Searching for Fingerprints on ID 8470: Provenance Research on a Gall Skull from the Anatomical Collection of Berlin Charité

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The provenance of human remains is most often examined in contexts of presumed injustice, whether these concern murder, war, and other conflicts, or the looting of burial sites. The 'skull according to Gall', which is the focus of consideration here, is not only a human bone that was once in the head of a human being; it is also inscribed with markings and was likely used as an object of teaching and learning. 'Gall' refers to Franz Joseph Gall (1758–1828), a controversial physician and anatomist, who developed ideas about how to interpret the contours of human skulls. According to these ideas, certain areas, which he called 'organs', can be identified. A 'skull according to Gall' – which for ease I will subsequently refer to as a 'Gall skull' – is, then, one in which these organs are delineated and named according to his scheme. These markings transform a skull into a hybrid object in more ways than one. The markings do not in fact refer to any anatomical formations as understood by medical science today – they are, instead, individual variations with no wider significance.[1] In scientific terms, such marked skulls are not anatomical visual preparations; rather, they document scientific ideas – those of Gall – that have been debunked and whose significance is not medical but historical.

[1] For example, a skull from the collection of the German Museum of Medical History in Ingolstadt serves as an anatomical teaching object. See Inv. No. 92/001, published as Johanna Hammerl, Tobias Angert, Michael Wolf, and Christian Foizig, 'Protsch von Zieten: Untersuchungen eines Craniums aus dem Deutschen Medizinhistorischen Museum in Ingolstadt', in *Jahrbuch des Deutschen Medizinhistorischen Museums 8/1992–1994*, ed. Heinz Goerke, Christa Habrich, and Juliane Wilmanns (Ingolstadt: Demeter, 1995), 103–18.

As a medical historian, with knowledge of the history of the medical landscape in Berlin, I was asked if I would do provenance research relating to the Gall skull as part of the *Who is ID8470?* project, described elsewhere in this volume.[2] I was happy to accept.[3] What follows is the result of my investigations. My method and procedure were shaped by what I learned as I followed my curiosity, drawing on both internet and documentary sources about this skull specifically and about skulls in other locations. My documentary research was primarily in Berlin, where, over a period of three months, I immersed myself in documentation concerning the era of Romantic medicine – which, on the basis of my knowledge of medical history, I determined was that in which the skull was inscribed. In this era – the first third of the nineteenth century – Berlin University was founded, and the anatomists and natural scientists Johannes Müller and Johann Friedrich Blumenbach were active in Berlin and Göttingen, respectively. I also used internet sources and surveyed, over email, anatomical and historical collections to locate other 'phrenological skulls'– with markings according to Gall's ideas or similar ones – in German anatomical and medical-historical collections. I followed up some of these with further searches elsewhere, including the Manuscripts and Scholarly Collections of the Göttingen State and University Library. In what follows, I describe what I learned directly about the Gall skull, before drawing on my further research into skulls elsewhere and on my wider knowledge of the period, to present what I was able to ascertain about its provenance.

The Object of Concern

The Gall skull, inventoried as ID No. 8470 in the Collection Portal of Humboldt-Universität zu Berlin, is about 26×13×20 cm in dimension.[4]

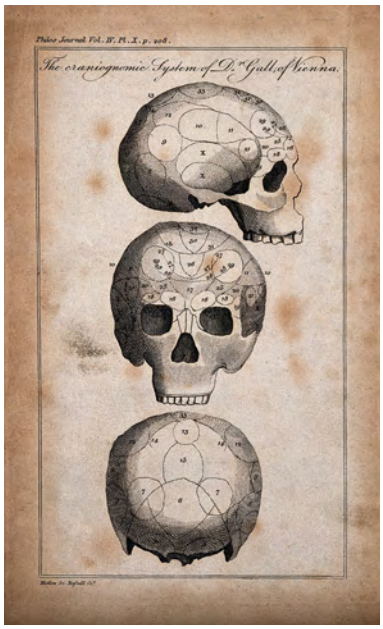
[2] See some of my prior work: Marion Hulverscheidt and Volker Hess, 'Zur Etablierung der Hygiene an der Medizinischen Fakultät der Friedrich-Wilhelms-Universität', in *Geschichte der Universität Unter den Linden 1810–2010: Praxis ihrer Disziplinen*, vol. 5, *Wandel der Wissensordnung: Verwissenschaftlichung der Gesellschaft und Vergesellschaftung des Wissens*, ed. Rüdiger vom Bruch and Heinz-Elmar Tenorth (Berlin: de Gruyter, 2010), 713–33; Gerhard Baader, Thomas Beddies, and Marion Hulverscheidt, 'Chirurgie und naturwissenschaftliche Medizin 1850–1890', in *Berliner Charité. Die Geschichte eines Krankenhauses*, ed. Johanna Bleker and Volker Hess (Berlin: Akademie Verlag, 2010), 80–111; Marion Hulverscheidt, Johanna Bleker, and Petra Lennig, *Visiten: Berliner Impulse zur Entwicklung der modernen Medizin* (Berlin: Kulturverlag Kadmos, 2012); Marion Hulverscheidt and Anja Laukötter, *Infektion und Institution – Zur Wissenschaftsgeschichte des Robert Koch-Instituts in Nationalsozialismus* (Göttingen: Wallstein Verlag, 2009).

[3] From November 2021 to January 2022, I researched the provenance of the Gall skull as a guest researcher at the Centre for Anthropological Research on Museums and Heritage at Humboldt-Universität zu Berlin. My research was funded through the AvH 'Making Differences' project. For information about the project, see the website, accessed June 9, 2023, https://www.carmah.berlin/making-differences-in-berlin.

