

Part I Blumenbach studies













1 Introduction

A brief history of Blumenbach representation

Nicolaas Rupke and Gerhard Lauer

Introduction

Johann Friedrich Blumenbach was one of the most celebrated practitioners of natural history of his generation, who from 1776 till the year of his death taught in the medical faculty of the University of Göttingen. His fame has been shaped on the several occasions of commemorative celebrations at the university. During his life time, Blumenbach enjoyed two such events, which happened to fall on dates of consecutive years: 1825 marked the fiftieth anniversary of Blumenbach's doctorate and the appearance of the first edition of his highly acclaimed doctoral dissertation, *De Generis Humani Varietate Nativa* (*On the Natural Variety of Mankind*), whereas 1826 represented the fiftieth anniversary of his career as an internationally eulogized university professor. Additionally, Blumenbach was honored during the university's centennial celebrations of 1837, and commemorated in the context of the 1887, 1937, and 1987 events, as well as during the 150th anniversary of the Göttingen Academy in 1901.

Exactly why has Blumenbach been commemorated? And how has he been remembered? What biographical portrait has been depicted of him? Intriguingly, no single answer has been or can be given to these questions, but several different ones exist, each reflecting the place and time of the particular publications about him. Even just at his own university, Blumenbach's representation has undergone noticeable changes; and if we add to the Göttingen location the ones of London, Paris, Cambridge, Massachusetts, and others – all places of authorship about him – the collective body of literature on Blumenbach shows an even broader range of interpretations of his scientific identity. Taking a bird's eye view of the entire body of Blumenbach scholarship, from his own time until today, we discern some four surprisingly different portraits. Let us take a brief look at each, and compare and contrast them with what we are doing in this volume, which, perhaps, is adding up to a fifth portrait.

The revered teacher of natural history who upheld the unity of humankind

Today, internationally, Blumenbach's significance is commonly narrowed down to his work on human skulls. *The Cambridge Biographical Encyclopedia* offers no







more than the following single and incorrect (Böker, this volume) sentence: "By his study of comparative skull measurements, he established a quantitative basis for racial classification" (Crystal 1994, 119). Yet in 1825/1826, at Göttingen, Blumenbach was honored for a much wider range of contributions. He was seen as a founder of what today we call the biomedical and paleontological sciences, and highly regarded for his research, teaching, writing of textbooks, and indefatigable collecting of natural history objects. His *Handbuch der Naturgeschichte* – to cite just one title – went through twelve editions (from 1779 till 1830) and was translated into Danish, Dutch, English, French, Italian, and Russian (Kroke 2010, 25–31).

Colleagues at the Georgia Augusta and other universities, some of them former students, celebrated him as much for his physiological insights as for his comparative anatomical work. Karl Friedrich Burdach, founder of a major school of physiology at Königsberg, in his published tribute to Blumenbach focused on the latter's ideas about a Bildungstrieb (1825) (nisus formativus). Jan Evangelista Purkinje, famous for his physiological work at the University of Breslau, offered a gratulatory essay that dealt with the development of a bird's egg before incubation (1825); the Swedish-born Karl Asmund Rudolphi at the University of Berlin contributed a booklet on numismatics (1825); and the following year, broadening the scope of relevant topics yet further, Karl Ernst Adolf von Hoff, gentlemangeologist in the civil service of the duchy of Gotha, emphasized the importance of his former teacher for the geological sciences (1826). At Göttingen, upon Blumenbach's death, a similarly broad appreciation was shown, among others by Karl Friedrich Heinrich Marx, a medical colleague and protégé of Blumenbach, in an obituary address to the Göttingen Academy (1840). This inclusive portrayal of him as the consummate professor of natural history persisted into the early part of the twentieth century (Ehlers 1901).

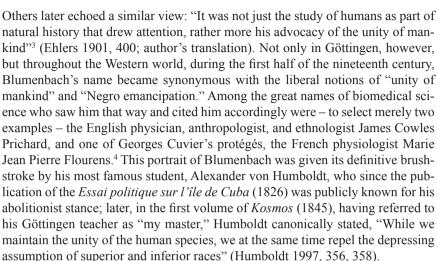
Also Blumenbach's highly original dissertation and his contributions to physical anthropology were repeatedly addressed. Influential was his classification of humankind into five (initially four) varieties: the Caucasian, or white; the Asiatic, or yellow; the African, or black; the American, or red; and the Malay, or brown (for the original names used by Blumenbach, see Böker, this volume). Yet more important than this fivefold division was the fact that Blumenbach stressed their essential sameness – the unity of the human species. Such unity served the humanitarian politics of anti-slavery, the emancipation of black slaves in the New World, and in particular the acknowledgment of the equality of "the Negro." At the time that Blumenbach produced the four editions of his dissertation (1775; 1776; 1781; 1795 – the first two of 1775/1776 were essentially the same) ideas of polygenism were gaining scientific ground (Livingstone 2011, passim). Blumenbach's monogenist stance, the view of unity amid variety, was highlighted by Marx:

