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## What Should We Do about Eduard Pernkopf's Atlas?

### ABSTRACT

Eduard Pernkopf created a classic anatomy atlas during World War II. He was also an ardent Nazi. Questions have been raised recently about the propriety of using an atlas created by a Nazi and illustrated by dissections of cadavers whose identities are unknown, but who could have been victims of Nazi political terror. To examine the ethical issues involved, the author first reviews recently published work regarding Pernkopf and his atlas, with the caution that facts are few in a debate where emotions run high and opinions abound. He then considers what has been written by bioethicists on the use of scientific data from the Nazi era and how those arguments might apply to Pernkopf and his atlas. Important questions remain, however. For example, are scientific data tainted by their associations with Nazism, or should such data (including

the atlas) be assessed on their own merits, separate from the persons and ideologies involved in their creation?

Finally, the author offers his own perspective as a young gross anatomist and physician. He argues that rejecting the hateful beliefs of Pernkopf and his fellow Nazis does not necessitate rejecting the elegant anatomic images they produced. The author further suggests that use of the atlas is itself the most fitting tribute to those who died for it, whether they were victims of Nazi repression or not. Those cadavers not only teach anatomy, they "can remind us of suffering not only in the past but in the present, that we may be more compassionate physicians, more compassionate citizens of the world."

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Is it possible that a creative or scientific work can be regarded as beautiful even if it was conceived in evil and born of malevolence? Can the worst of man's inhumanity be turned to good? Does a creative work have a life of its own, separate from its creator? Renewed interest in the work of Eduard Pernkopf—anatomist and Nazi—has once again crystallized these abstract philosophical questions into concrete moral dilemmas in need of resolution.<sup>1-11</sup> Questions have been raised about the identities of the cadavers used in Pernkopf's dissections and depicted in his classic anatomy atlas: were they victims of Nazi political terror?

Also questioned are the propriety and ethical impact of using an anatomy atlas by an ardent Nazi such as Pernkopf. Perhaps the only matter on which everyone readily agrees is that the ideals and actions of the Nazi party were utterly reprehensible, repugnant, uncivilized, and entirely without merit. Their plan of systematic genocide was the basest form of unmitigated evil, which cannot be excused, forgotten, or justified.

But what of Pernkopf's atlas? When its illustrations were viewed in ignorance of Pernkopf's political past, they were praised for their accuracy and detail; some even called them works of art.<sup>1,2</sup> Having learned more about Pernkopf himself, some now question the artistic, scientific, and educational value of the illustrations.<sup>2</sup> Others feel a sense of "personal betrayal" at learning of Pernkopf's political past.<sup>2</sup>

As if these issues were not difficult enough, the facts surrounding Pernkopf and his atlas are few, opinions abound, and emotions run high. In the early part of this essay, I attempt to present objectively what is known about Pernkopf by reviewing and analyzing what has been recently published regarding Pernkopf and his atlas. Next, I consider

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what has been written by bioethicists on the use of scientific data from the Nazi era and how those arguments might apply to Pernkopf and his atlas. In the final section, I offer my perspective as a young gross anatomist and physician, and suggest that emotion be balanced by fact and reason in considering the question of what we should do about Eduard Pernkopf's atlas.

#### PUBLISHED DATA: REVIEW AND ANALYSIS

It is clear that Pernkopf was an ardent Nazi who actively promulgated Nazi ideology and who fired his Jewish subordinates and colleagues<sup>2</sup>; there is no published evidence at present, however, to suggest that Pernkopf took an active role in Nazi executions. It is unclear whether the cadavers depicted in the Pernkopf atlas were those of people executed by the Nazis.