[4] See the database entry for 'Schädel mit Beschriftungen nach Gall', AN 8711, N.C. 381, Sammlung am Centrum für Anatomie, Humboldt-Universität zu Berlin, accessed June 9, 2023, https://www.sammlungen.hu-berlin.de/objekte/sammlung-am-centrum-fuer-anatomie/8470.

It is completely preserved, with the lower jaw attached to the left and right temporal bones by two spring hooks. The upper and lower incisors are missing and were probably lost post-mortem; the partially missing posterior molars and the wisdom teeth were, given the receded jawbone, likely lost during life. The colour of the bone is greyish ivory, and the bone's surface is well preserved and undamaged. Round, oval, elliptical, and heart-shaped markings have been drawn on the cranial dome and in the eye sockets, although not on the facial bones, and are arranged symmetrically on both sides of the skull.

Although, unfortunately, poorly legible, descriptions have been written within the markings, with a number noted behind them. The drawn markings are wider and darker than the writing, and it is unclear whether they were originally the same colour. Whether these inscriptions were applied with a brush, a metal quill, or a quill pen cannot be determined, nor can the composition of the pigment applied (ink). Inscribed at the *foramen ovale* are the words 'Lebens=Bedingung I' ('Life=Condition I'). Inside the *orbita* are three drawn markings, one of which can be deciphered as 'Personen-Sinn II' ('Persons-Sense II'), while the other two are illegible, other than the inscription 'Wort=sinn 19' ('Language=sense 19') and '16'. On the *glabella*, '8711' can be deciphered, while a '12' is legible in a circle above the orbital arch. 'Mordsinn 6' ('Murder-sense 6') can be read within a circle on the left above the temporal bone (*os temporale*).[5]



Three perspectives of a skull, sectioned and numbered according to Gall's system of phrenology. Etching by Mutlow. Wellcome Collection, reference: 27668i (public domain).

On phrenological skulls found in other collections, the regions are sometimes only labelled with numbers or noted in print. Some of the numberings on the Gall skull in Berlin do not correspond completely to historically published maps of phrenology or organology.[6] On the skull bone itself, 'N. Cat. 381' is marked on the left os *temporale*, possibly as an inventory number. A label with the designation 'Z. 280' is glued on the left side of the mandible, in front of the *foramen mentale*. On the left angle of the jaw,

[5] Translation of these terms by Ali Jones.

[6] Franz Heinrich Martens, *Leichtfassliche Darstellung der Theorie des Gehirn- und Schädelbaues und der daraus entspringenden physiognomischen und psychologischen Folgerungen des Dr. Gall* (Leipzig: Friedrich August Leo, 1803); and Marius Hagedorn, *Beschreibung und bildliche Darstellung der von Dr. Gall im Gehirn entdeckten Organe (. . .) Nebst einem in Gyps modellirten Schädel* (Leipzig: Johann Gottfried Graffe, 1803).

'a Nr 8711' is written. On an old object-label that is no longer kept with the skull, a description reads as follows:

> *9/6 'Gall skull' c. 1800 Berlin, Institute of Anatomy, Charité, Humboldt University Berlin. On both halves of the skull, symmetrical to the vertical axis, are inscribed various zones in which human abilities and aptitudes are located, such as 'generosity', 'obscenity', and 'sense of colour'.*[7]

The skull can be mounted, although the original stand is missing. Because of a burglary to the collection and the theft of several items, the skull, since 2016, is not stored in the public collection rooms (the Anatomical Institute's foyer) or in the semi-public rooms (Stern Hall), but rather in an office inaccessible to the public.

Neighbouring Skulls

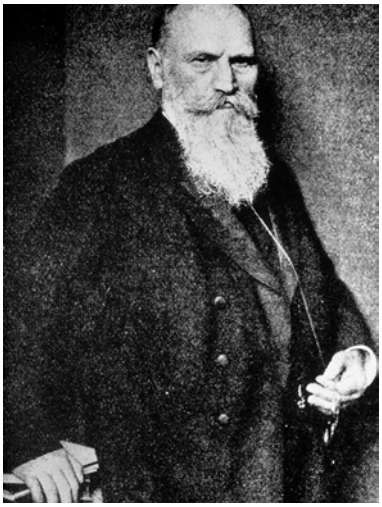
At the close of the twentieth century, a so-called racial skull collection was still displayed in five-meter-high display cases in the corridor of the Berlin anatomical collection. It contained more than eight hundred skulls. The collection, which was started in the first third of the nineteenth century, reached its peak at the end of the nineteenth century, under then-director Wilhelm Waldeyer (1836–1921), and then subsequently garnered less and less interest over the course of the twentieth century. Yet, the skull collection remained, standing in glass cases in the hallway. It was viewed less and less frequently and no longer researched.[8]

In addition to the Gall skull, the anatomical collection also contains another 'phrenological' 'skull with inscriptions according to Spurzheim'.[9] This skull, allegedly inscribed by Johann Gaspar Spurzheim (1775–1832) himself, bears the inventory numbers A.Nr. 4034, and N.C. 380. The skull is complete with a mandible, although most teeth are missing. The digital

[7] Ali Jones's translation from the German original: '9/6 "Gall'scher Schädel" um 1800 Berlin, Institut für Anatomie, Charité, Humboldt-Universität zu Berlin. Auf dem Schädel sind symmetrisch zur Vertikalachse in beiden Hälften verschiedene Bereiche eingetragen, in denen Fähigkeiten und Anlagen des Menschen lokalisiert werden, wie z. B. "Freigiebigkeit", "Zothensinn" und "Farbensinn"'. This text comes from an old photograph of the label next to the skull. The original label is now lost.

