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# 1

## Prologue

On or around 12 July 1947, at the height of the Nuremberg Doctors' Trial, shortly before the rendering of judgement, a mysterious stranger, barely visible, broke into the office in the Palace of Justice of Major Leo Alexander, Consultant to the Secretary of War of the United States and medical expert of the Chief of Counsel for War Crimes. The stranger left a series of notes that were invisible in ordinary daylight. Alexander's enquiry revealed that the stranger had been a gremlin who 'claimed to have had a fleeting acquaintance with Archie the Cockroach and Mehitabel the Cat, but did not otherwise wish to identify himself'.<sup>1</sup> After having studied and transcribed the notes 'in a setting of infra-red illumination provided by high hydro-carbon compound during the late hours of the night', Alexander decided that the nature of the document required it to be 'classified as secret'. Its distribution was to be strictly limited to 'those members of the inside circle of OCCWC [Office of Chief of Counsel for War Crimes] who have had direct dealings with the Medical Case'.<sup>2</sup> What had happened? Had the medical expert for the prosecution finally gone mad or was he suffering from some undiagnosed hallucinations? Why was this document in any way relevant, and why must it be sent to the 'inner circle' of the US prosecution team under the leadership of Brigadier General Telford Taylor? Surely, members of Taylor's staff must have had more on their minds than Archie the Cockroach. Perhaps it was one of those foolish office pranks to lighten the depressing atmosphere of the awfully long trial proceedings? It was certainly that. But it was more than that. It was a parody of the Doctors' Trial in the form of a theatre play called 'Saturnalia', a feast celebrated in the Roman period in honour of the God Saturn.

Alexander tells us the story of a newly established court in New York City in which the judges had been recruited from the planet 'Saturnus' to ensure the 'utmost in complete detachment and objectivity'.<sup>3</sup> The defendants, Bullet-Hole Pete, Frog-Face Joe and Scar-Face Tony, were charged with the robbery and murder of John Doe, a payroll clerk.<sup>4</sup> Although the prosecution, represented by James M. McHaney, Alexander G. Hardy and Arnost

Horlik-Hochwald – and these, their real names – had amassed an enormous wealth of incriminating evidence, they were constantly challenged by the defence, which succeeded in shifting the emphasis of the trial on to a question that had little to do with the murder of the payroll clerk. The judges, in their attempt to be absolutely impartial, did not realise that they were playing into the hands of the murderers. The cast in the play obviously resembles the major players in the Nuremberg Doctors' Trial, including Alexander, who plays himself as the medical expert of the prosecution. Alexander must have loathed the judges for their legalistic approach to the case. In fact, he did so to such an extent that he transformed them into inhuman, alien creatures from another planet who had no conception of life and death, right and wrong, justice and injustice. Like machines, emotionless and without any sense of morality, they followed the cold logic of the trial procedure and what they considered to be the law. This is not the story of some Kafkaesque moral maze in which the hero finds himself charged by his own paranoid feelings of guilt. It is rather the opposite. These defendants and their lawyers have no moral conscience, no sense of guilt and responsibility. They felt they had done nothing wrong, nothing other than obeying orders; they saw themselves as the victims of circumstance, of victors' justice. As in this piece of theatre, none of the defendants in the Nazi Doctors' Trial was willing to take individual responsibility for the crimes he had committed; each argued instead that he had acted under orders from a higher authority.

The judges in the play do not speak the language of the defendants. They are ignorant men. Like silent listeners they receive information only through the 'distilling mechanism of translation', cleansed from any unwanted social, emotional and cultural connotations that might taint their apparent judicial impartiality. What Alexander seems to be asking is whether the judges in the Doctors' Trial really understood what was being said in the courtroom. Were they aware of the enormous human and material resources that were sometimes used for matters profoundly irrelevant to the trial? Throughout the play the twisted legal logic of the Doctors' Trial is humorously called forth and criticised – to the point at which the victim becomes the guilty party, a reference to the recorded humiliation of some of the victims in war crimes trials after the war. In the end the victim's corpse is ruled 'immaterial to case' because it raises too many controversial issues and the prosecution is asked to remove the exhibit. Mr Hardy, dragging the corpse across the stage and stopping next to Dr Alexander's chair, says: 'Doctor, you sure let us down this time. You said this guy was dead.' Dr Alexander: 'But isn't he dead?' Mr Hardy: 'He sure is – but we couldn't prove it.'<sup>5</sup>

This unusual document reveals some of the contemporary inner thoughts and feelings of one of the chief medical experts at the Nuremberg Doctors' Trial – the focus of this book. Who was this man who not only

parodied the Doctors' Trial, but who also challenged the judicial and moral belief system that made it so enormously difficult to prove the guilt of doctors who had immersed themselves so deeply in criminal behaviour? Alexander's biography allows us to look behind the curtain of Nuremberg and see the inherent problems of the trial, its artificiality and improvised construction. It was a unique event in modern legal history. Established by the American military authorities, the Nazi Doctors' Trial was the first of twelve Nuremberg war crimes trials that followed the trial of the major war criminals by the International Military Tribunal (IMT). Its official title was United States of America *versus* Karl Brandt et al. (Case I). Twenty doctors, including Hitler's personal escort physician Karl Brandt and three administrators, were charged with a common design or conspiracy, with war crimes, crimes against humanity and membership of an organisation declared criminal by the IMT.<sup>6</sup>

