# Ethical Considerations when Dealing with Human Anatomical Specimens from a National Socialist Context

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**Abstract** The anatomical collection at the Medical University of Innsbruck contains about 4,000 specimens, about half of which are of human origin. The currently ongoing investigation of the institute's history during National Socialism (Nazi) also aims to identify specimens from this period. So far, only few macroscopic specimens from a Nazi context of injustice have been found. For many other specimens, the final clarification of the provenance does not seem possible due to limited data availability. Dealing with specimens from the National Socialist era and of unknown origin has numerous ethical implications and requires a reflective approach that considers current recommendations based on expert consensus. In the following, an application of these recommendations to the Innsbruck specimens is presented for discussion.

## Introduction<sup>1</sup>

On April 22<sup>nd</sup>, 1687, the University of Innsbruck's medical faculty received its third chair, namely for anatomy, and Theodor Friedrich Statlender (1660-1729) was appointed as its holder. Despite the university's founding only a few years earlier in 1669, this chair became the first one for anatomy in the region that today constitutes Austria. In the early days of anatomical training, students were almost exclusively limited to animal cadavers (dogs, pigs, birds, etc.) for anatomical demonstrations, i.e., with the dissections shown by Statlender. In rare cases, Statlender requested bodies of executed individuals from the local government. At the time, anatomical institutes commonly received bodies of the executed upon the anatomists' request. Apparently, Statlender had many opportunities to demonstrate his skills during his career, as Ignaz de Luca wrote that Statlender was "tremendously keen on dissecting human bodies" (original: "in [der] Zergliederung menschlicher Körper [...] ungemein eifrig").3 In the following centuries, the University of Innsbruck experienced many difficulties and was twice closed and re-opened. Finally, the third medical faculty was re-established in 1869. Anatomist Karl Dantscher (1813-1887) was one of the leading protagonists advocating for the importance of a medical faculty in Tyrol and Western Austria and therefore received the honorary title "Father of the Faculty" (original: "Vater der Fakultät") and was appointed as chair of anatomy.<sup>4</sup> In this position, he was responsible for the construction of a separate building for anatomy and histology, which was opened in 1889.<sup>5</sup>

Despite these positive developments at the end of the 19<sup>th</sup> century, Dantscher still faced a lack of human bodies to instruct students and do anatomical research. This situation seemed to improve at the beginning of the 20<sup>th</sup> century, and in 1930 a law regarding the regulation of body procurement (original: "Gesetz vom 18. Dezember 1930 betreffend die Regelung des Leichenwesens") was established. Paragraph 4 stated that "bodies, which are not demanded by anybody, [...] without the requirement for a forensic inspection, should be handed over to the Anatomical Institute of the University of Innsbruck" (original: "Leichen, die von niemandem in Anspruch genommen werden, [...], [sind], wenn nicht die Voraussetzungen für eine gerichtliche Leichen-

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- 2 Universität Innsbruck 1992, p. 36.
- 3 De Luca 1782, p. 54.
- 4 Huter 1969, p. 201.
- 5 Lechner 2019, p. 566.

<sup>1</sup> This contribution is part of the author's dissertation on the history of Innsbruck' anatomical institute (supervisors: ao. Univ.-Prof. Dr. Elisabeth Dietrich-Daum and Univ.-Prof. Dr. Dirk Rupnow) and the collaboration in the project "The Innsbruck Anatomy in the Third Reich" (PI: ao. Univ.-Prof. Dr. Erich Brenner, supported by the State of Tyrol, the "Zukunftsfonds der Republik Österreich" and the "Nationalfonds der Republik Österreich für Opfer des Nationalsozialismus").

beschau vorliegen, dem Institute für normale Anatomie der Universität Innsbruck zu übergeben"). $^6$ 

Looking at the Innsbruck anatomy body registry (original: "Leichenbuch") from that time, the numbers of the yearly received bodies were quite stable between 1929 and 1938. The abolition of the death penalty after World War I and the reintroduction of the death penalty in 1934 did not show any relevant effects on numbers (Fig.1). In these years, only one body originated from an executed man.