[8] Andreas Winkelmann, 'Die Anatomische Sammlung der Berliner Universität und ihre anthropologischen Bestände', in *Sammeln, Erforschen, Zurückgeben? Menschliche Gebeine aus der Kolonialzeit in akademischen und musealen Sammlungen*, ed. Holger Stoecker, Thomas Schnalke, and Andreas Winkelmann (Berlin: Ch. Links, 2013), 69–84, at 75–79; Andreas Winkelmann, *Sezieren und Sammeln – 300 Jahre Berliner Anatomie 1713 bis heute*, Hefte zur Geschichte der Charité – Universitätsmedizin Berlin 5 (Berlin: be.bra wissenschaft verlag, 2018), 31.

[9] The inventory numbers are found on a label numbered 221, mandible left 380, maxilla right 4034, mandible right 4034; see the database entry 'Schädel mit Beschriftungen von Spurzheim', AN 4034, N.C. 380, Sammlung am Centrum für Anatomie, Humboldt-Universität zu Berlin, accessed June 9, 2023, https://www.sammlungen.hu-berlin.de/objekte/sammlung-am-centrum-fuer-anatomie/8511.



Portrait of Wilhelm von Waldeyer-Hartz. Wellcome Collection (CC BY 4.0).

catalogue records its dimensions as 25×15×21cm. Markings with associated written descriptions can be found on the cranial dome and in the eye sockets, but the inscription is barely legible.

Another neighbouring object at the anatomical collection is the so-called Waldeyer skull, which is located in a glass case in the foyer of the Centre for Anatomy at the Charité. This is the skull of the former long-time director of the institute and full professor Wilhelm Waldeyer. During his lifetime, Waldeyer had mandated that his brain, skull, and hands be transferred to the Anatomy Department upon his death. His former colleague was given the task of preparing the hands. The brain no longer exists, but the skull does – along with an X-ray of the hands and a death mask. Johannes Sobotta (1869–1945) interprets Waldeyer's wish to bequeath his body parts to anatomy as a religious cult:

> *Thus the members of the Anatomical Society hold their honorary president in utmost memorialization, and the institute in which he worked so long and so beneficially, and which owes its present condition entirely to his outstanding organizational talent, retains as* ***precious relics*** *[emphasis mine] those parts of his body which he bequeathed to it.*[10]

Also located in the foyer of the Centre for Anatomy at the Charité is an oversized wooden skull, the 'Linden Wood Skull', for which the following information is provided: '1904 Johannes Rückert (1854–1923) A. Bechtel Inv. No. 2008/60'. At

Exhibition catalogue of *Theater der Natur und Kunst / Theatrum Naturae et Artis – Wunderkammern des Wissens*. Film still from the *Who is ID8470?* Video. © Tal Adler

[10] J. Sobotta, 'Zum Andenken an Wilhelm von Waldeyer-Hartz', *Anatomischer Anzeiger* 56, no. 12 (1922): 1–43. The German original reads as follows: 'So haben die Mitglieder der Anatomischen Gesellschaft ihren Ehrenpräsidenten in bester Erinnerung, und das Institut, in dem er so lange und so segensreich wirkte, das seinen heutigen Zustand überhaupt seinem hervorragenden Organisationstalent verdankt, bewahrt als **teure Reliquien** die Teile seines Körpers auf, die er ihm vermacht hat (Hervorhebung MH)'.

the request of Munich anatomist Johannes Rückert, the woodcarver A. Bechtel had created two lecture models of a human skull on a fivefold scale. These can be disassembled into individual 'bones', and each was carved from solid blocks of linden wood. One of the two skulls was exhibited by the Munich-based Ludwig Maximilian University's Institute of Anatomy at the 1904 World Fair in St Louis, in the 'Medical Section of the German Teaching Exhibition'. At the end of the World Fair, the wooden skull was donated to the Berlin Anatomical Institute.

Alongside these skulls – as well as many other anatomical objects not described here – the Gall skull has lingered in the anatomical collection. Until the end of the twentieth century, little indication was provided about the provenance of such objects in anatomical collections. When such information was offered, it only stated who had prepared or previously owned the object. The objects themselves were stripped of subjectivity, as part of an unspoken culture of the anatomical collection of not naming those from whom the body parts came. A culture of written consent for the donation of bodies to anatomical institutes and collections developed only during the second half of the twentieth century.[11] Towards the end of the eighteenth century and the beginning of the nineteenth, bodies prepared in anatomical institutes for teaching and research purposes typically came from executed prisoners or those who had died in prison, or from people who had died in poorhouses or hospitals.[12] All of this meant that it was not possible to determine the identity of the person behind this skull. Nor was it possible to find even rudimentary information about the person who made the markings on the skull – they left no signature. Nevertheless, there was other information that could be gained and other possibilities that could be suggested by conducting historical research based on inventory numbers.

