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Racism and Evolution: The Anthropometry and Inferiority of Women in 20th-Century Science

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Abstract

The measuring of the human skull, called craniometry, was exploited in the last century to prove that women had smaller brains compared to men in an attempt to support the notion that they were less-evolved than men. As a result, women were also believed to be less intelligent and inferior to men in other ways. This view, inspired by Charles Darwin, was widely accepted in academia, including by many of Darwin's leading disciples. It also had a profound negative effect on women's progress, especially educationally, socially, and economically.

Introduction

Anthropometry, the scientific study of comparable measurements and proportions of the human body, has historically been widely abused to justify Darwinism. This review focuses on its abuse in arguing for the mental inferiority of women, based on the belief that they are less-evolved than men. In Europe, anthropometry "dominated the human sciences for much of the nineteenth century and remained popular until intelligence testing replaced skull measurements as a favored device for making invidious comparisons among races, classes, and sexes."¹ The most important means of proving female inferiority was the measurement of the skull's size and shape, a field called *craniometry*. The obvious critical problem with this idea is women's bodies are smaller, on average, than men's. Consequently, their hands, legs, arms, and most of their organs, including their brain are, on average, smaller than men's. This fact illustrates the fact that belief, not fact, drove using skull size to prove the idea that women are, on average, less intelligent than men.

Paul Broca's important contribution to the movement

Of all anthropometric studies, the academic field of craniometry "commanded the most attention and respect."² Its unquestioned leader, Paul Broca (1824–1880), was a leading professor of surgery at the Faculty of Medicine in Paris. He gathered a school of disciples and imitators around himself, consequently influencing the entire scientific community. His scientific work was very "meticulous and apparently irrefutable, [and] exerted

great influence”³ on society. It won high esteem as a jewel of nineteenth-century science.”² An area of the brain in the frontal lobe of the dominant brain hemisphere that is linked to language processing and speech production is named after him.

The female brain is inferior, an idea from Darwin

“Darwin was adamant in public that women were inferior and incapable of equality with men, as evidenced in an 1882 letter to scientist and advocate for women’s rights Caroline Kennard.”⁴ During an interview with *Time* magazine, British neurobiologist Dr. Gina Rippon addressed the notion of women’s inferiority saying, “It goes all the way back to Charles Darwin, who said that women are inferior because they have inferior brains.”⁵

Rippon documents this claim in detail in her new book:

Among the intellectuals of the day [the 1800s], there were continuing concerns about the ‘women question,’ [in response to] the increasing demands from women for rights. ... This feminist wave served as a rallying call for scientists to provide evidence in favor of the status quo, and to demonstrate how harmful it would be to give power to women—not only for the women themselves, but for the whole framework of society. Even Darwin himself weighed in, expressing his concern that such changes would derail mankind’s evolutionary journey. Biology was destiny and the different ‘essences’ of men and women determined their rightful (and different) places in society.”⁶

She added that “brain size was an early focus in this campaign to prove the inferiority of women and their biology. The fact that the only brains that researchers had access to were dead ones did not stand in the way of trenchant brain-based observations on women’s lesser mental capacities.”⁷ The inferior brain claim was repeated as late as 1927 in a book titled *Women: The Eternal Primitive*.⁸ The author, William Fielding, wrote that “in the pathological state, such as insanity, she tends to be more intractable, more descriptive—representing a more complete reversion to the aboriginal life or [evolutionary] ancestral type.”⁹ He added that women’s “chief disadvantage in the struggle for existence as it evolved ... is the fact that she is subject to periodic incapacity in performing her functions as the mother of the race. ... [As a result,] womankind possesses an inherently primitive disposition.”¹⁰

Contribution of Darwin to sexism in the 21st century acknowledged

Darwin’s sexism was finally acknowledged by a Princeton University professor in perhaps the most esteemed science journal in the world, aptly titled *Science*. The author, Agustín Fuentes, wrote that some of Darwin’s sexist “assertions were dismally, and dangerously, wrong. ‘*Descent*’ [of *Man* is a book] ... not to venerate” as is common among many evolutionists today.¹¹ Fuentes writes that, despite

some innovative inferences, [Darwin’s 1871 book] “*Descent*” is often problematic, prejudiced, and injurious. Darwin thought he was relying on data, objectivity, and scientific thinking in describing human evolutionary outcomes. But for much of the book, he was not. “*Descent*,” like so many of the scientific tomes of Darwin’s day, offers a racist and sexist view of humanity.”¹¹

