Ann. Naturhist. Mus. Wien, Serie A	125	9–31	Wien, 20. Dezember 2024

Doing Race in the Habsburg Empire: The Weisbach and Novara collections in the NHMW

Katrin Kremmler[1]

(with 7 figures)

Manuscript submitted on January 19th 2024,
the revised manuscript on March 27th 2024.

Abstract

Debates about the colonial acquisition context, what colonial acquisition contexts are, and how objects were acquired are also relevant to collections in natural history museums like the Natural Histroy Museum Vienna (NHMW). This paper argues that a focus on anthropology collections seemingly unrelated to colonial acquisition contexts can provide surprising new insights on historical practices of racial classification and inventorization that qualify as scientific racism. The first Weisbach Collection, skulls of Habsburg nationalities acquired by the NHMW in 1877, in its placement together with the skulls from the Novara Expedition, calls for a wider analytical perspective on practices of racial classification as part of a positivist project of global racial evolution. This makes the NHMW osteology collection a highly relevant resource not only for Habsburg historians of science, social, medical and military history, but also for historians of race in Eastern Central/South Eastern Europe.

Keywords: Habsburg Empire, Natural History Museum Vienna, colonial provenance, Novara Expedition, physical anthropology, scientific racism, Augustin Weisbach.

Introduction

"[…] *the focus of interest being skulls of remote or somehow remarkable peoples, those from the closer vicinity were forgotten, which maybe erroneously were presumed to be known. So, it almost seems the skulls of the Negros*[2] *and Americans are better known than those of the Romanians, Slavs and Magyars, who live in our close vicinity.*" (Weisbach 1864: Part I, p. 49)

"*This piece of furniture is a theory* […]." (Latour 1999: p. 34)

[1] Humboldt University Berlin, Institute for European Ethnology, 10117 Berlin, Germany; e-mail: K.Kremmler@gmx.net

[2] 19th-century racist terminology is reproduced in original quotations to demonstrate the conflation of colonial and imperial practices of racialization.

Visitors to the NHM Vienna (NHMW) who book a rooftop tour for the spectacular view will pass through areas that are not open to the public. Turning a corner, they will have a surprising encounter with the "Skull Corridor" which houses the oldest part of the Anthropology Department's Osteology Collection, with display cases containing over 8,000 human skulls (see Adler *et al.* 2021). The Department of Anthropology uses it as a depot; providing visual information on provenance is not a priority. During the tour, visitors learn about the founding story of the NHMW, the Novara Expedition (1857–1859), the first circumnavigation of the world by the Imperial Austro-Hungarian Navy.

The literature gives the impression that the "Novara Collection" – donated by the Ministry of Culture from the University's anatomical teaching collection to the NHMW's Anthropology Department in 1877 – was merely ethnographic. But the Novara, with its explicit mission of looking for opportunities to establish colonies (Riedl-Dorn 2021: p. 221), also brought human skulls, which are kept in this display case (NHMW-ANTHRO-OSTE-723 to 825).

Natural history museums store more than objects and collections. Over time, historical research concepts and practices like storage settings, classification systems, and inventory practices can crystallize in objects (Hicks 2013). I argue that the modern skull collection of the military physician Augustin Weisbach and the Novara Collection, inventoried and stored by the museum in consecutive order, make for a particularly interesting case, what Sharon Macdonald has called a

> *"memory bank"* "[…] *often overlooked or only half-remembered* […]*, collections not just of material culture but of the world-views, political imaginaries, scientific practices, hopes, dreams, and nightmares with which its stored objects were entangled,* […] *a sedimented layer of memory upon which Europe is built*" (Macdonald 2021: p. 96).

The NHMW was the first museum in Europe fully committed to the Theory of Evolution, due to the first director of the museum, Ferdinand von Hochstetter (1829–1884), an avowed follower of Darwin from the very beginning. The NHMW was also the first to include human prehistory as part of natural history by incorporating an Anthropological-Ethnographical Department, presenting *"a more perfect and complete history of the knowledge of the earth and its inhabitants than has yet been presented"* (Jovanovic-Kruspel & Schumacher 2014), distinguishing the Vienna museum from its rival institutions in London and Berlin.

The Department was the first state research centre for disciplines studying the human as an object of natural sciences in Austria (Blaha *et al.* 1966: p. 451). In this regard, the incorporation of large contemporary and prehistoric skull collections from the Habsburg imperial territories was of particular importance.

While colonial provenance in the NHMW osteology collection is not limited to the Novara Collection, its first and oldest part can be described as a Central European imperial collection from the decade before the era of German colonialism. Of the *c.* 8,000

skeletons the museum acquired before 1918, 66 % come from the Habsburg context (45 % former crown lands, 22 % from the territory of contemporary Austria), 35 % from outside (of which *c.* 12 % are from Egypt, *c.* 8 % from the Ottoman Empire and Caucasus, and *c*. 12 % from non-European contexts) (Eggers *et al.* 2021).

The literature, both by the museum and external scholars, gives the impression that the first Weisbach collection[3] was a later addition to the department, having received the Novara Collection first. However, a visual encounter with the vitrine in the "skull corridor" shows that the collection starts with the Weisbach Collection (NHMW-ANTHRO-OSTE-38 to 722), followed by the Novara Collection (NHMW-ANTHRO-OSTE-723 to 824). Furthermore, a part of the Weisbach Collection stands out for its paper labels that correspond to the categories in the inventory book (albeit with slight orthographic modernizations): *"Germans, Czechs, Slovaks, Poles, Ruthenians, South Slavs, Hungarians, Romanians, Italians, Gypsies, Jews; Egyptians, modern Greeks."*[4]

Both in the inventory and on the shelf, the Weisbach Collection is immediately followed by the Novara Collection[5] (NHMW-ANTHRO-OSTE-723 to 824), categorized as follows in the inventory book: "*Asians: Chinese, skull from Ceylon, Hindu* […]*, Sumatran, Javanese, Madurese, Balinese, Borneo,* […]*; African; Americans: Peruvians, Chileans* […]*; Australians: Australian, New Guinea, New Caledonians, New Zealander* […]."[6] (selection)

This paper is the result of my reconstruction of the inventory process from the inventory books: what began in 1862 as a research project by an Austrian military physician was institutionalized by the NHMW in 1877 as universal natural history. As I will argue, Weisbach's original collection was not just incorporated but completely rearranged, to form the European part of a global racial taxonomy, in which the Habsburg nationalities were ranked according to contemporary understandings of racial and civilizational evolution, with the "Germans" on top.

First, I will give a brief description of the first Weisbach collection in the context of his oeuvre, and offer some context to his method. I then will discuss the findings of my

---

[3] This paper deals only with the first Weisbach collection (1860s), one of three separate collections compiled by military physician Augustin Weisbach from the 1860s to the 1900s. The second (1885) and third (1900s) collections collected by Weisbach during his time as director of the Austrian-Hungarian National Hospital in Istanbul, and as Chief Medical Officer of the 15th Corps in Bosnia and Herzegovina merit de-tailed studies of their own, to complement studies on the Habsburg colonization of Bosnia (see Novakov-Ritchey 2024; Rexhepi 2023).

[4] "*Deutsche, Čechen* [sic]*, Slowaken, Polen, Ruthenen, Südslawen, Ungarn, Rumänen, Italiener, Zigeuner* [German racist term for Romani people], *Juden; (Ägypter, Neugriechen).*" Naturhistorisches Museum, Anthropologische Sammlung, Inventar Buch 1, Skelette, Nr. 1-1460: 23–91.

[5] Ibid., p.1 01: "Sammlung von Schädeln von der Novara-Expedition, überlassen vom k. k. Ministerium für Kultus und Unterricht aus der anatomischen Sammlung der Universität."

[6] "*Asiaten: Chinese, Schädel aus Ceylon, Hindu* […]*, Sumatrane, Javanese, Madurese, Balinese, Borneo,* […]*; Afrikaner; Amerikaner: Peruaner, Chilene* […]*; Australier: Australier, Neu-Guinea, Neu-Kaledonier, Neu-Seeländer* […]"*; ibid., 101–112.*

archival research of the inventory process at the NHMW in 1877, and present historical context for its possible foundation not in Darwin's concept of evolution, but Erich Haeckel's. Haeckel's approach incorporates a dimension of language and linguistic evolution as part of racial-civilizational evolution, which is key for the Central European context. Weisbach procured the skulls from the Habsburg army bureaucracy that assigned recruits an ethnic label based on language. Therefore, the collection makes an interesting study of how army classification practices, incorporating recruits' native language, were built into a taxonomic system of evolutionary biology.

The first Weisbach Collection: Ethnic boxes and ethnic brains

Augustin Weisbach (1837–1914), an Austrian military physician at the Vienna Josephinum and the garrison of Olmütz (now Olomouc in the Czech Republic), began collecting the remains of army recruits who died in the garrison hospital and the Vienna Josephinum in the early 1860s. The skulls and pelvic bones became the focus and basis of his research into the racial anatomy of the so-called Habsburg nationalities (see below). In accordance with the scientific ideas of the time, he assumed that race and biological sex could be empirically determined by investigating skulls, brains and pelvic bones with anthropometric methods.

