which have resisted historical elucidation until the beginning of the 21st Century.

Franzblau's account of the Sewering case

The Sewering case, in the view of Michael Franzblau [238], is shaped by the construct of the Nazi doctor, who, through his membership in the National Socialist party and the SS, is an enthusiastic adherent of the National Socialist ideology of "racial hygiene" and who thus inevitably developed an inclination towards medical crimes

[11] Reuters News Service, January 22nd 1993: "The World Jewish Congress said on Thursday it was considering calling on national medical groups to withdraw from the World Medical Association if it confirmed a former Nazi as its president."

[12] Cf. Letter from James S. Todd, Executive Vice President of the American Medical Association to Michael A. Grodin, April 16th 1993: "The AMA will continue to take strong measures to try to assure that the WMA never has a problem like this again."

[13] Under www.badnazidoctor.com [accessed in 2008] the "Committee to Bring Dr. Hans-Joachim Sewering to Justice" offered information about the Sewering Case and claims that during Sewering's duty as physician at the Schönbrunn asylum, 900 patients have been transferred to "euthanasia" facilities.

and especially towards Nazi "euthanasia". The early SS and party membership of Hans Joachim Sewering, who joined the general SS as early as 1933 and the NSDAP in 1934, fits into this image [238: 85]. From this perspective, it seems logical that Sewering also took part in the so-called "wild euthanasia" program between 1942 and 1945 and was responsible for the transfer of 900 patients to "euthanasia" facilities, during his work as a doctor in the hospital for tuberculosis patients in Schönbrunn. The transfer order of 14-year-old Babette Fröwis from Schönbrunn to Eglfing-Haar, signed by Sewering, represents the crucial document in this story. Sewering's case appears to be the quintessential symbol of the unprocessed National Socialist past of German medicine.

Sewering's self-account of the story

Sewering's autobiographical version of the story could not be more different from the preceding one [240].[14] His memberships in the NSDAP and the SS were, as he tells it, a forgivable youthful folly, carried along by a wave of enthusiasm for National Socialism. In addition, he alleged that his membership in a National Socialist organization had been a prerequisite for finishing his medical studies.[15] He claimed to have withdrawn inwardly from National Socialism on the occurrence of the pogrom of 9 November 1938. In May 1942, he began working in the Munich Tuberculosis Hospital in the buildings of the Schönbrunn asylum. After the asylum's resident doctor was drafted into the military, Sewering took over the medical care of the women in the whole asylum. In his eyes, the case of Babette Fröwis was purely a tale concocted by *Spiegel* magazine. The nuns had asked him for his signature on various occasions, as they did for the transfer of the 14-year-old girl, whose care they were no longer able to cope with. Words of regret considering Babette's fate never crossed his lips. On the contrary, he was not even able to comprehend the question about such an emotional reaction. And so it seems that Sewering has a clear conscience, confirmed by the fact that no official investigative proceedings were opened against him.

The Story in the view of Schönbrunn and church authorities

At the Bavarian Medical Conference in 1978, the Munich Archbishop's Ordinariate stated that aspersions cast on doctors working in church institutions during the time of National Socialism were without foundation, a statement which could only have been refering to Sewering, whose involvement in Babette Fröwis' death had just been made public by the *Spiegel* news magazine [227]. In the denazification court's proceedings, the director of the Schönbrunn institution Josef Steininger exonerated Hans Joachim Sewering to the extent that he was absolutely not a National Socialist [239: 238, 246]. Sewering remained connected to Schönbrunn as a consulting physician until the 1970s, under the prerequisite that the account of the rescue of Schönbrunn should not be questioned. This very consensus on "historical facts" between Sewering and the church institution Schönbrunn were doomed to fall apart once the question of who was responsible for the transfer of 14-year-old Babette Fröwis to the asylum Eglfing-Haar could no longer be avoided [241].

Sewering's attempt to make the nuns from Schönbrunn responsible for Babette Fröwis' move to Eglfing-Haar elicited an official response from the Munich Ordinariate: namely that the asylum's nuns knew very well that deportation between 1940 and 1944 meant death for the patients in their care [239: 249; 242, 243].

Historical Sources

With this, we leave the level of legends and finally turn to the historical sources available today. To do this, it is necessary to recall the various forms of National Socialist "euthanasia" and the function of the mental hospital and asylum Eglfing-Haar [47, 244–251]:

1. Even after the formal end of the "T4 program" in August 1941, transportations of patients to institutions with high mortality rates continued; to be precise, another 172 patients had been transferred from Schönbrunn to the institution of Eglfing-Haar by December 1943. In June 1944, the negotiations between Steininger and the spiritual head of the Third Order Hospital in Munich concerning the implementation of an auxiliary hospital in Schönbrunn made it clear that if any information about the upcoming transfers reached the nuns, they could become very agitated [239: 218]. The transcript of the negotiations clearly proves that it was generally known in Schönbrunn that the killing of patients, especially in Eglfing-Haar, continued after the end of the "T4 program". Sewering's involvement in the collective transports in 1943 and 1944 cannot be proven by the existing sources, but it seems implausible that he did not know anything about the context of these transports. Indeed, after the halt of the "T4 program" in August 1941, the killing of patients in German asylums continued in various forms, especially by the use of overdosed medication and by starvation. In Bavaria, the Ministry of the Interior gave an order to establish a special starvation diet for non-working patients [252: 95–147; 253: 177–88]. Between 1939 and 1945, about 3,000 patients died in the asylum of Eglfing-Haar. A study of all the deaths of patients from Munich in this period showed that only a third of the patients in Eglfing-Haar died from natural causes. About two thirds of the death cases in Eglfing-Haar were caused by systematic neglect of nursing and medical care, by starvation and prob-

[14] Sewering told this story in an interview with the author on 19 June 2006 in his home in Dachau.

[15] As the BDC documents show, Sewering entered the General SS, see above.

ably—also in the case of adult patients—by overdosed medication.[16]

2. Babette Fröwis' transfer did not take place in the context of one of the collective transports mentioned above. It was an individual transfer due to disturbing behavior. Babette was probably registered with the "Reich Committee for the Research of Serious Hereditary and Constitutional Illnesses", the so-called "children's euthanasia" camouflage organization, by the asylum Eglfing-Haar and admitted to the *Kinderfachabteilung*. She was killed with repeated doses of Luminal, simulating a natural death by bronchial pneumonia.[17] According to present knowledge, Sewering admitted a total of nine patients from Schönbrunn to Eglfing-Haar between June 1943 and February 1945, of whom five died.[18] Aside from the aforementioned killing of Babette Fröwis in the *Kinderfachabteilung*, most of them were starved to death, some of them in the notorious "House of Hunger" 22. The grounds for transfer written in the short transfer papers from Dr. Sewering range from restlessness, bothering other patients and attempts to flee, to assault and battery of the staff. In all cases, Sewering confirmed in writing that the patients could not be kept in Schönbrunn and that admittance to a locked ward was necessary.
3. Between 1939 and 1945, out of a total of 905 inhabitants of the Schönbrunn institution who were transferred to state institutions, most of them to the asylum of Eglfing-Haar, 546 did not survive the war and probably fell victim to the National Socialist "euthanasia" program [254: 132–3].

Conclusion

When we critically compare the three accounts on the basis of source materials, their constructed character becomes clear: the real Sewering can neither be identified in the narrative of the perpetrator of "wild euthanasia" or as the prototype of the Nazi doctor and war criminal; nor can his version of himself as unknowing and innocent be supported by the sources. The legend of the heroic rescue of Schönbrunn by Prelate Steininger is also nothing more than a skillful reinterpretation of events documented in the sources, as the institution was saved at the end of the war, but almost all of the patients in its care had disappeared [239: 98–9]. It is not plausible that Sewering was as unaware as he declared 50 years later. This is either a conscious deception of the public, or else the creative and self-exonerating efforts of autobiography. In fact, the sources tell the story of two men who in the end functioned within the machinery of transfers controlled by the Bavarian Ministry of the Interior Department of Health and who did what was expected of them, namely making space to be used for the medical requirements of war by transferring mentally disabled and ill patients in their care. In addition, Sewering, as well as his predecessors, exposed disruptive patients to the danger of being killed in the mental hospital and asylum of Eglfing-Haar. Even if one were to accept the unlikely supposition that Sewering knew nothing about the impending danger, the real scandal would still be that the discovery of the death of Babette Fröwis, whom *he* had transferred, did not arouse any emotional expression of regret at all; the fact that he had played into the hands of the murderers only led him to shift the blame onto the nuns in Schönbrunn. In this respect, Sewering's case is a late example of the "inability to mourn", as Alexander and Margarethe Mitscherlich diagnosed in the 1960s [255].

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[16] This study was conducted by the working group "Psychiatry and welfare care in National Socialism in Munich" (Michael von Cranach, Annette Eberle, Gerrit Hohendorf and Sibylle von Tiedemann) with support from the Documentation Center on National Socialism in Munich and the District of Upper Bavaria. The results will be published in form of a Remembrance Book for the Munich "euthanasia"victims in 2018 edited by Michael von Cranach, Annette Eberle, Gerrit Hohendorf and Sibylle von Tiedemann.

[17] Archiv des Bezirks Oberbayern, München, stock Eglfing-Haar, patient file 7179.

[18] Archiv des Bezirks Oberbayern, München, stock Eglfing-Haar, patient files 7179, 7709, 7893, 8662, 8702, 10607, 11906, 11107, 12101.

The reception of the Nuremberg Code and its impact on medical ethics in France: 1947–1954

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The history of the prosecution of Nazi medical war crimes and the Nuremberg Code's impact on the development of medical ethics in France are complex historical subjects [256]. First, trial investigations were a matter of international collaboration and rivalry [257]. Second, follow-up trials for French (medical) war crimes were still in preparation when the first accounts of the Nuremberg trial were published [256–260]. Specific book-length accounts of the Nuremberg Medical Trial (NMT), written by Mitscherlich and Mielke (1947/1949) in German, appeared during the preparation of the French legal procedures [261]. Similarly, the French edition of selected documents from the NMT by Bayle (1950) was published before the Struthof/Natzweiler concentration camp medical war crimes trials (SMT) were held in Metz in 1952 and in Lyon in 1954 [31]. In both cases, important NMT documents were published before the French judgment. The Nuremberg Code was part of the NMT judgment and therefore could not been included in the first edition of Mitscherlich and Mielke's (1947) book, while the second edition published in 1949 as well as Bayle's French edition of 1950 documented the Nuremberg Code [30, 31, 261]. These editions therefore could have had an impact on French judges and physicians, but as our analysis will show, this was not the case. Our central contention is that differences arose between professional groups and their respective cultures and understandings, especially between judges and physicians and prosecuting lawyers and scientific experts. This conflict between professional agencies, which emerged during the preparation for the French trials, continued to play a role in the debates about medical ethics later on.

In the context of this paper, "impact" will be defined as direct influence, for example, when the Nuremberg Code was openly acknowledged or referenced in citation. "Indirect" influence would include echoing the code's principles without directly mentioning the code or a precise quotation.

This contribution examines the influence of the Nuremberg Code in France in five stages: first, the negotiations and events during prosecution prior to the Nuremberg trial (1944–1946); second, the immediate portrayal of the NMT in the French professional medical press; third, its influence in the early debates on medical ethics in the context of the WMA, and in particular the French representative Paul Cibrie's role within the WMA; fourth, the discussions about the prosecution of (medical) war crimes by the Monaco Commission in the early 1950s; and finally, the impact of these debates during the French SMT (1952–1954) [256–260].

(1) Negotiations and events during prosecution prior to the Nuremberg Trial (1944–1946)

Inter-allied discussions on experimental research in the concentration camps and ethical guidelines for the protection of human subjects in medical research preceding the NMT started in summer 1946 [14]. On May 15, 1946, British members of the Field Information Agency, Technical (FIAT) held an initial meeting with French scientists from the Pasteur Institute. On this occasion Professor Pierre Lépine from the Pasteur Institute suggested, on behalf of the French delegation, that scientific bodies representing the four powers should issue a moral condemnation of the unethical practice of German scientists [30]. The British delegate, Chairman Brigadier Raymond John Maunsell, held a contradictory view, insisting that it was essential to have a trial first and that national scientific bodies could subsequently publicly condemn criminal medical practices [262]. Here, the issue at stake was priority, namely whether judges or medical professionals should first get to define what was criminal or admissible, and who should get to convey this judgment to the general public. Half a year before the opening of the NMT, a second meeting in Paris on July 31, 1946 led to the foundation of the International Scientific Commission (ISC) on War Crimes of a Medical Nature [263]. Here Andrew C. Ivy, physician and Special Consultant to the U. S. Secretary of War, warned attendees that the publicity associated with a trial of concentration camp experimenters could "so stir public opinion against the use of humans in any experimental manner whatsoever that a hindrance will thereby result to the progress of science" [30]. Instead, Ivy presented the first draft of an ethical code [263]. A short while later it became clear that another international trial would be doomed. At the last meeting of the ISC on January 15, 1947 in Paris—six weeks after the beginning of the NMT—Leo Alexander, the second initiator of the "Nuremberg Code", and present as a guest of the ISC, announced his plan to publish two articles on medical ethics and the Nazi war crimes. Dissent arose when Lord Moran, Churchill's physician and President of the Royal College of Physicians, insisted with the support of the British and French delegates that no such publication should take place [193: 201–2]. The ISC never met again. In short, the above example shows how, in the French case, guidelines reaffirming and demarking legitimate clinical research from criminal experiments for legal purposes were a lower priority than a professional condemnation that should precede and inform judicial action.

(2) Immediate reception in the professional press after the NMT

The historian Etienne Lepicard has examined the impact of the NMT and the Nuremberg Code in detail in two leading French medical journals, *La Presse médicale*—an elite medical journal—and the *Concours médical*—a professional journal with close ties to the French medical trade unions. Beginning in 1946, the *Presse médicale* fea-

tured eyewitness accounts by Charles Richet, Jean Braine, André Ravina, Robert Waitz, and Marian Ciepielowsky, and covered the NMT in 1947, including a precise translation of the accusations but no direct mention of the Nuremberg Code. Camp experimentation and "euthanasia" remained rather undifferentiated in the accounts and genuine questions about extermination prevailed over those concerning experimentation and research. In contrast to *La Presse médicale,* the professionally-oriented *Concours médical* hardly made any reference to the NMT in its columns; when the issue surfaced, it did so mainly in the context of professional debates about the creation and actions of the WMA and the (re)structuring of the French medical profession in the form of the French Medical Association (*Ordre*) and its deontological code of 1947. Thus, the influence of the Nuremberg Code on the post-war debates in the professional medical press in France may be characterized as being strongly divided between an elite medical public with reports on the NMT but not the Code per se, and a discourse of general physicians with an "almost complete silence about what happened to medicine under the 'Third Reich' and about the NMT" [264: 71]. Generally, eyewitness accounts from physicians who had survived German concentration and extermination camps were placed at the forefront, including direct testimonies on atrocities and the moral condemnation of unethical practices by German physicians and scientists, lumping together "euthanasia", forced sterilization, and experimentation under the general heading of "medically assisted extermination". According to Lepicard, the Nuremberg Code does not seem to have had any direct influence on professional audiences at this point. In short, it seems that condemnation, rather than preventing unethical and criminal practices and experiments, was the central concern of the reports from French medical professionals.

(3) The role of French representatives in side-lining the Nuremberg Code in early debates about medical ethics in the WMA

In late November 1944 and on June 6, 1945, barely one month after the end of World War II and three weeks after the initial ISC meeting described above, the British Medical Association (BMA) gathered physicians from over 30 countries to discuss the (re)creation of an international association of doctors. Due to the late reorganization of the French Medical Association (*Ordre des Médecins*), Paul Cibrie (1881–1965) represented the French medical profession at the initial WMA meetings in 1945 and 1946 and continued to act as French liaison. He inevitably became a key player when he was appointed temporary secretary-general of the WMA in September 1946, together with Charles Hill, the secretary of the BMA. Cibrie was a longstanding medical-union activist and had been compromised by his membership in the second Higher Vichy Council which, from 1942 to 1944, participated in the implementation of anti-Jewish laws. [265]

In June 1947, two months before the final verdict of the Nuremberg Doctor's trial, John A. Pridham presented a BMA-supported request and draft for a declaration on war crimes and medicine, classifying the different medical war crimes for the preparatory assembly of the WMA. One month after the Nuremberg verdict, the first General Assembly of the WMA in Paris established a specific committee for the question of war crimes in September 1947. In 1947 this committee adopted a medical charter, including the WMA physician's oath, without any direct reference to the NMT Code [266, 267]. The initiative echoed British physicians' demands for a post-trial declaration, a step that the ISC discussed but never had the time to make. Paul Cibrie, one of the four members of the war crimes committee, specifically insisted on the necessity of an oath at the conclusion of medical studies, complementing or rivalling the binding deontological code of the French *Ordre des Médecins,* then barely established [266]. The medical vow was adopted and became known as the Declaration of Geneva at the second WMA General Assembly in Geneva in September 1948 [268].

Four months earlier in April 1948, at the second council meeting in New York, Cibrie had suggested the necessity for a more comprehensive and obligatory international code of medical ethics. His efforts led to the appointment of a study committee on the matter under his presidency at the second General Assembly in Geneva [269]. The code was conceived in a comprehensive way and was to include the Geneva declaration as a preamble and the code of ethics of the Canadian Medical Association as an introduction. A complete first version of this ethical code was then presented to the WMA council at its fifth meeting in Madrid in April 1949 [270]. A direct reference to the Nuremberg Code never appeared during the nine years that Cibrie served the WMA at the intersection of the committees on war crimes and medical ethics. From the outset, he sought to distance the WMA's considerations on international medical ethics from the "scientific crimes" of German physicians, especially because they were initially addressed in a single committee on war crimes that led to the adoption of the Geneva Declaration. The dividing line for Cibrie was a simple one: crimes fell into the domain of law and the competence of judges with their merciless justice, while medical ethics belonged to the realm of the medical profession, which was defined by professional autonomy [271].

(4) The Monaco Commission and the NMT

The early 1950s were further marked by an initiative of a group of continental jurists and physicians led by the Belgian military physician Surgeon General Jules Voncken and the Swiss jurist Jean Graven, who actively engaged the public in establishing international medical law. On December 23, 1950, Voncken, as one of the founders of the International Committee of Military Medicine and in the context of the debates mentioned above, published a harsh critique of the WMA International Code of Medical Ethics in the French medical journal *Presse médicale* [272]. He called for a lesson to be learned from the NMT and referenced the Nuremberg judgment and code directly. His conclusion was that without international law, international courts, and penalties, the code only represented a simple statement lacking any sort of practical con-

sequences. At the following WMA council meeting Cibrie resented the attack and insisted that international medical law did not exist and that international medical tribunals in wartime were impossible since a neutral location for impartial judgment would be impossible to find [271]. In Cibrie's view, Voncken's activities, as well as those of the ICMM, were unduly interfering with international and professional organizations rightfully concerned with medical ethics. In April 1951, Cibrie, in his role as the WMA's mandatory observer, attended the ICMM and the medico-legal Monaco Commission founding meeting for an Institute for the Study of International Law. He reported to the eleventh council meeting of the WMA that Voncken, the Monaco Commission, and the ICMM had no mandate to interfere with medical ethics affairs that belonged to the joint competence of WMA, WHO, and the International Commission of the Red Cross (ICRC). In October, 1951 the WMA General Assembly adopted a resolution concluding that "given that the Monaco Commission is not mandated to treat these questions, if it persists in elaborating a Code of Medical Ethics, the code will not be recognized by the medical profession" [273]. Sidelining the Monaco Commission's initiative, the first explicit reference to the Nuremberg Code was marginalized as well, and when the WMA transformed the Study Committee on Medical Ethics into a Permanent Committee in 1952 under the presidency of Paul Cibrie, the Nuremberg Code continued to be widely ignored.

(5) French medical war crimes trials: the Struthof Medical Trials (1952–1954)

It is in this context that the preparations for the French follow-up military trials of a group of Nazi physicians who conducted medical research at the Struthof/Natzweiler concentration camp in formerly-occupied Alsace (Struthof Medical Trials, SMT) were actively taken up on July 18, 1952. Four weeks prior to the trial opening in Metz, the French Academy of Medicine (FAM) published a public statement on experiments with human subjects in November 1952 [274]. The SMT offers a noteworthy and complementary perspective for studies concerned with the impact of the NMT and the influence of the Nuremberg Code in France. Did the French judges refer to the guidelines for "permissible medical experiments" established by the NMT in 1947?

A detailed analysis of the arguments used by the prosecution and the defence, and whether or not they echoed the NMT's "ten principles", is beyond the scope of this paper [257–260]; however, an overview is possible. First, the prosecuting magistrate Captain Lorich issued, on April 20, 1948, letters rogatory to the typhus expert Professor Georges Blanc, director of the Pasteur Institute in Casablanca, and Colonel André Jude, director of the Central Laboratory of the French Army and military hospital specialist physician, requesting written statements on ten questions based on the defendants' declarations and their scientific publications, which were essentially of a technical-medical nature. The Nuremberg principles did not surface and neither explicit nor implicit reference was made to them by the prosecution or by the two experts [275]. Defence lawyer Frédéric Hoffet interpreted the scientific experts' statements as a testimony to normal medical experiments devoid of any objectionable deed. Echoing individual points of the Nuremberg Code, but without referring to it explicitly, Hoffet noted that the experiments were made in accordance with societal necessity and usefulness, and that requirements such as prior animal and laboratory studies, a favourable risk-benefit analysis, and the execution by qualified personnel were respected [257–260].

Active preparations for the trial sparked an initiative by the French National Academy of Medicine (FAM) to hold a secret committee on human experimentation ethics. A public statement by this committee was rendered necessary by the pressure imposed, on the one hand, by the repeated accounts of medical atrocities reported to the Academy by physicians who had survived German concentration camps, and on the other by expert statements from Jude and Blanc which discharged the NS physicians on trial in Metz, purveying the FMA with the role of a mediating moral authority for the entire medical profession. The short statement emphasized a distinction between non-therapeutic and therapeutic research, meaning that the FAM reaffirmed different consent requirements for therapeutic and non-therapeutic research [257–259]. Therapeutic research, which associated experiment and care, was exempt from obtaining patient consent in writing. The FAM declaration suggested that the medical profession had the basic power to define what was therapeutic or not, and therefore what required consent or not. It was therefore in great contrast with the Nuremberg Code, which had abolished this distinction and declared that all research with coerced subjects and without consent was unlawful. To distance itself from coerced concentration camp medical research the FAM committee added a final paragraph to its statement. It concluded that, in applying the above-mentioned principle, the National Academy considered experimental activities committed in certain concentration camps during the past war criminal and contrary to the principles formulated in the Geneva Convention [257–259]. In the end, the judges of the Military Tribunal at Metz disregarded the medical experts' appreciations and condemned the two German physicians Eugen Haagen and Otto Bickenbach to lifelong forced labour on December 24, 1952. The audience notes from the SMT make no mention either of the NMT judgment or of the Nuremberg Code rendered five years earlier [256–259].

As described above, the example of the SMT, which was intensely covered by the French general press, highlighted the differences of opinion between medical scientists and physicians on the one hand, and jurists on the other. The debates at the trial made clear that the distinction upheld by the FAM conclusion and by Cibrie at the WMA, namely between normal medical practice and biomedical research on the one side and German medical war crimes on the other, was not as evident as the medical profession's representatives were inclined to think. In practice, the borderline between medical practice and research, and between lawful and criminal medical acts, was blurred, and the debates of the jurists at the SMT

hinted at this problem—as had the ICMM and the Monaco Commission. When the Royal Netherlands Medical Association—some of the Struthof victims serving as witnesses at the SMT in Metz were Dutch physicians—requested in early 1953 that the WMA consider the ethical issues concerning the use of human subjects in scientific experiments and develop guidelines to protect test subjects in practice, the Monaco Commission issue again became a burning one. In the context of this international competition for moral authority in the field of medical research ethics and international medical law and the preparation of the appeal court trial of the SMT in 1954, the Committee on Medical Ethics of the WMA under the leadership of Cibrie drafted the first version of the WMA's ethical guidelines for human experimentation, which were presented in Rome in 1954 [276]. In February, 1953 the American journal *Science* had published the Nuremberg Code as a guide [277]. When the British physician Hugh Clegg was appointed as chair of the Committee in 1959, he submitted a report to the WMA Committee on Medical Ethics in 1960 that stated that the WMA had briefly considered adopting the Nuremberg Code in 1953 but that Cibrie had dismissed the idea [278: 2]. Instead of adopting the Code, Cibrie and his committee imported the 1952 FAM formulation separating therapeutic and non-therapeutic research because they questioned the wisdom of laying down hard and fast rules that would constrain researchers; they especially wanted to defend professional autonomy [276]. It was this French influence in the competition between post-war international organizations, and in the confrontation between medical and juridical values and professional cultures, that reinserted the distinction between therapeutic and non-therapeutic human experiments. This was one of the characteristic traits of the sidelining of the Nuremberg Code in France and, through Cibrie, its eventual sidelining within the WMA Helsinki Declaration of 1964.

Conclusion

The reception of the Nuremberg Code and its impact on medical ethics in France was troublesome at best. The period between 1946 and 1964 may be interpreted as the result of a continued, hidden, and forgotten international disagreement and negotiation about the essential divide between an internal professional moral code and external legal control over the rules and principles that differentiate lawful and unlawful clinical research practices. In the French case, reception of the Nuremberg Code was very limited—if not absent—whether in the medical press or in the French military follow-up trials. The aforementioned discussions and disagreements in the late 1940s and 1950s about drafting an international code for clinical research echoed, directly or indirectly, issues that were at stake in ongoing legal procedures. They have rarely been connected to the wider contextual framework and the (non)reception and limited influence of the Nuremberg Code in France.

The perpetuation or reintroduction of the therapeutic versus non-therapeutic biomedical research divide, abandoned by the Nuremberg Code for the first time in biomedical research ethics, was a significant difference concerning the situation in France and had long lasting consequences. As a consequence of the reintroduction of the category of therapeutic research that could forego subject consent, the French medical profession and the FAM introduced a "pseudo-medical" research category based on the idea that Nazi concentration camp research was criminal because it was "pseudo" or biomedical research that was scientifically invalid. "Pseudo-medical" was defined here as the fact that these experiments could not be integrated into the framework of the normal role of medical diagnosis and treatment of unhealthy individuals. The FAM favoured a definition that attempted to demarcate between lawful therapeutic experiments and criminal Nazi experimental practices in concentration camps, while maintaining the medical profession as the defining authority, whereas the Nuremberg Code introduced the experimental subject as the supreme authority who could refuse, consent to or halt an experiment. The role that the "French case" played in the immediate post-war reorganization of biomedical research ethics was to extend the therapeutic versus non-therapeutic biomedical research divide into the 1960s, and to influence the 1964 Helsinki declaration. From there it took three decades to recover the essential influence of the Nuremberg Code's central principle: general experimental subject consent.