Some have advanced well-reasoned arguments to urge the investigation and proper commemoration of the origins of the cadavers depicted in Pernkopf's atlas<sup>3,4</sup>; indeed, this appears to have been the intent expressed in the original letter that prompted the current debate.<sup>3</sup> The proposal that the Pernkopf cadavers be identified and appropriately commemorated has met with support from many quarters. The atlas's publisher has suggested that the scientific work of Pernkopf the anatomist be considered separately from the beliefs of Pernkopf the Nazi<sup>5</sup>; at the same time, the publisher's president agrees with a thorough investigation of the identities of the Pernkopf cadavers, and offers financial support for such an undertaking. He also proposes commemoration of those cadavers in future editions of the atlas once their identities have been established. These calls for investigations have also met with support from the administration of the University of Vienna, which has begun looking into the matter.<sup>6,7</sup>

Unfortunately, a few reports have been more inflammatory than informative. One such report appearing in the lay press purported to cite evidence proving that some of the cadavers used to illustrate the atlas were Jewish victims of Nazi aggression.<sup>8</sup> This "evidence" consisted of nothing more than the observation that some of the cadavers are depicted with shaved heads and some of the male cadavers shown are circumcised.

Another example illustrates the passion this subject engenders, even in professional journals. Panush goes so far as to exhort us to "expunge" Pernkopf and his atlas from li-

braries and bookstores, citing "many historians and ethicists" who concur with his opinion.<sup>9</sup> He offers four citations as evidence that "many historians and ethicists" agree with him: one is of a separate work by Panush,<sup>12</sup> who is a rheumatologist; one of a historical retrospective written by a physiatrist who sometimes writes commentaries on ethics themes<sup>13</sup>; and the third represents a section of conference proceedings authored by the director of an HIV clinic who has an interest in Holocaust studies.<sup>9\*</sup> Only one of the four works cited is a bioethics text edited by an established bioethicist. It is a text edited by the bioethicist. However, the text itself is a complex and comprehensive discussion of many aspects of medicine during the Holocaust.<sup>14</sup> To imply that the entire work supports "expunging" the Pernkopf atlas represents an oversimplification. My reason for citing this particular example is not personal criticism but to point out a published argument advanced within the pages of a re-

spected journal that is based more on emotion and opinion than on rational, evidence-based discussion. Such emotion is understandable, but, as is argued below, it should take its place *alongside* reason in consideration of these issues.

Should we consider the scientific work of Pernkopf the anatomist separately from the beliefs of Pernkopf the Nazi, as suggested by Hutton<sup>5</sup>? Weissmann<sup>10</sup> argues the opposite: criticizing Pernkopf for his beliefs, he goes on to assert that a work cannot be separated from its creator. The only support offered for this contention, however, is that Weissmann supposes how Pernkopf himself might have reacted: "Pernkopf would have laughed at this 'work for work's sake' defense." To criticize Pernkopf (and rightly so) for his twisted racist beliefs, yet in the next breath invoke Pernkopf's hypothetical reaction as support for an argument seems, at the very least, incongruous. That a scholar of Dr. Weissmann's reputation should fall prey to such sophistries is testimony to the confusion engendered by this very emotional issue. The relationship between a creative work and its creator is the subject of an entirely separate set of arguments in the philosophy of art and ethics, the consideration

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\*I was unable to obtain a copy of the Seidelman text to which Panush refers, despite a search by a reference librarian in the interlibrary loan office of my medical school library; an on-line search of the Library of Congress via the World Wide Web; a search of the website of the United States Holocaust Memorial Museum; and several telephone calls to the United States Holocaust Memorial Museum.

of which is beyond the scope of this article (but see reference 15 for a discussion of this topic and further references).

Again, these examples illustrate how great passion can sometimes dominate the way in which this subject is debated within the lay press and even within the pages of prestigious and "objective" medical journals.

In considering the images in the Pernkopf atlas, no one has suggested how we should treat the work of the artists who worked with Pernkopf and who rendered the paintings that appear in his atlas. The work of Erich Lepier and Karl Endresser appears in many texts and atlases, including the most recent edition of Sobotta's *Anatomy*.<sup>16</sup> Both were prolific artists under Pernkopf and both were active Nazis.<sup>17</sup> In fact, Lepier often signed his name with a swastika,<sup>2,17,18</sup> and Endresser often replaced the "ss" in his name with stylized lightning bolts, the symbol of the Nazi SS.<sup>2,18</sup> Evidence besides their signatures<sup>17</sup> suggests that these men were clearly not half-hearted Nazis, but earnest, active party members. Should we therefore repudiate their individual illustrations? Must we expunge their work from the Sobotta atlas and other publications in which it has appeared over the decades? Or must we go even farther and reject in toto the other atlases and textbooks that have used Lepier's and Endresser's paintings? Again, the question is not whether we should condone the hateful ideology that these men espoused, for clearly such malevolence must be repudiated. Rather, the question entails the relationships between the men, their beliefs, and their work. I lack the expertise to venture into the philosophy of aesthetics, which would seem the most appropriate academic domain for a discussion of such relationships.

