Introduction

In the fading twilight of a rainy Saturday, 27 June 1857, a science professor named Elisha Mitchell slipped off a cliff on Black Mountain in North Carolina, fell 40 feet into the bottom of a waterfall, struck his head on the rocks, and drowned. It wasn’t until more than a week later that a search party found Mitchell’s remains in the pool, still preserved by the cold water. They brought him down and laid him to rest in Asheville, just a few weeks shy of his sixty-fourth birthday.

The eulogies that followed celebrated Mitchell as a man who died for science. His faculty colleagues at the University of North Carolina mourned the loss of “the oldest member of our body,” who had been a member of the faculty for almost 40 years and held the professorship of chemistry, mineralogy, and geology. On the day he fell to his death, Mitchell had climbed Black Mountain to prove that it was the highest point east of the Rocky Mountains, a finding he had made before, but one that had recently been challenged. So back he came again, on a mission “partly personal, and partly Scientific,” to take new measurements—and then he slipped. Thus he “met his death in the cause of Science, and thus . . . added his name to the list of her honored martyrs” (Phillips et al. 1858).

But Elisha Mitchell had another side to his scientific life—a carefully argued defense of slavery. Mitchell was not just a college professor but an ordained Presbyterian minister as well, and he brought both scientific and religious belief together in an 1848 work, The Other Leaf of the Book of Nature and the Word of God, a pair of sermons that offered both logical and biblical justification for the perpetuation of slavery. Mitchell dutifully acknowledged the notion of equal rights. Still, he made a special case for property rights above all, including the “divine right of slaveholders,” a right he invoked for himself. “I am the owner of a few slaves, of certain tracts of land of no great value, and of some other property. If it is a sin to hold the first, it is a sin to hold the others.” But underlying Mitchell’s claim for his right to human property was his insistence on human inequality. “Along with the Anglo-Saxon, there is intermingled through every part of the country another race, of inferior moral and mental endowment,” the Black people he felt needed to be kept enslaved. “Suppose the slave to be free,” he continued, “he is there, a negro still. . . . The happiness of the negro race would not be increased by emancipation, at least for a long series of years whilst the whole region would become intolerable to the white man, and uninhabitable by him.” Mitchell next took personal, even professional, ownership of his position: “Such are the honest and strong convictions which an acquaintance with the circumstances of the case for many years has forced upon me” (Mitchell 1831). That last sentence is
telling, a subtle scientific justification for the “strong convictions” he had developed during his long-term observations of life in the South.

Mitchell came to those convictions during his North Carolina career in science. He was not a lifelong southerner, born and bred in the ways of slavery, but a native of Connecticut, where he had been born in 1793 and educated at Yale, studying with the eminent Benjamin Silliman and graduating in 1813. After some brief teaching stints in New York and Connecticut, he accepted a job offer at the University of North Carolina, joining the faculty in 1818 and remaining there until his death. If not a southerner by birth, Mitchell became one by choice—and he chose to use his professional prominence to uphold the South’s peculiar institution. As a modern biographical sketch rather gently puts it, “On the question of slavery, he supported the southern point of view” (Watson 1979–1996). Elisha Mitchell may have died in the cause of science while taking the measure of Black Mountain, but his approach to taking the measure of Black people remains an inescapable aspect of his intellectual legacy.

The South in the Scientific Community

Elisha Mitchell was by no means the first man of science in the South—or in the United States, for that matter—to put forward a scientific justification for racism. Indeed, it makes no sense to talk of science in the antebellum South as if it were somehow distinct from science elsewhere. Scientists in the South were part of a transatlantic community—some of them coming, like Mitchell, from the North—and the active exchange of ideas and information transcended regional and national boundaries. By the early nineteenth century, racial science had gained a prominent place among those ideas.

