

Manuscript version: Author's Accepted Manuscript

The version presented in WRAP is the author's accepted manuscript and may differ from the published version or Version of Record.

Persistent WRAP URL:

<http://wrap.warwick.ac.uk/145662>

How to cite:

Please refer to published version for the most recent bibliographic citation information. If a published version is known of, the repository item page linked to above, will contain details on accessing it.

Copyright and reuse:

The Warwick Research Archive Portal (WRAP) makes this work by researchers of the University of Warwick available open access under the following conditions.

Copyright © and all moral rights to the version of the paper presented here belong to the individual author(s) and/or other copyright owners. To the extent reasonable and practicable the material made available in WRAP has been checked for eligibility before being made available.

Copies of full items can be used for personal research or study, educational, or not-for-profit purposes without prior permission or charge. Provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way.

Publisher's statement:

Please refer to the repository item page, publisher's statement section, for further information.

For more information, please contact the WRAP Team at: wrap@warwick.ac.uk.

RACIAL SCIENCE

JAMES POSKETT

ABSTRACT. This chapter situates the history of racial science within a global history of empire. It covers the growth of Atlantic slavery, the development of colonial and settler societies, as well as the period of anticolonialism and decolonisation. Drawing on examples from the Americas, Africa, Asia, and the Pacific, the focus of the chapter is on the colonial world rather than the metropole. Throughout, I emphasise the agency of colonised and enslaved people in the history of racial science. I also cover a broad range of racial sciences, from anthropology and phrenology through to psychology and statistics. Overall, the chapter makes the case that we need to move beyond the existing intellectual history of race. Instead, the history of scientific racism is best understood as part of the history of particular sites, technologies, and practices. The chapter concludes with a reflection on relationship between science and race in the present, particularly in relation to machine learning and genetic testing.

* * *

Empires always seek to classify their subjects. From the early modern period onwards, colonial states deployed a range of sciences in order to identify and control different ethnic groups.¹ These sciences, particularly during the age of European imperial expansion, transformed into a distinct set of disciplines dedicated to racial classification. In this chapter, I situate the history of racial science within a global history of empire. I begin with the growth of Atlantic slavery in the eighteenth century, move through the formation of colonial and settler societies in the nineteenth century, and end with the period of decolonisation in the twentieth century. In doing so, I bring together a range of historiographies which are typically treated in isolation.

Drawing on recent work in the history of racial science, I make four broad arguments. First, I argue we need to move beyond the existing intellectual history of race. Traditionally, the history of racial science was treated as part of the history of ideas. This perspective was reinforced following the rise of the linguistic turn and the early cultural history of the 1980s. Race was understood as an “idea” or a “concept,” something best analysed through the study of language. Nancy Stepan’s *The Idea of Race in Science* (1982) is characteristic of this approach.² However, as more recent work has demonstrated, race was not just an idea. It was also something made through action. With this in mind, I follow the work of scholars such as Sadiyah Qureshi and James Delbourgo in arguing that we need to study the history of racial science as part of the history of practice and performance, paying greater attention to sources grounded in material and popular culture.³

Second, I argue that we need to study a much broader set of racial sciences. Traditionally, historians of race focused on biological disciplines, such as physical anthropology and genetics. In this chapter, however, I uncover the role of a range of scientific disciplines, from philology to psychology, in the making of race. Rather than thinking of some sciences as racial, and others as not, we should therefore think of modern science as racial from the start. This approach also helps move away from an outdated narrative in which understandings of race are seen as becoming more “biological” over time. Such a narrative, whilst still featuring in many undergraduate history courses, has been thoroughly critiqued in recent years. As Qureshi argues, we in fact see a “proliferation” rather than a “homogenization” of racial ideas over time.⁴

Third, I argue that racial science was made in the colonial world. In developing this argument, I follow recent work by scholars such as Warwick Anderson and Bronwen Douglas. As Anderson and Douglas argue, the history of racial science looks very different when we start from places like Latin America and the Pacific rather than Europe.⁵ For this reason, I focus

on colonial sites and colonial actors, rather than traditional metropolitan thinkers such as Johann Blumenbach and Charles Darwin.

Finally, I argue we need to pay greater attention to the agency of colonised and enslaved people in the history of racial science. Historians have increasingly emphasised the role played by people outside of Europe in the development of modern science. To date, much of this work has focused on natural history as well as physical sciences such as astronomy and surveying.⁶ However, this approach has only recently been extended to history of racial science. As I show in this chapter, colonised and enslaved people were not simply the objects of racial science. They were also important agents in this history. In many cases, colonised and enslaved people challenged the claims of European racial scientists. In other cases, they adapted racial theories to suit their own political goals.⁷ Recovering these voices—and acknowledging the limits of such agency—remains an important challenge for historians of science, race, and empire.

Slavery and the African Body

In December 1744, the Royal Society in London published an article claiming to identify “the Cause of the Colour of the Negroes.” The author, a physician named John Mitchell, lived in Virginia, where he owned a number of slaves. In the article, Mitchell described how he had dissected the skin of an African man. Deploying the latest Newtonian theory of optics, Mitchell argued that African skin was thicker than European skin, and therefore led to “a Suffocation of the Rays of Light.” Disturbingly, Mitchell boasted that his experiments had been conducted “on living Subjects.” This was a marker of trustworthiness, as Mitchell complained that dead bodies might decompose prior to dissection, therefore rendering observations unreliable.⁸ However, Mitchell’s admission is also a reminder of the violence that went hand-in-hand with the scientific study of race in the eighteenth century. Mitchell was not the only person examining African bodies in an attempt to identify some underlying quality of “blackness.”⁹

The exact relationship between race and slavery is widely debated.¹⁰ For some historians, such as Joyce Chaplin, the “modern concept of race” was a product of the growth of Atlantic slavery in the eighteenth century.¹¹ Others, such as Seymour Drescher, place greater emphasis on the period of abolition during the nineteenth century.¹² Historians of science are well placed to intervene in this debate. Despite different accounts of the relationship between race and slavery, the traditional historiography is grounded almost exclusively in the history of ideas. However, as the experiments of John Mitchell remind us, race needs to be understood as part of a history of scientific practice.¹³ Rather than simply an intellectual change, we should therefore see the growth of slavery as creating the conditions whereby a range of new sites, technologies, and practices came to play increasingly important roles in the making of race.