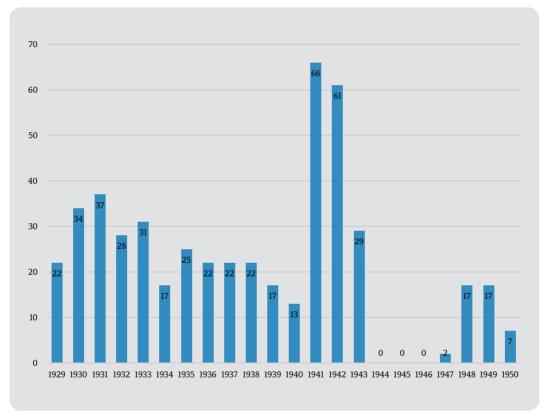


Fig. 1 Bodies received between 1929 and 1950

With Austria's annexation by Nazi<sup>7</sup> Germany, the enactment "W A 55" regulated the body procurement, so that all bodies of the executed were transferred to anatomical institutes if relatives did not claim the body for burial. Initially, Innsbruck's anatomical institute was not considered in the distribution of bodies from those executed in the

<sup>6 § 4</sup> Gesetz vom 18. Dezember 1930 betreffend die Regelung des Leichenwesens, Landes-Gesetz- und Verordnungsblatt für Tirol 7. Stück, Nr. 14, Jahrgang 1931.

<sup>7</sup> For the German speaking reader, the abbreviation "Nazi" in a scientific paper might be uncommon or strange, however, to prevent any misunderstandings of the term "National Socialism", the more common "Nazi" is used.

prison Munich-Stadelheim, which was opened in 1894 and later used by the Nazis as central execution site. After including Innsbruck in the distribution, body procurement numbers increased, as documented in the body registry (Fig. 1). On December 15<sup>th</sup>, 1943, the institute was hit by a bomb and no longer able to receive bodies.<sup>8</sup>

Overall, the anatomical institute received 199 bodies during the Nazi period 1938–1945, among them 59 bodies from Munich-Stadelheim, 39 from Soviet prisoners of war, 13 from suicide victims, two each from executions in Salzburg and Paschberg (near Innsbruck) and 19 from the nearby psychiatric hospital in Hall in Tyrol.<sup>9</sup>

# The Anatomical Collection

The Innsbruck anatomical collection currently consists of at least 4,024 specimens, <sup>10</sup> including dry and wet preparations, as well as isolated bones, skulls, and whole skeletons. About half of these specimens are of animal origin and are reminiscent of the period of comparative anatomy that lasted into the early 20<sup>th</sup> century. Currently, five macroscopic specimens from a National Socialist context have been identified by the author (Tab.1), which are still part of the current anatomical collection (see discussion

Tab. 1	List of identified	l specimens within a	a National Socialist context
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Specimen	Old inventory number	New inventory number	Body registry number	Year of preparation	Name	Provenance
Mamilla	G.2	3036	310	1941	Karl Klocker	Stadelheim
Skull base	G.264	491	426 or 433	"during World War II"	Johann Obreski or Johann Salwach	Salzburg or Stadelheim
Facial skull	G.264a	384	426 or 433	-	Johann Obreski or Johann Salwach	Salzburg or Stadelheim
Skeletal hand	G.47	710	426 or 433	"in World War II"	Johann Obreski or Johann Salwach	Salzburg or Stadelheim
Skull	G.16	1022	409, 459 or 460	"World War II"	Erhard Sailer, Franz Barcik or Franzissek Wiacek	Stadelheim

- 8 Huter 1969, p. 207.
- 9 Lechner 2019, p. 572 f.

<sup>10</sup> An unknown number of specimens in the office of the current curator of the collection has not been included in the author's inventory per the curator's instruction. Email correspondence between the author and Romed Hörmann on January 12<sup>th</sup>, 2015.

below for details).<sup>11</sup> Additionally, Freilinger et al. identified 237 of 15,000 histological slides in 300 drawers which are possibly from victims of the National Socialist regime.<sup>12</sup>

In the following, the names of the individuals connected with the identified macroscopic specimens are used purposefully, an approach that will be discussed in detail later below.

Karl Klocker was a 34-year-old farmer, who murdered his wife Mathilde with cyanhydric acid to marry his lover, Regina Geisler. However, Geisler became the main witness in the subsequent trial and testified against Klocker, who was sentenced to death on September 14<sup>th</sup>, 1938, and executed by decapitation on February 14<sup>th</sup>, 1939, in Stadelheim. His body was transferred to Innsbruck on the same day and dissected in the student course in the first trimester in 1941. Presumably afterwards, his right mamilla was included in the collection as a wet specimen.

