REVISITING THE INFAMOUS PERNKOPF
ANATOMY ATLAS: HISTORICAL LESSONS FOR
MEDICAL LAW AND ETHICS

Pieter Carstens

With heart at rest I climbed the citadel’s
steep height, and saw the city as from a tower,
hospital, brothel, prison and such hells,
where evil comes up softly like a flower.1

1 Introduction

Artists, anatomists and doctors alike have since time immemorial engaged in medical experimentation (including autopsy, dissection, procurement and distribution of human tissue and bone for anatomical sketching) upon human subjects without their consent. However, whether the experimentation was regarded as legitimate or criminal depended on the prevailing outlook of a particular time and its level of knowledge and understanding of medical science. The founder of modern anatomy, Andreas Vesalius (1513-1564), had to climb gallows or rob graveyards to find human cadavers to dissect and draw.2 Other Renaissance notables, such as Leonardo da Vinci, pursued this study of human

1 From Baudelaire’s Epilogue as quoted by P Conroy The Lords of Discipline (New York, 1980) at iv.

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** The author is indebted to Dr John W Ferguson, a surgeon from Melbourne, Australia, who introduced him to the topic in his article “The learning of anatomy: Lessons in ethics and morality from Ancient Greece to the present day”, presented at the Greek Medical Conference in 2009, Corfu, Greece. The author is also grateful to Liana Viljoen and Hannetjie Boshoff, librarians of the OR Tambo Law Library, University of Pretoria, for obtaining copies of the Pernkopf Atlas. This was a very difficult task, because most copies have been removed from libraries or have been classified as “out of circulation”.

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anatomy at night in newly constructed tombs, often obtaining cadavers for dissection and sketching. Body-snatching or grave robbing (also known as “murder for anatomy or the resurrection trade”) was, however, severely sanctioned by the law, society and the church, and history abounds with examples of notorious grave robbers and body-snatchers who were executed for murder. As Olry noted, grave robbing and illicit medical experimentation on cadavers stemmed from an ever-growing need for human bodies for dissection and the concomitant impossibility of legally supplying anatomists with enough bodies. Without the bodies, the work of many anatomists and the consequent development of medical science would not have been possible, so that “the end stooped to justify the means”. In the same vein, Frank asserts that in choosing their suppliers the doctors or anatomists of those times were indeed the victims of circumstance: the law, abject poverty in the growing cities and disregard for life inspired by the frequent sight of death from violence or disease put them in a position where dealing with grave robbers and body snatchers was unavoidable. It may thus be argued that those who accuse such anatomists, artists or doctors of unethical or unlawful conduct should consider the specific context in which the development of medical science and human anatomy with its subsequent benefit to mankind may be seen as a “therapeutic necessity” and as being in the public interest, thus trumping the individual rights and interests of the human subjects and the need for consent.

The foregoing cannot, however, be said of the gross medical experimentation conducted in Nazi Germany (including Austria as incorporated into the Third Reich) from 1933 to


5 In this regard reference may be made to William Burke and his companion William Hare in early nineteenth-century England, who murdered at least sixteen people in order to supply anatomists with human bodies. William Burke was executed on 28 Jan 1829: see Olry (n 4) at 8; see, also, Moore (n 2) at 86; Frank (n 4) at 400ff. Even Vesalius was accused of impiety and murder and sentenced to death for performing an autopsy on a nobleman whose heart was still beating: see Massengill (n 2) at 97ff.

6 In the words of Olry (n 4) at 8-9. It is to be noted that the Murder Act of 1751 (25 Geo II c 37) legalised the dissection of executed murderers in England “to add some further terror and peculiar infamy to the punishment of death”: Frank (n 4) at 400.

7 Idem at 410: “Certainly they (the surgeons) cannot be held accountable for the practice of murder for anatomy; that refinement was Burke and Hare’s own invention.”

8 Amongst the most horrific of these experiments conducted by Nazi doctors were those where healthy people were thrown into freezing cold water in an experiment to determine how long fighter pilots who, during battles, bailed out of aeroplanes into the sea could be expected to survive: see RL Berger “Nazi science – the Dachau hypothermia experiments” (1990) 322 New England J of Medicine 1435 at 1436ff; also as discussed by M Parker & D Dickenson The Cambridge Medical Ethics Workbook (Cambridge, 2005) at 81ff; for even more horrendous examples of Nazi medical experiments reference may be made to those conducted by Dr Hermann Stieve (1888-1952): Stieve was interested in the effects of stress on reproductive systems. In the 1920s he dissected chickens stressed by the presence of a caged fox. After the Nazis came to power, Stieve examined the effects of stress on the timing of human ovulation. He collected data in 200 female prisoners who were stressed by learning the date of
1945. It is in this context that it is necessary to revisit the Pernkopf Anatomy Atlas (itself a product of the Nazi era, in which the author used material obtained from Nazi victims of terror to illustrate the atlas), with specific reference to transgressions of medical law and ethics, the question of the continued use of the Atlas, and also the startling complicity of the medical and legal professions in providing the legitimacy which the Nazi regime needed for the implementation of its political ideology. Ultimately, this article assesses the lessons to be learned from this historical but contaminated publication.

2 Events in Nazi Germany preceding the compilation of the Pernkopf Atlas

The compilation of the Pernkopf Atlas was preceded by events in Nazi Germany that irrevocably changed the face of the world and were accompanied by unethical medical experimentation, forced sterilisation and “euthanasia” of the mentally handicapped, and ultimately, the genocide of the Jews and the Gypsies (the so-called “untermenschen”). It has been argued that these events define the infamy of the Pernkopf Atlas, serve as a pivotal contextual backdrop to it and explain its conditional banishment to the archives.

Persuasive and extensive research by the revered scholar and author, Henry Friedlander, indicates that Hitler’s appointment as German Chancellor on 30 January 1933 and the Nazi consolidation of power made the implementation of the eugenic and racial policies, long advocated by the Nazi party, a reality. The implementation of these extreme policies their execution, and he dissected them after their deaths: H Pringle “Confronting anatomy’s Nazi past” (2010) 329 Science 274 at 275, available at http://sciencemag.org (accessed 12 Dec 2011); for more examples of Nazi medical experimentation see, in general, G Aumüller & K Grundmann “Anatomy during the Third Reich – The Institute of Anatomy at the University of Marburg, as an example” (2002) 184 Annals of Anatomy 295 at 295ff.

9 As discussed in detail below.

10 The term “euthanasia” in this context refers not to the merciful and painless causing of the death of a patient suffering from an incurable disease, but to the intentional killing of the handicapped considered to be “lives unworthy of life”.

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12 The term “eugenics” was coined in 1881 by the British naturalist and mathematician Francis Galton and described by the leading American eugenicist, Charles B Davenport, as “the science of the improvement of the human race by better breeding”. The eugenics movement was, however, not the exclusive domain of Germany, but also had a following in the United States of America, notably in the State of Virginia: in 1927 a Virginian statute authorised state institutions to order the compulsory sterilisation of handicapped patients diagnosed as suffering from “an hereditary form of insanity or imbecility”. The validity of the said statute was challenged by a plaintiff, Carrie Bell (a woman diagnosed as feebleminded) in the US Supreme Court in the case of Bell v Buck 274 US 200 (1927). In upholding the validity of the statute and the compulsory sterilisation, Justice Oliver Wendell Holmes, speaking for the eight-man majority of the Court, ruled, inter alia (at 207 of the report): “It is better for the world, if instead of waiting to execute degenerate offspring for crime, or to let them starve for their imbecility, society can prevent those who are manifestly unfit from continuing their kind. The principle that sustains compulsory vaccination is broad enough to cover cutting the Fallopian tubes. Three generations of imbeciles are enough.” Thus ironically enough it was the USA (the “land of the free”) that provided a precursor to the eugenic movement in Germany.
of racial and genetic inequality depended on the collaboration and willing participation of the educated professional classes, including racist scientists, doctors, jurists, the courts and the civil service. Friedlander’s research further indicates that this collaboration, in tandem with the Nazi regime, established a political and legal framework which clearly isolated, excluded and penalised the handicapped, Jews and Gypsies. This resulted in the systematic and secret execution of the handicapped (the so-called “euthanasia killings”) which perfected organised mass murder. A method of selecting victims was devised and the technique of gassing people and burning their bodies was invented. The regime employed subterfuge to hide the killings, and did not hesitate to pillage and process the corpses. Friedlander’s research also shows that the euthanasia killings proved to be the “opening act” of Nazi genocide. The mass murder of the handicapped thus preceded that of Jews and Gypsies; the final solution followed euthanasia.

The established killing centres in the Third Reich (including those in Austria after the annexation (Anschluss) in 1938) where euthanasia, gassing and other political executions were carried out, yielded a long line of available corpses for autopsies, the procurement of human organs for scientific research and the training of physicians. The obvious beneficiaries of this processing and “pillaging” of the corpses were medical researchers, anatomy institutes and physicians who collaborated with the regime from the beginning. It is thus clear that the procurement, distribution, processing and dissection of, and medical experimentation on human corpses (of victims of the Nazi regime), were designed and intended consequences of the political and legal framework of the regime and of all those who collaborated with it. In this sense the human corpses were necessary and inevitable “by-products” or “collateral damage” of the euthanasia and extermination programmes, perfectly suited for medical experimentation. The foregoing contextual background thus demonstrates that the Pernkopf Atlas was not compiled or created “in a vacuum”, but was very much a product of its time.