Yet, at the same time, the entire German medical profession was on trial – their moral integrity and scientific reputation. It was a scenario that had been totally unthinkable in pre-war Europe: German medical science had led the world, particularly in the fields of physiology, biochemistry, surgery and public health. The country's leading medical experts had been hailed for their innovative medical research and achievements for humanity. Now an 'odd' selection of this profession, as commentators noted, was on trial for murder and unspeakably cruel torture committed in the name of medicine and scientific progress. Contemporary observers noted that something must have gone badly wrong. But what it was and how exactly it had happened was a matter of enormous complexity, far too complicated for a trial in which the instrument of new and untested international law was being applied.<sup>7</sup>

Even more problematic was the task of developing a mechanism that would prevent doctors from committing such crimes ever again. Ultimately, the judges had to find a solution to resolve one of the most fundamental conflicts in human experimentation: to balance the need for advancements in medical science that benefit all human society with the right of the individual to personal inviolability, autonomy and self-determination. After 139 trial days, and after studying thousands of pages of evidence, the judges gave a tentative answer: a ten-point medical ethics code that laid down, for the first time, unmistakably and in writing, the human rights of patient-subjects and the responsibilities of physician-researchers conducting experiments on humans. Not all, but only 'certain types' of experiments on humans conformed to the ethics of the medical profession in the civilised world, the judges said. Human experimentation needed to remain within 'reasonably well-defined bounds'. Unless 'certain basic principles' were observed in order to 'satisfy moral, ethical and legal concepts', experiments on humans were not permissible. The medical ethics code became known as the Nuremberg Code.<sup>8</sup>

The Code established for the first time, and in written form, fundamental human rights in medicine, and placed the welfare of the patients in the foreground of medical practice. In the Nuremberg Code, as historian Michael Wunder has emphasised, neither medicine, nor science, nor society – nor any kind of collective or utilitarian ethics – has priority over the protection of the individual to remain physically and psychologically unharmed.<sup>9</sup> A person's right to self-determination and inviolability cannot be calculated against a more abstract need for medical progress, nor any other claim that society and science may or may not have towards its citizens. The principles of the Code demand it to be universally applicable so that 'experiments on humans do not violate moral, ethical and legal principles'.<sup>10</sup> Long before any kind of biomedical ethics movement was identifiable on the horizon, the Code stated, in lucid and unambiguous language, that the rights and integrity of the research subjects have to be preserved at all times.<sup>11</sup>

Of the ten principles, two (numbers one and nine)<sup>12</sup> specifically refer to the protection and rights of the experimental subject, and principle eight to their well-being. In the history of medical ethics, the importance of principle one has extended far beyond Nuremberg. The principle links the experiment to the *voluntary consent* of the experimental subject, meaning that the experiment can only be carried out after the 'voluntary, personal consent' has been obtained and after the subject has been clearly informed in the best possible manner.<sup>13</sup> The Code makes it unequivocally and categorically clear that the person involved in the experiment has to have the legal capacity to give a voluntary consent. Moreover, prior to obtaining consent, the exact nature, duration and objective of the experiment, the applied methods and means as well as all potential risks and all possible implications of the experiments for the health of the person have to be made clear. The research subject has to have sufficient knowledge and the capacity to comprehend the subject matter in order to make an enlightened and informed decision. This was meant to protect unconscious and mentally handicapped persons who, because of their specific illness, are unable to give voluntary consent. The Code made it clear that no experiments are legally and ethically permissible on the aforementioned patient groups. Since the late nineteenth century the status of the voluntary consent principle was greatly enhanced as a central element of medical research. For the first time, the Code transferred this principle as part of the Nuremberg judgement into international law.<sup>14</sup>

Likewise, principle nine deserves attention as another essential medical ethics law: the right of the medical subject to terminate the experiment at any time. The judges consciously formulated this principle as a right and not just a professional guideline. It constituted another legal precedent. These innovative patient rights were given further weight through the formulation of unequivocal responsibilities of the physicians to act responsibly

towards the patient at all times. The rights of the patient *do not* replace the obligations of the physician as outlined in principles two to eight. A patient who has given his or her voluntary consent cannot be used for a random number of experiments; these experiments cannot violate professional medical ethics standards just because the patient has consented to the research. That is why, according to principle ten of the Code, it is the duty of the scientist in charge to terminate the experiment on his or her own initiative and at any stage if there is reason to believe that the continuation of the experiment would, in all probability, result in injury, disability or death of the experimental subject.