Three dry specimens (a skull base, a facial skull, and a skeletal hand) were identified as belonging to victims of the National Socialist regime based on data from the body registry and index cards that were probably created in the 1970s or 1980s. 14 The dates of the creation of the specimen and the age of the individual noted on the index card allow the identification of these three specimens from either Johann Obreski's or Johann Salwach's body. Obreski was brought to the anatomical institute from the state of Salzburg on June 28th, 1942. According to the body registry, this "Polish man" (original: "Pole") was "16" years old and died by "hanging" (original: "Erhängen"). Born on March 11th, 1925, in Grybow, Nowy Sacz/Poland, Obreski was a forced laborer in Elixhausen. On May 11<sup>th</sup>, 1942, the Gestapo reported him for theft and on June 26<sup>th</sup>, 1942, he was sentenced and then executed by hanging. The constant lack of food and clothing for forced laborers were frequent reasons for theft. However, Obreski was executed for the alleged theft of 500 reichsmark. 15 Salwach, born on January 11th, 1923, in Poland, was sentenced to death by the Nuremberg Special Court on July 10th, 1942, after allegations of murder and robbery, beheaded in Stadelheim on August 7<sup>th</sup>, 1942, and his body was handed over to the Innsbruck anatomy department the very next day.16

One further dry specimen, a skull, was prepared from an "executed prisoner (20 years old), [during] World War II" (original: "Schädel [...] eines exekutierten Gefangenen (20-jährig), 2. Weltkrieg") and is identified as belonging to one of the following individuals: Erhard Seiler, Franz Barcik and Franzissek Wiacek. Seiler, born on April 24<sup>th</sup>, 1921, was sentenced by the Nuremberg Special Court on December 15<sup>th</sup>, 1941,

- 11 Lechner 2019, p. 596 f.
- 12 Freilinger 2022, p. 1.
- 13 Body registry number 310, Karl Klocker.
- 14 These 2,124 index cards could be connected with 1,709 of the 4,024 recorded specimens and were obviously made and used as an inventory.
- 15 Mitterrutzner 1991, p. 522.
- 16 Staatsarchiv München, JVA München, 1447.

for theft as a "public pest" (original: "Volksschädling") and executed in Stadelheim on February 7<sup>th</sup>, 1942.<sup>17</sup> He was declared "an incorrigible criminal who [...] also took advantage of the blackout" (original: "ein unverbesserlicher Verbrecher, der [...] auch die Verdunkelung ausgenützt hat").<sup>18</sup> Barcik was born on January 10<sup>th</sup>, 1922, convicted of a "general crime" (original: "Generalverbrechen") on November 11<sup>th</sup>, 1942 and executed on December 21<sup>st</sup>, 1942. Wiacek, born on November 15<sup>th</sup>, 1921, was also sentenced to death for a "general crime" and executed on December 21<sup>st</sup>, 1942.<sup>19</sup>

Further biographical aspects of these six men are currently under investigation.

## Discussion

These macroscopic specimens originating from individuals who became victims of the National Socialist terror regime<sup>20</sup> raise the question of how Innsbruck, or institutions in general, should proceed with such human remains. In the past decades, various interdisciplinary working groups have suggested different recommendations based on expert consensus.<sup>21</sup> Probably the most important recommendations were published after an international symposium hosted by Yad Vashem on May 14<sup>th</sup>, 2017, which was attended by some of the most recognized researchers in the field and are, in the sense of pars pro toto, commonly referred to as the "Vienna Protocol", the title of Rabbi Joseph A. Polak's specific section within the recommendations.<sup>22</sup> After the identification of human remains connected to the National Socialist era with all possible means and the investigation of individual biographies, these remains should find their "final resting place" and, by that, be removed from the respective anatomical collection. An important point is to include relatives and, if applicable, descendant communities in these decisions.

In short, as this paper is not intended to reflect all important aspects of the "Vienna Protocol", this would mean that the above-mentioned specimens should be extracted from the collection. After applying further scientific methods, e.g. anthropological or

- 17 Staatsarchiv München, JVA München, 615.
- 18 Anonym 1943, p. 5.
- 19 Staatsarchiv München, JVA München, 1447. Further details on the meaning of "general crime" still need to be elucidated.
- 20 Whether Klocker should be considered as Nazi victim or not, is an important question. As his murder was unpolitical and he would have been sentenced to death also before the Nazi regime annexed Austria (see Lechner 2019 for details), it might be obvious to not classify him as Nazi victim. However, the below mentioned thoughts are valid as well for the wet specimen made from Klocker's right mamilla, meaning the right for a "final resting place" applies to Klocker as well.
- 21 Viebig 2003. Jütte 2011. Deutscher Museumsbund 2021. American Alliance of Museums 2021.
- 22 Polak 2017.