Auschwitz doctors on trial: the cases of Hans Münch, Johann Paul Kremer and Roman Zenkteller

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Introduction

According to the Moscow Agreement of 30 October 1943 and the London Agreement of 8 August 1945, after the end of the war, war criminals were to be either judged by an International Military Tribunal or to stand a trial in the country where they committed their crimes. The Polish media reported on the Nuremberg trials extensively, the Doctors' Trial (9 December 1946–20 August 1947) in particular,[19] familiarizing the readers with facts mostly unknown to the public at the time. At the same time, the perspective of extraditing hundreds of war criminals to Poland triggered efforts to create a Tribunal, which, due

[19] Stanisławska E. Procesy hitlerowskich zbrodniarzy wojennych w Niemczech na łamach prasy polskiej 1945–49. Wrocław 1977; unpublished MA dissertation.

to the significance of the proceedings, could act as a national equivalent to the International Military Tribunal in Nuremberg.

The National Supreme Tribunal (*Najwyższy Trybunał Narodowy*—NTN) was brought into being on 22 January 1946 in order to judge the main decision-makers and perpetrators responsible for the most horrific atrocities and exploitation of Poles and other nationals who found themselves in Poland during the years of occupation. The NTN judged in seven cases, including the First Auschwitz Trial, known as the Auschwitz Garrison Trial (24 November to 16 December 1947), which brought 40 members of KL Auschwitz staff to justice, including two SS physicians.

Sentences were rather severe—23 of the convicts were sentenced to death and 6 to life in prison, with the remainder facing 3 to 15 years in prison, with only one acquittal: doctor Hans Münch. According to Piotr Setkiewicz, "the collected evidence made it rather clear that he would be acquitted. Here again, propaganda reasons were at play; with the assumption that all the others will be sentenced, Münch's acquittal was to speak for the impartiality of the Polish ruling team and the Polish justice system in general" [279: 11].

The 'good man of Auschwitz'?

Hans Wilhelm Münch (1911–2001) had been recruited as a bacteriologist by the Waffen-SS and was sent to the Hygiene Institute of the Waffen-SS in Rajsko, 4 km from the main camp Auschwitz in 1943, where he continued his research and supervised the serological laboratory in Block 10 until the evacuation of the camp in January 1945. In 1946, having been identified as an Auschwitz physician, he was extradited to Poland to stand trial in Cracow. He was accused of conducting malaria experiments in which he injected blood samples taken from infected patients into healthy inmates, and also administering injections of serum that caused rheumatism [280: 150].

During the trial Münch claimed that he had never been a member of the NSDAP—in fact he had joined the party in 1937—and that he had attempted to enlist in the Wehrmacht in order to avoid recruitment into the SS, into which he was eventually inducted in 1943. The justification of the court's decision reads: "the work done in Rajsko was generally speaking honest, although there were cases of criminal medical practices, in which the accused has never participated. The accused did not conduct malaria experiments but worked on medicaments against rheumatism, administered both to SS-men and the prisoners, only for healing and not experimental purposes" [280: 215]

Hans Münch was the only one acquitted in the Auschwitz Trial. This decision was to a large extent based on his own insistance that he vehemently refused participation in prisoner selections [279: 254], and witnesses' testimonies that spoke in his favor. "According to witnesses Dr Kieta and Dr Reimann"—reads the justification of acquittal—"the accused conducted a series of experiments to find a treatment for rheumatism and the serum produced in the Institute was administered exclusively for healing purposes. It has happened that the patient's condition did not improve and he was back within a few weeks with fingers deformed, but witness Kieta could not determine whether that was an effect produced by the injections. Also, the expert opinion by Professor Olbrycht confirms that the serum produced in Rajsko was used for treatment. Additionally, witness Pleszkowska testified that the accused tested serum on him, in the inmates' presence, in order to alleviate their anxiety. All mentioned witnesses, as well as witnesses Dr Fajkiel and Dr Kowalczykowa, stated that the accused had always had a benevolent attitude towards the camp inmates and tried to be helpful, even putting at risk his own safety, by helping to smuggle correspondence, organizing meetings of spouses, providing medicament for a sick Jewish doctor and intervening on behalf of two prisoners placed in a punitive unit" [280: 215–6]. The court concluded that it was not possible to establish whether Münch took part in the experiments conducted by doctor Bruno Weber (1915–1956), the director of the Institute.

Almost twenty years later, a similarly favorable opinion of Münch was published in 'Medical Review—Auschwitz.' The author, former prisoner and doctor Dorota Lorska, maintained that Münch saved her from the punitive unit, thus saving her life, and vividly remembered that on his arrival to Block 10 he introduced himself and shook her hand. She admitted that Münch conducted experiments, immediately adding, however, that they were not harmful, but more like a cover up to be able to show some results to his superiors [281]. This reputation as a unique Nazi doctor in Auschwitz was later strengthened by Robert Jay Lifton in his classic "The Nazi Doctors", in which Münch, under the pseudonym Ernst B., was described as 'a human being in an SS-uniform' [282]. In the Polish literature, he also served as an example of a German physician who dared to refuse to follow criminal orders and tried to help the prisoners as much as he could in the circumstances given [283–285].

More recent studies do not share this enthusiasm, referring to Münch as a 'figure in all respects ambivalent' [286: 176] and 'controversial' [256: 85]. Research by Hans Joachim Lang and Paul Weindling indicates that painful injections received by the inmates of experimental Block 10 after chemical sterilization, as well as the extraction of multiple teeth without any anesthetic measures could have been in service of Münch's projects (given that teeth present a source of infection). In Paul Weindling's view "Münch's experiments were very much opportunistic and an individual sphere of activity" [287: 165]. Moreover, even though the Polish Tribunal did not find sufficient evidence to support the accusations regarding malaria experiments, it cannot be excluded that Münch may have loosely collaborated with his close friend Josef Mengele [288: 45, 289: 442] on a specific protein project.

There is no need to question the National Supreme Tribunal's proceedings or the credibility of witness statements during the 1947 trial. Many of them were former prisoner-physicians and, indeed, may have been treated

differently by their German colleague. Additionally, having been assistant-collaborators in experimental procedures, rather than experimental subjects, they certainly had a different perspective on and memory of the events.

The Polish medical community accepted proof of Münch's moral standards to the extent that a much shortened version of his work titled "*Hunger und Lebenserwartung in Auschwitz*" (Starvation and Life Expectatancy in Auschwitz) was published in 'Medical Review—Auschwitz'—the only journal devoted exclusively to medicine during the Holocaust [290]. While under arrest and awaiting trial (he was in Poland from 18 December 1946) Hans Münch analyzed and organized the files of the Hygiene Institute in Rajsko and compiled the results in a detailed 120-page study that he finished on the day of the beginning of the First Auschwitz Trial, 24 November 1947.

"I appeal for pardon not so much for myself but for science"

The second physician judged during the First Auschwitz Trial, Johann Paul Kremer (1883–1965), is much better known due to the publication of his famously infamous diary, which documents, among other events, his 2.5 months in Auschwitz (30 August to 18 November 1942) [291]. In this short period of time he selected at least 10,717 deported prisoners for death in the gas chambers (documentation incomplete) [291: 20] and took part in 14 *Sonderaktionen* (special actions) [291: 158] in addition to pursuing his research interests.

According to Kremer's line of defense, he was sent to Auschwitz as a form of punishment for a publication which supported the theory of inheritance of acquired characteristics, a concept not much favored by race-oriented scientists. The article, titled '*Ein bemerkenswerter Beitrag zur Frage der Vererbung erworbener Verstuemmelung*' (An important contribution to the question of the inheritance of injuries) was published in spring 1942 and presented the case of a child born without four fingers, whose father had lost fingers on the same hand in an earlier work accident. In fact, Kremer had demonstrated an inclination towards Lamarckism much earlier when he received his post-doctoral degree in 1929 based on a dissertation '*Ueber die Veraenderungen des Muskelgewebes im Hungerzustande*' (On changes in muscle tissue under starvation conditions) [279: 131]. Despite that, he was able to continue his career after 1933.

While in Auschwitz, he continued pursuing his research interests using camp inmates to study the relationship between starvation disease and alterations in internal organs (the liver, pancreas and spleen) under conditions of extreme exhaustion. In his statement, he described how he used to visit Block 28, where the prisoners were categorized as able or unable to work, and he would ask them to keep prisoners with advanced hunger disease for him and inform him of the date of their execution. "Selected prisoners were brought back to the Block 28 […], placed alive on the dissection table and I approached them and could ask questions significant for my research, for instance their body weight before the arrest, how much lost since then, whether there were any medicaments administered recently. After I'd collected the necessary information the prisoner was killed with a phenol injection by a paramedic. […] I myself have never done injections. I was waiting with the jars for the specimens that prisoner physicians cut out from those organs that I needed to examine for my research. In some cases, I ordered to take a photo of those patients who were to be killed for me, so that I could collect specimens" [279: 138–9].

Johann Paul Kremer was sentenced to death on 16 December 1947. On 24 December 1947, on the eve of his 65th birthday, he appealed to the President of the Polish Republic for pardon. In keeping with his main line of defense, he maintained that he had become a victim of science and continued: "I appeal for pardon not so much for myself as for science, because I am in possession of a number of significant research results, ready for publication, for instance the building of gallstones in insects, inflammations, the problem of cancer and, finally, a satisfying answer to the question of inheritance of acquired characteristics" [284: 379].

The president granted the pardon and Kremer's sentence was commuted to life in prison. However, in 1958 the court in Bydgoszcz decided that, due to his age and proper conduct in prison, one should assume that he would not commit additional crimes, and he was extradited to Germany [292]. Initially welcomed as a 'martyr from the East,' thanks to a media campaign Kremer stood another trial and was sentenced to 10 years in prison, but the years that he had served in a Polish prison were taken into account.

The case of Roman Zenkteller[20]

The First Auschwitz Trial was initially planned as a big trial with 100 accused, including the most brutal function prisoners. Piotr Setkiewicz argues that "doubts were voiced with the case of physicians Roman Zenkteller and Władysław Dering, whose coarseness and sometimes even brutality towards fellow inmates was rashly interpreted as a sign of betrayal and sellout to the Nazis. Soon, however,"—Setkiewicz continues—"witnesses began to turn up presenting activities of these two physicians in a more favorable light, hence, not to increase confusion, the decision was made that only SS staff members would be indicted" [279: 10].

Polish prisoner physician Roman Zenkteller (1889–1975)—block physician in Auschwitz I and later physician-in-chief at Birkenau hospital—earned a reputation for being extremely rude and cruel towards other prisoners, especially those who were Jewish, toward whom he was "evil for evil's sake" [282: 250]. He was indicted for active participation in selections and ill-treatment of patients and personnel of the hospital, and stood trial before the District Court in Cracow (30 June to 20 Novem-

[20] R.J. Lifton incorrectly referred to Zenkteller as Zenon [4: 249]

ber 1948). Even though prosecution witnesses testified to his notorious brutality and participation in selections of sick prisoners for death, he was acquitted because the statements of defense witnesses were considered more plausible, owing to the fact that they "were mostly physicians, paramedics and intelligent people" [293: 196]. The defense argument downplayed the legendary brutality of the accused, describing it as a reflection of the brutality that was pervasive and entrenched in camp life and essential to maintaining discipline, which was in the interest of all prisoners, and highlighted his cooperation with the camp resistance movement.

Zofia Wóycicka demonstrated that in court proceedings former function prisoners were often considered more credible than "normal" prisoners as it was assumed that they had better insight in camp life and "were more aware of the situation and circumstances than those who based their opinion on isolated events that they had witnessed" due to their privileged position in the camp hierarchy [293: 196]. Here again, it can be supposed that the concept of colleagueship, deeply rooted in the medical profession, was not without influence on the court's proceedings and decision. In 1949 the case was reopened, but the result of the proceedings remains unknown [293: 190]. It is known, however, that in 1950, Zenkteller practiced in a small town in the district of Greater Poland.

In general, camp physicians were poorly represented in the trials conducted in Poland [294: 188]. This might have been caused by the fact that the immediate postwar years were characterized by tracing the 'main war criminals' and also by increasing tensions between the East and West, which led to decreasing numbers of extraditions, which were eventually suspended from the American and British zones in 1949. Apart from Johann Paul Kremer and Hans Münch, only Erwin von Helmersen (1914–1949) was extradited to Poland and on 17 January 1949 sentenced to death by the District Court in Cracow. The sentence was executed on 12 April 1949.

Conflicting solidarities?

Trials of function prisoners triggered public discussion and substantial controversy as "their activities were perceived differently by 'camp aristocracy', inclined to defend the indicted, and those who found themselves on the lower level in the camp hierarchy" [293: 194]. Additionally, former prisoners often expressed doubts as to whether those who had never experienced life in the camps were in a position to judge those who had. Similar controversies erupted in the case of Roman Zenkteller and found their way into the media [293: 193–200].

It is interesting to note that the most important journal devoted to medicine during the years of occupation, Medical Review—Auschwitz (*Przegląd Lekarski—Oświęcim*), refrained from comment. With the exception of two papers discussing the problem of function prisoners [295], ethically dubious activities of prisoner physicians, dentists and paramedics remained shrouded in silence. Apart from numerous memoires and reports from the camps, an abundance of articles published over the course of thirty years (1961–1991) deal mostly with the mental and physical health conditions of the survivors, the loss of Polish medical personnel, heroic actions undertaken by Polish physicians to save other prisoners, sanitary conditions in places of incarceration, the fate of Polish children, killing of the mentally ill, and medical experiments, in particular those on mass sterilization and tuberculosis. The case of J. P. Kremer warranted one article, written by a lawyer [292].

There is no doubt that the majority of prisoner physicians did their best to improve conditions and save lives; however, in this hagiography of Polish medical professionals during the war there is no space for negative figures and even potentially harmful activities are transformed into actions carried out for the common good. At the same time, German perpetrators responsible for experiments or medical murder often are labeled as 'psychopaths', 'criminals', 'killers under the Nazi swastika', evoking the image of monsters, rather than that of unscrupulous physicians driven by an urge to pursue their scientific careers. One can develop the impression that the ethos of the profession took precedence over an in-depth debate of the dangerous potential inherent in medical vocations.

The ethical standards of the medical profession seem not to have been the main focus of interest in the postwar decades. One of the few to speak out on the matter was Ludwik Fleck, who in 1948 tried and failed to generate a national debate in regard to experiments on humans [296]. Surprisingly, he did not refer to the Nuremberg Code and argued that the increasing demand for experimentation on humans required clear regulations in order to protect experimental subjects. In his view, in case of potentially harmful procedures the persons involved should be fully informed about the consequences and their voluntary consent should be *conditio sine qua non*, whereas in non-risky experiments consent would not necessarily need to be obtained. Fleck condemned experiments on the mentally ill and prisoners, unless for healing purposes, however, in the case of convicts sentenced to death he proposed that they could be given an opportunity to volunteer, even for risky experiments, thus "rendering an important service to society" [295: 302]; should they survive, they should be granted pardon.

A national debate on medical ethics could have been orchestrated by the Chamber of Polish Physicians, which was dissolved in 1950 and replaced by the Physicians Sections attached to the Trade Union of Employees of the Health Service System which, however, "dealt mostly with various existential matters rather than questions of medical ethics" [285: 284].

Postscriptum

While World War II has been a very important field of study in Poland, medicine in the years of occupation has only intermittently attracted the attention of Polish historians, and research on medicine-related issues has primarily been the domain of physicians and other health-

service professionals. Additionally, the last two decades saw a shift in interest among researchers of WWII and the postwar decades. After the political transition of 1989, research focused largely on the history of the anticommunist underground movement and Soviet occupation. This shift has been mirrored in the name changes of the special commission tasked with documenting and disseminating knowledge of war crimes: founded as the Main Commission to Investigate *German* Crimes in Poland (1945–1949), altered to Main Commission to Investigate *Nazi* Crimes in Poland (1949–1984), followed by the designation Main Commission to Investigate Nazi Crimes in Poland—Institute for National Remembrance (1984–1991) and eventually the Main Commission to Investigate *Crimes against the Polish Nation*—Institute for National Remembrance (1991–1999), which was incorporated into the Institute as its investigative unit in 2000. While it is not surprising that Russian-Soviet crimes attract the attention of researchers and general readers after decades of silence and suppression, there is a risk that German-Nazi atrocities may gradually fade into collective post-memory[21] as less severe. After 1989 "Katyń became an equally, if not more important, symbol of Polish martyrdom as Oświęcim or Majdanek" [297: 254].

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Nazi medical crimes and the Jerusalem Declaration on Medical Ethics, 1952

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On August 10–14, 1952, the Second World Congress of Jewish Physicians gathered in Jerusalem. On its last day it passed a resolution on medical ethics, which became known as the Jerusalem Declaration on Medical Ethics (JD). Explicitly connected to what had happened in Nazi Germany, it actually constitutes one of the rare expressions of concern within the young state of Israel, and links the evolution of modern medicine and Nazi medical crimes. As far as we know, only one prior text presented such an attempt: The motion called "Let us throw the anathema against the murderer-doctors", which had been presented at the funding meeting of the World Medical Association (WMA) in September 1947 in Paris by the Jewish Medical Association of Palestine (JMAP) [298].

Toward the end of 1952, the JD has been published in three languages—Hebrew, French and English—in a very local and not easily accessible journal, *Dapim Refuiyim*, literally "Medical Leaves", the organ of the Hebrew General Sick-Fund. The French version received a greater exposure when issued in *La Presse médicale*, the journal of the Paris medical establishment [299]. The original 1952 English version is included as an attachment to this paper. However, as this version is relatively different from the French and Hebrew ones, the text has been annotated accordingly in order to ensure the readers perceive these differences and their significance.

Having presented elsewhere the broader context of the declaration [264], I will focus here on a close reading of the text within its immediate context, i. e. the two lectures the JD was taken from. In addition, comparisons will be made with the so-called Nuremberg medical code and the motion presented by the JMAP at the founding meeting of the WMA, both from 1947. In conclusion, the structure of the declaration will be clarified as well as its significance. I claim that it represents, in a sense, a failure to furnish an ethical framework based on Nazi medical crimes beyond a narrow focus on the ethics of human experimentation.

The Jerusalem Declaration – general presentation

The JD is a one-page text. It is divided into four parts: A summary of Nazi medical crimes (A), two transitional paragraphs (B and C) and four points of medical ethics (D). Globally speaking, as we will see later, the Hebrew and French versions are soberer and less emotional than the English one.

Formally, the declaration speaks in the name of the Congress in which it was passed: "The Second World Congress of Jewish physicians, which gathered in Jerusalem on August 10–14, 1952, exposes ... [146: 330]" This formal voice is actually enhanced as the cap of the article states that it was passed "unanimously". From the same cap, we also learn that the declaration is "a summary of the lectures [given] by Prof. H. Baruk (Paris) and Dr. M. Dvorjetski (Tel Aviv) at a session dedicated to the problems of medical ethics and the Nazi physicians' crimes" [146: 329]. Thus, these two lectures give us the immediate literary context of the declaration. It is worth noting that one of the authors, Dvorjetski, had also been the author of the 1947 motion mentioned above.

Henri Baruk (1897–1999) was a French psychiatrist who renovated the Charenton asylum before World War II (WWII) and remained head of it throughout the war years [300, 301]. A disciple of Babinski, he developed his practice at the crossroads of Jewish tradition, Pinel's moral therapy and research work on experimental psychopathology. He had just been appointed associate professor at the Paris Medical School when he first met Dvorjetski

[21] "According to anthropologists, memory includes what an individual or collectivity experienced. They distinguish between individual and collective memory. In literature there exist post-memories, which relate to events not experienced but deeply rooted in our conciousness thanks to stories important to us, told by our relatives, or known via education (school, books, film, museum, family). One can distinguish individual and collective post-memory. The majority of Poles did not personally experience World War II and 'embrace' these years as post-memory." R. Wnuk, II wojna światowa w pamięci historycznej Polaków, In: T. Nasierowski, G. Herczyńska, D.M. Myszka, Zagłada chorych psychicznie. Pamięć i historia. Warszawa: Eneteia 2012, p.249

at the founding meeting of the WMA mentioned above by mid-September 1947[22].

Mark (Meir) Dvorjetski (1908–1975) was born in Vilnius (today's Lithuania) and raised in Poland and France. A physician (Vilnius, 1935), he survived various concentration camps and had arrived in Paris after the war, with the intention of immigrating to Israel [143, 302]. Zionist from his early years as a student, he was connected with the Zionist movement and, although he had not yet immigrated to Israel, he has been called to be part of the delegation of the Jewish Medical Association of Palestine at the WMA founding meeting. His lecture "Let us throw the anathema against the murderer-doctors" at that meeting greatly impressed people, especially (recalled Krieger, head of the Jewish delegation) the moment when "he took out a piece of soap made out of the bodies of Jews (!) and placed it on the president's table" [303, referred to in 304: 201].

Dvorjetski's 1952 lecture

The lecture Dvorjetski gave on August 12, 1952 at the 2nd World Congress of Jewish Physicians in Jerusalem was entitled "The Jewish Medical Resistance and Nazi Criminal Medicine during Disastrous Period."[23] As indicated in the title, the first part of the paper (roughly a third of it) describes various figures of Jewish medical resistance to Nazism. Dvorjetski utilizes this framework to contrast the decline of morality in medicine under the Third Reich to the moral righteousness of the victims: "(the) discoveries of marvelous moral rising among the mortified (sic) doctors in the occupied countries."[24] The last two thirds of the lecture are a description of Nazi physicians' actions. Many of these deeds found their way into the first part of the Jerusalem Declaration, but here the lecture echoes the author in questioning: "How did the medical giants in Germany degraded (sic)? How did they come to moral decline and how did they come to paralyse (sic) the human feeling?"[25] Toward the end of his lecture, Dvorjetski called to found medicine anew on morality and on "the holiness of human life."[26]

Dvorjetski's general framework of a declining morality actually expresses the main idea of the first transitional section (B) of the Jerusalem declaration—the idea that German physicians "surrendered medical science to the service of Hitler's racism, and [...] initiated false and transgressing biologic theories [JD, section B]". Or in the words of the lecture: "A lot of German doctors had joined the racial idea to the medical science, and willingly they have become the [...] founders of the technic [to] exterminate nations and executed it."[27] This idea, which, compared to the results of the Nuremberg medical trial (NMT) for instance, greatly extends the responsibility of German physicians regarding all that happened in Nazi Germany, was already present in Dvorjetski's *Anathema* paper of 1947 [298]. The idea remains the same in 1952, but while the 1947 paper sounds mostly based on Dvorjetski's own experience and reflections as a survivor, this time the author explicitly and at various places indicates that his conclusions are based on an examination of the Nuremberg trials documentation—all of the Nuremberg trials, not only the medical one.[28] This is worth noting, because not all readers of this documentation went on to emphasize the link between eugenicist theories (called "racial hygiene" in Germany) and Nazi medical crimes. The 1947 account of the NMT by Mitscherlich and Mielke did, but the official American one, for instance, did not [305: 213]. Dvorjetski's lecture constitutes one of the first broad readings and interpretations of the Nuremberg trials documentation, in which his own personal experience may have helped him not to be constrained by the published accounts of the trials. Further research may be necessary here, but it is clear that Dvorjetski did not reduce "Nazi medical experiments" to those defined by the NMT [306], in contrast to many accounts, including quite recent ones like Alfred Pasternak's 2006 book [307].

This broad view of what happened to medicine under the Third Reich and the criminal deeds of the German medical community is largely reflected in the four categories of Nazi medical crimes, which constitute point number one (A) of the JD [146]. The ranking of these crimes as well as the fact that they are taken almost word by word from Dvorjetski's lecture constitute notable points. It begins with euthanasia, which is followed by forced sterilization and general hygienic negligence in concentration camps, and ends with medical experiments, which were relatively limited in scope. The insistence on ranking "mass euthanasia" first is remarkable, as are the various steps of it described by Dvorjetski in his lecture in a peculiar section entitled "The Psychiaters (sic) of Germany executors of mass slaughter". Although euthanasia had been debated during the Nuremberg medical trial, it did not find its way into the Nuremberg ten points of medical ethics, which focused only on the ethics of human ex-

[22] Actually, I am positing that they first met at the Paris WMA meeting because the correspondence held in Dvorjetski's papers at *Yad vashem* began immediately after that meeting; see the Dr. Mark Dvorjetski Archive (MDA). RG P 10, File 20/1 (1947–1960). Jerusalem: Yad Vashem library.

[23] A copy of Dvorjetski's lecture is among his papers in *Yad vashem*, see Dr. M. Dvorjetski (Tel Aviv), "The Jewish Medical Resistance and Nazi Criminal Medicine during Disasterous (sic) Period—A lecture at The World Jewish Medical Congress in Jerusalem on 12th August 1952," typescript annotated, 17 pages, MDA RG P 10 File 61 (now Dvorjetski, 1952).

[24] Dvorjetski, 1952, p.1. In this part, the author describes the famine research in Warsaw ghetto, three figures (J. Kortshak, J. Wigodsky and G. Gershuny) subsumed under the section title of "Images", "the medical underground" in various camps and countries, "Doctors in concentration camps", and "The doctors in Partisan Movement".

[25] *Ibid.*, p.7.

[26] *Ibid.*, p.18.

[27] *Ibid.*, p.8.

[28] At the beginning of the section on Nazi Medical Crimes, the author states generally: "Names and facts herewith shown, are based upon documents issued during trials against war criminals at Nirenberg (sic!), and also during the trial of 23 murder-doctors", cf. *Ibid.*, p.7–8. Later, he quotes documents presented at the trials, like a letter from gynecologist Clauberg to Himmler, and other documents. *Ibid.* p.15–16.

perimentation. The Jerusalem Declaration is constructed differently than the Nuremberg Code. It first looks to establish what the Nazi medical crimes were before concluding with some points of medical ethics. The fact that it ranks mass euthanasia first opens the door to the possibility of a broader ethical ruling.