It does make sense, however, to consider the situation of the American South within that larger intellectual community. During the antebellum era, the South was a seeming backwater in science, with fewer significant figures in the field, not to mention fewer institutions to support and promote scientific inquiry. A 1968 study of American Science in the Age of Jackson offered biographical sketches of 55 “Leading American Scientists of the Period 1815 to 1845,” only six of whom appear to have spent a significant part of their professional lives in the South, and only one of whom had been born there. (Elisha Mitchell did not warrant notice in this list.) The same study counts scientific journals established in the various states: for the period 1805–1849, some 216 originated in the Middle Atlantic or New England states, while only 23 came from states below the Mason-Dixon Line. Subsequent studies that covered the entire antebellum era and used additional criteria—membership in the American Association for the Advancement of Science, for instance—modified the picture a bit, but still, the situation seemed clear: “Judged by almost every measurable criterion,” one survey concluded, “the Old South lagged markedly behind the Northeast in promoting science” (Daniels 1968; Numbers and Numbers, 1989).

This sort of approach, however, reflects a traditional, more formal, notion of science, defining scientific significance largely by prominent men and their publications and thus overlooking individuals who did not sufficiently register in that regard. Scholarly studies that have taken a more inclusive view of scientific practitioners and institutions, particularly by looking at medical education and medical practice (or malpractice), have offered a more capacious picture of science in the South (Numbers and Numbers 1989). They have also provided a more incisive inquiry into the relationship between science and slavery. On a very basic level, one can note that a number of leading scientists in the antebellum South were, like Elisha Mitchell, slaveholders, and their reliance on the forced labor of others gave them the means and freedom to do the scientific work that made them notable. But on a broader level, slavery gave a more general stimulus to science, providing southern practitioners with an always-available supply of unfree people who could be sources of information, assistants in collecting specimens, and perhaps most significantly, specimens themselves—Black bodies, either
alive or dead, that could be objects of scientific investigation. Scientists in the South did not have to define their work as a direct contribution to the institution of slavery, nor did they see themselves merely as intellectual servants to the slaveholding class. They did, however, derive considerable benefit from working within a slaveholding society, and the pursuit of science and the perpetuation of slavery remained entwined in a mutually reinforcing relationship of scientific and social authority.

**Jefferson’s Legacy: Science, Institutions, and Slavery**

In the post-Revolutionary era, no one had a more immediate impact on the future of science in the South than Thomas Jefferson. By the 1780s, he had gained notoriety in the North—with honorary degrees from the region’s leading universities and membership in Philadelphia’s prestigious American Philosophical Society, of which he would become president in 1787—but he made a lasting mark on the South with two critical creations, a book and a university. His *Notes on the State of Virginia* (1787) became a foundational text for scientific studies that would follow. In addition to providing a detailed survey of the land and its resources—its soil, minerals, waterways, plants, mammals, and birds—Jefferson also included reflections on Virginia’s human inhabitants, most significantly its people of color. He offered a mixed depiction of Native Americans, concluding, as often happens in science, with a call for further research, but suggesting that “we shall probably find that they are formed in mind as well as in body, on the same module with the ‘Homo sapiens Europaeus.’” In the case of Black people, however, he famously put forth an argument for the near-impossibility of their inclusion and equality with white people. In addition to the political problem of deep-seated racial prejudice on the part of whites, he also posited other objections, “which are physical and moral,” laying out the evidence he saw not just for physical difference but for fundamental intellectual inferiority. Again, he suggested need for further research—“To justify a general conclusion, requires many observations, even where the subject may be submitted to the Anatomical knife, to Optical glasses, to analysis by fire, or by solvents”—but Jefferson himself provided justification enough for other southerners to echo and expand upon his race-based science (Jefferson 1787).