genetic methods, to finally identify the human remains with more than one possible individual as provenance, they should be buried, and an appropriate way of commemoration of the victims should be established. However, despite giving all interested visitors of anatomical collections the necessary information regarding the backgrounds of removed specimens, a simple board with biographies might not have the same powerful impact on its reader as concrete anatomical objects have on their observer. In a very pessimistic way, the removal of the remains, with the alternative being written text only, might contribute to further erasing of memory, in the broad sense following Harald Welzer's "the oblivion of the annihilation is [...] part of the annihilation itself" (original: "das Vergessen der Vernichtung ist, [...], Teil der Vernichtung selbst"). Considering this issue, alternatives to the actual specimen could prove useful, for example, a 3D (bio)print of the specific preparation which would be easily technically possible and was thus proposed by the author to experienced scholars such as Sabine Hildebrandt, William E. Seidelman, Rabbi Polak and Michael Grodin. The questions raised by this proposal are still under discussion.

Another option could be to replace the original specimen with something else (or even something abstract) that might serve as a connection to the individual and have the power to affect the observer on a similar level as the actual "object" would, for example, possibly existing pictures of these victims of the National Socialist regime, or contemporary (or current) art within an appropriate context.

Leaving gaps within the exhibition after removing "objects" with a problematic background, as was realized at the Institute of Anatomy and Cell Biology at the Martin-Luther-Universität Halle-Wittenberg for Australian human remains, would be another possibility.<sup>26</sup>

The particularly important next question concerns specimens without identifiable provenance, perhaps even without knowledge of the time the preparations of human remains were originally made. This issue is to some extent connected with the more general question of the necessity of anatomical collections in times of anatomical 3D models. Are anatomical museums with historic specimens truly still necessary? For example, many of the skulls presented in the museum of the anatomical institute in Innsbruck were taken from ossuaries in Western Austria (and are definitely outside the National Socialist context). Are not ossuaries considered as final resting places? So then why remove human remains from places where they had been adequately and in-

<sup>23</sup> Welzer 1997, p. 26. Welzer's comment is based on writings from the French philosopher Jean Baudrillard.

<sup>24</sup> Email correspondence between the author and Prof. Dr. Sabine Hildebrandt, Prof. Dr. William E. Seidelman, and Rabbi Joseph A. Polak in November 2021.

<sup>25</sup> For ethical implications of 3D-modelling see for example Jones 2018.

<sup>26</sup> Email correspondence between the author and Prof. Dr. Heike Kielstein, head of the Institute of Anatomy and Cell Biology at the Martin-Luther-Universität Halle-Wittenberg, in November 2021.

tentionally laid to rest? Even if this was done for research purposes (without addressing obvious ethical concerns in this paper), such remains should have been restored after the specific projects were finished. However, while this was not the contemporary approach, it should be today's one.

Coming back to specimens without identifiable provenance after applying all possible scientific methods: One approach the anatomical institute in Jena applied to an external recommendation was to classify these preparations according to "state of preservation, singularity, possibility for replacement, frequency of use in the institute and importance for teaching".<sup>27</sup> An obvious problem of this approach is that it does not exclude specimens from a National Socialist context. To make certain that there are no such specimens in a collection, in the end every single preparation for which a National Socialist context cannot be excluded, ought to be removed from the collection regardless criteria like singularity or others.

This procedure obviously neglects the fact that in addition, both identified and unidentified individuals anatomized before or after the National Socialist era most often did not have the option to disagree with being used either for anatomical teaching, research, or for exhibition purposes. If this fact was pursued with all consequences, most anatomical collections and museums would be almost empty and lose their meaning as places of study.

Consequently, a balanced approach should be taken, in the sense of removing all specimens with a Nazi context or which remain unidentifiable. Preparations not fulfilling these two criteria, and which are relevant for the necessary student teaching, might be kept, explaining the context in which they became part of the collection or museum. The same approach might be applied to dozens of specimens of the same kind, for example individual bones. Anatomical institutes do not need dozens of skulls stored in their collection for student teaching.

Looking into the future, it would be possible to specifically ask voluntary body donors if they agree that their bodies or parts of them might be used (possibly indefinitely) in the collection for student teaching or even in the museum for the interested public. By that, anatomical institutes could replace at least some historical specimens step by step.<sup>28</sup> However, this approach neglects the fact that visitors of museums might want to see the original, i.e. the historical preparation, and not any copy from the last couple of years. Additionally, research projects focused on historical preparations would obviously not be possible without them.