Weisbach published his findings extensively, in longer articles and monographs on specific nationalities or *"peoples"*, and was commissioned to analyse and publish the anthropometric data of the Novara Expedition. Published in the Novara series (Weisbach 1867), his data served Charles Darwin in The Descent of Man (1871: p. 208) as empirical evidence for his theory of natural selection (Fuchs 2019:p. 78).

The NHMW acquired Weisbach's first 1860s collection from the War Ministry, supplied from the holdings of the former Josephinum in 1877.

While the Weisbach literature notes that his research into Habsburg nationalities was entangled with colonial racial science practices (Fuchs 2003; Herza 2019; Shmidt & Jaworsky 2021), the material remnants of his racial investigations preserved at the NHMW since the 1870s are virtually unknown in the field.

Recently, humanities scholars have engaged with the NHMW's osteology collection as a *"contentious heritage"* (Macdonald 2021: p. 119), addressing ethical issues of display and the affective responses of contemporary viewers as part of current debates on contentious colonial legacies and postcolonial memory politics. While scientific racism has been mentioned (Szöke 2021), it has not yet been investigated in terms of provenance or historical methods and practices of racialization. The whole showcase has been interpreted as a contentious heritage of *colonial* provenance, in that contemporary memory practices to rehumanize victims of colonialism as *"ancestors"* (Jones in Lanz 2018) were also, unwittingly, extended to the remains of white Europeans in the vitrine.

Studies of the NHMW's Weisbach osteological and cranial collection in its materiality, with an approach that conceptualizes race as configured and made relevant by historic scientific methods and practices (see M'charek 2013), have not yet been carried out. This paper is a first effort to fill this gap.

As I will show, such an investigation can give new insights into the practices of classification and standardization of imperial populations, of great relevance for the scholarship of Habsburg internal colonialism (Annus *et al.* 2017; Bobinac 2015; Feichtinger *et al.* 2003; Krasny 2010; Ruthner 2014; Ruthner 2018; Surman 2022) and scholarship on race and (off-)whiteness in Eastern Central Europe (Melegh 2006; Böröcz 2021; Kalmar 2022; Baker *et al.* 2024).

Weisbach's method

The recent literature on Weisbach draws on his publications, and the explanatory concepts tend to remain within the boundaries of the humanities. For example, Weisbach compared Romani people to Africans in terms of *"analogy"* (Shmidt & Jaworsky 2021), and his taxonomic system was inspired by or imitated the racist hierarchy of colonial planter societies (Fuchs 2003: p. 143), or influenced by eighteenth-century racial systematics of Buffon (Fuchs 2003). I suggest a more recent source of inspiration and opt for an explanation developed from studying Weisbach's anthropological practices according to the contemporary methods of German language physical anthropology at the time, whose methodology was undergoing modernization.

In September 1861, physical anthropologists from all over the German-language region convened in Göttingen for the First Anthropology Congress to discuss a standardized method for the measurement of the human skull; this was the founding moment of German biological anthropology as an independent academic discipline (Hossfeld 2005: p. 87). The scientists Carl Scherzer (1821–1903) and Eduard Schwarz (1831–1862) from Vienna had been invited. They could not attend due to the editing work of the Novara publication but sent an offprint of their measuring system used on the Novara expedition, which was then re-printed in the supplements of the conference report (Baer & Wagner 1861: pp. 74–84). It is therefore plausible to assume that a copy of the conference report, as a de facto founding document of the discipline with detailed discussions about new measuring practices, was sent back to Scherzer and Schwarz in Vienna and discussed in the medical community, and that Weisbach had knowledge of it.

Weisbach started his skull collection in 1862. As his obituaries from 1914 note, he was particularly interested in the ethnic minorities of the Monarchy, the so-called nationalities: he assumed that they formed anatomically classifiable "races" and sought to determine their "racial differences" empirically through anthropometric measurements of skulls, brains, and pelvises (see Pöch 1914: p. 144; Khull-Kholwald 1914). His first publications focussed on skull and pelvis measurements and forms (Weisbach 1864), and brain weight of *"Austrian peoples"* (*sic,* Weisbach 1866).

On what basis Weisbach assigned individuals to a nationality/ethnicity – who collected these data, whether they came from the medical records of the Josephinum or the Olmütz garrison, or whether the living patients were questioned – is not clear from his publications, nor from the inventory book. But Weisbach was a military doctor in an Austrian military hospital. And at the time, the Austrian military bureaucracy's language policy assigned a regimental language to recruits who were often multi-ethnic and multilingual. As Stergar and Scheer have noted, *"bureaucratic forms that required people to label themselves using one of the prescribed categories were used increasingly during the period. There was no option to describe oneself as a non-national or as an* 'amphibian' *in the forms; there were no Roma, no Moravians or Hanáks, nor Friulians or Dalmatians, no Bosniaks, and – let us not forget – no Austrians either."* (Stergar & Scheer 2018: p. 579) In short, the boxes used in bureaucratic forms and questionnaires by the modernizing state throughout the nineteenth century turned into *"ethnic boxes"* (Stergar & Scheer 2018: p. 576).

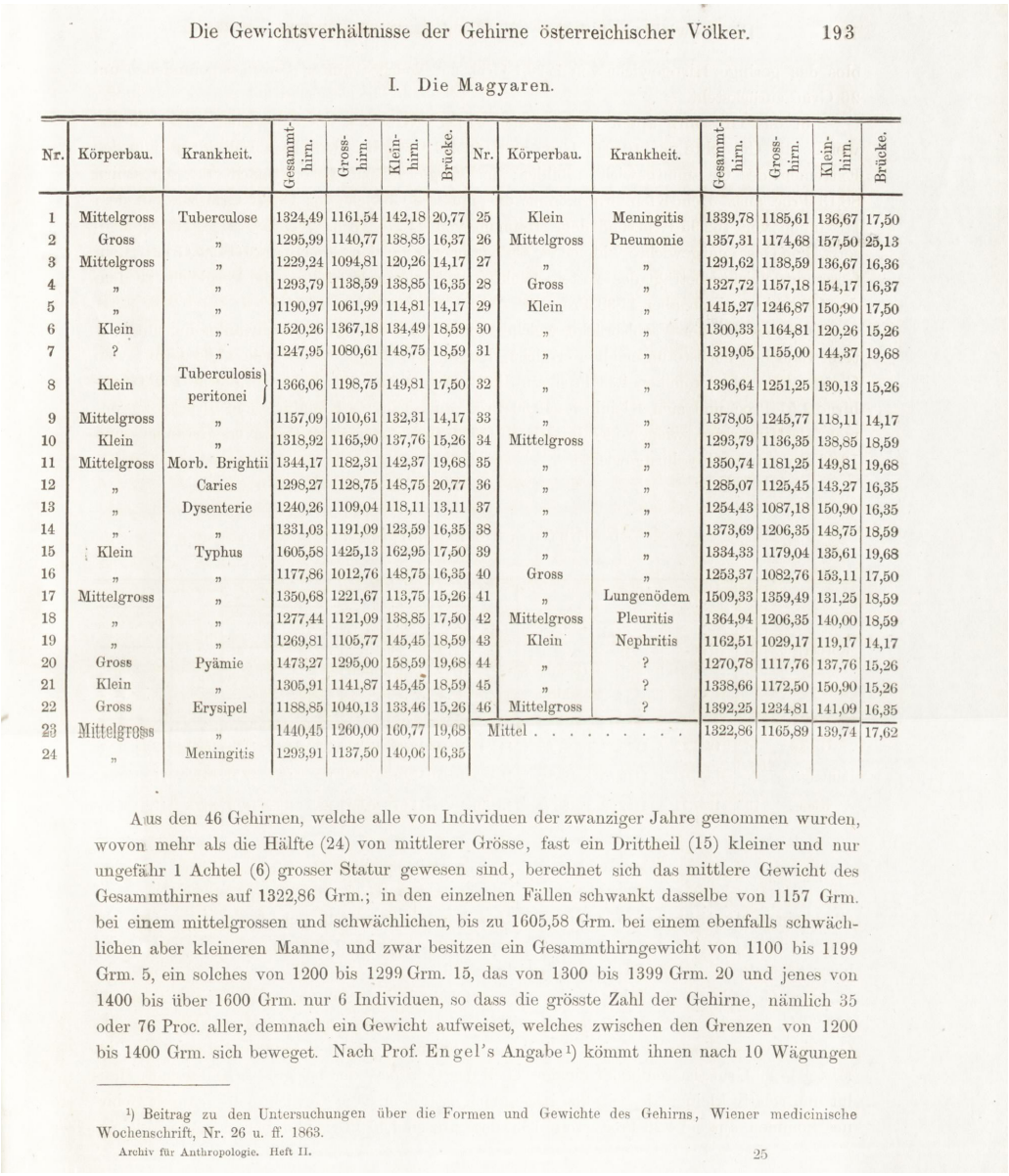
It is likely that Weisbach adhered to the classification practices of the military system, as his study material arrived at his dissection table already categorized.