At the time when Negroes and savages were still thought of as half animals and the idea of the emancipation of slaves had not even been raised, Blumenbach spoke out to make known, how their mental aptitude was not inferior to that of Europeans, how even between those tribes major differences exist, and how their higher faculties merely lack the opportunity for development.²

(Marx 1840, 10; author's translation)







When Blumenbach's dissertation was translated into French, it was given a new, interpretative title, *De l'unité du genre humain et de ses variétés* (1804; 1806; 1808). In his *Éloge historique* of Blumenbach (1847), Flourens opined that Blumenbach's fivefold division was not perfect; yet, referencing the French translation, he continued:

But the idea, the grand idea, which reigns and rules and predominates throughout in the admirable studies of Blumenbach is the idea of the unity of the human species, or, as it has also been expressed, of the human genus. Blumenbach was the first who wrote a book under the express title of the *Unity of the Human Genus*. The *Unity of Mankind* is the great result of the science of Blumenbach, and the great result of all natural history. [...] The human race had forgotten its original unity, and Blumenbach restored it. [...] According indeed to his doctrine, all men are born, or might have been born, from the same man. He calls the negroes *our black brothers*. It is an admirable thing that science seems to add to Christian charity, or, at all events, to extend it, and invent what may be called *human charity*. The word Humanity has its whole effect in Blumenbach alone.

(Flourens 1865, 56, 58, 60)

The "odious traffic" in black slaves would come to an end "in our age," Flourens predicted (1865, 57), and humanitarian science would join politics in a crusade for abolition, led by Blumenbach,

a man of high intellect, an almost universal scholar, philosopher and sage; a naturalist, who had the glory, or rather the good fortune, of making natural history the means of proclaiming the noblest and, without doubt, the highest truth that natural history ever had proclaimed, *The Physical Unity*, and through the *physical unity* the *moral unity*, of the human race.

(Flourens 1865, 63)







Europe's leading physical anthropologist who validated racist politics

Yet precisely this conclusion of "moral unity" was contentious and objected to by many. At about the time that the English translation of Flourens's *Éloge histo*rique of Blumenbach appeared, his identity was radically changed by being made part of a racist discourse. The new interpretation originated in London, spread to the United States and, finally, in our own day, also found an audience in Germany. Blumenbach's image was reconstructed and turned from the great scientific advocate of human equality into the leading authority of anthropology - in fact the founding father of physical anthropology – whose work on human varieties legitimized racism and, according to some, the politics of segregation and slavery. This reframing of Blumenbach took place within the Anthropological Society of London. The group was founded in 1863 in a breakaway move from the older Ethnological Society of London (Rainger 1978). The differences between the two societies were of a profound political-scientific kind. The fellows of the Ethnological Society, influenced by Prichard, were by and large monogenists and tended to be politically liberal in matters related to race. The Anthropological Society, by contrast, advocated polygenism and supported the Confederacy in the American Civil War (Desmond and Moore 2009, 332–333, 413). The issue that most sharply divided the two societies was the so-called Negro question. The president of the new society was James Hunt, author of On the Negro's Place in Nature (1863b), a book written in opposition to "that gigantic imposture known by the name of 'Negro Emancipation'" (Hunt 1863b, viii). He believed that Africans belong to a different species from Caucasians, that they are irredeemably inferior, and that slavery is the role for which they are best suited. In his programmatic "On the Study of Anthropology," Hunt bracketed Blumenbach's foundational work with the mission of the Anthropological Society:

Whatever may be the conclusion to which our scientific inquiries may lead us, we should always remember, that by whatever means the Negro, for instance, acquired his present physical, mental, and moral character, whether he has risen from an ape or descended from a perfect man, we still know that the Races of Europe have now much in their mental and moral nature which the races of Africa have not got. We have hitherto devoted our attention almost exclusively to physical Anthropology, which Blumenbach first founded. We now require to investigate the mental and moral characteristics of mankind generally. The difference between the European and the African is not so great physically as it is mentally and morally.

