Ethics, Medicine and Public Health (2017) 3, 452—459

Available online at
ScienceDirect
www.sciencedirect.com

Elsevier Masson France
EM|consulte
www.em-consulte.com

THOUGHTS

The Nuremberg veil

Le voile de Nuremberg

B. Goss

Saint Louis University, Albert Gnaegi Center for Health Care Ethics, Salus Center, 3545, Lafayette Avenue, St. Louis, MO 63104, United States

Received 23 August 2017; accepted 25 September 2017
Available online 22 November 2017

KEYWORDS
Human rights abuses;
Liberalism;
Nazi medicine;
Nuremberg Trial;
Research ethics

Summary Subject autonomy is widely considered the distinctive achievement of contemporary research ethics. Popular history claims that there were no attempts to protect subject autonomy or informed consent until the Nuremberg Doctors' Trial brought the Nazi research abuses into infamy. This is however a false history. There were at least two research codes in Europe before the Nazis: the Prussian Decree of 1900 and the German Reichsrundschreiben of 1931. Ironically, these codes had stricter demands for subject autonomy and informed consent than contemporary research codes like the Belmont Report and the Nuremberg Code. Yet, the strict demands were overridden by the Nazi state once it faced the emergencies of war. This historical lesson reveals a fundamental flaw in political liberalism, which caused the pre-Nazi codes to fail. But during the Nuremberg Trial, Allied prosecutors were manipulated by the Nazi defence into forgetting about these pre-Nazi codes. Consequently, a frightening lesson from history was lost to modern ethicists. Modern research codes remain vulnerable to the same problem that caused pre-Nazi codes to fail. Thus, recovering this lost history is as important as ever.

MOTS CLÉS
Abus des droits de l'homme ;
Libéralisme ;
Médecine nazie ;

Résumé L'autonomie de la personne est largement considérée comme un sujet à part entière de la recherche contemporaine en éthique. L'histoire populaire affirme qu'il n'y a pas de tentative pour protéger l'autonomie d'une personne ou le consentement éclairé jusqu'à ce que le procès de Nuremberg condamne les abus de la recherche nazie. Ceci est faux. Il y avait au moins deux codes de recherche en Europe avant les nazis : le décret Prusse de 1900 et le *Reichsrundschreiben* allemand de 1931. Étonnamment, ces règles étaient plus exigeantes sur l'autonomie de la personne et le consentement éclairé que le rapport Belmont et le code de Nuremberg.

E-mail address: boaz.goss@slu.edu

http://dx.doi.org/10.1016/j.jemep.2017.09.011

Procès de Nuremberg ; Éthique de la recherche

Pourtant, les Nazis sont passés outres ces exigences avec l'urgence de la guerre. Cette leçon d'histoire met en évidence une faille du libéralisme politique qui a fait que ces règles prénazies n'ont pas été respectées. Et pendant le procès de Nuremberg, les procureurs alliés ont oublié l'existence de ces règles. Par conséquent, une leçon effrayante de l'histoire a été perdue pour les chercheurs en éthique modernes. Les règles modernes établies par les chercheurs restent vulnérables de la même façon. Par conséquent, faire revivre l'histoire oubliée est important.

Allow me to narrate the most familiar story in bioethics. A now-infamous researcher was hoping to discover a treatment for syphilis. He decided to conduct research on a population known for their exponentially high syphilis rates. The surrounding culture had a heavy prejudice against this population that we would now consider extremely vulnerable. These subjects were believed to be so sexually depraved that they were villainized as a threat to both moral and racial purity. Something had to be done about their disease and new medical research was a promising solution.

Over the years of research, abuse of these subjects became evident. Subjects were not told they had syphilis and no effort was made to inform them about the nature of the research or get their consent. Medical professionals uninvolved with the study were the first to sound the alarm. Most notable was a whistleblowing article detailing a plethora of abusive research studies, which included the syphilis experiments. Eventually, public outcry spurred government intervention. The study would become infamous and in reaction, the government would sponsor the creation of a decree — a report of sorts that was not legally binding. The report was an attempt to bring individual liberty, an axiom of classic political liberalism, to the forefront of medical practice. Except now the axiom was repackaged under a new name: ''subject autonomy''. It was declared that respect for individual liberties — subject autonomy — would protect each individual's rights to life and liberty from infringement by state power.

Now you probably think this is the story of the Tuskegee syphilis experiment in America (1932—1972) and the Belmont Report. Except this is not the story of Tuskegee and the rise of American bioethics. This is the story of Dr. Albert Neisser's syphilis experiments and the Prussian government's response in 1900.

We like to think that contemporary Western bioethics is the latest in a long, unbroken line of victories for political liberalism. Bioethics emerged in reaction to the Holocaust and will forevermore protect individual rights against horrible abuses by doctors and governments. Liberalism freed citizens from kings, now liberalism frees subjects from researchers through bioethics.