Historical Reconstruction Based on Inventory Numbers

Historical provenance research relies on examining an object's records, and for objects in collections and museums, it typically begins with an examination of inventory list entries. The Gall skull is labelled with an A.N. number (presumably the abbreviation for *alte Nummer*, or 'old number'), referring to an inventory book, which was probably recorded between 1810 and 1883 but was considered lost after 1910. This inventory book was instigated by the first professor of anatomy, Karl

[11] Andreas Winkelmann, 'Schlemm, the Body Snatcher?', *Annals of Anatomy* 190, no. 3 (2008): 223–29.
[12] Karin Stukenbrock, 'Der zerstückte Cörper', in *Zur Sozialgeschichte der anatomischen Sektionen in der frühen Neuzeit (1650–1800)* (Stuttgart: Franz Steiner Verlag, 2001); Tatjana Buklijas, 'Cultures of Death and Politics of Corpse Supply: Anatomy in Vienna, 1848–1914', *Bulletin of the History of Medicine* 82, no. 3 (Fall 2008): 570–607.

Asmund Rudolphi (1771–1832), in 1810. It listed all the anatomical and zoological items of the anatomical collection in Berlin.[13] The more recent catalogue included N.C. numbers (*neuer Catalog*, or 'new catalogue'), which were often assigned parallel or supplementary to the A.N. numbers. However, this catalogue no longer exists either; it is assumed to have been destroyed during the bombing of the Anatomical Institute at the end of WWII.[14] This meant that even historical provenance research was difficult and needed to consider not only what could be directly known but also possibilities based on wider information.

The first anatomical collection in Berlin was established by Johann Gottlieb Walter (1734–1816). His private collection of 2 , 863 specimens was then acquired by Kaiser Friedrich Wilhelm III in 1803, for 100 , 000 Reichstaler, and from 1810 on, it formed the basis of the anatomical museum housed in Berlin University's main building, located on Unter den Linden.[15] After the Kaiser's purchase and the museum's opening, anatomy professors were forbidden by royal decree from establishing private collections. A catalogue of Walter's collection, dated 1796, exists and is kept in the Berlin Museum of Medical History.[16] The Gall skull is not listed in it.

The 'old catalogue' (referring to the A.N. – old numbers) was created by Rudolphi, who had expanded the inventory of the anatomical collection to seven thousand objects by the time of his death.[17] The old catalogue no longer exists. But the inventory of the Museum für Naturkunde Berlin contains a list, along with respective inventory numbers, of the objects in the anatomical museum, the animal specimens of which were given to the Museum für Naturkunde Berlin when the anatomical museum was dissolved. The list reveals that Rudolphi inventoried objects numbered 3234 to 5900, between November 1810 and June 1826, which means that this was when the Spurzheim skull (A.N. 4034) was inventoried.[18] The transcripts of the inventory records also reveal that Rudolphi's successor,

[13] Winkelmann, *Sezieren und Sammeln*, 15–16.
[14] Winkelmann, *Sezieren und Sammeln*, 15–16. The destruction of the collection directories during the WWII bombing of Berlin is also mentioned by W. Kirsche in his contribution 'Zum 100. Band der *Zeitschrift für mikroskopisch-anatomische Forschung* und zum 100. Geburtstag ihres Begründers Hermann Stieve', *Zeitschrift für mikroskopisch-anatomische Forschung* 100, no. 1 (1986): 1–6, at 3.
[15] Andreas Winkelmann, *Sezieren und Sammeln*, 14.
[16] Johann Gottlieb Walter and Friedrich August Walter, *Anatomisches Museum* (Berlin: Belitz und Braun, 1796).
[17] Manfred Stürzbecher, 'Aus der Frühgeschichte der Berliner Anatomie', *Deutsches Medizinisches Journal* 14 (1963): 803–19; Manfred Stürzbecher, 'Beiträge zur Geschichte der Berliner Anatomie', *Deutsches Medizinisches Journal* 9 (1958): 439–42; Winkelmann, 'Die Anatomische Sammlung der Berliner Universität', 84–105; Winkelmann, *Sezieren und Sammeln*, 16; and Thomas Werner, 'Das anatomisch-zootomische Museum unter Karl Asmund Rudolphi als Lehr- und Forschungsinstitution 1810–1832' (master's thesis, Humboldt-Universität zu Berlin, 2012).
[18] I would like to thank Andreas Winkelmann for this important piece of advice, as well as my colleagues at the Museum für Naturkunde Berlin for scanning the relevant sections of the catalogue for my perusal, since pandemic regulations prevented me from visiting in person.

the famous anatomist and physiologist Johannes Müller (1801–58), recorded objects numbered 7198 to 10785, between May 6, 1833, and May 28, 1838. The Gall skull (A.N. 8711) was therefore inventoried by Müller during this time. It is possible that the skull had already been placed in the anatomical collection during Rudolphi's tenure but had simply not yet been recorded. Indeed, Müller explained that about three thousand objects were still being stored in the depot at that time and had not yet been prepared or processed for inclusion in the exhibition and the catalogue, and thus they had not yet been inventoried.[19] On the basis of the numbers recorded on the skull and the written records in inventory lists, one can narrow down the point at which Müller inventoried the Gall skull to sometime between 1833 and 1836. It cannot be determined how long the skull had lingered in the anatomical collection beforehand, who gave it to the collection, or whether it was a gift or a purchase.

Gall's Theory of the Brain and Skull

Also important to consider is the history of Gall's theories about brains and skulls. His ideas caused a swirling controversy that peaked between 1798 and 1815, and which largely faded by the time of his death in 1828. It was only after the debate had subsided that the objects entered the museum's collection.