The Nuremberg Code therefore constitutes a particular, and in many ways unique combination of human rights which are part of international law *and* the Hippocratic medical ethic.<sup>15</sup> For the judges Hippocratic medical ethics were certainly an important precedent and although they offered much with regard to protecting the welfare and lives of patients, they were insufficient in protecting lives in human experimentation. They realised that research subjects needed to have quite specific rights if they were to be sufficiently protected from potential harm. That is why the Code defined the conditions under which informed voluntary consent could be obtained in a more comprehensive and legalistic fashion than any medical ethics code preceding it. The consent principle in the Code thus demands the status of an absolute, *a priori* principle. Moreover, the experimental subject is given the right to terminate the experiment at any time. The Nuremberg Code is therefore a legal code and, at the same time, a medical ethics code. This is the Code's particular strength. Yet it is also the profound weakness of many other ethics codes: they have no legal status whatsoever and are little more than 'guidelines' to be interpreted by respective experts.

The Code was partly instrumental in supporting the judgement, but it was also directed towards a future world in which men, women and children would be protected from any unwanted violation of their rights to the integrity of the human body. It was not unusual for American judges to go beyond the facts of the case in front of them, if they felt that it constituted a precedent. Their judgement reflected a new case law to address the legal issues that had arisen from the precedent. The judges believed in the creation of an international legal and professional framework that would empower those who had suffered harm to defend their rights against those who had violated them. The Nuremberg Code was in many ways a visionary and innovative medical ethics code and its principles were designed to apply to all research involving human subjects. Even today, the Nuremberg Code has a significant symbolic, and in many ways an influential role in the field of medical politics, ethics and law.<sup>16</sup> It also serves as a major point of reference to determine whether scientists who conducted experimental research on humans complied with, or violated, medical ethics standards during the Cold War period.<sup>17</sup>

One person who helped formulate the Code was Leo Alexander. This is the story of one footsoldier working behind the scenes who managed to make a lasting impact on major historical events. Alexander's life can tell us much about an important, and in many ways controversial chapter in the history of modern research ethics. Since the early 1990s, I have been interested in the history of medical ethics, particularly in social, political and cultural history. Work by Charles Webster and Margaret Pelling, to name but two, has made significant contributions to the social history of medicine, and I believe that there is a need for a distinctly social historical perspective on modern biomedical ethics. Moreover, those who have 'written' the history of bioethics thus far too often appear to have been coloured by their relationship to the institutionalisation and professionalisation of bioethics as a discipline. In some cases their historical narratives were meant to serve vested interests or to canonise a certain image of the field. Since 1997 I have been publishing short articles and editorial works aimed at drawing attention to the role of history in the field of medical ethics.<sup>18</sup>

In 2002, I completed a study on the history of medical films, ethics and 'euthanasia' in Nazi Germany.<sup>19</sup> A great deal of archival research in Germany and Austria, Israel and Poland, Great Britain and the United States was needed in order to piece together a previously neglected film genre. A key focus of the study was the film work undertaken at the University of Frankfurt am Main by the German psychiatrist Karl Kleist and his pupils in the late 1920s. Among them was Leo Alexander.<sup>20</sup> These researchers were interested in eugenics, the science of improving the hereditary make-up of a particular people. Research in the field of eugenics was later put in the service of Nazi racial policies. Medical films made by Kleist and others during the Third Reich affirmed theories of racial purity and sanctioned eugenic policies. Yet Alexander's name was absent from films produced after 1933. When the Nazis came to power in January 1933, he found himself stranded in China, where he was conducting research under the support of a Rockefeller fellowship. Unable to return to Germany because of his Jewish background and Austrian citizenship, he emigrated to the United States. Whilst undertaking research at the Imperial War Museum, London, and the National Archives, Washington DC, I repeatedly encountered Alexander's name, not as a film-maker, but as a high-profile US war crimes investigator and the author of a series of highly classified intelligence reports that he had written on behalf of the Supreme Headquarters Allied Expeditionary Forces (SHAEF). My curiosity became greater still when I came across a footnote about Alexander in a manuscript on German neuropathologists.<sup>21</sup> Apparently Alexander had kept a number of diaries during his war crimes investigations in 1945, and I was surprised that no one had ever edited or published excerpts from them. Was it that that had turned this young, successful Austrian physician into a major war

crimes investigator and, as I soon realised, into the medical expert for the prosecution in the Doctors' Trial?

I became interested in the social history of the Nuremberg Doctors' Trial, this trial of trials that put the issue of human rights in relation to human experimentation so strongly on the map of international law and medical morality. Through a contact in Holland, I was able to get in touch with Alexander's daughter, Cecily Alexander-Grable, who lives in Boston. She readily opened up the family home that had housed her father's private papers for years. Other archives in Koblenz, Boston and New York supplemented Alexander's official and unofficial papers. In 1997/98 I also discovered one of Alexander's original diaries in the Depository for Medical Center Records in the Duke University Archives in Durham, North Carolina.<sup>22</sup> It soon became clear that Alexander was a man who had done much of the essential background work in the Doctors' Trial. He had interrogated the defendants, both before and during the trial, studied their mentalities and rationale for committing medical crimes, followed the witnesses who were prepared to testify in court, written dozens of memoranda in preparation for the prosecution's case, and published extensively on the possible psychological causes behind the perpetration of war crimes. Despite this, his contribution to the Nazi Doctors' Trial had received very little recognition.<sup>23</sup> The present study addresses some of the misconceptions about the trial, and it aims to pose new questions, particularly about the work which happened in the background, before, during and after the trial.