The other three categories of the Jerusalem Declaration (A) are forced sterilization, degradation of human beings and criminal experiments. In his lecture, after having presented the euthanasia of psychiatric patients, Dvorjetski dealt with "The German doctors on Genoside (sic) operations", which he divided between what he called "the slow death operation" and "the operation of gas-chambers."[29] The former is reflected in point three of JD part A:

> Physical and moral degradation of human beings by systematic and well planned hunger, thirst, cold, whipping and other tortures. Serving the same purpose were the exposures to filth and absolute lack of hygiene, the instilling of fear and a sense of hopelessness, and the stripping the victims naked. All these diabolic abominations were designed to deprive the victims of their human image and dignity.

Earlier, I pointed out that the English version of the Jerusalem Declaration uses more emotional language than the French and Hebrew ones. This is one of the first instances of that pathos. The phrase "all these diabolic abominations" does not appear in the French or Hebrew versions; instead, the one-sentence paragraph merely summarizes the effects of such degrading treatments—the loss of human image, or dehumanization.[30]

The fourth category of Nazi medical crimes of the declaration is a summary of the next two sections of Dvorjetski's lecture: "The sadistic medical experiments in concentration camps" and "The desecration of medical sciences."[31] While the former is an enumeration of the various experiments shortened (sometimes word by word like "typhoid, typhus and malaria") in JD, the latter is a summary of the ethical principles, largely inspired by the Nuremberg Code, which according to Dvorjetski should regulate human experimentation. It ends by noting the violation of these rules "by the Nazi Doctors."[32] To the best of my knowledge, this was the first use of any section of the Nuremberg Code in Israel.[33]

Finally, point two of part A of the Jerusalem Declaration, which refers to forced sterilization, appeared in the next section of Dvorjetski's lecture under the title: "Preparation for sterilization of millions of European inhabitants."[34] From this title, the author's main idea regarding the Nazi sterilization program is already explicit—he did not consider to be just another experiment, but rather the tip of an iceberg of a much greater project, i. e. the enslavement of large parts of the European population. Given this stance, it makes sense that it ranks second in JD, just after mass euthanasia. What had just been a line without any specific purpose mentioned in the 1947 *Anathema* motion, has now been elaborated. By the end of the 1950s, Dvorjetski's main idea about Nazi sterilization programs would even develop into a book published in Hebrew and Yiddish: *Europe Without Children* [308].

Based on analysis conducted thus far, it is quite clear that the two first parts of the Jerusalem Declaration summarize Dvorjetski's lecture at the Congress.

Baruk's 1952 paper

Given that a copy of Dvorjetski's lecture has been preserved, it could have been more difficult to assert that the two next parts were drawn from Baruk's lecture, in the absence of a copy of the latter. However, upon his return to France, Baruk published an account of the Congress in *La Presse médicale*, a professional journal reflecting the Paris medical establishment to which Baruk belonged. In the absence of the text of the lecture itself, this article constitutes a good point of comparison in order to contextualize the declaration [299].

The second transitional part of the Jerusalem Declaration, part C, expresses in the name of the congress a

[29] *Ibid.*, p.11.

[30] The operation of gas chambers did not appear as such in the Jerusalem Declaration. It may be subsumed that it is part of the first point (mass euthanasia) which did not concern only psychiatric patients but "the extermination of children, old people, mental patients, incurables and cripples". JD, part A, point 1.

[31] Dvorjetski, 1952, p.12–14.

[32] *Ibid.*, p.13. The first part of the section, where the Nuremberg Code sounds inspirational, is preserved here. As far as I know, this is the first instance in which these ten points of medical ethics issued at the NMT were ever published in Israel: "They [the Nazi doctors] have desecrated the medical experiment work done in hospitals and cure institutes:—by consent of the patient and for his benefit.—conditionally the man considered for it is mentally fit to grant his agreement.—conditionally the man is in a condition of understanding, which prepare him to make use of his free consent, with intervention of no factor—of force, cheat, deception, shrewdness or any other means of forcing.—conditionally the man is able to demand, any moment convinient (sic) to him, to stop the experiments.—conditionally the experiment would be carried on with maximum hygienic conditions, scientific care at the outmost, based on former experiments upon beasts.—conditionally he (sic) would be prevented any physical and spiritual suffering, and conditionally that death would not be unesential (sic) and unavoidable as a result of the experiment.—conditionally it would be taken care of the object in experiment and protect against invalidity, dangerous wounds or death.—and conditionally that the executors of the experiments are men of scientific authority, handling their profession according to pure medical conscience, and according to human morals, the moral of justice and love for the suffering; and according to the recognition of the mankind life holiness—which applies: the holiness of life of the man upon who the experiment is executed."

[33] Actually, some passages may be found also in the JMAP *Anathema* motion of 1947 through the references to the absence of people's "consent and against their wishes" regarding experiments on freezing water and drinking sea-water on the one hand, and the practice of sterilization on the other [298: 321–2]. A translation of the Nuremberg Code into Hebrew appears among Dvorjetski's papers but it is undated. The next explicit reference to it in Israel would be the 1977 regulations on human experimentation that followed the Helsinki Declaration as reworked at Tokyo (1975).

[34] Dvorjetski, 1952, p.14–15.

fear and concern that "Nazi criminal biologic doctrines" would surreptitiously penetrate the contemporary—i. e. post-WWII—medical and biological sciences. This worry was typical of Baruk's fights at the time on two topics in psychiatry—psychosurgery and shock therapy. Moreover, it brought him to suggest a clear distinction regarding the ethics of human experimentation between supposedly-permitted therapeutic interventions while human experimentation *per se* would remain forbidden [309, 310]. These two topics formed the core of the four points of medical ethics developed in the Jerusalem Declaration, part D.

From Baruk's November 1952 article, we learn that he, Baruk, gave apparently two talks at the congress. One was at its opening session on August 10 and the other, on August 12, was held with Dvorjetski at the session dedicated to "The problems of medical ethics and the Nazi physicians' crimes". However, based solely on the article, it is difficult to fully understand what was part of the inaugural address and what was part of what he called himself his "report" [299: 1545, col. 1]. He apparently addressed more general considerations on the nature of medicine in the former and dealt more specifically with the ethics of human experimentation in the report. On medicine, we learn that according to him it results "from the merging of an intimate unity of both parties, technical knowledge and moral and human factors, such as people's respect or trust, which is an essential factor for recovery" [299: 1544, col. 2 (my translation)]. While a medicine that is purely spiritual would have no scientific value, a purely scientific one would risk "sacrificing everything [on the altar of] scientific curiosity and transforming every patient into a test animal" [*Ibid.*]. In contrast, monotheism in general and the Jewish tradition in particular have always opposed human sacrifice, asking that humans be replaced by animals in rituals. Baruk draws from this ancient tradition, emphasizing the possibilities opened to scientific medicine by animal experimentation. It reiterates, thus, a "total, rigorous and absolute" condemnation of human sacrifice [299: 1544, col. 3]; a condemnation, which is adopted in the first of the four points of medical ethics that end the JD: "Nobody is granted the right to sacrifice any human being for the needs of scientific effects".

Baruk goes on in the article to question the distinction between permitted therapeutic interventions and forbidden experimentation. This is precisely the topic of the second point of medical ethics within the JD:

> The medical world must elaborate definite and exact standards for the differentiation between experimental physiology on animals and the application of medical and therapeutic efforts to humans. In the former, the test animal is employed as an instrument, or victim, for the purpose of trying out a new remedy or therapeutic method, and thereby advancing our scientific knowledge. In the latter, the human must be the servant of the patient, applying to him only those remedies that have been [tried and] tested on animals and proven safe and effective.

In the article, Baruk presents two opposing views: the absolute distinction he had just stated and a more nuanced one, which he attributes to Professor Delay, who is presented as a colleague and friend: "There are two spiritual attitudes [...] which appeared to me many times, especially during my conversations and friendly discussions with my friend, the Professor Delay, regarding psychosurgery and shock treatments [299: 1544, col. 3]." Further, Baruk stresses again: "I have largely meditated on this amazing issue that my friend the Professor Delay asked me about [...]" [299: 1545, col. 1].

Jean Delay (1907–1987) was a brilliant French psychiatrist and writer [311].[35] He was one of the French experts at the International Military Tribunal of Nuremberg in 1945 and organized the First World Congress of Psychiatry in Paris in 1950 [311: 559–60]. During WWII, he conducted many experiments on animals exploring electroconvulsive shock therapy [311: 559]. Even though Delay eventually became a strong supporter of pharmacologic treatments rather than shock therapy, his scientific reputation was based on those experiments [312: 70–1]. While Delay was nearly ten years younger than Baruk, the latter had apparently been an associate professor in Delay's department, or Deniker's terms: "*D'autres furent ses agrégés avant moi, comme Henri Baruk et Pierre Pichot*" [311: 559]. Like Delay, Baruk was himself a researcher and both of them had discussed issues of human experimentation. For Delay, in addition to the distinction between experimentation and therapeutic attempts, it was no less important to distinguish between "permitted enlightened use of human experimentation and its condemnable abuse", which means that not all human experiments were forbidden in his views, only the abusive ones [299: 1544, col. 3].

We have seen earlier that for Baruk, the argument of experimentation to benefit mankind (the "greatest number" in his words) was seen as the equivalent of asking for the sacrifice of a few for the benefit of the whole, a concept absolutely forbidden by Judaism, which instead instructs that animals replace human sacrifices. Baruk refers here to the biblical concept of the "scapegoat" and to the narrative of "Isaac binding". Indeed, this is the official answer of halakhic Judaism. No one can volunteer for a medical experiment if there is any risk to life involved, even for the 'progress of science' or the 'benefit of mankind'. He may do so only if he is in an aporetic situation where the smallest chance of a benefit to himself opens again the possibilities for medical experimentation [313].

In two specific cases, psycho-surgery and shock-therapy, Baruk argued with Delay on the topic. These function as case studies. "Why do you hold a such absolute attitude about these methods", asks Delay, "as, while they have indeed implied some abuses, they may also represent a real interest [for patients] if cleverly used? [299: 1545, col. 1]" Baruk's answer is simple—"How, in practice, do you distinguish between justified usage and abuse?" And as if this was not sufficiently clear, Baruk repeats his question

[35] In the late 1950s, he was elected to the *Académie française*.

introducing this time the human factor: "How do you distinguish between a justified usage performed by competent and cautious physicians and the abuse perpetrated by unexperimented and less cautious doctors?" In fact, Baruk does not develop any real argument here but that of the slippery slope, which is often used in connection with euthanasia and which he wants to extend to the two aforementioned case studies. Perhaps because he knew that his opinion was a minority one, he presents it in the article as a "personal position" anchored in the old Jewish tradition and also, according to Baruk, in the Christian one [299: 1545, col. 1]. Even if not explicitly cited, I think that Baruk is referring to the halakhic argument called "Siyag laTora" here, which is similar to the modern "precautionary principle". In order to be sure not to transgress a divine commandment, do not take the risk and put the forbidding fence far away from the actual limit. Finally, Baruk gave a historic example that may be most understandable in the post-WWII context: During the 19th century, German and French psychiatrists opposed any distinction between curable and incurable people, with the French most vigorously opposed to making such a distinction due to fear of the consequences. "Worries that may have appeared exaggerated a hundred years ago. But which had become reality in Germany under Hitler through the massacre of the supposed chronically ill mentally people (Fr.: *Aliénés chroniques*) [299: 1545, col. 1]."

Thus, we see here that in order to deal with what we have described as point two of the medical ethics section (D) of the JD, Baruk uses two case studies, which appear to constitute the topic of point three of the same part of the JD:

> Certain therapeutic modalities that are able to obtain palliative results at the cost of anatomic destruction of human limbs, of causing new diseases, or of the weakening and dissolution of the human personality, raise very weighty problems of medical ethics.

It must be noted that this point is not as clear-cut as the others and leaves the reader in an undetermined position. Did Baruk know that in Israel, as in France, the majority of psychiatrists did not see such a radical ethical issue there, and feared that, if they opposed psychosurgery or shock therapy in their motion too explicitly, they would not receive the support of the Congress? There is no clear answer here but conjecture. We can only add that Baruk and Dvorjetski were not left alone in formulating the Jerusalem Declaration, but that Moshe Krieger, former head of the JMAP who had been in charge of presenting the Jewish motion in Paris five years before, was also part of it [299: 1545, col. 1].

The fourth and final point of medical ethics in the declaration is a general one. It does not correspond to anything specific from Baruk's lecture, but rather reiterates a point common to both Dvorjetski and Baruk:

> We therefore have to consolidate anew the foundations of medical conscience: no physician is permitted, under any circumstances, to utilize scientific data for the destruction and damaging of a human being.

Conclusion

In this article, the "unanimously passed" resolution on medical ethics from the 2nd World Congress of Jewish Physicians held in Jerusalem, August 1952, also called the Jerusalem Declaration, is compared with the two (or three) lectures in which its concepts first emerged. The two first parts of the declaration appear to have been taken from the lectures of Mark Dvorjetski, while the two last were from those of Henri Baruk. If this seems clear, it raises certain questions: Did both authors agree on what the other had to say? And, as the declaration is quite clearly structured, with a reminder of what Nazi doctors had done and then, after two transitional parts, the lessons to be drawn for contemporary medical ethics, how does it fit into the contemporary framework of medical ethics?

In this conclusion, I want to claim that based on the material explored above, it is not clear whether Dvorjetski fully agreed with Baruk's conclusions on the ethics of human experimentation, or if he did so, that it does not fit with his first reading of the Nuremberg trials documentation. Dvorjetski's position on the ethics of human experimentation presented here is a rewording of the Nuremberg Code and not a clear-cut distinction between experimentation (only permitted on animals) and therapeutic interventions allowed on humans. Baruk connected two new contemporary practices in psychiatry—electroconvulsive treatment and shock therapy with other means like insulin—with what the Nazis did, but further research is needed here to determine whether such a conclusion was justified. Otherwise, Baruk's conclusion might be seen as one of the first cases of justifying a personal ethical position through an authoritative argument of sorts based on what the Nazis did.

The second claim I want to make here is that while Dvorjetski's lecture, like the 1947 Jewish Medical Association motion (which he wrote too), widely opened the interpretation of Nazi medical crimes to include pre-WWII theories and practices of Nazi doctors, it failed to formulate broader ethical conclusions for contemporary medicine. Like in Nuremberg, even if based on totally different reasons, the medical ethics drawn from the Nuremberg trials documentation in the JD mainly focused on human experimentation.

While presenting an original voice regarding the interpretation of the Nuremberg trials documentation, the Jerusalem Declaration remains a marginal voice on medical ethics.

THE JERUSALEM DECLARATION ON MEDICAL ETHICS[36]

[(Passed at the Second World Congress of Jewish Physicians, Jerusalem, 10–14 August 1952)][37]

[36] In *Dapim refuiyim* [Medical leaves], vol. 11, Dec. 1952, p.331. The Hebrew version was published p.330 and the French one p.332 of the same issue. Generally speaking the Hebrew and French versions are quite the same. Exceptions are noted below.

[37] In the following all the signs and sentences put in brackets are lacking in the English version. The precise sentence is also missing

[A] The Second World Congress of Jewish physicians, which gathered in Jerusalem on August 10–14, 1952, exposes before the entire world[38] the Nazi medical crimes, to wit:[39]

1. The utilization of medical science for the extermination of children, old people, mental patients, incurables and cripples, under the project that was known as Mass Euthanasia.[40]
2. Forced sterilization[41] of men and women[42] by chemical, surgical, radiologic and other medical means,[43] that was carried out in the concentration camps. The sterilization in the camps was a preliminary experiment,[44] with the view of applying it on a much wider scope to whole nations in Europe, in order to turn them into exploitable slaves[45] incapable of perpetuating themselves through offspring.[46]
3. Physical and moral degradation of human beings by systematic and well planned hunger, thirst, cold, whipping and other tortures. Serving the same purpose were the exposures to filth and absolute lack of hygiene, the instilling of fear and a sense of hopelessness, and the stripping the victims naked.[47] All these diabolic abominations[48] were designed to deprive the victims of their human image and dignity.
4. The criminal medical experiments in which human beings were employed as test animals.[49] Such were the inoculation[50] of humans by the germs of Typhoid, Typhus or Malaria; the study of the effects of suffocating gases or various poisons on living human bodies; or experiments in the transferring of living tissues, nerves[51] and muscles from person to person; or experiments in prolonged freezing of living humans by immersing them in ice water,[52] or in determining[53] the influence of a lack of air[54] on a human being. All these experiments, and many others, were bestial acts,[55] in which a living human being was used as the test animal in experimental physiology.

[B] The Congress rises up and protests against the indifference and the desire to forget[56] these crimes that have become evident of late.[57] The Congress recognizes in[58] this apathy a silent moral partnership[59] with those German[60] physicians who surrendered medical science to the service of Hitler's racism,[61] and who initiated false and transgressing[62] biologic theories.

[C] The Congress expresses its deep fear and[63] anxiety, lest[64] these transgressing[65] Nazi biologic doctrines, and their distorted[66] trend of thought, be transferred and implanted,[67] knowingly or unknowingly, into the medical and biologic science of our time.

[D] The Congress therefore[68] declares:

1) Nobody is granted the right[69] to sacrifice any[70] human being for the needs of scientific effects.[71]
2) The medical world must elaborate definite and exact standards[72] for the differentiation between experimental physiology on animals and the application of medical[73] and therapeutic efforts[74] to humans. In the former, the test animal is employed as an instrument, or victim,[75] for the purpose of trying out a new remedy

in the French version.

38 Hb: use of the rare expression Mokiya kabel olam.

39 Fr: Differently organized. The Congress just "declares" and then adds "that it renews its indignation" before describing the four categories of Nazi medical crimes.

40 Hb: a project known by the name mass **euthanasia** (emphasis in the Hb text).

41 Hb: **Forced sterilization** emphasized.

42 "Of men and women" lacking in Hb and Fr.

43 Hb and Fr: "etc." instead of "and other medical means".

44 Hb: One sentence: "… concentration camps as preliminary experiments in view of broadening this action on to whole nations…"

45 Hb: "for their entire life".

46 Hb and Fr: "but unable to leave offspring".

47 Hb and Fr: One sentence with, in parenthesis, an enumeration (hunger, thirst, cold, whipping and all sorts of tortures, naked contempt and degradation of honor, filth and complete lack of hygiene, an everlasting atmosphere of fear and hopelessness).

48 "All these diabolic abominations" lacking in Hb and Fr. Instead, the same sentence goes on in Hb: "in order to deprive the human being of [his] human image" and in Fr, "in order to dehumanize human beings".

49 Hb: "based on the use of the human being as test animal".

50 Hb: same sentence but in parenthesis: (experimental inoculation of various infectious diseases like Typhoid fever, Typhus, Malaria; etc.).

51 Fr: "Bones" instead of "nerves" in Eng and Hb. Actually, operations on bones, muscles and nerves are described. See, for instance, the documents presented in [298: 161–80]. "Bones and muscles" is the expression used by Dvorjetski in his lecture: "They have cut their bones and muscles off of their flesh for transplantations", there, p.12.

52 "Of living humans by immersing them" is lacking in Hb.

53 "Or in determining" is lacking in Hb., and instead of it appears [and the influence…].

54 Fr: "Effet du vide sur l'homme".

55 "All these experiments, and many others, were bestial acts" lacking in Hb and instead of it, the same sentence in parenthesis goes on: experiments, in which, etc.

56 Hb: the oblivion and the indifference toward these crimes.

57 "That have become evident of late" lacking in Hb and Fr.

58 "The Congress recognizes in" lacking in Hb and Fr. Instead of it, the same sentence goes on: "this apathy, which constituted in those days a moral partnership with those physicians…"

59 Fr: "complicité morale".

60 "German", lacking in Hb and Fr.

61 Original English: "Hitlerite racism".

62 "False and transgressing", lacking in Hb and Fr. Instead of it, appears: "criminal biological theories".

63 "Deep fear and", lacking in Hb and Fr.

64 Hb and Fr: "about the possibility".

65 Hb: "criminal".

66 "Their distorted", lacking in Hb and Fr.

67 "And implemented" lacking in Hb and Fr. Instead of "transferred", the Fr speaks about the "survival" of these theories into the current sciences.

68 Fr and Hb: "in light of this anxiety".

69 Hb: "permission".

70 Fr and Hb: "another".

71 Hb: "efficiency, effectiveness". Fr: "utility".

72 Fr and Hb: "precise studies".

73 "And the application of medical", lacking in Hb.

74 Fr: "Therapeutic trials".

75 Hb: "and sometimes a victim". Fr: "and sometimes sacrificed".

or[76] therapeutic method,[77] and thereby advancing our scientific knowledge [for living beings]. In the latter, the human must be the servant of the patient,[78] applying to him only those remedies that have been [tried and] tested on animals and proven safe and effective,[79] [on a scientific basis, in order to heal the person and prevent him from any injury or disability].

3) Certain therapeutic ways that are willing to obtain palliative results at the cost of anatomic destruction of human limbs,[80] of causing new diseases, or of the weakening and dissolution of the human personality, raise very weighty problems of medical ethics [; methods, which may, from an imaginary healing purpose, cause damage to human beings.]
4) We therefore have to consolidate[81] anew the foundations[82] of medical conscience: no physician is permitted, under any circumstances, to utilize scientific data for the destruction and damaging[83] of a human being.

The role of the Council of Europe

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The Council of Europe

The Council of Europe is often erroneously confused with the European Union. For a better understanding of its obligations some introductory remarks are justified. Both, the EU and the Council, may be considered as "intergovernmental bodies", but have different intentions. The Council, established in 1951, with its 47 member states—and additionally Canada, the Holy See, Japan, Mexico, and the USA with the status of observers—represents around 900 million citizens. Its main mission is promoting and harmonising human rights and fundamental freedoms through appropriate legislation. This is mainly based on the "Convention for the Protection of Human Rights and Fundamental Freedoms of 4 November 1950" [314]. To perform its mission, the Council uses instruments of the international law: Conventions and additional protocols to these Conventions. These treaties enter only into legal force by signature and ratification of a member state to safeguard the democratic procedure and basis. In addition, the Council may adopt recommendations as a proposal to the member states for the regulation of specific fields. Recommendations are however in structure and content imbedded in the legal framework of the Council. In contrast to the EU, the Council has no right to issue regulations with binding force for its member states. The Council never includes proposals of NGOs or of other sources in its official documents. Therefore, neither the Nuremberg Code nor the Declaration of Helsinki are mentioned in the documents concerning medical ethics. However, a national legislator may decide how and to what extent proposals from NGOs will be accepted during the implementation procedure of legal provisions of the Council into national law. A very important institution attached to the Council is the European Court of Human Rights.

Engagement and structure for bioethics

Scientific progress in medicine and biology in the late 1970s has attracted more and more attention from the Council. The first successful in-vitro fertilisation is accepted to be the beginning of this increased scrutiny, from the perspective of the protection of human rights. In 1985, as a first step, the "Ad Hoc Committee of experts on Bioethics (CAHBI)" was set up under the direct authority of the Committee of Ministers, the leading body of the Council. They were given the responsibility of assessing the need for intergovernmental activities of the Council of Europe in the field of bioethics. In view of the situation whereby states in Central and Eastern Europe were requesting membership of the Council after 1989, the need to foster the implementation of bioethics in Europe more widely was recognised. Therefore, in 1992, the position of CAHBI was changed to the "Steering Committee on Bioethics (CDBI)" and became a standing group. In 2012, the "Committee on Bioethics (DH-BIO) assumed the full responsibilities of the "CDBI". The general mission can be defined as the "protection of human rights and fundamental freedoms with regard to the application of biology and medicine" as stated in the title of the Oviedo Convention. The scope of the legal system contains, for example, medical routine, the transplantation of human organs and tissues, human genetics and biomedical research including biobanks. The CDBI elaborated on the relevant documents following the positions emerging from ethical discussions around the justification of human experimentation which begun already in the 19th century. These basic principles are accepted as "respect for persons", "beneficence" and "justice" as published in The Belmont Report [315] or in a different version as "respect for persons", "beneficence", "nonmaleficence" and "justice", as presented by Beauchamp and Childress [316].

[76] "Remedy or" lacking in Hb and Fr.
[77] Hb: plural: "new therapeutic methods". Fr: "later, new human therapeutics".
[78] "The human must be the servant of the patient", is lacking in Hb and Fr. Instead there is in both languages: [The human being is not an instrument for medical science, on the contrary, medical science is at the disposal of the human being].
[79] "And proven safe and effective", lacking in Hb and Fr.
[80] Lobotomy was in sight of the writers, and especially Henry Baruk, at that time, as well as Insulin shocks.
[81] Hb: "fortify". The Fr adds "and specify".
[82] Fr: "foundations" is lacking.
[83] "And damaging", lacking in Hb and Fr. All the last sentence ("**no physician, etc.**") is emphasized in Hb.

Provisions of the Council for biomedical research

The basic provision is the Oviedo Convention [317] which contains the fundamental principles and serves as a legal framework for the other provisions, like the Additional Protocol on Biomedical Research [318] with specific details for research. Conventions and protocols are instruments of international law. They enter into national legal force when signed and ratified by the member state concerned. The Recommendation on Biobanks [319] is a proposal of the Committee of Ministers for Member States on how to regulate this sector of research. It is to underline that these provisions are the only legally binding international instruments covering all kind of biomedical research involving human beings and compulsory for all researchers. To improve their implementation, the CDBI has elaborated on it with the "Guide for Research Ethics Committee Members" [320]. The following description of the content of these provisions is with few exceptions restricted to main topics without a specific relation to the documents or to the wording in these documents. Wording will be quoted only for clarification in the text itself or within footnotes.

Freedom of research

The documents underline freedom of research which is limited by protective provisions, taking into account that researchers may argue for the preference of research for the benefit of humankind whereas different groups insist on the preference of protection. The key provision—Article 15 of the Oviedo Convention—formulates a synergy or balance: "Scientific research in the field of biology and medicine shall be carried out freely, subject to the provisions of this Convention and the other legal provisions ensuring the protection of the human being."

Qualification and quality

The basic conditions for the ethical acceptance of a research project are its scientific quality and the qualifications of the responsible researcher. The researcher shall be duly qualified as physician, which means specialisation to a degree appropriate for the project. They must be qualified to react to contingencies or to adverse events. In addition, they must safeguard the duty of care, personally or through qualified healthcare professionals. An analogue qualification is required for e. g. psychologists, biochemists or biophysicists as researchers. The quality of a research project is assessed under the usual points: scientific quality, accordance with national or international law and ethical acceptability. The assessment of qualification and quality is performed by independent bodies like research ethics committees, scientific bodies or authorities.