But this ''new'' liberal strategy in bioethics is actually an old failure. Injecting medicine with a heavy dose of individual freedom in the name of liberalism has catastrophically failed at least twice in the past 150 years. The Prussian code of 1900 contained the Four Principles long before Beauchamp & Childress' famous text. The Reichsrundschreiben was German law in 1931 and had stricter patient protections than the Belmont Report or any other American research code. Yet, the individual freedoms promised by these codes and underwritten by liberalism were blotted out by state force.

Even worse, the horrific abuses liberalism failed to stop were not themselves departures from liberalism but the culmination of it. Liberalism's problem lies in how it imagines politics as a tug of war between state power and individual power. Maintaining a balance between the two is an endless struggle. Historically, we see with the rise of the liberal state that individual freedoms are always dependent on state power. The state agrees to tolerate certain individual actions and protections in exchange for power over the individual. In liberalism, individual freedom and state power are not opposing poles: individual freedom is always provided by state power. Ultimately, the state holds all the power. In crisis, the liberal state devolves into Hobbes' Leviathan. A state will tolerate many freedoms in peace, but freedom and even rights will disappear when the state is threatened. Sacrifice of certain individuals for the good of the state is indeed the primary argument of the Nazi defence at the Nuremberg Doctors' Trial. The necessary sacrifice of individuals for the good of the state is also simply the logic of liberalism.

Two eras of subject autonomy

I will provide evidence for the points above by first examining two historical eras of research ethics: research ethics as it was done before the Nazis (pre-Nazi) and research ethics as it has been done after the Nazis (post-Nazi). I do this to make a simple point: protection of subjects through appeals to autonomy was just as emphasized in pre-Nazi research ethics as it is in contemporary post-Nazi research ethics. I will make this point by comparing two pre-Nazi research codes against two post-Nazi research codes, with special attention to their autonomy protections. The pre-Nazi codes of Prussia (1900) and the Reichsrundschreiben (1931) will be compared to the Belmont Report (1979) and the Nuremberg Code (1947). It is unknown how influential the Prussian code was, but as a government document responding to medical abuses it illuminates the ethical atmosphere of the European medical community in the pre-Nazi era. Likewise, neither Nuremberg nor Belmont are legally binding documents, but they serve as paradigms illuminating contemporary ethical mores. The juridical question of their legal status is irrelevant to my concerns in this paper. What matters in this examination is that binding regulations have been inspired by these documents and the typical bioethicist relies heavily on the principles therein [1, p. 1437]. These documents are prime examples of their ethical eras.

The Prussian decree of 1900

Albert Neisser was a professor of dermatology and venereology at the University of Breslau researching if it was possible to create a vaccination against syphilis [2, p. 249]. Inoculation from a disease by intentional infection from its live-but-weakened vectors had already led to some success against smallpox and cowpox [2, p. 250—1]. Dr. Neisser hypothesized that this strategy could lead to a vaccine against syphilis. He designed a protocol, which called for injecting prostitutes with serum containing live syphilis bacteria [2, p. 254—5]. At no point did Dr. Neisser or his fellow researchers inform the subjects what was being done to them or attempt to attain consent [2, p. 259].

Dr. Neisser's syphilis experiments caused a backlash amongst the medical intelligentsia — and later the public and government — once his results were published. While a handful of doctors criticized Neisser's scientific method, the ethical abuses within the protocol were far more controversial. Neisser's fatal flaw was that his prostitute subjects were not aware that potentially infectious live bacteria had been deliberately injected into them. Even though in retrospect there were reportedly no infections, both critics and defenders faulted Neisser's failure to get consent [2, p. 259].

In 1899 — less than a year after Neisser published his study — Ernst Von Dühring critiqued Neisser's ethics:

> *If one wishes to make an accusation against Neisser, it could only be that he did not obtain the consent of the patients for the injections, with an explanation of their purpose. When we want to undertake an uncertain operation... in the interest of a patient with the full personal conviction of its safety, we should speak about it freely with the patients or their relatives [2, p. 259].*

The medical historian Julius L. Patel defended Neisser's scientific method but admitted that ''consent of the subject is required under all circumstances'' [2, p. 260]. Likewise the psychiatrist Albert Moll defended Neisser's overall protocol but held that Neisser had nevertheless acted wrongly by failing to get consent from his subjects [2, p. 260].

Notice the similarities between this reaction against Neisser's research and the reaction against the Tuskegee syphilis study. There was some debate about whether the protocols were scientifically sound, but even defenders of either instance lamented the ethical failure of using non-consenting subjects. The main reaction to Neisser's study was an outcry demanding for consenting subjects. This shows that informed consent was widely considered essential to good research.