A book about a single individual in the context of the Doctors' Trial obviously involves a number of methodological and conceptual risks. There was, after all, no shortage of literature and published material on the trial. Alexander Mitscherlich and Fred Mielke's acclaimed edition *Das Diktat der Menschenverachtung* from 1947, published as *Wissenschaft ohne Menschlichkeit* in 1949 and as *Medizin ohne Menschlichkeit* in 1960, as well as Alice Platen-Hallermund's book *Die Tötung Geisteskranker in Deutschland* from 1948, were important milestones in the historiography about the trial.<sup>24</sup> All three authors had been members of the official doctors' commission (*Ärztelkommission*) that was sent to Nuremberg by the German medical profession to report on the ongoing trial, work that was extensively examined by Jürgen Peter.<sup>25</sup> Most of this body of literature looked at the official side of the trial, presented evidence of grim experiments that had been introduced by the prosecution, and attempted to find an explanation – psychological or otherwise – as to why doctors had become murderers in the name of medical science. In 1950 the French naval psychologist Françoise Bayle published *Croix Gammée Contre Caducée*, a book that was largely based on handwriting samples and physical measurements of the defendants. Bayle's work stood in the tradition of nineteenth-century European racial anthropologists and psychologists such as

Paul Broca (1824–80) in France or Cesare Lombroso (1836–1909) in Italy, who wanted to establish a scientific link between physiognomy and criminality.<sup>26</sup> Likewise, the publication of the ‘desk notebook’ of the presiding judge in the Doctors’ Trial, Walter B. Beals, offered little to improve our understanding of the history and long-term effects of the trial.<sup>27</sup> What all the work had in common was that it failed to examine the origins of the trial, and overlooked the Allies’ alternative plans and controversies, as well as the role of the men and women involved in staging this international media and legal event at the dawn of the Cold War. It was not until the early 1990s, with the publication of George Annas and Michael Grodin’s pioneering study, *The Nazi Doctors and the Nuremberg Code: Human Rights in Human Experimentation*, that the trial and its implications for the history of bioethics eventually received the scholarly attention it deserves.<sup>28</sup> In this volume, Grodin offered an excellent initial survey of the historical origins of the Nuremberg Code, one that addressed the role of the medical experts, including Leo Alexander and Andrew Ivy. Since then, the fiftieth anniversary of the Nuremberg Code gave historians of medicine, health professionals and legal experts an opportunity to address the far-reaching importance and shortcomings of the Code in protecting human rights in experimental medicine.<sup>29</sup>

The availability of secondary materials, and the publication of new primary sources, makes a comprehensive study, in this case through the medium of a biography, particularly appropriate. For example, the superb microfiche edition of the entire trial transcripts, edited by Klaus Dörner and Angelika Ebbinghaus in 1999, includes previously unpublished documents by the prosecution and the defence as well as material related to the background and consequences of the trial. It offers scholars an extensive body of new material that allows for an in-depth analysis of the evolution of one of the most significant events in modern legal history.<sup>30</sup> This book is an attempt to link the personal history of Alexander’s life with the social and political history that shaped the responses to the legacy of the Third Reich in the mid-twentieth century. The implications of this history reach far into our present-day reality, where war crimes tribunals and truth commissions are being established to put criminals like Slobodan Milosevic on trial at The Hague, or offer spaces for collective catharsis and, perhaps, societal healing in places such as Chile and South Africa. The history of the Nuremberg Doctors’ Trial and the Nuremberg Code also plays a central part in the debate about modern medical research ethics, particularly in relation to the extraordinary advances witnessed in modern biotechnology and genetics. These developments make us question the extent to which society can (or should) permit scientists to manipulate and control human life. They also raise the question as to whether the continuing modification of ethics codes and the establishment of ethics committees in places of medical learning provide sufficient safeguards to protect the rights and

dignity of patient-subjects. Scholars of modern medical ethics need to examine the tradition in which the Nuremberg Code was formulated to determine whether previous ethics codes were merely token documents to protect medical professionals from legal liability and embarrassment or whether they constituted meaningful and effective tools to regulate contemporary research practices. Only then are we able to appreciate the historicity and universality of the Nuremberg Code.<sup>31</sup>

A biography naturally runs the risk of turning into a whiggish history of a 'famous great man', or one of many who have apparently determined the course of history. In the past, scholars have often written with hidden admiration, or in some instances with a revulsion for their subject that tends to cloud our understanding of the complexities that shape human societies and direct the course of history. Biography assumes a certain empathy on the part of the author for his subject, but not so much sympathy or uncritical admiration. A central concern of this book is the social, political and cultural realm in which the subject operates, sometimes actively, but more often passively and in response to developments that are largely beyond his sphere of influence. I am interested in how individuals, in this case the Jewish émigré scientist Alexander, attempt to remain in control of their lives, and how they regain control if they feel they are about to lose it. In other words, I am interested in how people devise survival strategies in the face of ever-changing political situations, or how they adapt and acculturate to new and foreign environments that demand different social and professional codes of conduct. How do people think and feel who live lives of permanent transience, uprooted in many ways, undoubtedly, but also strangely rooted by default, so to speak, in themselves and their moral belief system? This naturally involves conflicts with institutions and large administrations, with other individuals and ideas that challenge or appear to challenge their role in society.