13 It is significant that in 1933, before Hitler’s rise to power, 3 000 doctors were members of the Nazi party. This number grew to 38 000 by the year 1942 (more than half of all the physicians in Germany); see R Strous “Hitler’s psychiatrists: Healers and researchers turned executioners and its relevance today” (2006) 14 Harvard Rev of Psychiatry 30 at 30-31.
14 For the full discussion see H Friedlander The Origins of Nazi Genocide: From Euthanasia to the Final Solution (Chapel Hill, 1995) at 23ff.
15 Idem at 22-23.
16 Idem at 22 and 295: “The linkage between the three killing operations was ideological, based on the belief in human inequality and on the determination to cleanse the gene pool of the German nation. But collaboration between different segments of the bureaucracy also established linkage…” The sterilisation programmes resulted in 400 000 Germans being sterilised without their consent, at least 5 000 handicapped children and 70 000 handicapped adults being euthanised, and the extermination of 6 000 000 Jews: see Friedlander (n 14) at 61, 85, 110.
17 It is for this reason that all the Nazi “killing centres” (including Mauthausen concentration camp near Salzburg, Austria) were equipped with dissection chambers: see idem at 127ff.
18 Cf idem at 127: “It provided the opportunity to collaborate with experienced professors, to do scientific work, and to complete one’s education (Ausbildung)”; see, also, WE Seidelman “Medicine and murder in the Third Reich”, available at http://jewishvirtuallibrary.org/jsource/Holocaust/medmurder.html (accessed 2 Dec 2011).
3 Revisiting the Pernkopf Anatomy Atlas

3.1 Pernkopf: The man

Ever since suspicion about the possible unethical origins of the Pernkopf Atlas surfaced almost fifty years after the publication of the first edition, and as initially detected and exposed by, amongst others, American doctors Williams and Israel, the background and life of Eduard Pernkopf have been probed and scrutinised by various authors. In

23 See Williams (n 21) at 2; Ernst (n 21) at 789; Israel (n 22) at 131; Israel & Seidelman (n 22) at 1633; D Querido “Pernkopf’s Atlas – a product of Nazi atrocities perpetrated in Austria during World War II” (1998) 88 South African Medical J 56 at 56ff; DC Angetter “Anatomical science at the University of Vienna 1938-45” (2000) 355 Lancet 1454 at 1454ff; Jones (n 2) at 108ff; MC Atlas “Ethics and access to teaching materials in the medical library: The case of the Pernkopf Atlas” (2001) 89 Bulletin of the Medical Library Association 51 at 51ff; Seidelman (n 18); C Hubbard “Eduard Pernkopf’s Atlas of topographical and applied human anatomy: The continuing ethical controversy” (2001) 265 The Anatomical Record 207 at 208; SA Norton “On first looking into Pernkopf’s Atlas (Part 1)” (2001) 137 Archives of Dermatology 549 at 550; S Hildebrandt “How the Pernkopf controversy facilitated a historical and ethical analysis of the anatomical sciences in Austria and Germany” (2006) 19 Clinical
summary, it may be stated that Eduard Pernkopf was born on 24 November 1888 in a small village in Lower Austria. He enrolled in the Vienna Medical School in 1907 and received his medical degree in 1912. In 1920 he became assistant director of the Anatomy Institute of Vienna, associate professor of anatomy at the University of Vienna in 1926, full professor in 1928 and director of the Anatomy Institute in April 1933. Pernkopf was an active and ardent member of the National Socialist German Party (Nazi), which he joined in 1933. One month after Nazi Germany invaded Austria in 1938, Pernkopf was appointed Dean of the Faculty of Medicine in Vienna. Thanks to his political affiliations and party loyalty, he was in 1943 elevated to the position of rektor magnificus of the University of Vienna, an appointment he held until 1945. In his first official speech as dean of the faculty and students, entitled “National Socialism and Science”, delivered on 6 April 1938 (see figure 2 above), after paying homage to Hitler he fully endorsed the regime’s racist policies of “racial hygiene” and eugenics that would dictate the teaching of medicine in the Third Reich.\(^\text{24}\) Pernkopf, acting on instructions, also purged the University of Vienna of Jews and other undesirable staff: 153 of the 197 members (including three Nobel Laureates) of the Faculty of Medicine were dismissed.

At the end of the war Pernkopf was held in an Allied prison camp near Salzburg for three years, but was never charged with war crimes. He subsequently returned to Vienna where the Anatomy Institute had largely been destroyed by Allied bombing. Although he was stripped of all his titles and appointments, he was allowed to continue his work on his Atlas in the Neurological Institute. Pernkopf died of a sudden stroke on 17 April 1955.

3.2 Pernkopf: The Atlas

3.2.1 Composition and content

In the preface to Pernkopf’s Atlas, the following preview of the content is to be found:

The creation of a large, original, illustrated work such as the seven volumes of ‘Topographische Anatomie des Menschen’ by Eduard Pernkopf could only have been achieved through the combination of numerous particularly fortunate circumstances … Pernkopf was fortunate in being associated with a number of artists who were able to reproduce, in the finest detail, anatomically precise and pictorially impressive drawings from specimens prepared by the master. Most of the illustrations are outstanding pieces of art and, in spite of abundance of detail, are drawn with great clarity and accuracy. Only one who has participated in the preparation of many anatomical illustrations in cooperation with a medical artist can appreciate the degree of patience and the work involved in

\(^{\text{24}}\) As specifically recounted by Atlas (n 23) at 52 and Israel (n 22) at 136. See, also, G Weissmann “Springtime for Pernkopf” (1985) 20 Hospital Practice 142 at 153.
the creation of such a complete pictorial story of topographical human anatomy … The appearance of Pernkopf’s work as a two-volume atlas of human anatomy makes available these unique pictures in a more concise format that will facilitate widespread use of this work, which is valuable not only to anatomists but also to practitioners in other fields, particularly surgery.\textsuperscript{25}

\textbf{Figure 3}\textsuperscript{26}

The first volume (two books) of the Atlas, containing over 800 illustrations, was published in 1937, followed by the second volume (two books) in 1943 and the third volume (one book) in 1952. The fourth and final volume (two books) was completed after Pernkopf’s death in 1955 and published between 1956 and 1960. English editions of the Atlas were published in 1963, 1980 and 1989 and it has been hailed throughout the world as a classic “masterpiece” of unsurpassed beauty.\textsuperscript{27}

\begin{itemize}
\item \textsuperscript{25} Preface by Prof Dr Helmut Ferner: \textit{Eduard Pernkopf: Atlas of Topographical and Applied Human Anatomy} 2 vols (tr Dr Harry Monsen, Philadelphia, 1964) at ii.
\item \textsuperscript{26} Examples of the illustrations contained in the Pernkopf Atlas: on the left, a drawing depicting the superficial facia of the neck (fig 251 at 234: vol 1 of the 1963 ed of the Atlas); on the right a drawing depicting the bronchial tree and intrapulmonary blood vessels: lungs, heart and mediastinum (fig 116 at 124: vol 2 of the 1963 ed of the Atlas): images sourced by Pringle (n 8), available at \url{http://sciencemag.org} (accessed 12 Dec 2011); cf the offensive images in the Atlas sourced by Angetter (n 23) at 1455 – it is to be noted that Angetter wrote on behalf of the Senate Project of the University of Vienna.
\item \textsuperscript{27} See Israel (n 22) at 135 with reference to the glowing review by RS Snell “Pernkopf Anatomy: Atlas of Topographic and Applied Human Anatomy vol 2” (1990) 323 \textit{The New England J of Medicine} 205 at 205 where the Atlas is described as “[a]n outstanding book … of great value to anatomists and surgeons”; see, also, Hubbard (n 23) at 210.
\end{itemize}
3.2.2 Illustrators or artists and controversial insignia

In the compilation of the Atlas, Pernkopf was ably assisted by various distinguished and talented illustrators or artists of the time: these included Erich Lepier, Ludwig Schrott, Karl Endtresser and Franz Batke (all active members of the Nazi Party). In their illustrations, these artists paid meticulous attention to anatomical detail, producing some of the most beautifully coloured anatomical drawings created during their time. However, what detracts from this magnificence is the fact that Erich Lepier, Franz Batke and Karl Endtresser “frequently demonstrated their allegiance to the Nazi cause, by signing the anatomical paintings with Nazi icons”.

In particular, as indicated in Figure 4 (below), Karl Entresser signed his name with the “SS bolts” (reconfiguring the “ss” of his surname), while Erich Lepier signed his name with a “swastika” (reconfiguring the “r” of his surname). Franz Batke’s signature (Figure 5 below) is also followed by “SS bolts” replacing the number “44” in the year 1944. It is noteworthy that the more recent editions of the Atlas (1963, 1980 and 1989) contain the same illustrations, but the offensive Nazi insignia have been eliminated or airbrushed out and the signatures altered.