Moving from Pernkopf and his artists, let us consider the people whose cadavers were used to illustrate the atlas. What do we owe them? Clearly the first priority should be to establish exactly who they were. Whether they were victims of Nazi aggression is an important moral and historical question that merits investigation, but to date I know of only one published attempt to objectively document the identity of these people. In that single article, Williams cites personal communications from Simon Wiesenthal and from Dr. S. Krakowski, then deputy director of archives for Yad Vashem, the Holocaust memorial museum in Jerusalem. Neither of these experts believed the cadavers were Jews. Williams also cites a separate personal communication from Dr. Ulrich Weinzierl, then at the Documentation Archive of the Aus-

trian Resistance, who possessed evidence suggesting that some cadavers used for dissection and teaching in Vienna during World War II were those of people executed by the Vienna District Court. Williams states, "Whether any of these cadavers were used for [Pernkopf's atlas] has not been determined."<sup>17</sup>

Although we should take every reasonable measure to establish their identity, it is important to bear in mind that we may never do so. Dr. Werner Platzer, editor of the most recent edition of Pernkopf, is quoted in one report as saying that "the university's records [of the cadavers' identities] were destroyed during an Allied bombing."<sup>18</sup> This contention is supported in a general way by Williams, who writes that after Pernkopf was released from an Allied prison in 1948, "he returned to Vienna to find the Anatomy Institute at Währinger Strasse largely destroyed by Allied bombing."<sup>17</sup> Williams does not specifically address whether university records were destroyed.

To the best of my knowledge, the foregoing represents the entire recent published debate regarding Pernkopf and his atlas. Curiously enough, no comment on this subject from the bioethics community has yet appeared in print. Since that is the case, let us consider what has been written about the bioethical impact of Nazi medicine in general, and in particular the implications for use of Nazi-generated scientific data.

#### PREVIOUS BIOETHICAL DEBATES ON NAZI MEDICINE

A surprisingly small number of bioethicists and philosophers have commented on the implications of the Holocaust for modern biomedicine and research<sup>14,19,20</sup>; as far as I am aware, none has yet commented on the Pernkopf controversy.

Of the scholarship that has emerged with regard to bioethics and the Holocaust, much attention has focused on the use or non-use of Nazi data generated from brutal hypothermia experiments carried out on concentration camp inmates at Dachau (see, for example, references 21, 22, and 23). That debate was rendered largely hypothetical by Berger's detailed analysis that showed the data to be essentially worthless due to pervasive errors in experimental design, data collection, and analysis.<sup>24</sup>

Pernkopf, however, is a special case. The validity of the Pernkopf "data"—which is to say, the anatomical accuracy of his atlas—has never been in dispute. Indeed, the atlas consistently received glowing reviews prior to the publicity

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surrounding Pernkopf's Nazi ties.<sup>2,25,26</sup> Thus, after many years of hypothetical discussion of how the biomedical community "might" or "should" react to useable to Nazi data, the Pernkopf atlas turns out to be the archetype of highly reliable data "tainted" by its association with Nazism. Perhaps examination of the arguments put forth regarding the Dachau hypothermia data will shed light on the issues surrounding Pernkopf's data.

In the interest of academic honesty, however, two disclaimers are in order. First, there are no easy answers. The reader is directed to Caplan<sup>14</sup> and Annas<sup>27</sup> for an extensive discussion and a variety of views on matters of Nazi biomedicine and contemporary bioethics. What follows is necessarily a summary.