Jefferson left more than that publication; he also left an institution, the University of Virginia—not the first, but arguably the most prominent college in the antebellum South. Although Jefferson started promoting the idea of a state-supported university in the eighteenth century, he didn’t actually lay out the grounds until 1817—with the assistance of ten enslaved men—and his university didn’t enroll students until 1825. But he had a clear institutional mission, an alternative to universities in the North, where he feared southern students might come under the influence of “opinions and principles in discord of their own country,” including northern notions of opposition to slavery. Hence he called for an “Academical Village” in Virginia, rooted “in a central and healthy part of the State an University wherein all the branches of useful science may be taught.”

Jefferson’s reference to “useful science” no doubt covered all fields of academic inquiry, but the phrase does point to two particular challenges of promoting science in the antebellum South. First was the dearth of teachers. There were not enough sufficiently trained men of science to fill the available positions, and southern universities had to recruit professors from outside the region (as was the case with Elisha Mitchell) or even outside the nation. To fill Virginia’s initial chair of the Institutes and Practices of Medicine in 1824, for instance, Jefferson had to hire an Englishman, Robley Dunglinson. Second, professors of science often found themselves in a second-class status, deemed less intellectually worthy than their colleagues in philosophy, classical languages, and the like. Lardner Vanuxem, the Philadelphia-born, Paris-educated professor who held the first chair of geology and mineralogy at the University of South Carolina, was offered a salary only two-thirds of the pay for men in classical studies, an insult that almost caused him to quit (University of Virginia 2018).

But the sciences gradually gained a larger place in the curriculum. The case of the University of Georgia, which was chartered in 1785 and opened for enrollment in 1801, offers a useful insight into
that process, particularly among other state-supported universities that came into existence in the first half of the nineteenth century. The university’s initial president, Josiah Meigs, had taught at Yale, but he came to Georgia with a strong dislike for the religious environment of New England, intent on breaking the “clerical chains” that he felt constrained education there. (Those “clerical chains” in the North included, however, growing religious opposition to the chains of slavery, a worrisome sentiment that had motivated Jefferson in his own planning for a southern university.) In his more secular vision of a college curriculum, Meigs made room for science—natural philosophy, astronomy, botany, and chemistry—although mostly concentrated in the junior year. He also pushed the trustees to purchase scientific instruments, a process of acquisition that extended well beyond Meigs’ presidency, which ended in 1811. By the 1830s, the University of Georgia had also increased both the number of professors and the range of courses in the sciences, and it also provided funding for a botanical garden and a collection of mineralogical specimens. Those latter two innovations underscored the potential importance of scientific research to the economic development of the state, which became even more deeply institutionalized with the creation of new schools of agriculture and applied science in 1859. The university still championed study in the liberal arts and the law, but its increasing emphasis on the practical value of scientific inquiry foreshadowed the institutional status science would assume in the post–Civil War era (Dyer 1989).

Learning the Lay of the Land

Public resources for scientific activity in the antebellum South did not just go for higher education. The southern states also took the lead in promoting geological surveys, beginning with North Carolina in 1823, South Carolina in 1824, and Tennessee in 1831. (Massachusetts was the first state in the North to support such a study, in 1830.) On one level, it’s possible to portray these early geological surveys as a significant step in the institutionalization and professionalization of geology as a science and the men who made them as some of the first to deserve the title of scientist (a term that came into existence in the 1830s). It’s also important, though, to see how slow and uncertain that process was. State legislatures in the South did not support geological surveys altogether willingly or well, generally providing inconsistent and inadequate funding, which typically resulted in a start-and-stop process for one to four years, then a hiatus, then perhaps another stage of investigation several years later. Moreover, as was the case in science in general, the men who led these studies early on tended to come from outside the South. In North Carolina, for instance, Connecticut’s Denison Olmstead led the initial geological survey, then gave way in 1825 to his Yale classmate Elisha Mitchell. So it was in South Carolina, with Lardner Vanuxem of Pennsylvania as the original leader, and in Tennessee, where the German-born Gerard Troost directed the first survey (Corgan 1982; Johnson 1982; Millbrooke 1982).