Fuentes concluded that Darwin, in his book *Descent of Man*,

identified women as less capable than [White] men, often akin to the “lower races.” He described man as more courageous, energetic, inventive, and intelligent, invoking natural and sexual selection as justification, despite the lack of concrete data and biological assessment. His adamant assertions about the centrality of male agency and the passivity of the female in evolutionary processes, for humans and across the animal world, resonate with both Victorian and contemporary misogyny. ... Darwin was a perceptive scientist whose views on race and sex should have been more influenced by data and his own lived experience. But Darwin’s racist and sexist beliefs, echoing the views of scientific colleagues and his society, were powerful mediators of his perception of reality.¹¹

One example of Darwin’s sexism was his claim that women were at a “lower level of development” than men, due to their “earlier arrest of individual evolution.” Because they had smaller brains, Darwin and many other evolutionists of the time believed that women were “eternally primitive” and childlike, less spiritual, more materialistic, and “a real danger to contemporary civilization.”¹² Darwin then reviewed the historical proof that supported his view that women were inferior to men.¹³ Ironically, Darwin’s daughter Henrietta was one of the main editors of Darwin’s *Descent of Man* book. Some Darwin scholars speculate that Darwin’s original words were toned down by Henrietta when she edited his *Descent of Man* book. Furthermore, these ideas are surprising in view of the fact that Darwin had extensive correspondence with many intelligent, educated women, as documented in a 270-page collection of a select sample of these letters.¹⁴

Darwinist ideas were critically important in developing and maintaining sexist ideas in society as a whole. Darwin’s writing was an especially important influence on sexism because Darwin’s ideas had a profound influence on the entire academic and scientific world. In fact, “‘The Descent of Man’ is one of the most influential books in the history of human evolutionary science.”¹¹ And it was this book that was used to support the sexist and racist beliefs that ended up causing the Nazi Holocaust.

As noted, leading evolutionists have finally openly acknowledged the fact that Darwin has influenced the sexism that developed after the biblical foundation of the equality of the sexes was undermined. The fact that *Science* has acknowledged Darwin’s major contribution to this problem will help open the door for others to publicly document this fact.

Many leading Darwinists followed Darwin

The contribution of Darwin to the denigration of women is well-known. Less well-known is the fact that many leading Darwinists were as aggressive as Darwin, if not more so, in defending the belief that women were intellectually inferior to men. One example is George John Romanes (1848–1884). He was the youngest of Charles Darwin’s academic co-workers, and therefore his opinions on evolution are historically important.¹⁵ Romanes became Darwin’s research assistant during the last eight years of Darwin’s life. His work was essential to Darwin’s compiling the information required for his later books.

Romanes, the man Darwin said he “venerated”¹⁶ was a nominal Christian but became an agnostic due to Darwin’s influence.¹⁷ Some, including Romanes’s religious wife, claimed that her husband regained some of his religious beliefs during his final illness. Shortly before his untimely death at age 46, Romanes published an important three-volume encyclopedic work supporting Darwin titled *Darwin and After Darwin*.¹⁸

Romanes’s views on women

Romanes concluded that the main difference between men and women was women’s inferior mental faculties of intellect, emotion, and will.¹⁹ The rationale he used to justify this view was claiming that the

average brain-weight of women is about five ounces less than that of men, [consequently] on merely anatomical grounds we should be prepared to expect a marked inferiority of intellectual power in the former [women]. Moreover, as the general physique of women is less robust than that of men—and therefore less able to sustain the fatigue of serious or prolonged brain-action—we should also, on physiological grounds, be prepared to entertain a similar anticipation. In actual fact, we find that the inferiority displays itself most conspicuously in a comparative absence of originality, and this more especially in the higher levels of intellectual work.²⁰

He added that the intellectual difference between males and females was not apparent until the woman reached her full development as an adult. Then “it becomes apparent that there is a greater power of amassing knowledge on the part of the male.”²¹ Furthermore, regardless of whether

we look to the general average or to the intellectual giants of both sexes, we are similarly met with the general fact that a woman’s [fund of] information is less wide, and deep, and thorough, than that of a man. What we regard as a highly-cultured woman is usually one who has read largely but superficially; and even in the few instances that can be quoted of extraordinary female—industry which, on account of their rarity, stand out as exceptions to prove the rule—we find a long distance between them and the much more numerous instances of profound erudition among men ... there can be no real question that the female mind stands considerably below the male.²²

Romanes concluded that he was referring to *average* differences, admitting that it

would be easy to find multitudes of instances where women display better judgment than men. ... But that as a general rule the judgment of women is inferior to that of men has been a matter of universal recognition from the earliest times.²²

One compensatory factor is that, although

woman has been a loser in the intellectual race as regards acquisition, origination, and judgment, she has gained ... certain very conspicuous advantages. First among these, we must place refinement of the senses, or higher evolution of sense-organs. Next, we must place rapidity of perception, which no doubt in part arises from this higher evolution of the sense-organs—or, rather, both arise from a greater refinement of nervous organization.²³

