

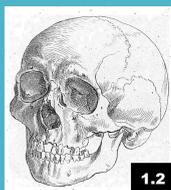
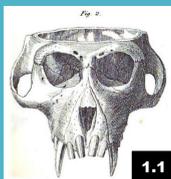
How Blumenbach's Illustrations of Human Racial Variation were Manipulated

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1. Contrasting Humans from Apes or Gods

1776 and 1790s

In 1776, Johann F. Blumenbach (1752-1840) published *De Generis Humani Varietate Nativa*, the first systemic analysis of human racial variation. In it, he endorsed monogeny (the notion that all human races had one origin). He refuted scholars who supported polygeny, the notion that races had separate origins. Instead, he proposed there were a few anatomically diverse "varieties" who "run into one another" by a gradual transition.¹



In modern parlance, JFB said humans were a polytypic species which exhibited a zoological cline or racial spectrum. He also refuted the idea that some human races were apes or ape-like.² He used Fig. 1.1 to show how the skull of apes are structurally unlike humans of all races. In 1790, JFB began to publish papers describing the ethnically diverse skulls he had collected. He also published drawings like the Siberian "Calmuck" skull in Fig 1.2.

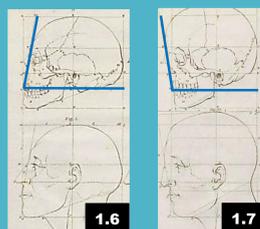
1770s and 1780s

For JFB, the environment shaped a person's anatomy and intellect. He opposed those like J. C. Lavater, who promoted physiognomy, the notion that inherited facial features determined one's intellect.³ Fig. 1.3 is from Lavater's 1778 chart ranking facial form from a frog to a human. His 1781 chart (Fig. 1.4) ranked a frog up to statue of Apollo from the Vatican (Fig. 1.5), which he saw as the epitome of beauty.



1791

JFB was critical of his friend, P. Camper, an anatomist who developed templates on how to draw animals, famed statues, and people. Camper claimed that the "Facial Angle," the angle from a generally horizontal plane to a line drawn from the brow to the front teeth, characterized ethnic groups.⁴ Fig. 1.6 is his "European." He drew Fig. 1.7 to show how the Vatican statue of Apollo had an idealized facial angle no human could possess.



Camper drew Fig. 1.8 to assert that Far East Asians (right) had a more sloping face than Europeans, while West African faces (center) sloped the most, but not as much as apes (left). He did not intend to show a hierarchy or a family tree. JFB faulted Camper's drawing of a Far East Asian as looking more like an African than an Asian.⁵

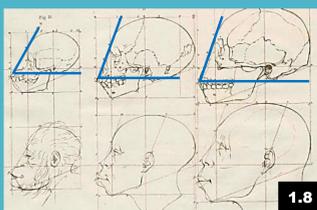
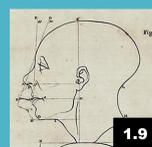


Fig. 1.9 is Camper's European-African Comparison showing the Facial Angle he claimed was characteristic of these two groups. This iconic image influenced generations of race scholars. Yet, JFB faulted the Facial Angle for being too simplistic. Instead JFB argued that one should use a suite of multiple skull features, and other anatomical features to characterize ethnic groups.⁶



1795 and into the 19th Century

As the following sections of this poster will show, JFB published skull illustrations in 1795 which had a graphic layout similar to the above drawings of Lavater and Camper. However, during the 19th century, JFB's drawings were reproduced with subtle but significant alterations that, at times, reflected Lavater's and Camper's drawings and theories. These altered versions of JFB's drawings were repeatedly used to support polygeny and racial supremacy, both of which were concepts JFB ardently opposed.

