

HOW DO WE MOVE BEYOND THE FLAWED PARADIGM OF WHITE INTELLECTUAL SUPERIORITY?

By

Benjamin B. Arhen and Brendon J. Gurd

The scientific revolution, the emergence of modern western science, began in the 16th century and marked the departure from traditional Greek views of the natural world ¹. Copernicus, Galileo and Newton - 3 influential physicists – exemplify the whiteness of the early period of the scientific revolution. Early western science was primarily white because it was performed in 16th century renaissance Europe where white men held most positions of status and power ². Sadly, modern western science still lacks black contribution. In this paper, we postulate that the lack of black contributions to modern western science can be attributed to a paradigm of white intellectual supremacy and racial inequality established during slavery and perpetuated by white scientists during the 18th and 19th centuries.

African slaves were first captured and brought to North America in late August of 1619, marking the beginning of the transatlantic slave trade ³. The slave trade continued until it was formally abolished in 1865. During slavery, education of black people in Europe and North America was largely forbidden thus preventing a significant black contribution to science. Slavery was initially vindicated by the paradigm of white superiority – the belief by white people that their place on the racial hierarchy made it acceptable to control an inferior race ⁴. This paradigm was later legitimized and propagated in the 18th and 19th centuries by pseudoscientific research primarily aimed at validating slavery – a concept known as scientific racism ⁵.

Carolus Linnaeus was an 18th century researcher who focused on the categorization of human beings into biologically distinct groups. His categories were ordered by race and culture, listing black people (*Homo sapien africanus*) at the lowest tier ⁶. Linnaeus' model describes *Homo sapien africanus* as being cunning, phlegmatic, ruled by impulse, and whose women act without shame ⁵. These depictions of black impulsivity and laziness justified slavery by indicating the need for black people to be controlled. Samuel G. Morton further contributed to scientific racism in the early 19th century through his research supporting the superior intellect of the white race. Morton theorized that intelligence was linked to brain size and after measuring a vast number of

skulls around the world concluded that the larger skull size of whites compared to other races made them intellectually superior ⁷. Morton's findings inferred that black inability to emulate the advanced intellect of whites meant they were incapable of higher levels of education. Samuel Cartwright further supported the inferior intellect of the black race by touting their "animalistic traits". In a report to the Medical Association of Louisiana in 1851, Cartwright states; "In addition to his keen eyesight, he had other animal like senses, smelling better and hearing better than the white man...like children, [Negroes] require government in everything, or they'll run into excesses. Slavery thus, is for the enslaved person's own good" ⁸. Linnaeus, Morton and Cartwright were highly recognized scientists in their time, and despite the fact that all 3 performed pseudoscience - the practice of using observations to explain preconceived ideas - their legitimization of the paradigm of white superiority has proved difficult to invalidate.

Although slavery was formally abolished in the 19th century, the paradigm of white superiority along with many of the barriers established during slavery – barriers called "the badges and disabilities of slavery" – persist today. Specifically, black people in western society continue to struggle for fair employment, work & promotion and equitable education ⁹. The persisting educational barriers particularly contribute to the lack of diverse contribution in modern western science. Further, a lack of black role models in science contributes to the persistence of the paradigm of white intellectual superiority and continued suppression of black contributions to western science.

Scientific racism questions the intellectual capability of black people and the absence of black contribution serves to perpetuate this view. It is thus important to recognize black scientists who have influenced the progress of modern-day western science. George Washington Carver was born into slavery and faced racial discrimination throughout his life. Nevertheless, Carver greatly contributed to the agriculture revolution by discovering innovative techniques to prevent soil depletion from excessive growth of cotton ¹⁰. Dr. Daniel Hale Williams is acknowledged as the first ever African American to receive a medical degree ¹¹. An active advocate for black civil rights, Williams was the first doctor to found a hospital with interracial staff, providing countless opportunities for black healthcare workers. Lewis Latimer, a draftsman and inventor, worked alongside Alexander Graham Bell and Thomas Edison to help design and patent the telephone and the lightbulb ¹². Latimer's contributions pushed technological advancement and set an example for aspiring black inventors. Acknowledging the contributions of Carver, Williams and Latimer along with a growing list of

highly successful 20th and 21st century scientists and intellectuals - including 16 Nobel Prize recipients - is an important step in debunking the myth of white intellectual superiority.

Modern western science continues to be overwhelmingly white, with few black contributors. This underrepresentation of black people in science has its roots in the geographical origins of the scientific revolution but was perpetuated by slavery and scientific racism supporting slavery in the 18th and 19th centuries. Improving black representation in science requires a paradigm shift and a conscious effort by western science to reject the paradigm of white intellectual superiority. As Frederick Douglass, a 19th century abolitionist said “the negro is a man...scientific writers, not less than others, write to please, and even unconsciously themselves, to sacrifice what is true to what is popular... what is fashionable now in our land is to exaggerate the differences between the Negro and the European”¹³. Shockingly relevant more than 100 years later, this quote serves as a challenge to modern science to overturn the normalcy of white superiority, accept and celebrate black contributions in science and push towards an equitable future.

References

- [1] Brush, S., & Spencer, J. (2019, November 26). Scientific Revolution. Retrieved October 02, 2020, from <https://www.britannica.com/science/Scientific-Revolution>
- [2] Mayne, R., & Aubin, H. (2020, February 04). Politics and diplomacy. Retrieved October 02, 2020, from <https://www.britannica.com/topic/history-of-Europe/Politics-and-diplomacy>
- [3] Slavery in America. (2009, November 12). Retrieved October 02, 2020, from <https://www.history.com/topics/black-history/slavery>
- [4] Newkirk III, V. R. (2017, October 06). What Is White Supremacy? Retrieved October 02, 2020, from <https://www.theatlantic.com/politics/archive/2017/10/the-language-of-white-supremacy/542148/>
- [5] Garrod, J. Z. (2006). A Brave Old World: An Analysis of Scientific Racism and BiDil®. *McGill Journal of Medicine: MJM*, 9(1), 54.
- [6] Revolution and Ideology. (2019, December 03). Scientific racism – Carl Linnaeus. Retrieved from https://www.youtube.com/watch?v=dD4IQ5p9yIc&ab_channel=RevolutionandIdeology
- [7] Morton, S. G. (1849). *Catalogue of Skulls of Man and the Inferior Animals, in the Collection of Samuel George Morton...* Merrihew & Thompson, printers.
- [8] Ruane, M. (2019, April 30). A brief history of the enduring phony science that perpetuates white supremacy. Retrieved October 02, 2020, from https://www.washingtonpost.com/local/a-brief-history-of-the-enduring-phony-science-that-perpetuates-white-supremacy/2019/04/29/20e6aef0-5aeb-11e9-a00e-050dc7b82693_story.html
- [9] Walters, R. W. (2012). The impact of slavery on 20th-and 21st-century black progress. *The Journal of African American History*, 97(1–2), 110-130.
- [10] Bagley, M. (2013, December 07). George Washington Carver: Biography, Inventions & Quotes. Retrieved October 02, 2020, from <https://www.livescience.com/41780-george-washington-carver.html>
- [11] Daniel Hale Williams. (2020, June 23). Retrieved October 02, 2020, from <https://www.biography.com/scientist/daniel-hale-williams>
- [12] Lewis Howard Latimer. (2020, January 14). Retrieved October 02, 2020, from <https://www.biography.com/inventor/lewis-howard-latimer>

[13] The Science of Race. (n.d.). Retrieved October 02, 2020, from <https://www.facinghistory.org/holocaust-and-human-behavior/chapter-2/science-race>