Whatever their geographic origins, the leaders of the state surveys did not come from a common professional background, share a similar scientific method, or focus on the same features: the emphasis of inquiry often reflected the skills and interests of the investigator, variously including soils and mineral fertilizers, shells and fossils, stratigraphy and topography. Fieldwork was difficult and often dangerous, scientific instruments scarce or nonexistent, and assistants poorly prepared, usually through on-the-job training. The state legislators who funded the surveys didn’t care much for the finer points of scientific preparation or investigation but had their eyes on the practical value the fieldwork might provide, whether railroad routes, agricultural improvement, or in their most hopeful moments, deposits of gold. But for all the inconsistency of the various studies, it is still necessary to note the significance of the information they gathered and the contribution they made to the development of geological study.

It is also necessary to locate these studies within the larger social and political context of the antebellum South. At a time when the southern states were expanding their possession of the land for
white people by forcibly pushing Indigenous people westward and, in the process, increasing their commitment on agrarian economy based on the enslavement of Black people, knowing the natural resources of the region made a critical contribution to defining the destiny of the South as a national bastion of slaveholding: geology and identity went hand in hand.

That scientific commitment to an agrarian economy could seem puzzling to some people. Ebenezer Emmons, who came down from his post as state agriculturist of New York to become state geologist of North Carolina in 1851, had a hard time understanding what he saw in the South. He wondered about the almost exclusive emphasis on agriculture in the region, expressing his surprise about “the little progress which a people under a better sun, with better soil, and numerous natural advantages” had made in diversifying their economy, particularly by failing to use their mineral resources for industrial development (Johnson 1982). But by the time Emmons arrived in the region, the scientific agenda for the antebellum era had long been set, and the geological surveys served to promote the perpetuation and elevation of an agricultural system based on slavery.

The men who conducted the state surveys were not, in fact, the only ones to concern themselves with geology. Some planters fancied themselves as gentlemen of science, conducting their own investigations—often with the aid of enslaved workers—to gain better knowledge about the soil and mineral fertilizers of their lands. In the process, they not only developed networks of connection with other science-minded men in the South, but they also gained notoriety and credibility with naturalists in the North, thus adding another layer to their social prominence and sense of self-worth. But above all, they understood that the social and economic positions rested on the institution of slavery, and they used geology as a means of justifying, even celebrating, the agricultural and racial regime they felt served them so well.

One of the earliest and most emphatic proponents of the connection between geology and slavery was Rush Nutt, a Virginia-born, Pennsylvania-educated planter who moved to Mississippi in 1805 and established himself as a man of science in the slaveholding class. His scientific interests varied from ethnology (based in part on disinterring the bodies of Indigenous people) to botany, agronomy, and technology, but he reached for the bigger picture as a natural philosopher, fashioning a seemingly all-encompassing theory of the Earth. In a string of writings—most of which remained unpublished in his lifetime—Nutt sought to bring together geological and human histories in a way that defined the social arrangements of the South as the logical, even inevitable, outcome of natural processes (Scarborough 1989; Strang 2019).

Borrowing from the idea of uniformitarianism best articulated by the celebrated English geologist Sir Charles Lyell, Nutt argued that the long-term transformation of the Earth had been the result of a process of gradual geological change—a challenge to the notion of sudden and catastrophic change, such as that found in the biblical tale of Noah’s Flood. The central issue, in Nutt’s eyes, was the struggle between scientific knowledge, based on observation and reason, and religious belief, based on fable and falsehood. He had nothing but contempt for members of the clergy—particularly Presbyterians, and even more particularly, those from the North—whom he suspected were out to undermine the secular state for their own professional purposes, destroying both the plantation system and slavery, which he saw as the two interrelated strengths of the South. With a proper understanding of geological history, Nutt proposed that planters could divert the Mississippi and other rivers to promote sedimentation and thus create new farmlands out of former swamps. They could also sustain slavery as a corrective, even a cure, to what he described as the long-term degeneration of Black people, first in Africa and then in the United States. For both geological and sociological reasons, then, Nutt promoted the path of the South as the most hopeful future for the nation (Strang 2019).