2. Altering JFB's Three Skull Comparison

1795

In 1795, JFB published a greatly revised and expanded third edition of *De Generis Humani Varietate Nativa* (Fig 2.1). In this book, he detailed his theory that humanity's founding population had spherical-shaped skulls and lived in the Caucasus Mountain region. JFB asserted that this first population migrated through the world, inhabiting new climates which slowly transformed the tissues, skin, hair, and skull shape of those who settled there.⁷



JFB proposed that the modern peoples of Georgia, located in the Caucasus region, looked the most like the original humans. He asserted that Georgians were not the founding population, but they underwent the least transformation. JFB argued that, in terms of skull shape, West Africans and Mongols underwent the most transformation from the original population. The skulls of West Africans had become more elongated, while the Mongol skulls became more box-like with a flatter face.⁸

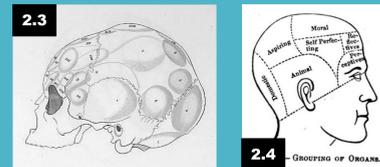
Fig. 2.2 is the drawing JFB used to illustrate this theory. He situated the spherical skull of a Georgian in the center to contrast it with a more oval Ghanian skull (to the right) and a more box-like indigenous Siberian skull. Fig. 2.2 also demonstrated "Norma Verticalis," a technique JFB used to compare skull anatomy. It involved directly observing skull differences rather than measuring them. JFB claimed that his observation-based technique was a more informative than Camper's Facial Angle.⁹

JFB did not intend Fig. 2.2 to show rank. The West African skull was not positioned first to indicate it was either the best, or the most primitive. The Siberian skull was largest but not regarded as best.



Early to Mid-1800s

Phrenologists like F. J. Gall claimed that the brain contained many organs each of which generated a unique cognitive function (Fig 2.3 from 1810). He claimed that people with larger foreheads had higher intellect, while individuals with a larger posterior skull possessed strong animalistic abilities and instinctive talents like rearing children.¹⁰ This claim is illustrated in Fig. 2.4 from 1857.



1827

E. Griffith modified JFB's three-skull comparison (Fig. 2.5) enlarging the Caucasian so that it, not the Mongolian, was the largest. The African skull was made thinner, and its back was elongated, which phrenologically indicated strong animalist instincts.



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3. Altering JFB's Five Skull Comparison

1795

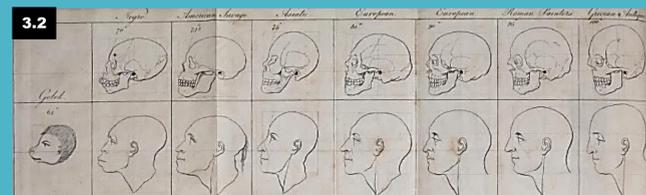
JFB asserted that humanity could be classified into five "principal" racial varieties he called "Mongolian," "American," "Caucasian," "Malay," and "Ethiopian."¹¹ He selected five skulls from his collection, which he presented as exemplars in Fig. 3.1. The five exemplars JFB selected as best representing their respective populations were: (left to right) a Siberian Tungus, a Carib, a Georgian, a Tahitian, and a Ghanian.



The intent of this graphic was not to rank the races. Rather it showed how skulls were 1) spherical in Georgia; 2) becoming more oblong in the Pacific and most oblong in West Africa, and 3) becoming more laterally compressed in the Americas and most laterally compressed in Siberia. This image did not show genealogical relationships; he did not think Georgians begat Americans, who then begat Mongols. Instead, he noted it was "very probable" that "Americans came from northern Asia."¹²

1799

C. White published a diagram (Fig 3.2) which presented skulls from all human races in a row as did JFB. But White used Camper's skulls, and emphasized Facial Angle which JFB regarded as a tool of limited value. White, a race supremacist, claimed that "Negros" were the race most akin to apes. He claimed that the European face was least ape-like, and most like the ideal beauty of the Vatican statue of Apollo.¹³