His methods correspond to those discussed in the Göttingen publication: Andreas Retzius' system of cephalic index with the distinction of *"doliocephalic"* (long skull) and *"brachycephalic"* (short skull) as well as *"orthognathism"* (straight upper jaw) and *"prognathism"* (protruding upper jaw) as morphological principles of skull measurement. He also measured skull size using the craniometric data of the previous generation of scientists, Samuel George Morton (1799–1851) and Friedrich Tiedemann (1781–1861), on the cranial capacity of white Europeans and Africans. Weisbach used their data as extreme poles, and then inserted his own measurements of Habsburg nationalities as intermediate categories of a global racial taxonomy, filling in the blanks in between (Weisbach 1864: Part III, pp. 152–154).

To understand Weisbach's method better, I studied a sample of individuals listed in the inventory book as Hungarians.[7] Their first names seem to have been mostly Germanized, in accordance with Habsburg military practice, but most surnames can be identified as Hungarian. In 16 of the 69 cases they are ambiguous, and in some cases the individuals come from ethnically diverse regions such as Transylvania/Siebenbürgen – a realistic sample of the empirical fuzziness of ethnic categories in the multi-ethnic Central European imperial context. This is also the case with Weisbach's 1867 comparative study on *"weight ratios of the brains of Austrian peoples"* (Weisbach 1867): thirteen of the 69 individuals classified as Hungarian, have brain weight data recorded in the inventory book. In the study, individual cases are listed anonymously with four-digit brain weight data, as well as data on physique and cause of death (Fig. 1).

Comparing the study with the inventory book, the listed individuals can indeed be identified on the basis of their brain weight data (Fig. 2): all thirteen *"Hungarian"* recruits

[7] NHMW-ANTHRO-OSTE-468, 478, 480, 483, 485, 486, 498, 499, 500, 505, 507, 509, 510, 518, 520, 536.



Die Gewichtsverhältnisse der Gehirne österreichischer Völker. 193

I. Die Magyaren.

Nr.	Körperbau.	Krankheit.	Gesammt-hirn.	Gross-hirn.	Klein-hirn.	Brücke.	Nr.	Körperbau.	Krankheit.	Gesammt-hirn.	Gross-hirn.	Klein-hirn.	Brücke.
1	Mittelgross	Tuberculose	1324,49	1161,54	142,18	20,77	25	Klein	Meningitis	1339,78	1185,61	136,67	17,50
2	Gross	„	1295,99	1140,77	138,85	16,37	26	Mittelgross	Pneumonie	1357,31	1174,68	157,50	25,13
3	Mittelgross	„	1229,24	1094,81	120,26	14,17	27	„	„	1291,62	1138,59	136,67	16,36
4	„	„	1293,79	1138,59	138,85	16,35	28	Gross	„	1327,72	1157,18	154,17	16,37
5	„	„	1190,97	1061,99	114,81	14,17	29	Klein	„	1415,27	1246,87	150,90	17,50
6	Klein	„	1520,26	1367,18	134,49	18,59	30	„	„	1300,33	1164,81	120,26	15,26
7	?	„	1247,95	1080,61	148,75	18,59	31	„	„	1319,05	1155,00	144,37	19,68
8	Klein	Tuberculosis peritonei	1366,06	1198,75	149,81	17,50	32	„	„	1396,64	1251,25	130,13	15,26
9	Mittelgross	„	1157,09	1010,61	132,31	14,17	33	„	„	1378,05	1245,77	118,11	14,17
10	Klein	„	1318,92	1165,90	137,76	15,26	34	Mittelgross	„	1293,79	1136,35	138,85	18,59
11	Mittelgross	Morb. Brightii	1344,17	1182,31	142,37	19,68	35	„	„	1350,74	1181,25	149,81	19,68
12	„	Caries	1298,27	1128,75	148,75	20,77	36	„	„	1285,07	1125,45	143,27	16,35
13	„	Dysenterie	1240,26	1109,04	118,11	13,11	37	„	„	1254,43	1087,18	150,90	16,35
14	„	„	1331,03	1191,09	123,59	16,35	38	„	„	1373,69	1206,35	148,75	18,59
15	Klein	Typhus	1605,58	1425,13	162,95	17,50	39	„	„	1334,33	1179,04	135,61	19,68
16	„	„	1177,86	1012,76	148,75	16,35	40	Gross	„	1253,37	1082,76	153,11	17,50
17	Mittelgross	„	1350,68	1221,67	113,75	15,26	41	„	Lungenödem	1509,33	1359,49	131,25	18,59
18	„	„	1277,44	1121,09	138,85	17,50	42	Mittelgross	Pleuritis	1364,94	1206,35	140,00	18,59
19	„	„	1269,81	1105,77	145,45	18,59	43	Klein	Nephritis	1162,51	1029,17	119,17	14,17
20	Gross	Pyämie	1473,27	1295,00	158,59	19,68	44	„	?	1270,78	1117,76	137,76	15,26
21	Klein	„	1305,91	1141,87	145,45	18,59	45	„	?	1338,66	1172,50	150,90	15,26
22	Gross	Erysipel	1188,85	1040,13	133,46	15,26	46	Mittelgross	?	1392,25	1234,81	141,09	16,35
23	Mittelgross	„	1440,45	1260,00	160,77	19,68	Mittel			1322,86	1165,89	139,74	17,62
24	„	Meningitis	1293,91	1137,50	140,06	16,35							

Aus den 46 Gehirnen, welche alle von Individuen der zwanziger Jahre genommen wurden, wovon mehr als die Hälfte (24) von mittlerer Grösse, fast ein Drittheil (15) kleiner und nur ungefähr 1 Achtel (6) grosser Statur gewesen sind, berechnet sich das mittlere Gewicht des Gesammthirnes auf 1322,86 Grm.; in den einzelnen Fällen schwankt dasselbe von 1157 Grm. bei einem mittelgrossen und schwächlichen, bis zu 1605,58 Grm. bei einem ebenfalls schwächlichen aber kleineren Manne, und zwar besitzen ein Gesammthirngewicht von 1100 bis 1199 Grm. 5, ein solches von 1200 bis 1299 Grm. 15, das von 1300 bis 1399 Grm. 20 und jenes von 1400 bis über 1600 Grm. nur 6 Individuen, so dass die grösste Zahl der Gehirne, nämlich 35 oder 76 Proc. aller, demnach ein Gewicht aufweiset, welches zwischen den Grenzen von 1200 bis 1400 Grm. sich beweget. Nach Prof. Engel's Angabe[1]) kömmt ihnen nach 10 Wägungen

[1]) Beitrag zu den Untersuchungen über die Formen und Gewichte des Gehirns, Wiener medicinische Wochenschrift, Nr. 26 u. ff. 1863.

Fig. 1. Brain weight of Austrian peoples. I. The Magyars. Weisbach (1866) – In: Archiv für Anthropologie, p. 193

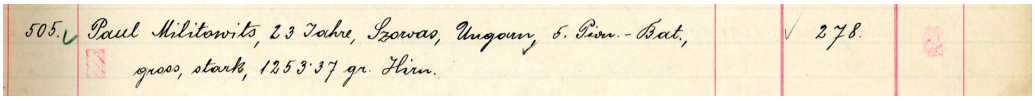


Fig. 2. NHMW Inventory book, Magyar skulls, detail. No. 505, *"Paul Militowits, age 23, from Szarvas/ Hungary, 5th Pioneer Battalion, tall, strong, brain 1253.37 gr."* (Photo: Wolfgang Reichmann)

who died in 1863/64 and whose brain weight data are recorded in the inventory book were included in Weisbach's calculation of the average *"Magyar brain"*. Read together, the inventory book and the comparative study clarify how Habsburg language policy was "translated" or reified in biological terms: individuals from a multilingual and multiethnic context were assigned one language as an ethnic category (nationality), and then into biology, in the mathematical calculation of the median *"Magyar"* brain. And once again, Weisbach's *"nationality brain type"* turns out to be constructed from a heterogeneous sample: four of the thirteen individuals do not have Hungarian, but German and Slavic surnames.[8]

My random survey focuses solely on the category *"Hungarian"*. Extending it to the other categories is beyond the scope of this article and calls for collaborative research to cover the range of languages. But based on the findings above, it is plausible that Weisbach's research on Habsburg nationalities followed the general direction formulated in the 1861 Göttingen Convention (Baer & Wagner 1861), that he saw his work as part of the disciplinary project of developing a standardized method and a global taxonomic order, and that his mission was to provide the new positivist discipline of comparative anthropology with standardized anthropometric data on a large scale.

As Franziska Tschenett has shown, many of the Novara skulls were not looted from graves, but modern anatomical specimens acquired from colonial doctors and scientists (Tschenett 2023). As a young military surgeon in Vienna, the epicentre of nineteenth century medical sciences, Weisbach had access to a regular supply of "fresh" anatomical specimens, already pre-sorted by nationality. And these skulls were not primarily collected to become part of an individual scientist's personal study collection. They were important as carriers of anthropometric data to be processed and published, and then donated to imperial institutions.