Romanes also claimed that women, in contrast to men, possess less willpower and, as a result, are more apt to break away

from the restraint of reason, and to overwhelm the mental chariot in disaster. Whether this tendency displays itself in the overmastering form of hysteria, or in the more ordinary form of comparative childishness, ready annoyance, and a generally unreasonable temper—in whatever form, this supremacy of emotion displays itself.²⁴

Romanes also claimed that “We rarely find in women that firm tenacity of purpose and determination to overcome obstacles which are characteristic of what we call a manly mind.”²⁵

Another example of the “women-are-less-evolved-than-men” belief was provided by anthropologist Luke Owen. He wrote in an 1872 article that attempted to be balanced, but acknowledged,

Among other and better-known features distinguishing the female sex from the male are the smallness of the brain-case, the width of the pelvis, and the tendency to deposit adipose tissue, rather than muscular fiber. To the rule of course, there are exceptions; there are masculine women just as there are effeminate men.²⁶

He added, “So also the desire, if not the capacity, for the prolonged study of abstruse subjects, is less in the female than in the male, and [therefore her] mental activity pursues another course.”²⁶

Romanes quoted Sir J. Crichton Browne, who concluded that not only is the female brain cortex shallower than the male, but it also receives less than its proportional supply of blood than the male. For these reasons, women’s mental inferiority cannot be explained by the lack of educational advantages enjoyed by males.²⁷ The explanation for these differences is that males are more evolved than females. Darwin wrote that, as a result of natural selection, “man has ultimately become superior to woman,” claiming that the chief distinction in the intellectual powers of the two sexes is proven by

man attaining to a higher eminence, in whatever he takes up, than woman can attain—whether requiring deep thought, reason or imagination, or merely the use of the senses and hands. ... If men are capable of decided eminence over women in many subjects, the average standard of mental power in man must be above that of women.¹³

Furthermore, Romanes wrote that the male,

being accustomed to rely upon its own strength, is self-central and self-contained: to it the need of external aid, even of a supernatural kind, is not felt to be so urgent as it is to the feminine character, whose only hope is in the stronger arm of another. “The position of man is to stand, of woman to lean,” although it may be hard for even a manly nature to contemplate the mystery of life.²⁸

One last example of women’s smaller brain is by anthropologist Gustave Le Bon, who published the following in a respected mainline anthropology journal:

There are a large number of women whose brains are closer in size to those of gorillas. ... This inferiority is so obvious that no one can contest it. ... All psychologists who have studied the intelligence of women ... recognize today that they represent the most inferior forms of human evolution and that they are closer to children and savages than to an adult, civilized man. They excel in fickleness, inconsistency, absence of thought and logic, and incapacity to reason. ... Distinguished women ... are as exceptional as the birth of any monstrosity, as, for example, of a gorilla with two heads, consequently we may neglect them entirely.²⁹

This idea was challenged beginning at the start of the last century and now has been effectively overthrown.

Interestingly, the reasons for Darwin's conclusions about women appear to be driven by requirements for his theory of evolution and not by his negative experiences with women. He reportedly had an excellent marriage and had very good relationships with his daughters. His favorite was Anne Elizabeth Darwin, his second child and eldest daughter, who died when she was ten from scarlet fever and tuberculosis. Charles wrote in a personal memoir, "We have lost the joy of the household, and the solace of our old age. She must have known how we loved her. Oh that she could now know how deeply, how tenderly we do still and shall ever love her dear joyous face."³⁰ He was devastated at her loss, and the supposition is that he never got over it and that this event led him to reject God. No evidence exists that he had any negative experiences with women.³¹

Summary

Darwin and many leading contemporaneous evolutionists and academics accepted the idea that women were less evolved than men. In their thinking, women had a smaller brain than men and therefore were less intelligent. This belief demeaned women and strongly impeded women's educational and social progress for generations. Darwin declared that women's brains were "analogous to those of animals."⁴ Remnants of this myth still exist today.

Evolutionists that lived during Darwin's age ignored the scriptural teaching of equality, namely that there is "neither Jew nor Greek, there is neither bond nor free, there is neither male nor female: for ye are all one in Christ Jesus. (Galatians 3:28, KJV)" Man and woman were created equally in the image of God and together have dominion over the earth: "'Let us make mankind in our image, in our likeness, so that they may rule over the fish in the sea and the birds in the sky, over the livestock and all the wild animals, and over all the creatures that move along the ground.' So God created mankind in his own image, in the image of God he created them; male and female he created them. (Genesis 1:26–27, NIV)"

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