A history of modern medical ethics must, I believe, be a social history of interest groups and organisations that attempt to succeed (sometimes through negotiation and compromise, at other times through power and command) by defining and codifying what is ethically right and good for a society. It should also be a history of individuals who, when confronted with particular circumstances, attempted to influence the debate, either directly or indirectly, and with varying degrees of success – as Alexander did in Nuremberg and thereafter. This being the case, the present study has two points of focus: it examines the key historical forces that shaped the creation and implementation of ethics guidelines before, during and after the Doctors' Trial, and at the same time, it concentrates on the life of Alexander, the man who was himself responsible for many of these developments. Alexander realised that any useful analysis of Nazi medicine and its ethical implications required a broad social and political perspective: 'I believe that we do not contribute to our understanding of historical events

if we simply “question” whether these experiments had been carried out when they seem incredible to us. Instead we must face the facts, ascribing them to the power which social and political forces have upon the practical aspects of scientific and medical endeavour.<sup>132</sup>

The trial stands at the crossroads of modern biomedical research ethics and highlights the importance of patients’ rights and medical jurisprudence in medical science and practice. We need to acknowledge, however, that these issues are part of a long and complex history of medical professionalisation that saw doctors negotiating and renegotiating their position with respect to both society and the state. Historically, the trial is part of a series of failed attempts to introduce effective regulations in medical research involving human participants. To be clear, the Nuremberg Doctors’ Trial is not a success story: it is quite the contrary. The tension between nineteenth-century medicine as a middle-class, bourgeois profession in which courts of honour functioned as self-disciplinary bodies that codified medical ethics, on the one hand, and the increasing political and state influence on medical practice, on the other, meant that the organisation of vested medical interests became a central objective of the profession. In general, medical practice and research continued to be governed by professional and social duties. It was a paternalistic system in which doctors decided what was best for patients on the basis of existing medical knowledge and codes of professional conduct.

Medical ethics codes were to guide the profession in its conduct and secure its social and professional standing, but were not to rule, govern or interfere with experimental medicine. In 1803, Thomas Percival commented that the principles of his ethics code were ‘not laws to govern but principles to guide to correct conduct’.<sup>33</sup> But Percival also noted that investigators searching for new remedies had to be ‘scrupulously and conscientiously governed by sound reason, just analogy, or well authenticated facts’ and had to consult with their peers before departing into uncharted medical territory. One of America’s oldest ethics codes, formulated by William Beaumont in 1833, already contained many of the principles (although most of them only by inference) that would later inform the judges at Nuremberg. According to Beaumont, researchers should conduct experimental work on humans only if the information could not be obtained by other means, for example through animal experimentation, and if the investigators were conscientious and responsible in their research. They had to abstain from random trials, obtain the voluntary consent from the patient-subject and had to be prepared to discontinue the experiment if it caused distress to the subject, a principle which the Nuremberg judges turned into a ‘moral duty’ of the physician/investigator.<sup>34</sup> The language in which most medical ethics codes were written, especially those within the Anglo-Saxon tradition, was often rather vague and subject to general interpretation in order to leave investigators with the

freedom of discretion, as was the case with the Code of Ethics of the American Medical Association that was adopted in May 1847.<sup>35</sup> Claude Bernhard's personal code from 1865, which was based on Christian morals, is another case in point. He claimed that human experiments 'that can only do harm are forbidden, those that are harmless are permissible, and those that may do good are obligatory'. Yet Bernhard did not define the boundaries of what constituted permissible and non-permissible experiments on humans, nor did he make it clear whether experiments were permitted if they were random, badly organised or unnecessary, even if they were harmless.<sup>36</sup> Ironically, the country that began to develop the most stringent and clearly defined medical ethics regulations at the end of the nineteenth century was Germany.

As early as 1891 the Prussian Ministry of the Interior issued a regulation ensuring that tuberculin would 'in no case be used against the patients' will' for the treatment of tuberculosis. Three years later the German Supreme Court stressed that surgical and other potentially life-threatening treatments required the patients' consent. In 1900, the Albert Neisser case caused a public furore when it was discovered that Neisser had injected serum from patients suffering from syphilis into a group of eight patients, mostly prostitutes, who were suffering from other diseases. He had neither informed the women about the risks involved, nor had he obtained their consent. Legal experts pointed out that, according to criminal jurisprudence, Neisser had committed an act of physical injury by failing to obtain the women's consent, and one of them even noted that the 'respect for rights and morality has the same importance for the good of mankind as medical and scientific progress'.<sup>37</sup> Although the medical profession closed ranks to protect one of its peers, some doctors stressed the importance of the informed consent principle for upholding medical ethics standards.