In the words of Israel (n 22) at 137; see, also, Hubbard (n 23) at 210; Hildebrandt (n 23) at 93.

The “SS bolts” indicative of the Nazi symbol for the Schutzstaffeln: see n 64 below.

The “swastika” or hakkenkreuse, premier symbol of the Third Reich: see n 63 below.

See Israel (n 22) at 137; cf. however, Angetter (n 23) stating at 1456: “Franz Batke, who is accused of having written the number 44 like the SS double lightning bolt rune, was not a Nazi party member and contemporaries stated in interview that he had not sympathised with the National Socialist regime. His handwriting is typical of the Old German script that was still in common usage at that time” – it should be noted that Angetter wrote on behalf of the Senate Project of the University of Vienna; Ferguson (n 23) at 5 reports that Pernkopf had protected his Austrian assistants who made the drawings so that they would not be drafted into the German Army, and that out of gratitude they added the Nazi icons to some of the paintings.

The signatures depicted are from the 1943 edition of the Atlas, as recounted by Israel (n 22) at 135 and Ferguson, sourced and available in Ferguson’s paper (n 23); also available in the paper by Angetter (n 23) at 1455.
3.2.3 Unethical origins of human cadavers

Having conducted extensive research into the origins of the Pernkopf Atlas in the 1980s and mid-1990s, authors Israel and Seidelman were prompted to state that the precise origins of the cadavers used in the Pernkopf Atlas were unknown, but that evidence suggested that they might have been the victims of political terror. They further pointed out that it is known that from 1938 to 1945 the Anatomy Institute of the University of Vienna received the cadavers of prisoners executed at the Vienna District Court and of others put to death in Gestapo execution chambers in Linz, Munich and Prague. Although the Faculty of Medicine of the University of Vienna initially refuted these allegations, in 1997 mounting international pressure and outrage prompted the University to initiate an investigation into the origins of the human cadavers used in the Pernkopf Atlas from 1938 to 1945 (more particularly those cadavers delivered to the Anatomy Institute of Vienna). On 1 October 1998, the University of Vienna released the final report. The investigation revealed that during 1938 and 1945 the Institute of Anatomy received at least 1,377 bodies of executed persons, including eight victims of Jewish origin and also those of children. The bodies were assigned for purposes of research and teaching to the Institute on the basis of a general decree of 18 February 1939. The report noted that the investigation could neither prove nor disprove the suspicions that some of the illustrations might have been of prisoners of war or Jewish victims. However, Angetter, writing on behalf of the Senate Project of the University of Vienna, reports that the team of investigators was aware that the research into the origin of anatomical preparation,

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33 Cf Israel (n 22) at 137; image sourced from Pernkopf’s Atlas (n 25) “regional preparation of structures of trigonum caroticum” fig 258 at 244, as recounted by Seidelman (n 18) at n 24.
34 Cf the literature listed in nn 18, 21 and 22 above.
35 Israel & Seidelman (n 22) at 1634ff.
36 Specifically the Israel Holocaust and Martyrs Remembrance authority, Yad Vashem, who in Mar 1995 requested the rector of the University of Vienna and the publisher of the Atlas to conduct an official investigation: recounted by Atlas (n 23) at 51; Angetter (n 23) at 1457; Hildebrandt (n 23) at 94.
37 Angetter (n 23) at 1455 reports that most of the 1,377 executed people were guillotined at the Vienna assize court and that some of them were shot by the Gestapo at a rifle range situated on the outskirts of Vienna.
38 A closer inspection of fig 3 (above) depicts the wasted and emaciated appearance and crudely shaven head of a young man (an illustration of a dissection by Lepier), which strengthened the suggestion that the subject might have been a wartime prisoner – cadavers used in anatomy books usually had completely shaved heads: see Atlas (n 23) at 53; Israel (n 22) at 139.
39 G Spann Investigations of Anatomical Science in Vienna 1938-1945: Results of the Senate Project of the University of Vienna (University of Vienna, 1998) as relayed by Atlas (n 23) at 54 n 18.
more than half a century after the end of World War II, would be fraught with difficulties because of the time lapse and because the Institute of Anatomy had received a direct hit during a bombing raid shortly before the end of the War, which destroyed some of the most relevant documents. Angetter nevertheless acknowledges that the investigation revealed that there were indeed remnants of victims (presumably of Nazi terror) and that there was “a lack of ethnic sensitivity (sic) on the part of the faculty in this regard”.  

According to research conducted by Israel, it is evident that Pernkopf in his capacity as head of the Institute of Anatomy played a pivotal role in the procurement of corpses for his Atlas and must have been fully aware of their status and unethical obtention. Israel reports that Pernkopf was very concerned about the shortage of cadavers in the Anatomy Institute during 1938 and 1939. He therefore requested permission from the authorities in Berlin to use cadavers of persons executed in German-occupied Poland. Although this request was denied, apparently because of a wave of executions in Vienna, sufficient numbers of corpses were available in the Institute by 1940. It is therefore clear that the political events and context of the time and Pernkopf’s complicity in them, as well as the circumstantial evidence, are significant factors in the ethical and legal assessment of the continued use of his Atlas.

324 Subsequent controversy and debate

324.1 Ethical and legal questions central to the controversy and debate

Pivotal to the controversy and debate surrounding the Pernkopf Atlas are the following ethical and legal questions: the first and most obvious one is whether a publication such as the Atlas, created and tainted by medical research and the obtaining of data which, in the light of the origins of the victims and cadavers procured for dissection, was unethical and unlawful, should continue to be used or published? The second question is whether the signing of the illustrations with Nazi insignia is of relevance in the debate? The third question, posed mainly by librarians, is whether the Atlas should still form part of teaching materials in medical library collections with open access? And the fourth

40 Angetter (n 23) at 1456-1457.
41 Israel (n 22) at 138.
42 Cf Hildebrandt (n 23) at 97: “The fact remains that Pernkopf and some of the artists were guilty of being Nazis. Pernkopf was also guilty of profiting from the abundance of human bodies provided by the NS regime through execution, a fact of which he was very much aware.”
43 Israel (n 22) at 138 n 20 with reference to a dissertation by M Lehner Medizinische Fakultat der Universität in den Jahren 1938-1945 (University of Vienna, 1990).
44 This question is almost unanimously identified and formulated by all commentators on the unethical origins of the Atlas: see the authors as listed in nn 22 and 23 above.
45 This question has not been addressed separately and specifically by the above-mentioned commentators (see nn 22 and 23 above), but has been treated as an intrinsic part of the first question, almost as an inevitable emphasis on the unethical procurement of the victims concerned.
question, added by the present author, is how the application of medical law can be informed or influenced by the unethical use and publication of tainted medical research, or to put it differently, what the relationship should be between medical law and medical ethics when faced with unethical medical research as illustrated by the Atlas, whether done in the past or the present?

3 2 4 2 The main debate

3 2 4 2 1 Summary of the arguments for the acceptance or rejection of the Atlas

Responses to the first question posed above have ranged from utter condemnation and outrage to a more tempered approach and conditional acceptance of the use of the publication. Hildebrandt, writing as recently as 2006, and arguing forcefully for the continued use of the Pernkopf Atlas, has succinctly summarised the main arguments advanced for and against doing so.

Arguments (with some extensions and additions by the present writer) against the continued use are that (a) the creation of the Atlas was fundamentally evil; (b) nobody should profit from the exploitation of human life, especially by the Nazi regime; (c) using the results of research by Nazi scientists could appear to endorse the atrocities committed; (d) a work cannot be separated from its creator, thus if the creator is evil, the work is also evil; (e) the use of Nazi data might initiate society’s slide down a “slippery slope” towards Nazi-like amorality; (f) the Atlas can readily be replaced by other anatomical atlases or modern means of medical imaging (for example the Visible Human Project at the US National Library of Medicine); and (g) the Atlas is the product of gross transgressions of law and medical ethics.