Further proof of this point comes with the intervention of the Prussian government in 1900. The Royal Prussian Disciplinary Court was unconcerned with the scientific merits of Neisser's protocol. What concerned them was the lack of informed consent [3, p. 1445]. For this crime, Neisser and his co-researchers were fined 8 months' worth of their salaries [2, p. 261]. On top of the fine, the Prussian Minister of Culture issued a decree in December 1900 concerning the finer points of informed consent. The decree stated that research was forbidden under all circumstances if the subject was a minor, incompetent or otherwise not capable of being fully informed. Only medical directors were allowed to do research projects or anything else outside of ''diagnosis, therapy or immunizations'' [2, p. 261]. A rigorous cost-benefit analysis was required and the decree declared an explanation of risks was a required component in obtaining fully informed consent [3, p. 1446]. The state's Scientific Medical Office of Health and several lawyers staffed the committee who crafted the Prussian decree. The committee's guiding principles bear uncanny similarities to Beauchamp and Childress' wildly popular Four Principles, which are informed consent (autonomy), beneficence, non-maleficence and justice [3, p. 1446]. The Prussian decree was promulgated but not legally binding. Although its effects on the practice of medicine are currently unknown [2, p. 261], its existence alone demonstrates how the pre-Nazi ethical era appealed to autonomy in order to protect research subjects.

The Belmont Report in comparison

The Belmont Report (also known simply as ''Belmont'') shares significant similarity to the Prussian decree of 1900 where it is concerned with subject autonomy. It is a popular misconception in contemporary bioethics to think that post-Nazi research ethics is historically unique because our commitments to subject autonomy are stronger than ever before. But Prussia had stricter protections for subject autonomy than Belmont, the document which guides our current ethical era.

Belmont defines an autonomous subject as ''an individual capable of deliberation about personal goals and of acting under the direction of such deliberation'' [4, p. 2]. Researchers respect the autonomy of their subjects in practice by providing all the relevant disclosures needed for informed consent. By ''relevant disclosures'', Belmont means the nature of the experiment and cost-benefit analysis, which matches the standard set by the Prussian decree. But when dealing with ''incompetent'' subjects who cannot comprehend all these relevant disclosures, the Prussian decree is more protective than Belmont. Prussia forbade under all circumstances any research involving incompetent subjects:

> *Medical directors were advised that all medical [research] was excluded under all circumstance if ''the human subject was a minor or not competent for other reasons'' or if the subject had not given his or her ''unambiguous consent'' after a ''proper explanation of the possible negative consequences'' [3, p. 1446].*

Belmont however allows research on incompetent subjects, those ''infants and young children, mentally disabled patients, terminally ill and comatose'' on a case-by-case basis with a surrogate decision-maker [4, p. 7].

Both Prussia and Belmont stress that informed consent is essential, but Prussia had a firmer insistence on it 78 years earlier. Compared to the Prussian decree of 1900, Belmont softens the demands of informed consent by conditionally allowing research on incompetent subjects through the use of surrogate decision-makers, a practice which Prussia did not allow. I am not attempting to prove here that Prussia was ''better'' at protecting subject autonomy than Belmont. My

point is that protections for subject autonomy are not new: the principle has been recognized for centuries. Pre-Nazi and post-Nazi research ethics indeed have their differences, but devotion to protecting subject autonomy is not one of them.

The Reichsrundschreiben

Similarities between the two ethical eras become even clearer when we examine the German research code of 1931, known as the Reichsrundschreiben. While it was ratified before the Nazi party took control of the German government, the Nazis did not repeal it. The Reichsrundschreiben of 1931 served as the legally binding human experimentation ethics code. The Reichsrundschreiben classifies research into two categories: ''New Therapy'' which is aimed at therapeutic goals for the subject and ''Human Experimentation'' which is non-therapeutic. The rules regarding New Therapy are less strict than in Human Experimentation because of their therapeutic purposes. New Therapy must have been first tested on animals to ensure safety, whenever animal experimentation is possible [5, A5]. A cost-benefit analysis must be calculated beforehand [5, A5]. An extensive written report is required detailing the protocol design, the problems it seeks to remedy and the method to create this remedy [5, A10]. All of this is part of the ''appropriate information'' that the subject necessarily needs to know in order for them to autonomously offer their fully informed consent [5, A5]. Like Belmont, the Reichsrundschreiben allows for ''proxy consent'' in New Therapy. It even leaves open the possibility that New Therapy may be done without consent in ''special circumstances'' where immediate action is needed to save a subject's life or limb [5, A5].