Among these doctors was Albert Moll, a Berlin psychiatrist and advocate of Christian medical ethics. In 1902, Moll published *Ärztliche Ethik. Die Pflichten des Arztes*, a book that chronicled dozens of cases of unethical research on humans.<sup>38</sup> Moll had observed that the violation of medical ethics principles appeared to be the result of increasing specialisation of physician-researchers in modern medical practice. The over-emphasis on a particular field of expertise sometimes led to the narrowing of doctors' perspectives. It was not uncommon for experiments on humans to reveal a lack of protection for research subjects; they were often wholly unnecessary and badly organised, and showed a disrespect for the dignity of the subjects, both in the language used to describe the experiment and in its execution. Some scientists simply seemed to 'gamble' with human lives.<sup>39</sup> For Moll, issues of autonomy, beneficence and informed and voluntary consent were of fundamental importance in research involving human participants.<sup>40</sup> He also questioned the so-called voluntary nature of the consent that patient-subjects gave to their physician-researchers, suggesting that in

many instances a certain degree of coercion was not uncommon. Moll seems to have been particularly concerned about the welfare and rights of vulnerable patient groups such as children, the handicapped and terminally ill patients, who were, and often still are, used for experimental research on a regular basis.<sup>41</sup>

In 1900, hospital and clinic directors had already been advised by the authorities that research on humans was prohibited 'if the human subject was a minor or not competent for other reasons', or had not given unambiguous and informed consent.<sup>42</sup> Nonetheless, the response to these new guidelines was mixed. Medical ethicists such as Moll realised that the new regulations were insufficient and probably would turn out to be ineffective in protecting patient-subjects from psychological and physical harm because they were too general in certain areas and too specific in others.<sup>43</sup> Moreover, it was not the case that the informed consent principle suddenly became a matter of great significance for the profession as a result of these changes in medical regulations. Likewise, informed consent did not figure prominently in the profession's disciplinary procedures. On the contrary, throughout the early part of the twentieth century the majority of doctors continued to engage in controversies about illegitimate competition through advertising, the poaching of patients, financial misconduct, slander and libel, lack of collegiality or alleged sexual offences: in short, about matters relating to professional status and reputation.<sup>44</sup> Medical ethics issues, in other words, continued to be largely concerned with (and defined by) the profession itself. This meant that the concerns of patients and their families would only receive sufficient attention when the reputation of the profession as a whole was at stake, as it was during the Nuremberg Doctors' Trial, or in a number of previous scandals that involved the use of human subjects. Since the turn of the century, a certain pattern had begun to emerge: whenever members of the medical profession were guilty of serious professional misconduct that aroused the public conscience, the authorities reacted by issuing modified or stricter ethics guidelines which, as soon as the public debate subsided, were mostly ignored or treated as a mere pro-forma measure by the profession.

For example, at the end of the 1920s, a series of unethical and in some cases fatal experiments on children prompted public debate about medical ethics standards and the reform of the German penal code.<sup>45</sup> In February 1931 the Reich Ministry of the Interior therefore issued the 'Regulations Concerning New Therapy and Human Experimentation'.<sup>46</sup> The directives were among the most comprehensive research rules by any contemporary standards and some elements were even more elaborate than the principles of the Nuremberg Code. Contentious issues such as individual autonomy, beneficence, informed voluntary consent or therapeutic and non-therapeutic research were addressed in order to protect the rights and dignity of patients. Thus, remarkably, Germany was one of the few countries which,

by the 1930s, had introduced state directives for the protection of human subjects in clinical research. In particular, the guidelines aimed to protect the most vulnerable groups of society: the handicapped and children, for example. Significantly, they were also the first victims of the Nazi racial programme. These German ethics guidelines from the 1930s offer poignant proof that ethics codes and other professional regulations are insufficient in themselves to protect patients from serious bodily harm, disability and death.

In the frank discussions that preceded the promulgation of the regulations, Julius Moses, a social hygienist and member of the German parliament, criticised doctors for their lack of respect for patients, for their use of humans as research objects and for their general ignorance of medical ethics issues.<sup>47</sup> Many Weimar physicians, on the other hand, argued that unethical experiments on children were rare instances of professional malpractice that needed to be balanced against the importance of medical progress for society. Without such experiments, they proclaimed, the advancement of medical science would be prevented.<sup>48</sup> The representatives of the German medical profession were in agreement that a set of official ethics regulations for research on humans needed to be formulated. But they also realised that medical ethics codes (and legal regulations, more generally) would be of limited effectiveness unless the profession itself was fully committed to adhering to its own principles.

Central to the effectiveness of ethics regulations is an efficient dissemination and communication process. We know, for example, that the 1931 regulations were given to the Reich Justice Ministry and to the Reich Ministry of the Interior for comment, and that they were accepted in both cases.<sup>49</sup> As for original intentions, we know that all German doctors were to acknowledge the regulations in writing when entering into a new employment contract with hospitals and other health-care institutions. It is unclear, however, why the regulations failed to achieve wide circulation, and why their influence on the profession remained almost negligible. The incoming Nazi regime may well have blocked any further distribution, but there is also relatively little information showing that young doctors acknowledged the Reich regulations. The German medical profession does not seem to have been indifferent to the issue of medical ethics in human experimentation, but doctors appear to have been inadequately informed about their professional responsibilities and about legal limitations in experimental research. Without the commitment of the medical profession and the government to protect the health of human subjects – something that was in short supply during the Third Reich – the ethics regulations remained ineffective and were probably of little relevance.