(Hunt 1863a, 3)

In Hunt's opinion, "Blumenbach saw, in his five varieties of man, nothing but degeneracy from some ideal perfect type" (Hunt 1863b, 4). When in 1865 the Anthropological Society had grown to no fewer than 500 fellows/members, the vice president, Thomas Bendyshe, continued the appropriation of Blumenbach's







legacy by producing an English translation entitled *The Anthropological Treatises of Johann Friedrich Blumenbach*, which included the obituary essays by Flourens and Marx. In the preface, Bendyshe criticized Flourens for having interpreted/translated Blumenbach's doctoral thesis in the sense of "The unity of the human genus," which he characterized as a "singular mistake" (Bendyshe 1865, xiii). The volume made some of Blumenbach's work available to an English readership, but the selection was limited and the translation, in crucial respects, tendentious (Michael 2017). This partial source of information about Blumenbach, produced in the context of the racist polygenism of the Anthropological Society of London, has continued to be the primary source of information about Blumenbach in the English language. Till the present day, the portrayal of him as a founder of scientific racism has remained in vogue in different circles and for different purposes.

The German skull collector bearing historical blame for twentieth-century eugenicist atrocities

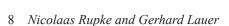
One of these circles took shape in the wake of World War II, in the context of which Blumenbach was included in a third, wholly different discourse. Two points of contrast stand out. First, the issue of race was now discussed less in relation to black slavery and more in relation to eugenics and the Holocaust. Second, although the main source of information about Blumenbach continued to be the inadequate Bendyshe volume, the purpose of painting a racist image of Blumenbach was no longer to adulate and appropriate him but to use his picture as a dart board. In a search for the historical causes of the eugenicist atrocities as promoted by National Socialist anthropology, the finger was pointed, in the international arena, at Blumenbach's dissertation and his collection of human skulls – his "Golgotha."

An early accusatory finger was that of the British-Polish mathematician and science popularizer Jacob Bronowski. In the book that accompanied his highly acclaimed BBC documentary *The Ascent of Man* (1973), he took special notice of Göttingen and paid tribute to the mathematician Carl Friedrich Gauß and the mathematical physicists Max Born and Werner Heisenberg, even telling his audience/readership about the "Gänseliesel" (a fountain statue in the town square) and the "Rathausspruch" (a saying painted on the wall of an entrance to the town hall): "Extra Gottingam non est vita" (outside Göttingen there's no life); but then he went on to hint at a link between Blumenbach and Nazi racism:

The sky was darkening all over Europe. But there was one particular cloud which had been hanging over Göttingen for a hundred years. Early in the 1800s Johann Friedrich Blumenbach had put together a collection of skulls that he got from distinguished gentlemen with whom he corresponded throughout Europe. There was no suggestion in Blumenbach's work that the skulls were to support a racist division of humanity, although he did use anatomical measurements to classify the families of man. All the same, from the time of Blumenbach's death in 1840 the collection was added to and added







to and became a core of racist, pan-Germanic theory, which was officially sanctioned by the National Socialist Party when it came into power.

(Bronowski 1973, 367)

In the course of the 1960s, 1970s, and 1980s, as part of a wider discourse of postcolonialism in Europe and of civil rights debates in the United States, the very notion of race became a contested and discredited concept. Among many historians, sociologists, and some scientists, "race" was a social construct that needed deconstruction. Specifically, social anthropologists from Franz Boas onward argued for cultural relativism in a move to end racism. Blumenbach became a whipping boy for those engaged in that activity; unambiguously, although hesitantly, it was intimated that On the Natural Variety of Mankind was materially implicated in the Holocaust. The Harvard paleontologist and science popularizer Stephen J. Gould, well known for his left-wing Marxist leanings, addressed these issues in his bestselling *The Mismeasure of Man* (1981). Especially in the second edition of 1996, Gould lay the accusation of scientific racism at Blumenbach's feet, even though, like Bronowski, he called him a genial person who had acted without ill intent. Blumenbach meant well, but ended up affirming racial hierarchy by way of geometry and aesthetics, not by any overt viciousness" (Gould 1996, 49). His classification was

the foundation of so much that continued to influence and disturb us today, [...] a scheme that has promoted conventional racism ever since. [...] Blumenbach lived as a cloistered professor all his life, but his ideas reverberate through our wars, our conquests, our sufferings, and our hopes. [...] Where would Hitler have been without racism?

(Gould 1996, 402, 405, 412)

In an instance of scholarly fraud, Gould tried to back up his contention with fabricated evidence by reprinting a doctored version of Blumenbach's famous illustration of a row of five skulls (Gould 1996, 409, 1998; Junker 1998, this volume).