Some men of science in the South might have had reason to feel uncomfortable with Nutt’s antipathy toward Christianity—Elisha Mitchell, the Presbyterian pastor, among them—but they did not challenge his insistence on the fundamental inferiority of Black people. By the time of Nutt’s death,
in 1837, that assumption had become widely accepted in the scientific community, and it would remain a staple of white southern belief throughout the antebellum era—and for years beyond.

Science and the Enslaved

Black people, both free and enslaved, were not just an abstract category in the race-based hierarchies of science. They also figured actively and directly in scientific investigation, sometimes as valuable collaborators in field research, sometime as vulnerable subjects of crude, and quite often cruel, medical experiments. Although white people typically dictated the direction of scientific inquiry, Black people became, for better or worse, important participants in the research process.

One revealing example of that relationship came from John James Audubon, arguably the most prominent (and certainly the most self-promoting) naturalist of the antebellum era. Audubon spent a good deal of time in the South, particularly Louisiana, South Carolina, and Florida, collecting avian specimens for his “Great Work,” the massive, four-volume *The Birds of America.* In his travels, he made the most of his contact with the region’s people, white and Black, male and female, rich and poor. He enjoyed nothing more than going into the field with his gentleman friend and slaveholding host, the Rev. John Bachman, the South Carolina pastor-naturalist, to shoot birds to depict in his book. He also employed Maria Martin, Bachman’s sister-in-law (and later wife), as a botanical illustrator to paint the plants and trees on which the birds perched. But Audubon likewise relied on ordinary people for information about the birds of the region. It was, after all, their home, they knew it better than even an inquisitive visitor like Audubon, and he was willing to give some degree of credence to their observations—but only up to a point.

In one instance, Audubon admitted to being puzzled about a particular bit of bird behavior, “trying to ascertain in what manner the Chuck-will’s-widow removes her eggs or young.” This bird didn’t nest in a tree but made a place among twigs and dry leaves on the ground, moving its eggs or young when it sensed a threat. Audubon didn’t know how the bird did that, so he asked around. Some farmers, he wrote, “imagined the transportation to be performed under the wings of the old bird,” but since they said so “without troubling themselves much about the matter,” he doubted their report. Instead, he turned to some “Negroes . . . [who] assured me that these birds push the eggs or young with their bill along the ground.” Audubon’s Black sources, “some of whom pay a good deal of attention to the habits of birds and quadrupeds,” seemed more reliable than the indifferent-seeming white observers, and he accepted their account as “more likely to be true than that of the farmers.” Still, he concluded, “I made up my mind to institute a strict investigation of the matter” (Nobles 2017, 2020).

The story may not have happened exactly as Audubon told it—he quite often preferred fiction over fact in writing about his life in science—but the basic point is important. Audubon engaged in the longstanding tradition of seeking information from locals, including African American and Indigenous people, but also keeping scientific credit for himself (Parrish 2006; Lewis 2011). In the case at hand, Black people could be useful informants, even participants, in scientific inquiry, but not partners. Scientific authority—Audubon’s “strict investigation of the matter”—remained the possession of white people who made the inquiry, and the knowledge they gained from people of color in the process would be appropriated to enhance their own prominence.

Harsh Medicine

It was one thing for African Americans to be denied scientific credit for their knowledge of the natural world, but quite another for them to become the subjects of scientific inquiry themselves. Indeed, the pursuit of prominence among southern scientists led them to see the benefits the abundance of Black people gave them in defining their identity in the larger scientific community. Slavery was not
Science in the Antebellum South

just the foundation of the region’s economy but the source of an easily accessible supply of human specimens who became the basis of scientific investigation, whether living or dead. Nothing in the history of science in the antebellum South casts a brighter, more ghastly light on the relevance of race than the unsettling record of medical research.