"The Austrian state, a complex of countries where the Romans, Slavs and Magyars, if not brotherly, at least border the Germans as more or less friendly neighbours, is certainly the best place to collect the relevant material and to make accurate measurements, which, of course, would have to include a large number of skulls in order to achieve a completely valid final result; especially the Austrian military hospitals could make extremely valuable contributions in this direction, since they receive their patients mostly from the most diverse troop bodies of manifold descent." (Weisbach 1864: p. 50)

Not much later, Weisbach found himself in the position of having to systematize, analyse, and publish a large body of anthropometric data on living people from around the world: the anthropometric data of the Novara Expedition, compiled by Scherzer and Schwarz. The volume, published in 1867 as part of the Novara series, was widely read in disciplinary circles. Weisbach presented this data in another publication of the Novara

[8] Georg Szokup (chart in Weisbach 1866, No.1/ NHMW-ANTHRO-OSTE-483), Johann Heinzler (No. 23/ NHMW-ANTHRO-OSTE-499), Tobias Franz (No. 25/ NHMW-ANTHRO-OSTE-510), and Paul Militowits (No. 40/ NHMW-ANTHRO-OSTE-505).

Fig. 3. Weisbach's 1878 classification of 18 taxonomic types

series: *"Body measurements of various human races"* (Weisbach 1878). His innovation was to include systematic measurements of the extremities, "*as parts which present such important differences both between humans and anthropoid apes, as well as between the various races, and accordingly also possess the greatest variability in their main dimensions* […]" (Weisbach 1878: p. 7). Accordingly, he proposed the following classification of altogether 18 taxonomic types (Fig. 3):

"I. Short heads (Brachycephali) with indices of 850 and upwards […]

II. medium heads (Mesocephali) with indices from 800–819;

III. long heads (Dolichocephali) with indices from 799 downward.

Each of these 3 main divisions, which again are either

a. prognathic or

b. orthognathic, then breaks down further according to the lengths of the limbs into 3 subdivisions each, namely:

1. long-limbed, where the arms are longer than the legs

2. equal-limbed, where arms and legs are of equal length, and

3. short-armed, where the arms are shorter than the legs." (Weisbach 1878: p. 8)

Weisbach's systematic was explicitly hierarchal: *"Undoubtedly, in each of the 3 main divisions, the prognathic peoples are lower than the orthognathic peoples and those whose arms are longer than the legs are lower than the others, so that the prognathic, long-armed peoples always occupy the lowest place, the orthognathic, short-armed peoples the highest."* (Weisbach 1878: p. 8)

It is important to note that skin colour does not (yet) feature here[9], and that the dimension of world civilizations is introduced to the geographic order: individuals are assigned to taxonomic types in a hierarchical global matrix or continuum of culture and civilization on the one pole, and the great apes on the other. In addition, Weisbach noted: "[…] *remarkably, the most ancient civilized peoples, at least of the Eastern hemisphere,* [were] *doliocephalic (Chinese, Indians, Egyptians, Phoenicians, Etruscans, Greeks and Romans)*" (Weisbach 1878: p. 8). He then lists the cranial indices of great apes, and relates them to *"brachycephalic peoples (Patagonians, Tagals)"*, to conclude: *"This finding speaks for the fact that brachycephaly must be assigned its place below the meso- and doliocephaly, and that those brachycephalic, prognathic peoples, which possess longer arms than legs, are closest to the anthropomorphic apes, and in contrast to this the orthognathic doliocephalic with shorter arms than legs are the most remote."* (Weisbach 1878: p. 9)

Accordingly, he lists the *"human races"* studied in this publication in the following order: *"Hottentot, Kaffer, Congo Negro, Siamese, North Chinese, Japanese, Javanese, Madurese, Bugis, Dajak, Kanakas, Maori, Patagonians, Sudanese, Tagals, Gypsies, Jews, Magyars, Romanians, Northern Slavs."* (Weisbach 1878)[10]

While the publication date was 1878, the manuscript was completed as early as January 1876, according to the date of the preface (Weisbach 1878: p. 9) – the same year in which Ferdinand von Hochstetter presented his new concept for the NHMW, and the foundation of the NHMW.

The NHMW Inventory 1877: A global taxonomic order

By February 1877, shortly after the founding of the museum in 1876, preparations were in full swing and the respective collections had already been organized and inventoried (Blaha *et al.* 1966: p. 453). Archival records kept in the Somatological Collection of the Department of Anthropology show that the first Weisbach collection (NHMW-ANTHRO-SOMA-260) arrived in a chronological order: the accompanying papers

[9] The second (1885) and third (1900s) Weisbach collections contain data on hair, eye and skin colour.

[10] On racist terminology in original quotes see Footnote 1.

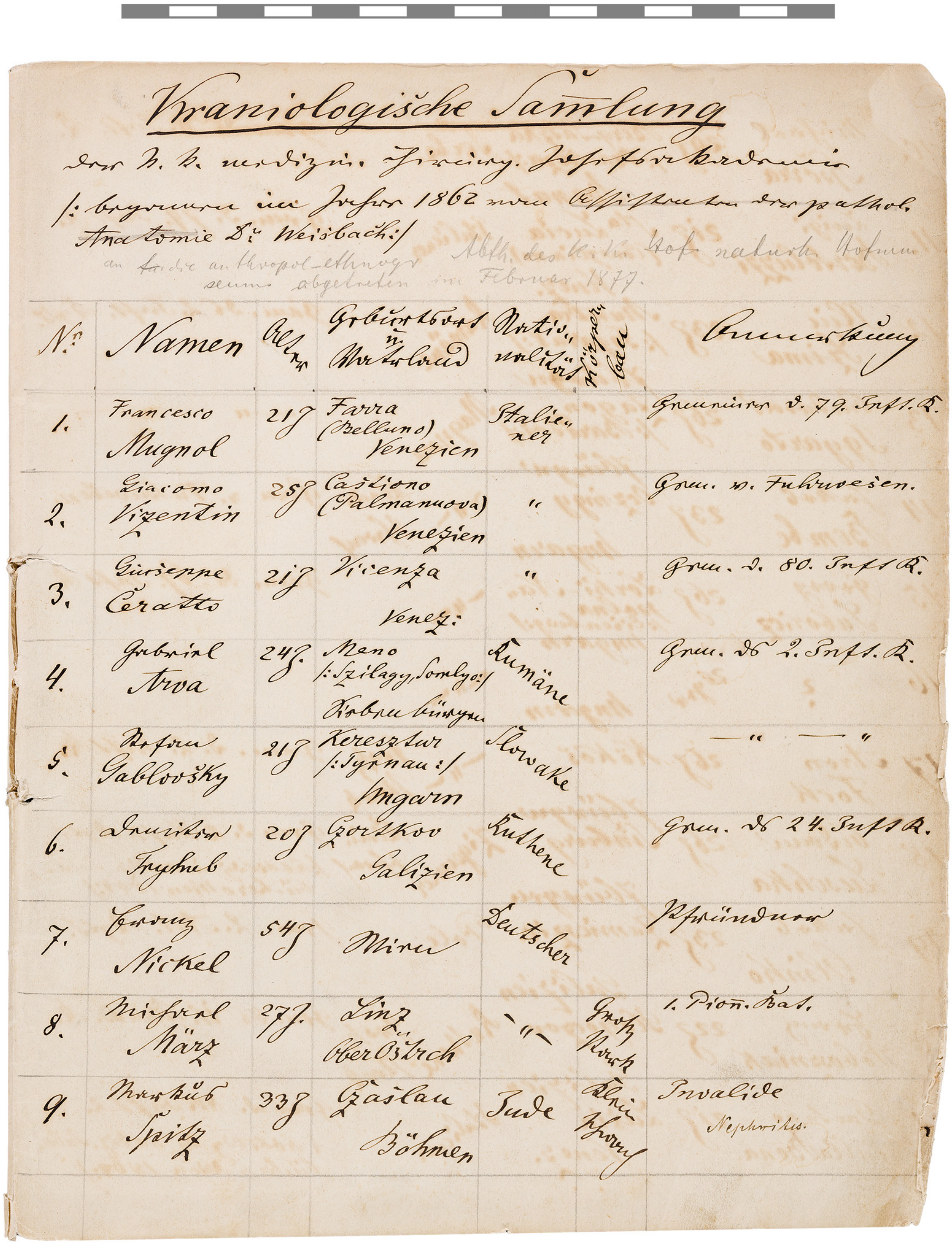


Fig. 4. First Weisbach collection, chronological inventory. *“Craniological Collection of the k.k. medical Joseph Academy, started in the year of 1862 by the assistant of pathological anatomy Dr. Weisbach.”* (NHMW-ANTHRO-SOMA-2602, photo: Wolfgang Reichmann)