In a further twist to the story, the Princeton historian of the US South, Nell Irvin Painter, reconnected Blumenbach with slavery – in part sex slavery – by focusing on the actual individuals whose skulls ended up as part of the Göttingen collection and were depicted in *On the Natural Variety of Mankind*. Papers that culminated in Painter's bestselling *The History of White People* (2011) outlined the case against Blumenbach as follows: Blumenbach's five skulls came from real people who entered science through sexual exploitation and imperialist wars. His choice of the name "Caucasian" for the European, white race "came from traditions about sexual vulnerability and beauty rooted in an ancient form of human subjugation: slavery" (Painter 2015, 36). Why should Blumenbach have adopted the term "Caucasian" for the white race, Painter asked? The reason was that the Europeans regarded their own, white race as the most beautiful and that the epitome of that beauty traditionally was embodied by girls and young women in the Caucasus. They were the highly prized "odalisques" of the Black Sea white









slave trade, famously portrayed by Jean-Léon Gérôme, Jean-Auguste Dominique Ingres, Henri Matisse, and others who provided respectable Europeans with soft porn paintings in their art collections.

Blumenbach enthused about the beauty of his Caucasian skull, which had been sent to him from Russia by the Göttingen alumnus Georg Thomas von Asch. That skull, Painter explained, belonged to "a sex slave who had been raped to death" (Painter 2015, 20). "[H]is use of 'Caucasian,' with its connotations of slavery, endlessly elaborated and depicted during the nineteenth century, tightens the relationship between concepts of race, on the one hand, and slavery on the other." Blumenbach's Russian-derived skull collection and the artistic representations that followed reinforced the tie between concepts of race and white slavery—"enslaved femininity" (Painter 2001, 29).

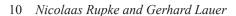
Göttingen's Enlightenment humanist and internationalist

In the meantime, a fourth refashioning of Blumenbach began taking shape, which, like the first, was centered on Göttingen. It was carried out as part of a new discourse about the university, intended to face up to, and deal with, its Third Reich past. During the 1937 centennial celebrations, which doubled as the bicentenary, the university in no uncertain terms affirmed its commitment to National Socialism. The Georgia Augusta putatively was a national, Germanic institution (Petke 1987; Wegeler 1996) that had cleansed itself from foreign racial impurities by firing its Jewish professors and burning many of its "un-German" books. Half a century later, as part of the 1987 observances, the university, aided by the Göttingen Academy and the Max Planck Institute for History, confronted its Nazi past, documenting parts of its involvement, and expropriating the university's academic identity from the 1937 Nazi claims (Becker, Dahms, and Wegeler 1987; Kamp 1987). The Georgia Augusta should be defined in terms of eighteenthcentury Enlightenment ideals that had been the fertile soil of its early blossoming. Göttingen should be seen less as a German national institution and more of a European international university (Boockmann 1997, passim). The historical importance of the university's cultivation of the natural sciences, the international networks of correspondence of professors, the multinational student body, the encouragement of expeditions to parts unknown – these and similar signs and symbols of Enlightenment openness to the world should be accentuated. Among the eighteenth-century linchpin professors at Göttingen used to give substance to this revisionist discourse were the Swiss physiologist and polymath Albrecht von Haller, the physicist, satirist, and Anglophile Georg Christoph Lichtenberg and Blumenbach (Rupke 2002, 24–26 and passim).

Blumenbach proved an ideal figure for adding content to the discourse of Göttingen's Enlightenment identity (Rupke and Böker 2010). Luckily, the Nazis had not made him one of their heroes nor loudly appropriated his heritage on behalf of racialist anthropology. One indication of this was that the centenary of Blumenbach's death in 1940 was not marked by any commemorative events







that led to publications. Admittedly, as part of the university's 1937 bicentenary, the soon-to-be rector, Hans Plischke, an avowed National Socialist, produced Johann Friedrich Blumenbachs Einfluß auf die Entdeckungsreisenden seiner Zeit (1937) (Johann Friedrich Blumenbach's influence on the explorers of his time). Yet, as in the case of the Nazi appropriation of Humboldt's journey of exploration of the Americas, and the all-encompassing scope of his Kosmos, the interest in global breadth was construed in terms of German world supremacy (Rupke 2008, 87–92), not of Enlightenment cultivation of a brotherhood of men. The latter exegesis was now put forward. Blumenbach's network of foreign contacts, his many students from abroad, and his efforts in collecting objects of natural history from around the world, including skulls, reflected enlightened and liberal ideals. Blumenbach's place in the so-called German Enlightenment, his friendships with London's long-time president of the Royal Society Joseph Banks, who took part in James Cook's first scientific expedition to the South Pacific, and with Georg Foster, who along with his father, Johann, took part in Cook's second voyage, became "hot topics" of Blumenbach scholarship (Gascoigne 1994, 2002), as did "the Göttingen moment" of the university's participation in "the science of man" (Bödeker, Büttgen, and Espagne 2008; Vermeulen 2015).