The crimes under discussion at Nuremberg, especially the Nazi concentration camp experiments, represented a profound departure from previously accepted medical and human behaviour in Western societies. It

was the 'low water mark in twentieth century moral culture', as Robert Proctor has written.<sup>50</sup> In February 1947, a trial commentator compared the fundamental shift in medical morality in Nazi Germany to a slow and invisible chemical reaction until a sudden change of colour (*Farbumschlag*) indicated that the reaction had already taken place.<sup>51</sup> Central to this 'change of colour' was a shift from ethical positions concerned with the well-being of the individual to biologicistic ethics aimed at purifying the race, an uneven and twisted process that was rooted in nineteenth-century social Darwinism and the racial hygiene movement. This book attempts to understand those individuals whose lives were profoundly affected by these developments, and those who wanted to ensure that medicine would never again follow the path of racial and social engineering.

To reiterate, this book has a dual focus: it places a single individual within the context of major political developments that shaped the character of modern European history, and, at the time, it looks closely at the Nuremberg Doctors' Trial, examining its historical genesis and addressing its implications for modern biomedical research ethics. A central concern of the study is how at Nuremberg the United States and its allies put Nazi medical 'science' on trial through the commitment and visionary outlook of men like Alexander. This is therefore not a biography in the conventional sense, one in which the subject remains the focus of the narrative at all times, but rather one that allows itself to be guided by the richness and diversity of the source material, and by the multiplicity of factors that help to explain the nature and outcome of the trial. The first two chapters explore the historical forces that shaped Alexander's social background and intellectual mentality before the end of the Second World War. This analysis offers fundamental insight into the cultural, professional and religious beliefs that would eventually inform the positions and decisions he reached later, especially during his time in Europe. I will discuss his upbringing in Austria around the turn of the century and life among the Jewish medical élite. This includes his early experience of anti-Semitism and the process of assimilation in Austria in the 1910s and 1920s. Alexander's professional training in Weimar Germany, his experience of emigration after 1933, first to China and later to the United States, and his cultural and religious roots are key stages and recurring themes in his life necessary for understanding his responses and attitudes towards German medical war crimes. Their analysis helps to gain insight into Alexander's obsessive search for incriminating evidence and explains why he was most suited as an Allied war crimes investigator.

In Chapters 4 and 5 I turn to the period that first saw the discovery and then the investigation of medical war crimes, followed by largely improvised Allied preparations for a series of international war crimes trials. Alexander's relatively brief tour of duty through various occupied zones in the war's immediate aftermath is reconstructed in detail to allow for an

understanding of the historical environment in which the Doctors' Trial occurred. Most of Alexander's investigative work was carried out in a climate that approximated a political, administrative and legal vacuum. It was an environment in which most of the future defendants were willing to co-operate and in which war crimes trials were not yet instituted. Particular attention is given to the planning and organisational stages of the trial in which different approaches to prosecuting war crimes were discussed and dismissed, modified and sometimes influenced by developments that were outside the control of those on the ground. More specifically, I examine the groups of experts who pushed the Nazi Doctors' Trial forward, to the point at which individual defendants were 'shared' between the Allies or 'moved' to different occupied zones in order to stage the American-led Doctors' Trial. In short, these chapters document the road that led to Nuremberg through the life and work of Leo Alexander, particularly the social and political forces that dictated the shape of the trial.

The construction of the trial and the origin of the Nuremberg Code form the basis of Chapters 6 and 7, where I examine the strategies employed – and failures experienced – by the team of prosecutors in mounting their case against the Nazi doctors. I explore Alexander's understanding of Thanatology, the science of producing death, an offshoot of Raphaël Lemkin's genocide concept, which had previously been applied with some success in the IMT. The genocide concept became the overarching conceptual framework for all subsequent Nuremberg trials. Here, some particular dramatic moments of the trial are discussed, for example when Alexander presented four of the Ravensbrück victims of medical experiments to a shocked international audience in the courtroom. In addition, the chapter will explore the response which Alexander's presentation generated from the defendants and their lawyers. His first-hand knowledge of some of the defendants and his in-depth understanding of German medical science, together with his language skills and professional ambitions, made him an ideal expert who was able to supply the prosecution and the court with valuable information regarding the ethics of human experimentation. In the second half of the trial the question of what constituted ethical and legal experiments on humans became of paramount importance. Eventually, the judges themselves interviewed some of the witnesses to find out what the accepted medical ethics principles in the Western world actually were. For this reason, I will examine the step-by-step evolution of the Nuremberg Code, and offer a tentative response to controversial questions regarding its authorship.