47 Notably Williams (n 21); Ernst (n 21); Israel (n 22); Israel & Seidelman (n 22); Querido (n 23).
48 Notably Angetter (n 23); Hildebrandt (n 23).
49 Hildebrandt (n 23) at 96ff; it is to be noted that Hildebrandt’s summary is in fact a distillation of the opinions of various commentators, without direct authority provided for each of the listed arguments.
50 Cf the remarks, by analogy, of WE Seidelman “Mengele medicus: Medicine’s Nazi heritage” (1988) 66 The Milbank Quarterly 221 at 232: “By giving value to (this) research we are, by implication, supporting Himmler’s philosophy that the subjects’ lives were ‘useless’. This is to argue that, by accepting data derived from their misery we are post mortem, deriving utility from otherwise ‘useless’ life. Science could thus stand accused of giving greater value to knowledge than to human life itself.”
51 As relayed by Ferguson (n 23) at 8 and Atlas (n 23) at 58, the Visible Human Project utilises contemporary imaging techniques to enable construction of three-dimensional images of dissected bodies, which then essentially makes it possible to learn anatomy through a computer screen. A male body (that of a convicted executed murderer in the State of Texas, Joseph Paul Jernigan, with his full informed consent) was used in the project. Immediately the question arose whether or not the informed consent given was appropriate and valid in view of the death penalty. Ironically the strongest opposition came from the Department of Emergency Medicine at the University of Vienna Medical School, which argued that the death penalty and medical participation in an execution are unethical, that even with the informed consent of the condemned person the procurement of the material used in the project was unethical and that the immediate withdrawal of the images was morally necessary.
52 This aspect will be canvassed in more detail below – added to the summary by the present author.
By contrast, arguments advanced for its continued use are that \(^{53}\) (a) good may be derived from evil in providing new doctors with the means to perform better operations; (b) victims of the Nazi regime and their sacrifice are best honoured by the continued use of the Atlas; (c) publication of the Atlas in its original form, including the Nazi symbols and information about the historical context, may be used for not only the anatomical but also the ethical and historical education of future physicians (with reference to the complicity of the medical profession in unethical research); (d) the elimination or suppression of books is a characteristic of totalitarian systems as evidenced by the Nazi book burnings; \(^{54}\) (e) the Atlas is a work of great aesthetic value; (f) the material exists anyway so it should be used for teaching purposes; \(^{55}\) (g) there is no evidence that Pernkopf directly contributed to anyone’s execution; \(^{56}\) (h) from an anatomist’s point of view, the Pernkopf Atlas cannot easily be replaced by other anatomical atlases; \(^{57}\) and (i) the Atlas should be accepted conditionally. \(^{58}\)

32422 The meaning and interpretation of the signing of the illustrations with Nazi insignia

Most commentators have not directly addressed the role of the meaning and interpretation of the signing of the illustrations with Nazi insignia \(^{59}\) as a possible factor in the debate about acceptance or rejection of the Atlas. \(^{60}\) Although all of them have identified and discussed this deeply offensive feature of the Atlas, its obvious infamy and horror seem to have been automatically equated with the unethical contamination of the content and origins of the Atlas, so that the second question has been treated as an intrinsic part of the first one (as set out in par 3241 above), almost as an inevitable emphasis of the unethical origins of the Atlas. However, it is submitted that the meaning and interpretation of this notorious feature may in conjunction with the discussion below reinforce an argument for the conditional banishment of the Atlas to the archives on ethical and legal grounds.

The Pernkopf Anatomy Atlas is indisputably a product of its time, and undoubtedly a Nazi atlas created by Nazis. The creators and content of the Atlas must have been permeated with the ideology, racial policies, practices (including “euthanasia”), exclusion

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53 As per summary by Hildebrandt (n 23) at 97ff.
54 As argued by Israel (n 22) at 142.
55 See Ferguson (n 23) at 8 – added to the summary by the present author.
56 As argued by Hildebrandt (n 23) at 97 – added to the summary by the present author.
57 As argued by Hildebrandt ibid – added to the summary by the present author.
58 As advanced by Strous & Edelman (n 23) at 208 where it is stated (in the context of eponyms) that a reference should be included in every edition of the Atlas to the unethical origins of its content, although the authors state (at 209) that “use of such a tainted atlas has no place in modern medical usage” – added to the summary by present author; also compare Jones (n 2) at 113-115 with reference to M Weitzmann “The ethics of using Nazi medical data: A Jewish perspective” (1990) 19 Second Opinion 27 at 28, stating that the victims should never be forgotten and one should fully acknowledge the moral flaws in the procurement of the material whenever it is used.
59 See the discussion in par 322 above.
60 Cf the literature listed in nn 21, 22, 23 above.
and extermination) and symbolism of the Third Reich. Pernkopf and his team of talented illustrators, working in close collaboration, were by no means “ideological virgins” and must have been acutely aware of the unethical origins of the human bodies procured for dissection. It is therefore in this context that appending the Swastika symbol and the SS rune to the superlative illustrations was to be expected as the “ultimate glorification of, loyalty/affiliation to the Third Reich and its ideals and aspirations”. The swastika, the premier icon and symbol of the Third Reich, symbolises Aryan (Nordic) supremacy and domination, anti-Semitism, fascism, tyranny and eventually genocide. The SS lightning bolts are indicative of the Shutzstaffel (SS), Himmler’s dreaded police forces and members of the Gestapo, notorious for their terror campaigns, complicity in torture and death in the concentration camps.

Ultimately, the question may be posed: what is the significance of this offensive feature of the Atlas? What inferences may be drawn, apart from the one that the reconfigured signatures serve as an affirmation of the Nazi origin and content of the Atlas? It is submitted that the answer to these questions should be sought with reference to the unethical and unlawful conduct of Pernkopf and his illustrators not only at a secondary level but at a primary level, from a “reconstructed” subjective perspective of the victims themselves. Only from this perspective does the conduct of the creators of the Atlas become a total abomination and can the reconfigured signatures be seen to proclaim total disregard and disrespect, not only for the victims’ right to life and bodily integrity, but also for their right to human dignity. From the victims’ perspective, and “speaking for the dead” with respect, the “reconstructed”, almost narcissistic message or gesture conveyed to them through the insignia may be said to have been the following: “In life you were nothing; you were arrested, incarcerated and brutally executed because you were mentally unfit, racially inferior or just an enemy of the Reich; we have appropriated your remains, which were delivered to our Anatomy Institute, and without your consent have dissected and mutilated them and incorporated them into

61  Cf the discussion and literature in par 2 above.
62  Viewed in this context, Angetter’s justification of the signatures (n 23) at 1456 seems highly suspect: see n 31 above.
63  Friedlander (n 14) at 10-11.
64  Idem at 54-55, 142-143, 295-296; see, also, the interesting comments about the SS by M Baigent & R Leigh Secret Germany: Claus von Stauffenberg and the Mystical Crusade against Hitler (London, 1994) at 200: “Few institutions in the course of human history have equalled the SS in the smooth-working precision and efficiency of its murderousness. Yet the SS, the epitome of rational methodology and competence, encouraged its personnel to procreate on the gravestones of illustrious Germans of the past, in order that the children thus spawned might somehow ‘absorb’ something of a dead hero’s qualities. So ‘rationally’ was this bizarre premise spread that the official SS newspaper published lists of gravestones on which copulation was recommended.”
65  The word “abomination” is used deliberately here based on the research of SG Post “The echo of Nuremberg: Nazi data and ethics” (1991) 17 J of Medical Ethics 42 at 42-44, who applies the concept “abomination” as a cultural concept denoting the line between civilisation and the moral abyss. Post sees the Holocaust and data derived from unethical practices of the Nazi era as the epitome of evil.
66  This aspect is discussed in more detail below.
67  To use the title of a remarkable book by Jones (n 2) Speaking for the Dead: Cadavers in Biology and Medicine.
an anatomy atlas. As the ultimate gesture of our total domination and obliteration of you, we have, for the greater glory of the Third Reich, appended our signatures with Nazi symbols to the illustrations created from your anatomical remains – even in death you are dominated by us and are still nothing!” Surely this reconstruction is a realistic reflection of the feelings of the victims, if they could be resurrected? It is submitted that this subjective victim perspective is the important subtext of the Atlas. This all-important, but often ignored subtext might very well be the ultimate reason for rejecting the Atlas in the light of the human right to dignity. The assessment of Nazi insignia in the Pernkopf Atlas must, however, acknowledge a deep and obvious irony concerning the origins of the human subjects procured for the Atlas: these victims were regarded by the Nazi regime as inferior and unfit for life (untermenschen68 destined to be executed, euthanised or exterminated); yet their remains were “good enough” in death to be used to create a superlative Nazi anatomy atlas hailed as a masterpiece. Thus paradoxically the untermensch in life became the übermensch in death! This paradox serves to defy Nazi racial ideology and reaffirm that even in death, good or truth (even in the anatomical sense) will invariably conquer evil and untruth.

3 2 5  The relationship between medical ethics and medical law in the light of unethical and unlawful medical research as illustrated by the Atlas69

The relationship between medical ethics and medical law is pivotal to the question whether the Pernkopf Atlas should be rejected or accepted on ethical and legal grounds. One must consider not only the medico-ethical context of the Atlas, but also its legal context, and especially the conduct of Pernkopf and his illustrators with reference to this relationship. It is noteworthy that most commentators70 have until now assessed the Atlas only in the context of transgressions of medical ethics. An assessment of the legal framework and specifically the interface between medical law and ethics may therefore be instructive. The following questions should be posed: To what extent does the medico-ethical framework serve to inform the legal framework? Does the legal rule follow the ethical rule; in other words, can a normative ethical value simultaneously also be a legal right? Does unethical conduct automatically translate into unlawful conduct? Were the actions of Pernkopf and his illustrators thus unethical and unlawful? Are the role and function of medical ethics different from the role and function of medical law? These questions will be addressed by revisiting the medico-ethical and legal framework.