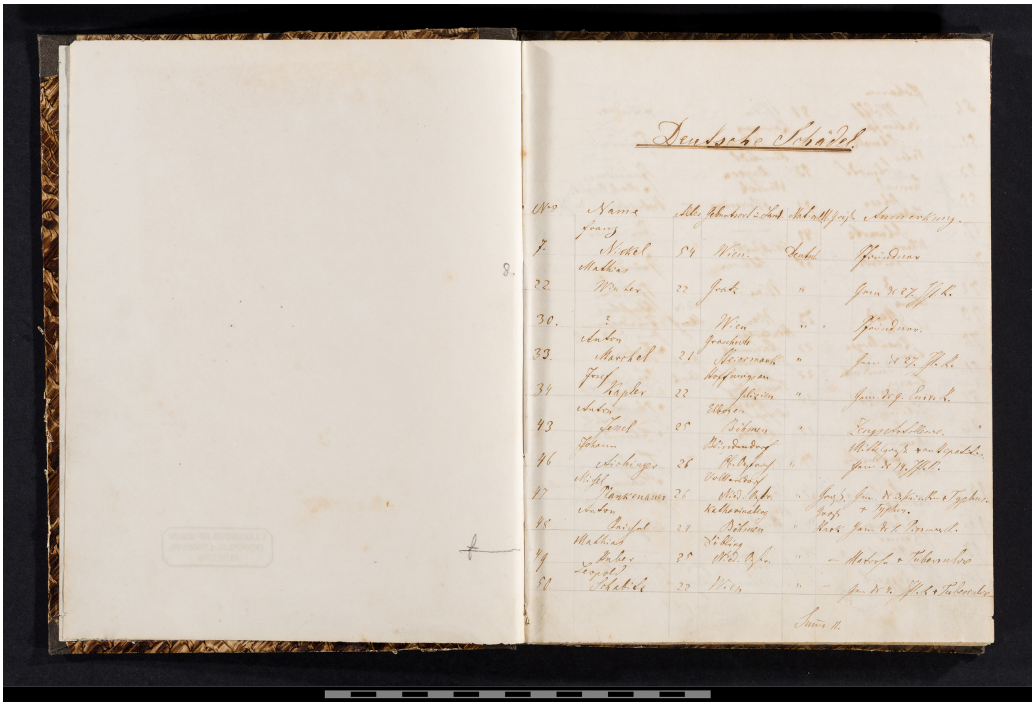
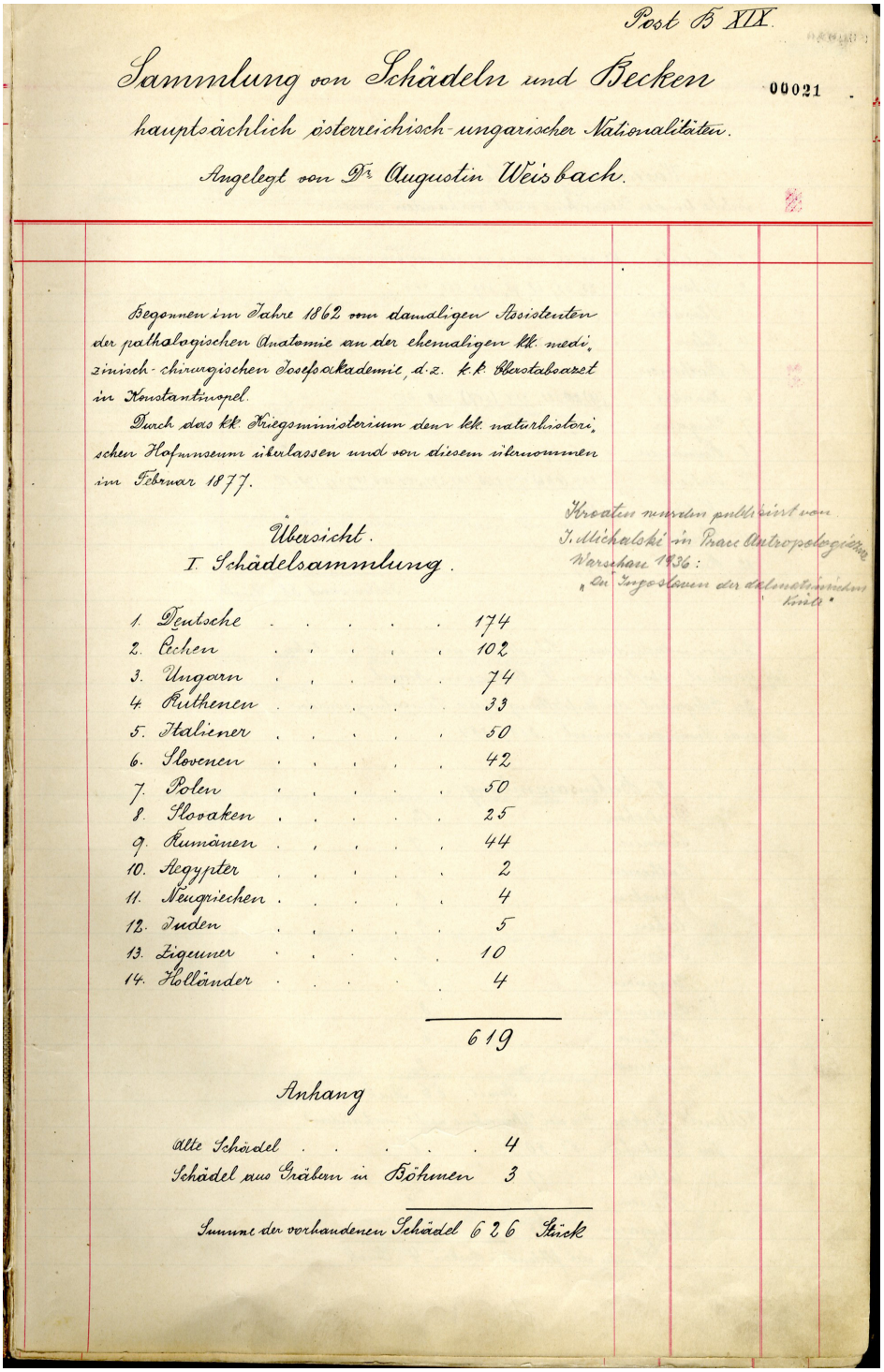


Fig. 5. First Weisbach Collection. The chronological collection sorted according to races before inventorying, starting with *"German skulls"*. NHMW, 1877. (NHMW-ANTHRO-SOMA-2602, photo by Wolfgang Reichmann)

(Fig. 4) show Weisbach's own inventory, beginning in 1862. (The first individuals were listed as *"Italian, Romanian, Slovak, Ruthenian, German"* and *"Jew"*.) The collection was then sorted by nationality in two small ledgers dated February 1877, beginning with *"German skulls"* (Fig. 5).

The next step was to add the sorted collection to the inventory (Fig. 6), at a time when anthropology, ethnology and prehistory were still united in one department. After 1884 they were separated and each department started its own inventory. The data of the earlier joint inventory were copied into the new inventory book of the Department of Anthropology.

As I have shown, Weisbach's method "translated" languages into nationality, and reified nationality into biology, to produce standardized data for global taxonomic comparison. By 1877, the museum invested significant time and effort in having staff sort the collection by nationalities, inventorying and storing them in a specific order: the ethnic boxes on bureaucratic military forms (Stergar & Scheer 2018) had become the shelves of the skull cabinets. I have been unable to find any archival sources that provide an explicit explanation as to why this was deemed necessary, or information on the logic used to list the nationalities in what appears to be a hierarchical taxonomic



Post B XIX.

Sammlung von Schädeln und Becken

00021

hauptsächlich österreichisch-ungarischer Nationalitäten.

Angelegt von Dr Augustin Weisbach.

Begonnen im Jahre 1862 vom damaligen Assistenten der pathologischen Anatomie an der ehemaligen kk. medi, zinisch-chirurgischen Josefakademie, d.z. k.k. Oberstabsarzt in Konstantinopel.

Durch das kk. Kriegsministerium dem kk. naturhistori, schen Hofmuseum überlassen und von diesem übernommen im Februar 1877.

Kroaten wurden publiziert von J. Michalski in Prace Antropologiczne Warschau 1936: „Die Jugoslawen der dalmatinischen Inseln"

Übersicht.

I. Schädelsammlung.

1.	Deutsche	174
2.	Cechen	102
3.	Ungarn	74
4.	Ruthenen	33
5.	Italiener	50
6.	Slovenen	42
7.	Polen	50
8.	Slovaken	25
9.	Rumänen	44
10.	Aegypter	2
11.	Neugriechen	4
12.	Juden	5
13.	Zigeuner	10
14.	Holländer	4
		619

Anhang

Alte Schädel	4
Schädel aus Gräbern in Böhmen	3

Summe der vorhandenen Schädel 626 Stück

Fig. 6. First Weisbach Collection. Inventory book with overview (Photo: Wolfgang Reichmann)

order (see above). The Weisbach Collection is then followed by the Novara Collection (see above), grouped according to continents (Asia, Africa, the Americas, Australia).

Again, I have been unable to find any archival sources that explain why this was deemed necessary and according to what logic the Novara Collection was inventoried – not in the order of its acquisition, the Novara route (see Tschenett 2023), but in what appears to be a geographic and taxonomic order, which as such was clearly hierarchical. Here another dimension becomes relevant: On the shelf and in the inventory, the Novara Collection is followed by single finds, and prehistoric collections.

This suggests that the initial inventory practice of 1877 was intended to represent the innovative paradigm of the then still united departments of anthropology (represented by the Weisbach Collection, organized by nationalities), ethnology (represented by the Novara Collection, organized geographically), and prehistory (represented by archaeological excavations from the Austrian-Hungarian Monarchy, organized geographically, under the name of the excavation site or cemetery). All of this is consistent with the taxonomic-geographical order of the NHMW in general.

As we can see from the first guide book to the NHMW (Hauer 1889), the osteological collection was then open to the public and presented according to the logic of the inventory: from the present day of the Monarchy, with the Weisbach collection as the largest part of the exhibition, the visitor could follow a timeline of racial evolution to the colonies – in the sense of Anne McClintock's concept of "anachronistic space" (McClintock 1995) – and back into prehistory:

"1–19 Dr. A. Weisbach's collection of more than 600 skulls of the tribes inhabiting the Austro-Hungarian Monarchy.