Medicine in the antebellum South reflected a widely and often fervently held belief in a form of regional exceptionalism, the notion that environmental and epidemiological factors necessitated a southern style of medical science. Just as American physicians underscored the differences between the United States and Europe, southerners argued for similar distinctions between the North and South (Cassedy 1989; Warner 1989; Hogarth 2017). Although often exaggerated, the argument made sense in some respects. The comparatively warm, moist climate in the lower latitudes contributed to the proliferation of insect- and water-borne diseases, the most virulent of which—malaria, hookworm, and yellow fever—had originated in Africa. (Indeed, because Blacks had some measure of immunity to these diseases, they were less likely to succumb than were white people—a perhaps ironic epidemiological twist to the racial history of the South, with the threat to white bodies an unanticipated and invisible add-on cost to the transatlantic slave trade.)

But instead of portraying the situation of the South as a regional disaster, many physicians saw it as a source of southern distinctiveness, making the case for a separate medical identity. In the early years of the nineteenth century, hundreds of southern students did their training outside the region, particularly in Philadelphia, but they remained wary of letting their lessons dilute their loyalty to their local origins. In many respects, they had little to worry about. The most eminent physicians who taught in the North—the University of Pennsylvania’s Benjamin Rush chief among them—accepted the notion that differences in climate, disease environment, and social conditions could require different emphases in medical practice. Still, the teachers and textbooks in the North didn’t fully speak to the regional distinctiveness of the South, and many medical students returned home with a reinforced sense of mission, becoming increasingly adamant about the need for a southern-specific approach to their professional practice—which would, in turn, enhance their own professional standing (Warner, 1989).

Although some medical students from the South continued to go to northern schools throughout the antebellum era, others found the opportunity to pursue their education closer to home—and more enclosed within southern culture. Beginning in the 1820s, southern medical schools—the Medical College of South Carolina in 1823, the University of Virginia’s Anatomy Theater in 1827, and the Medical College of Georgia in 1828—provided a training alternative that built on the standards of practice developed elsewhere but focused on the medical issues considered more specific to the region (Numbers and Numbers 1989). The best place to determine the best medicine for the South, so the argument went, should be in the South itself. At the same time, the creation of new institutions could be a way to counter the sense of southern inferiority so often implied by people outside the region. Thus the scientific benefit of southern medical schools could lead to a social benefit as well.

The new medical schools in the South had a long way to go to catch up to the reputations of their northern counterparts, but they had one significant advantage in local resources—a much more abundant supply of bodies for anatomical research. Cadavers were always in demand for medical education, and the increasing need for fresh specimens in the early nineteenth century created a lively trade in the dead throughout both North and South. But the enslaved population in the southern states came to be a special source of corpses, giving the region’s medical schools a greater, although grisly, edge in the race for remains.

At the University of Virginia, for instance, the study of the dead had been embedded in Thomas Jefferson’s original design. Dissection, Jefferson noted, would be an essential means for medicine to “remake itself into a reliable science, via a commitment to empirical investigation.” And so it came to be a critical part of the medical curriculum. In 1827, the year following Jefferson’s death, UVA opened its Anatomical Theater for medical dissection, where professors could cut up cadavers, mostly of Black
bodies, for the instruction of their students. The university also staffed the practice with enslaved Black people to do the dirty work of preparing the cadavers, washing away the bloody mess after the dissection, and finally boiling the body parts to separate the severed flesh from bone. In 1832, the university budgeted $100 for acquiring corpses, which ranged in price from $12 to $30—what one scholar has called the “ghost value” of the dead. But the allocation was hardly enough to cover the demand for cadavers, which could run to four or five per week. Professors and students had to procure specimens however they could, either by paying grave-robbing “resurrectionists” for bodies, sometimes shipped in barrels of brine or whiskey from as far away as Baltimore or Richmond, or engaging in their own “anatomical excursions” in the immediate neighborhood to steal the recently deceased from nearby burial sites. Harriet Martineau observed that the grave-robbers focused on taking the bodies of Black people, “because whites do not like it, and the coloured people cannot resist.” Black people often did resist as best they could, in fact, staging fake funerals, putting a log or stones in the grave, and holding secret burials elsewhere. Still, even though body-snatching was technically illegal, nothing could seem to curtail the covert trade in Black bodies, and throughout the antebellum era, UVA remained a central site in this hideous business (University of Virginia 2018; Barry, 2017).