68 “Untermensch”, German for “under man” or “sub-human”: a term that became infamous when Nazi racial ideology used it to describe “inferior people”, especially the Jews, Gypsies, the Poles, Hungarians and Romanians and other Slavic people: see http://dac.neu.edu/holocaust/Hitlers_Plans.htm (accessed 13 Feb 2012); see, also, Baigent & Leigh (n 64) at 174.

69 The discussion under this heading will deal with the fourth stated question as per par 3 2 4 1 above.

70 See nn 21, 22, 23 above.
Revisiting the medico-ethical framework

Dr Howard Israel\(^1\) who, among others, was instrumental in exposing the Pernkopf Atlas, comments on the present relevance of the “Pernkopf issue” in the context of medical ethics:

The quality of the anatomic illustrations and the value of Pernkopf’s *Atlas of Topographic and Applied Human Anatomy* in the education of anatomist, medical students and surgeons remain unquestioned. The issue is one of biomedical ethics … To thoroughly understand this issue, it is important to realize that the “Pernkopf issue” is potentially just one of the numerous examples in which there have been horrific violations of medical ethics by Nazi doctors, which continue to influence medicine today. To understand the importance of the “Pernkopf issue” requires a retrospective look at the devastating consequences of the abuse of power by doctors who violate the Hippocratic Oath … How today’s medical profession handles the scientific data which has resulted from those medical atrocities will impact greatly on biomedical ethical issues of today and in the future.\(^2\)

Medical ethics, since antiquity and more specifically as founded in the Hippocratic Oath,\(^3\) has as a general term covered the several different ways of examining and understanding moral life. This involves the application of ethical reasoning to medical decision-making, and particularly to the question which general moral norms should be accepted for the guidance and evaluation of medical conduct and why? The core consensus seems to be that a medical practitioner, by accepting and treating a patient, irrespective of the circumstances, is first and foremost required “to do no harm” and to act in the best interest of the patient.\(^4\) The notion of normative medical ethics has over time evolved into what is generally known today as the Beauchamp-Childress-medical-ethic-paradigm, consisting of the following four principles: (a) respect for autonomy (a medical practitioner has no right to impose treatment upon a patient); (b) non-maleficence (do not cause harm to the patient); (c) beneficence (do good to patients); and (d) justice

\(^1\) (n 22) above.
\(^2\) Israel (n 22) at 140.
\(^3\) The Hippocratic Oath (which in part reads as follows: “I will prescribe regimens for the good of my patients according to my ability and my judgment and never do harm to anyone”) is generally acknowledged by both physicians and lay people to be the foundation of medical ethics for physicians in the West. For a comprehensive discussion of the history of medical ethical systems and the Hippocratic tradition see RM Veatch “Medical ethics: An introduction” in RM Veatch (ed) *Medical Ethics* (Boston, 1989) (hereafter Veatch *Medical Ethics*) at 1-26; see, also, JF Childress “The normative principles of medical ethics” in Veatch *Medical Ethics* 27 at 27ff; JK Mason & A McCall-Smith *Law and Medical Ethics* (Oxford, 1991) at 439-446; J Herring *Medical Law and Ethics* (Oxford, 2008) at 10ff; TL Beauchamp & JF Childress *Principles of Biomedical Ethics* (Oxford, 2009) at 1ff; A Dhai & D McQuoid-Mason *Bioethics, Human Rights and Health Care* (Cape Town, 2011) at 3ff.

\(^4\) Cf RB Roth “Medicine’s ethical responsibility” in RM Veatch (ed) *Cross Cultural Perspectives in Medical Ethics* (Boston, 1989) 150 at 153: “Medical ethics have, over years, acquired a rather philosophical character … it has its roots in a societal concept of *summum bonum*, with interesting modifications such as expressed in the oft repeated maxim *primum non nocere*”; cf AA van Niekerk “Ethics and philosophy” in K Moodley (ed) *Medical Ethics, Law and Human Rights* (Pretoria, 2011) 7-16 at 7ff.
(treatment should be fair, equitable or reasonable). This medical ethical paradigm is generally regarded as the foundation of the ethical principle of principlism, also drawing on the principle of universalism in that these medical ethical principles should apply to everyone. Not only has principlism found application in various ethical codes or instruments (e.g., the Nuremberg Code, 1947, and the World Medical Association’s Helsinki Declaration, 1964 (as revised)) created in response to the medical atrocities committed by the Nazi doctors during the Second World War, but it has also dictated the key factors for ethical medical research, namely (a) knowledge (the proposed research should produce and increase medical knowledge); (b) necessity (it should be necessary to do the research using selected human subjects, rather than less vulnerable groups); (c) benefits (these should outweigh any inherent risks of harm); and (d) consent (valid, free and informed consent).

If the foregoing medico-ethical standard is applied to Pernkopf and his illustrators, it becomes clear that their conduct was unethical. Although it may be argued that principlism (as it is known today in terms of the Beauchamp-Childress-model) was at that time not well articulated, and the post-war ethical codes or instruments did not even exist at the time of the creation of the Atlas (in essence an argument against retrospective application), it should nevertheless be noted that between 1900 and 1945 the German government issued medico-ethical regulations prohibiting unethical medical research (in the context of consent and risk limitation). In addition, it may be argued that all medical practitioners in the Third Reich were at least bound by the principle of “beneficence” as articulated in the Hippocratic Oath. However, the horrible unethical medical atrocities committed in the Third Reich demonstrate that neither official ethics regulations nor high aspirations are necessarily a guarantee that an ethical code will protect subjects from...
abuse. Research also indicates that all participating doctors in the Third Reich dismissed the Hippocratic Oath as a “physician’s oath of ancient times” and argued that physicians should “balance benefits against risks and thus protect higher values”. The Nazi authorities did not expect any opposition from the medical profession, for young doctors no longer followed absolute ethical rules, but followed the teachings of their Nazi professors and the opinions of their peers.  

Author Gareth Jones in his remarkable book, Speaking for the Dead: Cadavers in Biology and Medicine gives yet another ethical dimension to the debate over the Pernkopf Atlas: the principle of moral complicity. In terms of this principle, there are only two possible responses to the dilemma: either the moral complicity principle is accepted and use of the material or data is banned, or the principle is rejected and the material or data are used as any ethically derived material or data would be. The following reasons may, according to Jones, be advanced for rejecting unethically derived data: 

A first reason ... stems from a desire to show respect for those killed under appalling circumstances ... Such refusal is regarded as the sole way in which a nation’s guilt can be absolved. It is also argued that the personhood of those experimented on without their consent should be vigorously asserted, and this can only be done by refusing to use any material or data emanating from an unethical source ... A second reason is that its use implicates people today in Nazi crimes. The contention here is that those using the material become one with the perpetrators of the original crimes, since their motives today cannot be isolated from the manner in which the material was obtained in the first place. From this view, even to cite unethical work is to validate it, and to demonstrate the existence of a continuous thread linking apparently respectable current research with ethically abhorrent work in the Nazi era. The essence of the moral complicity argument is that this link alters the character of the apparently respectable studies today, by tainting the pedigree of the material or data on which they are based. 

Since Pernkopf and his illustrators were not directly involved in the execution of the victims and profited only on their death, when they procured their bodies for dissection and drawing, the question may well be posed whether cadavers have any ethical significance? The answer to this question too is provided by Jones: 

The treatment of cadavers is considered to be of ethical significance. One answer is that the cadaver has intrinsic value: it is an end in and of itself. Alternatively, the cadaver may have instrumental value: it can be used as a means to an end ... The closest we come to recognising a cadaver’s intrinsic value is when we bestow a person’s intrinsic value upon their dead body at death. We do this because we consider that a person and his or her body

80 Friedlander (n 14) at 16ff.
81 (n 2) at 110.
82 Idem at 108-111 with reference to Weitzmann (n 58) at 27.
83 Jones (n 2) at 111; in a similar vein, Levine (n 78) at 27-28, invoking the Declaration of Helsinki (principle 1.8: “Reports of experimentation not in accordance with the principles laid down in this Declaration should not be accepted for publication”), states that the obvious motive of the rejection policy is to discourage unethical research. In addition, he refers to earlier commentators on this issue, who drew an analogy between the publication of unethically obtained data and the acceptance by a court of unconstitutionally obtained evidence, eg, Miranda v Arizona 384 US 436 (1963).
are inseparable. We recognise each other because we recognise each other’s bodies, and while this applies supremely during life, some very important aspects of identity continue following death. While the body retains a recognisable form, even in death, it commands the respect of identity. No longer a human presence, it still reminds us of the presence that once was utterly inseparable from it. When we turn to a cadaver’s instrumental value we recognise that it serves as a vital source of memories and responses. This leads to the conviction that a cadaver should be respected and treated in a ‘decent’ manner. As we remember a person who has died, we respect the person who was. Consequently, the manner in which cadavers are treated is of moral interest. On the negative side, we show disrespect to a person-now-dead when we allow that person’s body to be dissected in the absence of any consent.