Proportion of risk and benefit

In biomedical research, risk and burden for the participants are foreseeable only to some extent. Therefore, as a general rule, minimising risk and a clear benefit are obligatory. According to the different fields of research, the provisions contain adapted calculations for risk and benefit. For research without a potential direct benefit for the person included, often addressed as fundamental research, e. g. involving healthy volunteers, only acceptable risk and acceptable burden for the participant are permitted. Research with a potential direct benefit involving persons able or not able to consent is allowed if risk and burden are not disproportionate to this potential direct benefit. This potential direct benefit justifies authorisation by a legal representative for inclusion in a research project when persons are not able to consent, e. g. minors, victims of traffic injuries or persons suffering from dementia. For specific scientific fields, research on persons not able to consent is needed, even if a potential direct benefit for the participants cannot seriously be expected. In conformity with specific legal provisions in place, authorisation may only be given if together with others the conditions of minimal risk and minimal burden[84] are fulfilled. "Minimal risk" means an absolute limitation based on statistics and is different from "minimising the risk". "Burden" addresses the reaction of the person concerned to the research procedure and can be assessed, for example, by a person who is familiar with those reactions. There are precise definitions given by the Research Protocol.[85] The proportion of risk and benefit is subject to assessment by an ethics committee.

[84] "Exceptionally and under the protective conditions prescribed by law, where the research has not the potential to produce results of direct benefit to the health of the person concerned, such research may be authorised subject to the conditions laid down in paragraph 1, sub-paragraphs i, iii, iv and v above, and to the following additional conditions:
[i] the research has the aim of contributing, through significant improvement in the scientific understanding of the individual's condition, disease or disorder, to the ultimate attainment of results capable of conferring benefit to the person concerned or to other persons in the same age category or afflicted with the same disease or disorder or having the same condition;
[ii] the research entails only minimal risk and minimal burden for the individual concerned." (Article 17, §2, Oviedo Convention; identical wording in Article 15, Research Protocol)

[85] Research with minimal risk and minimal burden: 1. For the purposes of this Protocol it is deemed that the research bears a minimal risk if, having regard to the nature and scale of the intervention, it is to be expected that it will result, at the most, in a very slight and temporary negative impact on the health of the person concerned. 2. It is deemed that it bears a minimal burden if it is to be expected that the discomfort will be, at the most, temporary and very slight for the person concerned. In assessing the burden for an individual, a person enjoying the special confidence of the person concerned shall assess the burden where appropriate. (Article 17, Research Protocol)

Research on persons able to consent

If a research project fulfils the conditions of "scientific quality, conformity with law and ethical acceptability" as assessed by the competent bodies—only an ethics committee or in addition bodies to prove the scientific quality and legal questions—and, if national law requires, has been approved by a competent authority, persons may be included after having declared their free and informed consent. "Free" means that there is no undue influence, no vulnerability and no coercion. Disadvantages like the withholding of healthcare are not allowed in the case of refusal or of withdrawal of consent, possible at any time. "Informed" addresses all relevant information before starting a project including information on foreseen or foreseeable further use of the results, alternatives to the foreseen methods, and legal or other protective provisions. The person concerned may be asked to give free informed consent to a specific project or projects in the future, which cannot be specified in the moment of that specific research project. The latter form of free informed consent is more and more accepted as broad consent.

Research on persons not able to consent

All conditions for research as outlined above must be fulfilled. In addition, a justification is required for the need to carry out research on this specific group. Any alternative of comparable effectiveness must be excluded. For the involvement of a person not able to consent in a research project the authorisation by the legal representative according to national law is compulsory. Assent of the represented person should be asked if appropriate. The represented person should be included in the information and authorisation procedure to the extent of their understanding. In most cases, research on persons not able to consent is carried out for their potential direct benefit. Only in exceptional cases is research without a potential direct benefit on persons not able to consent justified. For these cases, protective provisions prescribed by law and the conditions of minimal risk and minimal burden among others are compulsory. Additionally, the field for such research and the reasons accepted for its justification are defined.[86]

Specific situations

The provisions of the Council cover specific research fields. Research during pregnancy and breastfeeding may be performed for the benefit of other women in relation to reproduction or for other embryos, foetuses or children. Any adverse impact on the health of a breastfed child must be avoided. Research on persons deprived of liberty, e. g. prisoners in jails, has its own ethical implications and procedures and is forbidden in some countries. For such research, a permission by law is required. The research should be performed exclusively for the benefit of persons deprived of liberty. The research on these two specific groups can be justified only in the absence of any alternative of comparable effectiveness. This states clearly that such research when carried out on non-pregnant women or on non-prisoners would not be able to gain the specific scientific results. The principles of minimal risk and minimal burden apply.

Emergency situations

Research on persons in emergency clinical situations is a specific case. Free informed consent cannot be given in view of the urgency of that research and of the person envisaged as a participant. To respect autonomy as much as possible and to safeguard the progress of medical science, the provisions list a number of conditions: a legal regulation is in force; the person concerned is not able to consent; due to the urgency of the situation, no authorisation of any kind can be sought; research of comparable effectiveness cannot be carried out on persons in non-emergency situations; the competent body in conformity with the legal regulation has approved the project specifically for emergency research after ethical assessment; a potential direct benefit is not disproportionate to the risk and if there is no potential direct benefit expected, the absolute conditions of minimal risk and minimal burden apply; any previously expressed objection to research, if known in the emergency situation, has to be respected. The information on inclusion in an emergency research project must be given as soon as possible to the person concerned or to the legal representative to decide whether they stay in the project or end participation.

Examination and approval

Before starting a biomedical research project, the researcher must apply for it to be examined and gain confirmation that it is in conformity with national law. The provisions state rather strictly that every research project must be submitted for independent examination of its ethical acceptability to an ethics committee. The project as such has to undergo an independent examination of its scientific merit, including assessment of the importance of the aim of the research. If these examinations have positive results, a competent body may give the approval for the project to begin after a multidisciplinary review of its ethical acceptability. It is clearly stated that the ethical assessment has to be carried out prior to approval by a competent body. The Research Protocol entails specific provisions on the responsibilities of ethics committees, including a list of information that must be presented for the ethical assessment. This list can be completed on request of the ethics committee in view of the project to be assessed.

[86] idem.

Collections – biobanks

The relevant provision in this matter is in the form of a recommendation: the "Recommendation of the Committee of Ministers" [319]. A stronger solution with more legal binding force was not accepted by the member states, not even when preparing the second, more recent version. The positions of the member states obviously differ too much. The Recommendation entails provisions on establishing, guiding and overseeing biobanks, which are not addressed here. The following description is restricted to protective points. The removal of human tissue for an immediate research project is regulated by the Research Protocol. In contrast, the Recommendation covers the removal of human tissue and storage for future research use. "Broad" free informed consent of a person able to consent or "broad" authorisation by the legal representative of a person not able to consent is accepted. The same conditions apply if human tissue is removed for other purposes. e. g. initially intended only for a single project or in the course of clinical routine, will be used for scientific purposes and are stored for this aim. A confirmation or a withdrawal of a previous authorisation by the person concerned after gaining or regaining the ability to consent completes this part of protective provisions. The person may agree or not on the further use of the stored material. The donor decides whether they want to be contacted in the future by representatives of the biobanks. This decision may include the wish to be informed or not in case of incidental findings with impact on the health of the donor or of his family. Before any anonymization of tissue or related data, the donor has to be informed of the consequences. The donor has the right to restrict anonymization in view of the use for specific research fields. If the research is in the scope given by the donor, the project may start if the other conditions laid down in the Recommendation and the Research Protocol are fulfilled. If the project is outside a given scope, the researcher has to undertake "reasonable efforts" to contact the donor unless such a contact has been refused during the information and consent procedure. If such a contact—the "reasonable efforts" shall be explained to the competent ethics committee—is not possible, the tissue may be used under strong protective conditions.[87] All projects must be assessed by an ethics committee to which apply the provisions for the assessment as stated in the Research Protocol. If required by national law, an approval by the competent body is required.

[87] "Where the attempt to contact the person concerned proves unsuccessful, these biological materials should only be used in the research project subject to an independent evaluation of the fulfilment of the following conditions: i evidence is provided that reasonable efforts have been made to contact the person concerned; ii. the research addresses an important scientific interest and is in accordance with the principle of proportionality; iii. the aims of the research could not reasonably be achieved using biological materials for which consent or authorisation can be obtained; and iv. there is no evidence that the person concerned has expressly opposed such research use." (Extract, Article 21, Recommendation)

Consent and special vulnerability: the Universal Declaration on Bioethics and Human Rights

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Introduction

Voluntary consent is the first and *absolutely essential* premise of the normative framework set out in the Nuremberg Code. The heinous crimes perpetrated by Nazi doctors provided tragic evidence that "the theme of human rights in human experimentation is a universal one. The need to respect the humanity and self-determination of all humans is central to the ethos not only of medicine and human experimentation but of all civilized societies" [321: 7]. In order to avoid the risk of exploitation, the Code introduced some fundamental criteria, which today appear obvious and well-established:[88] a) legal capacity; b) free power of choice, "without the intervention of any element of force, fraud, deceit, duress, over-reaching, or other ulterior form of constraint or coercion;" c) sufficient knowledge and comprehension "of the elements of the subject matter involved", as to enable persons "to make an understanding and enlightened decision" (art. 1). Suffice it to mention, as illustrative examples, the Declaration of Helsinki as last amended in Fortaleza in October 2013 and the new Ethical Guidelines issued by CIOMS in 2016. According to art. 25 of the Declaration, "no individual capable of giving informed consent may be enrolled in a research study unless he or she freely agrees". Researchers—according to the Guidelines—"have a duty to provide potential research participants with the information and the opportunity to give their free and informed consent". This consent should be understood as a "process", which entails the duty to ensure "that the person has adequately understood the material facts and has decided or refused to participate without having been subjected to coercion, undue influence, or deception" [322: 33 (GL 9)].

Against this consolidated background, the UNESCO Universal Declaration on Bioethics and Human Rights, adopted in 2005, is no exception. Art. 6.2 reaffirms the

[88] In this perspective, it is correct to say that a "critical historical analysis of the Nuremberg medical maelstrom" remains a premise for the understanding of the meaning and implications of the evidence that "informed consent permeates modern medicine" [256: 8].

principle that scientific research "should only be carried out with the prior, free, express and informed consent of the person concerned". Art. 7 recalls that, in accordance with domestic law, "special protection is to be given to persons who do not have the capacity to consent". Such protection is to be ensured with reference to concepts and provisions which are easy to find in many other international documents: the best interest of the person concerned, his or her involvement in the decision-making process, the potential direct health benefit for the participant as a premise (provided that there is no alternative of comparable effectiveness that can be tested on participants able to consent), the principles of minimal risk and minimal burden (to consider and apply "with the utmost restraint") in those exceptional cases where the benefit to the individual subject is absent and "the research is expected to contribute to the health benefit of other persons in the same category". Immediately after art. 7, the *Declaration* of 2005 focuses in art. 8 on the concepts of *integrity* and *vulnerability*: "In applying and advancing scientific knowledge, medical practice and associated technologies, human vulnerability should be taken into account. Individuals and groups of special vulnerability should be protected and the personal integrity of such individuals respected".

Integrity, vulnerability, special vulnerability. As I have said, even though these concepts are deeply rooted in contemporary medical ethics and research ethics, the reference to human vulnerability as such deserves specific attention. It is possible to use art. 8 (it goes without saying that other starting points could be as fruitful) as a kind of magnifying glass to look at some aspects of the Nuremberg Code which have undergone substantial refinements or extensions and focus on the very crucial relationship between voluntary consent as a premise and special vulnerability as a condition which can undermine voluntary consent and consequently pave the way for more subtle, not immediately apparent forms of discrimination, marginalization and exploitation.

The duty to respect and protect

The first point to make refers to the scope of medical and scientific activities which are addressed. The Guidelines for New Therapies and Human Experimentation, which were issued by the German Reich Ministry of the Interior in 1931 and have been long discussed as a literal though not explicitly-acknowledged forerunner of the essential content of the Nuremberg Code (hereafter referred to as the Code) itself,[89] had already made a differentiation between "innovative therapy" related to a therapeutic purpose and "scientific experimentation". The former refers to interventions and treatment methods "that are carried out in a particular, individual case in order to diagnose, treat, or prevent a disease or suffering or to eliminate a physical defect". The latter "means interventions and treatment methods that involve humans and are undertaken for research purposes without serving a therapeutic purpose in an individual case". The same provisions should apply to both activities, with some "additional requirements" for scientific experimentation. The first one is about consent: experimentation "shall be prohibited in all cases where consent has not been given", whereas an innovative therapy may be initiated "if it constitutes an urgent procedure to preserve life or prevent serious damage to health and prior consent could not be obtained under the circumstances" [324: GL 2, 3, 12 and 5]. It has been correctly pointed out that the atrocities committed in concentration camps simply ignored this distinction. It is true that drug trials were carried out to test the efficacy and potential side effects of new substances. However, not only were these studies "clearly not intended to be of benefit for the research subjects themselves": the conditions which were treated experimentally "were systematically inflicted on previously healthy prisoners", who were indeed used "like guinea pigs" [19: 44]. Nowadays, fortunately, we are not often confronted with such extreme practices of exploitation, even though there have been other situations where the treatment of human beings has been considered as resembling that of guinea pigs, which immediately evokes the title of the book published in 1967 by Maurice Pappworth [325]. However, the extension of the situations and research fields where the principles set in the Code are at stake has gained increasing importance, prompting updates, refinement and further elaboration. A clinical trial is a process which can be looked at as combining elements of *experimentation* and *therapy*. An urgent procedure to preserve life can be invoked as a last hope in the absence of consolidated therapies, to the point of blurring the difference between innovation and compassionate use. By pointing at the same time at scientific knowledge, medical practice and associated technologies, art. 8 of the Declaration of 2005 hints at this broad scope: biobanks, all evidence indicates, cannot be established and managed according to the same rules developed for clinical trials.

The duty "to avoid all unnecessary physical and mental suffering and injury" (Code, art. 4) while pursuing "fruitful results for the good of society" (art. 2), and a willingness to terminate experiments when their continuation "is likely to result in injury, disability, or death to the experimental subject" (art. 10),[90] paved the way for the pivotal role of a strong, broad notion of integrity in post-paternalistic medicine. Respect for integrity has been increasingly understood in the sense of a strict obli-

[89] According to Grodin, who underlines the role played by Julius Moses by alerting the public to the deaths of many children in Luebeck in the course of experiments with tuberculosis vaccination, these guidelines, in many ways, "are more extensive than either the subsequent Nuremberg Code or the later Declaration of Helsinki recommendations" [94]. The Guidelines and their historical premises as well as their influence have been the object of several studies [323, 19].

[90] The exception introduced dubiously in art. 5, with regard to "those experiments where the experimental physicians also serve as subjects", is probably the most controversial provision of the Code and was rapidly dropped.

gation to *not touch*, a negative right to non-interference, that obviously does not dismiss the idea of integrity "as a responsibility or virtue that the investigator should develop and society should demand", that is a disposition to act which is "attributed to all those who remain unalterable, incorruptible, particularly by outside influences or pressures" [326: 160].[91] The Declaration of Helsinki includes integrity in a list of *goods* to protect, together with life, health, dignity, right to self-determination, privacy, and confidentiality of personal information, independent of the consent that individuals may have given (art. 9). As is clearly illustrated by this list, integrity is not simply about being safe from physical violence, because it implicitly refers to the totality of individual experience as a project of life relying on values, feelings and the multifaceted flourishing of a narrative identity. Not coincidentally, this article immediately follows one that affirms unequivocally that the goal of generating new knowledge "can never take precedence over the rights and interests of individual research subjects" (art. 8). It is the same provision included—among other texts—in the Oviedo Convention: "the interests and welfare of the human being shall prevail over the sole interest of society or science" (art. 2).

The idea that respect for integrity and protection of people living in conditions of *special* vulnerability are intrinsically linked builds on these premises, with particular reference to two crucial points highlighted in the UNESCO Declaration.

1) The application and advancements of scientific knowledge should always take into account the general experience of human vulnerability, that is the fact that all human beings may lack, at some point of their life, the ability and the means to avoid *wounds* to their "physical, mental and social well-being", to quote the controversial definition of health proposed in the Constitution of the WHO. The notion of integrity, which is embedded in the most *private* dimension of life, cannot therefore be conceived in opposition to that of solidarity. It is precisely because of the fact that integrity implies a biography and not only the physical limit of the body, that the respect for this irreplaceable oneness refers necessarily to the experience *of* and *with* others. It is one and the same humanity (often referred to as intrinsic dignity) which is at stake in the efforts of science to ameliorate the consequences of our natural finitude and fragility. Vulnerability is a fundamental touchstone for equality. This is why the circumstances where vulnerability impinges more on the sphere of freedom and capabilities (Sen, Nussbaum) require special attention, in order to avoid that advantages for few be created at the expense of others.

2) No condition can be seen as more vulnerable than that of prisoners in Nazi concentration camps. How can the challenge of *special* vulnerability be addressed when the vulnerability in question is not the consequence of a blatant case of crimes against humanity but of the differences and inequalities that are likely to increase the risk of exploitation in everyday life? The distinction between the duty *to protect* individuals and groups exposed to more serious risks and *to respect* their personal integrity is a crucial one. This distinction, which is unfortunately lost in the title of art. 8, which refers only to respect for human vulnerability (which sounds inappropriate if not downright misleading) and personal integrity, could be interpreted along the line of the tripartite typology[92] exemplified by the UN Committee on Economic, Social and Cultural Rights in General Comment No. 14 on the right to the highest attainable standard of health: "The obligation to *respect* requires States to refrain from interfering directly or indirectly with the enjoyment of the right to health. The obligation to *protect* requires States to take measures that prevent third parties from interfering with article 12 guarantees. Finally, the obligation to *fulfil* requires States to adopt appropriate legislative, administrative, budgetary, judicial, promotional and other measures towards the full realization of the right to health" [328: 33]. By all evidence, the duty to protect enshrined in art. 8 of the UNESCO Declaration is not limited to preventing third parties from interfering and includes all *positive* actions which can help improve these determinants of inequality among human beings and promote effective sharing of the benefits of scientific progress. It is also not uncalled for to state that the same provision should be applied here as in art. 14 with regard to the promotion of health and social development: this is "a central purpose of governments that all sectors of society share".

Special vulnerability as social vulnerability

Focusing on consent, it is easy to observe that this awareness has encouraged in-depth research into the elements which could constitute constraint or coercion. The Belmont Report, for instance, considers both coercion that occurs "when an overt threat of harm is intentionally presented" and undue influence that occurs "through an offer of an excessive, unwarranted, inappropriate or improper reward", pointing out that "inducements that would ordinarily be acceptable may become undue influence if the subject is especially vulnerable". According to the Report, unjustifiable pressures usually occur "when persons in positions of authority or commanding influence [...] urge a course of action for a subject". It may be difficult "to state precisely where justifiable persuasion ends and undue influence begins. But undue influ-

[91] Patrão Neves underlines that this notion of integrity as virtue or disposition is used in other UNESCO documents such as the Universal Declaration on the Human Genome and Human Rights of 1997 and the International Declaration on Human Genetic Data of 2003.

[92] The idea of tripartite typology goes back to Henry Shue's study on *Basic Rights, Subsistence, Affluence and U.S. Foreign Policy*, published in 1980 [327: 68–70].

ence would include actions such as manipulating a person's choice through the controlling influence of a close relative and threatening to withdraw health services to which an individual would otherwise be entitled" [329].

In the Richtlinien of 1931, unlike the Code of 1947, "exploitation of social hardship (*Ausnutzung der sozialen Notlage*) in order to undertake innovative therapy" (and consequently scientific experimentation) was explicitly labelled as "incompatible with the principles of medical ethics" (GL 7). The Belmont Report underlines the relevance of questions of justice in research involving human beings. Poor ward patients who serve as subjects to produce scientific benefits that flow primarily to private patients, the unwilling prisoners in Nazi camps whose exploitation "was condemned as a particularly flagrant injustice", and the disadvantaged rural African American men "used" in the Tuskegee syphilis study are mentioned as illustrative examples. The crucial role of *social* injustice in the ethics of research as well as effective access to quality health care has been widely acknowledged in recent decades. The International Bioethics Committee of UNESCO proposed to distinguish two fundamental categories of possible determinants of special vulnerability. The first one includes "special (temporary or permanent) disabilities, disease and limitations imposed by the stages of human life", which are determinants of special *individual* vulnerability. The second category refers to "social, political and environmental determinants", which can generate and increase not only the individual, but also the *collective* risks of being *wounded*, discriminated against, or exploited: "Many individuals, groups and population nowadays become especially vulnerable because of factors created and implemented by other human beings, in many cases in blatant violation of fundamental human rights". Poverty and inequalities "in income, social conditions, education and access to information" lead the list of examples of determinants of special social vulnerability, which goes on to mention gender discrimination, limitation or deprivation of personal liberty, hierarchical relations, and marginalization on various grounds [330: 14–5 (§§ 12 and 14)].

Voluntary consent to be a research subject may be undermined in many ways. Even though impairment can affect both the initial choice and the different stages of ongoing studies, recruitment stands out as a decisive test to assess the ability and willingness to address the conditions that increase the "likelihood of being wronged or of incurring additional harm" for some groups and individuals (Declaration of Helsinki, art. 19). The Report of the International Bioethics Committee on vulnerability and personal integrity offers several examples concerning research ethics as well as ethics in a healthcare setting and the development and application of emerging technologies in the biomedical sciences: "First, the personal, economic or socio-political situation of potential research participants may render them vulnerable to exploitation. Second, again because of the so-called 'therapeutic misconception', people may agree to participate in research in the mistaken belief that there may be some benefit for them; this is particularly likely where healthcare services are inadequate or unavailable". Thus, the responsibility to respect and protect encompasses issues such as double standard research, equivocal donations, inappropriate research, and social vulnerability, but also that specific kind of vulnerability which is "a result of lack of research", resulting from pharmaceutical companies' minimal interest in developing treatments for diseases that affect poor populations primarily if not exclusively [330: 16, 25–7 (§§ 19 and 29–33)].

The new Guidelines issued by CIOMS dismiss the "traditional approach" of labelling entire classes of individuals as "inherently vulnerable", pointing instead to the "specific characteristics" to which "special protections" should correspond: limited capacity to consent; hierarchical relationships; institutions such as nursing homes, mental institutions, and prisons; and circumstances in which women could be vulnerable are mentioned. The actual level of individual vulnerability remains however "highly dependent on the context", so that "persons who are illiterate, marginalized by virtue of their social status or behaviour, or living in an authoritarian environment, may have multiple factors that make them vulnerable". Other social conditions are listed extensively as potential determinants of vulnerability: "people receiving welfare benefits or social assistance and other poor people and the unemployed; people who perceive participation as the only means of accessing medical care; some ethnic and racial minorities; homeless persons, nomads, refugees or displaced persons; [...] individuals who are politically powerless; and members of communities unfamiliar with modern medical concepts". Group vulnerability itself is eventually admitted as a possible, "context dependent" challenge, when there is "empirical evidence" of circumstances that require ethics committees "to pay special attention to research involving certain groups" [322: 57–9 (GL 15)].

Social vulnerability, in particular, may be a premise for improper inducement. The Universal Declaration on Bioethics and Human Rights underlines this risk with regard to the principle of benefit-sharing, as do many other documents: "Benefits should not constitute improper inducements to participate in research" (art. 15.2). Open, brutal coercion is relatively rare as compared to the many situations where a person's ability to make a free choice can be undermined either by incomplete, inappropriate or even misleading information or because of conditions which impel the subject to accept something that he or she would otherwise not be willing to: "The fact that participating in a clinical trial can be in some contexts the only way to get access to some treatment underlines a serious and persisting challenge for the principles of equality and justice" [331: 8–9 (§ 20)]. As soon as voluntary consent is acknowledged as the essential premise, questions arise regarding the determinants of inequality, starting with poverty, which impinge upon individual freedom as conditions of special vulnerability, which require therefore special protection.

Conclusions

"Medical progress is based on research that ultimately must include studies involving human subjects" (Declaration of Helsinki, art. 5). It is exactly this observation that underlines the importance of preventing individuals from serving as research subjects under the pressure of improper inducements and constraints. We honour the philosopher Immanuel Kant for his statement that we should treat humanity, in our person or in the person of any other, "never merely as a means to an end, but always at the same time as an end" [332: 429]. Never *merely* as a means, *always* at the same time as an end. Scientific research is no exception to the rule.

Bioethics in Austria and its European context

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Introduction

In order to discuss "bioethics in Austria", it is important to first clarify the term "bioethics". Medical ethics has a special focus on human disease and health. The advances in medicine in the past 70 years, especially in regard to intensive care, organ replacement therapy, organ transplantation, reproductive medicine and genetics have been so revolutionary that a much wider approach to new moral questions became necessary. Since the 1970s the term "bioethics" has been used for this much wider ethical debate [333].

The Nuremberg Medical Trial is widely seen as the beginning of a new era of transparency and ethics in clinical research. Although single initiatives to codify clinical research have been undertaken prior to the Second World War, especially in Germany, the atrocities committed in Nazi Germany during the war made a new start necessary. The Nuremberg Code can be seen as the first document of medical ethics directed at physicians involved in research with human participants that originated outside the medical field. The hallmark of the code was the requirement of the free and voluntary consent of the patient or the volunteer prior to being included in the medical research experiment [96: 343–5].

Since 1947 and the publication of the Nuremberg Code, a constant and continuous development with regards to a governance of clinical research under the viewpoint of medical ethics can be seen. This development has been driven by many regions, countries and institutions worldwide and is ongoing as the advances in medicine continue to be challenging in regard to our ethical re-evaluations in this field.