Another important issue in this context is the role of the researcher: The "Vienna Protocol" recommends for example the "engagement of historians with expertise in the history of the institution, the era, and the specific program e.g. anatomy, 'euthanasia',

<sup>27</sup> Redies 2012, p. 301.

<sup>28</sup> These topics are currently under wide discussion in the scientific world of anatomy and anthropology, see for example: Organ 2022. Mulligan 2021. Jones 2009.

experimentation, etc." By that, anatomists themselves might initiate or support a respective project at their institution, but as employees of the institution under investigation a possible conflict of interest is inevitable. Therefore, the examination of an institute's collection for specimens with a possible Nazi context, should be done primarily by external researchers.

Lastly, this discussion addresses the question of whether to use the real name of these individuals or not, with or without connection to the specific specimens.<sup>29</sup> However, the first aspect affects not only victims of the National Socialist regime brought to anatomical institutes but also individuals murdered by the "euthanasia" program or in concentration camps. The memorial sites Hartheim castle near Linz and Steinhof in Vienna name all the victims with their real name, with the latter even having an online registry established. 30 This naming of the victims was preceded by an intensive societal debate. For decades, relatives of victims have opposed the publication of their names for fear of continued stigmatization. In the last twenty years there has been a change of heart, driven by relatives such as Sigrid Falkenstein, who consider the "dead silence of the annihilation [as] part of this injustice" (original: "Totschweigen der Vernichtung [als] Teil dieses Unrechts"), and renowned historians like Götz Aly, Paul Weindling, Maike Rotzoll and Gerrit Hohendorf. 31 An important result of this discussion was the online publication of 30,000 named victims of National Socialist "euthanasia" by the German Federal Archives in August 2018. However, there are still opposite approaches, for example by the Working Group of the "Euthanasia" and Forced Sterilization Victims (original: "Arbeitsgemeinschaft Bund der "Euthanasie"-Geschädigten und Zwangssterilisierten").32

Connecting the real names to the respective human remains (or their possible alternatives like a 3D model) in exhibitions, publications or presentations is another important issue. Arguments for such an approach include the same reasons as for using the real names and replacing specimens with alternatives, i.e., preventing oblivion by (emotionally) affecting the observer. On the other hand, the victim's right of dignity might be impaired by demonstrating the real name with the preparation, be it actual human remains or a 3D model. Another reason to use the real names is to find possible relatives by that if the names are disseminated appropriately. However, this aspect deserves further investigation, exceeding the scope of this paper, and requires a broad discussion including representatives of victim groups, which is currently ongoing for example in the Task Force on Legacy Anatomical Collections by the American Association for Anatomy.

- 29 The following section is based in part on Friedmann 2021.
- 30 Totenbuch Spiegelgrund.
- 31 Falkenstein 2013. Aly 2013.
- 32 Statement of the Working Group of the "Euthanasia" and Forced Sterilization Victims 2018.

## **Conclusion**

When dealing with human anatomical specimens from a National Socialist context, the recommendations of the "Vienna Protocol" are of great use and should be applied by experienced and external scholars in collaboration with the investigated institutes. Situations going beyond specifically mentioned aspects should be evaluated interdisciplinarily and individually. In questions of doubt, expert consensus should be reached by asking experienced researchers in the field for support, for example the editors of the "Vienna Protocol". Alternatives for specimens to be removed from the anatomical collections, for example 3D (bio)prints, need to be further discussed and investigated.