Over the course of the eighteenth century, the plantation emerged as a crucial site for the scientific study of race. Slaveowners employed physicians and surgeons to help manage health on the plantation, providing a minimal level of medical care which also functioned as a form of discipline.¹⁴ The growth of plantation slavery therefore placed European medical men in an unprecedented position of power over African bodies. The difference between Africans and Europeans was then often conceived in medical terms, something Rana Hogarth refers to as the “medicalization of blackness.”¹⁵ Alongside debates over skin colour, physicians working on plantations developed racialised theories of disease. John Lining, a physician based in South Carolina, subscribed to the theory that Africans were particularly resistant to yellow fever. At the same time, a number of other diseases, such as the yaws, were understood to be peculiar to the African body.¹⁶ As medical interest in racial difference increased, so too did demand for African bodies. By the middle of the nineteenth century, medical schools and museums across the United States and Europe housed collections of African anatomical specimens, often harvested from deceased slaves.¹⁷

New accounts of the difference between European and African bodies served a variety of political ends, ranging from supporting slavery through to the campaign for immediate abolition. In some cases, Africans were presented as a distinct “species,” uniquely fit to undertake the backbreaking work of sugar farming in tropical climates. Writing in *The History of Jamaica* (1744), the slaveowner Edward Long argued that the African body was “peculiarly adapted to a hot climate.” Long then concluded that “the White and the Negroe had not one common origin.” The belief in different human origins—later known as polygenism—was controversial even at the time, particularly as it seemed to contradict the Biblical account of creation.¹⁸ Others, such as Samuel Stanhope Smith, professor of moral philosophy at the College of New Jersey, argued that all human beings shared a common origin, and that physical variation was simply the result of climate.¹⁹ Nonetheless, despite these differences in interpretation, the terms of the debate were set. By the beginning of the nineteenth century, both abolitionists and proslavery campaigners increasingly deployed scientific and medical evidence in making political arguments.²⁰

It is important to recognise that Africans were not simply passive victims of racial science. Britt Rusert and others have recently uncovered the role that Africans themselves played in contesting racial science. This represents a move away from an older historiography of race focused solely on European dominance. From the late eighteenth century onwards, a number of African Americans and former slaves began to develop counternarratives, making use of the growth of cheap print and popular lecture circuits to reach new audiences.²¹ Many were very critical of the use of anatomical and medical ideas to differentiate Europeans and Africans. James McCune Smith, the first African American to receive a medical degree, wrote a series of articles in the 1850s entitled “The Heads of the Colored People,” ridiculing phrenological accounts of African mental inferiority. Similarly, the African American abolitionist Frederick Douglass delivered an influential lecture in 1854 entitled “The Claims

of the Negro, Ethnologically Considered.” In the lecture, Douglass noted that “if, for instance, a phrenologist, or a naturalist undertakes to represent in portraits, the difference between the two races... he will invariably present the *highest* type of the European, and the *lowest* type of the negro.” Douglass then concluded with a statement that neatly sums up the relationship between racial science and slavery: “By making the enslaved a character fit only for slavery, they excuse themselves for refusing to make the slave a freeman.”²²

Racial Science and the Colonial State

Setting sail from Britain in 1783, William Jones composed a list of subjects he intended to study on arriving in India. These included “A Grammar of the Sanscrit Language,” “A Translation of the Veda,” and “A History of India before the Mahommedan conquest, from the Sanscrit-Cashmir Histories.”²³ Jones’s list—with its focus of translation and grammar—points to the importance of language for eighteenth-century studies of race. For Jones, as for many philologists at the time, the origins of different peoples was best traced through the study of language.²⁴ Over the next ten years, Jones worked alongside Indian pandits to translate many classical Indian texts. He concluded that ancient Indian languages, particularly Sanskrit, were closely related to classical European languages, such as Greek and Latin. There was, according to Jones, “a stronger affinity.... than could possibly have been produced by accident.”²⁵ With this in mind, Jones argued that the people of Europe and India shared a common origin, constituting the “Aryan” race.²⁶

Jones had been sent to India, not to study Sanskrit, but to work as a judge at the Supreme Court in Calcutta. The legal context here is important.²⁷ Once again, we need to pay close attention to particular sites and practices in the history of racial science, rather than ideas alone. The growth of European colonial states required the development of new legal institutions as well as forms of linguistic expertise. This was particularly the case from the middle of the

eighteenth century, as European trading companies, such as the English East India Company, expanded into new territory and assumed the powers of administration and taxation. To understand the history of race and the colonial state, we therefore need to start with the sciences of philology and jurisprudence. Here, much of the earlier work of historians of the British Empire is instructive. Bernard Cohn long ago argued that British rule in India relied on the command of language. Similarly, Tony Ballantyne has identified the role played by “Aryanism” in shaping colonial law, both in British India and beyond.²⁸