Around the time of the 1987 university commemoration, the Göttingen historian of medicine Ulrich Tröhler solicited the services of the Canadian historian of science Frank Dougherty in starting an editing project of Blumenbach's correspondence, which at the time amounted to some 4,500 letters. As Tröhler put it,

The correspondence of JFB, professor of medicine and natural history at the University of Göttingen, is a unique testimony to the European dimension of the republic of letters of the Late Enlightenment. In succession to Albrecht von Haller he materially contributes in this context to the blossoming of German science. Blumenbach cultivated contacts with scientists throughout Europe – with those of scientific centres such as Paris and London, but also for instance with those in Amsterdam, Copenhagen, Padua and St. Petersburg. His correspondence shows exemplarily the endeavor of the scientists to work together, beyond political, social and religious boundaries, on behalf of science and the public good.

(Tröhler 1994, unpublished progress report)⁵

This project came to a premature end by the tragically early death of Dougherty, and by Tröhler's departure from Göttingen. Yet indirectly, it led to a major digitization project, Blumenbach – Online, which brings us to our present volume.

The digital Blumenbach

The starting point of our volume's joint effort is the Blumenbach – Online project, described in some detail in Chapter 2. This comprehensive and large-scale documentation of Blumenbachiana is guided by the scholarly interests and needs of a collective of experts to help set priorities. The project's early focus has been







the issue of race, and this collection in part is a spring harvest of these efforts. We look at a broad range of issues about race and racism in order to address how Blumenbach has been implicated in their historical development. It recognizes that the conflicting differences between the various Blumenbach interpretations of the past two hundred years or so in part are attributable to the inaccessibility and inadequacy of information – a situation Blumenbach – Online is meant to rectify.

The Blumenbach identity to which we are contributing is a contested, fractured one and, for the first time, the product of professional historians of science and medicine. A broader set of interests, questions, and fields of expertise than before is brought to bear on his physical anthropology. The race issue is explored in the wider context of Blumenbach's own complete works, of contemporaneous figures who may have influenced him – for example, Georges-Louis Leclerc de Buffon, Immanuel Kant, and Samuel Thomas Soemmerring – and of the then novel academic subjects of biology and geology. Blumenbach's anthropology increasingly has become seen in the light of Franco-German life sciences and as a product of the institutional and intellectual dynamics that marked the transition from Enlightenment to Romantic thought. Several of our contributors have been leading participants in this contextualizing and deepening of Blumenbach studies.

A milestone in these developments was the enunciation of the so-called Lenoir thesis (Lenoir 1980, 1982; see also Zammito 2012), which argues that the rise of German biology was engendered by the "Göttingen School," and that Blumenbach was instrumental in bringing Kantian thought – especially the *Kritik der Urteilskraft* (1790) (Critique of Judgment) – to bear on a "teleomechanical" research program – naturalistic yet non-reductionist. Several experts on Enlightenment science as well as the Romantic period have critically expanded upon the thesis (Richards 2000, 2002; Reill 2005; Zammito 2018; see also Marino 1975, and contributions in Mann and Dumont 1985, 1990, Mazzolini 2007, and Mensch 2018). Among the canonical texts of Blumenbach scholarship, his *Über den Bildungstrieb* (1791, Tröhler 1993) has now joined the *De generis humani varietate*.

The Blumenbach – Online initiative synergizes with this comprehensive approach and so does our volume. We address largely unanswered questions, such as: how exactly did Blumenbach define race and races? What were his scientific criteria? And which cultural values did he bring to bear on his scheme? Various thematic threads run through the collection. A series of essays considers the ways in which, with Blumenbach and others, the study of natural history – that is, of biology – came to dominate the Western discourse of race. Another thread follows the way in which Eurocentric exceptionalism – scientific and sociopolitical – affected racial classification. Collectively, this volume develops a new narrative of race and its historiography that highlights anti-racism, not just racist science and its representatives. Belatedly, we now are following up on William F. Bynum's programmatic exhortation:

We need a full-scale study of Blumenbach, for many of his anthropological and biological concepts in the 1780s and '90s foreshadowed much that was to come. He explicitly discarded the chain of being, consolidated the human







species, championed the equality of Negroes, stressed the fundamental unity of man, and definitively discredited the philosophical importance attached to Peter the Wild Boy and other 'wild children.'