#### References

- Aly, G. 2013. Die Belasteten "Euthanasie" 1936–1945. Eine Gesellschaftsgeschichte. Berlin 2013.
- American Association of Museums. Code of Ethics and Professional Practice for Collections Professionals. URL: https://tinyurl.com/3etuc92d (13.06.2022).
- Anonym 1943, Salzburger Volksblatt vom 10. 02. 1943. Salzburg 1943.
- De Luca, I. 1782. Versuch einer akademischen gelehrten Geschichte von der Kaiserl. Königl. Leopoldinischen Universität zu Insbruck. Innsbruck 1782.
- Deutscher Museumsbund e. V. (Ed). 2021. Guidelines. Care of Human Remains in Museums and Collections. URL: https://www.museumsbund.de/wp-content/uploads/2021/07/dmb-leitfaden-umgang-menschl-ueberr-en-web-20210625.pdf (10.05.2022).
- Falkenstein, S. 2013. Ein Plädoyer für die Freigabe der Namen von Opfern der NS-"Euthanasie". URL: https://www.gedenkort-t4.eu/de/blog/sigrid-falkenstein-ein-plaedoyer-fuer-die-freigabe-der-namen-von-opfern-der-ns-euthanasie (10.05. 2022).
- Freilinger, M.; Klimaschewski, L.; Brenner, E. 2022. Innsbruck's histological institute in the third Reich: Specimens from NS-victims. In: Annals of Anatomy Anatomischer Anzeiger. Volume 241, 2022, pp. 1–14.
- Friedmann, I.; Lechner, C. 2021. Medizin. In: Gräser, M.; Rupnow, D. (Ed.). Österreichische Zeitgeschichte Zeitgeschichte in Österreich. Eine Standortbestimmung in Zeiten des Umbruchs. Wien, pp. 534–553.
- Huter, F. 1969. Hundert Jahre Medizinische Fakultät Innsbruck 1869 bis 1969. II. Teil: Geschichte der Lehrkanzeln, Institute und Kliniken. Innsbruck.
- Jones, D. G. 2018. Three-dimensional Printing in Anatomy Education: Assessing Potential Ethical Dimensions. In: Anatomical Sciences Education. Volume 12, Issue 4, 2019, pp. 435–443.
- Jones, D. G.; Whitaker, M. I. 2020. Speaking for the Dead. The Human Body in Biology and Medicine. Milton Park 2020.

- Jütte, R. 2011. Die Stuttgarter Empfehlungen zum Umgang mit Präparaten aus menschlichem Gewebe in Sammlungen, Museen und öffentlichen Räumen. URL: https://edoc.hu-berlin.de/bitstream/handle/18452/1976/juette.pdf?sequence=1 (10.05.2022).
- Lechner, C. 2019. Der Umgang mit Leichnamen am Anatomischen Institut Innsbruck zwischen 1929 und 1950. In: Rupnow, D.; Friedrich, M. (Ed.). Geschichte der Universität Innsbruck 1669–2019. Band II: Aspekte der Universitätsgeschichte. Innsbruck 2019, pp. 567–603.
- Mitterrutzner, C.; Ungar, G. 1991. Widerstand und Verfolgung in Salzburg 1934–1945, Bd. 1. Wien/Salzburg 1991.
- Mulligan, C. J.; Raff, J. A. (Ed.). 2021. Race reconciled II: Interpreting and communicating biological variation and race in 2021. In: American Journal of Biological Anthropology. Volume 175, Issue 2, 2021.
- Organ, J. M.; Comer, A. R.; Laitman, J. T. (Ed.). 2022. Evolution of a Discipline The Changing Face of Anatomy. In: The Anatomical Record. Volume 305, Issue 4, 2022.
- Polak, J. A. 2017. How to Deal with Holocaust Era Human Remains: Recommendations Arising from a Special Symposium. "Vienna Protocol" for when Jewish or Possibly-Jewish Human Remains are Discovered. In: Journal of Biocommunication. Volume 45, 2017, pp. 74–86.
- Redies, C.; Fröber, R.; Viebig, M.; et al. 2012. Dead bodies for the anatomical institute in the Third Reich: An investigation at the University of Jena. In: Annals of Anatomy Anatomischer Anzeiger. Volume 194, 2012, pp. 298–303.
- Statement of the Working Group of the "Euthanasia" and Forced Sterilization Victims regarding the online publication of "euthanasia" victims by the German Federal Archives. 2018. URL: https://www.euthanasiegeschaedigte-zwangssterilisierte. de/neues/aktuell-2018/15-11-18-bundesarchiv-macht-namen-der-opfer-von-nseuthanasieverbrechen-online-zugaenglich-stellungnahme-ag-bez/ (10.05.2022).
- Totenbuch Spiegelgrund. URL: http://gedenkstaettesteinhof.at/de/totenbuch/totenbuch-spiegelgrund (10.05.2022).
- Universität Innsbruck (Hg.). 1992. Die Medizinische Fakultät der Leopold-Franzens-Universität Innsbruck. Innsbruck 1992.
- Viebig, M.; Prüll, C.-R. 2003. Arbeitskreis der Bundesärztekammer "Menschliche Präparate in Sammlungen". Empfehlungen zum Umgang mit Präparaten aus menschlichem Gewebe in Sammlungen, Museen und öffentlichen Räumen. In: Deutsches Ärzteblatt. Heft 8, 2003, pp. 378–383.
- Welzer, H. 1997. Verweilen beim Grauen. Essays zum wissenschaftlichen Umgang mit dem Holocaust. Tübingen 1997.