Born in Tiefenbronn near Pforzheim in Baden in 1758, Franz Joseph Gall began studying medicine in 1781 in Vienna, where he remained living and working as a physician after receiving his doctorate in 1785.[20] It was in Vienna that he developed a theory of the brain and skull, which stimulated controversial and intensive discussions in both academic and social spheres. Anatomist Samuel Thomas Sömmerring (1755–1830), who was widely known in German-speaking lands, claimed that the brain was the organ of the soul. Gall argued that not only the soul but also mental characteristics, talents, feelings, and inclinations were situated in the brain. He, therefore, shifted focus away from the cerebral

Franz Joseph Gall. Mezzotint by F. Wrenk, 1803, after Catharina Escherich. Wellcome Collection, reference: 601029i (public domain).

[19] Quoted in Werner, 'Das anatomisch-zootomische Museum', 18. The original source is Johannes Müller, 'Gedächtnisrede auf Carl Asmund Rudolphi', in *Abhandlungen der Königlichen Akademie der Wissenschaften* (Berlin: Königliche Akademie der Wissenschaften, 1837), xvii–xxxviii.

[20] See John van Wyhe, The History of Phrenology on the Web (website), accessed June 10, 2023, http://www.historyofphrenology.org.uk.

ventricles that Soemmering had identified as the soul's location and towards the cerebral cortex.

Gall revolutionized the dissection of the brain by abandoning the standard practice of proceeding inwards from the cerebral cortex; instead, he started with the spinal cord and proceeded outwards from there. Michael Hagner calls this new approach focusing on the brain an 'epistemological break'.[21] However, accessing the brain itself was nearly impossible during Gall's lifetime, leading him to hypothesize that bulges and dents on the skull correlate with brain size and formation; this correlation would – per his theory – enable one to draw conclusions about mental faculties and qualities. He supported his theory with empirical evidence, numerous observations, and a series of systematic investigations, in order to demonstrate that his doctrine was empirically based rather than pure metaphysical speculation.

Gall had been speculating about potentially locating mental abilities in different brain regions since his anatomical-philosophical investigations at the end of the eighteenth century. The identification or locating of human characteristics was already known from the physiognomy of the Swiss priest, philosopher, and writer Johann Caspar Lavater (1741–1801). The latter believed that he could deduce a person's aptitudes from their appearance and facial expressions. This approach was critically debated. Underlying all these speculations is the desire to be able to classify and grasp a person in a simple, provable way. How, for instance, can I recognize that someone is dangerous, is deceiving me, is betraying me, or even loves me unconditionally? Such questions reveal that there was, and remains, the desire to understand and gauge other people based on simple and apparently objective characteristics, which could also be used comparatively with others.

During his time in Vienna, Gall developed a research program 'whose aim was to localize the site and sources of peoples' various mental qualities, inclinations, and talents in the various independent organs in the brain (organology)'.[22] This postulated connection earned him accusations of charlatanism, but, even worse, he was accused of materialism, which resulted in Kaiser Franz II banning him from lecturing in 1801.[23] Gall saw brain structure, brain function, and human behaviour as three varied aspects of a unified, naturalistic doctrine of man, which he expected

[21] Michael Hagner, *Geniale Gehirne. Zur Geschichte der Elitegehirnforschung* (München: dtv, 2004), 55.
[22] Michael Hagner, 'Franz Joseph Gall', in *Ärztelexikon*, ed. W. U. Eckart and C. Gradmann (München: Beck Verlag, 1995), 152.
[23] Erna Lesky, *Franz Joseph Gall. Naturforscher und Anthropologe* (Bern, Stuttgart, Wien: Verlag Hans Huber, 1979), 11.

would influence psychiatry, moral science, education, and legislation. The paradigmatic shift of which Gall was representative meant that psychology was no longer organized according to philosophical categories but rather to anatomical-physiological ones.

His anatomical dissections of the brain and spinal cord stimulated lively academic discussions. However, it is the skulls he used for demonstration purposes that have remained in the cultural memory. These skulls were used to demonstrate how certain abilities or inclinations, which manifested in the cortex according to size and prominence, pushed through the brain onto the skull. The popular scientific twist was that these aptitudes could ostensibly be detected by touching the head. The location of the regions was constantly developed, and gradually more and more regions and new designations were added to the originally identified twenty-seven regions. Prints, skulls, and plaster casts were all produced as illustrative and teaching tools.[24] It is remarkable, although not without precedent, that Gall himself only published his major piece on his skull theory, together with his colleague Spurzheim, between 1810 and 1819 in Paris.[25] His teachings were thus published primarily by others, sometimes via their criticism.[26]

After he was banned from lecturing in Vienna, Gall embarked on a lecture tour, in 1805, lasting more than two years, before he settled in Paris in 1807. This tour included a stop in Berlin, in 1805, where he gave six public lectures and conducted anatomical demonstrations for physicians.[27] Johann Gottlieb Walter attended a lecture and a dissection, and afterwards he wrote a harsh critique of Gall's anatomical claims, his dissection methods, and his theory of organology.[28] It was Gall's prosector

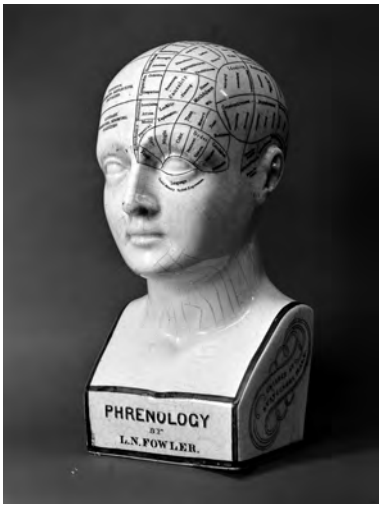
[24] See Franz Heinrich Martens, *Leichtfassliche Darstellung*; and Marius Hagedorn, *Beschreibung und bildliche Darstellung*.