(Bynum 1975, 22)

Notes

- 1 The lectures on anthropology at Göttingen, as announced in the Göttingische Gelehrte Anzeigen, were not given by Blumenbach, but by an adjunct professor, Wilhelm Liebsch, known for his Grundriß der Anthropologie, 2 vols. (Göttingen: Vandenhoeck & Ruprecht, 1806, 1808) (although from the winter semester of 1776/77 to that of 1788/89 Blumenbach six times offered a lecture course on the topic of "Naturgeschichte des Menschengeschlechts" [natural history of humankind]).
- 2 "Zur Zeit als die Neger und Wilden noch für halbe Thiere galten und der Gedanke der Emancipation der Sclaven noch nicht einmal angeregt war, erhob Blumenbach seine Stimme, um bemerklich zu machen, wie ihre psychischen Anlagen denen der Europäer nicht nachständen, wie zwischen jenen Stämmen selbst die grössten Verschiedenheiten obwalteten, und wie ihren höheren Vermögen einzig die Gelegenheit zur Entwicklung mangle" (Marx 1840, 10).
- 3 "Die naturgeschichtliche Behandlung des Menschen war es nicht allein, die Aufsehen machte, mehr noch das Eintreten für die Einheit des Menschengeschlechtes" (Ehlers 1901, 400).
- 4 Prichard dedicated the second edition of his Researches Into the Physical History of Man (1826) to Blumenbach, just as William Lawrence had done with his Lectures on Physiology, Zoology and the Natural History of Man (1822). Other scientific proponents of monogenism included Petrus Camper, Georges Cuvier, Marcel de Serres, and Jean Louis Armand de Quatrefages. Among the clergy, the French bishop and fervent abolitionist Henri Jean-Baptiste Grégoire, known as Abbé Grégoire, in his De la littérature des nègres (1808) made frequent mention of Blumenbach, and elsewhere commented, "L'unité de type dans l'espèce humaine, proclamée par la révélation, est en général avouée des naturalistes, sourtout par le célèbre Blumenbach" (Grégoire 1826, 27).
- 5 "Der Briefwechsel von JFB, Professor der Medizin und Naturgeschichte an der Universität Göttingen, ist ein einmaliges Zeugnis der Europäischen Dimension der Gelehrtenrepublik der Spätaufklärung. In der Nachfolge von Albrecht von Haller ist er in diesem Kontext wesentlich am Aufblühen der deutschen Wissenschaft beteiligt. Blumenbach pflegte Kontakt mit Wissenschaftlern in ganz Europa – mit denen der wissenschaftlichen Zentren wie Paris und London, aber etwa auch mit denen in Amsterdam, Kopenhagen, Padua und St. Petersburg. Sein Briefwechsel zeigt exemplarisch das Bestreben der Wissenschaftler, über die politischen, ständischen und konfessionellen Grenzen hinweg zur Beförderung der Wissenschaft und des Wohls der Menschheit zusammenzuarbeiten" (Tröhler 1994, unpublished progress report).

Bibliography

Becker, Heinrich, Hans-Joachim Dahms, and Cornelia Wegeler, eds. 1987. Die Universität Göttingen unter dem Nationalsozialismus: Das verdrängte Kapitel ihrer 250jährigen Geschichte. München: Saur.

Bendyshe, Thomas, trans. 1865. The Anthropological Treatises of Johann Friedrich Blumenbach, with Memoirs of Him by Marx and Flourens, and an Account of His Anthropological Museum by Professor R. Wagner, and the Inaugural Dissertation of John Hunter, M.D., on the Varieties of Man. London: Longman, Green, Longman, Roberts & Green.