Second, without derogating from the force of the following discussion, it is important to note that I am making an analogy between previous philosophical discussions of Nazi data and the case of the Pernkopf atlas. I believe these parallels to be sound in every important respect. However, like every commentator who has thus far published on this topic, I am not trained as a philosopher. Just as I as a physician understand the potential danger of a self-educated philosopher's practicing medicine, so I must appreciate the potential pitfalls of self-taught physicians' engaging in philosophical discussions of very complex ethical issues. As noted by Haldane, "moral philosophy is no easier to practise than any other area of the subject."<sup>28</sup>

With those caveats in mind, let us consider the first of the prime arguments against use of Nazi data. It has been proposed that use of Nazi data might start our society (or at least medicine) on an unstoppable downhill slide toward Nazi-like amorality (see, for example, reference 29). An elegant analysis of such "slippery-slope" arguments by Burgess,<sup>30</sup> however, provides a convincing demonstration that most such arguments do not hold up under close scrutiny. In a similar vein, Caplan<sup>31</sup> has shown that many analogies drawn between the Holocaust and modern biomedical and bioethical issues are unsound.

One of the most elegant, balanced, and intellectually rigorous analyses of ethical questions surrounding the use or non-use of Nazi data is provided by Freedman.<sup>32</sup> Fortunately his analysis also seems relevant to the Pernkopf debate. In response to assertions that we must not use Nazi data, Freedman considers four possible arguments. One argument is that, for symbolic reasons, we must reject Nazi data in order to make an ethical statement (see, for example, reference 33). Freedman rightly points out that this argument "presupposes what needs to be proven, namely, that the use of the data—as opposed to the manner of its acquisition—is wrong." He goes on to suggest that "to make a statement, you make a statement, you don't fail to make a statement." Indeed, if we wish to make the statement that the ethics of

the Nazi era were hateful and twisted, or if we wish to state our commemoration for those who died for their beliefs at Nazi hands, we should, in fact, make that statement. Such action has been suggested in the case of the Pernkopf atlas.<sup>3,5</sup>

As a second possibility, Freedman rejects the argument that Nazi evil somehow suffuses the data themselves. He argues (along with most philosophers) that ethical valuations are attached to human actions, not to objects or representations of objects (i.e., data). Freedman goes on to point out that the hate that permeated Nazi ideology was common to all aspects of society under Nazi rule, including politics, law, and even ethics. This line of argument clearly has significant contemporary support, inasmuch as we do not reject the study of Nazi history, nor do we even prohibit publication of books such as *Mein Kampf* or the peaceful gatherings of neo-Nazis.

In like manner, it follows that the Pernkopf atlas itself cannot be suffused with evil, even if those who performed the dissections or painted the illustrations were engaged in evil acts or held hateful ideology. Moe<sup>21</sup> compared the question of whether Nazi data are inherently tainted with use of data obtained from other great human tragedies of WW II. She specifically referred to the observations made by Jewish doctors in the wartime ghettos on the diseases suffered by starving adults and children,<sup>34</sup> and the studies of radiation-related illnesses among Japanese survivors of Hiroshima and Nagasaki.<sup>35-38</sup> The latter examples illustrate the attempt to derive some modicum of good from the suffering of innocent civilians in wartime. Moe suggests that, terrible as radiation sickness or starvation is, observations made on how these processes affect human health could possibly benefit subsequent generations. By analogy, then, Nazi data, however immorally obtained, could in theory serve the good of subsequent generations. This is what some have called the salvage-some-good-from-the-ashes defense, which I return to below. (It is important to be clear that Moe considers only the philosophical questions of how reliability of data may relate to the manner of its acquisition, and how, or under what circumstances, such data should be cited. Neither she nor I use these examples to justify use of nuclear weapons, starvation, or torture to obtain medical observations.)

The third argument Freedman considers is whether we "perpetuate" the evil of Nazism by using data from that time. He concludes that using Nazi data for contemporary good is not an extension of "the Nazi project," since that "project" has in fact perished. Freedman argues that this is true in the particular case when "the remaining detritus [i.e., data] has been co-opted for another purpose, one that is in fact quite antithetical to the intentions of the Nazis."

By the same line of argument, Freedman makes the important distinction that contemporary use of Nazi data does not

change the evil of the Nazi past, which is fixed in history. It is this concept (that the Nazi-perpetrated evil can be neither diminished nor augmented by contemporary actions) that causes Freedman to reject the salvage-some-good-from-the-ashes defense mentioned above.