Jones’s interest in Indian languages therefore stemmed not simply from curiosity, but a need to govern. Although European empires sometimes attempted to impose their own legal standards, most adopted a policy whereby “native” legal systems were applied to “native” peoples. All this required a definition of who the “native” was, and what kind of legal systems they would be subject to. Jones’s linguistic studies were designed to aid in this—to uncover an “ancient Indian constitution”—and crucially separate the administration of Hindu and Muslim populations.²⁹ Similar policies were adopted by other European empires. In the early 1900s, the governor-general of German New Guinea, Albert Hahl, ordered a series of legal and linguistic surveys, supported by the Berlin Museum of Ethnology.³⁰ At around the same time, Albert Pollera, an Italian colonial officer in Eritrea, produced a study of the Kunama language as part of an effort to reform the colonial legal system. (Pollera complained that the structure of the language was “very simple” indicating “a people so far behind in the civilisation ladder.”)³¹ As these examples suggest, the study of language—and the associated legal contexts—remained an important part of racial science well into the twentieth century.³²

Linguistic studies of race operated alongside an interest in physical difference. The context here was that of colonial violence. As European empires expanded, they fought numerous bloody wars. Colonial states also enacted comprehensive regimes of physical and capital punishment. The battlefield and the execution block then provided the raw materials for

studies of racial difference grounded in the body. Indeed, much recent work on the history of racial science, including by scholars such as Kim Wagner and Ricardo Roque, is characterised by a focus on these materials. In the 1820s, the Phrenological Society in Edinburgh received nine skulls from a British medical officer serving in Ceylon. One of the skulls, the phrenologists were told, had been taken from the body of an executed leader of a local rebellion.³³ Later in the century, the Coimbra University Museum in Portugal received 35 human skulls from East Timor. The heads had been severed from the enemy by a party of Timorese soldiers operating in the service of the Portuguese Empire. Conduct on the battlefield then fed into racial assessments back in the metropole. According to Barros e Cunha, the anthropologist who analysed the skulls in the 1890s, the Timorese were a “cruel” race who “make war the savage way,” taking the heads of their enemies as trophies.³⁴ This connection between race and colonial violence extended to the study of “martial races” and “criminal tribes.” In India, particularly following the 1857 Rebellion, the British colonial government ordered a number of anthropometric and photographic surveys. The purported aim was to identify those groups that could be trusted, such as the “true Sikhs,” as well as those that needed to be carefully monitored for signs of dissent.³⁵ By the end of the nineteenth century, most European capitals housed large collections of human skulls, often taken from the bodies of colonised people killed in war or executed as punishment.³⁶

Sciences of Settler Colonialism

Addressing the Secretary of the Interior, John Wesley Powell warned of the impending fate of the indigenous people of North America. “In a very few years it will be impossible to study our North American Indians in their primitive condition except from recorded history,” explained Powell in 1879. Powell had recently been appointed director of the Bureau of Ethnology at the Smithsonian Institution in Washington, DC. Like many anthropologists in the

late nineteenth century, he subscribed to the idea that indigenous people living in settler colonies would be wiped out by the advance of civilisation. Powell suggested that the science of ethnology would help guide the United States government in its policy towards Native Americans, explaining that “savagery... is a distinct status of society, with its own institutions, customs, philosophy, and religion.”³⁷

The discourse of “dying races” was not unique to the United States. In early twentieth-century South Africa, anthropologists identified the San people as what they called the “pure-breed” of the “Bushmen.” Matthew Drennan, professor of anatomy at the University of Cape Town, took hundreds of photographs and plaster casts, claiming that the “Bushmen” represented “relics” of a distant evolutionary ancestor.³⁸ Similar claims were made concerning the fate of Aboriginal Australians, the indigenous people of Canada, and even the Irish.³⁹ These people often formed the focus of human displays at colonial and international exhibitions. Popular from the middle of the nineteenth century onwards, these exhibitions presented indigenous people, particularly in recently colonised lands, as living examples of the evolutionary past.⁴⁰

The development of racial science in settler societies needs to be understood in the context of this specific form of colonialism. Over the course of the nineteenth and early twentieth centuries, a specific set of scientific institutions, technologies, and practices developed in order to explain and manage the introduction of European people into settler colonies. A range of sciences—including pathology, statistics, and eugenics—were used to identify so-called “dying races.” Those same sciences were also used to isolate an underlying quality of “whiteness,” something that distinguished the settler colonist from the indigenous population. These two ideologies, of dying races and of whiteness, then operated in tandem in order to define and police settler colonies throughout the early twentieth century.⁴¹

In the eighteenth century, European people tended to fear that life in the tropics would lead to racial degeneration. Indeed, this was part of the justification for the use of enslaved labour in the Americas. However, during the late nineteenth century, this rhetoric underwent a dramatic reversal. By the start of the twentieth century, “whiteness” was increasingly understood as a necessary biological characteristic for adaptation to tropical environments. This change in understanding was closely tied to the development of new scientific practices and institutions, particularly those associated with tropical medicine. These racial sciences helped create what Warwick Anderson refers to as a “discourse of settlement.”⁴²

Much of the early scientific research on whiteness took place at the Australian Institute of Tropical Medicine, established in 1913 at Townsville, Queensland. Researchers at the institute collected data on blood pressure and red blood cell counts from white children living in northern Australia. In the end, the director of the institute, Anton Breinl, concluded that the tropical climate had no adverse effect on what he called “the white organism.” By the 1920s, medical researchers were convinced that white settlers were uniquely suited to life in the tropics. Ronald Hamlyn-Harris, President of the Royal Society of Queensland, believed settlers represented “a type of human beings specially adapted to live in Tropical Queensland.” This type was “based on British blood” but “amended by the sun and soil in appearance, physique, speech and temperament.” There was a gendered element to this, as medical researchers tended to believe that the white male labourer was ideally suited to life in the tropics, whereas women were more liable to suffer.⁴³ Similar ideas were repeated across the settler colonial world. As early as the 1870s, French doctors in Algeria referred to the “robust, strong, and well-built” settlers, who apparently possessed “a great ability to adapt.” By the end of the nineteenth century, French settlers in Algeria increasingly presented themselves as a “new white race,” the next step along the evolutionary ladder.⁴⁴