[25] 'Des Herrn Dr. F. J. Gall Schreiben über seinen bereits geendigten Prodromus über die Verrichtungen des Gehirns der Menschen und Thiere an Herrn Joseph Freiherr von Retzer', *Der Neue Teutsche Merkur* 12 (December 1798): 311–82; Franz Joseph Gall and Johann Gaspar Spurzheim, *Anatomie et physiologie du système nerveux en général, et du cerveau en particulier, avec des observations sur la possibilité de reconnaître plusieurs dispositions intellectuelles et morales de l'homme et des animaux, par la configuration de leurs têtes*, 4 vols. (Paris: J.-B. Baillière, 1810–19). Volumes 1 and 2 were published jointly by Gall and Spurzheim, volumes 3 and 4 by Gall alone.

[26] Johann Gottlieb Walter, *Etwas über Herrn Doctor Gall's Gehirn-Schädel-Lehre, Dem Berliner Publikum mitgetheilt* (Berlin: Wegener, 1805); Henrik Steffens, *Drei Vorlesungen über Hn. D. Gall's Organlehre* (Halle: Neue Societäts-Buch- und Kunsthandlung, 1805); Samuel Thomas Sömmerring, 'Meine Ansicht einiger Gallschen Lehrsätze', *Göttingische. Gelehrten Anzeigen* 6–7 (1829): 49–64.

[27] Lesky, *Gall*, 12.

[28] Paul Eling and Stanley Finger, 'Gall's German Enemies', *Journal of the History of the Neurosciences* (2019): https://doi.org/10.1080/0964704X.2019.1687245; Walter, *Etwas über Herrn Doctor Gall's Gehirn-Schädel-Lehre*; Christian Heinrich Ernst Bischoff, *Darstellung der Gall'schen Gehirn- und Schädel-Lehre; nebst Bemerkungen über diese Lehre von Christoph Wilh. Hufeland* (Berlin: Wittich, 1805); Jakob Fidelis Ackermann, *Die Gall'sche Hirn- Schedel- und Organenlehre vom Gesichtspunkte der Erfahrung aus beurtheilt und widerlegt* (Heidelberg: Mohr und Zimmer, 1806); and Garlieb Merkel, 'Dr. Gall und der Geheimrath Walter', *Die Freimüthige* 98 (1805a): 390–91; (1805a) 99: 393–95; (1805a) 100: 397–99; (1805a) 101: 401–3; (1805a) 103: 409–10.



Photograph of a ceramic head with phrenological markings. Wellcome Collection (CC BY 4.0).

and companion, Johann Gaspar Spurzheim, who advanced Gall's theory of the brain and skull in a more popular-scientific approach, which had more to do with character studies than with actual neuroanatomical science. Spurzheim and Gall fell out around 1813, and Spurzheim became Gall's successor in what he now called phrenology.[29] This approach was especially noted in Great Britain, and it received serious attention in the United States until the twentieth century, but only in the public realm. In medical science, Gall was esteemed for his neuroanatomical approaches, though not for his phrenology.[30]

Tentative Biographies and the Journey to the Collection

Who held this skull in their hands and used it to learn or even teach Gall's organology? How, and through whom, did this striking object come into the Berlin anatomical collection? Such questions surrounding past fingerprints and possession are part of provenance research, but it is often not easy to find definitive information to answer them. In such contexts, we can seek to propose 'tentative object biographies', to use a term coined by Larissa Förster and Holger Stoecker (and discussed further by Förster in this volume)[31]. Such tentative object biographies are neither proven nor disproven, but some are more plausible – or more enticing or exciting – than others. Below are four possibilities that, on the basis of my research, seem to be relatively likely.

From Gall to Walter

The skull could have possibly come from a hitherto unknown private estate of the Walter anatomists. Johann Gottlieb Walter died in 1816, and his son and successor, Friedrich August Walter (b. 1764), in 1826. By 1803, Johann Gottlieb Walter had already sold his private collection to the Prussian state, the catalogue of which still exists. This does not

[29] Roger Cooter, *The Cultural meaning of Popular Science: Phrenology and the Organization of Consent in Nineteenth-Century Britain* (Cambridge: Cambridge University Press, 1984); and James Poskett, *Materials of the Mind. Phrenology, Race, and the Global History of Science, 1815–1920* (Chicago: University of Chicago Press, 2019).
[30] John van Wyhe, *Phrenology and the Origins of Victorian Scientific Naturalism* (Burlington, VT: Ashgate, 2004); Courtney E. Thompson, *An Organ of Murder: Crime, Violence and Phrenology in Nineteenth-Century America* (New Brunswick, NJ: Rutgers University Press, 2021); and Wyhe, The History of Phrenology on the Web.
[31] Larissa Förster and Holger Stoecker, *Haut, Haar und Knochen. Koloniale Spuren in den naturkundlichen Sammlungen der Universität Jena*, vol. 9, *Laborberichte* (Ilmtal-Weinstraße: VDG Weimar, 2016), 67–68.

list the Gall skull. However, it is possible that Walter could have ordered an inscribed skull from Gall in Vienna before 1803. Perhaps Walter received the skull as a gift from Gall, as thanks for organizing an anatomical theatre in Berlin for Gall's public lecture and demonstration. Gall spoke in Berlin in 1805, two years after Walter sold his collection, but in his position as a professor, Walter presided over both the anatomical theatre and the Royal Anatomical Museum in Berlin. Walter mentions this in 1805, when he wrote the following:

> *I also wish to mention one particular situation, to prove how obliging I have been to Doctor Gall in all respects, since it was not a matter of the person but of the subject itself. Only professors of anatomy are permitted to give lectures at the anatomical theatre, unless by the explicit written order of His Majesty the Kaiser, the head of the Medicinal Department, Count von der Schulenburg Excellenz, or the first director of the Collegium Medico-Chirurgicum President von Scheibler Hochwohlgeboren. But what happened here? – Doctor Gall's most ardent supporter, Mr Geheime Rath Hufeland Wohlgeboren, had his anatomy henchman simply inform me that Doctor Gall would be lecturing, and I was to prepare corpses for him. I ignored this ridiculous despotism, arranged for five heads be given to Doctor Gall, and, as I said, paid a Friedrichs-d'or on top of all that for this tidy demonstration.*[32]

As mentioned above, after 1810, royal decree forbade all professors at Berlin University from procuring objects for private collections. However, Walter could still have acquired a skull from Gall privately. Walter's son and successor, Friedrich August Walter, died in 1826, and the Gall skull could have come from his estate, which was only inventoried after 1833, under Müller's directorship of the anatomical collection. It can be assumed that the skull was merely considered a curiosity or relic at that point, rather than a serious anatomical specimen. This would

[32] Johann Gottlieb Walter, *Etwas über Herrn Doctor Gall's Gehirn-Schädel-Lehre, dem Berliner Publikum mitgetheilt. Zweiter Theil* (Berlin: Wegener, 1805), 24. The German original reads as follows: 'Zum Beweise, wie zuvorkommend ich dem Herrn Doktor Gall in allen Stücken gewesen, da es hier nicht auf die Person, sondern auf die Sache selbst ankam, will ich auch diesen Umstand anführen. Niemand als nur die Professores der Anatomie können, ohne Allerhöchsten schriftlichen Befehl Sr. Majestät des Königs, oder des Medicinal-Departments-Chef, Herrn Grafen von der Schulenburg Excellenz, oder stattdessen des ersten Direktors des Collegii medico-chirurgici, des Herrn Präsidenten von Scheibler Hochwohlgeboren, Vorlesungen auf dem anatomischen Theater halten. Was geschah aber hier? – der eifrigste Anhänger des Doktor Gall, Herr Geheime Rath Hufeland Wohlgeboren, ließ mir, eigenmächtiger Weise, bloß durch den Anatomieknecht sagen, der Doktor Gall würde auf dem Theater Vorlesungen halten, und ich möchte Körper für ihn bereit halten. – Ich setzte mich über diesen lächerlichen Despotismus weg, ließ dem Doktor Gall fünf Köpfe geben, und bezahlte, wie gesagt, noch obendrein einen Friedrichs-d'or für diese saubere Demonstration'.

explain the old catalogue number. Considering the harsh criticism he had published, it seems less likely that Johann Gottlieb Walter had procured a skull marked with Gall's organology for his own private use or that he acquired it directly from Gall or his collection.[33]

From Gall to Hufeland

The Gall skull could also have come from the estate of Christoph Wilhelm Hufeland (1762–1836), the personal physician of the Kaiser and founder of so-called macrobiotics. In 1805, he published an account of Gall's brain and skull theory in which he differentiated and critically classified Gall's ideas.[34] Hufeland had also ordered the anatomist Walter to provide Gall with both the anatomical theatre for his lectures and 'five heads' for the demonstrations.[35] He shared his critique with professional and educational societies in Berlin. Johann Gottfried Schadow (1764–1850), the famous Prussian draftsman and sculptor, states that Hufeland encouraged him to make plaster casts of skulls, about which he lectured at the Humanity Society.[36] Hufeland died in Berlin in 1836. It is also possible that this Gall skull was in his possession, and that after his death, his widow delivered the skull to the anatomical collection.

From the Rehmann Collection

Joseph von Rehmann (1779–1831) delivered two lectures on Gall in St Petersburg in 1805.[37] He advertised these with the proviso that he wanted to arouse not only 'the attention of the systematic scholar' but also the interest of 'every educated person' regarding this new theory. He would have heard Gall's lectures in Vienna on multiple occasions, had personally witnessed his demonstrations, and thus saw himself in a position to present Gall's observations and empirical research in a series of six to eight lectures. The subscription price for attending the lectures was twenty-five roubles, and for an additional ten roubles, one could purchase a plaster skull, which had been cast and labelled on the basis of one of Gall's own pieces.

[33] Eling and Finger, 'Gall's German Enemies'; and Walter, *Etwas über Herrn Doctor Gall's Gehirn-Schädel-Lehre*.
[34] See Bischoff, *Darstellung der Gall'schen Gehirn- und Schädel-Lehre*.
[35] Walter, *Zweiter Theil*, 24.
[36] Hannah Lotte Lund, '"Fleißig anatomirt!" Berliner Anatomie zwischen Privat und Öffentlich im ausgehenden 18. Jahrhundert', in *Tiefe Einblicke. Das Anatomische Theater im Zeitalter der Aufklärung*, ed. Johanna Bleker, Petra Lennig, and Thomas Schnalke (Berlin: kadmos-Verlag, 2018), 143. Lund cites Uta Motschmann, *Schule des Geistes, des Geschmacks und der Geselligkeit. Die Berliner 'Gesellschaft der Freunde der Humanität' 1797–1861* (Hannover: Wehrhahn, 2009), 801. According to this source, Schadow delivered a lecture on June 15, 1805.
[37] See Joseph von Rehmann, *Vorlesungen über Dr. Galls Gehirn- und Schädel-Lehre*, 4 vols. (St. Petersburg, 1805), accessed June 10, 2023, http://drw.saw-leipzig.de/30447. The print version can be found in *Russische Karrieren. Leibärzte im 19. Jahrhundert*, Relationes 4, ed. Marta Fischer (Aachen: Shaker, 2010), 200–203. On Rehmann's biography, see also Hartmut Walravens, 'Zum Werk des Arztes und Ostasienforschers Joseph Rehmann', *Sudhoffs Archiv* 67 (1983): 94–106.