On the basis of that persuasive view, there can be no doubt that the human body is, not only in life but also in death, endowed with the ethical value of human dignity, even though no longer with life, bodily integrity or privacy.

Visiting the legal framework

The general legal framework

Replying to the question whether medical ethics should inform law, more specifically medical law, and what the relationship should be between medical ethics and law, the late Dieter Giesen, renowned author and medical-law scholar, stated that professional medical ethics do not stand separate from law, but that they are intrinsically interwoven with and have a continuous influence on the doctor-patient relationship. Important, in the context of the ‘Pernkopf issue’, is Giesen’s statement that what the rules of medical ethics demand of the physician will at the same time and to a large extent also be the legal obligation that has to be fulfilled. It is in the medical professional field much more than in any other social relationship, that ethical considerations are inextricably linked with considerations of a legal nature, and this is as true today as it was in the past. Although some authors have correctly pointed out that not all unethical conduct can necessarily be regarded as illegal or unlawful, since it violates professional medical standards, while unlawful conduct is a transgression of the law, courts have nevertheless been willing to accord an important role to ethical issues in reaching their decisions, particularly in controversial cases where they are called upon to decide what treatment a patient should receive. The principle that the legal rule follows the medical ethical value is further...

84 Jones (n 2) at 57-58; see, also, Jackson (n 75) at 28 on the so-called “social construction” of the body.
85 Giesen (n 77) at 669.
86 Ibid; see, also, Herring (n 73) at 3; Jackson (n 75) at 2ff.
87 Herring (n 73) at 3: “To be discourteous to a patient may be unethical, but it would not necessarily be illegal”; see, also, Van Niekerk (n 74) at 11.
88 A concrete example is the English case of Airedale NHS Trust Respondents v Bland (1993) 1 All ER 821 at 850: “This is not an area (in) which any difference can be allowed to exist between what is legal and what is morally right. The decision of the court should be able to carry conviction with the
borne out by the fact that the most important ethical values (life, bodily integrity, dignity, privacy and equality), incorporated into and articulated in medical ethical codes or instruments, have subsequently all been elevated into legal rights in some legal systems and their constitutions or human rights legislation.\textsuperscript{89}

What one has to determine is whether the unethical conduct of Pernkopf and his illustrators also amounted to a transgression of the law, and more specifically the tenets of medical law. This assessment calls for an understanding of the nature and scope of medical law. Various commentators have remarked on the transcendental nature of medical law in the sense that it does not respect traditional compartments with which lawyers have become familiar, such as torts, contracts, criminal law, family law and public law. Instead, medical law cuts across these subjects and may be regarded as a discrete area concerned with the law governing the interactions between doctors and patients (including medical ethical principles) and the organisation of health care.\textsuperscript{90} It is submitted that this very transcendental nature of medical law exposes not only the multiplicity of the legal transgressions committed by the Nazis against humanity, but also the complicity of Pernkopf and his helpers in these transgressions. By violating the principles of medical law, in that they conducted unethical medical research on murdered human beings without consent, they simultaneously also violated other fields of law\textsuperscript{91} by acting contra legem artis et bonos mores.\textsuperscript{92}
While it is indisputable that Pernkopf conducted research on the bodies of victims of Nazi terror without having obtained prior consent from the victims, and that he incorporated anatomical drawings based directly on their anatomical remains into his Atlas (once again without their consent), it may be asked whether there was any ground of justification which would render this unethical and unlawful conduct lawful? It is an established, universally applicable, principle of medical law that medical research conducted on human bodies (alive or dead) will be justified and therefore lawful, only where (a) informed consent was obtained; or (b) informed consent could not be obtained, but some emergency arose (such as necessity or unauthorised administration) necessitating the research in the absence of consent; or (c) some form of statutory authority provided for the research without consent; or (d) a court order was obtained rendering consent superfluous; or (e) the research without consent was in the public interest.

It is argued here that none of these grounds can be invoked to justify Pernkopf’s conduct. It is submitted that, in view of the all-pervasive Nazi ideology that permitted bodies to be deliberately processed and pillaged, any court order, statutory instrument (eg, the general decree of 18 February 1939, in terms of which bodies were assigned to the Anatomy Institute) or any perceived emergency or public interest was devoid of all legality and cannot be regarded as justification for such actions. This is further borne out by the subsequent sanctioning of this kind of conduct (as constituting crimes against humanity) in international criminal law. In the context of criminal law Pernkopf’s intent (in the form of at least dolus eventualis) must also be taken into account. Being ardent Nazis, and fully embracing Nazi ideology and policies, Pernkopf and his illustrators must undoubtedly have been aware of the unethical origins and status of the assigned bodies and must have reconciled themselves to this reality.

In this regard, and in the context of that time, the guilt and criminal liability of Pernkopf and his illustrators may be “reconstructed” with reference to the following candid personal confession, in later years, by Albert Speer, principal architect of the Third Reich and confidante of Hitler:

You ask … about the Nazis … You say how could an intelligent person go along with such a thing. I want to show you specifically using myself as an example, how this might happen. Let me say the hardest bit first: unless one wants, cowardly, to avoid confronting

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93 As discussed by Giesen (n 77) at 564-589; Herring (n 73) at 565.
94 Giesen (n 77) at 367-369, 362-364.
95 Idem at 356-357, 375ff also with reference to “therapeutic privilege”.
96 See the discussion in par 2 above.
98 Idem at 113: “In many if not most domestic systems, a mens rea lower than dolus directus or purpose and knowledge warrants full criminal responsibility on the part of the offender. Common standards are recklessness and dolus eventualis … A person acts with dolus eventualis … if he is aware that a material element included in the definition of a crime (such as the death of a person) may result from his conduct and ‘reconciles himself’ or ‘makes peace’ with this fact”. Cf Hildebrandt (n 23) at 97: “The fact remains that Pernkopf and some of the artists were guilty of being Nazis. Pernkopf was also guilty of profiting from the abundance of human bodies provided by the NS regime through execution, a fact of which he was very much aware.”
the truth, one has to say that there can be no excuse; there is no justification. It is in that sense that I am convinced of my own guilt. There are things, you see, for which one has to carry the blame, even if purely factually one might find excuses: the immensity of the crime precludes any attempt at self-justification.

While it is true that neither Pernkopf nor his illustrators were ever directly involved in the killing of the victims, the question needs to be asked whether they (as benefiting from the bodies) should be sanctioned as indirect perpetrators. In this regard their complicity is clear. There can be no doubt that Pernkopf, as head of the Anatomy Institute, was instrumental in the procurement of the bodies of the victims of Nazi terror for dissection, and ultimately, for the creation of his Atlas. In this sense he was an indirect perpetrator in the execution of the victims, but a direct perpetrator in the subsequent processing and pillaging of the bodies. He may also be regarded as a direct beneficiary of the bodies. Pernkopf’s participation and complicity in crimes committed by the Third Reich are certainly evidence of not only gross medical ethical transgressions but also of his unlawful and criminal conduct.

3 2 5 2 2 Invoking the right to human dignity: Application of the “Foster model” in rejecting the Atlas

The above assessment indicates that Pernkopf’s conduct was both unethical and unlawful and serves to convince us that his Atlas should no longer be used. This link between

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99 As recounted by G Sereny Albert Speer: His Battle with Truth (London, 1995) at 19-20, with reference to May 1953, when Speer was forty-eight years old and serving his seventh year in Spandau prison, his then seventeen-year-old daughter, Hilde, a brilliant high school student spending a year in America, wrote to her father asking him to explain his guilt – the above quote was his reply.

100 Cf Werle (n 97) at 120ff, in the context of subsequent international criminal law with reference to “joint commission” in terms of art 25(3)(a) of the International Criminal Court (ICC) Statute; see, also, the discussion in par 2 above with regard to the willing participation of the educated professional classes in implementing extreme policies of racial and genetic inequality: see Friedlander (n 14) at 216: “Various myths have been created to explain the role of physicians in Nazi killing operations. Authors dealing with Nazi crimes have ascribed to physicians as a group unique commitment to serve humanity and have thus viewed their participation in these crimes as a particularly egregious fall from grace … on the other side, a tendency developed to dilute the crimes of physicians by granting them sincere though misguided motives.” In view of this stance, one can with respect, not agree with Hildebrandt (n 23) at 97 who states: “There is no evidence that he (Pernkopf) contributed to anyone’s execution”. It is submitted that this is an attempt to “dilute” his liability. For a further explanation of fascism and of the complicity of the professional classes in Nazi Germany, see W Kirchner Western Civilization Since 1500 (London, 1975) at 287: “All activities (in the Third Reich) in art, science and business had to be co-ordinated with party doctrines, and the ‘leadership principle’ was extended to all areas of national life”; see, also, Baigent & Leigh (n 64) at 199: “Above and beyond all schematic models, there lies the phenomenon of the Third Reich itself, which reflects a disquieting melange, unique in modern history, of rational and irrational. It is precisely this melange that renders the Third Reich so terrifying and so apparently inexplicable in ‘reasonable terms’. At Nazi Party rallies – in the mass hysteria, the ecstatic rapture, the mindless chanting, the torchlight processions, the hypnotic ritualistic pageantry and ceremonial, the rhythmic incantatory rhetoric as mesmerising as a drumbeat – the irrational holds triumphant sway. Rationality attains a monstrous apotheosis in the death camps where mass murder and genocide are transformed into a mechanical bureaucratic process, a dreary matter of engineering, accounting and book-keeping”.