Tab. Timetable of important milestones, events and documents (selection)

1947	Promulgation of the Nuremberg Code
1964 ff.	World Medical Association, Declaration of Helsinki (including subsequent amendments)
1966	Henry H. Beecher, *Ethics and Clinical Research, New England Journal of Medicine*
1972	Termination of the Tuskegee Experiment, US Public Health Service (begun 1932)
1979 ff.	Tom Beauchamp & James Childress, Principles of Biomedical Ethics
1979	Belmont Report, USA
1996	International Conference on Harmonisation, Guideline for Good Clinical Practice E6
1997	Council of Europe, Oviedo Convention and Protocols
2001	European Commission, 'Clinical Trial Directive' (Directive 2001/20/EC)
2002	CIOMS, International Ethical Guidelines for Health-related Research Involving Humans
2004	International Committee of Medical Journal Editors, Trial Registration
2005	UNESCO Universal Declaration on Bioethics and Human Rights
2014	REGULATION (EU) No 536/2014 repealing Directive 2001/20/EC
2017	International Committee of Medical Journal Editors, Data Sharing

The shift from paternalism to patient autonomy

The central aspect of the Nuremberg Code is the informed consent of the patient, a direct consequence of the doctors' trial. Beyond that, there was a more general shift towards self-determination and autonomy in society, not only in medicine or medical research. Previously, patients literally put "their lives into the hands" of the doctors, while in the second half of the 20th century, information, strong respect for the opinions of others, for human rights, and, for the very first time, the specific and factual attribution of human dignity in the field of ethics and medicine led to a developed acceptance of the autonomous decisions of the patients. An acceptance which also recognises the notion of autonomy as personal right of the informed patient.

The introduction of ethics committees and ethical review in Austria

After the Second World War, a dramatic increase in clinical research to find better diagnostics and therapies can be seen. Scientific and medical research developed major technologies and pharmacological products and could thus improve the life span and life quality of human beings. At the same time, awareness of the ethical considerations of research activities increased within the worldwide community of clinical researchers. Scandals such as the Tuskegee experiment between 1932 and 1972 in the South of the United States, where poor African-American workers were included in an observational study conducted by

the United States Public Health Service without being informed or asked about their participation, nor being informed after the introduction of penicillin in the 1940s that there would be a valid therapy for them available, made regulation highly desirable. This observational study neglected every principle of medical ethics [334: 21–9].

In 1966 an anaesthesiologist at Harvard Medical School, Henry H. Beecher, published an important article in the New England Journal of Medicine describing wrongful practices in clinical research. Most of the published studies he quoted had deficiencies in regard to obtaining informed consent of the participating patients [116: 1354–60].

The World Medical Association formulated its Declaration of Helsinki, "*Ethics Principles for Medical Research Involving Human Subjects*", which was adapted at its general assembly in 1964 in Helsinki, Finland as a document for physicians conducting clinical research [335]. The declaration—which at that time addressed only physicians—also emphasised as a follow-up to the Nuremberg Code the requirement of free and informed consent. It was amended several times, including by an important amendment agreed on in Tokyo in 1975, by which the additional requirement of ethical review by a specialised interdisciplinary external body, a so-called ethics committee, was formally established. Every experimental protocol involving human subjects should be submitted to "a specially appointed committee independent of the investigator and the sponsor" for "consideration, comment and guidance". However, recommendations of the World Medical Association are not legally binding, they merely constitute so-called "soft law".

In the year 1979, the Medical Faculty of the University of Vienna established a first such advisory board, an ethics committee to advise on clinical research protocols for clinical studies conducted at the Vienna General Hospital (*Allgemeines Krankenhaus der Stadt Wien* or *AKH*), the teaching hospital of the Medical Faculty with 2200 beds. At that time, the Viennese Ethics Committee was the second such committee established in a German speaking country—the first being at the University of Münster (*Westfälische Wilhelms-Universität Münster*), established in 1978.

At that time, the committee consisted of 16 physicians (professors and assistants) as well as students of the Medical Faculty. There were two professors from the Faculty of Law and one professor of the Faculty of Theology. The committee was intended to be a consulting body for the members of the Medical Faculty regarding their clinical trials or other 'ethical questions'. The decisions were legally not binding but considered 'recommendations'. In the first years of its existence applications were scarce (e.g. two protocols in 1979) and it was not until the early 1990s that protocol submissions numbered more than 100 per year. In the past years the number of applications for new protocols has increased steadily to more than 1000 per year.

Since the introduction of the European Union (EU) GCP-guideline in 1990 [336] and its translation into the Austrian Medicines Act 1994, the Hospital Act of 1993 and the Medical Device Act of 1996, ethics committees were firmly established throughout Austria and the number of applications continued to increase. The law required the investigator to obtain a positive vote before commencing a trial. The Good Clinical Practice Guideline of the International Conference on Harmonization (GP-ICH) increasingly harmonised the clinical trial of medicinal products across the following regions: the EU, Canada, the United States and Japan. GCP-ICH was implemented as standard practice in Europe in January 1997 by the EU Committee for Proprietary Medicinal Products (CPMP) and it has led to further increased rigour in clinical research [337].

An important decision was taken in 1994, when the Ethics Committee of the Medical Faculty was merged with the Ethics Committee of the Vienna General Hospital. According to the requirements of the Austrian Hospital Act 1993 additional members were appointed. Since 1997 one technical expert was included in the committee as required in the Medical Devices Act 1996. An expert in biometry also became a member. Two members of the Faculty of Law, one of the Faculty of Theology and two students completed the 28 members [338: 1019–26].

A further important change came in 2004: First, the three medical faculties in Austria became separate universities by law, and to complicate matters further, a new European Directive changed the clinical research landscape in Europe fundamentally.

In 1997, an association of the main 27 Austrian ethics committees (*Forum Österreichischer Ethikkommissionen*) was established upon the initiative of the Ethics Committee of the Medical Faculty of Vienna. All Austrian Ethics Committees were invited to join. Participation was free, decisions were issued as nonbinding recommendations [339].

New bioethics institutions and the Austrian Bioethics Commission

In 1993, the University of Vienna established a "Senate Institute for Ethics in Medicine" [340]. Its first director until 2001 was Günter Virt, a professor for moral theology at the University of Vienna. At that time, the medical school was still a faculty of the University of Vienna—one of the founding faculties from 1365 in fact. It was only in 2004 that the Faculty of Medicine became a separate university, as with the other medical faculties of Austria.

Since then, the "Institute for Ethics and Law in Medicine" has functioned as an interdisciplinary platform–carried by the Faculties for Catholic and Protestant Theology and the Faculty of Law. The Medical University of Vienna cooperates with the platform. This institute, it should be noted, anticipated issues related to the establishment of an Austrian National Bioethics Commission, established in 2001, by almost 10 years. The idea and importance of an interdisciplinary approach had already been realised within the institute by the inclusion of the various faculties. Furthermore, the institute had the re-

mit to give recommendations for parliamentary deliberations, which is today the mandate of national bioethics advisory bodies. However, the "Institute for Ethics and Law in Medicine" is an important player in this field, currently headed by Ulrich Körtner, professor at the Protestant-Theological Faculty of the University of Vienna, as a mere "platform", they do not have the full possibilities of a university institution, such as recruiting young academics and being automatically involved in the regular and standard curriculum. In Austria, as opposed to other countries, there are no standard university institutes for ethics in medicine. In Germany, by contrast, there are more than 30 such institutes, mainly combinations devoted to the history, theory and ethics of medicine.

In 2001, bioethics advisory bodies were established in three neighbouring countries: "Nationale Ethikkommission im Bereich der Humanmedizin" in Switzerland [341], "Nationaler Ethikrat" (succeeded in 2007 by the "Deutscher Ethikrat") in Germany, and the "Bioethikkommission beim Bundeskanzleramt" in Austria [342].

In Austria, the Bioethics Commission was founded on 29 June 2001 via decree by Federal Chancellor Wolfgang Schüssel from the Conservative Party as an independent interdisciplinary advisory body to the Federal Chancellor. At first there were 19 members, four of whom were women. The mandates were for two years (this provision was valid until 2013 when the mandate was extended to three years). The first Chair, nominated by the Chancellor like all other members, was a professor of gynaecology and obstetrics of the Medical University of Vienna. He remained in this function from 2001 until 2007.

The Austrian Bioethics Commission issues recommendations and documents relating to the main bioethics topics [343], and has a mandate to provide information and debate on bioethical issues to the public. The commission is active—like the other bioethics advisory bodies—in organising (international) conferences [344] and participating in conferences and meetings abroad, especially the regular meetings of the NEC-Forum under the respective presidencies of the European Union. The chairperson since 2007—the author of this article—is regularly invited to give lectures, present opinions and explore various bioethical topics. In 2013, the Austrian Bioethics Commission initiated yearly meetings with the other two German-speaking national commissions, the first and fourth meetings taking place in Vienna (2013 and 2016), the others in Berlin (2014) and Berne (2015).

In 2016, the Medical University of Vienna signed an agreement with the Director-General of the United Nations Educational, Scientific and Cultural Organization (UNESCO) concerning the establishment of a UNESCO Chair on Bioethics. This chair is one of 15 UNESCO Chairs on (Bio-)Ethics in the world [345]. The purpose is to promote an integrated system of research, training, information and documentation on bioethics, thus facilitating collaboration between high-level, internationally recognised researchers and teaching staff of the university and other institutions in Austria, as well as in Europe, Africa and Asia and in other regions of the world [346: 229–33; 347: 137–44]. Such a Chair of Bioethics in Austria makes a valuable contribution towards new expertise in the Austrian academic field and is thus—next to the Austrian Bioethics Commission and the Institute for Ethics and Law in Medicine—the third important stakeholder in the area of bioethics.

Milestones in ethical review

Looking back at 70 years since the Nuremberg Medical Trial we can see a net governing biomedical research that has become increasingly tighter and more efficient. It is also easier to look back with hindsight and define important milestones in this development.

If we take the Nuremberg Code, with its focus on the will (the autonomy) of the patient as starting point, we notice a common thread leading directly to the World Medical Association (WMA) and its Declaration of Helsinki. The World Medical Association was founded 1947, is active worldwide and has as its central objective "to establish and promote the highest possible standards of ethical behaviour and care by physicians" [348]. The establishment of ethics committees is one of their achievements, only adopted much later by the European and various national legislations.

A further European milestone was set by the European Union with the formulation of its Clinical Trials Directive 2001/20/EC on the basis of ICH-GCP and the consecutive transfer into national law. Although this Directive did not immediately achieve a harmonised European landscape for clinical research, but it set the stage and established a tight legal framework recognising ethical issues in biomedical research. The European Directive had to be transferred into national law and was a first legal step within Europe to harmonise the clinical research situation, although—as ethical issues are to be considered national issues—the goal of a harmonised research landscape in Europe was not achieved. However, the decision to require "one single opinion" for drug trials within the individual EU member states in Europe somehow established a similar framework for ethical review within Europe.

Unfortunately, one of the biggest pitfalls of this directive was the heterogeneity which resulted in regard to patients in intensive or emergency care medicine. The Directive stated that these subjects can be included in a clinical trial only if informed consent of the patients "legal representative" is obtained, which obviously is not possible for previously healthy subjects and legal provisions are not easy to define for such a situation and did not exist in all European member states. The European research landscape never quite recovered from this problem, leading to discussions regarding the ethical principle of justice, where everybody should have the chance to receive benefits of clinical research [349].

Furthermore, there were global scandals that involved underreporting or selective reporting. A well-known example is that of Rofecoxib (Vioxx), which was introduced by Merck in 1999 as an effective, and supposedly safer,

alternative to non-steroidal anti-inflammatory drugs for the treatment of pain associated with osteoarthritis. Studies, however, intentionally obscured the cardiovascular risk associated with the drug, and, although known within the company, critical data on the cardiovascular toxicity were purposefully withheld accepting the adverse cardiovascular events occurring associated with osteoarthritis. Up to 107 million prescriptions were dispensed up until 2004 in the US alone.

This scandal led to an initiative and common decision of the "International Committee of Medical Journal Editors" (ICMJE) in 2004 [350: 1995–6; 351: 120].

This milestone in transparency cannot be underestimated [352: 1250–1]. It required as a condition of consideration for publication that every clinical trial be registered in a public trials registry at or prior to the onset of patient enrolment. Today, registries are part of the clinical research world and have the additional effect of increasing the participation of patients as the websites of the registries are also a very good tool for information about ongoing research—especially necessary for the rare diseases communities [353].

Conclusion and outlook

The Nuremberg Code is considered and accepted as the initial milestone in the history of medical ethics for formulating an ethical framework for the conduct of research on human subjects for the first time. Since then, various stakeholders, national and international institutions and organisations, academia and industry, authorities and professional associations as well as parliaments have continued to improve the frameworks for ethical review and medical research.

The conference "Medical Ethics in the 70 Years after the Nuremberg Code, 1947 to the Present", organised on the occasion of 70 years anniversary of the Nuremberg Medical Trial by the Medical University of Vienna, the Documentation Centre of Austrian Resistance, Oxford Brookes University, and the Austrian Bioethics Commission aimed at summarising the developments since the formulation of the Nuremberg Code and its impact on today's medical research. The world has changed. Research is based on the principles of exchange and cooperation, researchers are mobile, the internet provides a supporting framework removing national barriers. A central focus of this conference, therefore, was the role played by international organisations over the past 70 years in initiating ethical guidelines and endeavouring to establish normative standards with a global validity, thus ensuring trust and transparency in clinical research.

The development of bioethics in Africa: The role of the European and Developing Countries Clinical Trials Partnership

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Introduction

Modern international codes of ethical health research conduct have emerged from and been shaped in response to the most egregious episodes of abuse in recent history. The Nuremberg Code—which is regarded as the preeminent historical document in the field of bioethics [108, 354]—dates to post-Second World War trials of Nazi scientists, and was formulated by the judges who considered their crimes [355]. The foregrounding of informed consent, and the elevation of the patient's right to refuse to participate in an experiment, are considered to be the code's key contributions to the development of modern bioethics [108].

The post-war trials and Nuremberg Code were followed by the Declaration of Helsinki, first adopted in June 1964 by the World Medical Association (WMA), and last amended by the 64th WMA General Assembly in October 2013 [356]; the International Ethical Guidelines for Biomedical Research Involving Human Subjects of the Council for International Organisations of Medical Sciences (CIOMS), last revised/updated in 2016 [357]; and the International Covenant on Civil and Political Rights of the United Nations [358], which enshrines the right to refuse to participate in medical research (Article 7).

Developments in Africa after the Nuremberg Code

These international guidelines, treaties and codes are contextualised for the African continent in the African Charter on Human and Peoples' Rights of 1981 [359] and its subsequent protocols, codifying a cohesive expression of political will at the highest level. Unfortunately, unethical medical research has continued to be conducted in African settings well into the twenty-first century, despite broad political commitments to uphold human rights (see Ndebele *et al*. 2014 for an overview of some examples [360]). While there are cases in which attempts were apparently made to exploit immature national ethical review and regulatory systems [360], there are also more complex instances in which debate regarding "ethical imperialism" (the application of Western ethics to non-Western contexts) arise [361]. In response, there has been a groundswell in the publication of African thought on bioethics, which is informing locally situated and appropriate responses to the question of ethical research conduct [360].

Research oversight capacity in Africa

Ndebele *et al.* [360] provide an overview of the history and development of research oversight bodies on the African continent; the earliest date of establishment given is 1966 (for the Research Ethics Committee [REC] at the University of the Witwatersrand in South Africa). Formal oversight bodies such as ethics committees, regulatory bodies and medical research councils have therefore existed in Africa for 51 years. Yet in 2001, the Regional Committee for Africa of the World Health Organisation was sufficiently concerned about the state of ethical review on the continent to implement a study on the matter [362]. Although the responses to the study questions indicated national commitment to ethical review, 36% of the countries responding did not have a REC.

Challenges to bioethics growth in Africa

Where RECs do exist in Africa, several themes consistently emerge in needs assessments. These themes include:

- Training (initial and ongoing)
- Resources (human, material, and technological)
- Capacity (increasing workload, increasing complexity of trials submitted for review, insufficient staff).

REC members express a need for more *training* on research and ethical norms, clinical trial design and phases; and risks, monitoring and oversight of clinical trials, among other topics. REC members surveyed also commonly refer to *lack of resources* such as computers, software to facilitate and manage reviews, and office space [363–365]. Other concerns relate to the *independence* (or lack thereof) of RECs, and inadequate or absent *guidelines*, *standard operating procedures*, and *legislation* [364, 365].

There is a clear need for sustainable development of bioethics capacity in Africa by providing support for material needs and training. This need recently received high-level recognition at the 67th Session of the WHO Regional Committee for Africa, at which it was recommended that member states, WHO, and partners support ethical review processes [366].

EDCTP partnerships and activities to strengthen bioethics capacity in Africa

Organisations involved in bioethics capacity building in Africa have included, among others:

- The African Malaria Network Trust (AMANET)
- Fogarty International Center at the National Institutes of Health (NIH)
- Wellcome Trust
- World Health Organisation (WHO)
- Council on Health Research for Development (COHRED)
- South African Research Ethics Training Initiative (SARETI)
- Advanced Research Ethics Training in South Africa (ARESA)
- African Vaccine Regulatory Forum (AVAREF)
- The New Partnership for Africa's Development (NEPAD)
- Cameroon Bioethics Initiative (CAMBIN)
- Pan African Bioethics Initiative (PABIN)
- United Nations Educational, Scientific and Cultural Organisation (UNESCO).

Activities to strengthen bioethics capacity generally fall into five activity streams, namely *s*hort-term training in a workshop environment; support for long-term degree training; grants to support REC material needs; online discussion fora; and online learning courses [360, 365].

EDCTP has supported RECs under its Ethics and Regulatory Capacities call for proposals in both the first (2003–2015) and second (2014–present) programmes. The Ethics and Regulatory Capacities grant scheme was initiated in 2005 with the aim of strengthening the ethics review framework in sub-Saharan Africa at both the institutional and national level. Grants were awarded to develop the appropriate human resources and infrastructure to establish functional, competent, independent, and sustainable RECs. Seventy five grants were made during the first programme, with total funding of over € 4M. Through this scheme, EDCTP funded the establishment and strengthening of ethics review frameworks for health research in countries with little or no existing ethics review capacity such as Benin, Democratic Republic of Congo, Gabon, Liberia, Mozambique, Rwanda and Togo. Of the 75 grants awarded, 38 were intended to support an Institutional Review Board (IRB), 13 supported National Ethics Committees (NEC), 8 supported both an IRB and NEC, 11 provided support for courses on ethics, and 5 supported a "coordination function" [367].

Valuable ethics tools which have resulted from EDCTP-supported bioethics-initiatives have included the "Research Ethics in Africa" free online textbook [368], the Mapping African Research Ethics Review and Medicines Regulatory Capacity (MARC) project [369], the TRREE online training programme [370], AMANET's online training programme [371], and the Pan African Clinical Trial Registry, the only WHO-endorsed registry in Africa. This serves as a potentially very effective ethics compliance tool [372], among others.

The MARC project has provided crucial data to dynamically map and characterise existing RECs, examine progress, forecast needs, and provide support [373]. Data characterising African RECs was collected for MARC using the online database HRWeb with data input solicited directly from REC officials. By 2016, MARC had mapped 167 RECs from 35 African countries; 20% were national bodies and 75% were institutional bodies; 19 African countries had not registered any type of ethics committee. The authors estimated that the actual number of active African RECs could be double the number mapped, approximately 330 [369].

Data from MARC [369] indicate that a large proportion of RECs continue to operate on a hard copy-based sys-

tem (48% of RECs for which data were available). There is clearly room for improvement in the management of REC applications, a gap which could be filled by technology such as the Research for Health Innovation Organizer (RHInnO) a product of the Web 4Development team of COHRED [374]. RHInnO is a very influential technological development which supports and improves the function of African RECs, and fills *resource* gaps. This simple online product is intended to simplify the process of ethical review by moving RECs from a paper-based to an online system, and also facilitates tracking of approved projects. RHInnO was launched in 2012, and has already been found to have had a significant impact on various metrics of REC performance, principally in improving efficiency, communication, and data security, and reducing reliance on paper [375]. Online technologies such as video conferencing should also be exploited to support rapid review meetings in fast-moving outbreak contexts (such as for outbreaks of Ebola and Zika) [376].

During the second EDCTP programme (2015–2024) support for ethics and regulatory capacity activities has been scaled up and the focus re-aligned to a national and sub-regional strategic approach, with an attendant increase in engagement with national governments. EDCTP currently encourages national RECs and regulatory bodies to collaborate on their submissions to our calls for proposals, in an effort to increase communication and harmonisation of approaches between these organisations. Integrating a requirement to register all clinical trials as part of the ethical review process promotes and facilitates oversight of the national research landscape as a whole, and enhances researcher accountability. In view of this, EDCTP has provided holistic support for the ethics and regulatory ecosystem by also supporting the Pan African Clinical Trials Registry. By the end of 2016, six ethics and regulatory capacities grants had been awarded in the second EDCTP programme, with a total value of € 1.75M [377].

EDCTP participates in the TRUST project, which is a three-year coordination and support action funded by the European Union [378]. This global ethics consortium includes 13 partners and has developed a set of ethics tools to improve adherence to high ethical standards in low- and middle-income countries (LMICs). These include a global code of conduct for north-south research collaboration (launched 15 May 2018), a fair research contracting web tool and a compliance and ethics follow-up tool. Drawing from its vast experience of supporting north-south collaborative research during the first EDCTP programme, EDCTP is well poised to lead the TRUST funder platform which continues the "ethics dialogue" with other like-minded funders such as WHO-TDR, Calouste Gulbenkian Foundation, MRC UK and the European Commission. EDCTP is also a member of the TRUST working group for the Global Code of Conduct and has contributed to TRUST reports on compliance gaps and challenges, compliance tools and the mapping of exploitation risks against existing research ethics codes and guidelines. The Fair Research Contracting web tool will support health research in situations where legal support may be insufficient through the means of guidance booklets and notes, workshops, and technical consultancy [379]. TRUST will also produce several other outputs, including policy briefs for ethics committees, an ethics dumping case study resource and proposals for strategic approaches to compliance tailored for LMICs [378].

Discussion and conclusion: future activities

Despite numerous initiatives, the mind-set in health research ethics remains in its infancy in Africa, and there is a high need for support in the training, resource, and capacity arenas. Future activities should focus on:

- Early introduction of bioethics into the medical curricula to instil the concept of "thinking ethically" into all healthcare practitioners and academic researchers
- Increased south-south collaboration, funding flow in general as well as local funding commitments
- Exploration of the use of technological developments such as video-conferencing to facilitate REC training and operational needs
- Increased support for publication of African thought on bioethical issues.

Funding support is currently available in the form of north-south partnerships, but the continent should also be looking towards increased regional collaboration and local governmental investment to build the capacity of RECs and regulatory bodies. The EDCTP-supported regional Networks of Excellence (NoEs), and multidisciplinary consortia for research and clinical management of patients in poverty-related epidemics in sub-Saharan Africa, provide some informative examples: all four of the NoEs (Central Africa Network on Tuberculosis, HIV/AIDS and Malaria (CANTAM); East African Consortium for Clinical Research (EACCR); West African Network of Excellence for TB, AIDS and Malaria (WANETAM), and the Trials of Excellence for Southern Africa (TESA)) have invested in capacity building for ethical conduct of health research. Their reach is not limited by geography: the NoEs collaborate and exchange expertise within and between their networks, and also engage with other bodies, including northern partners [380].

Conclusion

Above all, researchers must commit to conducting their projects in a manner which is respectful of and in accordance with non-harmful local cultural traditions and value systems. To facilitate this, populations that participate in health research must be encouraged to engage with questions of appropriate research conduct; the South African San Institute together with the South African San Council recently published their "San Code of Ethics" [381], a reference work which guides researchers in the development of project proposals and interaction with this indigenous community, and which will be informative to other vulnerable research populations. Health re-

search in Africa must foreground the dignity of the people who volunteer to participate by adhering to ethical codes derived from indigenous thought [382, 383].

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The legacy of the Nuremberg Code and the approach to bioethics in Mainland China

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The legacy of the Nuremberg Code

70 years ago, on August 19th, 1947 American Justice Harold L. Sebring read the verdict at the trial of Nazi doctors' crimes, including a section entitled "Permissible Medical Experiments". This later became known as the "Nuremberg Code" [193]. The Code is the basis for the Declaration of Helsinki as well as for the regulations for biomedical research involving human subjects in many countries, including China. Interestingly, one of the key figures in formulating the Code, the American neurologist with Austrian Jewish origins, Dr. Leo Alexander, was a doctor at Peking Union Medical College's Department of Neurology during the Japanese invasion of China.

Universality of the Code

The ten principles are not deduced from any ethical theories—though they are highly consistent with many of them—but created on the basis of learning from the historical lessons on human experimentation and the fierce courtroom debates during the Nuremberg Trials. The values implied in the Code are beyond any historical limit, and universal in space and time: no culture can appeal to its uniqueness as an excuse to exempt itself from implementing these principles, though they need to be perfected.[93] They also project into the future. The two major values are humanist concerns. These are sensitivity or intolerance to human pain, harm, distress, and suffering, embodied in Principles 2–7, 9–10; and recognition of human autonomy, dignity and intrinsic value, embodied in Principles 1 and 8 [384].

The humanist values are compatible and paralleled by the fundamental concept of Confucianism, ren. Ren means care for others, a moral capacity to feel for others. Confucius said: "Don't do things to others what you don't want to do to yourself" (The Analects of Confucius, the chapter of the Duke of Wei Ling). Mencius said: "When we suddenly see a child about to fall into a well, we will have the feeling of alarm and compassion. This is not because we want to enter into good relationship with the parents of the child, or because we want to gain praise in his neighbourhood and among our fellow students and friends, or because we dislike the cry of the child." (Mencius, the chapter of Gongsun Chou). Unfortunately, contemporary Confucians did not advance this concept of mutuality to accommodate modernity.

The birth of bioethics

It is widely accepted today that the birth of bioethics came with the announcement of the ten principles of the Nuremberg Code, implying a paradigm shift from medical paternalism to a patient/research participant (as a living, individual person)-centred approach. Since then, the patient's autonomy, right to informed consent, and wellbeing gradually became central to physician/patient and investigator/research participant relationships in both medical research and practice. Starting with research ethics, this paradigm shift has extended to clinical ethics, and further to public health ethics. The bulk of bioethics (clinical ethics, research ethics and public health ethics) has then been formed.

The assumption underlying the Code is that any individual research participants ought to be treated as people, "the intelligent part of the universe", or "the most precious entity in the universe" (Confucius), or the rational agent, the end itself (Kant), whose safety, health and wellbeing deserves to be protected and respected. Later it was extended to patients in clinical practice and the broader population in the context of public health.

Respect for the patient

Respect for the patient as a person implies that the patient should be the decision-maker for their treatment when they are competent, and that the decision should comply with their values. As an individual, they know best what their value and meaning of life is. However, as professionals, physicians or surgeons are experts at diagnosing and treating disease and their professional duty is to guide their patient in making an informed and appropriate decision which may integrate their guidance with the patient's values. This is the so-called 'shared decision' [385].