I find Freedman's rejection of the "salvage" argument curious. While I certainly agree with him that "later actions causally dependent on the results of the *Shoa*" cannot "retroactively alter the ethical significance of that event," I disagree that we cannot "salvage some good from the ashes." If it is accepted that (1) only human actions (not data) have ethical valuations, and that (2) the remaining detritus [i.e., data] can be coopted for another purpose, it seems to follow that only the other purpose for which the data are coopted determines whether the data are used to good or evil ends. It would certainly seem that for the Pernkopf data, teaching, enlightenment, and enhancing patient care are noble ends. Therefore, it is not difficult to conclude that some good has then come from the ashes, without diminishing the magnitude of past wrongs or forgetting those who were wronged.

Freedman's final consideration is of the argument that by using Nazi data, we mitigate, excuse, or somehow legitimize the means used to collect the data. Having established that use of Nazi data neither perpetuates Nazi evil nor ipso facto makes an ethical statement about Nazi crimes, this argument rests on how our act of using the Nazi data is perceived by others. Freedman concludes, "A moral universe such as our own must, I think, rely on the authors of their own actions to be primarily responsible for attaching symbolic significance to those actions." In essence, then, if one were to accept the ideology of Pernkopf and his fellow Nazis, use or non-use of the Pernkopf atlas itself has no significance. Likewise, if one rejects Nazi ideology, use of the Pernkopf atlas does not alter the act of rejecting Nazi ideology.

The idea of personal accountability and intent in deciding to use Nazi data has been raised by others, including Moe,<sup>21</sup> Greene,<sup>39</sup> and even the central figures of the current Pernkopf debate.<sup>4</sup>

Least Freedman be accused of being too objective or even cold-hearted in his analysis, it is germane to note his own view that "emotion must supplement, but not supplant, reason." He also makes the philosophical point that the relationship between emotion and ethical judgment is

unclear at best, and he suggests that "conflict introduces an asymmetry between reason and passion, for reason of its essence can adjudicate conflict as emotion of its essence cannot."

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Freedman's is certainly not the only view of the use of Nazi data. He is cited here as one of the most specific and intellectually compelling writers on the subject. Among the most powerful arguments opposing the use of Nazi data are the moving and eloquent testimonies of the Holocaust's survivors (see, for example, references 40, 41, and 42). Even so, not all survivors of the camps agree on whether to use Nazi data. Segal reports that of 13 twins who had been subjected to "medical experiments" by Josef Mengele, six supported the hypothetical use of Mengele's data, five rejected it, and one twin was uncertain.<sup>43</sup>

The Pernkopf case may differ in important ways from the Nazi hypothermia data mentioned above. Are anatomic "data" different from experimental data? If an anatomist were to use the bodies of victims of political repression for teaching or research, to what extent would that anatomist be culpable for the victims' deaths? If the anatomist supported the persecution of these victims in principle, but in fact took no active role in their deaths, is his guilt qualitatively or quantitatively different than that of an anatomist who neither supported the victims' persecution nor took active part in their executions? These are among the important questions on which professional philosophers and bioethicists might shed a great deal of light.

#### MY VIEW

The emotion and passion that infuse this debate are understandable, natural, and healthy; indeed, absence of such emotion in the present context would be far more troubling. However, as suggested by Freedman,<sup>32</sup> Greene,<sup>39</sup> and others, passion must be balanced by reason in dictating how we approach these complex ethical conundrums.

Unfortunately, the solution is not as simple as, for example, removing the atlas from circulation. That would be a facile solution to a complex problem. To remove Pernkopf's atlas from circulation changes neither past nor present in any good way; the past remains as painful as ever, and those who espouse hate in the present day are unfazed by the banning of books. One real effect of removing Pernkopf's atlas

from circulation would be to diminish appreciation of the beauty and structure of the human form, for the Pernkopf figures do teach anatomy, and they do so very well. For this reason, I differ with Dr. Weissmann, who argued that knowing more about the creator changes what he created.<sup>10</sup> I do not think that what was created is changed. Just as I can in no way condone the beliefs of Pernkopf and his Nazi cronies, neither can I deny the beauty, grace, and precision of the images they produced.