20–22 More than 100 skulls of various peoples of foreign continents, collected during the expedition of His Majesty's frigate 'Novara.'

23–24 Prehistoric skulls from various sites in Austria

25–26 Prehistoric skulls from Bosnia and Herzegovina." (Hauer 1889: p. 358)

More recent acquisitions followed: skulls from North America and the Dutch Indies, originating in Batavia (27–41).

"42–60 Dr. Weisbach's second collection [1885], containing more than 600 skulls, mainly of Oriental peoples and southern Slavs." (Hauer 1889: p. 358)

The acquisition history of the anthropology collection from the 1880s therefore reflects the Austro-Hungarian Monarchy's colonial acquisitions in the Balkans (see *e.g.,* Feichtinger *et al.* 2003; Rexhepi 2023; Novakov-Ritchey 2024).

A possible explanation: The Novara scientists and Ernst Haeckel

Hochstetter, a geologist, had been a member of both the Novara Expedition and the interdisciplinary group of scientists who had worked together for over two decades on the publication of the Novara data. The following information provides another clue to the overall organizing principle: while in Hochstetter's new concept the prehistoric collection was to provide the link between geology and history, the anthropological collection was to provide the link to the zoological collection (Heinrich 1995/96: p. 15). As Lewit and Hossfeld note, it was the "German Darwin" Ernst Haeckel (1834–1919) who was instrumental in promoting Darwin's theory in the German-speaking world by constructing "phylogenetic trees" that illustrated the evolution of various species, including humans. Although the concept of human evolution by natural selection originated with Darwin, Haeckel was the first to create a new precise anthropology based on Darwin's method (Levit & Hossfeld 2020; Hossfeld & Levit 2023). Of interest here is that Haeckel, influenced by the linguist August Schleicher (1821–1868), linked linguistics to evolution. Schleicher's ideas about the evolution of languages as natural organisms supported Haeckel's view that linguistic change reflected biological evolution.

Haeckel's influence on the discipline of biology in Austria and on the Austrian public is well documented (Krausse 1998; Di Gregorio 2002). Haeckel was also a friend of the Novara scientists' circle. In particular, Friedrich Müller (1836–1898), who published the ethnographic volume of the Novara data, is referred to as a "Haeckelian ethnologist" (Di Gregorio 2002: p. 92). His *Allgemeine Ethnographie* (Müller 1873) was dedicated to his friends Ernst Haeckel, Bernhard Jülg[11], and Carl von Scherzer. At the time, positivist philology gained new relevance for ethnology, and it was argued that comparative philology had reached a higher standard of exactness than comparative craniology. Following Haeckel, Müller grouped *"peoples"* according to physical type, including hair structure: Woolly hair (tufted hair, fleecy hair), straight hair, and wavy hair (Di Gregorio 2002: p. 96). In his magnum opus, *Grundriss der Sprachwissenschaft*, he elaborated on *"the languages of straight-haired races"* and *"wavy-haired races"* (Müller 1876–1888). Haeckel in turn drew on Müller's work in his later editions after 1870.

It is interesting to see how Weisbach's studies of Habsburg nationalities based on military language policy and morphology could be seamlessly integrated into Müller's global concept of linguistic ethnology, and how the new disciplinary paradigm of anthropology-ethnology-prehistory produced a positivist paradigm of cultural-racial evolution based on *morphology, language, and culture* that could systematically integrate European and non-European populations into one global taxonomic system of evolution, combining colonial and imperial patterns of hierarchical classification (see Feinberg 2024).

At this point in the 1870s, skin colour was not yet a dominant object of systematic study as it would be in the following decades.

[11] Bernhard Jülg (1825–1886), philologist, German linguist, specialist for Eastern languages.

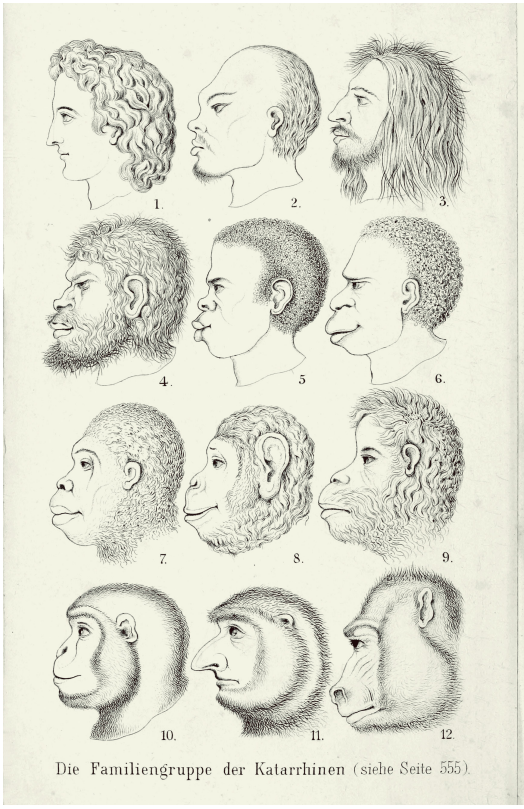


Fig. 7. Haeckel (1868), modified from www.biodiversitylibrary.org/item/104167

Haeckel's infamous cover illustration of his *History of Creation* illustrates how the connection between the zoological and anthropological collections might have been understood by scientists in Vienna at the time (Fig. 7).

Archaeologist Dan Hicks uses the concept of taphonomy in a metaphorical sense to describe the museum as a site of *"processes by which, as declarations of newness fade, ideas continue to crystallize in persons and places"*, and thus as potential field sites for writing disciplinary history (Hicks 2013: pp. 755–756). The display case in the NHMW's "skull corridor" can be seen as such a crystallized assemblage of Central European colonial-imperial scientific practices from the NHMW's inception.

Discussion: Imperial natural science paradigm and internal colonialism

As Marijan Bobinac notes, the majority of researchers focus on the Habsburg Postcolonial paradigm in the context of cultural studies, that is, on the phenomenon of *"colonialism as a state of mind"* (Bobinac 2015). But, as he argues, analyses of asymmetrical

relationships are not exclusively limited to the cultural sphere, or to the symbolic hierarchy in the representation of certain groups, but underscore this asymmetry on other analytical levels: economic, social and political. What is evident on all these levels is a striking "*inequality of power, influence and meaning* […]" (Bobinac 2015: p. 246). In the light of all the above, one might add the dimension of natural sciences, and the inclusion of language, civilizational superiority, and decline, which produces a new civilizationist layer of meaning to how nineteenth-century Habsburg classification practices affected processes of national ethnic fragmentation and ethno-nationalist projects in the context of a contiguous empire (Böröcz & Sarkar 2012), as well as the post-imperial projects of "national races" (McMahon 2007, 2019) in the region.

Conclusion

Based on my research on classification and inventory practices in the context of the relevant literature of the time, I argue that this oldest part of the NHMW osteological collection was most likely conceived in the evolutionary spirit of the museum's overall concept, and its sequential arrangement was intended to reflect the interdisciplinary paradigm of anthropology, ethnology, and prehistory that made the NHMW innovative and unique as an evolutionary museum.

I have attempted to reconstruct the practices of ethnic classification from Weisbach since 1862. Noting that the Weisbach Collection was reorganized by the NHMW in 1877 and placed in consecutive order with the Novara Collection, I argue that this arrangement was most likely the result of a process of interdisciplinary exchange among the scientists evaluating and publishing the Novara data, and consistent with the contemporary positivist project (Weiler 2006) of racial and cultural evolution influenced by Ernst Haeckel.

In a conflation of language, ethnicity, and race, the Habsburg nationalities were classified and ranked within a global taxonomy of racial evolution, on the basis of morphology, not (yet) skin colour.

From the 1880s, the Department of Anthropogy's acquisition history reflects the Habsburg expansion to the Balkans.

In 2011, Margit Berner, curator of the NHMW anthropology collection, and colleagues coined the concept of *"sensitive collections"* and argued for expanding the understanding of what is now considered "sensitive" about objects and artefacts of colonial provenance in museum collections to include the circumstances of their production and acquisition (Berner *et al.* 2011). Based on my findings, this can be applied to the historical practices of racial classification and inventorying in the museum.

All of this makes the NHMW's osteological collection a highly relevant resource not only for Habsburg historians of ethnicity, race, and nationalism. The way in which this imperial paradigm of anthropology, ethnology, and prehistory in the natural sciences

was institutionalized in a contiguous Central European empire (Böröcz & Sarkar 2012) suggests that the nineteenth-century process of fragmentation into nations, races, and perceptions of distinct cultural regions in the Habsburg Empire can be placed in a global perspective, adding new historical material to scholarly debates on Europeanizing the imperial turn (Buettner 2022), imperial science (Surman 2022), race and ethnicity (Stergar & Scheer 2018; Brubaker 2009), specific regional patterns of imperial racial formations (Melegh 2006; Stoler 2010, 2016), and also current theoretical perspectives on colonial-imperial legacies of race and (off)whiteness in post-imperial Central European and South-eastern European contexts (Kalmar 2022; Baker *et al.* 2024). All this is the stuff of *"the worldviews, political imaginaries, scientific practices, hopes, dreams and nightmares with which its stored objects were entangled,* […] *a sedimented layer of memory upon which Europe is built"* (Macdonald 2021: p. 96).