It was, however, by no means alone among southern medical schools. Like UVA, the Medical College of Georgia engaged in a determined pursuit of Black bodies, spending $100 in 1837 to procure cadavers from New York. The school also employed a handful of “resurrection slaves” to dig up the dead closer to home, and by the 1850s, seven faculty members pitched in to purchase an enslaved man named Grandison Harris as a “porter,” giving him the job of acquiring and preparing bodies for dissection. In South Carolina, doctors associated with the Medical College in Charleston openly advertised for diseased and dying Black people, seeking to acquire specimens for operations and dissections so that, as one physician put it, “the mode of performing all the surgical operations, as practiced in the English and French hospitals, will be taught to such classes as may offer.” The reference to performing the practices carried out on the far side of the Atlantic bespoke a clear point of pride: medical practitioners could offer their students just as strong an education in the South as they could get anywhere (Berry 2017). In that competitive context of medical education, access to Black bodies became a professional asset, a means of seeking scientific equality through the severest form of social inequality.

The “ghost value” of Black cadavers was one thing, but the value of the living quite another—and understandably greater. Seen in the crassest terms, as labor inputs, enslaved Blacks represented a significant financial investment for members of the slaveholding class, and prolonging their years of usefulness remained a concern for the people who purchased them. That did not mean benign treatment, of course. Enslaved people lived in inferior housing, ate nutritionally inadequate diets, worked long and demanding days, and sometimes suffered direct physical abuse as a form of discipline. But for all the detrimental treatment of enslaved laborers, slaveholders still had reason to keep them alive. Determining how to do so became another way by which the medical profession in the South provided a service to slaveholders and, in the process, enhanced its own position in the region (McCandless, 2011; Long, 2012).

It wasn’t always easy. Some slaveholders were skeptical about calling on professional physicians, thinking their treatments too expensive, too ineffective, or even too late: by the time a doctor could respond to a summons to come to a plantation, the situation might well have worsened, with the enslaved person in further decline or even dead. Instead, slaveholders first relied on home remedies, some of them gleaned from the writings of medical professionals, others from the various forms of medical quackery that circulated throughout the South. In many cases, slaveholders never fully knew about the physical complaints of the enslaved because Black people kept their medical issues to themselves, preferring to rely on people within the enslaved community to provide cures derived from their own cultural roots. Some slaveholders took exception to such medicine, but others quietly, and perhaps wisely, acknowledged the knowledge Black practitioners had about treating Black bodies. In any event, the medical practices of both the enslavers and the enslaved
often took precedence over the remedies prescribed by doctors (Berry 2017; Fett 2002; Downs 2012; Savitt 1978, 1989; Russert 2017).

But members of the medical profession in the South well understood the economic and social significance of slavery, and they made it their mission to pursue research about—and often on—the enslaved population. Slave hospitals, whether run by entrepreneurial physicians or by faculty members of medical colleges, encouraged slaveowners to send in sick people for treatment. The enslaved people themselves typically had no real choice in the matter, but they came to understand the grim consequences of being submitted to medical care. They often served as subjects for medical demonstrations, readily available laboratory material for the training of southern students. Like cadavers, the living bodies of Black people became an important resource, and physicians felt free to use them for experiments they might hesitate to inflict on white people (Washington, 2006).