Again like Belmont, it allows for possible therapeutic research on minors, stating that such cases require ''especially careful examination'' [5, A6]. Keen enough to anticipate a scandal like Beecher's 1966 whistleblowing article and aware of the controversy caused by Neisser decades before, the Reichsrundschreiben states that ''publication of results of New Therapy must respect the patient's dignity and the commandments of humanity'' [5, A11]. In the same way that Belmont is concerned with the protection of vulnerable socio-economic populations, citing a commitment to the principle of ''Justice'' [4,6], the Reichsrundschreiben forbids ''any exploitation of social or economic need in conducting New Therapy'' [5, A7], except the appeal is to ''medical ethics'' instead of ''justice.'' We already see in the Reichsrundschreiben a concern for autonomy, informed consent and subject protection that rivals Belmont. But we see the Reichsrundschreiben take this concern farther when we understand that the two documents are using different taxonomies to parse out various kinds of research. So far, we have only examined the Reichsrundschreiben's rules on therapeutic experiments or ''New Therapy.'' The current fashion in bioethics however is to classify a procedure as either ''practice'' or ''research.'' Belmont defines practice as ''interventions that are designed solely to enhance the well-being of the patient and have a reasonable expectation of success'' [4, p. 2]. Belmont defines research as ''an activity designed to test a hypothesis, permit conclusions to be drawn and thereby to develop or contribute to generalizable knowledge'' [4, p. 2]. Belmont is a document concerned with only research guidelines, not practice. The Reichsrundschreiben, if we make it use Belmont's definitions, so far has only been concerned with procedures Belmont classifies as novel forms of ''practice,'' also known in our times as ''medical innovation.'' But Belmont clearly states that just because something is novel does not mean it is research. According to Belmont, what makes something research is that it is aimed at ''generalizable knowledge'' instead of ''direct subject benefit'' [4, p.1—2]. If operating under these definitions, then so far, the Reichsrundschreiben have only been discussing what Belmont calls ''practice.'' Belmont offered no guidance on practice in order to avoid angering professional medical organizations, who had significant lobbying power in the American government at the time. The American Medical Association would have seen it as an infringement upon their rightful domain if Belmont had attempted to regulate practice [6, p. 57].

The Reichsrundschreiben is insisting that all medical innovation be treated under the same scrutiny that contemporary ethicists reserve only for research. Subjecting medical innovation to as much scrutiny as research in our current ethical era would mean requiring IRB approval for both enterprises. This would be too strict to be feasible with our current infrastructure. IRBs are overloaded by research protocols alone [7, p. 3] and the American Medical Association has a history of lobbying against increased ethical regulation in medicine.

We have yet to examine the Reichsrundschreiben's section on non-therapeutic ''human experimentation,'' a category which matches the current Belmont definition of ''research.'' When it comes to what we now call ''research'', the Reichsrundschreiben considers all the articles concerning New Therapy to be ''equally applicable to Human Experimentation'' [5, A12]. It then stacks additional rules onto the New Therapy requirements. The requirements for informed consent are stricter. Since therapeutic benefit is not the purpose of human experimentation, consent is now non-negotiable. ''Without consent, non-therapeutic research is under no circumstances permissible'' [5, A12a]. Human experimentation on the incompetent and the vulnerable is totally forbidden. ''Experimentation with children or minors is impermissible if it endangers the child or minor in the slightest degree. Experimentation with dying persons conflicts with the principles of medical ethics and therefore is impermissible'' [5, A12c & d].

Bioethicists in our contemporary ethical era would dismiss the Reichsrundschreiben regulations for being too restrictive. The current favoured view amongst ethicists is that research on children and other historically exploited groups (pregnant women, minorities, those with rare illnesses) is necessary because without such research we have no data on these populations [8, p. 25]. Without that data, we have to medically treat all groups as Caucasian males, which ironically creates long-term harm for those already vulnerable [8, p. 26].

If the Reichsrundschreiben were ratified in contemporary America, most researchers and ethicists would feel its regulations to be greatly restrictive, since it has absolute proscriptions against research on certain vulnerable groups who are routinely research subjects in America. To our great

surprise, the ratified ethical code of Nazi Germany would be too restrictive in contemporary American medicine.

How did we forget?

Many contemporary ethicists believe research ethics began with the Nuremberg Doctors' Trial. Apparently, medicine was unconcerned with subject autonomy before the Nuremberg Trial of 1947. According to this story, Nuremberg is the historic foundation for what is today ''one of the most important principles in bioethics'' [9, p. 299]. By now however, we have plenty of historical proof that the oft-repeated claim that ''The Nuremberg Code was the first major curb on research in any nation'' [10, p. 153] is false. We have seen two significant attempts in the pre-Nazi ethical era to curb research abuses by appealing to subject autonomy. Arguably, the pre-Nazi research codes were too restrictive. Protocols ethicists routinely allow without controversy today would be prohibited in Prussia circa 1900 and Germany circa 1931 due to concerns over subject autonomy.

How did our contemporary community of ethicists forget all this? The key is to understand the judicial errors that occurred during the Nuremberg Doctors Trial. The Nazi legal defence forced the Allied persecutors to conveniently forget the pre-Nazi research codes, in order to avoid admitting that Allied countries sometimes abused subjects in Nazi-like experiments. This inconvenient truth altered the course of the trial, the prosecutors' arguments and the story that American medicine and ethics would tell themselves in future decades.