For the sake of discussion, let us assume the cadavers were non-Jewish victims of the Nazi machine executed for their social, political, or religious beliefs. For that matter, what if Mr. Wiesenthal and Dr. Krakowski were mistaken, and some of the cadavers were actually Jews? In either case, I suggest that active use of the atlas itself is the most fitting tribute to those who died for it. It would be an ironic retribution if Jewish cadavers (or those of others victimized for their beliefs), used to illustrate a Nazi's anatomic atlas, are thereby immortalized by it. The greater irony is that these cadavers, speaking to us from half a century ago, make us re-examine and again repudiate the Nazi beliefs that killed them, the same Nazi beliefs that Pernkopf would have promulgated.

As an anatomist, I would highlight one very important additional distinction: it is indeed the cadavers (or victims?) themselves that teach us these lessons. As every student of anatomy knows, it is neither professor nor textbook that teaches anatomy; the *cadaver* teaches anatomy. In this way, even the physical remains of an individual achieve a small semblance of immortality by speaking in a quiet and elegant way to subsequent generations of students. The anatomic knowledge that I now possess, as well as that which I shall acquire during my lifetime of study, will be the result of what the cadavers themselves teach me. And the Pernkopf cadavers teach in more ways than one.

I suggest we allow those cadavers depicted in the Pernkopf atlas to continue teaching. Whoever they were in life—and that certainly should be determined to the best of our abilities—they are with us still: they live, they teach, and now they not only teach us anatomy: they remind us that ignorance and prejudice and hatred are not necessarily mitigated by knowledge or education.

We should not silence these people by putting them in a glass case away from inquiring minds. Let them tell their story each and every time we look up a nerve, a muscle, or an artery. Every day as we go about our busy routines, preoccupied as we are with the small matters of daily life, let these people whisper again of the sacrifices of the past and the need for vigilance in the present. Let them remind us of the sacrifices that have been made that we might practice our art. And above all, let them remind us of suffering not only in the past, but in the present, that we may be more compassionate physicians, more compassionate citizens of the world.

It would have been easier, less emotionally wrenching, to have destroyed the Nazi death camps at the end of World War II. Likewise, it would have been easier to bury photographs and film footage from that awful time deep in some archive and never look at them.

Easier, perhaps, but wrong. The camps remain powerful testimony to suffering and the strength of those who endured them, and the horrific photographs teach powerful moral lessons. Likewise, the Pernkopf atlas infiltrates the safe, secure, rational environment of academia and strikes us with the terrible reality that evil has many faces. Pernkopf reminds us that we academics have as much responsibility as anyone to remain vigilant and behave ethically. He reminds us that the rank of "professor" does not confer immunity against hatred or racism. And again, the greatest irony is that Pernkopf's despicable beliefs have utterly backfired: knowing what we know about him urges us to ever greater vigilance against the very beliefs he espoused.

In summary, I believe the Pernkopf atlas remains an important educational and scientific work, even more so knowing what we do of Pernkopf himself. The illustrations are beautiful, elegant, and precise, despite the barbaric sociopolitical beliefs of those who drew them. It is important that we have learned more about Pernkopf, and we should continue to investigate him, his colleagues, and the identities of the people whose cadavers were used for the anatomic illustrations. As suggested by the atlas's publisher, appropriate commemorations should be made in the atlas about its origin, its creator, and its subjects. Those commemorations, however, should be based on historical fact and systematic inquiry and not merely on emotional reactions to an emotionally charged subject. I, like the academic community as a whole, anxiously await the insights of bioethicists, philosophers, and historians in the present debate.

Finally, some authors, in their earnest attempts to abjure hateful beliefs, call for the removal of the Pernkopf atlas from our lives; they sincerely, if rather dogmatically, insist, "We cannot forget . . . We cannot forget . . . We cannot forget . . ." <sup>11</sup> Let them be assured, among the plethora of views expressed, no one has suggested we forget. Quite the contrary: the very presence of the Pernkopf atlas serves not only as a monument to its victims, but also as a constant reminder that we all must strive for ethical and moral behavior and guard against divisive or hateful ideology. The atlas very much belongs in our daily lives, that we may not become complacent, much less forgetful.

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