This specific notion of “whiteness” implied a system of segregation. Researchers in institutes of tropical medicine deployed the latest work in pathology and developmental biology in order to argue that the advantages of the white body could only be maintained in isolation from other races. In Australia, this manifest itself in the 1901 Immigration Restriction Act. Pathologists advised that immigrants, particularly those of the “black races,” could still act as healthy carriers of disease. Through miscegenation immigrants might also dilute the “white stock.” As John Cumpston, Director of the Commonwealth Quarantine Service, explained in 1921, “it is all very well to have a white Australia, but it must be kept white. There must be immaculate cleanliness.”⁴⁵ Comparable claims, grounded in the language of biological science, were made to justify segregation policies in South Africa. Harold Fantham, a leading eugenicist and professor of zoology at the University of Witwatersrand, published a series of articles in the 1920s claiming that “racial admixture” led to physical abnormalities. In 1927, the South African government introduced strict laws regulating mixed-race pregnancies outside of marriage, a precursor to the 1949 apartheid legislation which outlawed all interracial sexual intercourse.⁴⁶

Segregationist policies did not go unchallenged. Throughout the settler colonial world, a small number of scientifically trained individuals, often of indigenous or mixed descent, developed counternarratives. In early twentieth-century New Zealand, the Maori anthropologist Te Rangi Hiroa—who had studied at the Otago Medical School—published an article based on anthropometric data arguing that racial mixing actually resulted in a superior physical type. “Miscegenation” would provide “the stepping-stone to the evolution of a future type of New-Zealander in which we hope the best features of the Maori race will be perpetuated forever,” claimed Te Rangi Hiroa.⁴⁷ These views were echoed by the Brazilian anthropologist João Baptista de Lacerda, who promoted the evolutionary advantages of racial mixing at the Universal Races Congress in 1911.⁴⁸ In the early decades of the twentieth century, racial

sciences were therefore put to radically different political uses, from the justification of segregation in South Africa to the promotion of multiracial states in Latin America.

Science, Race, and Anticolonialism

In early 1924, members of the Indian Psychoanalytic Society in Calcutta gathered to listen to a paper on the theme of “Hindu-Muslim Unity.” The author, Owen Berkeley-Hill, worked as superintendent of the Ranchi Mental Hospital. He was also a keen psychoanalyst. Drawing on Sigmund Freud’s studies of religion, Berkeley-Hill argued that “the feeling of hatred which most Hindus experience for Muslim is derived from two sources: (1) the mother-land complex. (2) The Cow-totem.” At a time of growing religious tension, Berkeley-Hill provided a racialised explanation of Indian psychology. He also suggested a number of practical steps the British could take in order to contain religious and anticolonial fervour.⁴⁹

Throughout the middle decades of the twentieth century, European empires increasingly turned to racial sciences—particularly sciences of the mind—in order to respond to the growth of anticolonial movements. This theme has been the subject of much recent research by scholars including Erik Linstrum, Sloan Mahone, and Shruti Kapila, amongst others. At the height of the Mau Mau Rebellion in Kenya, the British colonial government employed a psychiatrist named John Carothers to produce a report on the psychology of the insurgents. Published as *The Psychology of Mau Mau* (1954), Carothers rejected the idea of any significant biological difference between Europeans and Africans. Instead, he argued that the behaviour of the Mau Mau insurgents could be explained in psychological terms. Carothers claimed that Africans, because of a failure in child-rearing, tended to feel a lack of security, and were liable to act rather like a “jilted lover.” In response, Carothers suggested that the British adopt a system of “villagization,” whereby Mau Mau insurgents would be forcibly relocated to small settlements, isolating them from the wider community and allegedly

providing a sense of security.⁵⁰ The French in Algeria made similar use of racial psychology to explain the growth of anticolonialism. Psychiatrists at the Algiers Medical School argued that the violent tactics employed by the National Liberation Front in the 1950s could be attributed to Muslim “mental deficiency.” One French psychologist went as far as to describe Islam as an “epidemic of religious madness.”⁵¹

Racial sciences were not just a weapon of colonialism. From the early 1900s onwards, colonised elites began to adopt the languages and practices of racial science in order to promote their own political interests. Jomo Kenyatta, who went on to become the first president of independent Kenya, was just one of a number of anticolonial nationalists who studied anthropology under Bronisław Malinowski at the London School of Economics in the 1930s. Kenyatta completed his diploma in 1938, submitting a dissertation on the anthropology of his own people, the Kikuyu. This dissertation then formed the basis of Kenyatta’s seminal work, *Facing Mount Kenya* (1938), in which he presented the Kikuyu people as possessing a coherent and stable culture. “It cannot be too strongly emphasised that the various sides of Gikuyu life here described are part of an integrated culture,” concluded Kenyatta. By adopting the practices of European racial science, Kenyatta hoped to convince the British that the Kikuyu were already a nation, and therefore should be granted the right to independent government. As Bruce Berman argues, Kenyatta was “pursuing his politics as ethnography.”⁵²