Respect for a member of a population as a person is also a key aspect of public health. However, unlike research and clinical practice, public health has to take measures to limit individual freedom—in some cases—

[93] Criteria such as information disclosure and apprehension as well as proxy consent for incompetent subjects etc. should be added.

in order to prevent and control the further spread of epidemics. Even in such situations, the limiting of individual freedom can be ethically justified only under the following conditions: effectiveness, proportionality, necessity, minimal infringement and transparency [386].

As an individual person who is a rational being as well as a member of humankind, the patient, research participants or member of population has intrinsic value (not merely instrumental value or extrinsic value) as well as dignity. Their value and dignity does not depend on their contribution to society, wealth, rank in public office, or their use to others. Human dignity is absolute: it does not depend on whether they are rich or poor, powerful or powerless, have made contributions to society or committed any wrongdoing. Of course, wrongdoing or crime will bring about punishment, and thereby the wrongdoer will be deprived of some rights, but it is not the basis for a person to be deprived of dignity. Human dignity is equal: a morally vicious person enjoys equal dignity to a morally virtuous person, though the former lets their dignity down. However, the equality of the value of all rational beings does not mean that we cannot make different evaluations of different people. But it does mean that regardless of what that evaluation may be, the constraint of treating the person with dignity must be observed. The Nuremberg trials are an exemple of respecting human dignity; even though the war criminals tried there committed horrific crimes against humanity, they were still granted the right to defend themselves and to a defence by their lawyers.

Relevance today

Since the promotion of the Code, we have seen positive and negative developments in mainland China. Since 1989, many laws and regulations have stipulated that in clinical practices and research/trials the consent of patients/research participants is mandatory. However, a few provinces have promoted eugenic regulations, the legislature (National People's Congress) passed a law regulating maternal and infant healthcare which contains a few eugenic articles, and the authors of some textbooks of medical ethics expressed views akin to the Nazis on eugenics and coercive "euthanasia".

In the *Regulation Prohibiting Reproduction of the Dull-Witted, Idiots or Blockheads* (since abolished) passed by the Fifth Session of the Standing Committee of Gansu People's Congress on November 23rd, 1988, the definition of the "*dull-witted, idiots or blockheads*" is:

"1. Congenitally caused by familial inheritance, inbreeding or parents under external influences;
2. Mental retardation at middle or severe degree with an IQ below 49;
3. Behavioural disorders in language, memory, orientation, thinking etc."

The regulation stipulates: "Prohibiting the reproduction of dull-witted, idiots or blockheads. Dull-witted, idiots or blockheads may be married only after sterilisation. If a couple are both dull-witted, idiots or blockheads, only one has to be sterilised; if only one of the couple is dull-witted, idiot or blockhead, only he or she must be sterilised." [94]

In the Law on Maternal and Infant Care passed by the legislature (National People's Congress) in 1994, Article 10 stipulated:

> "Physicians shall … explain and give medical advice to both the male and female (applying to marry at the civil affairs administration) who have been diagnosed with certain genetic diseases of a serious nature considered to be inappropriate for childbearing from a medical point of view; the two may be married only if both sides agree to take long-term contraceptive measures or to undergo a ligation operation for sterility."[95]

The authors of some textbooks on medical ethics during the 1980s and 1990s categorised physically disabled people or those with learning difficulties as "inferior", a discriminatory term, and even claimed that medicine is a learning of promoting "inferior" and impeding the struggle for survival (Social Darwinism). This term "inferior" was also used in some governmental documents and ministers' speeches. They defined those couples with severe genetic diseases, severe schizophrenia, inbreeding and old age as "persons without reproductive value", another discriminatory term. They favour an ideology in which priority was given to the social good or state interest, regardless of individual interest [389–393].

The authors of the textbooks of medical ethics in 2013–2016 argue for compulsory euthanasia killing and sterilisation of the mentally retarded:

> "When a patient suffers from a fatal illness or is in a terminal state, they should not request futile and wasteful treatment, but should accept euthanasia. This is their moral obligation. On the basis of this moral obligation, their family and friends also should assent to euthanasia".

> "A human being has an extremely low quality of life, their value to society and others is also extremely low, or only has a negative value. Their survival does not assume any obligation for society and others, but only ceaselessly ask for something from the society and others, and impose heavy burdens on them." [394–398]

This is not far from the rhetoric of the Nazi period. At several meetings—including three meetings to commemorate the 70th anniversary of the Nuremberg Code in Beijing and Wuhan—all these Nazi-style measures were criticised and the critiques published [399, 400].

The approach to bioethics in Mainland China

Important events for the development of bioethics in mainland China include:

[94] The debate on the regulations of that sort, please see [387].
[95] The debate on the law, please see [388].

- 1979—National Conference on Philosophy of Medicine in Guangzhou
- 1980—Founding of the journal *Medicine & Philosophy* in Dalian, Liaoning Province
- 1986–1987—Legal cases: Hanzhong (Shaanxi Province) case on euthanasia; Shanghai case on AID (artificial insemination by domor)
- 1987—Publication of the book *Bioethics*
- 1988 July—National Conference on Social, Ethical and Legal Issues in Euthanasia, Shanghai
- 1988 November—National Conference on Social, Ethical and Legal Issues in Artificial Reproduction, Yueyang, Hunan Province
- 1988—Founding of the journal *Chinese Medical Ethics* in Xian, Shaanxi Province

Challenges to the ABA's definition of bioethics

In the Asian Bioethics Association's constitution,[96] bioethics is defined as follows:

> "Bioethics is the interdisciplinary study of philosophical, ethical, social, legal, economic, medical, therapeutic, ethnological, religious, environmental, and other related issues arising from biological sciences and technologies, and their applications in human society and the biosphere."

This definition deprives bioethics of the status of being a discipline in its own right, and only defines it as an interdisciplinary study, with the issues being studied assigned to different disciplines or fields. If so, bioethics becomes a patchwork or a mere platform on which scholars from different disciplines talk about issues in which they are all interested in. This misleading definition has led to a number of negative consequences. On a practical level, there is a tendency towards what I have termed "*deethicalisation*". There are many ethics committees (IRBs) in which ethical review became a technical or mechanical process according to existing standards of practices (SOPs), but not a moral judgment on the basis of weighing values of stakeholders. At an academic level, the quality of academic publications on medical ethics or conferences on the subject, seems stalled and without visible progress. Ethics has become empty preaching or ideological propaganda without serious arguments.

Characteristics of bioethics

There are five characteristics of bioethics shared with other disciplines of practical ethics:

Normative: Bioethics is a normative discipline which addresses the substantial and procedural ethical issues raised in clinical medicine, biomedical and health research, public health and innovation, R&D and the application of novel biotechnologies, and provides an ethical framework to evaluate human action in certain fields as an ethical guidance for human action/decision-making. Bioethics contains important descriptive elements, but it should not be reduced to descriptive ethics. The moral judgment is value-laden, and cannot be induced from the empirical facts. Otherwise the naturalistic fallacy will have been inflicted.

Rational: Bioethics is a rational discipline and relies on human rational capability, and its rational activities are mainly on argumentation. Some argued for bioethics being the love for life [401], the thesis was widely criticised by Chinese bioethicists [402–407].

Practical: Bioethics aims to provide ethical guidance or criteria for human action or decision-making in clinical, research and public health practices, not to directly develop ethical theories. We prefer the term "practical" to the term "applied", because the "applied" may lead to the misunderstanding that the solution of ethical issues is deduced from ethical theory. Instead, the solution relies on "drawing" (conceptual analysis) and "weighing" (balancing different values) as well as argumentation.

Evidence/experience-informed: Different from theoretical ethicists, bioethicist have to know the actual practices and their contexts, as Ross claimed that we must know non-moral properties before we make moral judgment [408]. Case studies and surveys as descriptive ethics are important to bioethics.

Secular: Bioethics is neither religious nor theological, but secular, although the perspectives from religions and theologies are also important in our dealing with practical issues in various human social fields. For me the term "Christian bioethics" or "Confucian bioethics" is self-contradictory: rational reason and irrational faith are not compatible. If bioethics is to help solve practical issues or take an appropriate action/make a rational decision, it cannot be purely moral preaching, breaking away from reality.

Features of the Chinese approach to bioethics

Following the bicycle-riding model: (1) we start with an ethical issue raised in clinical, research or public health practices and is closely relevant to the health and basic human rights of individuals, a certain social group or whole population as a logical starting point; (2) use major ethical theories, basic ethical principles and ethical methods to address these ethical issues and find the options for providing a solution, then weigh critical arguments for and against these options and finally choose an appropriate solution which often challenges the inadequacies or drawbacks of existing laws, regulations or policies related to the issues; (3) translate the results of ethical inquiries into action by producing recommendations on improving policy, law or regulations; and (4) finally check and review whether our recommendation and its implementation serve our ultimate goal, i. e. protecting the health, wellbeing, rights and interests of patients, research participants, the public, vulnerable

[96] http://www.eubios.info/abacon.htm

groups, systematically disadvantaged groups, and sentient animals[97] [409–412].

To use or not to use: the legitimacy of using unethically obtained scientific results or human tissue from the National Socialist era

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Epitaph

The Institute of Anatomy in Berlin
received during the years from 1939–1945
the bodies
of 269 executed women
Rolf Hochhuth 1963 [413: 15]

Libertas

- On December 19th, 1942, the trial at the People's Court in Berlin against Libertas Schulze-Boysen and her husband Harro ended in a death sentence for high treason. Libertas was a 29-year-old publicist for the German movie industry and 33-year-old Harro served as an officer in the *Reich's* Aviation Ministry. They had been married for five years, opposed Hitler's regime and had worked together with other political dissidents in an organisation that later became known as the Red Orchestra. The group was discovered in the summer of 1942, and most of the members were sentenced to death [414, 415].
- As all prisoners on death row, Libertas was allowed to write a letter of farewell to her loved ones. She wrote hers to her mother on the day of her execution, December 2nd, 1942. In this letter, Libertas expressed very clear ideas of what should happen to her body after her death. She wrote: "*As a last wish I have asked that my 'material substance' be left to you. If possible, bury me in a beautiful place amidst sunny nature.*" [416: 141, translation by SH]. However, Libertas' wishes were ignored. Indeed, something very different happened, as remembered by young physician Charlotte Pommer, who worked as an assistant for Professor Hermann Stieve, the director of the Anatomical Department at the University of Berlin [417]. Charlotte remembered: "*On 22nd of December 1942, eleven men were hanged and five women were decapitated. Fifteen minutes later they were laid out on the dissection tables in the anatomical institute. [She, Libertas] lay on the first table, […] on the third table the big lifeless body of her husband […] I felt paralysed and could hardly assist Professor Stieve, who—as always—carried out his scientific exploration with great care and uncommon diligence […] After the impressions of that night, I resigned from my position*" [417, translation by SH].

The researchers

- While Charlotte Pommer quit her job, Hermann Stieve continued with his research and in his position as chair of anatomy in Berlin, without interruption until his death in 1952 [418]. This was possible because he had never joined the NSDAP (the Nazi Party). His publications reveal that he dissected hundreds of bodies of executed persons for his work. Before 1920 he had performed animal experiments on the influence of the nervous system on the reproductive organs. He then realised that he could interpret the situation of death row inmates in a similar manner to his animal experiments; he saw the imprisonment and fear of execution as the equivalent of chronic and acute stressors on the reproductive system of these persons. He studied the bodies of men executed in the 1920s, as women were not executed during this period. However, in 1935, as soon as the National Socialists started with the execution of women, Stieve began studies on the effect of severe psychological trauma on menstruation patterns and the morphology of reproductive organs. There is no evidence that he ever had access to these prisoners prior to their deaths. He received the clinical data of the women from the prison personnel [419].
- Heinrich von Hayek was another anatomist who made regular use of bodies of the executed for his research during his years at the University of Würzburg [420]. He had joined the SA stormtroopers in 1933 and the NSDAP in 1938. In a 1940 study on lung architecture he stated: "*most suitable of course are the lungs of young, executed men, of whom I had several at my disposal*" [421: 405, translation by SH]. His book "*Die menschliche Lunge*" [422], on the human lung, published in 1953 and internationally perceived as a standard work on the subject, was largely based on his work with the bodies of executed persons. In 1952, Hayek was recruited as chairman of anatomy in Vienna, a position he continued to hold until his death in 1969.
- Research like Stieve's and Hayek's was made possible through the close collaboration between the Nation-

[97] Please see Asian Bioethics Review 2014 6(2) for the articles 'Ethical Issues in Medical Security System in Mainland China' (Qiu, R), 'The Tort Law of P.R. China and the Implementation of Informed Consent' (Zhu, W), 'Can the No Fault Approach to Compensation for HIV Infection through Blood Transfusion be Ethically Justified?' (Zhai, X), 'Ethical Challenges to Punitive Law on Drug Users in China' (Huang, W), 'Ethical Inquiry into the Conditions under which Involuntary Commitment of Mentally Ill Can be Ethically Justified?' (Liu, R), and "An Ethical Reflection on the 'Danger Criterion' in China's Mental Health Law" (Hu, L)

al Socialist regime and the anatomical sciences. After the new German government came into power in January 1933, one of its first goals was the reorganisation of academia. All science was to be organised in terms of the National Socialist authoritarian leadership principle and utilised for war purposes. Within a few months, laws were passed that led to the dismissal of all so-called "non-Aryan" university members and those considered political opponents. Leadership of the universities was no longer the responsibility of the individual German states, as it was centralised and administered by the Ministry of Education in Berlin, which was also responsible for the anatomical institutes. This included research funding, recruitment of faculty, and the anatomical professional society, the *Anatomische Gesellschaft*. In terms of procuring bodies of prisoners and executed persons, the Ministry of Education shared this responsibility with the Ministry of Justice. The effect of the new government's policies was profound, as reflected in the data available for 176 of 233 anatomists employed in Germany and the occupied territories between 1933 and 1945. Of these 176, 54 saw their careers disrupted for so-called "racial" or political reasons, whereby dismissal could mean anything from having to change jobs to forced emigration or incarceration. Of the remaining 122 anatomists, 99 joined the NSDAP, 42 the SA, 13 the SS (the Nazi elite troop) and only 10 had no political affiliation with the regime [423].

- One of the leading National Socialists among the anatomists was the Austrian Eduard Pernkopf. He was recruited as chair of anatomy at Vienna University in 1933 and joined the NSDAP and SA in 1933/34, at a time when these groups were still illegal in Austria. Pernkopf succeeded his mentor Ferdinand Hochstetter, who had headed the traditionally conservative-nationalist second chair of anatomy at Vienna University, whereas the first chair was traditionally held by liberal scientists of Jewish descent, at that time Julius Tandler, a baptised protestant, who was ousted by the Austro-fascist regime in 1934. After the so-called "*Anschluss*,"—the annexation of Austria by Germany—Pernkopf was made dean of the medical school in March 1938, and in this capacity oversaw the removal of 53% of the medical faculty for "racial" or political reasons [424]. In 1943, he also became rector of the University of Vienna. In 1945, he was one of the few anatomists who lost their academic position permanently, although he received a pension and was invited by a colleague to continue his work on topographical anatomy, the atlas "*Topographische Anatomie des Menschen.*" It was this book that made him well known after the war, as it became internationally popular among anatomists and surgeons due to the level of detail and a new printing technique that enabled the most brilliant and exact images. The atlas had been commissioned by the publisher Urban and Schwarzenberg, which also financed the work of the medical illustrators [425]. It took half a century, apparently, before the users of the atlas noticed that the illustrators had left signs of their National Socialist sympathies in the images during the war years. Erich Lepier used a Swastika for his signature, Karl Endtresser shaped the double SS in his name as the SS runes on uniform batches, and Franz Batke did the same with the double number 4 in the year 1944. This and other observations led New York oral surgeon, Howard Israel, and Canadian physician, William Seidelman, to contact Yad Vashem, the world Holocaust remembrance center, which in 1995 sent an official inquiry to the University of Vienna, asking about the political background and the origins of the Pernkopf atlas [426]. After much discussion, the university senate launched a historical project, the *Senatsprojekt der Universität Wien* [427], which confirmed that Pernkopf was indeed an avid National Socialist. In addition, it was found that the bodies of many victims of the National Socialist regime had been delivered to the anatomical institute, among them more than 1300 bodies of persons executed following civilian and military court trials. It was deemed likely that at least some of these victims' bodies had been used in the creation of the atlas.

Research with the dead and the "future dead"

- To understand how this was possible, it is necessary to look at legal body procurement in anatomy prior to the National Socialist regime, and at the changes that occurred thereafter [428]. Since the 18th century in Germany, Austria, and many other countries, the traditional legal sources for anatomical body acquisition were so-called "unclaimed" bodies, that is: bodies of persons who died in public institutions and whose families did not claim them for burial. They included the bodies of patients who had died in psychiatric institutions, persons who committed suicide, deceased prisoners, and executed persons. Indeed, bodies of the executed were the oldest legal source of anatomical body procurement in Europe, dating back to the 13th century [429]. Under the National Socialists, increasing numbers of their victims fell within these traditional sources. From 1939 onwards, psychiatric patients included persons killed within the so-called "euthanasia" programmes. Rising numbers of Jewish citizens committed suicide, and among the deceased were more political prisoners due to new legislation, and more violent deaths, especially in the Gestapo prisons. Also, there were many so-called "natural deaths" in the new network of camps: the concentration camps and camps for forced labourers and prisoners of war. Finally, the number of bodies from executed prisoners grew exponentially. During the Weimar Republic, 1919–1933, about 200 men and no women were executed. These numbers rose to more than 30,000 executions following civilian and military trials between 1933 and 1945. From 1935 on women were also executed, and some of them were pregnant. Based on numbers from studies of individual anatomical departments, the overall body supply for all 31 anatomical departments

in Germany and the occupied territories can now be estimated, and a conservative evaluation arrives at 30–35,000 bodies delivered to the anatomical institutes. At this point it is unclear, just how many of these bodies were those of victims of the regime, however, there is an evidence-based estimate from Tübingen, where it was thought to be two thirds of the anatomical body supply [430]. Anatomists were not only passive recipients of these bodies, but they actively lobbied with the authorities for increased delivery of bodies of the executed to their institutes [431]. All of the anatomical departments used these bodies, independent of the political convictions of the anatomists. Among the victims, there were at least 3938 bodies of executed persons from 20 departments that have been documented so far. For a majority their names are known, however, biographies still have to be reconstructed for a full memorialisation of these victims.

- Some anatomists were willing to further transgress the ethical boundaries of medical ethics. They changed the traditional anatomical paradigm of knowledge gain through work with the dead, to a new paradigm of anatomical knowledge gain [432] through work with the "future dead", that is: human experimentation [433]. Professor August Hirt became the mastermind of the anatomical experiment with the "future dead". He was chair of anatomy at the German University of Strasbourg in occupied Alsace, and performed inhumane experiments with chemical agents on prisoners in the Struthof-Natzweiler Concentration Camp—near Strasbourg—with the aid of the *Ahnenerbe*, the SS organisation that studied "race" and heredity. Hirt also planned an anatomical-anthropological experiment: a so-called "Jewish skeleton collection", for which he had prisoners selected by the SS anthropologists Bruno Beger and Hans Fleischhacker in Auschwitz in the summer of 1943. The prisoners were then transported by train to Struthof-Natzweiler, where Hirt gave cyanide salts to the camp commander for the murder of 86 victims in August 1943. Their bodies were then sent to the anatomical department in Strasbourg, where they were discovered upon the liberation of the city by French military forces in November 1944. After the war, Hirt was the only anatomist named in the Nuremberg Medical Trial in 1946/47, and was indicted in absentia as a murderer in Metz/Alsace in 1953, however it was discovered that he committed suicide in the summer of 1945 [434].

Legacies

- There are many continuities, legacies and consequences from this history, starting with the fact that the National Socialist history of anatomy shines a clear light on current critical questions in anatomy, as the unethical handling of anatomical bodies still exists. One of the most striking legacies is that Charlotte Pommer remained the only voluntarily "retired" anatomist, whereas few German and Austrian anatomists lost their positions after the war. Most were reinstated after a short denazification period. Furthermore, while in the first years post-war several hundred bodies of victims were returned to their families at their relatives' behest, others were left in the anatomical departments for many more years to come, to be used in teaching and research. Apart from whole bodies and body parts, tissue samples from victims remained in many collections [428]. There are currently several projects underway that investigate historic collections of human tissue in terms of their potential origin during the National Socialist regime. These investigations include an independent group of historians undertaking a provenance analysis of the neuroanatomical collections owned by the Max Planck Society; the Cécilie and Oskar Vogt neuroanatomical collection at the University of Düsseldorf; the Erich Blechschmidt collection of embryos at the University of Göttingen; collections from the *Reichsuniversität* in Strasbourg; a comprehensive database on all victims and perpetrators of coerced medical research under National Socialism [287]; and recent archaeological findings of bones at the Freie Universität Berlin on the grounds of the former Kaiser Wilhelm Institute for Anthropology, Human Heredity and Eugenics.

"To use or not to use": a new Pernkopf debate

- In terms of anatomy, the answer to the question of whether "to use or not use data from the National Socialist period", is that their use never ended. Publications of research based on tissues from victims became integrated in the general anatomical body of knowledge, and many books by German anatomists continued to be used for many decades after the war, including works by Stieve, Hayek and Pernkopf. The revelation of the historical background of the Pernkopf atlas led to the suspension of its publication by the owner of the copyright and the original paintings in 1994. While some libraries removed the books from shelves, and several anatomists and surgeons stopped working with the atlas, old copies of the volumes in several languages, as well as digital versions are available and still in use.
- A new controversy concerning the Pernkopf atlas began in 2016, initiated by the US American reconstructive surgeon, Professor Susan Mackinnon, (Director of the Center for Nerve Injury and Paralysis and Sydney M. Jr. and Robert H. Shoenberg Professor and Chief of the Division of Plastic and Reconstructive Surgery of Washington University, St. Louis Missouri), and her associate Andrew Yee. Mackinnon has been using the atlas since 1981. She knew about the book's background and included this historical example of nefarious research practices in her teaching on medical ethics. Her team has developed an online video platform for global education on rare and difficult nerve reconstruction surgery. For this, she wanted to use images

from the Pernkopf atlas, including its history, as she argued that no other atlas afforded the information necessary to understand her procedure, and that specific illustrations from the Pernkopf atlas have saved human lives in the surgeries she has performed. When she asked the publisher for the right to use some of the images in 2016, Elsevier refused to give her access to the copyright, citing ethical reasons and the political background of the atlas. In a discussion between the surgeon and the authors, the question then arose of whether the publisher could be urged to grant the copyright for ethical reasons on the grounds of saving human lives? The question was then put to Rabbi Joseph Polak and Prof. M. Grodin of Boston, with the request for an opinion that addressed the ethical, religious and ritual aspects of the problem from the Jewish ethical perspective, considering the concept of *Pikuach Nefesh*, the saving of human lives. Rabbi Polak, the Chief Judge of the Rabbinical Court of Massachusetts, is an authority on Jewish medical ethics and the Holocaust and a childhood survivor of Bergen-Belsen. Prof. Grodin, of the Elie Wiesel Center for Jewish Studies at Boston University, is an internationally noted expert on the history of medicine and the Holocaust, and medicine and human rights.

On March 3rd, 2017, at the "Medical Ethics in the 70 Years after the Nuremberg Code" conference sponsored by the Medical University of Vienna, co-author William Seidelman presented the following proposal for a "collaborative initiative of Elsevier publishing and the Medical University of Vienna":

- Elsevier Publishing and the Medical University of Vienna jointly establish a dedicated place of remembrance on the campus of the Medical University of Vienna in honour of the victims of medical abuses by Vienna faculty, and exploited by the original publisher, during the Hitler period.
- The original Pernkopf paintings be displayed in this dedicated space along with documentation on the history of the paintings and as a commemoration to the memory of the victims.
- A joint committee of Elsevier Publishing and the University of Vienna be established, pending the results of the review by Prof. Grodin and Rabbi Polak, to consider applications for the use of the Pernkopf paintings based on the precepts and recommendations of the Grodin and Polak review of the potential for the saving of human life and limb.

During a panel discussion at the conference on the same day it was agreed to pursue this proposal. Since then, Rabbi Polak has formulated his opinion in the "Vienna Protocol". In point C.12 of the protocol he recommends the use of Pernkopf images when lives can be saved, stipulating the connection of their use with the memorialisation of their historical background and the victims. The "Vienna Protocol" is now part of a set of recommendations on "How to deal with Holocaust era human remains" formulated by an interdisciplinary group of experts at a special symposium at Yad Vashem, the World Holocaust Remembrance Center, Jerusalem May 4th, 2017.[98]

Abiding values

The authors fully concur with Rabbi Polak's opinion. The example of data from anatomy during National Socialism shows that there are many continuities and legacies reaching into the present, and that this history needs to be carefully re-examined by each generation of medical researchers and practitioners. Decisions on the use of such data are dependent on context, and require full transparency of the specifics of the historical background. However, the principles of respect for the dead and their memorialisation, as well as the concept of saving human lives, are abiding values in medical ethics that cannot change.

Acknowledgements: The authors would like to thank Professor Mackinnon and her associate Andrew Yee for their clear commitment to this work on medical history and ethics, and for the passion and tenacity with which they are pursuing their quest to save lives and alleviate pain, not only in their home country but across the world, with their global education initiative.

Beyond argument: contemporary artists on euthanasia

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Toward 1900, medical breakthroughs led by German researchers provided the impetus for better hygiene. Surgeries became cleaner. Deaths from infection became rarer. As more people faced death later in life from deteriorative diseases, a new topic of debate emerged: euthanasia. Shouldn't the terminally ill have a right to end their suffering by choosing when and how to die? Shouldn't people receive a merciful death, as suffering animals ordinarily do? In 1913 a terminally-ill German Monist, Roland Gerkan, asked these questions in advocating for a proposed euthanasia law. The debate that ensued included warnings of a slippery slope: a euthanasia law could expand to include patients who were not terminally ill, such as incurable mental patients [244].

During World War I, the German government rationed food and medical supplies to support its troops, and life became dire for civilians. This was especially true for patients in government asylums. Of the more than 140,000 who perished, about half evidently died of malnutrition

[98] The text of the recommendations including the "Vienna Protocol" is being hosted for download on the website of Boston University Elie Wiesel Center for Jewish Studies [435].