Timeline

1857–1859 The Novara Expedition, the first circumnavigation of the world by the Imperial Austro-Hungarian Navy. Scientists collect specimens considered relevant for natural history, including human remains. Carl Scherzer and Eduard Schwarz systematically measure indigenous individuals at every stop.

1861 First Anthropology Congress in Göttingen, where German language anthropologists discuss new standardized methods, including the measuring system used by Carl Scherzer and Eduard Schwarz on the Novara expedition. The conference report, as a de facto founding document of the new discipline, is sent to Vienna.

1862 Augustin Weisbach starts his first skull collection. Data on hair colour and skin tone is not included.

1864–1867 Weisbach publishes on skull and pelvis measurements and forms (Weisbach 1864), and brain weight of *"Austrian peoples"* (*sic*, Weisbach 1866). He is commissioned to publish the anthropometric data of the Novara Expedition.

1867 Weisbach publishes the anthropometric data of the Novara Expedition.

1868 Haeckel publishes *On the origin and family tree of the human race* and *Natural History of Creation*.

1871 Charles Darwin publishes *The Descent of Man*. Weisbach's data serve as the only empirical evidence for his theory of natural selection.

1876 Weisbach finishes the manuscript of *Body measurements of various human races*.

Ferdinand von Hochstetter presents his new concept for the NHMW, with anthropology, ethnology and prehistory as part of the same unit. Later in the year, the NHMW is founded.

1877 The NHMW acquires and inventories Weisbach's first collection from the War Ministry, and the Novara Collection. The Weisbach Collection is sorted according to categories, and the categories ranked in consecutive order with the Novara Collection, according to contemporary understandings of racial evolution as a global continuum.

1878 Weisbach publishes *Body measurements of various human races* (Weisbach 1878).

1884 As the NHMW grows, the departments of anthropology, ethnology and prehistory are separated. New ledgers are introduced.

The acquisition history of the anthropology collection from the 1880s reflects the Austro-Hungarian monarchy's colonial acquisitions in the Balkans.

1885 The second Weisbach Collection, collected during his time as director of the Austrian-Hungarian National Hospital in Istanbul, including data on hair and skin colour, is donated to the NHMW.

1900s The third Weisbach Collection, collected during his time as Chief Medical Officer of the 15th Corps in Bosnia and Herzegovina is donated to the NHMW.

Acknowledgements

This paper is part of the NHMW colonial acquisition project Kolonialer Erwerbskontext (KolText) supported by the Austrian Federal Ministry of Arts, Culture, Public Service and Sport (BMKÖS). I would like to thank Dr. Margit Berner (NHMW) for her invaluable expertise and input; Prof. Dr. Sabine Eggers (NHMW), DDr. Martin Krenn (NHMW), Dr. Verena Pawlowsky, Dominik Spörker, MA, and an anonymous reviewer, whose comments helped me immensely to improve the manuscript. I would also like to thank Dr. Jeremy F. Walton for the opportunity to present this paper at the REVENANT-Conference "Postcolonial, Decolonial, Postimperial, Deimperial", 15–17 May 2024, University of Rijeka. I would also like to thank Dr. Agnes Hartmann, Stiftung Zeitlehren (zeitlehren.de), for supporting a research trip to Vienna in February 2023. Finally, I would like to thank Wolfgang Reichmann (NHMW) for the photographs, Dr. Gwen Jones for her thoughtful proofreading and copy-editing, and the *Annalen* editing team.

References

Adler, T., Fibiger, L., Harris, J., Teschler-Nicola, M., Smith, J. & Szöke, A. (2021): Dead Images. Facing the history, ethics and politics of European skull collections. – In: Hamm, M. & Schönberger K. (eds): Contentious Cultural Heritages and Arts: A Critical Companion. – pp. 63–68, Klagenfurt & Celovec (Wieser Verlag).

Annus, E., Bobinac, M., Göttsche, D. & Patrut, J. (2017): Europäischer Binnenkolonialismus in interdisziplinärer Perspektive. – In: Göttsche, D., Dunker, A. & Dürbeck, G. (eds): Handbuch Postkolonialismus und Literatur. – pp. 87–95, Stuttgart (Springer).

Baer, K.E. von & Wagner, R. (1861): Bericht über die Zusammenkunft einiger Anthropologen im September 1861 in Göttingen zum Zwecke gemeinsamer Besprechungen. – 89 pp., Leipzig (Voss).

Baker, C., Iacob, B.C., Imre, A. & Mark, J. (eds) (2024): Off white. Central and Eastern Europe and the global history of race. – 374 pp., Manchester (Manchester University Press).

Berner, M., Hoffmann, A. & Lange, B. (2011): Sensible Sammlungen. Aus dem anthropologischen Depot. (FUNDUS, 210). – 248 pp., Berlin (Distanz Verlag).

Blaha, C., Jungwirth, J. & Kromer, K. (1966): Geschichte der Anthropologischen und der Prähistorischen Abteilung des Naturhistorischen Museums in Wien. – Annalen des Naturhistorischen Museums in Wien, **69**: 451–461.

Bobinac, M. (2015): The Habsburg Legacy From A Postcolonial And Postimperial Perspective. – Umjetnost riječi, **59**/3–4: 239–260.

Böröcz, J. (2021): "Eurowhite" Conceit, "Dirty White" Ressentment: "Race" in Europe. – Sociological Forum, **36**/4: 1116–1134. https://doi.org/10.1111/socf.12752

Böröcz, J. & Sarkar, M. (2012): Empires – In: Anheier, H.K., Juergensmeyer, M. & Faessel, V. (eds): Encyclopedia of Global Studies. – pp. 476–480, Thousand Oaks (SAGE).

Brubaker, R. (2009): Ethnicity, Race, and Nationalism. – Annual Review of Sociology, **35**: 21–42.

Buettner, E. (2022): Europe and its entangled colonial pasts. Europeanizing the "imperial turn". – In: Knudsen, B.T., Oldfield, J., Buettner, E. & Zabunyan, E. (eds): Decolonizing Colonial Heritage. New Agendas, Actors and Practices in and beyond Europe. – pp. 25–43, London (Routledge). https://doi.org/10.4324/9781003100102-3

Darwin, C. (1889): The Descent of Man, and Selection in Relation to Sex. 2nd edition. – 716 pp., New York (D. Appleton and Company).

Di Gregorio, M. (2002): Reflections of a Nonpolitical Naturalist: Ernst Haeckel, Wilhelm Bleek, Friedrich Müller and the Meaning of Language. – Journal of the History of Biology, **35**/1: 79–109.

Eggers, S., Te Herewini, H., Te Mamaku, A., Schattke, C., Buttinger, K., Eggers, S., Gorab, M. & Berner, M. (2021): Māori Human Remains in the Natural History Museum in Vienna: Exhumed, shipped, exchanged and inventoried. – In: Schölnberger, P. (ed..): Das Museum im kolonialen Kontext. Annäherungen aus Österreich. – pp. 281–303, Wien (Czernin).

Feichtinger, J., Prutsch, U. & Csáky, M. (eds) (2003): Habsburg Postcolonial. Machtstrukturen und kollektives Gedächtnis. (Gedächtnis – Erinnerung – Identität, 2). – 344 pp., Wien & Innsbruck (Studien Verlag).

Fuchs, B. (2019): Weisbach, Augustin (1837–1914), Anthropologe und Mediziner. (Österreichisches Biographisches Lexikon, 16 (Lfg. 70)). – 78 pp., Vienna (Verlag der Österreichischen Akademie der Wissenschaften). https://doi.org/10.1553/0x003afc70

Fuchs, B. (2005): „Kultur" und „Hybridität": Diskurse über „Rasse", Sexualität und „Mischung" in Österreich 1867 bis 1914. – Austrian Studies in Social Anthropology, **1**: 1–15.

Fuchs, B. (2003): „Rasse", „Volk", Geschlecht: Anthropologische Diskurse in Österreich 1850–1960. – 335 pp., Frankfurt & New York (Campus).

Haeckel, E. (1868a): Ueber die Entstehung und den Stammbaum des Menschengeschlechts. Zwei Vorträge. – 80 pp., Berlin (Lüderitz).

Haeckel, E. (1868b): Natürliche Schöpfungsgeschichte. – Gemeinverständliche wissenschaftliche Vorträge über die Entwickelungslehre im Allgemeinen und diejenige von Darwin, Goethe und Lamarck im Besonderen, über die Anwendung derselben auf den Ursprung des

Menschen und andere damit zusammenhängende Grundfragen der Naturwissenschaft. – 584 pp., Berlin (Verlag von Georg Reimer).

Hauer, F. von (1889): Allgemeiner Führer durch das k.k . naturhistorische Hofmuseum. – 366 pp., Vienna (Verlag des k.k . Naturhistorischen Hofmuseums).

Heinrich, A. (1995/96): Vom Museum der Anthropologischen Gesellschaft in Wien zur Prähistorischen Sammlung im k. k. Naturhistorischen Hofmuseum. – Mitteilungen der Anthropologischen Gesellschaft in Wien, **125/126**: 11–42.