The tangled arguments at Nuremberg

The trial opened with debates in January 1947. The intent was to try high-ranking Nazi doctors of crimes against humanity for the major abuses against subjects of human experimentation in the concentration camps. Werner Leibbrand, a German psychiatrist supporting the Allies, argued that the Nazi doctors were guilty of violating the ethics of good medicine, as represented in the Hippocratic Oath [1, p. 1438].

The Nazi defence lawyers countered that the Hippocratic Oath was not binding upon researchers. As evidence, they cited American researchers who abused their subjects much like the Nazis did. Allied doctors acted as if the Hippocratic Oath was irrelevant, so why were the Nazi doctors the only ones being charged [11, p. 1—27]? Therefore, the Nazi defence argued, either the Hippocratic Oath was irrelevant or Allied doctors were hypocrites who deserved to be tried alongside the Nazi doctors.

The defence also falsely claimed that no legally binding research codes existed anywhere before December 1946. Nazi doctors were obeying standard German ethics and since there were no research codes in existence to contradict these German cultural standards, the Nazi doctors were simply law-abiding citizens [12, p. 133].

It is true there was no international declaration on the ethics of human research, but the Third Reich never repealed the Reichsrundschreiben even if they never bothered to enforce it [5, p. 99]. Enter Andrew Ivy, a respected physiologist sent by the American Medical Association as a testifying expert. Ivy knew of the Reichsrundschreiben and cited it early in the trial as a legally binding code. This caused a major battle with the Nazi defence, since such a claim if true would hang the Nazi doctors by a German rope. The Nazi defence countered that these regulations held no legal force in Nazi Germany, but this was an intentional lie. Three of the four historians who have examined this claim agree with Hans-Martin Sass that the Reichsrundschreiben ''remained binding law in Germany even during the Third Reich'' [5, p. 100], even despite their ''factually non-existent impact on research practices in German concentration camps'' [5, p. 104], with the one dissenting historian concluding that the Reichsrundschreiben were only ''recommendations without legal force,'' which would have still provided some precedent nevertheless.

Even if we ignore the Reichsrundschreiben, there was still enough precedent to convict the Nazi doctors from the Neisser controversy and the Prussian Code. In that case, the government punished and fined Neisser despite there being no explicit subject protection laws for Neisser to break. Two codes published afterwards, obviously for the purpose of protecting subjects, could only strengthen the precedent for a guilty verdict.

Yet Ivy abandoned the attempt to convict the Nazi doctors according to pre-Nazi ethical era precedents because Ivy knew pursuing the line any further would also require scandalous admissions that Allied doctors flagrantly violated those codes too. Such revelations would be doubly-costly for the persecution since it would strengthen the defence's argument that Nazi abuses were no worse than what Allied doctors did themselves. Ivy caved to the Nazi defence's false history, thereby accepting a historic lie as a historical fact: that ''there were no written principles of research in the United States or elsewhere before December 1946'' [1, p. 1439].

Accepting this lie as fact wrecked the rest of Ivy's argument. Ivy consequently had to state on record that the ethical principles the Allies were using to convict the Nazi doctors were created ad-hoc by the American Medical Association solely for the purpose of convicting the Nazi doctors. The Nazi defence had secured a few major victories in short order: they manipulated Ivy into accepting false history as fact. They secured evidence that the prosecutors were conjuring up fake ethical standards and they were contorting the prosecutors into embarrassing positions.

The Nazi defence successfully managed to erase the pre-Nazi codes from official memory, or at least make their memory useless. Ivy was now forced to proceed as if the Prussian decree and the Reichsrundschreiben had never existed. Ivy had to look elsewhere to find an ethical code that would convict the Nazi doctors. He settled on the Hippocratic Oath. He claimed to have exegeted ''common-sense principles shared by everyone in practice in the medical community'' [1, p. 1438] from the Oath which guided research ethics. Ivy named these the ''Principles of ethics concerning experimentation with human beings'' and summarized they are:

- voluntary consent of the subject must be obtained;
- all hypotheses must have been tested on animals before research begins on humans;

- all research must be performed by qualified medical personnel and avoid all unnecessary suffering and risk [12, p. 134].

There is however a fatal flaw with the ''discovery'' of this ''new'' research code and later the Nuremberg Code, within the Hippocratic Oath. We must first realize there was no such thing as ''medical research'' in Hippocrates' time [12, p. 123]. We thus must believe Hippocrates prophetically left research codes within the Oath that are supposedly hidden enough for every doctor until Ivy to miss, but explicit enough that a single doctor without historical training could discover them and clear enough to be legally-binding on all researchers at all times. In reality, this ''discovery'' is just an anachronistic re-interpretation to fit the Allies' purpose of securing a guilty verdict. Ivy had countered Nazi false history with his own false history, except this one would benefit the Allies.