A number of other anticolonial figures adopted the same strategy, employing racial sciences such as anthropology, psychology, and genetics in order to make the case for national or regional identity. Recent work by scholars including Omnia El Shakry and Projit Bihari Mukharji has explored this theme in the context of the Middle East and South Asia respectively. In Egypt, the anthropologist ‘Abbas Mustafa ‘Amma collected blood samples and anthropometric data throughout the 1940s, arguing for the unity of the Egyptian and Sudanese people, grounding his pan-Arab politics in racial science.⁵³ At the same time, the Bengali

anthropologist Nirmal Kumar Bose—who went to prison for his involvement in the Quit India Movement—made the case for Indian national identity based on social and cultural characteristics. “In spite of the fact that [the] languages of India are many,” Bose argued, “there is an overall unity of design... the sameness of traditions.”⁵⁴ Others, such as the anthropologist Atul Krishna Sur, went beyond social and cultural analysis, making claims about Indian national and regional identity based on physical characteristics, such as the width of the forehead.⁵⁵ By the time that many colonial states gained independence, racial sciences often formed the basis of nationalist claims to identity.

Conclusion

Today, the sciences continue to play a significant role in making and enforcing racial boundaries. Biometric technologies are routinely used around the world, often with the effect—intended or otherwise—of profiling individuals according to race.⁵⁶ Anyone who has ever tried to enter the United States will be all too familiar with the assortment of fingerprint, body, and facial recognition scanners. Machine learning technologies, which tend to reproduce and reinforce existing racial divisions, are also increasingly used in a wide variety of settings.⁵⁷ Recent studies have shown how algorithms used by American banks to assess mortgage applications are more likely to reject people of colour. The banks argue that this is not based on “race,” by which they mean physical difference. But of course, these algorithms still enact a form of racial discrimination, making judgments based on long-standing geographic divisions, many of which are a product of the segregation era.⁵⁸ A study by computer scientist Joy Buolamwini also found that facial recognition software performs significantly worse when trying to identify people of African descent, particularly women. This has the potential to lead to an increase in “false positives,” whereby people of colour are more likely to be wrongly identified as suspects by law enforcement agencies.⁵⁹

Alongside computer technologies, the reduction in the cost of genetic testing has led to a resurgence in claims linking DNA to race. In some instances, genetic technologies have then been taken up by indigenous people as well as the governments of former colonies. For some Native American groups, genetic testing provides a means to secure their identity and legal rights. However, as Kim TallBear warns, modern genetic testing often reproduces colonial categories, and erases indigenous approaches to identity. For TallBear, as for many indigenous people, there is more to being Native American than simply a genetic code.⁶⁰ Similarly, in an age of growing nationalism, genetic studies are being deployed by governments around the world to determine the racial character of the nation, as well as identify patterns of migration and miscegenation. The largest of these projects was launched by the Indian government in 2003, under the auspices of the Indian Genome Variation Consortium. After analysing 15,000 individuals, researchers at the Consortium produced a genetic map of India which seemed to perfectly reproduce many of the colonial categories described earlier in this chapter. The article, published in the journal *Human Genetics*, divided the subcontinent by language families and “morphological types” including the “Negrito” and the “Mongoloid.”⁶¹

I hope that the history uncovered in this chapter points towards some of the ways in which we can start to grapple with the legacies of racial science in the postcolonial present. As I have argued, the history of racial science is best understood, not just as a history of ideas, but rather as a history of particular sites, technologies, and practices. This emphasis on action rather than ideas should help focus our attention on the ways in which science and race come together in the present. In the first instance, we need to engage with the existence of large collections of human remains, and associated cultural objects, which are still housed in European and American museums.⁶² Additionally, as the previous examples demonstrate, racial sciences today operate at new sites and deploy a range of new technologies. Some of these, such as genetic testing, are clearly biological. But many are not. As I suggested in this chapter, there is

no meaningful sense in which understandings of race became more “biological” over time. Rather, we see biological, linguistic, psychological, and cultural approaches to race all operating side-by-side, even in the early decades of the twentieth century.

The myth that understandings of race became more biological over time is in fact a significant obstacle to the fight against scientific racism in the present.⁶³ Today, some of the most widespread technologies of racial discrimination are successful precisely because they ostensibly ignore biological characteristics. Machine learning in particular provides a new way for individuals, organisations, and governments to discriminate in practice whilst professing equality in principle. The power of racial science, then, does not lie in its homogeneity. Rather, racial science derives its power from its ability to constantly adapt.⁶⁴

* I would like to thank Andrew Goss, Thomas Simpson, and Charu Singh for their valuable comments on earlier drafts of this chapter.

¹ For earlier sciences of human difference, see Surekha Davies, *Renaissance Ethnography and the Invention of the Human: New Worlds, Maps and Monsters* (Cambridge: Cambridge University Press, 2016); Joan-Pau Rubiés, “New Worlds and Renaissance Ethnology,” *History and Anthropology* 6 (1993): 157–97; and Siep Stuurman, “François Bernier and the Invention of Racial Classification,” *History Workshop Journal* 50 (2000): 1–21. For sciences of human difference in non-European empires, particularly the Qing, see, Laura Hostetler, *Qing Colonial Enterprise: Ethnography and Cartography in Early Modern China* (Chicago: University of Chicago Press, 2005).

² Nancy Stepan, *The Idea of Race in Science: Great Britain, 1800–1960* (London: Macmillan, 1982). See also, Peter Robb, ed., *The Concept of Race in South Asia* (Delhi: Oxford University Press, 1995).