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medical ethics and medical law is significant, since the latter is a tool for enforcing the former. Logically speaking, law can never be an end in itself, but only a means to an end. Its value and significance depend on how successful and effective a means it proves to be in relation to an end. It is to be hoped that the end is justice within the specific context in which the law has been applied. Law begs the question of application and application begs the question of context.\textsuperscript{101} Can the right to human dignity be invoked as the ultimate human right (and ethical value) which will banish the Pernkopf Atlas to the archives of infamy? This is certainly a compelling option if regard is given to the views of Charles Foster, arguably a leading and most original voice in contemporary medical law.\textsuperscript{102}

Foster argues that the final end of law is to promote human flourishing to enable humans to lead excellent lives. He states that “human flourishing” consists of human dignity as objective flourishing (human enhancement).\textsuperscript{103} To him dignity is about being human, implying that every transaction must be managed so as to maximise the dignity of all the parties involved.\textsuperscript{104} Although human dignity has often been denounced as “useless” or hopelessly amorphous (a feel-good value to be invoked when all else fails),\textsuperscript{105} Foster argues convincingly that dignity is not only an essential principle in bioethics and law, but it really is the only principle that is sustainable as the “Theory of Everything”.\textsuperscript{106} To him, dignity is the key that, properly used, unlocks all problems in contemporary medical ethics and medical law.\textsuperscript{107} It is submitted that the Foster model of dignity not only solves contemporary problems in medical ethics and medical law, but may also solve historical problems, such as the dilemma of the Pernkopf Atlas. This submission is borne out by the following practical example provided by Foster:

\textsuperscript{101} See Carstens & Pearmain (n 89) at v.
\textsuperscript{102} C Foster Human Dignity in Bioethics and Law (Oxford, 2011) at 4ff. Charles Foster teaches medical ethics and medical law at the University of Oxford, and is also a barrister practising medical law from Outer Temple Chambers, London.
\textsuperscript{103} Idem at 22-23.
\textsuperscript{104} Idem at 1-4.
\textsuperscript{105} Idem at 58-62.
\textsuperscript{106} Idem at 19-21.
\textsuperscript{107} Idem at 1ff. Note that Foster, in support of human dignity as the ultimate human right, draws, \emph{inter alia}, on the jurisprudence of the South African Constitutional Court case of \textit{National Coalition for Gay and Lesbian Equality v Minister of Justice} 1999 (1) SA 6 (CC) par [120]: “It will be noted that the motif which links and unites equality and privacy, and which indeed runs through the protections offered by the Bill of Rights, is dignity”, and, par [30]: “The right to dignity is a cornerstone of our Constitution” (per Ackerman J): see Foster (n 102) at 97-98, 121-123; see, also, N Goolam “Human dignity: Our supreme constitutional value” (2001) 1 Potchefstroom Electronic LJ 1 at 1ff; H Botha “Human dignity in comparative perspective” (2009) 20 Stellenbosch LR 171 at 172ff. Cf, also, in the context of human dignity linked to the right to life, S v \textit{Makwanyane} 1995 (3) SA 391 (CC) pars [326]-[327]. Foster’s dignity model, and his reliance on South African constitutional jurisprudence, may, in a modern context, be reinforced by the traditional African notion of “ubuntu” that points to individual civil and social rights within a communitarian framework, denoting collective solidarity, humanity and the responsibility of all to recognise and respect each other’s dignity and value: see L Forman “Justice and justiciability: Advancing solidarity and justice through South Africans’ right to jurisprudence” in AP den Exter (ed) \textit{International Health Law} (Antwerpen, 2008) 143 at 143ff.
Consider a patient who has given (her) body to be dissected by medical students. One of the medical students cuts off the patient’s ear and takes it home to be used as an ashtray. Why not? Dignity again, most would say. But how? … Why should I not use a patient’s ear as an ashtray? The answer, if I’m right, must be that to do so does not promote human flourishing. But what can that mean? Is it not nonsensical to talk about the flourishing of a dead person? There are several possible ways in which the statement might make sense. It might mean: (a) That part of the dead person’s being survives her death. She continues to live in the minds of others. For that part of her that survives to flourish, the remnants of her body must be treated with respect; (b) that another part of her being survives her death – namely her wishes. A wish not to have one’s dead body abused can be presumed … (c) that if the possibility of her ear being so abused had occurred to her while she was still alive, this would have interfered with some part of her flourishing – for instance her peace of mind. An assurance embodied in a legal or ethical code that this would not happen is therefore a flourishing – promoting assurance; (d) that by using the ear that way, the user himself being undignified – doing something that compromises his own flourishing; and (e) that a set of societal rules prohibiting such abuse enshrines a principle of respect for persons that will facilitate human flourishing in society generally. To use an ear in that way instrumentalises humans, and instrumentalisation metastasises fast and widely.

It is submitted that the parallels between the above example and the Pernkopf Atlas are self-evident. In essence it may be argued that the human dignity of the victims of the Pernkopf Atlas was violated in that their flourishing (even in death) was extinguished by Pernkopf and his illustrators. This becomes clear when the above considerations listed by Foster are extrapolated and applied to the victims of the Pernkopf Atlas. By analogy it may be said that: (a) in the dissected, processed body parts of the victims, illustrated and included in the Atlas, the dead victims’ beings survive their death. They continue to live in the minds of others and on the published pages of the Atlas. For those parts that survive to flourish, they must be respected, which means that the Atlas must be rejected; (b) other parts of the victims survive their death, namely their wishes – it may be presumed that they wished not to have their dead bodies abused; (c) if the possibility that their bodies and body parts might be so abused had occurred to them while they were still alive, this would have interfered with some form of their flourishing – for instance their peace of mind, given the horror and brutality of their circumstances, and their angst, misery and anxiety knowing that they would certainly face execution or extermination at the hands of the Nazis – the ultimate annihilation of their flourishing; (d) in using their bodies and body parts in that way, Pernkopf and his illustrators were themselves undignified, doing something that compromised their own flourishing; and (e) a set of societal rules prohibiting such abuse enshrines a principle of respect for persons that facilitates human flourishing in a civilised society generally. To use bodies and body parts in that way instrumentalises humans, and instrumentalisation metastasises fast and widely. In the light of this statement and of the Foster model of human dignity, the Pernkopf Atlas should be condemned and rejected as a historical pariah or abomination, whose creation was only made possible by the ideological and institutionalised suppression and obliteration of human flourishing (and by implication human dignity), on a scale never seen before.

108 Foster (n 102) at 7-8.
This stance invoking human dignity also accords with the more recent principles of International Criminal law in the context of war crimes: Article 8(2)(b)(xxi) of the ICC Statute refers to outrages on personal dignity committed in international armed conflict, especially humiliating and degrading treatment. Article 8(2)(c)(ii) of the ICC Statute provides a similar rule in respect of non-international armed conflict. For such a crime to be committed it is not necessary for the victim to be aware of the violation of his or her dignity; thus the dignity of a deceased person is also protected.\(^\text{109}\)

4 Historical lessons for medical law and ethics

What historical lessons may be gleaned from the Pernkopf Atlas, specifically in the context of medical law and ethics? To what extent can the events leading up to its creation, as well as its unethical origins and content, inform contemporary medical law and ethics? The following historical lessons are advanced: (a) Atrocities committed in the name of medical research and science are generally assessed with reference to the particular period in history when they were committed – it has been argued that body snatching and grave robbing during the Renaissance, which were severely sanctioned by the law, are not comparable to the medical atrocities (including the Pernkopf Atlas) committed during the Nazi era. (b) When political ideology such as national socialism or fascism permeates civil society, the professional classes, including doctors, scientists, lawyers and educationalists, are “infiltrated” and compromised in order to give legitimacy to this ideology. Medicine and law, in tandem, are often politically exploited to “orchestrate” professional complicity and legality to create a state of total control. Politics becomes law and law becomes politics, and racial tension, exclusion and even extermination ensue.\(^\text{110}\)

The status of humiliating and degrading treatment as a war crime is recognised under customary international law. The definition is based on common art 3(1)(c) of Geneva Conventions I-IV. Art 75(2)(b) of the Additional Protocol I and art 4(2e) of the Additional Protocol II also contains prohibitions of humiliating and degrading treatment. The right to respect for one’s person is understood broadly to cover all rights that are inseparable from human existence, especially the right to physical, moral and intellectual integrity: see Werle (n 97) at 314. It is submitted that this stance also accords with the views of Jones (n 2) at 57-58 as discussed above.