But Ivy's erroneous history was debunked by the defence. Ivy's principles exegeted out of the Hippocratic Oath are also the principles that Ivy submitted ad-hoc to the American Medical Association in December 1946 to provide legal support for the prosecutors at Nuremberg. So Ivy's admission that ''there were no written principles of research in the United States or elsewhere before December 1946 and that the [Principles of ethics concerning experimentation with human beings] adopted by the American Medical Association were expressly formulated for the Nuremberg Doctors' Trial'' [1, p. 1439] serves as a confession that his principles do not actually exist hidden within the Hippocratic Oath; they are an ad-hoc anachronism.

This ought to be considered a historic blunder in the Nuremberg Doctors' Trial. Indeed, I am in the process of arguing that accepting the false history accepted as fact by the Allied prosecution veils over a catastrophic failure that contemporary research is in danger of repeating. The Allies never needed to create an entirely new ethical code, basing it off admittedly non-existent rules hidden within medicine's debatable debt to Hippocrates. German medicine was in reality hanged by a German rope. The Reichsrundschreiben could have brought guilty verdicts by itself. Had the Allied prosecutors been brave enough to renounce their own ethical scandals and thereby debunk the Nazis' false history in the process, they would have been able to enforce the Reichsrundschreiben and the trial would have quickly ended with guilty verdicts all around. Afterwards, however, certain Allied doctors would have rightly faced convictions as well.

Yet because the Allies tried to save their public image as the ''good guys,'' they were manipulated into accepting the lie that research ethics began with Nuremberg itself in 1947. The Allies thereby turned a false history into accepted history. This false history became enshrined in the self-identity of modern bioethics and is reinforced whenever an ethicist makes a claim such as ''The Nuremberg Code is the most important document in the history of medical ethics research. . . it changed forever the proper conduct of medical research on human subjects'' [1, p. 1436 & 1440].

This false history veils over pre-Nazi research ethics and thereby forces contemporary ethicists to miss a critical lesson from history: attempts to protect subjects by appealing to autonomy were tried decades before Nuremberg, and they failed catastrophically to actually protect research subjects. Nuremberg was not the moment when ethicists and doctors first began to care about subject autonomy, Nuremberg was in reality the attempt to salvage protection for subjects after autonomy regulations and informed consent laws had catastrophically failed to protect them in Germany. The lesson that laws fail under the compulsions of state power was lost to contemporary ethicists.

What law compels the lawmaker?

The pre-Nazi codes — even the legally binding Reichsrundschreiben — had no power to stop the Nazi state from ignoring and overriding them. These codes made appeals to vague notions like ''medical ethics'' and ''the commandments of humanity,'' but these appeals had no power against a state that was most concerned with the preservation of its own security and power during national emergencies of war. In a modern state, the primary motivation for obeying a law is to avoid punitive force by the state. Fear of state power can be extremely compelling to the relatively powerless individual or medical association living under the state, but not to the state itself. The problem is similar Juvenal's ancient question, ''Who watches the watchmen?'' ''What law compels the lawmaker?''

By not grounding subject autonomy in something which transcends the state, like perhaps a divine law, immutable human nature, or a natural law, the pre-Nazi codes imply that subject autonomy is merely a product of state power and nothing more. Without any transcendent options, state power and the fear it inspires is the strongest ethical foundation available. But the development of the modern state demonstrates that governments are necessarily more concerned with security and maintaining their own power rather than the protection of individual autonomy. The modern state is not and has never been a loyal protector of subject autonomy. Protection for the individual is promised only as long as national security and power are unthreatened. This is not political philosophy lifted from Nazi propaganda; these are the core commitments of classical political liberalism — the philosophy which has been the foundation of Western politics for the past 450 years.

The classical political philosophy liberalism replaced had a straightforward answer to the problem at hand: God, through the Church, compels the lawmaker. In the premodern West, it was generally understood that political sovereigns must obey the moral laws of the universe, which were ultimately decreed by God's character and promulgated through the Church. Classical politics however depended on widespread cultural agreement about which god is the true God, which morality is the true morality and which church delivers the true message. The Reformation, pluralism and other evolving social realities have made such political setups impossible for centuries in the West.

Today's political liberalism is how Western sovereigns over the past 4 centuries have engineered law and order in their lands despite deep and bitter ideological battles amongst their people. Sovereigns needed new something to unite society now that theology led to violence instead of peace. Queen Elizabeth I offered a solution: allegiance to the state itself would be the new basis of the political union. Her solution laid the foundation for modern liberalism and

England under her rule can be seen as the first modern liberal state as it provides a blueprint for all modern liberal states. We see in Elizabeth's Acts of Supremacy of 1558 that the purpose of the modern state is security, stability, and control, all of which require an expansive state power and unquestionable loyalty from the subjects:

> *the queen's highness is the only supreme governor of this realm and of all other of her highness's dominions and countries, as well in all spiritual or ecclesiastical things or causes as temporal and that no foreign prince, person, prelate, state, or potentate hath or ought to have any jurisdiction, power, superiority, preeminence, or authority, ecclesiastical or spiritual, within this realm... [13].*

In exchange for pledging allegiance to the sovereign above all else, Queen Elizabeth ushered in the first modern secular space. We also see perhaps the first instance of modern autonomy. Queen Elizabeth I granted her subjects the autonomy to practice whatever religion they pleased and hold whatever private beliefs they wished, as long as they pledged total allegiance to her absolute power beforehand. This newfound autonomy was guaranteed and safeguarded by the state... as long as the beliefs of the subjects were kept private, civil and loyal to the state.