³ For this argument, see Sadiyah Qureshi, *Peoples on Parade: Exhibitions, Empire, and Anthropology in Nineteenth-Century Britain* (Chicago: University of Chicago Press, 2011), 1–12; James Delbourgo, “The

Newtonian Slave Body: Racial Enlightenment in the Atlantic World,” *Atlantic Studies* 9 (2012): 186–87; James Poskett, *Materials of the Mind: Phrenology, Race, and the Global History of Science, 1815–1920* (Chicago: University of Chicago Press, 2019), 8–8, 256–261.

⁴ For a critique of this narrative, see Sadiya Qureshi, “Robert Gordon Latham, Displayed Peoples, and the Natural History of Race, 1854–1866,” *The Historical Journal* 54 (2011): 163; Sujit Sivasundaram, “Race, Empire, and Biology before Darwin,” in *Biology and Ideology from Descartes to Dawkins*, eds. Denis Alexander and Ronald Numbers (Chicago: Chicago University Press, 2010); Bruce Dain, *Hideous Monster of the Mind: American Race Theory in the Early Republic* (Cambridge, MA: Harvard University Press, 2003), vii; Poskett, *Materials of the Mind*, 256–61.

⁵ Warwick Anderson, “Racial Conceptions in the Global South,” *Isis* 105 (2014): 782–92; Suman Seth, “Introduction: Relocating Race,” *Isis* 105 (2014): 759–63; Chris Ballard, “The Cultivation of Difference in Oceania,” in *Foreign Bodies: Oceania and the Science of Race, 1750–1940*, eds. Bronwen Douglas and Chris Ballard (Canberra: Australian National University Press, 2008), 339.

⁶ For example, Kapil Raj, *Relocating Modern Science: Circulation and the Construction of Knowledge in South Asia and Europe* (Basingstoke: Palgrave Macmillan, 2007); Benjamin Elman, *On Their Own Terms: Science in China, 1550–1900* (Cambridge: Harvard University Press, 2009).

⁷ Poskett, *Materials of the Mind*, 141–7, 261–62, Thomas Simpson, “Historicizing Humans in Colonial India,” in *Historicizing Humans: Deep Time, Evolution, and Nineteenth-Century British Sciences*, ed. Efram Sera-Shriar (Pittsburg, PA: University of Pittsburgh Press, 2018), 114–16, Britt Rusert, “The Science of Freedom: Counterarchives of Racial Science on the Antebellum Stage,” *African American Review* 45 (2012): 291–308; Nancy Stepan and Sander Gilman, “Appropriating the Idioms of Science: The Rejection of Scientific Racism,” in *The ‘Racial’ Economy of Science: Toward a Democratic Future*, ed. Sandra Harding (Bloomington: Indiana University Press, 1993).

⁸ Delbourgo, “Newtonian Slave Body,” 185–202; John Mitchell, “An Essay upon the Causes of the Different Colours of People in Different Climates,” *Philosophical Transactions* 43 (1744): 102. See also Todd Savitt, “The Use of Blacks for Medical Experimentation and Demonstration in the Old South,” *The Journal of Southern History* 48 (1982): 331–48; Andrew Curran, *The Anatomy of Blackness: Science and Slavery in the Age of Enlightenment* (Baltimore, MD: Johns Hopkins University Press, 2011).

-
- ⁹ For earlier understandings of African bodies, see Anu Korhonen, “Washing the Ethiopian White: Conceptualising Black Skin in Renaissance England,” in *Black Africans in Renaissance Europe*, ed. Thomas Earle and Kate Lowe (Cambridge: Cambridge University Press, 2005).
- ¹⁰ For an overview of this debate, see Timothy Lockley, “Race and Slavery,” in *The Oxford Handbook of Slavery in the Americas*, eds. Mark Smith and Robert Paquette (Oxford: Oxford University Press, 2010).
- ¹¹ Joyce Chaplin, “Race,” in *The British Atlantic World, 1500–1800*, ed. David Armitage (Basingstoke: Palgrave Macmillan, 2002), 173.
- ¹² Seymour Drescher, “The Ending of the Slave Trade and the Evolution of European Scientific Racism,” *Social Science History* 14 (1990): 415–50.
- ¹³ Delbourgo, “Newtonian Slave Body,” 186–87.
- ¹⁴ Classic studies include Todd Savitt, *Medicine and Slavery: The Diseases and Health Care of Blacks in Antebellum Virginia* (Urbana: University of Illinois Press, 1978); Richard Sheridan, *Doctors and Slaves: A Medical and Demographic History of Slavery in the British West Indies, 1680–1834* (Cambridge: Cambridge University Press, 1985).
- ¹⁵ Rana Hogarth, *The Medicalization of Blackness: Making Racial Differences in the Atlantic World, 1780–1840* (Chapel Hill: University of North Carolina Press, 2017), 2.
- ¹⁶ Suman Seth, *Difference and Disease: Medicine, Race, and the Eighteenth-Century British Empire* (Cambridge: Cambridge University Press, 2018), 196–98; Hogarth, *Medicalization of Blackness*, 10–25.
- ¹⁷ Stephen Kenney, “The Development of Medical Museums in the Antebellum American South: Slave Bodies in Networks of Anatomical Exchange,” *Bulletin of the History of Medicine* 87 (2013): 32–62.
- ¹⁸ Seth, *Difference and Disease*, 208–37.
- ¹⁹ William Stanton, *The Leopard’s Spots: Scientific Attitudes Toward Race in America, 1815–59* (Chicago: University of Chicago Press, 1960), 3–5; Dain, *Hideous Monster of the Mind*, 55–58.
- ²⁰ Drescher, “Ending of the Slave Trade”; Poskett, *Materials of the Mind*, 56–76, 118–31; Curran, *Anatomy of Blackness*, 210–15; Adrian Desmond and James Moore, *Darwin’s Sacred Cause: Race, Slavery and the Quest for Human Origins* (London: Allen Lane, 2009).
- ²¹ Britt Rusert, *Fugitive Science: Empiricism and Freedom in Early African American Culture* (New York: New York University Press, 2017).
- ²² Rusert, *Fugitive Science*, 30–31, 126–29; Frederick Douglass, *The Claims of the Negro, Ethnologically Considered* (Rochester: Lee, Mann and Co, 1854), 15, 20. Some African Americans and former slaves