As illustrated by Friedlander (n 14) at 23ff: see the discussion in par 2 above; see, also, Strous (n 13) at 31ff; Israel (n 22) at 140 with reference to WE Seidelman “Complicity, complacency and conspiracy: The enduring legacy of medicine in the Third Reich” in JA Barondess (ed) Proceedings of Hippocrates Betrayed: Medicine in the Third Reich (United States Holocaust Memorial Museum, Washington DC, 24 Jan 1996) 1 at 3; see, also generally, L Fernandez “The law, lawyers and the courts in Nazi Germany” (1985) 1 SAJHR 124 at 124ff. Note that in the South African context there are definite parallels to be drawn with professional complicity in the context of medicine and law under “apartheid” and, recently in the context of government-sanctioned “AIDS denialism”: see in this regard J Taitz “The Steve Biko affair: The case against Dr IR Lang and Dr B Tucker before the South African Medical Council (1977-1985) on allegations of improper and disgraceful conduct arising from the death in detention of Steve Biko” (1986) 54 Medical Legal J 119 at 119ff; J Taitz “The disciplinary powers of the South African Medical and Dental Council” in TW Bennett et al (eds) Law and Medicine (Cape Town, 1988) 40 at 60; L Baxter “Doctors on trial: Steve Biko, medical ethics and the courts” (1985) 1 SAJHR 137 at 137ff; D McQuoid-Mason “Detainees and the duties of district surgeons” (1986) 2 SAJHR 49 at 49ff; P Govender “Love, courage, insubordination and HIV/AIDS denialism” in K Cullinan & A Thom (eds) The Virus, Vitamins & Vegetables: The South African HIV/
(c) The professional complicity referred to takes many forms: participating doctors are involved not only as direct or indirect perpetrators, but also as conspirators, accomplices or accessories after the fact – as borne out by the conduct of Pernkopf and his illustrators.

(d) The professional complicity relates to transgressions not only of medical ethics, but also of law, for example medical law, criminal law and international criminal law. Crimes against humanity and war crimes are often committed. The Pernkopf Atlas dilemma highlights the interface between medical ethics and law and the transcendental nature of medical law in view of the varied transgressions that took place.

(e) Arguably, the most serious atrocities committed in times of war and armed conflict in the name of medical science, aided and abetted by law, have been against persons who have been perceived as unequal, whether on the grounds of race, ethnicity, gender or disability. To inequality has been added indignity, not only in terms of the suffering of the victims, but also in terms of the undignified conduct of the perpetrators. The right to human dignity (even after death) seems to be still, as it was in the past, the ultimate criterion in judging atrocities committed against humanity in the name of medical science. The anatomical equality of all humans, more specifically in death, exposes and dispels the myth of political and racial inequality in life.

(f) The medical profession has relied on excuses such as limited involvement, obedience to orders, ethnic insensitivity or even public interest ex post facto to escape or reduce its liability for the atrocities committed. These excuses tend to downplay the human suffering and unspeakable horrors concerned and to dilute and pervert the truth, and should be rejected by medical law and ethics.

(g) Atrocities that are committed in the name of medical science often result from the medical profession’s apparent indifference to the origins of the human cadavers sourced and procured for medical experimentation. Human cadavers are seen as a necessary means to an end and the ethical and legal rights of the dead seem not to be well articulated and need to be revisited.

(h) The medical profession and doctors who participated in atrocities should accept responsibility for their complicity, including responsibility for being beneficiaries of the atrocities.

(i) The most important lesson to be learned from all this is that medical ethics and medical law should guard against erosion of their standards, and that both the medical and legal professions should recommit themselves to the spirit of medical ethics and the foundational tenets of medical law (including respect for the right to life, patient autonomy, dignity, privacy and equality) and denounce historical phenomena such as the Pernkopf Atlas in a collective gesture of solidarity in order to achieve justice.

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111 See Angetter (n 23) at 1457: “By the same token, the lack of interest of the medical establishment in the use of bodily remains needs to be put up for discussion.”

112 This accords with the views of Jones (n 2) at 74ff.
5 Conclusion

Revisiting the Pernkopf Atlas is a challenge historically, ethically, legally and politically, and also challenges one to explore and consider the pathological nature of humanity itself. On the face of it, one is confronted with unsurpassed anatomical beauty. However, in view of historical fact, this beguiling beauty is immediately permeated by a sense of evil and outrage. How can something so beautiful at the same time be so utterly despicable? Herein lies the paradox of the Pernkopf Atlas, as a legacy of the Third Reich: the fact that Pernkopf and his illustrators, by embracing Nazi ideology and benefiting from the atrocities committed, created a Nazi anatomy atlas in which irreconcilable opposites were forcibly reconciled. Beautiful anatomical drawings were created, but this was only made possible by the unethical and unlawful procurement of the anatomical remains of murdered victims of an evil Nazi regime – thus beauty and evil were fused.\textsuperscript{113}

This fusion not only perverts and diminishes the status and content of the Pernkopf Atlas, but also explains why it should be rejected. It has been argued throughout this article that principles of medical ethics and medical law (with specific reference to moral complicity and the right to human dignity) militate against the continued use of the Pernkopf Atlas. In conclusion, it is submitted that Pernkopf and his Atlas should be banished to the archives of infamy, and that the Atlas be permitted to show its duplicitous face only rarely and then for very good reason in the teaching of history, medical ethics and medical law so that its lessons will be learned and its history never repeated. If it is truly the aim of law to achieve justice and to promote human flourishing, then in considering whether the Pernkopf Atlas should continue to be used, one should be mindful of the opening statement by the chief prosecutor, Justice Robert Jackson, at the Nuremberg Trials:

The privilege of opening the first trial in history for crimes against the peace of the world imposes a grave responsibility. The wrongs which we seek to condemn and punish have been so calculated, so malignant and so devastating, that civilisation cannot tolerate their being ignored, because it cannot survive their being repeated … We must never forget that the record on which we judge these defendants is the record on which history will judge us tomorrow … We must summon such detachment and intellectual integrity to our task that this trial will commend itself to posterity as fulfilling humanity’s aspirations to justice … (If the law is to serve a useful purpose) it must condemn aggression by any other nations, including those which sit here now in judgment … The real complaining party at your bar is Civilisation … It points to the dreadful sequence of aggressions and crimes I have recited, it points to the weariness of flesh, the exhaustion of resources and the destruction of all that was beautiful or useful in this

\textsuperscript{113} Cf the discussion by Baigent & Leigh (n 64) at 225: “The German propensities (in Nazi Germany) for both irrationality and hyper-rationality were fused in a single all-encompassing and all-embracing euphoria. In a warped fashion that would have appalled Goethe and Heine on the one hand, Gneisenau and Yorck von Wartenburg on the other, Germany became what all of them sought to make her: a political and nationalistic entity, which, at the same time, embodied culture and the spirit … Political and nationalistic impulses were reduced to their lowest denominator, a crude tyranny … Culture was reduced to the level of kitsch; and the spirit though energetic enough, was amalevolent one.” Cf, also, J Barzun \textit{From Dawn to Decadence 1500 to the Present: 500 Years of Western Cultural Life} (London, 2001) at 712: “The devastation, both material and moral, had gone so deep that it turned the creative energy from their course, first into frivolity, and then into the channel of self-destruction.”
world … Civilisation asks whether law is so laggard as to be utterly helpless to deal with crimes of this magnitude, by criminals of this order of importance … It does expect that your judicial action will put the norms of international law, its precepts, its prohibitions and, most of all, its sanctions, on the side of peace, so that men and women of good will, in all countries, may have ‘leave to live by no man’s leave, underneath the law’.  

Abstract

The Pernkopf Anatomy Atlas was compiled in Austria during the Nazi era (1938 to 1945) by Eduard Pernkopf, professor of anatomy and director of the Anatomy Institute at the University of Vienna. Initially, the Atlas was hailed as a classic “masterpiece of unsurpassed beauty”, with reference to the anatomical illustrations, until it was discovered in the 1980s and mid-1990s that Pernkopf and his talented illustrators (all ardent Nazis), had used human material obtained from executed victims of Nazi terror to illustrate the Atlas. In addition, it transpired that the illustrators had signed some of the illustrations with offensive Nazi insignia (the swastika and the “SS bolts”). Amid international condemnation and outrage, whether the Atlas should be rejected or continued to be used has continued to be fiercely debated. This article revisits the Atlas with specific reference to transgressions of medical law and ethics, the debate about the continued use of the Atlas, as well as the startling revelation of the complicity of the medical and legal professions in providing the Nazi regime with the legitimacy it needed for the implementation of its political ideology. Ultimately, this article assesses the lessons to be learned from this historical, but contaminated publication. It is argued that the principle of moral complicity, the right to human dignity and, ultimately, civilisation all militate against the continued use of the Atlas.

114 Extract from the opening statement at the Nuremberg Trials, from T Taylor The Anatomy of the Nuremberg Trials (London, 1993), as recounted by Sereny (n 99) at 575-576. The entire trial was officially recorded and published in a twenty-three volume edition, see The Trial of German Major War Criminals: Proceedings of the International Military Tribunal Sitting at Nuremberg, Germany (London, 1950); cf Werle (n 97) at 8-9.