Fig. 1 Installation view of "Mastering Death: Artistic Perspectives," 2 March – 1 April 2017, Josephinum, Medical University of Vienna. Photo: Martina Peters

and epidemic disease. Regarded by some as a necessary sacrifice, the deaths fuelled a debate in the economically difficult post-World War I years. Concerned above all with resource allocation, the most radical writers on the topic, Karl Binding and Alfred Hoche, argued in 1920 for "the destruction of life unworthy of life" [244: 15; 437].

The Nazis adopted these arguments in support of their *Aktion T4* program for secretly killing asylum patients, whom their propaganda labelled "worthless eaters." Officially established with a letter from Adolf Hitler backdated 1 September 1939, the first day of World War II, 'T4' aimed to save money and to free hospital beds for wounded soldiers. The term "euthanasia" (*Gnadentod* in German for "merciful death") became a screen to cover up mass murder. Eventually utilizing gas chambers and crematorium ovens, 'T4' served as a model, in 1942, for genocidal policy against the Jews.

In 1946/47, the Nuremberg Medical Trial held German physician murderers accountable for their crimes and established the foremost tenet of modern bioethics: patients and human research subjects must understand and consent to medical intervention. Today, euthanasia and physician-assisted suicide, legal in some countries and American states, give patients the control that early advocates sought more than a century ago. But these new developments have inspired fresh criticism that draws on the knowledge of German history and the fear of a slippery slope. Who decides the worthiness of a life? By which criteria? What, if anything, constitutes a "good death"?

These are big questions, and the ten contemporary artists in "Mastering Death: Artistic Perspectives," an exhibition of artworks about the history and ethical challenges of euthanasia from Nazi times to the present that I guest-curated at the Josephinum, Medical University of Vienna, in March and April 2017, (fig. 1), are, on the whole, skittish about answering them. In contrast with the arrogance of Nazi doctors and perpetrators in judging who would live and die, many of these artists tend to undermine their own authority.

*

The intellectual underpinnings of Nazi medical thinking are the subjects of *Tower of Babel,* 2016, by American artist Susan Erony, (figs. 2, 3 and 4). Erony references the biblical story of human arrogance, which Friedrich Nietzsche invoked to describe scientific knowledge itself: "The domain of science has expanded and the towers of Babel erected by the sciences have multiplied in a monstrous fashion" [437: 295, 438: 94]. Nietzsche saw science, like religion before it, as a grandiose lie because it promised comforting certainties when, he believed, there are none. With her triptych to a false religion, Erony simultaneously recalls yet another Nietzschean notion, one that inspired the Nazis: society as a pyramid of castes that rise from anonymous workers to the *Übermensch* ("super-

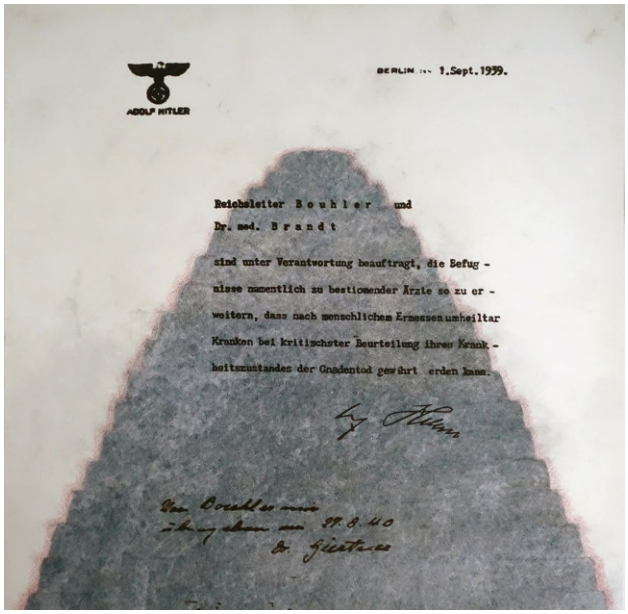

Fig. 2 Susan Erony, *Tower of Babel: 1 September 1939*, 2016. Inkjet print, 23 × 22 inches. Courtesy of the artist

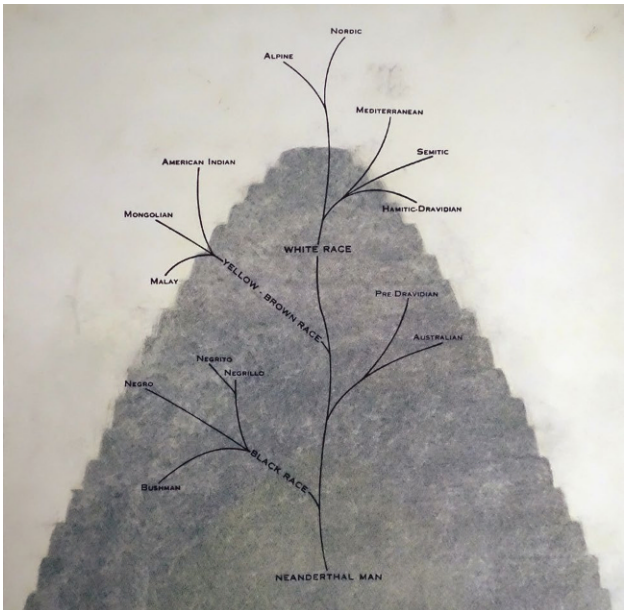

Fig. 3 Susan Erony, *Tower of Babel: Tree of Races*, 2016. Inkjet print, 22 3/4 × 22 inches. Courtesy of the artist

Fig. 4 Susan Erony, *Tower of Babel: Useless Eaters*, 2016. Inkjet print, 22 5/8 × 21 7/8 inches. Courtesy of the artist

man") leader on top.[99] Erony imagines this pyramid as a pile of bodies represented as hands of the disenfranchised dead, in particular the children killed in 'T4', to whom she dedicates the piece.

Instead of, for example, inventing an expressive style, Erony lets history speak for itself by accepting biblical and Nietzschean metaphor as givens and by incorporating photographic reproductions of historical documents (Hitler's falsely dated 1 September 1939 letter authorizing 'T4', and a vintage Anglo eugenics diagram reproduced in *Tree of Races* representing a now-discredited scientific idea). Her reliance on different quotations, along with her mix of image and text, drawing and photography engender a work that conceptually and formalistically embodies complexity and contradiction, hallmarks of postmodernism.[100]

Many Holocaust-related artists take a postmodern approach that intrinsically challenges the modernist certainty the Nazis were known for. But some promote a moral absolutism associated with modernism. Arie A. Galles, born in Uzbekistan to parents who had fled the Nazis, and later raised in Poland, Israel and the United States, where he lives today, abandoned a twenty-year career making semi-abstract paintings to focus on Nazi subject matter starting in the early-1990s, when Holocaust consciousness in the US reached a fever pitch.[101] To communicate historical facts without ambiguity or uncertainty, Galles began drawing naturalistically, reproducing vintage photographs in charcoal, as in the

[99] In *Also Sprach Zarathustra* (1883), where Nietzsche developed his idea of the *Übermensch*, the author explored the notion of euthanasia in a section entitled "Voluntary Death" ("*Vom Freien Tode*"). Zarathustra instructs the potential *Übermensch* to "die at the right time" ("*Stirb zur rechten Zeit*"). "My death, praise I unto you, the voluntary death, which cometh unto me because *I* want it" ("*Meinen Tod lobe ich euch, den freien Tod, der mir kommt, weil* ich *will*"). Nietzsche contrasts those who die nobly and heroically with those who cling to life, shriveled (*runzelig*) [439; 440: 48].

[100] Among authors who link post-Holocaust to postmodernism, see Eaglestone [441].

[101] A commentator on the 28 December 1993 broadcast of the American news program *Nightline* went so far as to declare 1993 "the year of the Holocaust" [442].

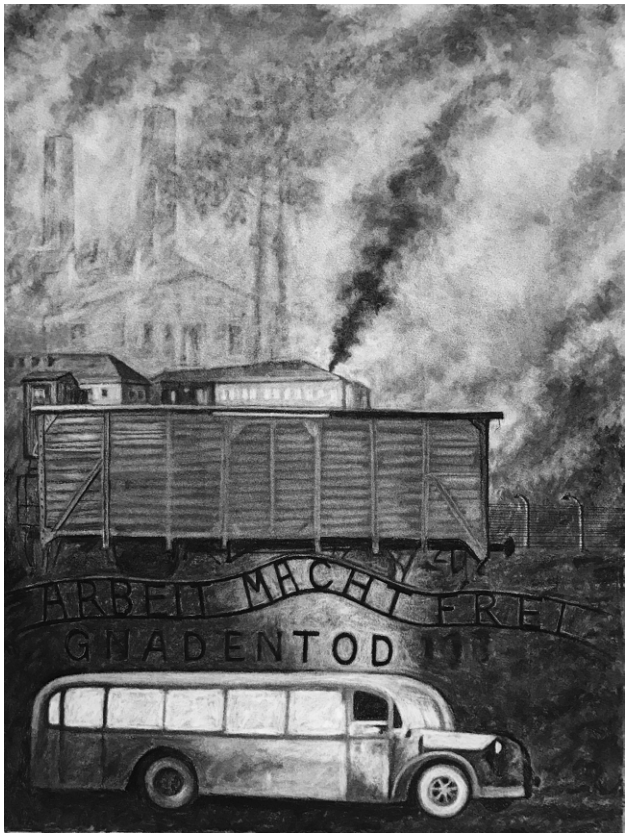

Fig. 5 Arie A. Galles, *GNADENTOD,* 2017. Charcoal and conté on Arches BKF, 29.5 × 22 inches. Courtesy of the artist

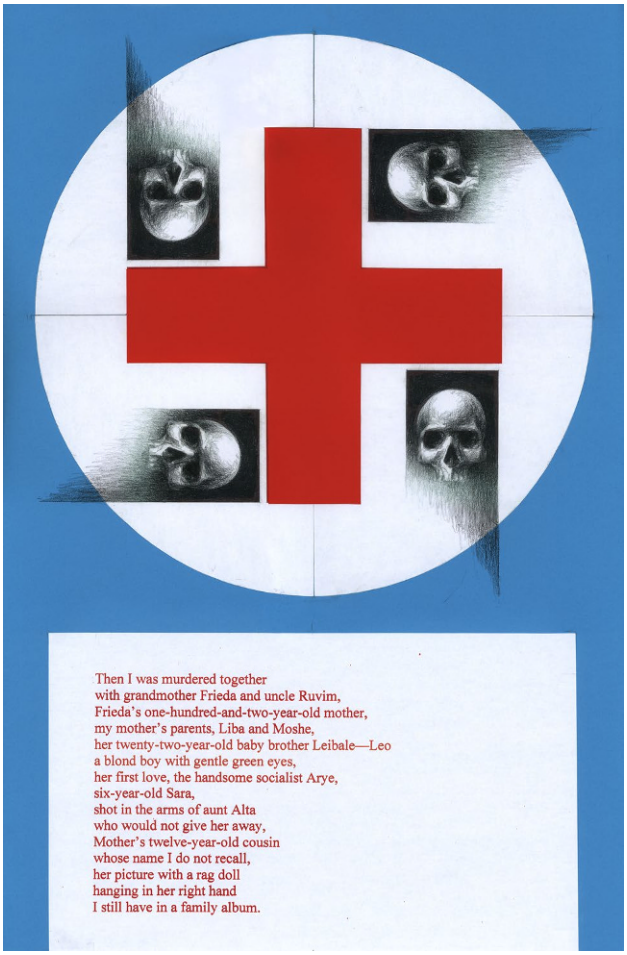

Fig. 6 Vitaly Komar and Anna Halberstadt, *Broken Cross*, 2016. Ed. 12, C-print, 30 7/16 × 19 7/8 inches. Courtesy of the artists

aerial views of death camps in his magisterial *Fourteen Stations*, 1993–2002.

In *GNADENTOD,* 2017, Galles leaves no doubt about his understanding of 'T4' (fig. 5). He stacks an image of a 'T4' bus that delivered asylum patients to killing centres below that of a cattle car that transported victims to death camps to manifest the evolution from 'T4' to the Final Solution. By highlighting MACHT from "ARBEIT MACHT FREI" ("work makes you free") on various death camp gates together with the last syllable of GNADENTOD, Galles composes a chilling phrase: *MACHT TOD* (suggesting the "power to bring about death"). A column of smoke, adapted from a photograph that secretly documented cremation at the Hartheim Castle asylum, joins smoke from death camp crematoria. Smoke underscores Galles's rationale for the charcoal medium—by "drawing with ashes" he references the dead[102] [443].

Reminiscent of work by survivor artist David Olere and others, *GNADENTOD* displays an older Expressionist style often associated with agitprop: writes Galles, "I had to walk a thin mental edge between empathy and propaganda" [444, unpaginated]. To my eyes, empathy is what matters most here. Having spent his life among survivors, Galles testifies here with the passion of a *secondary* witness.[103] Significantly, the paper on which Galles drew came from an artist-friend survivor diagnosed with Alzheimer's, a disease for which 'T4' doctors likely would have slated her for *Gnadentod*.

*

Erony's postmodernism and Galles's modernism represent different positions on the spectrum of possibility in art about Nazi atrocity, but they are not as far apart as they first appear. Both Erony and Galles have the victims in mind. They memorialize and honour. Notwithstanding her play of meaning, Erony, no less than Galles, focuses on the criminality of medicalized murder. Among artists who choose to engage with that difficult subject matter, it's quite ordinary to find the postmodernist play of meanings fused with modernist authority; art about Nazi atrocity typically exemplifies a "postmodern modernism"[104] [447].

[102] The phrase "drawing with ashes" also serves as the title of a forthcoming book of Galles's journal entries written during the creation of *Fourteen Stations*.

[103] Shoshana Felman explores the notion of secondary witnessing in an incisive essay on Claude Lanzmann's *Shoah* [445].

[104] This contradictory approach, which I believe develops in response to the subject matter itself, also describes the philosophy of Theodor W. Adorno, which responds to Holocaust history and

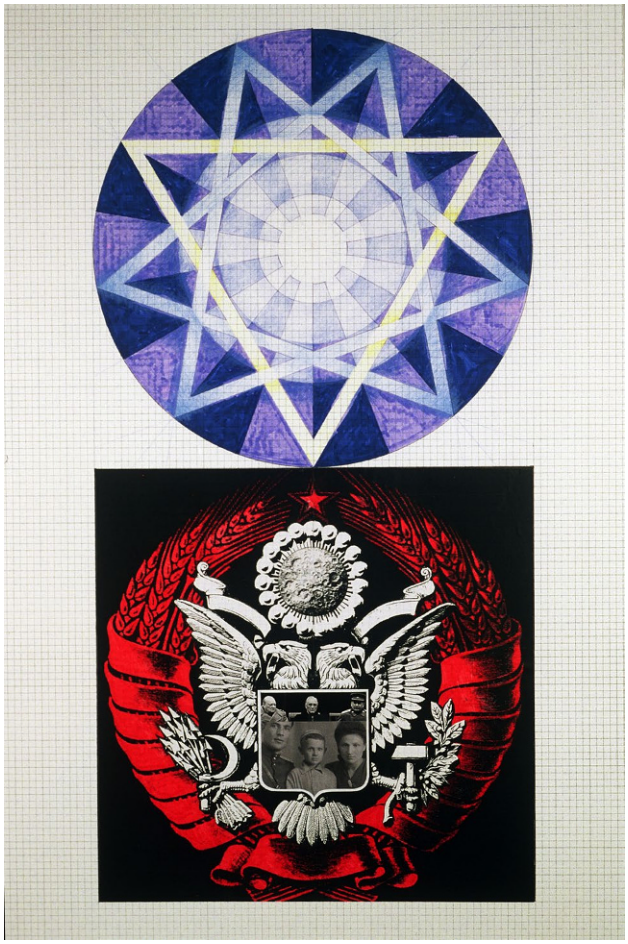

Fig. 7 Vitaly Komar, *Mandada Above State Heraldry #2*, 2004–2005. Mixed media on paper, 40 × 30 inches. Courtesy of the artist

Artist Vitaly Komar and poet Anna Halberstadt balance contradiction and certainty in *Broken Cross*, 2016, (fig. 6). The piece presents a red cross, associated with empathy and healing, transformed into a swastika, what Komar describes as a once-positive symbol that has fallen, like the Angel of Death, to create "a dialectical contradiction of two concepts, merged into a monstrous mutation"[105] [444]. To appreciate what's behind the contradictory overlay of symbols in *Broken Cross*, let's examine an earlier work with a similar composition. In the lower half of Komar's *Mandala Above State Heraldry #2*, 2004–2005, (fig. 7), the wheat-sheath originates in the emblem of the USSR, where Komar was born and raised; the eagle derives from the seal of the United States, where he emigrated in 1978; with two heads, Komar's eagle recalls

memory. In general, Holocaust-related artists intuitively pursue an approach with affinities to Adorno's philosophy [446].

[105] While not intended by Komar, the image conjures Nazi deceptions: tricking international Red Cross observers at Theresienstadt by camouflaging inhumane conditions and, above all, murdering Jews at Chemno in 'T4'-inspired gas vans marked with the red cross.

Fig. 8 Ruth Liberman, *Humans Are Not Animals*, 2017. Inkjet print, 32 × 32 inches. Courtesy of the artist

the emblem of Czarist Russia and pogroms of that time against his Jewish co-religionists. On the bird's breastplate appears a photo of Komar as a boy with his parents shortly before his father divorced his mother and vanished forever. In its absurdist refusal to attempt a serious or coherent understanding, Komar's complex and contradictory image embraces what he considers a Kierkegaardian sense of irony; it tacitly accepts the mystery of life [448, 449]. The same may be said of the absurd fusion in *Broken Cross*. What's more, the contrast of geometric abstraction (flat coloured shapes) with naturalistic representation (the three-dimensional skulls) prohibits aesthetic coherence, much in the way that the juxtaposition of visual and literary forms do. As in *Mandala with State Heraldry #2*, the lower half affirms the autobiographical, in this case with an excerpt from an affecting poem by Halberstadt, a Lithuanian-born Russian émigré to the United States. The larger poem relates Halberstadt's perspective as the child of Holocaust survivors on returning to visit the land of her early childhood. The excerpt positions Halberstadt as a secondary witness through her harrowing account of her mother's relatives who were murdered by the Nazis [450].

*

Though other artworks that were in the exhibition do not specifically explore Nazi crime, they do destabilize fixed meanings to raise ethical questions about euthanasia. Born in Germany and living today in the United States, Ruth Liberman based *Humans Are Not Animals*, 2017, (fig. 8), on an image from an old medical textbook. As in Erony's *Tower of Babel: Useless Eaters*, hands become a charged metonym of human presence. Liberman's haunting image shows a doctor's hands attending to those of a patient, but the gesture is indeterminate. Has the patient raised a hand for a handshake or for help?

Fig. 9 Verena Kaminiarz, '*may the mice bite me if it is not true*' *installation detail: Felix,* 2008. Inkjet print, 12 × 16 inches. Courtesy of the artist

Fig. 10 Verena Kaminiarz, '*may the mice bite me if it is not true*' *installation detail: Habitat,* 2008. Inkjet print, 12 × 16 inches. Courtesy of the artist

Fig. 11 Manfred Menz, *EUTHANASIA SOLICITATION*, 2017. Ed. 5, inkjet print, 23 7/16 × 29 15/16 Inches. Courtesy of the artist

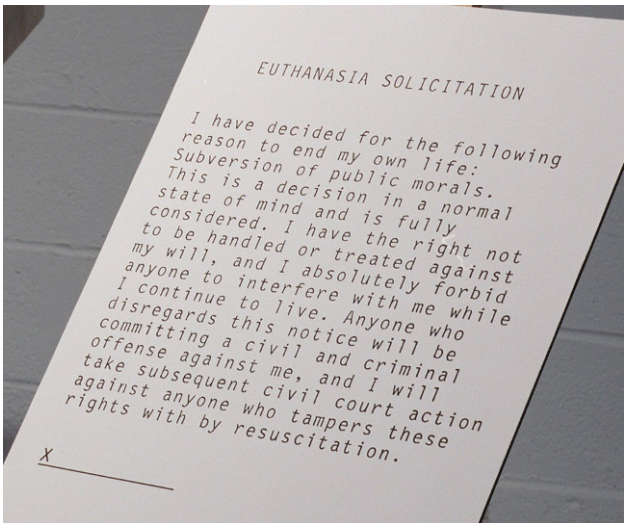

Fig. 12 Manfred Menz, *EUTHANASIA SOLICITATION*, 2017. Detail

Has the doctor lifted this hand to monitor the patient's heart rate or make sure it has stopped?

Descending from above, the isolated hands of a god-like doctor suggest a traditional Christian symbol for God, in keeping with the Christian interpretation of the Second Commandment against graven images.[106] With a whiteness that simultaneously suggests hygiene as well as the bright light traditionally associated with the moment of death, Liberman's image generates multiple possible interpretations.

The title, which may at first sound uplifting, reinforces the indeterminacy: *Humans Are Not Animals.* Which humans? The patient, possibly euthanized by the doctor as unceremoniously as a dog? Or the doctor, who possibly behaves like an animal with an act that violates the physician's Hippocratic Oath to "do no harm"? Comparison of humans to animals suggests depravity, but animals, of course, cannot commit crimes; animals are not humans. In the end, Liberman's piece prompts us to ask what it means to be human.

Treatment of laboratory research animals today suggests that the scientific method fosters much of the coldness associated with Nazi doctors. In 2008, Verena Kaminiarz, a German-born artist who lives in Canada, proposed an installation for giving retired laboratory mice names instead of numbers and comfortable cages in which to live out their natural lives, (figs. 9 and 10). But her proposal ran afoul of her university bioethics board. Initially mistaking her artwork for a bona fide experiment, the board argued that naming the mice would compromise the objectivity of the researcher and insisted the mice be euthanized after the experiment to pre-

[106] A prominent Renaissance example is Domenico Ghirlandaio's *Baptism of Christ*, ca. 1475. Liberman also references the hands of God and Adam in Michelangelo's Sistine Chapel ceiling of 1508–12.

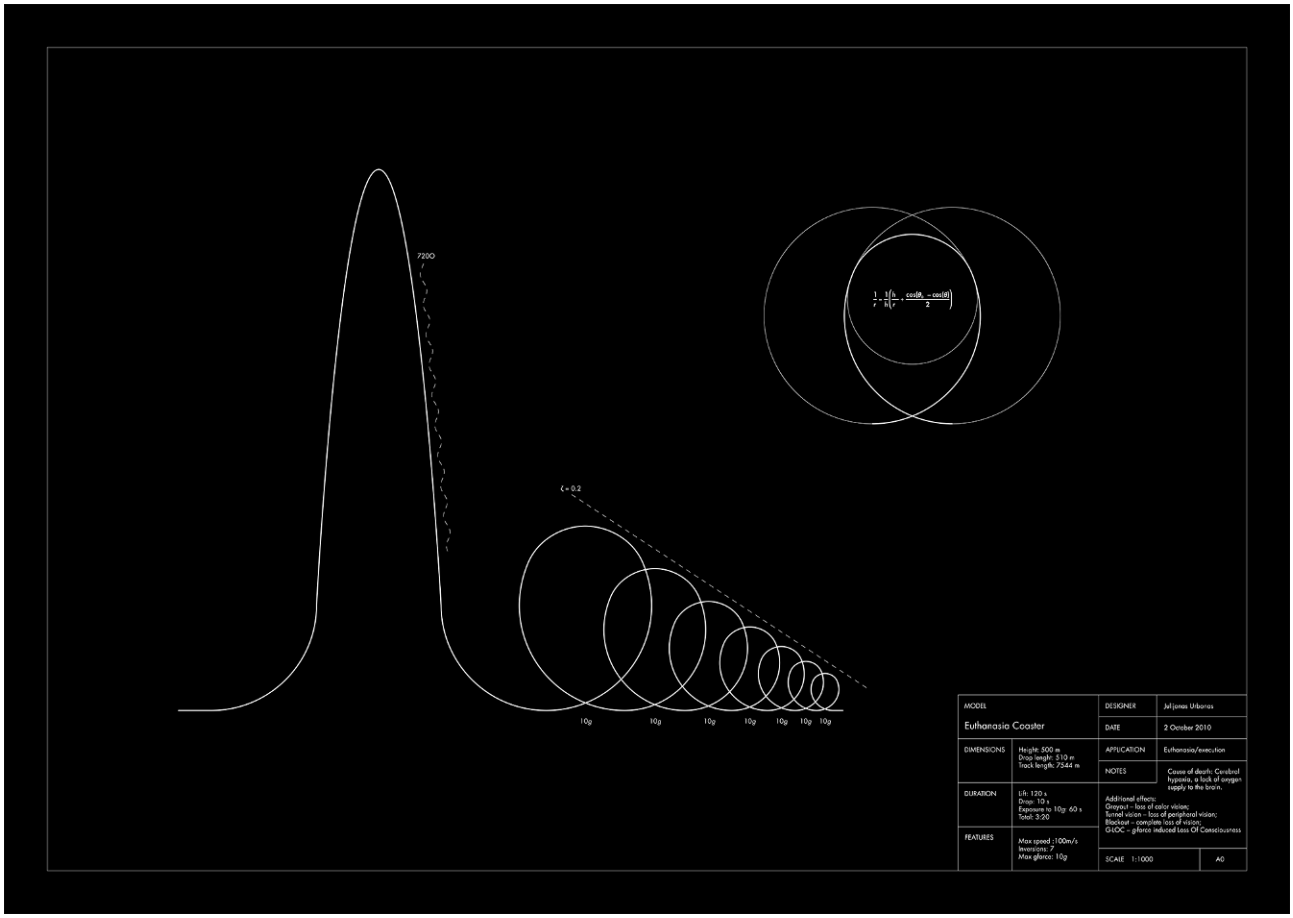

Fig. 13 Julijonas Urbonas, *Euthanasia Coaster, simplified technical drawing, scale 1:1000*, 2010 Silkscreen on metal sheet, 90 × 120 cm. Design, engineering: Julijonas Urbonas. Medical advisor: Dr. Michael Gresty, Spatial Disorientation Lab, Imperial College London. Courtesy of the artist

vent their suffering unnecessary stress. By rejecting this protocol, Kaminiarz recommends a new, humbler scientific approach: respect and responsibility for sustaining life, as suggested by the lower-case letters and oath-like sound of her title, *'may the mice bite me if it is not true'.*

From lab animal to vermin, the mouse resonates with cultural associations. *EUTHANASIA SOLICITATION,* 2017, by German-born, American-based Manfred Menz, presents an image of a human-size mousetrap, (figs. 11 and 12). Menz's Pop Art-style sculpture depicted in the print dates to 1995, at the height of popularity of *Maus*, Art Spiegelman's 1991 memoir that relates the Holocaust experience of the author's survivor father, Vladek, in comic-book form, with Jews represented as mouse-headed humans. Chapter 6, "Mouse Trap," about Vladek's and wife Anja's capture, opens with a drawing of them both under the hammer of a giant trap [451: 129). Nazi propaganda characterized Jews as vermin that had infected the German body politic with disease.