In one particularly gruesome experiment, a prominent doctor-slaveholder in South Carolina, Harvey Leonidas Byrd, imposed a then-innovative treatment on a 12-year-old enslaved girl named Harriet, sent to him by her enslaver with the complaint that she suffered from “paroxysms” that often rendered her insensible and speechless. After trying the standard methods—bleeding, purging, and dosing her with calomel, castor oil, and turpentine—Byrd turned to another approach, electro-shock. He and one of his former medical students attached battery contacts to her body and subjected her to several minutes of electrical pulses, at which point she cried out in excruciating pain. Taking her cries to be a good sign, since she had apparently been speechless before, the two physicians continued the treatment for a full hour, then subjected her to another hour of agony the following day. Despite Harriet’s repeated protests of pain, Byrd declared the experiment a success, later publishing his scientific results, “Case of Periodic Convulsions cured by Electro-Magnetism,” in the Charleston Medical Journal and Review. In this way, Byrd enhanced his professional standing through an enslaved girl’s suffering (Kenny 2015).

But there was more to it than that. One of the assumptions supporting this sort of cruel research was the notion that Black people experienced physical pain differently from whites because they were, indeed, physically and mentally different from whites. Whatever their interest in promoting the South’s position in the larger transatlantic medical community, southern physicians also used their scientific investigations to undergird the foundation of their region’s rationale for slavery, the assertion of racial inferiority. The longstanding belief that, because of their African origins, Black people were comparatively immune to certain diseases (yellow fever and the like) and less susceptible to the ill effects of the environment (especially heat) provided an apparent justification for subjecting enslaved people to long hours of labor and exposure. The similar assumption that Black people suffered from racially specific pathologies (Cachexia Africana, or dirt-eating, for instance) provided evidence not just of physical difference but of moral inferiority as well. Even something so seemingly fundamental as the desire for human freedom came to be described as a detrimental difference in the case of enslaved Blacks, what the Virginia-born and Penn-educated Dr. Samuel A. Cartwright defined as *drapetomania*, a form of mental illness (Hogarth, 2017). When escape became equated with insanity, the case for keeping Black people enslaved reached an intellectual point of no return for science-minded southerners.

**Conclusion**

The point is clear: it’s simply not possible to see, much less accept, any significant separation between science and racism in the region. Throughout the antebellum South, the list of physicians and scientists who used their professional positions to promote notions of racial inferiority as a defense of slavery is long, and it includes some of the most prominent men in their fields—Byrd, Cartwright, Crawford W. Long, Josiah Clark Nott, and once again, Elisha Mitchell. They gained fame in their own time, but they now face a critical reconsideration in ours.
Gregory Nobles

In the summer of 2020, a remarkable season of racial reckoning throughout the United States, a number of scientific societies—perhaps most notably the American Philosophical Society and the National Audubon Society—sought to address the history of racism in their respective organizations, an effort that was by no means focused on the South alone. The APS issued a statement that acknowledged that

the APS's history is inextricably entwined with race, slavery, and, later, pseudoscientific ideas that supported and perpetuated racist beliefs and practices. . . . Indeed, throughout the early 19th century, the Society published flawed treatises that used race as a way to explain and justify inequalities among people, and it elected Members whose accomplishments rested on claims of scientifically established differences between races.

The Audubon Society also noted that its namesake “enslaved people and held white supremacist views, reflecting ethical failings that it is time to bring to the fore.”

But the example of a local organization in Asheville, North Carolina, brings this chapter to a fitting end: the Elisha Mitchell Audubon Society changed its name to Blue Ridge Audubon Society. “Elisha Mitchell was an early conservationist,” the chapter president noted, but “also a vocal proponent of slavery.” The embrace of a regional identity reflected the “recognition of the natural beauty and unique biodiversity of these mountains we call home,” she explained, while the chapter’s original connection to a man like Mitchell couldn’t accommodate the human diversity of the birding community, most notably Black birders. And so Elisha Mitchell has tumbled to the bottom again, not from a precipice this time, but from a position of scientific respect, his racism now an inescapable explanation for his downfall.

References


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