-
- did take up phrenology, turning racial science against claims of European superiority, see Poskett, *Materials of the Mind*, 129–31, 150–51; Rusert, “The Science of Freedom,” 301–4.
- ²³ John Shore, “A Discourse Delivered at a Meeting of the Asiatick Society”, in *The Works of Sir William Jones* (London: John Stockdale, 1807), 3: xi.
- ²⁴ Thomas Trautmann, *Aryans and British India* (Berkeley: University of California Press, 1997), 131–64.
- ²⁵ Tony Ballantyne, *Orientalism and Race: Aryanism in the British Empire* (Basingstoke: Palgrave, 2002), 20–31; Simpson, “Historicizing Humans,” 117–22.
- ²⁶ See Ballantyne, *Orientalism and Race*, for the way in which Aryanism operated across the British Empire, beyond India.
- ²⁷ Ballantyne, *Orientalism and Race*, 20; Bernard Cohn, *Colonialism and its Forms of Knowledge: The British in India* (Princeton: Princeton University Press, 1996), 16–75.
- ²⁸ Ballantyne, *Orientalism and Race* and Cohn, *Colonialism*.
- ²⁹ Cohn, *Colonialism*, 75.
- ³⁰ Rainer Buschmann, “Colonizing Anthropology: Albert Hahl and the Ethnographic Frontier in German New Guinea,” in *Worldly Provincialism: German Anthropology in the Age of Empire*, eds. H. Glenn Penny and Matti Bunzl (Ann Arbor: University of Michigan Press, 2003).
- ³¹ Barbara Sòrgoni, “The Scripts of Alberto Pollera, an Italian Officer in Colonial Eritrea: Administration, Ethnography and Gender,” in *Ordering Africa: Anthropology, European Imperialism, and the Politics of Knowledge*, eds. Helen Tilley and Robert Gordon (Manchester: Manchester University Press, 2007), 291.
- ³² This was also true in India, see Javed Majeed, *Colonialism and Knowledge in Grierson’s Linguistic Survey of India* (London: Routledge, 2018).
- ³³ Poskett, *Materials of the Mind*, 23–32; Nira Wickramasinghe, “The Return of Keppetipola’s Cranium: Authenticity in a New Nation,” *Economic and Political Weekly* 32 (1997): 85–92.
- ³⁴ Ricardo Roque, *Headhunting and Colonialism: Anthropology and the Circulation of Human Skulls in the Portuguese Empire, 1870–1930* (Basingstoke: Palgrave Macmillan, 2010), 52–87, 119, 159–61.
- ³⁵ Thomas Metcalf, *Ideologies of the Raj* (Cambridge: Cambridge University Press, 1994), 66–158; Clare Anderson, *Legible Bodies: Race, Criminality and Colonialism in South Asia* (Oxford: Berg, 2004); Crispin Bates, “Race, Caste and Tribe in Central India: The Early Origins of Indian Anthropometry,” in *The Concept of Race in South Asia*, ed. Peter Robb (Delhi: Oxford University Press, 1995); Nicholas Dirks, “Castes of Mind,” *Representations* 37 (1992): 56–78.

-
- ³⁶ For skull collecting, see Kim Wagner, “Confessions of a Skull: Phrenology and Colonial Knowledge in Early Nineteenth-Century India,” *History Workshop Journal* 69 (2010): 27–51; Simon Harrison, “Skulls and Scientific Collecting in the Victorian Military: Keeping the Enemy Dead in British Frontier Warfare,” *Comparative Studies in Society and History* 50 (2008): 285–303; Ann Fabian, *The Skull Collectors: Race, Science, and America’s Unburied Dead* (Chicago: University of Chicago Press, 2010); Poskett, *Materials of the Mind*, 19–50.
- ³⁷ Curtis Hinsley, *Savages and Scientists: The Smithsonian Institution and the Development of American Anthropology, 1846–1910* (Washington, DC: Smithsonian Institution Press, 1981), 147–49; *Letter from the Acting President of the National Academy of Sciences, Transmitting a Report on the Surveys of the Territories* (Washington, DC: Government Printing Office, 1879), 20. See also Sadiah Qureshi, “Dying Americans: Race, Extinction and Conservation in the New World,” in *From Plunder to Preservation: Britain and the Heritage of Empire, 1800–1950*, eds. Astrid Swenson and Peter Mandler (Oxford: Oxford University Press, 2013).
- ³⁸ Saul Dubow, *Scientific Racism in Modern South Africa* (Cambridge: Cambridge University Press, 1995), 48–51.
- ³⁹ Patrick Brantlinger, *Dark Vanishings: Discourse on the Extinction of Primitive Races, 1800–1930* (Ithaca, NY: Cornell University Press, 2013).
- ⁴⁰ Qureshi, *Peoples on Parade*; Pascal Planchard, ed., *Human Zoos: Science and Spectacle in the Age of Colonial Empires* (Liverpool: Liverpool University Press, 2008); Sadiah Qureshi, “Peopling Natural History,” in *Worlds of Natural History*, eds. Helen Curry, Nicholas Jardine, James Secord, Emma Spary (Cambridge: Cambridge University Press, 2018).
- ⁴¹ Gregory Smithers, *Science, Sexuality, and Race in the United States and Australia, 1780s–1890s* (New York: Routledge, 2009), 44–69.
- ⁴² Warwick Anderson, *The Cultivation of Whiteness: Science, Health, and Racial Destiny in Australia* (Durham, NC: Duke University Press, 2006), 1–70.
- ⁴³ Anderson, *Cultivation of Whiteness*, 100–38.
- ⁴⁴ Ann Chopin, “Embodying ‘The New White Race’: Colonial Doctors and Settler Society in Algeria, 1878–1911,” *Social History of Medicine* 29 (2016): 11.
- ⁴⁵ Anderson, *Cultivation of Whiteness*, 98–147.