Many Westerners will be glad to see the expansion of individual autonomy at this moment in history and leave their analysis at that, but this misses the other side of a double-edged sword. Individual autonomy was birthed, provided and controlled from the beginning of the modern liberal state by absolute state power. Modern liberal political philosophy released the state from the moral constraints traditionally imposed on it by the Catholic Church.

> *It is precisely the character of state power as guaranteeing personal security and non-interference [autonomy] in 'private' pursuits (selling, contracts, education, choice of abode), which demands that this power be otherwise unlimited and absolute. Hobbes was simply more clear-sighted than later more 'liberal' thinkers like Locke & Rousseau on realizing that a liberal peace requires a single undisputed power [14, p. 53—4]*

Queen Elizabeth's political framework would spread to the rest of Europe by 1648 thanks to the Peace Treaty of Westphalia [15, p. 97]. It would become the official theology of the modern West by influencing the classical political works of Thomas Hobbes, John Locke and J.J. Rousseau. All three thinkers see security and control as the purpose of the state and provide it with such power that it is unable to be checked by any other cultural institution, such as a church [14, p. 53—96]. If we look at what this meant for religious tolerance, we see the double-edge. At first glance, such a modern liberal state increased the autonomy of individual citizens. Now that all churches subjected themselves to the state, all the various religions that agreed to be civil had the right to exist, thereby creating more options for individuals to make an autonomous decision about their religious views. But in a deeper sense, this consolation of power by the state destroys individual autonomy, because the individual must first yield all their rights to the state before they are given the opportunity to choose between the state-approved options. Modern tolerance for autonomous decisions historically arises only after expansive state power allows for the necessary policing. The more space that citizens of modern liberalism have for autonomous decision-making, the more tightly the state controls that space by threat of force.

The modern liberal political philosophy has birthed nations, which have provided peace and prosperity for millions of people. But the philosophy cannot solve this worrisome problem: what could overpower an absolute power? According to modern liberal politics, there is no moral force above the state, which holds power over it. Traditionally Christianity was the institution that held power over political sovereigns since Churches acted as messengers of God. But now, Christianity has been relegated to a private realm within the state, with its primary purpose being the maintenance of peace and civility. The modern liberal state is unrestrained by any moral counterbalance.

We see in the rise of the modern state that autonomy is actually dependence to the state. For almost half a millennium, Westerners have structured our lives and societies around a form of autonomy that can only exist underwritten by an absolute state power. Perhaps no one captures this irony more succinctly than Rousseau when he wrote: ''each citizen should be completely independent in relation to each of the other citizens and as dependent as can be in relation to the city'' [16, Bk II Ch 12]. Modern protections of autonomy have certainly provided individuals with protection from other individuals and even from social institutions and companies. It has never provided reliable protection from the state, and it will never be able to, because individual autonomy in the modern age is provided by the state. How could a law compel the lawmaker, when the law borrows all its power from the lawmaker? We must also remember that the liberal state's ultimate concern is security and power, since anarchy is the ultimate and ever-looming threat. Thus, individual autonomy, including the autonomy of citizens serving as medical research subjects, can only ever be a relative good to the modern liberal state that enforces the laws. Individual autonomy is a relative good that may have to be sacrificed in order to secure the greater good of the state.

What research code could compel absolute power?

If we return to the Nazi doctors' arguments at the Nuremberg Trial, we realize the logic of modern liberalism was central to their defence. They stated in the opening remarks that ''the Dechau experiments were necessary; the good of the state takes precedent over the good of the individual'' [1, p. 1438]. Thus, according to the basic logic of liberalism, the state cannot guarantee protection of every subject's autonomy, as the defence lawyer Robert Servatius argued on behalf of Karl Brandt: ''One can say that all prisoners are living under a certain compulsion,'' making subject autonomy laws and requirements for informed consent into unattainable ideals, ''voluntariness is a fiction, the emergencies of the state hard reality'' [17, p. 63—4]. Overriding subject autonomy becomes almost a logical imperative when the subjects in question are criminals — threats to the state —

and they can be made to serve the state through the sacrifice of their autonomy and consent: ''Much as bacteria cause disease in an individual body, Jews, Gypsies, homosexuals, mentally handicapped, physically disabled and others were seen as corrupting the German national body... But Hitler often said that the criminals in the concentration camps are also here to serve their fatherland'' [17, p. 58].