Herza, F. (2019): Sombre faces: Race and nation-building in the institutionalization of Czech physical anthropology (1890s–1920s). – History and Anthropology, **31**: 1–22.

Hicks, D. (2013): Four-Field Anthropology. Charter Myths and Time Warps from St. Louis to Oxford. – Current Anthropology, **54**/6: 753–763. https://doi.org/10.1086/673385

Hossfeld, U. (2005): Geschichte der biologischen Anthropologie in Deutschland: Von den Anfängen bis in die Nachkriegszeit. – 573 pp., Stuttgart (Franz Steiner Verlag).

Hossfeld, U. & Levit, G.S. (2023): Ernst Haeckel und die Frage nach der Herkunft und dem Stammbaum des Menschengeschlechts. – In: Porges, K. (ed.): Den Begriff „Rasse“ überwinden. Die „Jenaer Erklärung“ in der (Hoch-)Schulbildung. – pp. 123–145, Bad Heilbrunn (Verlag Julius Klinkhardt).

Jovanovic-Kruspel, S. & Schumacher, A. (2014): Das Naturhistorische Museum. Baugeschichte, Konzeption & Architektur. – 264 pp, Vienna (Verlag des Naturhistorischen Museums Wien).

Kalmar, I. (2022): White But Not Quite. Central Europe’s Illiberal Revolt. –334 pp., Bristol (University Press Bristol).

Khull-Kholwald, F. (1915): Dr. Augustin Weisbach. – Sonderabdruck aus den Mitteilungen des Naturwissenschaftlichen Vereines für Steiermark, **54**: 8 –16.

Krasny, E. (2010): Binnenexotismus und Binnenkolonialismus. – In: Aigner, A. (ed.): Vernakulare Moderne. – pp. 37–56, Bielefeld (Transcript).

Krausse, E. (1998): Ernst Haeckels Beziehungen zu österreichischen Gelehrten. Spurensuche im Briefnachlaß. – Stapfia, **131**: 375–414.

Lanz, F. (2018): Dead Images. – Traces Journal, **7**: 7. https://www.academia.edu/39805592/TRACES_Journal_07_Dead_Images

Latour, B. (1999): Circulating Reference. Sampling the Soil in the Amazon Forest. – In: Latour, B.(ed.): Pandora’s Hope. Essays on the Reality of Science Studies. – pp. 24–79, Cambridge & London (Harvard University Press).

Levit, G.S. & Hossfeld, U. (2020): Ernst Haeckel, Nikolai Miklucho-Maclay and the racial controversy over the Papuans. – Frontiers in Zoology, **17**: 16. https://doi.org/10.1186/s12983-020-00358-w

Macdonald, S. (2021): Contentious collections, contentious heritage. Risks and potentials of opening Europe’s memory bank. – In: Hamm, M. & Schönberger, K. (eds): Contentious Cultural Heritages and Arts: A Critical Companion. – pp. 95–127, Klagenfurt & Celovec (Wieser Verlag).

M’charek, A. (2013): Beyond Fact or Fiction: On the Materiality of Race in Practice. – Cultural Anthropology, **28**/3: 420–442. https://doi.org/10.1111/cuan.12012

McClintock, A. (1995): Imperial Leather. Race, Gender, and Sexuality in the Colonial Contest. – 646 pp., London (Routledge).

McMahon, R. (2019): National Races. Transnational Power Struggles in the Sciences and Politics of Human Diversity, 1840–1945. – 464 pp., Lincoln (University of Nebraska Press).

McMahon, R. (2007): The Races of Europe: Anthropological Race Classification of Europeans 1839–1939. – PhD thesis, 526 pp., Florence (European University Institute)

Melegh, A. (2006): On the East-West Slope: Globalization, Nationalism, Racism and Discourses on Eastern Europe. – 230 pp., Budapest (Central European University Press).

Morton, S.G. (1849): Catalogue of the Skulls of Man and the Inferior Animals in the Collection of Samuel George Morton. 3rd ed. – 48 pp., Philadelphia (Merrihew and Thompson).

Müller, F. (1873): Allgemeine Ethnographie. – 550 pp., Vienna (Beck'sche Universitätsbuchhandlung).

Müller, F. (1876–1888): Grundriss der Sprachwissenschaft. – 264 pp., Vienna (Alfred Hölder).

Novakov-Ritchey, C. (2024): A Colonial Expedition in the Balkans: Ethnography as Primitive Accumulation During the First World War. – In: Petkovska, S.S. (ed.): Decolonial Politics in European Peripheries. Redefining Progressiveness, Coloniality and Transition Efforts. – pp. 277–296, London (Routledge).

Pöch, R. (1914): Dr. Augustin Weisbach 1838–1914. – Wiener Prähistorische Zeitschrift, **1**/3: 143–149.

Rexhepi, P. (2023): White Enclosures. Racial Capitalism and Coloniality along the Balkan Route.– 200 pp., Durham & London (Duke University Press).

Riedl-Dorn, C. (2021): Forschungsreisen im Geist des Eurozentrismus. Erwerbungen für das Naturhistorische Museum Wien im 19. Jahrhundert. – In: Schölnberger, P. (ed.): Das Museum im kolonialen Kontext: Annäherungen aus Österreich / The museum in a colonial context. Reflections from Austria. – pp. 199–229, Vienna (Czernin).

Ruthner, C. (2018): Habsburg's Only Colony? Bosnia-Herzegovina And Austria-Hungary, 1878–1918. – SEEU Review, **13**/1: 2–14. https://doi.org/10.2478/seeur-2018-0002

Ruthner, C. (2014): Bosnia-Herzegovina, 1878–1918: A Colony of a Multinational Empire. – In: Healy, R. & Dal Lago, E. (eds): The Shadow of Colonialism on Europe's Modern Past – pp. 156–169, London, NewYork & Shanghai (Palgrave Macmillan).

Shmidt, V. & Jaworsky, B. (2021): Historicizing Roma in Central Europe. Between Critical Whiteness and Epistemic Injustice. – 186 pp., London (Routledge).

Stergar, R. & Scheer, T. (2018): Ethnic boxes: the unintended consequences of Habsburg bureaucratic classification. – Nationalities Papers, **46**/4: 575–591. https://doi.org/10.1080/00905992.2018.1448374

Stoler, A.L. (2010): Along the Archival Grain: Epistemic Anxieties and Colonial Common Sense. – 336 pp., Princeton (Princeton University Press).

Stoler, A.L. (2016): Duress. Imperial Durabilities In Our Times. – 448 pp., Durham & London (Duke University Press).

Szöke, A. (2021): In search of the individual story. Learning from collections of human remains. – In: Hamm, M. & Schönberger, K. (eds): Contentious Cultural Heritages and Arts: A Critical Companion. – pp. 549–571, Klagenfurt & Celovec (Wieser Verlag).

Surman, J. (2022): Imperial Science in Central and Eastern Europe. – Histories, **2**: 352–361. https://doi.org/10.3390/histories2030026

Tschenett, F. (2023): The provenance and osteological analysis of the skulls collected during the Circumnavigation of the Globe by the Austrian Frigate Novara 1857–1859. – Master thesis, 188 pp., Vienna (University of Vienna).

Turda, M. & Quine, M.S. (2018): Historicizing Race. – 200 pp., London (Bloomsbury Academic).

Weiler, B. (2006): Die Ordnung des Fortschritts. Zum Aufstieg und Fall der Fortschrittsidee in der „jungen" Anthropologie. – 524 pp., Bielefeld (Transcript).

Weisbach, A. (1864): Beiträge zur Kenntnis der Schädelformen österreichischer Völker. Nebst Bemerkungen über eine Verändungerung des deutschen Männer- und Weiberschädels im Alter zwischen 20 und 80 Jahren. – Wiener Medizinische Jahrbücher, **20**/I–III: 49–127.

Weisbach, A. (1866): Die Becken österreichischer Völker. – Wiener Medizinische Jahrbücher, **22**/11: 37–96.

Weisbach, A. (1866): Die Gewichtsverhältnisse der Gehirne österreichischer Völker mit Rücksicht auf Körpergrösse, Alter, Geschlecht und Krankheiten. – Archiv für Anthropologie, **1**: 191–218.

Weisbach, A. (1867): Reise der österreichischen Fregatte Novara um die Erde in den Jahren 1857, 1858, 1859 unter den Befehlen des Commodore B. von Wüllerstorf-Urbair. Anthropologischer Theil. Zweite Abteilung: Körpermessungen, an verschiedenen Menschenracen vorgenommen durch Dr. Karl Scherzer und Dr. Eduard Schwarz. Bearbeitet von Dr. A. Weisbach, k.k. Oberarzt. Mit VIII Tabellen. – iv+306 pp., Vienna (kaiserlich-königliche Hof- und Staatsdruckerei).

Weisbach, A. (1878): Körpermessungen verschiedener Menschenrassen. – Zeitschrift für Ethnologie, **9** (1877) Supplement: 1–338.

Online resources

Feinberg, J.G. (2024): The Fall and Ambivalent Rise of East European Anti-Colonialism. Available at: https://commons.com.ua/en/kolonialnist-chi-imperskist-na-prikladi-shidnoyi-yevropi/ Accessed 25.05.2024