-
- ⁴⁶ Dubow, *Scientific Racism*, 133–34, 181–82. Generally, eugenicists in settler colonies were more concerned with what they called the “poor white” than the indigenous population. See Chloe Campbell, “Eugenics in Colonial Kenya,” in *The Oxford Handbook of the History of Eugenics*, eds. Alison Bashford and Philippa Levine (Oxford: Oxford University Press, 2010); Saul Dubow, “South Africa: Paradoxes in the Place of Race,” in Bashford and Levine, *Handbook of the History of Eugenics*.
- ⁴⁷ Anderson, “Racial Conceptions in the Global South,” 787; John Allen, “Te Rangi Hiroa’s Physical Anthropology,” *Journal of the Polynesian Society* 103 (1994): 20.
- ⁴⁸ Anderson, “Racial Conceptions in the Global South,” 32.
- ⁴⁹ Shruti Kapila, “The ‘Godless’ Freud and his Indian Friends: An Indian Agenda for Psychoanalysis,” in *Psychiatry and Empire*, eds. Meghan Vaughan and Sloan Mahone (Basingstoke: Palgrave Macmillan, 2007), 127.
- ⁵⁰ Jock McCulloch, *Colonial Psychiatry and the “African Mind”* (Cambridge: Cambridge University Press, 1995), 64–71; Sloan Mahone, “East African Psychiatry and the Practical Problems of Empire,” in Vaughan and Mahone, *Psychiatry and Empire*. The British and French made similar use of racial psychology during anticolonial struggles in Malaya and Indo-China, see Erik Linstrum, *Ruling Minds: Psychology in the British Empire* (Cambridge, MA: Harvard University Press, 2016), 155–57.
- ⁵¹ Richard Keller, *Colonial Madness: Psychiatry in French North Africa* (Chicago: University of Chicago Press, 2007), 166–70.
- ⁵² Bruce Berman and John Lonsdale, “Custom, Modernity, and the Search for Kihooto: Kenyatta, Malinowski, and the Making of *Facing Mount Kenya*,” in Tilley and Gordon, *Ordering Africa: Anthropology*, 173–90.
- ⁵³ Omnia El Shakry, *The Great Social Laboratory: Subjects of Knowledge in Colonial and Postcolonial Egypt* (Stanford: Stanford University Press, 2007), 66–81.
- ⁵⁴ Pradip Kumar Bose, “The Anthropologist as ‘Scientist’? Nirmal Kumar Bose,” in *Anthropology in the East: Founders of Indian Sociology and Anthropology*, eds. Patricia Uberoi and Satish Deshpande (Delhi: Permanent Black, 2007), 290–301.
- ⁵⁵ Projit Bihari Mukharji, “The Bengali Pharaoh: Upper-Caste Aryanism, Pan-Egyptianism, and the Contested History of Biometric Nationalism in Twentieth-Century Bengal,” *Comparative Studies in Society and History* 59 (2017): 454–55.

-
- ⁵⁶ On the colonial origins of biometrics, see Keith Breckenridge, *Biometric State: The Global Politics of Identification and Surveillance in South Africa, 1850 to the Present* (Cambridge: Cambridge University Press, 2014).
- ⁵⁷ Safiya Umoja Noble, *Algorithms of Oppression: How Search Engines Reinforce Racism* (New York: New York University Press, 2018).
- ⁵⁸ Robert Bartlett, Adair Morse, Richard Stanton, and Nancy Wallace, “Consumer-Lending Discrimination in the FinTech Era,” *NBER Working Paper* no. 25943 (2019).
- ⁵⁹ Joy Buolamwini and Timnit Gebru, “Gender Shades: Intersectional Accuracy Disparities in Commercial Gender Classification,” *Proceedings of Machine Learning Research* 81 (2018): 77–91.
- ⁶⁰ Kim TallBear, *Native American DNA: Tribal Belonging and the False Promise of Genetic Science* (Minneapolis: University of Minnesota Press, 2013).
- ⁶¹ “The Indian Genome Variation database (IGVdb): A Project Overview,” *Human Genetics* 119 (2005): 1–11. For the colonial origins of this project, see Mukharji, “The Bengali Pharaoh,” 452.
- ⁶² On the way in which institutions should respond, see Jeremiah Garsha, “Repatriating Histories: A Call for Global Policies on the Return of Human Remains,” *History & Policy*, <http://www.historyandpolicy.org/opinion-articles/articles/repatriating-histories-call-for-global-policies-on-return-of-human-remains>.
- ⁶³ This myth has its origins in the era of decolonisation, whereby European and American geneticists tried to distance themselves from earlier imperial projects, see Sebastián Gil-Riaño, “Relocating Anti-Racist Science: The 1950 UNESCO Statement on Race and Economic Development in the Global South,” *The British Journal for the History of Science* 51 (2018): 281–303.
- ⁶⁴ Qureshi, “Robert Gordon Latham,” 163.