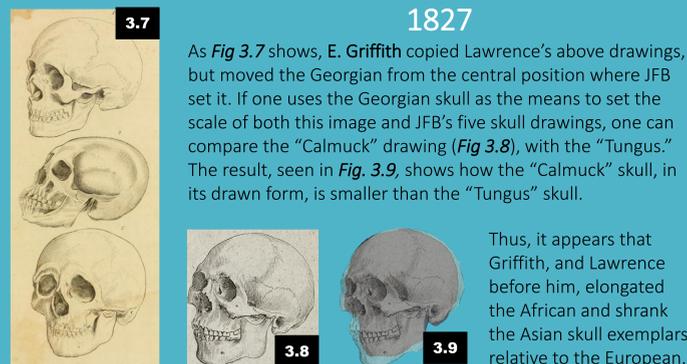
1819

W. Lawrence copied JFB's "Georgian" skull (Fig. 3.3), but replaced JFB's "Tungus" exemplar with JFB's "Calmuck" (Fig. 3.4). Lawrence replaced JFB's "Ethiopian" (Fig. 3.5) with an oblong "Negro" (Fig. 3.6). This difference is seen when one matches the eye and nose sockets of these drawings. Phrenological theory holds that a small forehead and large posterior indicate weak intellect and strong animal-like talents.



1827

As Fig. 3.7 shows, E. Griffith copied Lawrence's above drawings, but moved the Georgian from the central position where JFB set it. If one uses the Georgian skull as the means to set the scale of both this image and JFB's five skull drawings, one can compare the "Calmuck" drawing (Fig 3.8), with the "Tungus." The result, seen in Fig. 3.9, shows how the "Calmuck" skull, in its drawn form, is smaller than the "Tungus" skull.

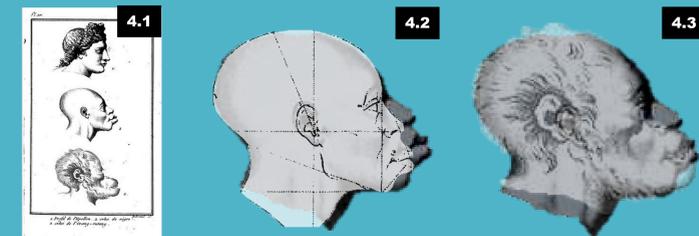


Thus, it appears that Griffith, and Lawrence before him, elongated the African and shrank the Asian skull exemplars relative to the European.

4. Altered Copies of JFB's Images

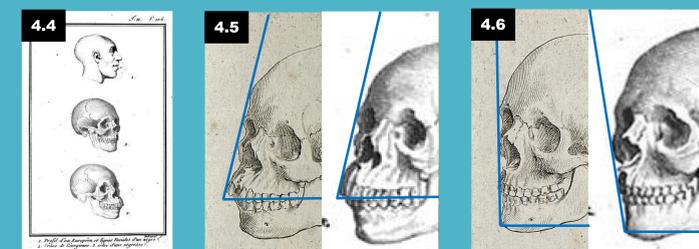
1800

J. Virey, a polygenist race supremacist, presented Camper's "Negro" as ranking in value below Camper's "Apollo" and above Camper's "Orangutan" (Fig. 4.1).¹⁴ But, as Fig. 4.2 shows, the "Negro" was altered to make the mouth and nose extend out, thus giving the "Negro's" face the same angle of profile as the orangutan (Fig 4.3).



1824

J. Virey, who previously altered Camper's drawings, also altered version of JFB's "Ethiopian" and "Caucasian" exemplars (Fig. 4.4). As Fig. 4.5 shows, Virey altered JFB's "Ethiopian" by pushing out the upper teeth and pushing back the forehead, which phrenologically is the seat of intelligence. As Fig. 4.6 shows, Virey also pushed in the teeth of JFB's "Caucasian," giving it an unnatural facial angle like Camper's drawing of the Apollo statue from the Vatican, shown previously in Fig. 1.7.



c. 1850

Fig. 4.7 is a phrenological chart by C. Donovan. The inset (Fig. 4.8) shows how Virey's altered version of JFB's Georgian skull was still being using in the 1850s. This chart also used the smaller "Calmuck" skull for the "Mongolian" exemplar, like Lawrence and Griffith did, instead of the larger "Tungus" that JFB preferred.



1827 and 1996

Perhaps based on altered copies of JFB's original drawings, S. T. Coleridge (1827) falsely claimed that JFB ranked the "Caucasian or European" above all other races (Fig. 4.9). Similarly, in 1996, S. Gould falsely claimed that JFB published a triangular diagram which sought to rank "Caucasians" above other races (Fig. 4.10).