The trap suggests an unwitting victim, but Menz's unattributed text in the print implies otherwise. It invokes a person who *seeks* death on account of "subversion of public morals," leaving a reader to wonder if that personal choice to die may itself be the mischievously subversive act.

"Most important human needs," Menz explains, "are used as bait to terminate the desire to live" [444]. I understand this to mean that the enormous freedom to choose one's partner, career, home, etc., and create one's own happiness and fulfilment comes with the formidable risk of disappointment and even despair. For people who judge their lives unworthy of living, even though they may be physically well, Belgium and the Netherlands lead the way with euthanasia laws that grant the freedom to choose to die. Is freedom itself the ultimate trap?

Both Belgium and the Netherlands permit euthanasia for dementia patients who, when they were competent, had recorded their preference to die in such circumstances. When he was healthy, my own father insisted he would rather pass from the scene than languish with dementia, but when vascular dementia diminished him, he enjoyed sharing time with family, playing checkers, and dining out, and expressed a desire to live. Menz's written solicitation to die states darkly, "I have the right not ... to be treated against my will ... ." Should euthanasia for a dementia patient be determined by someone who was, in effect, a different person? Must executors of a living

Fig. 14 Niels Alpert, *Untitled*, 2016. Inkjet print, 11.78 × 16 inches. Courtesy of the artist.

Fig. 15 Niels Alpert, *Untitled*, 2016. Inkjet print, 10.67 × 16 inches. Courtesy of the artist

Fig. 16 Niels Alpert, *Untitled*, 2016. Inkjet print, 9.94 × 16 inches. Courtesy of the artist

will comply with a legal order to euthanize a patient who wants to live? When, if ever, is a patient's life no longer worth living? Who decides? Menz's artwork raises these questions.

If some societies already accept euthanasia by poison, perhaps they will someday permit it by the gravitational forces unleashed by Julijonas Urbonas's *Euthanasia Coaster,* a project for a frolicsome killing machine designed in consultation with a medical doctor (fig. 13). The idea is that it might deliver a euphoric death through deprivation of oxygen to the rider's brain. Urbonas, a Lithuanian artist who worked as an amusement park director in 2004–2007, regards his piece as social science fiction. In a commodity culture that pitches virtually everything for consumer satisfaction, *Euthanasia Coaster* goes to an absurd extreme. The piece suggests that even the experience of dying itself can be supplanted by distracting, momentary excitements. Seen in profile, the coaster's declining line suggests the rider's fading heartbeat and a literal slippery slope.

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Physician-assisted suicide was not theoretical for American artist Betsy Davis. Suffering with ALS, she chose to end her life surrounded by friends and family during a weekend-long gathering she called her "rebirth ceremony" in July 2016 [444]. With a prognosis of less than six months to live, a debilitating and painful disease, a clear mind and strong feelings, Davis offers a compelling example of the benefits of physician-assisted suicide. Niels Alpert, Davis's friend and occasional artistic collaborator, documented her self-determined, semi-public example, (figs. 14, 15 and 16). In addition to Belgium (2002) and the Netherlands (2002), Colombia (2015) and Luxembourg (2009) now permit euthanasia, and more and more governments permit physician-assisted suicide: Canada (2015), Germany (2015), and Switzerland (since 1942), as does Washington, D.C. (2017) and the American states of Colorado (2015), Montana (2009), Oregon (1997), Vermont (2013), Washington (2008), and California (2015), where Davis died.

In societies that normalize euthanasia and physician-assisted suicide, people may choose to die for reasons quite different from Davis's. With perhaps the most permissive laws, Belgium allows persons with "constant and unbearable physical or mental suffering that cannot be alleviated" to seek euthanasia. These have included Belgians with autism, anorexia, borderline personality disorder, chronic-fatigue syndrome, partial paralysis, blindness coupled with deafness, and manic depression [452]. In choosing to die, people may act rashly due to undiagnosed or untreated mental illness. Or they may wish to spare relatives the emotional or financial burden of prolonged healthcare.

As euthanasia and physician-assisted suicide increase in popularity, and freedoms expand to include children of any age, no one knows how public policies and attitudes may develop.[107] Through creative distillations that have the potential to chill and haunt, affecting viewers on a visceral and often a personal level that rational arguments alone cannot reach, artworks have a thoughtful role to play in sensitizing the public to a range of ethical concerns and, by extension, in shaping public policy.

[107] In 2014, Belgium legalized voluntary euthanasia for children of any age.

Vienna Protocol for when Jewish or Possibly-Jewish Human Remains are Discovered[108]

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A) Major classical Jewish sources for the Protocol

In this section, I list many of the classical texts informing the Protocol, including sources from the Bible, the Talmud, Maimonides ("Rambam"), and other codes, as well as from the Responsa literature. It also contains my occasional reflections on these sources, intended to help ease the way for readers unfamiliar with these types of materials. Finally—the list of texts presented is hardly exhaustive, but this is because I have already considered and documented most others (including *Noda beYehuda, Hatam Sofer*, *Maharam Schick*, *Igrot Mosh*e, *Tzitz Eliezer* etc.) in an earlier, related article.[109]

***

The first obligation when someone dies, often, but not always, overridden by all other considerations, is the swift burial of the corpse:

> And if a man has committed a sin worthy of death, and he is put to death, and thou hang him on a tree: his body shall not remain all night upon the tree, but thou shalt surely bury him that day (for he that is hanged is accursed of G-d:) that thy land be not defiled, which the L-rd thy G-d gives thee for an inheritance.
> (Deut. 21:22-3)[110]

The Talmud, from which the following extract is drawn, is composed of an early section called the Mishna (3rd C.), and an elaboration on the Mishna called the Gemara (3rd to 6th C.).

> And not only of this one [a criminal] did they [sc. The Sages] say it [that the corpse not be left hanging overnight] but whosoever lets his dead lie overnight transgresses a negative command. [However] if he kept him overnight for the sake of his honor, to procure for him a coffin or a shroud, he does not transgress thereby.
> (Mishna Sanhedrin 46a).[111]

The Gemara following this Mishna raises the question of whether [immediate] burial is a means to avert disgrace[112] or is a means of atonement.[113] What is important here is the notion of burial itself being redemptive.[114]

Again, the Gemara here[115] raises the question whether prompt burial, or for that matter, burial itself, is for the benefit of the deceased or for their survivors, and concludes it is for the deceased, implying that the survivors do not have the option to delay burial unless doing so is of benefit to the deceased.

> It is forbidden to derive benefit from the deceased, save for his hair, which is permitted for benefit since it is not part of his body. So also his coffin and shrouds are forbidden for benefit. However, vessels [objects, material] set-aside for shrouds are not forbidden for benefit until placed in his coffin to be buried with him. For things set aside [for the dead] are not prohibited from benefit.
> Rambam, *Yad, Eivel* 14:21

> Mishna: All things which are requiring to be buried must not be burned,[116] and all things which are required to be burnt [e.g. certain animal sacrifices] must not be buried. Gemara: ... And no benefit may be derived from the crumbled flesh of a corpse ...
> (B. Temura, 14a).

> Ash from cremation, where the cremation was against the will of the deceased, as is the case in persecutions, may be buried.[117] If it is not known whether all the burnt victims were Jews, the corpses may be buried together in a properly demarcated area of a Jewish cemetery.[118]

On the Sabbath, based on biblical injunction, it is forbidden to carry an object from a public to a private domain—say from your house (private domain) to the street (public domain), or vice versa. But if I carry a person on a

[108] Presented at a Symposium entitled "The Remains of Jewish Martyrs Who Were Victims of Nazi Medical Experiments," held at Yad Vashem, Jerusalem, May 2017.
[109] Polak, Joseph A., Exhuming Their Neighbors: A Halakhic Inquiry, Tradition 35:4, 2001.
[110] Koren Bible, trans. Harold Fisch.
[111] Soncino translation, slightly adapted. See also, Nachmanides, Commentary on the Bible, (Deut. 21) that this prohibition applies with greater severity in the land of Israel. See also R Chaim David haLevi, Responsa Mayim Chaim, Tel Aviv, 1991, p. 28.
[112] Decomposition and putrefaction make the dead loathsome: burial may be intended to spare them and their relatives that disgrace. (Soncino note)
[113] For the sins committed during the lifetime (ibid).
[114] There is a broad rabbinic literature, mostly mishnaic in origin, which considers the disposal of the remains of sacrificial animals set aside for sacred purposes and subsequently incurring blemishes which then precluded them from being offered at the temple altar (remembering that by the time the Mishna is committed to writing (3rd C.), animal sacrifice has been discontinued for almost 300 years). The animals in question may neither be burnt, nor discarded, nor may any benefit of any kind be drawn from their remains. Indeed, the only respectful thing to do with their carcasses, the tradition teaches, that is equal to their sacerdotal status, is to bury them. See M. Hulin, 10:2, M. Bechorot 1:7 and 2:3. From this we see that burial, in Judaism, constitutes an accordance of deep respect.
[115] B. Sanhedrin 47a
[116] This Mishna is thus the basis for the Jewish prohibition against cremation.
[117] Shmelkes, Y. Y., Resp. Bet Yitzchak, Yoreh De'ah, 125, and Grunwald, Y. Y., Kol Bo al Avelut, NY, Feldheim, p. 183.
[118] Resp. Harei Besamim, cited in Grunwald, op. cit, p,189.

litter from his house to the street, the Mishna explains,[119] then I have not violated the prohibition of carrying, because a human being is never described as a burden, and in fact "carries himself."[120] But if one carries a corpse, one does indeed violate this prohibition, because a corpse does not "carry itself." The Mishna now proceeds: so how much of the corpse—what measure—do I need to carry to violate the prohibition?—The size of an olive.

R. Yom Tov Lipman Heller of Kraków (18th century) in his commentary to this Mishna: "It is also possible, that [with respect to a corpse] if the [size of the remains is indeed] less than the size of an olive, there is [also] no obligation to bury it."[121] There are some who disagree with this position, including R Samuel Strashun,[122] but the majority of decisors appear to support it, as documented in footnote 120.

There are three modern compendia, each widely accepted in the halakhic world, that serve as encyclopedic gathering-places for Jewish laws having to do with interment and the dead. The first is *the Kol Bo* of the late R. Yekutiel Grunwald of Columbus, Ohio, to which we have already referred. Grunwald came from the Hungarian Yeshiva world, known for its inexhaustible capacity to remember everything, and then associate with enormous creativity from one set of laws to the other. The second was the late R Yechiel Michel Tukochinsky, author of the *Gesher haChaim*, a Jerusalem-based Yeshiva administrator, with origins in the Lithuanian Yeshiva world, with its contrasting capacity for penetrating analysis, leading often to surprising conclusions. The third is the *Yesodai Semachot* of R Aaron Felder, whose work by this name, in addition to containing his own analyses and guidance, records most significantly the rulings of his teacher, R Moses Feinstein, the most widely accepted American halakhic decisor of the twentieth century, and of his father, R Gedaliah Felder, who had the same reputation in Canada.

Our case is not uncharacteristic of the Lithuanian method. In a section of his work devoted to corpses burned during persecution, R Tukochinsky unequivocally recommends their interment, not so much because of a prohibition of not leaving one's dead unburied,[123] but to ensure that no BENEFIT (which prohibition continues to be operative) be ever derived from these remains.[124] He bases his decision on the Temura Gemara cited above.

Responsum of R Isser Yehuda Untermann, late Chief Rabbi of Israel, regarding sacks of earth containing the remains of Jewish martyrs prepared to be interred in Israel:

> " ... my opinion is to bury the sacks in a separate grave in the cemetery, and to erect a massive monument over it explaining just what is buried here ...[125] (This will from here-on-in be referred to as the Untermann Protocol).

B) The ensuing Preamble to the Protocol: Whereas:

1. The classic Jewish legal tradition requires burial of its dead,
2. and requires burial without delay,
3. and maintains that such burial is of benefit to the mourners permitting them to grieve,[126]
4. and because such burial is also of benefit to the dead: a) since the remains are now putrefying and ugly and should therefore not be seen by others;[127] b) because burial is part of the process of forgiveness for the sins of deceased,
5. and since it is prohibited to derive any BENEFIT from both corpses and objects on them or in their immediate vicinity,
6. and since all cremation is strictly prohibited,
7. and since bodies burned at the request of the deceased may not be interred in a Jewish cemetery,
8. but bodies cremated against the will of the deceased, must be buried in a Jewish cemetery,
9. and since, while body parts smaller than the size of an olive need not be buried, but are still prohibited from benefit,
10. and whereas the remains of the anonymous dead discovered inadvertently assume the halakhic status of *metay mitzvah*—imposing the obligation of incumbent, immediate burial upon its finder—to the extent that the discovered anonymous Jewish deceased legally acquires deed and title to the earth upon which he is found.[128]

C) The Protocol and recommendations

1. When human remains are (inadvertently) found, local legal (forensic) civic and religious authorities need to be consulted immediately.

[119] Shabbat 10:5

[120] And the litter itself, insofar as it is carrying a person who "carries himself", so-to-speak, is thus not carrying anything. This is actually not the final ruling with respect to the litter.

[121] ibid. Also cited by R Solomon Eiger [probably on behalf of his father, R Akiva Eiger] in his glossary to the Code of Jewish Law, Gilayon haMaharsha, Yoreh De'ah 362:2. R Akiva Eiger confirms this independently in his own Tosafot on this Mishna in Shabbat. So also R Isaiah Berlin-Pick, Rishon leTziyon on the Mishna Shabbat (op cit), and who sends us to R Judah Rozanes, Mishna laMelech on Maimonides, Yad, end of Eivel, to the effect that there is no obligation to inter olive-size portions of a corpse—what needs to be buried are "rosho veRubo"—the head and majority of the body.

[122] Rashash on the Mishna.

[123] He is not convinced that the obligation for charred remains is identical to that of a normal corpse.

[124] Gesher haChaim, vol. 1, p. 154.

[125] Resp. Shevet mi Yehuda, vol. 2, section Yoreh Dde'ah, #54.

[126] Modern psychological sources

[127] *Ma'avar Yabok*

[128] A full discussion of the parameters of "met mitzvah" may be found in my earlier article, Polak, op cit.

2. If there is even a remote chance that such remains may be of Jewish origin, the nearest Jewish rabbinic authorities need to be consulted immediately.
3. If a full cemetery or killing field is come upon, marked or unmarked, then except under the rarest circumstances, reinterment to another site is not recommended, and ignoring these remains so as to, for example, construct real estate (e. g. the shopping center in Vilnius) over them, is extraordinarily offensive to Jewish custom, life, traditions, and values and to the memories of victims, if victims they be, and should be vociferously avoided. Under no circumstances should they be either cremated, or buried in a gentile cemetery.
4. Since not all rabbis are expert in these matters, a copy of these Protocols should be forwarded to the local rabbinic administration in which the remains are discovered and a central clearinghouse established.
5. The remains should be immediately covered and kept covered, and where humanly possible, buried the same day,[129] in a Jewish cemetery close to where discovered, or sent for burial in Israel.
6. It is permitted to delay reinterment in order to do the forensic investigation to identify some or all of the victims or their persecutors.[130]
7. Survivor families who would normally mourn such victims need to observe *shiva* rites on the day itself of reinterment.
8. If the discoveries are likely a mixture of gentiles and Jews, all may be buried in a demarcated area of a Jewish cemetery.[131]
9. If the remains found are smaller than the size of an olive, the obligation for immediate burial is lifted, but the prohibition against benefit is not, and so all such discoveries should, in fact, be buried, not forgetting the Untermann Protocol discussed above.
10. There is a rich body of Jewish legal literature on the impermissibility of photographing the dead, for reasons already cited. Moreover, according to some authorities including Strashun[132] and others, this might extend to histology slides and similar minute samples so as to preclude violating the prohibition of "benefit." Where no issues of *pikuach nefesh* or medical education are involved, competent local halakhic decisors should be consulted regarding their disposition.
11. All graves of reinterred remains, or of remains of this type buried for the first time, need to bear elaborate explanatory markings as to their nature[133] ("the Untermann Protocol")
12. In a far-ranging discussion on the permissibility of human autopsy in Jewish Law, Rabbi Dr Abraham Steinberg speaks about the permissibility of autopsy for the purposes of discovering the cause of death that could save the lives of others, as in a plague, and of its permissibility in teaching medicine, and his study is too nuanced and lengthy to summarise here.[134] But the drawings in the Pernkopf Atlas, drawn by artists and scientists mostly with Nazi sympathies, based on corpses of prisoners executed by rogue civilian and military courts of the Third Reich, would normally fall under the prohibition of *benefit* from the dead. They might also likely fall under the prohibition of photographing the dead, which R Grunwald prohibits,[135] and of gazing at the dead, which is also prohibited.[136] Yet their use would certainly be permitted by most authorities to help save lives (*piku'ach nefesh*), as during surgery, and, following other authorities, even for medical education.[137] In all cases where using the Pernkopf Atlas becomes permissible, I would invoke the Untermann Protocol, which requires making it known to one and all just exactly what these drawings are. In this way, the dead are accorded at least some of the dignity to which they are entitled.
13. If the remains found have been burned, and appear to be the result of unsought violence, then their charred or cremated remains must be buried in a Jewish cemetery.
14. If fresh remains are found, not yet buried, which were clearly the result of a murder, then there is no need for a tahara (ritual washing of the body).[138]
15. A killing field or large mass grave should probably not be disturbed but *formally designated* as a Jewish cemetery, a *ritual procedure* familiar to many rabbis and Jewish burial societies. This ritual would include establishing unambiguous formal perimeters for all the graves in the area *(*for purposes of establishing sacred space and for *tziyon laKohanim*). A broad, fully-descriptive plaque detailing the events that took place on this site should be erected at once, following the Untermann Protocol.[139]

Background to the "Vienna Protocol"

This protocol is the result of a three-decade effort to address the legacy of Nazi medical science. That effort began in earnest in 1989 with the reports in the international press—based on the research of the historian Götz Aly—who had discovered that brain specimens of persons murdered in the Nazi 'euthanasia' killing operations had been retained in the collections of member institutes of the Max Planck Society. The Max Planck Society is the postwar successor to the renowned Kaiser Wilhelm research organisation under whose name, sponsorship and funding the institutes that collected the specimens functioned during the Nazi regime.

[129] The prohibition against *lina* kicks in upon discovery
[130] Polak, op cit
[131] Grunwald, *Kol Bo*, op cit.
[132] op cit
[133] Unterman, above.

[134] Steinberg, A "Autopsy," in the Encyclopedia of Jewish Medicine.
[135] Op cit, p. 36
[136] *Ma'avar Yabok*, essay 25, p. 95.
[137] Steinberg, op cit.
[138] Felder, Aaron, Yesodei Smochos, N.Y., np, 1974, p. 30.
[139] Protocol 15 was added in response to an inquiry about the ongoing forensic investigations at this time on the grounds of what had been the Sobibor Concentration Camp.

Aly's reports occurred in conjunction with revelations that university institutes of anatomy in Germany (and later Austria), included the remains of victims of Nazi terror. Investigations of two collections—the universities of Tübingen and Vienna—revealed that many of the victims had been executed following trials for political crimes or socialising with German women. In the case of Tübingen, many of the victims were Russian or Polish slave labourers who had been executed for trivial crimes or had died of so-called natural causes. In those instances, few victims were identified as Jews.

Since the reports in the 1980s, there have been continuing revelations of human remains being discovered in the collections of esteemed universities and research institutes. Within the past three years alone, new discoveries have been made, including brain specimens that were reported to have been buried by the Max Planck Society in 1990.

Given the secrecy and lack of information on the provenance of many of the specimens, and knowing the horrific reality of the Holocaust, it was assumed, and is still assumed, that heretofore unknown Jewish victims will be discovered. It is known that the anatomist Prof August Hirt of the Reichsuniversität of Nazi-occupied Strasbourg had Jewish prisoners from Auschwitz murdered in preparation for a special anthropological skeletal collection. Prof Hermann Voss and his technician from the Reichsuniversität of Posen (Poznan), in Nazi-occupied Poland, acquired the bodies of Jews from a nearby concentration camp from which they prepared death masks and defleshed skulls, some of which were sold to the Museum of Natural History of Vienna.

In 2014, the discovery of human bones on the Dahlem campus of the Free University of Berlin provoked a major investigation into the possibility that the human remains were from victims of Auschwitz that had been sent to the Kaiser Wilhelm Institute of Anthropology, Human Heredity and Eugenics as part of the research carried out by the institute's then director, Prof Otmar von Verschuer, and his Auschwitz-based assistant, Josef Mengele.

The location of the discovered remains in Dahlem is very close by the original building (presently a university department) that housed the Verschuer anthropology institute, the final destination for the specimens from the Auschwitz victims.

It is known that a significant proportion of the victims of the Auschwitz twin experiments performed by Mengele and his associates on behalf of Verschuer were Jews, thus raising the possibility that the human remains discovered in Dahlem were from Jewish victims. Another preferred victim group were the Roma-Sinti.

In addition to determining the provenance and identity of the victims and their appropriate burial and memorial, there arose the question of representation and reproduction of images of the victims. This issue accompanied the revelations regarding the renowned atlas of human anatomy edited by Prof Eduard Pernkopf of the University of Vienna; Pernkopf Anatomy. Given the known Nazi political sympathies of Pernkopf and his medical illustrators, as well as the fact that some of the published paintings included Nazi iconography (swastikas and the "SS" rune) in the artists' signatures, suspicions were raised as to the provenance of the subjects portrayed in the atlas and whether they may have been victims of Nazi terror.

In 1996, in response to an official request of the Israel Holocaust Authority, Yad Vashem, the Senate of the University of Vienna initiated a research project into the history of anatomy in Vienna between the years 1938 and 1945. The Vienna investigation determined that bodies of over 1300 executed victims of Nazi terror were delivered to the university institute of anatomy. Despite the absence of documentation, it is highly likely that some of those victims are portrayed in the Pernkopf atlas.

The University of Vienna ordered that all collections of human specimens in university collections be examined and, where the provenance was unknown, removed from the collections and buried. It was decided by the Chief Rabbi of Vienna, given the history of the Jews of Vienna during the Nazi period, that it must be assumed that some of the unidentified remains were from Jews and that all of the recovered remains should be buried, according to Jewish ritual, in a Jewish cemetery. That burial, in the Jewish cemetery in Vienna, took place on March 22nd, 2002.

With respect to the issue of "representation and reproduction of images of possible victims" portrayed in the Pernkopf atlas, there were many differences of opinion, as expressed by letters published in journals as well as articles, especially by librarians. Some called for the destruction of the atlas, others suggested that it be withdrawn from circulation in university libraries. Editions of Pernkopf Anatomy had been published in five different languages.

To the best of our knowledge there were never scholarly symposia to discuss the question of the continued publication and use of the atlas or the images. Originally published by the Vienna-based publisher, Urban and Schwarzenberg, the copyright and physical ownership of the original paintings are held by Elsevier Publishing of the Netherlands. In 1994, publication of the atlas was discontinued. Images from the atlas can be easily found on the internet. It is probable that thousands of copies remain in private collections.

In 2016, Prof Susan Mackinnon, director of the Center for Nerve Injury and Paralysis; Sydney M., Jr. and Robert H. Shoenberg, professor and chief, Division of Plastic and Reconstructive Surgery of Washington University, St. Louis, Missouri, and her associate Andrew Yee, requested permission from the publisher to reproduce a painting from Pernkopf Anatomy, which they used in teaching residents in reconstructive surgery. Prof Mackinnon, who had been using the anatomy atlas since the 1980s, had found some paintings to be especially useful in her practice of reconstructive surgery and, in her words, these images helped save lives or significantly improved the quality of life. Mackinnon and Yee also assert that there is no other atlas of human anatomy as detailed and accurate for their purposes as the Pernkopf Atlas. In ad-

dition to using the atlas for surgical instruction, Mackinnon and Yee instruct residents in the history of the atlas. The educational programme they have developed using the Pernkopf paintings are not sold for profit; they are only used for educational purposes.

In 2016, Mckinnon and Yee made two requests of the publisher, Elsevier publishing, for permission to reproduce the Pernkopf paintings for their educational programme. Their requests were denied by Elsevier, which argued "ethical reasons".

After further consideration involving Dr Sabine Hildebrandt, who teaches at Harvard and is an anatomist/historian and the author of the first comprehensive history of anatomy in Nazi Germany, and Prof (Em.) William Seidelman, an expert on the history of medicine in the Third Reich, Prof Mackinnon and Andrew Yee, together with Dr Hildebrandt and Prof Seidelman, formulated a request for an ethical review of the use of the Pernkopf paintings as requested by Mackinnon and Yee to Elsevier Publishing. This request was formally submitted to Rabbi Joseph Polak, a noted Orthodox Jewish rabbinical authority and expert on the question of medicine and the Holocaust and Prof Michael Grodin MD, director of the project on Medicine and the Holocaust at the Elie Wiesel Center for Judaic Studies, Boston University. Rabbi Polak and Prof Grodin were asked to advise whether the Jewish precept of Pikuach Nefesh, which gives priority to the value of human life over all other laws and commands, would be applicable in the case of Mackinnon and Yee's application to Elsevier Publishing.

After a detailed discussion with Dr. Hildebrandt, Rabbi Polak and Prof Grodin agreed.

The submitted protocol, authored by Rabbi Polack, addresses the two key issues arising from this history:

Jewish law and burial practices to be followed when the remains of possible Jewish victims of the Holocaust and Nazi medical practice are discovered and,

The application of the principle of Pikuach Nefesh in the use of paintings or images from tainted sources such as Pernkopf Anatomy

It should be emphasised that while the first issue applies to Jews and Jewish law and tradition, the second issue is a universal one that could have broader universal implications, irrespective of their faith.

The Protocol is the first known scholarly religious and ethical review to consider these issues arising from the tragic experience of the Nazi period and the Holocaust and their continuing legacy.

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