''The Nazis' aggressive approach, applying 'mercy killing' to the criminal and impaired, was welcomed as a biologically sophisticated form of modern statecraft'' [17, p. 58]. And it should deeply worry any modern Westerner, especially the ethicist, that our modern political framework offered no resistance to this conclusion. If anything, aspects of our cherished political philosophy encouraged that attitude. It consequently should not surprise us that the modern liberal governments of the Allies also indulged in violations against research subjects when convenient, justifying these violations the same way the Nazis justified theirs.

Officially, the Nazi doctors justified themselves with 12 distinct arguments. In 4 of those arguments, we can clearly see this darker side of modern liberal politics at work:

> *[1] Research is necessary in times of war and national emergency. Military & civilian survival may depend on human experimentation. Extreme circumstances demand extreme action... [2] In times of war, all members of society must contribute to the war effort... [3] the state determined the necessity for human experimentation. The physicians were just following orders... [4] sometimes it is necessary to tolerate a lesser evil, the killing of some, to achieve a greater good, the saving of many [12, p. 132—3].*

In these defences, we see a logical outcome of liberalism's eternal struggle between individual autonomy and state power: state power trumps and consumes individual autonomy. If we accept the basics of liberalism, and nearly all contemporary Westerners do, including ethicists, then we are conditioned to agree that in at least some circumstances the state ought to sacrifice subject autonomy for the sake of national security and power. The state giveth when it is in control and the state taketh away when it is threatened. But if we agree to this, then we ''good guys'' only differ from the Nazis by degree, not substance.

Ivy fell into this trap in his later counter-arguments, when he underestimated the force that state power exerts on the Western imagination:

> *Ivy argued that researchers must refuse to conduct experiments on human beings when ordered by the state in order 'to save lives' because in such cases subjects would not be volunteers. He declared that 'there is no justification in killing five people in order to save the lives of five hundred' and that 'no state or politician under the sun could force [him] to perform a medical experiment which [he] thought was morally unjustified [1, p. 1439].*

Ivy attempts to pit individual autonomy against state power in hopes that individual autonomy will gain an advantage. But Ivy fails to realize that the two poles have really been connected from the beginning and that the state dictates the relationship. Neither pre-Nazi nor post-Nazi research codes were able to discover a law to compel absolute respect from the lawmaker. Such a law is impossible to find if the outlook of modern political philosophy is correct. Subject autonomy is necessarily a conditional good relative to state security. Our post-Nazi ethical era was robbed of the opportunity to learn from history that our favourite strategy is fatally flawed, because subject autonomy is protected and enforced only as long as the state feels unthreatened. When a nation faces a doomsday threat, current research codes can be ignored just as easily as the Nazi state ignored their research codes. There is no higher law in liberalism's worldview that could compel the state. This is the only position for research codes under modern liberalism. As we have seen from the development and failure of pre-Nazi research codes, it places citizens and subjects in a precarious position indeed.

Disclosure of interest

The author declares that he has no competing interest.

References

[1] Shuster E. Fifty years later: the significance of the Nuremberg Code. New Engl J Med 1997;337:1436—40.
[2] Benedek TG, Case Neisser:. Experimental design, the beginnings of immunolog & informed consent. Perspect Biol Med 2014;57:249—67.
[3] Vollmann J, Winau R. Informed consent in human experimentation before the Nuremberg Code. Br Med J 1996;313:1445—7.
[4] Research NCftPoHSoBB. The Belmont Report: ethical principles & guidelines for the protection of human subjects of research; 1979.
[5] Sass H-M. Reichsrundschreiben 1931: pre-Nuremberg German regulations concerning New Therapy & Human Experimentation. J Med Philos 1983;8:99—111.
[6] Faden RR, Beauchamp TL, King NMP. A history & theory of informed consent. New York: Oxford UP; 1986.
[7] Beauchamp TL, Saghai Y. The historical foundations of the research-practice distinction in bioethics. Theor Med Bioeth 2012;33:45—56.
[8] Williams PC. Success in spite of failure: why IRBs falter in reviewing risks and benefits. IRB 1984;6:1—4.
[9] Mastroianni A, Kahn J. Swinging on the pendulum: shifting views of justice in human subjects research. Hastings Cent Rep 2001;31:21—8.
[10] Minkoff H. Teaching ethics: when respect for autonomy & cultural sensitivity collide. Am J Obstet Gynecol 2014;210:298—301.
[11] Lederer SE. Subjected to science: human experimentation in America before the Second World War. Baltimore: Johns Hopkins UP; 1995.
[12] Annas GJ, Grodin MA. The Nazi doctors & the Nuremberg Code. New York: Oxford UP; 1995.
[13] Acts of supremacy; 1558.
[14] Cavanaugh WT. Theopolitical imagination. London: T&T Clark; 2002.
[15] Treaties of Osnabrück and Münster; 1648.
[16] Rousseau JJ. The social contract. Sounth Bend: Gateway Editions; 1954.
[17] Moreno JD. Undue risk: secret state experiments on humans. New York: Routledge; 2001.