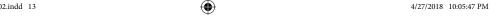






- Bödeker, Hans Erich, Philippe Büttgen, and Michel Espagne. 2008. Die Wissenschaft vom Menschen in Göttingen um 1800: Wissenschaftliche Praktiken, institutionelle Geographie, europäische Netzwerke. Göttingen: Vandenhoeck & Ruprecht.
- Boockmann, Hartmut. 1997. Göttingen: Vergangenheit und Gegenwart einer europäischen Universität. Göttingen: Vandenhoeck & Ruprecht.
- Bronowski, Jacob. 1973. The Ascent of Man. Boston: Little, Brown.
- Burdach, Karl Friedrich. 1825. Viro perillustri Johanni Friderico Blumenbach solemnium quibus ante hos quinquaginta annos summos in medicina honores adeptus est instaurationem gratulatur Academia Regiomontana. Regiomonti: Hartung.
- Bynum, William F. 1975. "The Great Chain of Being After Forty Years." History of Science 13: 1-28.
- Crystal, David, ed. 1994. The Cambridge Biographical Encyclopedia. Cambridge: Cambridge University Press.
- Desmond, Adrian, and James Moore. 2009. Darwin's Sacred Cause: How a Hatred of Slavery Shaped Darwin's Views on Human Evolution. Boston: Houghton, Mifflin and Harcourt.
- Ehlers, Ernst. 1901. "Göttinger Zoologen." In Festschrift zur Feier des hundertfünfzigsten Bestehens der Königlichen Gesellschaft der Wissenschaften zu Göttingen. [Vol. 3] Beiträge zur Gelehrtengeschichte Göttingens, 391-494. Berlin: Weidmann.
- Flourens, Pierre Marie Jean. 1847. Élogue historique de Jean-Frédéric Blumenbach. Paris: Didot.
- . 1865. "Memoir of Blumenbach." In The Anthropological Treatises of Johann Friedrich Blumenbach, edited by Thomas Bendyshe, 49–63. London: Longman.
- Gascoigne, John. 1994. Joseph Banks and the English Enlightenment: Useful Knowledge and Polite Culture. Cambridge: Cambridge University Press.
- 2002. "Blumenbach, Banks, and the Beginnings of Anthropology at Göttingen." In Göttingen and the Development of the Natural Sciences, edited by Nicolaas Rupke, 86-98. Göttingen: Wallstein.
- Gould, Stephen Jay. 1996. The Mismeasure of Man, 2nd edn. New York: Norton.
- —. 1998. "On Mental and Visual Geometry." *Isis* 89: 502–504.
- Grégoire, Henri Jean-Baptiste. 1826. La noblesse de la peau, ou du préjugé des blancs contre la couleur des Africains et celle de leurs descendans noirs et sang-mêlés. Paris: Baudouin.
- Hoff, Karl Ernst Adolf von. 1826. Erinnerung an Blumenbach's Verdienste um die Geologie. Gotha: Engelhard-Reversche Schriften.
- Humboldt, Alexander von. 1997. Cosmos: A Sketch of the Physical Description of the Universe. Vol. 1. Baltimore: Johns Hopkins University Press.
- Hunt, James. 1863a. "On the Study of Anthropology." The Anthropological Review 1: 1-20.
- -. 1863b. *On the Negro's Place in Nature*. London: Trübner.
- Junker, Thomas. 1998. "Blumenbach's Racial Geometry." Isis 89: 498-501.
- Kamp, Norbert. 1987. Das Göttinger Jubiläum von 1937: Glanz und Elend einer Universität. Göttingen: Vandenhoeck & Ruprecht.
- Kroke, Claudia. 2010. Johann Friedrich Blumenbach: Bibliographie seiner Schriften. Göttingen: Universitätsverlag.
- Lenoir, Timothy. 1980. "Kant, Blumenbach, and Vital Materialism in German Biology." Isis 71: 77–108.
- Liebsch, Wilhelm. 1806, 1808. Grundriβ der Anthropologie, 2 vols. Göttingen: Vandenhoeck & Ruprecht.