In Chapter 8 I look broadly at the effectiveness of the Code in influencing Anglo-American research culture from the early days of the Cold War in the 1950s to the 1970s, when issues surrounding bioethics began to dominate the political and scientific debate. I also examine

Alexander's theoretical work on the psychological causes of war crimes and his charitable work for some of the victims of Nazi human experiments. Broadly speaking, this concluding chapter focuses on social and political forces that shaped post-war biomedical research. For a long time the Code was seen as 'A Good Code for Barbarians', that is for German medical scientists, and was given little serious consideration in the Western scientific establishment.<sup>52</sup> I look at the way in which the international medical profession revisited the issue after the war by establishing the World Medical Association (WMA) and by promulgating a watered-down ethics code at the beginning of the 1960s, the so-called Helsinki Declaration. The Helsinki Declaration was one of many strategies developed by the medical profession to ensure that the level of legal liability – and indeed public embarrassment – of researchers and their institutions would be kept to a minimum at a time when civil liberty and human rights groups were exposing medical ethics violations in the United States and elsewhere. The chapter concludes with some of Alexander's reflections about his role at Nuremberg in the late 1970s. The exchange of ideas and information between Alexander and the New York psychiatrist Robert J. Lifton provides insight into the construction of historical narratives, and thus into the historiographical origins of one of the first major studies on Nazi medicine.

In this study, I argue that a social history of modern medical ethics and an understanding of the value of the Nuremberg Code, irrespective of the fact that it needed to be modified to take account of modern biomedical research, can make a valuable contribution to the future protection of patient-subjects in human research. A comprehensive study of the Nuremberg Doctors' Trial and the Nuremberg Code cannot be limited to the genesis and implementation of modern biomedical research ethics; rather, it must also engage with the wider history of international law and the development of human rights in medicine and science. International public outrage over Nazi atrocities stifled the political will and determination for compromise in the United Nations that led to the Declaration of Human Rights in 1948. The Nuremberg trials, including the Doctors' Trial, constitute in many ways the organisational and legal predecessor of the current war crimes tribunal in The Hague, where perpetrators can be tried, for example, for crimes against humanity, a legal concept that was applied in Nuremberg for the first time in history. The Hague Tribunal and the newly established International Criminal Court (ICC) only represent the tip of the iceberg in what is an important, though in many ways long and protracted process towards a more globally defined, international civil, human rights, and patient law that one day might be enforceable in concurrence with national bodies. This would mean that human beings would at last become the subject of medical research and practice, protected by national and international law against professional, economic or institutional abuse and exploitation. This would also mean that some lessons may

have been learned from Nazism and its destructive effects on medical morality. Benjamin B. Ferencz, one of the prosecutors of the Nuremberg trials and a passionate expert in international law, recently said in an interview: 'The true sovereign of international law, that becomes more and more clear, is the human being. Only his or her protection matters.'<sup>53</sup>

Human research is – or should ultimately be – a dialogue between two equal subjects, and should remain so even if this exchange causes progress to be slowed along the way. Unless we see this dialogue as an essential part of the research process, and unless we are willing to pay a certain price for this dialogue to take place, medical ethics codes and other professional regulations amount to little more than lip-service. There is a continuing need (perhaps never more pressing) to balance the advancement of medical science with the protection of human and patient rights. In 1963, Bradford Hill remarked that the 'ethical obligation always and entirely outweighs the experimental', but in order to negotiate these two equally important values, which often stand in juxtaposition, researchers need to comprehend their own moral and ethical obligations, and also understand their evolution over time.<sup>54</sup> Doctors need to acknowledge that moral codes are formulated by man and thus subject to change. At the same time, however, they should be constantly mindful that both medicine and society must always uphold certain universal principles, including respect for the inviolability of patient-citizens and the right of the individual to self-determination. A social and political history of modern medical ethics in the twentieth century can, I believe, contribute to a balanced and rational decision-making process in order to face the moral challenges that lie ahead in the area of genetic engineering. An informed historical discourse can perhaps also make the case for changes in the research environment that would ensure that patient-subjects come to realise that research is not therapy, and that trust in the doctor–patient or investigator–subject relationship results from the conduct of the physician-investigator. In short, we need to improve the public understanding of the historical processes at work in medical practice, lower public expectations regarding the effectiveness of certain treatments and outcomes of research, draw attention to the risks involved in experimental studies, and reduce the level of uncritical trust that patients may place in the therapeutic quality of experimental research. Ultimately, as Jay Katz has pointed out, doctors have to learn, and perhaps be educated, 'to respect patient-subjects as persons with minds of their own and with the capacity to decide for themselves how to live their medical lives. The choices may or may not include a willingness for altruistic self-sacrifice, but such choices must take precedence over the advancement of science.'<sup>55</sup>

This book traces the history of how medicine became the subject of greater accountability and scrutiny through the medium of the biography of Leo Alexander. In doing so, it explores the social and political forces that

called for the protection of subject-citizens in experimental research. The international medical community has come a long way in realising that medical progress is itself of little value if the people who practise it sacrifice the lives of those for whom it is intended along the way. A book about the Nuremberg Code can perhaps remind us that only the protection of human beings, their lives, dignity and human rights, really matters.

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