It is also possible that Rehmann acquired the skull in Vienna and brought it with him to St Petersburg. He offered his lecture audiences the chance to study a plaster skull, which he had cast from a real skull. That object travelled with him across the vast expanses of Russia and China, before being sold to the Prussian State for 130 ducats, along with the rest of his collection.[38] Rudolphi had instigated that purchase, since he respected Rehmann as a colleague and knew he was an avid skull collector.

As Müller's Souvenir from Paris

Johannes Müller came to Berlin in 1833 as Rudolphi's successor, and by 1858 he had expanded the number of objects in the anatomical collection to 19 , 577. The Gall skull's inventory number suggests that it was inventoried under Müller's tenure or even procured at his request. Müller was in Paris in the summer of 1831, shortly before taking up the professorship in Berlin. He had travelled with his doctoral student Jakob Henle to conduct comparative anatomical studies in the Jardin des Plantes and to meet Alexander von Humboldt and Georges Cuvier.[39] Gall had lived and worked in Paris since 1807 and had amassed an extensive collection of skulls, busts, casts, and wax models of brains. In an 1830 / 31 publication that includes biographical references, A. A. Royer describes 354 objects from this collection on display at the Musée de l'Homme.[40] Neither Henle nor Müller mentions a visit to the collection nor the gift of a human skull in any of their letters. However, it still remains possible that Henle and Müller brought a skull marked with Gall's theory of the brain home with them as a souvenir from Paris.

These four possibilities are not the only ones, but they seem the most plausible, and they also illustrate the range of tentative object biographies concerning the Gall skull's provenance.

[38] Winkelmann, 'Die Anatomische Sammlung', 75; and Werner, 'Das anatomisch-zootomische Museum', 22–23. See also Geheimes Staatsarchiv Preußischer Kulturbesitz, GStA PK, I. HA Rep. 76 Kultusministerium, Va [Universitäten] sect. 2 Tit. X No. 11, vol. 4, tal. 129–130 (Rudolphi an das Ministerium, 14. Okt. 1828). Tot. 131–132 (Altenstein an Friedrich Wilhelm 111., 26. Nov. 1828): Ibid., tot. 133 (Friedrich Wilhelm 111. an Altenstein. 3. Dez. 1828).

[39] Herrmann Hoepke, 'Der Bonner Student Jakob Henle in seinem Verhältnis zu Johannes Müller', *Sudhoffs Archiv* 53, no. 2 (1969): 193–216, at 206.

[40] 'Catalogue, Number, and Descriptive of the Heads of Men and Animals, which made up the late Dr Gall's collection'. A. A. Royer's description of the *Jardin des Plantes*, from the Manuscript by M. le Dr Danncey, a pupil and friend of Dr Gall, *Phrenological Journal* 6 (1829 / 30): 480–99, 583–602; and 7 (1831 / 32): 27–36, 181–5, 250–53. Ackerknecht and Vallois also describe 354 objects originating in Gall's collection, and which are now in the Paris Musée de l'Homme; see Erwin H. Ackerknecht and Henri V. Vallois, *François Joseph Gall et sa collection* (Paris: Mémories du Muséum National d'Historie Naturelle, 1955), 92.

Conclusion

Using the example of provenance research on a Gall skull from the Berlin collection, I have attempted to explore the possibilities and limitations of this method. As a learning tool for Gall's organology, the skull is a useful visual object, yet it would function just as well in a cabinet of curiosities, attesting to the collecting mania that raged until the middle of the nineteenth century in Europe. No longer a 'scientific' object, in the sense of being of use for natural science, the Gall skull remains part of the Charité anatomical collections, with Waldeyer's skull and the man-sized lime-wood model nearby, and close to the Spurzheim skull. While Gall's neuroanatomical findings have been lost, his popular skull doctrine has been virtually immortalized and buried in collection repositories by the long-lasting, nearly immortal teaching objects – the skulls.

The research on which this article is based has shown what could be learned from searching for the provenance of the Gall skull, but it has also revealed where the limits of provenance research become palpable and where provenance becomes unclear. As I have endeavoured to illustrate, the indeterminacy itself opens up the attractive potential for informed speculation. In my search for the possibilities of how the Gall skull was acquired, I immersed myself in the medicine of the Romantic period in Berlin. This was a time not only of natural scientists – such as those mentioned above, including Hufeland and Schadow – but also of those whose work crossed into the arts and humanities, as exemplified by Goethe. Drawing on approaches from the arts and humanities, I have sought to show how provenance research can serve as an entry point into history for discovering and awakening possible, horizon-expanding – albeit not necessarily entirely factual – stories.

Label from the teaching collection of the Phyletisches Museum Jena reading 'Scalp of a Herero'. © Michael Markert