- ——. 1982. The Strategy of Life: Teleology and Mechanics in Nineteenth-Century German Biology. Dordrecht: Riedel.
- Livingstone, David N. 2011. *Adam's Ancestors: Race, Religion, and the Politics of Human Origins*. Baltimore: Johns Hopkins University Press.
- Mann, Gunter, and Franz Dumont, eds. 1985. Samuel Thomas Soemmerring und die Gelehrten der Goethezeit. Stuttgart: Fischer.
- . 1990. Die Natur des Menschen. Probleme der Physischen Anthropologie und Rassenkunde (1750–1850). Stuttgart: Fischer.
- Marino, Luigi. 1975. I Maestri della Germania. Turin: G. Einaudi.
- Marx, Karl Friedrich Heinrich. 1840. Zum Andenken an Johann Friedrich Blumenbach: Eine Gedächtniss-Rede gehalten in der Sitzung der Königlichen Societät der Wissenschaften den 8. Februar 1840. Göttingen, Dieterichschen Buchhandlung.
- Mazzolini, Renato. 2007. "Diritti dell'umanità e antropologia fisica: il caso Blumenbach." In *Chiesa cattolica e mondo moderno. Scritti in onore di Paolo Prodi*, edited by Adriano Prosperi, Pierangelo Schiera, und Gabriella Zarri, 487–495. Bologna: Il Mulino.
- Mensch, Jennifer. 2018. "Kant and the Skull Collectors: German Anthropology from Blumenbach to Kant." In *Kant and His German Contemporaries*, edited by Corey Dyck and Falk Wunderlich, 192–210. Cambridge: Cambridge University Press.
- Michael, John S. 2017. "Nuance Lost in Translation: Interpretations of J.F. Blumenbach's Anthropology in the English Speaking World." NTM Zeitschrift für Geschichte der Naturwissenschaften, Technik und Medizin 25: 1–29.
- Painter, Nell Irvin. 2001. "Q. Why Are White People Called 'Caucasians' A. Beauty + the White Slave Trade + German Science." Princeton University, unpublished paper, 4 December.
- ——. 2011. *The History of White People*. New York: Norton.
- ———. 2015. "Five Skulls That Made Human Taxonomy." Göttingen University, unpublished paper, 23 April.
- Petke, Wolfgang. 1987. "Karl Brandi und die Geschichtswissenschaft." In *Geschichtswissenschaft in Göttingen*, edited by Hartmut Boockmann and Hermann Wellenreuther, 287–320. Göttingen: Vandenhoeck & Ruprecht.
- Plischke, Hans. 1937. Johann Friedrich Blumenbachs Einfluß auf die Entdeckungsreisenden seiner Zeit. Göttingen: Vandenhoeck & Ruprecht.
- Purkinje, Jan Evangelista. 1825. Joan. Fried: Blumenbachio eq. Guelph. viro de omni scientia naturali uni omnium maxime merito universitatis Georgiae Augustae decori eximio die XIX. Septembri MDCCCXXV summorum in medicina honorum semisaecularia faustis omnibus celebranti gratulatur Ordo Medicorum Vratislaviensium. Vratislaviae: Typis Universitatis.
- Quatrefages de Bréau, Jean Louis Armand de. 1861. *Unité de l'espèce humaine*. Paris: Hachette.
- Rainger, Ronald. 1978. "Race, Politics, and Science: The Anthropological Society of London in the 1860s." *Victorian Studies* 22: 51–70.
- Reill, Peter Hanns. 2005. *Vitalizing Nature in the Enlightenment*. Berkeley: University of California Press.
- Richards, Robert J. 2000. "Kant and Blumenbach on the Bildungstrieb: A Historical Misunderstanding." *Studies in History and Philosophy of Biological and Biomedical Sciences* 31 (1): 11–32.
- ——. 2002. *The Romantic Conception of Life*. Chicago, IL, London: University of Chicago Press.

15031-1771d-1proof-r02.indd 14 4/27/2018 10:05:47 PM



Introduction: Blumenbach representation

- Rudolphi, Karl Asmund. 1825. Ioanni Fr. Blumenbach... Viro Illustri Germaniae Decori diem semisecularem Physiophili Germanici laete gratulantur: Inest Index Numismatum in virorum de rebus medicis vel physicis meritorum memoriam percussorum. Berolini: s.n.
- Rupke, Nicolaas, ed. 2002. Göttingen and the Development of the Natural Sciences. Göttingen: Wallstein.
- ———. 2008. Alexander von Humboldt: A Metabiography. Chicago, IL: University of Chicago Press.
- ——, and Wolfgang Böker. 2010. "'... dieses kleine Fleckchen freier Erde': das frühe Göttingen als Freiraum für neues Denken." *Georgia Augusta* 7: 4–11.
- Tröhler, Ulrich. 1993. *Blumenbach Bildungstrieb/On generation*. Göttingen: Institut für Geschichte der Medizin.
- ——. 1994. Unpublished progress report on the editing project of Blumenbach's correspondence by Frank W.P. Dougherty. Göttingen: Institut für Geschichte der Medizin.
- Vermeulen, Han F. 2015. *Before Boas: The Genesis of Ethnography and Ethnology in the German Enlightenment*. Lincoln, NE: University of Nebraska Press.
- Wegeler, Claudia. 1996. "... wir sagen ab der internationalen Gelehrtenrepublik." In *Altertumswissenschaft und Nationalsozialismus: Das Göttinger Institut für Altertumskunde* 1921–1962. Vienna: Boehlau.
- Zammito, John. 2012. "The Lenoir Thesis Revisited: Blumenbach and Kant." *Studies in History and Philosophy of Science, Part C: Biological and Biomedical Sciences* 43(1): 120–132.
- ——. 2018. The Gestation of German Biology: Philosophy and Physiology from Stahl to Schelling. Chicago, IL: University of Chicago Press.



